APPLICATIONS/

CORRESPONDENCE

Well was P/A'd + never reentered.
No surface facilities constructed.
DP expired 4/8/90
Can remove DP - brine operation from status list

KMB
3/18/92

I. GENERAL DESCRIPTION

A. 18420 Salty Dog, Inc.
Nolan Brunson
P. O. Box 774
Hobbs, New Mexico 88240

B. Located in Section 20, T-18-S, R-38-E
1650' FNL and 1650' FEL
Lea County, New Mexico

C. At the brine well fresh water from the city of Hobbs is injected down tubing casing annulus and brine is returned up tubing and sent to the storage facility. Brine is removed from the storage facility by the loading pump and metered as it is loaded on to transports. See Drawing #1, Brine System Schematic.

D. This well was initially drilled as an oil well. It was plugged and abandoned in 1967. It is proposed to reenter this well and convert it to a brine well.

II. DESCRIPTION OF FACILITY

A. Surface Facilities:

The site will be enclosed by a fence which will have a 24" sheet metal border along the bottom to prevent small animals from entering the site and getting into the brine storage facility. The surface facilities are arranged as shown in drawing #2. The brine storage facility is 177' by 177' with a slope of 30°. The brine facility is lined with hypolon type plastic sealed using a chemical fusing method (see Attachment J). Brine is carried 40' through 4" pipe to the storage facility. From the storage facility, brine is carried 40' to the loading station. Typically 1000 bbls./day are discharged to and withdrawn from the brine storage facility.

B. Underground Facilities:

The proposed brine well was drilled in March 1962 and is currently plugged and abandoned. (Attachment A is a diagram of the well as it is now. Attachment B is a well bore sketch of the well as proposed. Salty Dog, Inc. proposes to re-enter the well and clean out the plugs from surface to 2800'. A new plug will be set from 2550' to 2800' on top of the existing plug at 2800'. A string of 5-1/2" casing will be set at 1700' and cemented back to surface. Then 2-3/8" tubing will be run in the hole to 2250'.

NATURAL RESOURCES
ENGINEERING INC.
P. O. Box 2188 / 201 E. Sanger
Phone (505) 397-6319
Hobbs, New Mexico 88240

ATTACHMENT "A"

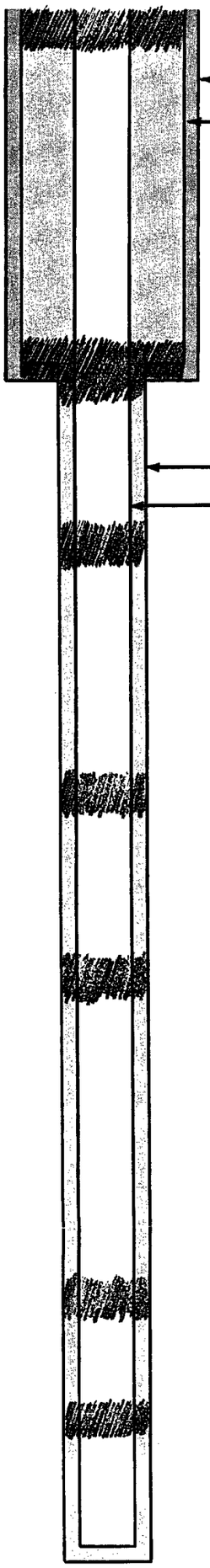
WELL BORE SKETCH

OPERATOR/LEASE/WELL Moran Oil Producing & Drilling Corp./SM-20/#1

NRE JOB NUMBER NB01-003-001 DATE July 1, 1984

FIELD/POOL Grayburg / --

PLUG BACK DEPTH 0 KB 10' ELEVATION 3646'



10 Sack Plug
At Surface

Hole Size 12-1/4"

SURFACE CASING:
Size 8-5/8" Weight 24# Grade New
Set at 306' with 225 Sacks Cement
Circulate ____ Sacks to Surface
Remarks: Cement was circulated. No record of number of sacks circulated. After 24 hours WOC, casing was tested to 1000 psi for 30 minutes. Tested O.K.

20 Sack Plug
At 300', Base
Of Surface Pipe

Hole Size 6-3/4"

PRODUCTION CASING:
Size -- Weight -- Grade --
Set at -- with -- Sacks Cement
Cement Top: Calculated -- Temperature Survey --
Remarks: Casing was not run. Well was plugged and abandoned. Plugs set at : 20 sx at 6000', 25 sx at 5575', 25 sx at 4200', 30 sx at 2800', 20 sx at 1700', 20 sx at 300', 10 sx at surface

20 Sack Plug
At 1700', Top
Of Salt

30 Sack Plug
At 2800', Base
Of Salt

TUBING:
Size ____ Weight ____ Grade ____
Number of Joints ____ Set at ____
Packer Set at ____
Bottom Arrangement: ____

25 Sack Plug
At 4200', Top
Of San Andres

RODS:
Size ____ Number ____
Gas Anchor Set at ____
Pump Set at ____
Arrangement: ____

25 Sack Plug
At 5575', Base
Of San Andres

20 Sack Plug
At 6000', Top
Of Blinebry

TD 6175'

UNITED STATES FIDELITY AND GUARANTY COMPANY

BALTIMORE, MARYLAND

NOTICE OF CANCELATION

Date July 8, 19 91

TO: New Mexico Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87504-0968

You are hereby notified that the Bond or Policy described below is hereby canceled in accordance with its terms and conditions.

Said cancelation is effective as of November 10, 19 91

United States Fidelity and Guaranty Company

By Dan C. Cappleman
Dan C. Cappleman Attorney-in-Fact

Number	01-0130-10506-88-0	Principal (Surety) or Insured (Fidelity) and Address: SALTY DOG INC. P. O. Box 2158 Hobbs, NM 88340
Agent (Name and Address)	Leavell/Danford Insurance Eunice, NM.	68603
Premium Period	From: 10-24-91 To: 10-24-92	Obligee (Surety) and/or Kind of Bond or Policy: NM Envirenmental Improvement Division
U. S. F. & G. Office	P. O. Box 3566 Albuquerque, NM 87190	Salt Water Injection Performance Bond

Remarks: CERTIFIED MAIL

JGO 34 (4-89)

Guidelines to aid you in determining what will be required for the renewal of your discharge plan are bring prepared. When the guidelines are finalized, they will be supplied to each operator of a brine production facility.

The OCD requires that any person, firm corporation or association that is in ownership of an oil, gas, or service well in the State of New Mexico shall furnish the Division with a surety bond in an amount prescribed in the OCD regulations. The current bond for well less than 5000 feet deep in Chaves, Eddy, Lea and Roosevelt Counties is $5000. I am enclosing the OCD bond forms for your use. All surety bonds previously submitted to the OCD did not include brine wells. Those surety bonds submitted to the EID must be changed to the OCD. Once the proper bond form are received and approved, all other sureties and bonds can be cancelled.

If you have any questions, please do not hesitate to contact me at (505) 827-5884.

Sincerely,

Roger C. Anderson
Environmental Engineer

RCA/sl

Enclosures

CC: Artesia
Hobbs Di

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.
1. ☐ Show to whom delivered, date, and addressee's address. *(Extra charge)* 2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:
Mr. Larry Squires
Salty Dog Inc.
PO Box 774
Hobbs, NM 88240

4. Article Number
P 106 675 130

Type of Service:
☐ Registered ☐ Insured
☑ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X [signature]

6. Signature — Agent
X

7. Date of Delivery
12-11-89

8. Addressee's Address *(ONLY if requested and fee paid)*

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time	Date
		7/25/91

Originating Party	Other Parties
K. Brown - OCD	Leavell/Danford Insurance

Subject: Cancelation by USF&G of 1-well plugging bond

Discussion:

1650 FNL, 1650 FEL NE 1/4 Sect. 20, T10S, R38E
→ Salty Dog Brine Well

Insurance agent (Leavell/Danford) has copy of bond. Bond was cancelled by the insurance company (United States Fidelity & Guaranty Co.) because no longer needed. Discharge plan cancelled since didn't construct facility (abandoned well never entered).

Conclusions or Agreements

Distribution

Signed

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

December 6, 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Larry Squires
SALTY DOG INC.
P. O. Box 774
Hobbs, New Mexico 88240

RE: Delegation of Responsibilities Brine Manufacturing Operations

Dear Mr. Squires:

On June 13, 1989, the Water Quality Control Commission (WQCC) transferred the responsibility for the administration and enforcement of Commission regulations at brine manufacturing operations, including all brine production wells, holding ponds and tanks, from the Environmental Improvement Division (EID) to the Oil Conservation Division (OCD). The OCD has jurisdiction over all manufactured brine once it is transported, used or disposed of off brine plant premises for use in or directly related to oil and gas operations regulated by OCD. OCD regulates brine injection through its Class II Underground Injection Control (UIC) Program if the brine is used in the drilling for or production of oil and gas. EID shall regulate brine injection through its UIC Program if the brine is used for other purposes.

Brine production facilities that were transferred to OCD's jurisdiction must operate pursuant to an approved and current discharge plan. The discharge plan renewal process will be continued by OCD Environmental Bureau Staff. Approximately eight (8) months before the expiration date of an approved discharge plan, the discharger will be notified of the pending expiration of the plan. The discharge plan review process can, depending on circumstances, take several months. If the holder of an approved discharge plan submits a renewal application at least 180 days before discharge plan expiration, and the discharger is in compliance with his approved plan on the date of expiration, then the existing plan will not expire until the renewal application has been approved or disapproved.

NEW TEX OIL COMPANY

P.O. Box 297 505 393-~~0967~~ 6169

HOBBS, NEW MEXICO 88241

NOLAN H. BRUNSON, JR.
PRESIDENT

November 22, 1988

Environmental Improvement Division
Harold Runnels Bldg.
1190 St. Francis Drive
Santa Fe, NM 87503

Attn: John W. Parker

RE: Salty Dog, Inc., DP-353
Plugging Bond Cancellation

Dear Mr. Parker:

New Tex Oil Company as successor to Nolan H. Brunson desires to cancel the plugging bond for the Salty Dog, Inc. Hobbs #1 brine well; DP-353. This well was never re-entered and plans for the brine source well have been abandoned.

Sincerely,

Nolan H. Brunson

NHB/dst

NEW TEX OIL COMPANY

P.O. Box 297 505 393-~~0967~~ 6169

HOBBS, NEW MEXICO 88241

NOLAN H. BRUNSON, JR.
PRESIDENT

December 5, 1988

Environmental Improvement Division
Harold Runnels Bldg.
1190 St. Francis Drive
Santa Fe, NM 87503

Attn: John W. Parker

RE: Salty Dog, Inc., DP-353
Plugging Bond Cancellation

Dear Mr. Parker:

New Tex Oil Company as successor to Nolan H. Brunson desires to cancel the plugging bond for the Salty Dog, Inc. Hobbs #1 brine well; DP-353. This well was never re-entered and plans for the brine source well have been abandoned. Please terminate the DP-353 which has an expiration date of April 8, 1990.

Sincerely,

Nolan H. Brunson

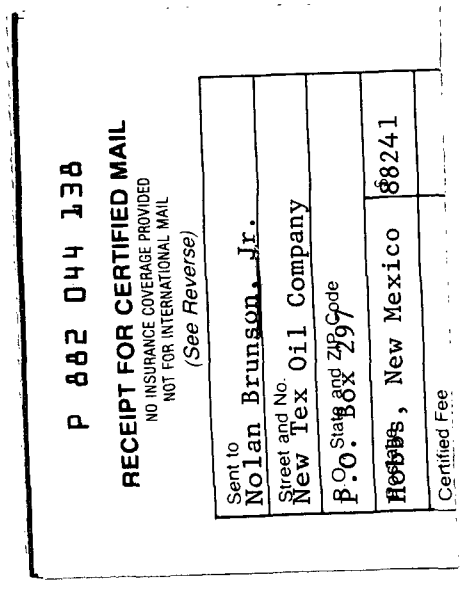
NHB/dst

NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

ENVIRONMENTAL IMPROVEMENT DIVISION
Harold Runnels Bldg.-1190 St. Francis Drive
Santa Fe, New Mexico 87503

Richard Mitzelfelt
Director

GARREY CARRUTHERS
Governor
CARLA L. MUTH
Secretary
MICHAEL J. BURKHART



CERTIFIED MAIL - RETURN RECEIPT REQUESTED

December 6, 1988

Nolan Brunson, Jr.
New Tex Oil Company
P.O. Box 297
Hobbs, New Mexico 88241

RE: Termination of DP-353

Dear Mr. Brunson:

In accordance with your request of December 5, 1988, DP-353, the discharge plan for the Salty Dog, Inc. Hobbs #1 brine facility is hereby terminated. Since the facility was never constructed, and the abandoned well never re-entered, no plugging and abandonment plans are necessary and EID hereby authorizes cancellation of the plugging bond; no. B517928.

If we can be of further assistance please contact the Ground Water Section staff.

Sincerely,

Stuart P. Castle
Bureau Chief
Ground Water Bureau

SPC/JP/mw

cc: Garrison McCaslin, District IV

EID BUCKSLIP

CHECK ONE:

☒ LETTER TO Nolan Brunson Jr.

FOR Stuart Castle SIGNATURE

☐ MEMO TO _____

☐ PRESS RELEASE

☐ OTHER

SUBJECT: DP-353 Cancelation

DRAFTED BY: John Parker 12/06/88 (DATE)

CONCURRENCES:

NAME:		INITIAL	DATE REC'D	DATE APPROVED
Ernest Rebuck	Prog. Mgr.	[illegible]	12/8	12/8
Stuart P. Castle	Bur. Chief	[illegible]	12/8	12/9
_____	Deputy Dir.	_____	_____	_____
Jon Thompson	Deputy Dir.	_____	_____	_____
Richard Mitzelfelt	Director	_____	_____	_____
_____	Legal Review	_____	_____	_____
_____	Branch Admin.	_____	_____	_____

FINAL DECISION NEEDED BY _____ (Date) BECAUSE _____

COMMENTS BY DRAFTER OR REVIEWER(S):

NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

ENVIRONMENTAL IMPROVEMENT DIVISION
Harold Runnels Bldg.-1190 St. Francis Drive
Santa Fe, New Mexico 87503

Richard Mitzelfelt
Director

GARREY CARRUTHERS
Governor
CARLA L. MUTH
Secretary
MICHAEL J. BURKHART
Deputy Secretary

November 17, 1988

Glenn Danford
Leavell/Danford Insurance Agency
P.O. Box 1889
Eunice, NM 88321

RE: Salty Dog, Inc., DP-353
Plugging Bond Cancellation

Dear Mr. Danford:

The Environmental Improvement Division (EID) Ground Water Section of the New Mexico Health and Environment Department has received your request to cancel the one-well plugging bond for the Salty Dog, Inc. Hobbs #1 brine well; DP-353. Before EID can act upon your request, we would first need to receive a request from Mr. Nolan Brunson, his successor, or duly authorized representative, to terminate DP-353 which has an expiration date of April 8, 1990. Only after actual termination or expiration of a discharge plan is an operator relieved of the pertinent requirements under the New Mexico Water Quality Control Commission (WQCC) Regulations. Section 5-210.B.17. requires that an operator of a brine facility have in place financial assurances for the proper plugging and abandoning of the injection well.

Should you have any further need of assistance or require additional information you may reach me at telephone number; (505) 827-0027.

Sincerely,

John W. Parker
Water Resource Specialist
Ground Water Section

JWP:dg
cc: Larry Squires, Salty Dog, Inc., Hobbs, NM
Nolan Brunsen, Salty Dog, Inc., Hobbs, NM

Leavell/Danford Insurance Agency

(505) 394-2514
394-2515
397-4116

P.O. Box 1889 914 Main Eunice, New Mexico 88231

October 7, 1988

Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87504-0968

RE: Salty Dog, Inc.
Plugging Bond No. B517928

Dear Sirs,

Please send our Agency a letter releasing the Bond above, as principal did not take any action to enter and complete well nor do they intend to do so in the future.

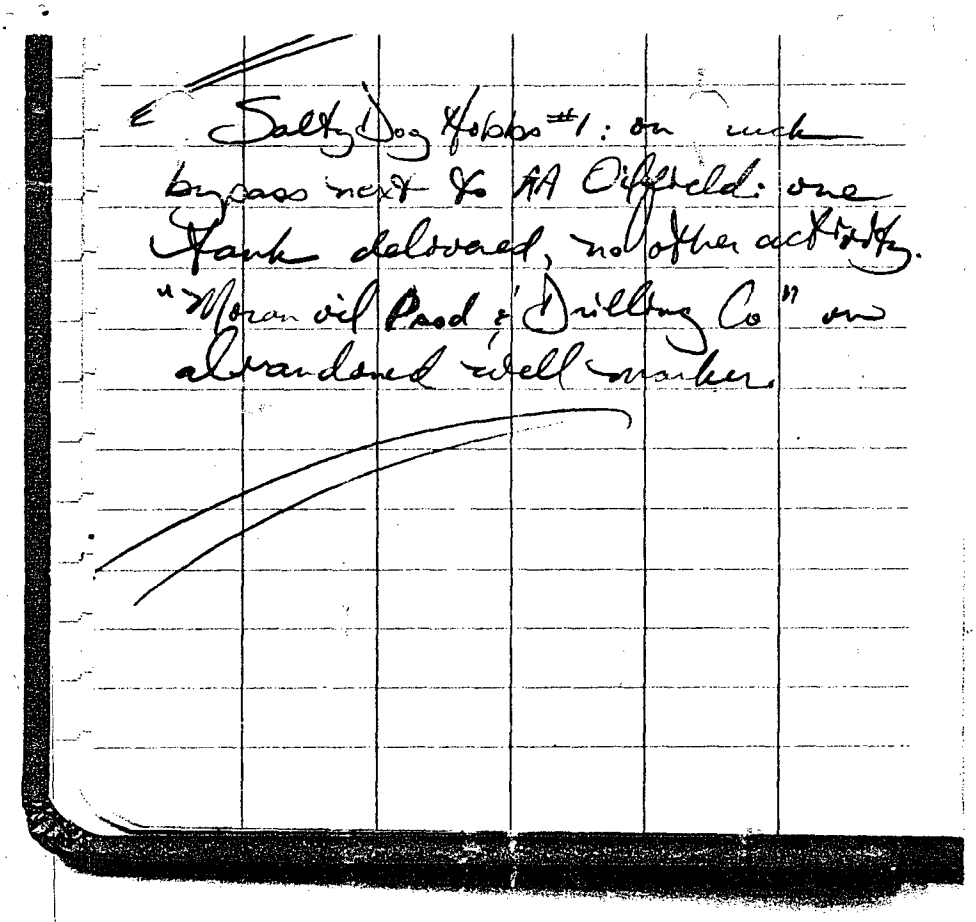
Thank you for your prompt reply.

Sincerely,

Glenn Danford

GL/tb

cc: Larry C Squires
Salty Dog, Inc.
P. O. Box 2158
Hobbs, New Mexico 88240


Salty Dog Hobbs #1: on rock
bypass next to AA Oilfield: one
tank delivered, no other activity.
"Moran Oil Pool Drilling Co" on
abandoned well marker.

No. of Samples	Ion
	Na
	K
	Ca
	Mg
	Cl
	HCO3
	CO3
	SO4
	TDS
	NO3+ NO2
	NH3
	kjeld N
	As
	Ba
	Cd
	CN
	Cr
	F
	Pb
	Hg
	Se
	Ag
	U
	V
	Ra 226
	Ra 228
	Cu
	Fe
	Mn
	Phenols
	Zn
	Al
	B
	Co
	Mo
	Ni
	pH
	Conduct.

FIELD TRIP REPORT
GROUND WATER SECTION

SLD USER CODES

County Lea

Ground Water: 59300

NO_3, HC, & Toxics: 59600

UIC: 59500

FACILITY VISITED

Name of Facility: Salty Dog Hobbs #1

Location: Hobbs – on Truck bypass next to AA Oilfield

Discharge Plan Number: DP-353

Type of Operation: brine mfg & sales

ENVIRONMENTAL IMPROVEMENT DIVISION FIELD VISIT

EID Inspector(s): Paige Morgan & Steve Sanes

Date of Inspection or Visit: 8/22/85

Discharger's Representative Present During EID Visit: NONE

Name:

Title or Position:

Purpose of Visit:

a. Evaluation of Proposed Discharge Plan _____

b. Compliance Inspection of Discharge with Approved Plan ✓

c. Other (specify) _____

Inspection Activities During Field Visit:

a. Inspection of Facilities or Construction (specify)

no construction begun as yet. One tank delivered.

b. Sampling of Effluents (give sampling locations)

c. Sampling of Ground Water (give names or locations of wells)

d. Evaluation of geology, soils, water levels or other physical characteristics of the location (specify)

e. Other (specify)

Observations and Information Obtained during the Visit:

ACTION REQUIRED

HEALTH ENVIRONMENT department

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

P 612 425 098

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Nolan Brunson	
Street and No. P.O. Box 774	
P.O., State and ZIP Code Hobbs, NM 88240	
Postage	$

PS Form 3800, Feb. 1983

April 8, 1985

Nolan Brunson
SALTY DOG, INC.
P.O. Box 774
Hobbs, NM 88240

RE: Approval of Salty Dog Hobbs #1 Discharge Plan

Dear Mr. Brunson:

The discharge plan (DP-353) for the Salty Dog Hobbs #1 brine station located approximately two miles northwest of downtown Hobbs, Lea County, New Mexico is hereby approved. The approved discharge plan consists of the plan dated August 21, 1984, and the materials dated December 21, 1984, March 7, 1985, and March 20, 1985, submitted as supplements to the discharge plan.

The discharge plan was submitted pursuant to Section 5-101.B.3. of the N.M. Water Quality Control Commission Regulations. It is approved pursuant to Section 3-109. Please note subsections 3-109.E. and 3-109.F., which provide for possible future amendment of the plan. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

The monitoring and reporting shall be as specified in the discharge plan and supplements thereto. These requirements are summarized on the attached sheet. Any inadvertent omissions from this summary of a discharge plan monitoring or reporting requirement shall not relieve you of responsibility for compliance with that requirement.

Please note that Section 3-104 of the regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan."

Pursuant to subsection 3-109.G.4., this plan approval is for a period of five years. This approval will expire April 8, 1990, and you should submit an application for new approval in ample time before that date.

On behalf of the staff of the Ground Water Section, I wish to thank you and your consultants for your cooperation during this discharge plan review.

Sincerely,

for Denise Fort
Director

DF:PGM:jba

cc: John Guinn, EID District IV, Roswell

P.S. Attached please find a copy of the plugging bond you submitted, signed for the EID by the Ground Water/Hazardous Waste Bureau Chief.

EID BUCKSLIP

CHECK ONE:

[X] LETTER TO Salty Dog, Inc.
for Drypolcher's signature (for Fort)

[ ] MEMO TO _____

[ ] PRESS RELEASE

[ ] OTHER

SUBJECT: DP approval

DRAFTED BY: Paige Grant Morgan 4/4/85 (Date)

CONCURRENCES:

NAME:		INITIAL	DATE REC'D	DATE APPROVED
Maxine Goad	Sect. Mgr.	MSG	4/4/85	4/5/85
A. Drypolcher	Bur. Chief	AD	4/8/85	—
Richard Holland	Dep. Dir.			
Denise Fort	Director			

FINAL DECISION NEEDED BY 4/8/85 (date) BECAUSE _____

No word redrafting.

COMMENTS BY DRAFTER OR REVIEWER(S):

This is the first Part 5 brine well DP to come in without being brought into compliance under an Assurance.

Please note: Drypolcher's signature is required on the attached bond as well as on the letter.

DISCHARGE PLAN MONITORING AND REPORTING FORM

DISCHARGE PLAN NUMBER: 353

SIC NUMBER: _____

Original DP: X
Renewal: _____
Modification: _____
Date Received: 8/21/84

NAME OF FACILITY: Salty Dog Hobbs #1 28850 30-025-35706

ADDRESS OF FACILITY: Salty Dog Inc./ PO Box 774/ Hobbs NM 88240

ALTERNATE OR PAST NAME OF FACILITY: ---

CITY OR CLOSEST TOWN: Hobbs

COUNTY: Lea TWP: 18S RGE: 38E SEC: 20

CONTACT PERSON: Janica (last), J.T., Jr. P.E. (consultant) (first)

ADDRESS OF CONTACT PERSON: Natural Resources Engineering/ PO Box 2188
Hobbs, NM 88240

TELEPHONE NUMBER: 397-6319

TYPE OF FACILITY: brine extraction well and associated surface facilities

MEANS OF DISCHARGE (lagoon, leach field, other -specify): injection well; lined lagoon.

REVIEWER: Morgan (last), Paige Grant (first)

DATE APPROVED: April 8, 1985 DATE OF EXPIRATION: 4/8/90

MONITORING REQ: (Comment, if necessary, on back)

SAMPLING SITE & ID	STORET CODE	PARAMETER(S)	DATE DUE
injected water		six-month volume	June 30 December 31
extracted brine		" " "	June 30 December 31
lagoon leak detection system		presence of fluids	check monthly; report when fluid ~~encountered~~
produced brine		Ca, Mg, Na, K, HCO_3, Cl, SO_4, TDS	12/31/85

SEND REPORTS TO: Ground Water Section
EID: Ground Water/Hazardous Waste Bureau
P.O. Box 968
Santa Fe, NM 87504-0968

SAMPLING SITE & ID	STORET CODE		PARAMETER(S)	DATE DUE
AA Oilfield Service well			TDS, Cl	December 31
brine well			1000-psi pressure test	when applying for renewal of DP

COMMENTS:

FOR EID USE ONLY

STATUS OF DP:

Active	X	Inactive:	
Withdrawn		Not Yet Approv:	
Expired, Not Renewed			

natural resources engineering inc.

March 20, 1985

Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87504-0968

Attention: Paige Morgan

RE: Plugging Bond
Discharge Plan DP-353
NB01-003-001

Dear Ms. Morgan:

Attached please find a copy of the one well plugging bond for the Salty Dog Hobbs #1 with the changes you requested.

If you have any questions, please feel free to contact our office.

Sincerely yours,

J. T. Janica

J. T. Janica
Natural Resources Engineering, Inc.

Enclosures

cc: file
chrono
N. Brunson
L. Squires

phone (505) 397-6319 • 201 e. sanger • p. o. box 2188 • hobbs, new mexico 88240

natural resources engineering inc.

March 7, 1985

Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87504-0968

Attention: Paige Morgan

RE: Final Terms of Agreement
Discharge Plan DP-353

Dear Ms. Morgan:

Salty Dog, Inc. agrees to the items in your letter of February 28, 1985. These items are as follows:

1. Renewed approval of DP-353 will be contingent on submittal of a sonar log or equivalent which demonstrates that the salt cavity created by our brine well has not grown so large as to encroach on the existing abandoned or temporarily abandoned wells in the vicinity.

2. The leak detection system under the pond will be constructed with no more than 15 feet between the laterals.

If any further information is required, please advise.

Sincerely yours,

Nolan Brunson

Nolan Brunson

cc: L. Squires
file
chrono

phone (505) 397-6319 o 201 e. sanger o p. o. box 2188 o hobbs, new mexico 88240

TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR

HEALTH ENVIRONMENT department

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVI
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

P 612 425 051

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	J. T. Janica
Street and No.	P.O. Box 2188
P.O., State and ZIP Code	Hobbs, NM 88240
Postage	$

U.S.G.P.O. 1983-403-517

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 1, 1985

J.T. Janica, Jr., P.E.
Natural Resources Engineering, Inc.
P.O. Box 2188
Hobbs, NM 88240

RE: Plugging bond for Salty Dog, Inc.'s proposed Hobbs #1 brine extraction well.

Dear Mr. Janica:

Our EID legal counsel informs me that the attached bond is acceptable with modifications. I am returning the bond form to you for modification, as our counsel recommended that it was more appropriate for your clients to make the changes themselves, or through you, then for us to alter the form even with verbal agreement from your clients by phone.

The proposed modifications are as follows:

1. Remove the "note" on the first page, through the address of the Oil Conservation Commission.

2. In the first paragraph, remove "and benefit . . ." through " . . . as amended", and replace with "of the Environmental Improvement Division".

3. Remove the first two "WHEREAS" statements.

4. Alter the third "WHEREAS" statement to read as follows:

   WHEREAS, The above principal, individually, or in association with one or more other parties, may commence the reworking of one well not to exceed a depth of 2,800 feet, to produce brine, the identification and location of said well being 1650 FNL, 1650 FEL - NE Quarter of (etc).

5. NOW, THEREFORE: change "Oil Conservation Commission" to "Environmental Improvement Division".

6. On the second page, change the approval agency to read "Environmental Improvement Division of New Mexico".

If these modifications are acceptable to you and your clients, please alter this form accordingly and return it to me. I will then have it signed and return a copy to you with formal notification that Salty Dog, Inc. may commence construction of the proposed Hobbs #1 brine extraction well.

Sincerely,

Paige Grant Morgan

Paige Grant Morgan
Water Resource Specialist
Ground Water Section

PGM:jba

cc: John Guinn, EID District IV, Roswell

TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR

HEALTH ENVIRONMENT department

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVI
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

P 612 425 050
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	Nolan Brunson
Street and No.	P.O. Box 774
P.O., State and ZIP Code	Hobbs, NM 88240
Postage	$

U.S.G.P.O. 1983-403-517

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 28, 1985

Nolan Brunson
SALTY DOG, INC.
P.O. Box 774
Hobbs, NM 88240

RE: Final terms of agreement for discharge plan DP-353.

Dear Mr. Brunson:

Please respond in writing that you concur with the following points. Once we have your concurrence on these issues, and our EID legal staff has approved your plugging bond, I will recommend to the EID Director that the discharge plan for Salty Dog's Hobbs #1 facility be approved.

1. Renewed approval of DP-353 will be contingent on submittal of a sonar log or equivalent which demonstrates that the salt cavity created by your brine well has not grown so large as to encroach on the existing abandoned or temporarily abandoned wells in the vicinity.

2. The leak detection system under the pond will be constructed with no more than 15 feet between the laterals.

Please note that you may begin construction of the surface facilities at your proposed brine station at any time, so long as they will be constructed in accordance with your approved discharge plan by the time you begin to use them. You may begin construction of the well as soon as you receive approval of the plugging bond submitted by your consultant. Our legal staff is currently reviewing the plugging bond; you will receive notice regarding its adequany by a separate letter.

Thank you for your cooperation during this discharge plan review process.

Sincerely,

Paige Grant Morgan

Paige Grant Morgan
Water Resource Specialist
Ground Water Section

cc: John Guinn, EID District IV, Roswell
J.T. Janica, P.E.

PGM:jba

natural resources engineering inc.

February 15, 1985

Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87504-0968

Attention: Paige Morgan

RE: Plugging Bond
Salty Dog, Inc.
Hobbs #1
NB01-003-001

Dear Ms. Morgan:

Attached please find a one well plugging bond for the Salty Dog Inc., Hobbs #1.

This bond is a guarantee by Salty Dog, Inc. and Reliance Insurance Corp. that the above referenced well will be plugged in accordance with the rules and regulations of the State of New Mexico in such a way that oil, gas, and water will not escape from the strata in which they are found into another strata.

It is our understanding from telephone conversations with you that this plugging bond is all that is left before approval of our discharge plan is granted. Please advise this office as soon as approval is granted so that we may begin construction of the underground facilities.

Sincerely yours,

J. T. Janica JEC

J. T. Janica, Jr.
Natural Resources Engineering, Inc.

Enclosures

cc: file
chrono
N. Brunson
L. Squires

phone (505) 397-6319 • 201 e. sanger • p. o. box 2188 • hobbs, new mexico 88240

1/17/85: Called Jay Janca to get verbal agreement on some outstanding points rather than having another exchange of letters. We discussed the following — he will clear with his client and get back to me w/ final decision:

(1) There are two P&A oil wells and a TA well within ≈ 1000 feet of the (proposed) brine well. Records for the P&A wells indicate no cement or mud in salt zone and very small (25-sack) plugs where they do exist. In short, substantial opportunity for brine migration through these old well bores. Two options:

(1) reenter the wells (TA also) and set a good solid (150-foot?) cement plug above and below the salt, or

(2) commit to running a sonar log or equivalent once @ 5 years to ~~demonstrate~~ measure the maximum diameter and other geometry of the cavern. Jay thinks they will opt for the latter, with the understanding that if the cavity begins

to encroach within 2-300 feet of the adjacent wells they will cease operations.

(2) They will redesign the leak detection system such that there is no more than 12-15 feet between laterals.

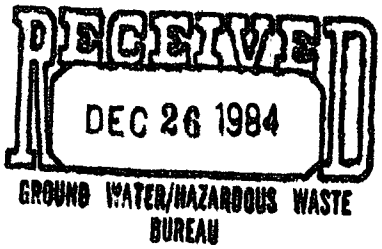
(3) I'm the one to notify prior to construction, for the pressure test, etc. In emergency, use Haz. Waste response line: 827-9329.

(4) I gave him refs. on hydrology in Hobbs area - therefore these sources are clearly available to me and they need not amplify this section. I discussed the inadequacy of this section, for future reference.

Lady Grant Morgan.

natural resources engineering inc.

December 21, 1984



Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87504-0968

Attention: Paige Morgan

RE: Supplement to
Discharge Plan DP-353
Salty Dog, Inc.
Hobbs #1
NB01-003-001

Dear Ms. Morgan:

Attached please find a supplement to our discharge plan which we sent you on August 21, 1984. This supplement answers the questions raised and supplies the additional information requested in your letters of October 24, and November 13, 1984.

We have not supplied the plugging bond information which you requested; however, we are in the process of obtaining it. This information will be forwarded to you as soon as it is available.

Please notify this office when Salty Dog, Inc. may begin construction of surface facilities and/or construction of underground facilities. If you have any questions, please contact our office at 397-6319.

Sincerely yours,

Jay Janica

J. T. Janica, P.E.
NRE, Agents for
Salty Dog, Inc.

Enclosures

cc: file
chrono
N. Brunson
L. Squires

phone (505) 397-6319 • 201 e. sanger • p. o. box 2188 • hobbs, new mexico 88240

Supplement to
Discharge Plan DP-353
Salty Dog, Inc.
Hobbs #1
S20 T18S R38E
Lea County, NM

LIST OF ATTACHMENTS

Attachment B Rev 1	Proposed Wellbore Sketch
Attachment I Rev 1	Plugging Procedure
Attachment S1	Fracture Gradient Calculations
Attachment S2	Fresh Water Aquifers In the Area
Attachment S3	State Engineer Records
Attachment S4	Plat of Water Wells In the Area of Review
Attachment S5	Well Records

SUPPLEMENT TO DISCHARGE PLAN DP-353
Salty Dog Inc., Hobbs #1

Surface Facilities

The type of pipe to be used to transport brine from the well to storage to the loading station will be plastic coated steel pipe. It will be laid on the surface to facilitate visual inspection for leaks.

Leak Detection System

The leak detection system as designed is a standard leak detection system and is used throughout the industry. This type of design has been accepted by the Minerals Management Service as sufficient to detect leaks from lined brine pits on federal lands.

The one percent slope of the lateral lines and the central line is a slope which is commonly used in the design of sewer systems which handle solid and liquid materials. As this system will not be handling solid waste, the 1% slope is adequate. However, we will commit to a slope of not less than 1-1/2% if you desire.

The surface substrata under the pond is caliche and no compaction is anticipated. A layer of sand will be spread over the bottom of the pond to protect the liner from punctures.

Salty Dog, Inc. will notify the Environmental Improvement Division one day before construction of the leak detection system. It is estimated that a minimum of three days will be required to complete the leak detection system. Please provide the name and telephone number of the person we are to notify.

Underground Facility

Attached is a revised wellbore sketch (Attachment "B" Rev 1). The amount of cement used to set surface casing was 225 sacks of Type C Neet. While the cement was circulated to surface, the number of sacks circulated was not recorded.

The type of cement used to set all plugs will be Class C.

Salty Dog will notify the EID prior to pressure testing the casing. We will also submit a report of the results of the test with a pressure chart of the casing pressures during the testing.

Geology

The sources of our geological information are:

1. The Roswell Geological Society
2. The U.S. Corps of Engineers
3. Well logs and sample records
4. N.M. Energy & Minerals Department Oil Conservation Division
5. U.S. Minerals Management Service
6. N.M. State Engineers Office

Stratigraphic column in the brine extraction well is:

Caliche and Alluvium	0 - 15'
Ogallala	15 - 250'
Chinle (Redbeds)	250 - 540'
Santa Rosa	540 - 1140'
Dewey Lake	1140 - 1540'
Rustler Anhydrite	1540 - 1640'
Salado Salt	1640 - 2570'
Anhydrite Stringers in Basil Salado	2570 - 2725'

The downhole pressure caused by a 250 psi operating pressure would be 1427 psi. The fracture pressure of salt at 2500' is 2958 psi, this is well above the operating pressure and no fractures should be caused (see Attachment "S1").

Hydrology

The information requested in section 5-210.B.5 of the WQCC regulations is not readily available; however, attached are maps showing the the aerial extent and thickness of aquifers containing ground water with less than 10000 MG/L of TDS (see Attachment "S2" pages 1-4).

Total depth to water in the AA Oilfield well is 54'. Attached is a drillers log of this well (Attachment "S3").

We have checked with the state engineers office in Roswell for additional water wells in this area. Attached is a plat of the area (Attachment "S4") with water wells located as best as can be from the available records. Also attached are records from the State Engineers Office on water wells in this area (Attachment "S3").

Flooding Potential

The location is in a very slight declivity trending from Northwest to Southeast. This declivity is divided in two immediately to the Northwest of the site by county road C-66A which makes an effective barrier/dike against potential run off from the Northwest. All other drainage is away from the site to the Southeast. Additionally during the recent heavy rains and localized flooding experienced in the Hobbs area, there was no flooding in the area of the proposed brine well.

Our next water analysis of the AA Oil Field Service water well will contain nitrates as a constituent. Salty Dog will also submit an analysis of its brine which will include purgeable aromatic hydrocarbons with this analysis as requested.

Protecting Ground Water Quality

The total depth of the H. D. McKinley "B" #1 is 8010'. See Attachment "S5", well records.

The total depth of the Shell N. Hobbs G/SA Unit #421 was 4414'. See Attachment "S5", well records.

Salty Dog will pressure test the well as follows:

1. Remove tubing.
2. Set retrievable bridge plug at end of casing.
3. Pressure up on casing to 1000 psi.
4. Record pressures for 15 minutes on pressure recorder.

This procedure will verify that there are no leaks in the casing. Salty Dog will notify the EID one day before the test is conducted and submit a report of the test results.

The sump of the loading pad will be concrete lined.

As this facility will only be producing brine, it is the only material which can be spilled. A major spill would be any spill which causes brine to get off of the facility site.

A loss of mechanical integrity will be detected by the following:

1. Comparing volumes inspected and volumes produced.
2. Any sudden changes in injection pressures.
3. Five year pressure tests.

Salty Dog will report any significant spills and/or loss of mechanical integrity of the well to the EID as required in Section 1-203.A.1 and 5-208.B.1 of the WQCC regulations.

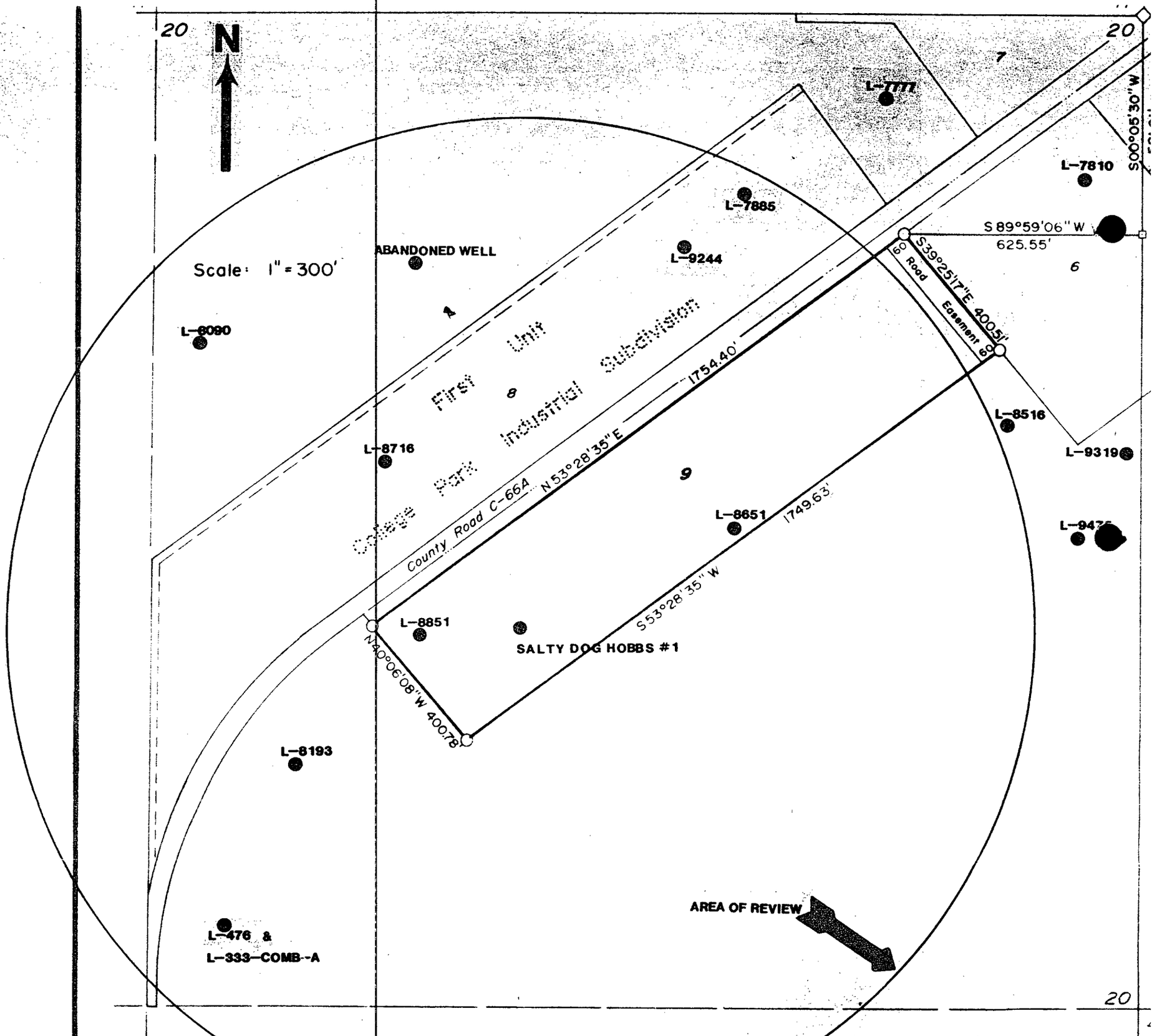
Please provide the name and telephone number of the person who Salty Dog is to report to in this event.

Plugging and Abandonment

Attached is a revised plugging procedure (Attachment "I" Rev 1) calling for:

1. Filling the cavity with brine.
2. Setting a bridge plug at the bottom of the casing.
3. Filling the casing with cement.

We are obtaining the requested information on Salty Dog's plugging bond and will forward it as soon as it is available.



CERTIFICATE OF SURVEY

I, Neal D. King, hereby certify that I am the Registered Land Surveyor who had prepared the above plat from field notes of actual surveys made under my direction and that the same are true and correct to the best of my knowledge and belief.

Attachment "S4":

Plat of Water Wells in the Area of Review

NATURAL RESOURCES
ENGINEERING INC.
P. O. Box 2188 / 201 E. Sanger
Phone (505) 397-6319
Hobbs, New Mexico 88240

ATTACHMENT "B" REV. 1

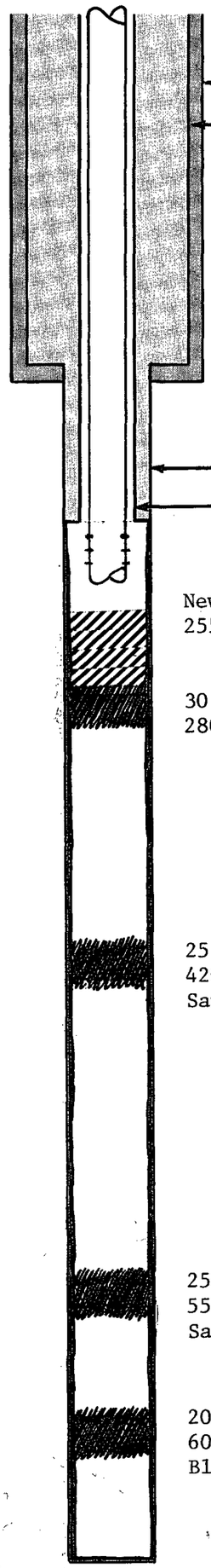
WELL BORE SKETCH

OPERATOR/LEASE/WELL Salty Dog, Inc./Hobbs #1

NRE JOB NUMBER NB01-003-001 DATE December 18, 1984

FIELD/POOL -- / --

PLUG BACK DEPTH 4200' KB 10' ELEVATION 3646'



Hole Size 12-1/4"

SURFACE CASING:

Size 8-5/8" Weight 24# Grade New

Set at 306' with 225 Sacks Cement

Circulate Yes Sacks to Surface

Remarks: Cement was circulated. There is no record of the number of sacks circulated. After 24 hours WOC, casing was tested to 1000 psi for 30 minutes. Tested O.K.

Hole Size 6-3/4"

PRODUCTION CASING:

Size 5-1/2" Weight 14# Grade J-55

Set at 1700' with 300 Sacks Cement

Cement Top: Calculated surface Temperature Survey

Remarks: Cement is calculated to circulate to surface with 100% excess.

TUBING:

Size 2-3/8" Weight 6.4# Grade J-55

Number of Joints 75 Set at 2250'

Packer Set at None

Bottom Arrangement: Open ended with 15' of perforations in tubing.

RODS:

Size _____ Number _____

Gas Anchor Set at _____

Pump Set at _____

Arrangement: _____

natural resources engineering inc.

Attachment "I"
PLUGGING PROCEDURE

OPERATOR: Salty Dog, Inc.

WELL: Hobbs #1 FIELD: Brine Well

COUNTY: Lea STATE: NM

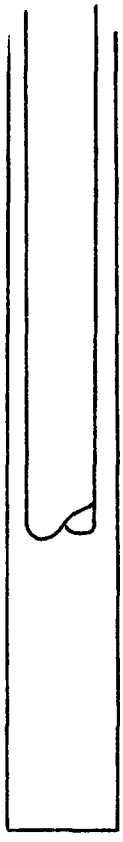
LOCATION: 1650 FNL & 1650 FEL Sec 20, T-18-S, R-38-E

DATE: 12/18/84 ELEV. RKB: 10 GR: 3646 REV: 1

****

1. Move in and rig up plugging unit. Unload work string and tally
2. Displace hole and cavity with brine
3. Pull tubing out of hole and run in hole with wire line bridge plug.
4. Set bridge plug at bottom of casing (1700')
5. Set cement plug from 1700' to surface
6. Rig down, clean location, move surface equipment (tank battery, loading station, etc.) off location.
7. Remove liner from storage pit, break up pit and return ground to original contour

Attachment "S1"
Fracture Gradient Calculations



Given:
Fresh Water Head - 0.433 psi/ft depth
10# Brine Head - 0.519 psi/ft depth
Fracture Gradient Salt - 1.16 psi/ft depth
Operating Pressure - 250 psi

End of Tubing @ 1770'

PBTB=2550'

Bottom Hole Pressure = 250 psi + Fresh Water head + Brine head
= 250 psi + 1700(0.433) + 850(0.519)
= 1427 psi

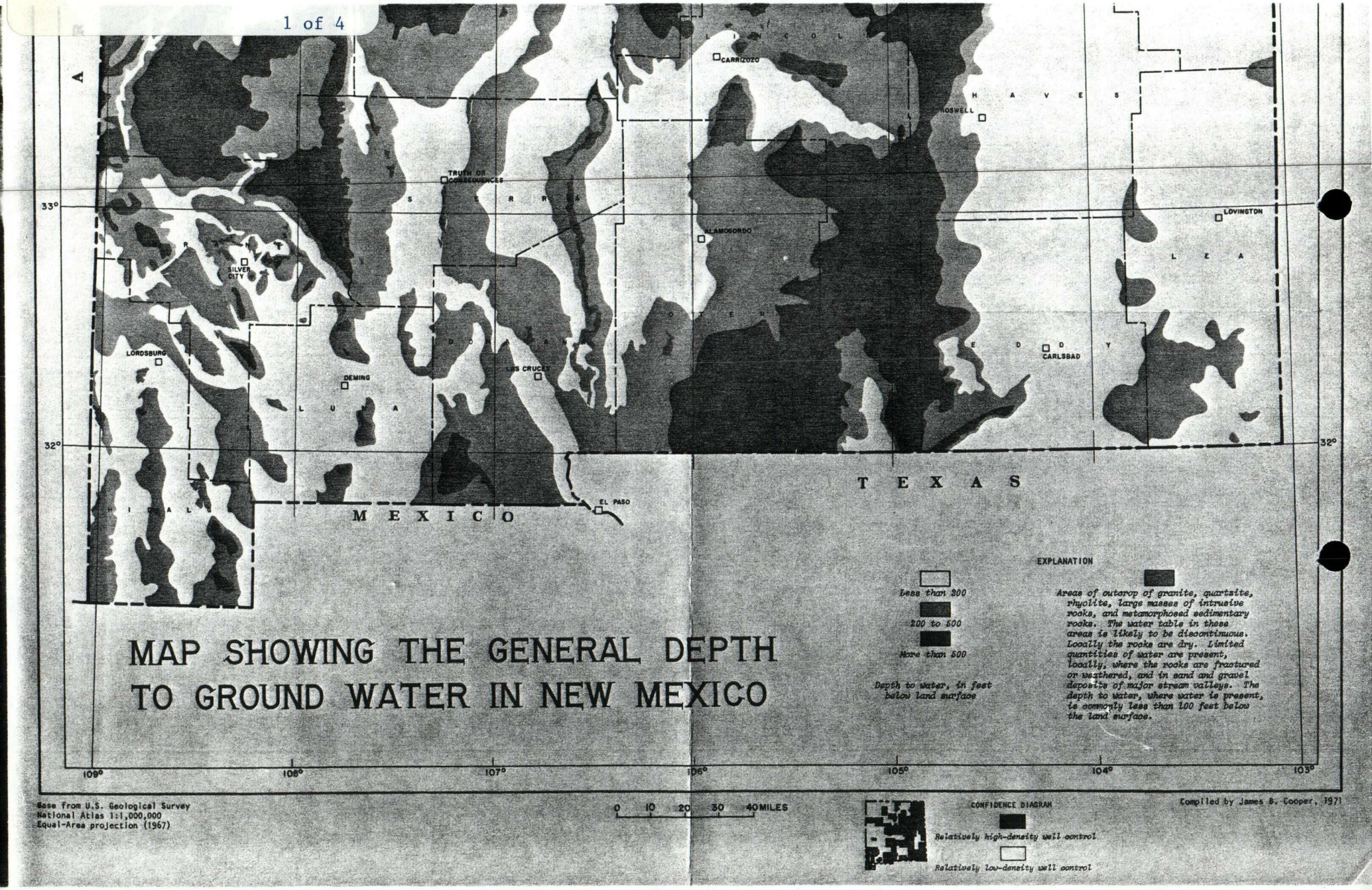
Fracture Pressure = Fracture Gradient X Depth
= 1.16(2550)
= 2958 psi

Therefore:
Bottom Hole Pressure is less than Fracture Pressure

Attachment "S2"

Depth to Ground Water

1 of 4



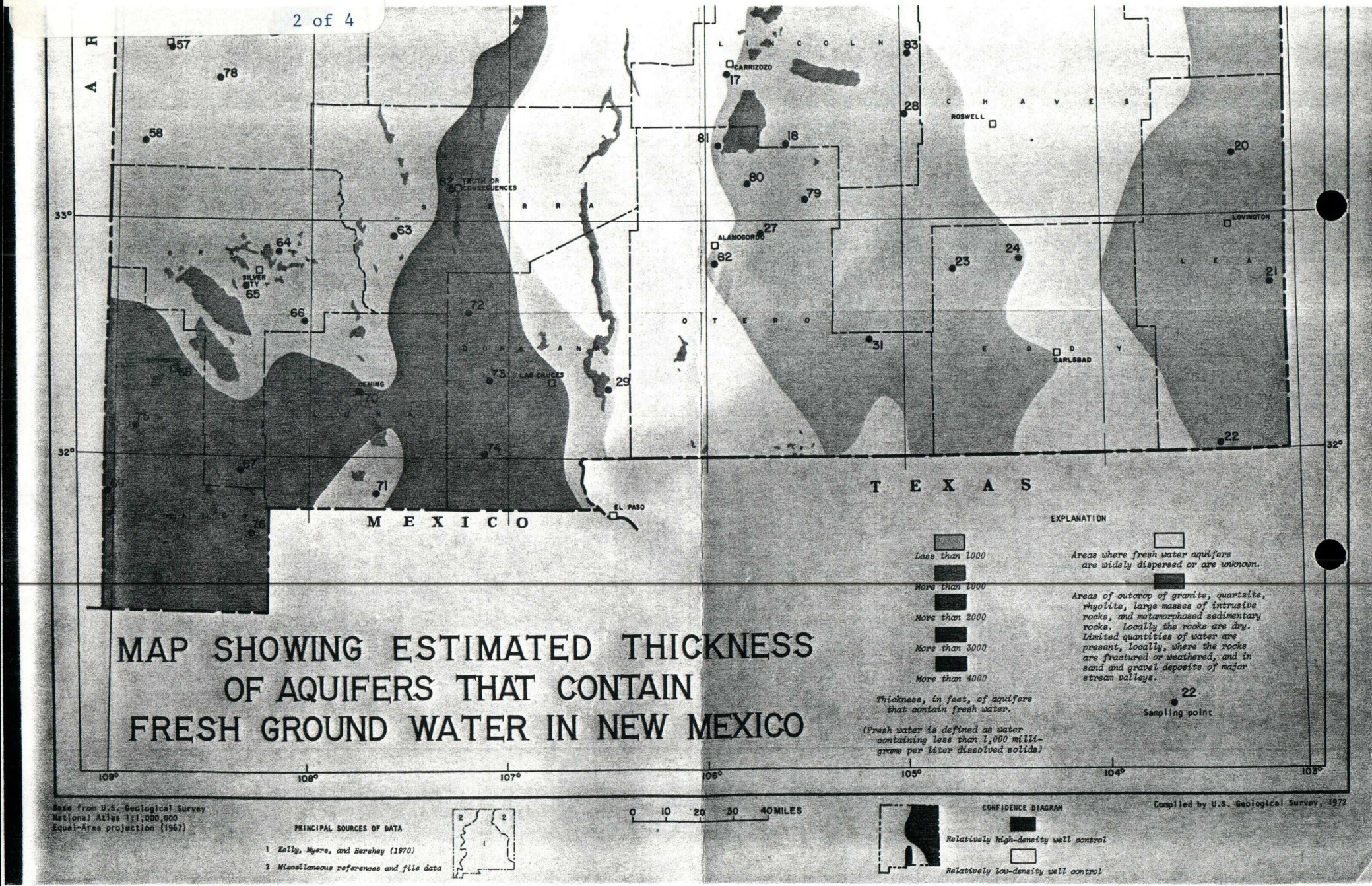
MAP SHOWING THE GENERAL DEPTH TO GROUND WATER IN NEW MEXICO

Base from U.S. Geological Survey
National Atlas 1:1,000,000
Equal-Area projection (1967)

Compiled by James B. Cooper, 1971

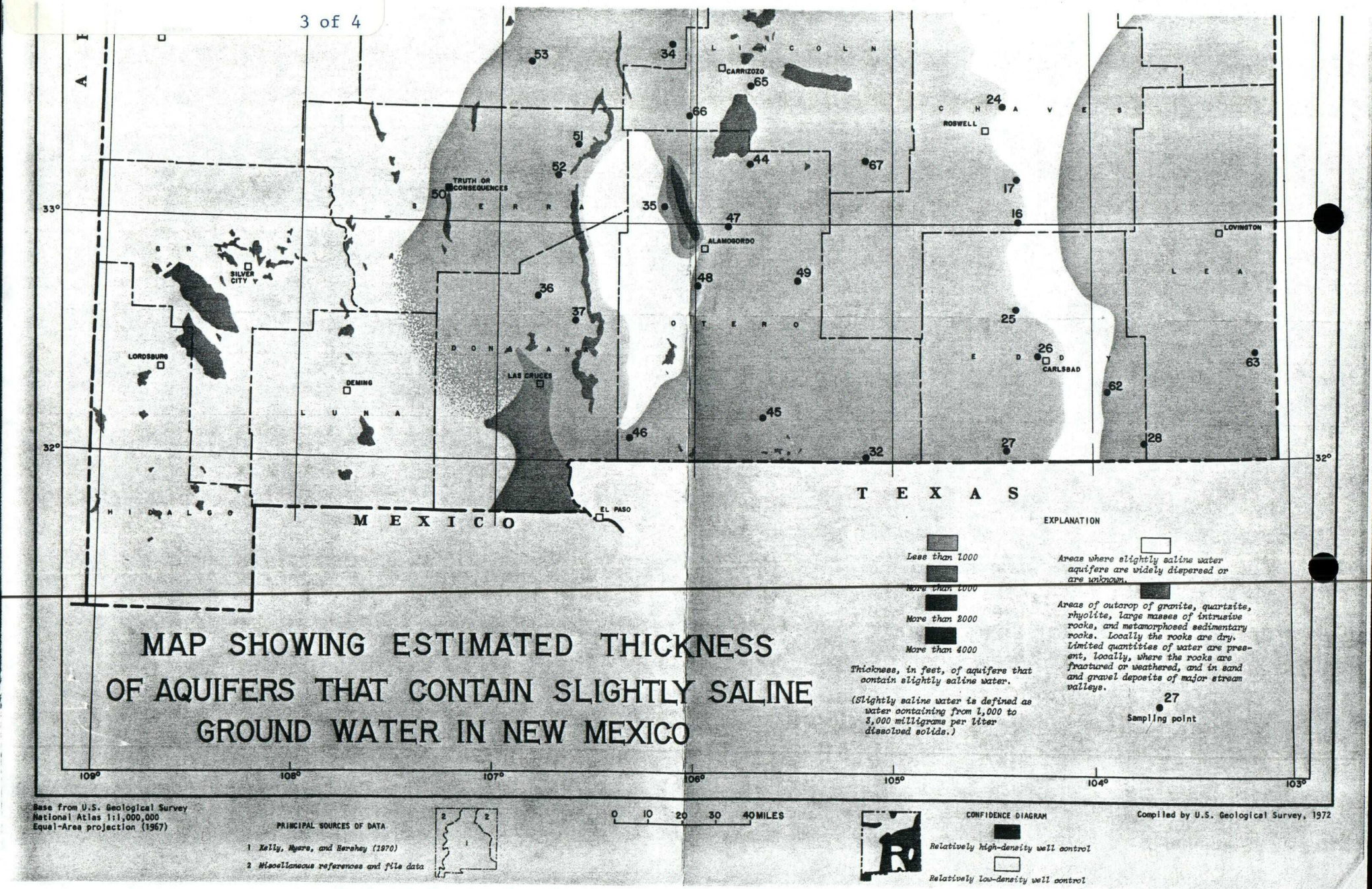
Attachment "S2"

Thickness of Aquifers
With Less Than 1000 MG/L TDS



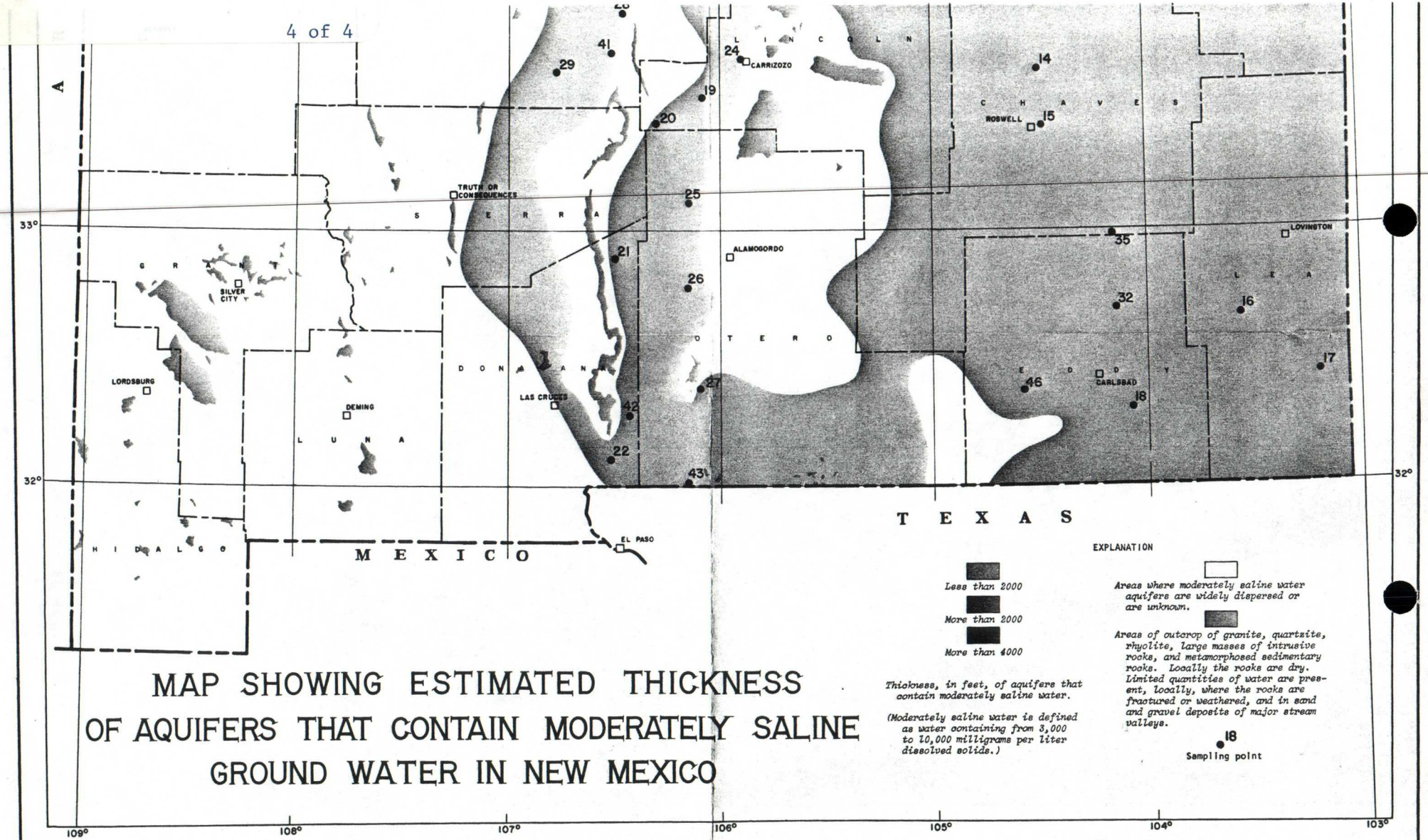
Attachment "S2"

Thickness of Aquifers
With 1000-3000 MG/L TDS



Attachment "S2"

Thickness of Aquifers
With 3000-10000 MG/L TDS



MAP SHOWING ESTIMATED THICKNESS OF AQUIFERS THAT CONTAIN MODERATELY SALINE GROUND WATER IN NEW MEXICO

EXPLANATION

Less than 2000

More than 2000

More than 4000

Thickness, in feet, of aquifers that contain moderately saline water.

(Moderately saline water is defined as water containing from 3,000 to 10,000 milligrams per liter dissolved solids.)

Areas where moderately saline water aquifers are widely dispersed or are unknown.

Areas of outcrop of granite, quartzite, rhyolite, large masses of intrusive rocks, and metamorphosed sedimentary rocks. Locally the rocks are dry. Limited quantities of water are present, locally, where the rocks are fractured or weathered, and in sand and gravel deposits of major stream valleys.

18 Sampling point

Base from U.S. Geological Survey
National Atlas 1:1,000,000
Equal-Area projection (1967)

PRINCIPAL SOURCES OF DATA

1 *Kelly, Myers, and Hershey (1970)*

2 *Miscellaneous references and file data*

0 10 20 30 40 MILES

CONFIDENCE DIAGRAM

Relatively high-density well control

Relatively low-density well control

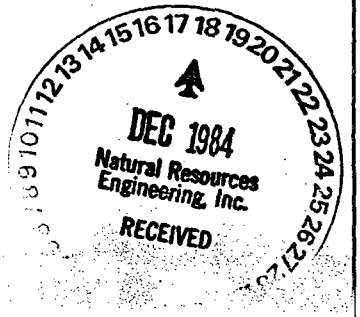
Compiled by U.S. Geological Survey, 1972

Attachment "S3"

N.M. State Engineer Records

Section 20	Township 18 South	Range 38 East
L-1173	NE¼NE¼SW¼	Irr.
~~L-502~~		Irr.
L-1213		Shallow-Dom.
L-3445	~~SE¼NE¼NW¼~~	Dom.
L-2733	NE¼SE¼SW¼	Dom.
L-3863		Dom.
L-4043	SW¼NW¼SW¼	Irr.
L-502-A-Enlarged	SW¼NW¼SW¼	Irr.
L-5107	SE¼	Dom.
L-5371	SW¼SW¼SW¼	Dom.
L-5437	S½SW¼	Dom.
L-5607	S½SW¼	dom.
L-502-A-Enlgd-B	NW¼SW¼SW¼	Irr.
L-502-A-Enlgd-C	E½SW¼SW¼ -cancelled	Irr.

SECTION 20	TOWNSHIP 18 SOUTH	RANGE 38 EAST
L-502-A-Enlarged-D	NW¼SW¼SW¼	IRR
~~L-7885~~	NE¼NE¼	DTC
L-7903	SE¼SE¼	DOM
L-8024	SE¼SE¼SW¼	DOM
~~L-8090~~	~~SW¼NW¼NE¼~~	DOM
~~L-8193~~	~~SW¼NE¼~~	DTC
L-8313	SW¼SW¼	DOM
L-8408	NE¼SW¼	DOM
~~L-8516~~	~~SE¼NE¼NE¼~~	DTC
L-8520	S½SW¼	DOM
L-8600	NE¼NE¼	DTC
L-8617	S½NW¼NE¼ -not drilled	DOM
~~L-8651~~	~~NE¼NW¼NW¼SE¼NE¼~~	DTC
~~L-8716~~	~~S½NW¼NE¼~~	DTC



L-6127	$S\frac{1}{2}SW\frac{1}{4}$	Dom & Stk
L-6264	$S\frac{1}{2}SW\frac{1}{4}$	Dom.
L-6317	$N\frac{1}{2}SW\frac{1}{4}$	Dom.
L-6329	$S\frac{1}{2}SW\frac{1}{4}$	Domestic
L-6374	$S\frac{1}{2}SW\frac{1}{4}$	Dom.
L-6541	$N\frac{1}{2}SW\frac{1}{4}$	Dom
L-6645	$S\frac{1}{2}SW\frac{1}{4}$	Dom & Stk
L-7100	$SE\frac{1}{4}SW\frac{1}{4}$	Dom.
~~L-476~~ & L-333-Comb-A	$NE\frac{1}{4}NW\frac{1}{4}NW\frac{1}{4}$	Irr.

L-476 & L-333-Comb-A - CLW & P & PU well now located in the $SW\frac{1}{4}NE\frac{1}{4}$ renumbered L-476A Ind.

L-7546	$S\frac{1}{2}SW\frac{1}{4}$	Dom.
L-7777	$NE\frac{1}{4}NE\frac{1}{4}$	DTC
L-7810	$NE\frac{1}{4}NE\frac{1}{4}NE\frac{1}{4}$	DTC

L-8728	$SE\frac{1}{4}NE\frac{1}{4}SW\frac{1}{4}$	DTC
L-8817	$NE\frac{1}{4}NE\frac{1}{4}SE\frac{1}{4}$	STK
~~L-8851~~	~~$NW\frac{1}{4}SW\frac{1}{4}NE\frac{1}{4}$~~	DTC
L-9244	$NW\frac{1}{4}NE\frac{1}{4}NE\frac{1}{4}$	D & S
L-9364	$SE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$	DOM
L-9319	$SE\frac{1}{4}NE\frac{1}{4}NE\frac{1}{4}$	D & S
L-9475	$NE\frac{1}{4}NE\frac{1}{4}$	D & S

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

FIELD ENGR. LOG

Section 1. GENERAL INFORMATION

(A) Owner of well A A Oilfield Owner's Well No. _____

Street or Post Office Address 1416 W. Broadway

City and State Hobbs, NM 88240

Well was drilled under Permit No. L-8851 and is located in the:

a. _____ ¼ NW ¼ SW ¼ NE ¼ of Section 20 Township 18S Range 38E N.M.P.M.

b. Tract No. 9 of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the 2 Unit College Park Industrial Subdivision, recorded in Lea County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Larry's Drilling License No. WD882

Address 2601 W. Bender Hobbs, NM 88240

Drilling Began 7-1-82 Completed 7-2-82 Type tools tricone Size of hole 8¼ in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 120 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 54 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
54	120	66	sand & sandstone	28

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
5½	160PVC		-1	120	121		100	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by: _____ State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received July 9, 1982 Quad _____ FWL _____ FSL _____

File No. L-8851 Use D & S Location No. 18.38.20.23141

Temp. on N. E. Corner

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	2	2	topsoil
2	38	36	caliche
38	60	22	sand & sandstone
60	68	8	hard red rock sand & sandstone
68	120	52	sand, think layers of sandstone

Section 7. REMARKS AND ADDITIONAL INFORMATION

JUL 23 2:11 PM '82

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All questions, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

FIELD ENGR. LOG

Section 1. GENERAL INFORMATION

(A) Owner of well Oil Field Rental Service Co. Owner's Well No. L-8716

Street or Post Office Address 1312 Kiowa

City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-8716 and is located in the:

a. ___ ¼ S½ ¼ NW ¼ NE ¼ of Section 20 Township 18-S Range 38-E N.M.P.M.

b. Tract No. 8 of Map No. ___ of the First Unit of College Park Industrial

c. Lot No. ___ of Block No. ___ of the ___ Subdivision, recorded in Lea County.

d. X= ___ feet, Y= ___ feet, N.M. Coordinate System ___ Zone in the ___ Grant.

(B) Drilling Contractor Abbott Bros. Drilling License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 3/23/82 Completed 3/24/82 Type tools Cable Size of hole 8¼ in.

Elevation of land surface or ___ at well is ___ ft. Total depth of well 130 ft.

Completed well is [X] shallow [ ] artesian. Depth to water upon completion of well 49 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
49	92	43	Sand	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
6 5/8	17	Welded	0	132	132	None	54	132

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor ___

Address ___

Plugging Method ___

Date Well Plugged ___

Plugging approved by:

___ State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received March 26, 1982

Quad ___ FWL ___ FSL ___

File No. L-8716 Use DTC Location No. 18.38.20.213344

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	3	3	Surface soil
3	26	23	Caliche
26	49	23	Sand-tight
49	92	43	Sand-water
92	110	18	Sand-tight
110	118	8	Sand-rock
118	130	12	Sand

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Murrell Abbott N.B.
Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section need be completed.

Revised June 1972

STATE ENGINEER OFFICE
WELL RECORD

FIELD ENGR. LOG

Section 1. GENERAL INFORMATION

(A) Owner of well Tony Gassaway Owner's Well No. _____

Street or Post Office Address P.O. Box 2443

City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-8651 and is located in the:

a. NE¼ NW¼ NW¼ SE¼ NE¼ of Section 20 Township 18-S Range 38-E N.M.P.M.

b. Tract No. 9 of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the 2nd unit of College Park Industrial Subdivision, recorded in Lea County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Abbott Bros. Drilling License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 2/9/82 Completed 2/10/82 Type tools Cable Size of hole 8½" in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 120 ft.

Completed well is [X] shallow [ ] artesian. Depth to water upon completion of well 56 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
56	89	33	Sand	
89	120	31	Loose Sand	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
6 5/8	17	Welded	0	120	120	None	60	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by: _____ State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received February 17, 1982 Quad _____ FWL _____ FSL _____

File No. L-8651 Use DTC Location No. 18.38.20.24112

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	4	4	Surface soil
4	26	22	Caliche
26	30	4	Sand rock
30	56	26	Sand-tight
56	89	33	Sand-water
89	120	31	Sand-loose-water

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Murrell Abbott N.B.
Driller

INSTRUCTIONS: This for should be executed in triplicate, preferably typewritten, and submitted t e appropriate district office of the State Engineer. A ions, except Section 5, shall be answered as completely and accurat possible when any well is drilled, repaired or deepene When this form is used as a plugging record, only Section 1(a) and Section need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

FIELD ENGR. LOG

Section 1. GENERAL INFORMATION

(A) Owner of well MACK TIREK DEALERSHIP Owner's Well No. L-7310

Street or Post Office Address

City and State HOBBS NM.

Well was drilled under Permit No. L-7810 and is located in the:

a. ____ ¼ NE ¼ NE ¼ NE ¼ of Section 20 Township 18-E Range 38-5 N.M.P.M.

b. Tract No. ____ of Map No. ____ of the ____

c. Lot No. ____ of Block No. ____ of the ____
Subdivision, recorded in ____ County.

d. X= ____ feet, Y= ____ feet, N.M. Coordinate System ____ Zone in the ____ Grant.

(B) Drilling Contractor YUCCA DRILLING CO. License No. WD-763

Address ~~Hwy~~ 2601-W Bender HOBBS NM

Drilling Began 11-25-77 Completed 11-27-77 Type tools HAMMER Size of hole 8 ½ in.

Elevation of land surface or ____ at well is ____ ft. Total depth of well 120 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
60	120	60	SAND & SANDSTONE	35
			Pebbles	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
5"	PVC 160		0	120	20		100	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
0	120	8 ½			AIR

Section 5. PLUGGING RECORD

Plugging Contractor ____

Address ____

Plugging Method ____

Date Well Plugged ____

Plugging approved by:

____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received February 5, 1979

Quad ____ FWL ____ FSL ____

File No. L-7810 Use DTC Location No. 18.38.20.222

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	60	60	Caliche
60	120	60	SAND & SANDSTONE Pebbles

'79 FEB 8 AM 8 16
STATE ENGINEER OFFICE
ROSWELL, N. M.

Section 7. REMARKS AND ADDITIONAL INFORMATION

'79 FEB 5 AM 8 16
STATE ENGINEER OFFICE
ROSWELL, N. M.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Clifton T. Fulkerson
Driller

INSTRUCTIONS: This fo ould be executed in triplicate, preferably typewritten, and submitted appropriate district office of the State Engineer. Al. ions, except Section 5, shall be answered as completely and accurate possible when any well is drilled, repaired or deepened When this form is used as a plugging record, only Section 1(a) and Section need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well The Western Co. of North America Owner's Well No. _____

Street or Post Office Address P.O. Box 1067

City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-476 & L-333-Comb.A and is located in the:

a. _____ ¼ _____ ¼ SW ¼ NE ¼ of Section 20 Township 18S Range 38E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in Lea County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Abbott Bros. License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 8/18/75 Completed 8/18/75 Type tools Cable Size of hole 8 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 125 ft.

Completed well is [X] shallow [ ] artesian. Depth to water upon completion of well 55 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
55	125	70		

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
6 5/8	13	Welded	0	125	125	None	55	125

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
					Cement at top

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received December 12, 1979

Quad _____ FWL _____ FSL _____

File No. L-476 & L-333-Comb-A Use IND. Location No. 18.38.20.23323

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	2	2	Topsoil
2	20	18	Caliche
20	55	35	Sand
55	125	70	Water sand

Section 7. REMARKS AND ADDITIONAL INFORMATION

'79 DEC 12 AM 8 07
STATE ENGINEER OFFICE
ROSWELL, N.M.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Murrell Abbott N.M.
Driller

INSTRUCTIONS: This fo hould be executed in triplicate, preferably typewritten, and submitted e appropriate district office of the State Engineer. A. ions, except Section 5, shall be answered as completely and accurat possible when any well is drilled, repaired or deepened When this form is used as a plugging record, only Section 1(a) and Section need be completed.

Revised June 1972

FIELD ENGR. LOG

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Brakes & Wheels, Inc. Owner's Well No. XXXXXXX

Street or Post Office Address 3245 Kermit Highway

City and State Odessa, Texas

Well was drilled under Permit No. L-7885 and is located in the:

a. NE ¼ NE ¼ ¼ ¼ of Section 20 Township 18S Range 38E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____ Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Yucca Drilling Co. License No. WD-763

Address P. O. Box 798, Artesia, New Mexico 88210

Drilling Began 4-24-78 Completed 4-24-78 Type tools Hammer Size of hole 8 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 120 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 65 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
70	120	50	Sand	25

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
5 5/8	PVC 160		0	120	20		100	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
0	120	8			Air

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by:

_____ State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received May 1, 1980

Quad _____ FWL _____ FSL _____

File No. L-7885 Use DTC. Location No. 18.38.20.22142

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	120	120	Sand

Section 7. REMARKS AND ADDITIONAL INFORMATION

'80 MAY 1 AM 7 55

STATE ENGINEER OFFICE
ROSWELL, N. M.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This for ould be executed in triplicate, preferably typewritten, and submitted ' appropriate district office of the State Engineer. Al. .ons, except Section 5, shall be answered as completely and accurat , possible when any well is drilled, repaired or deepened When this form is used as a plugging record, only Section 1(a) and Section need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

FIELD [illegible]

Section 1. GENERAL INFORMATION

(A) Owner of well Jim Martin Owner's Well No. L-7777

Street or Post Office Address P.O. Box 116

City and State Hobbs, NM 88240

Well was drilled under Permit No. L-7777 and is located in the:

a. ___ ¼ NE ¼ NE ¼ ___ ¼ of Section 20 Township 18S Range 38 E N.M.P.M.

b. Tract No. ___ of Map No. ___ of the ___

c. Lot No. ___ of Block No. ___ of the ___
Subdivision, recorded in ___ Lea ___ County.

d. X= ___ feet, Y= ___ feet, N.M. Coordinate System ___ Zone in the ___ Grant.

(B) Drilling Contractor Yucca Drilling License No. WD763

Address 2601 W. Bender, Hobbs, NM 88240

Drilling Began Nov. 1977 Completed Nov. 1977 Type tools hammer bit Size of hole 8 1/2 in.

Elevation of land surface or ___ at well is ___ ft. Total depth of well 120 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
80	120	40	sand & sand stone	20

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
5 5/8	pvc/160		0	120	120		100	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
0	120	8 1/2			air

Section 5. PLUGGING RECORD

Plugging Contractor ___

Address ___

Plugging Method ___

Date Well Plugged ___

Plugging approved by:

___
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received August 11, 1980

Quad ___ FWL ___ FSL ___

File No. L-7777 Use DTC. Location No. 18.38.20.22213

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	3	3	top soil
3	45	42	caliche
45 40	120	80 75	sand and sand stone pebbles

Section 7. REMARKS AND ADDITIONAL INFORMATION

'80 AUG 11 AM 8 09

STATE ENGINEER OFFICE
ROSWELL, N. M.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This f hould be executed in triplicate, preferably typewritten, and submitted e appropriate district office of the State Engineer. A tions, except Section 5, shall be answered as completely and accura s possible when any well is drilled, repaired or deepene . When this form is used as a plugging record, only Section 1(a) and Sect need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

FIELD ENGR

Section 1. GENERAL INFORMATION

(A) Owner of well James Rodgers Owner's Well No. _____
Street or Post Office Address 511 E. Llano
City and State Hobbs, NM 88240

Well was drilled under Permit No. L-8516 and is located in the:

a. _____ ¼ SE ¼ NE ¼ NE ¼ of Section 20 Township 18-S Range 38-E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ Lea _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Larry's Drilling License No. WD882
Address 2601 W. Bender, Hobbs, NM

Drilling Began 8-10-81 Completed 8-11-81 Type tools button bit Size of hole 9½ in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 120 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 48 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
60	120	60	sand and sandstone	30

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
5½	160 PVC		-1	120	121		100	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor _____
Address _____
Plugging Method _____
Date Well Plugged _____
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received August 14, 1981 Quad _____ FWL _____ FSL _____

File No. L-8516 Use DTC Location No. 18.38.20.224

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	3	3	topsoil
3	34	31	caliche
34	38	4	sand
38	44	6	hard rock red
44	60	16	sand, sandstone & shite clay
60	120	60	sand and sandstone

Section 7. REMARKS AND ADDITIONAL INFORMATION

STATE ENGINEER
ROSWELL, NM

AUG 14 8 45 AM '81

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This f should be executed in triplicate, preferably typewritten, and submitted he appropriate district office of the State Engineer. ctions, except Section 5, shall be answered as completely and accura as possible when any well is drilled, repaired or deepene l. When this form is used as a plugging record, only Section 1(a) and Sectior 5 need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

FILE NO. L-8090

Section 1. GENERAL INFORMATION

(A) Owner of well Wayne Hunnicut Owner's Well No. ~~80512-1~~

Street or Post Office Address P. O. Box 2248

City and State Hobbs, New Mexico, 88240

Well was drilled under Permit No. L-8090 and is located in the:

a. SW¼ NW ¼ NE ¼ ¼ ¼ of Section 20 Township 18S Range 38E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ Lea _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor G. D. Oldaker License No. WD-657

Address P. O. Box 2321, Hobbs, New Mexico. 88240

Drilling Began 1/5/80 Completed 1/7/80 Type tools cable Size of hole 9 in.

Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 110 ft.

Completed well is [x] shallow [ ] artesian. Depth to water upon completion of well 52 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
52	110	58	Water, Sand	25GPM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
6 5/8			0	110	110	none	90	110

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
		9			

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by:

_____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received January 10, 1980

Quad _____ FWL _____ FSL _____

File No. L-8090 Use DOM. Location No. 18.38.20.21300

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	2	2	Brown Soil
2	20	18	Caliche
20	40	20	Gray Soil
40	42	2	Rock
42	110	68	Water, Sand
110			

Section 7. REMARKS AND ADDITIONAL INFORMATION

'80 JAN 10 AM 8 13

STATE ENGINEER OFFICE
ROSWELL, N.M.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

G. D. Whitaker
Driller

INSTRUCTIONS: This fo ould be executed in triplicate, preferably typewritten, and submitted appropriate district office of the State Engineer. A ions, except Section 5, shall be answered as completely and accurat possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section need be completed.

Copy

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

FIELD ENGR. USE

Section 1. GENERAL INFORMATION

(A) Owner of well W. L. McCoulough Owner's Well No. L-8193

Street or Post Office Address Eunice Highway

City and State Hobbs, NM 88240

Well was drilled under Permit No. L-8193 and is located in the:

a. ___ ¼ ___ ¼ SW ¼ NE ¼ of Section 20 Township 18-S Range 38E N.M.P.M.

b. Tract No. ___ of Map No. ___ of the ___

c. Lot No. ___ of Block No. ___ of the ___
Subdivision, recorded in ___ County.

d. X= ___ feet, Y= ___ feet, N.M. Coordinate System ___ Zone in the ___ Grant.

(B) Drilling Contractor C. M. Griffin License No. WD 603

Address 201 W Alto Hobbs, N. M

Drilling Began 3-14-80 Completed 3-18-80 Type tools Spudder Size of hole 10 in.

Elevation of land surface or ___ at well is ___ ft. Total depth of well 120 ft.

Completed well is ☑ shallow ☐ artesian. Depth to water upon completion of well 52 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
52	120	68	Red Sand	75

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
6 5/8			0	120	120	None	100	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
52	120	10	4		Gel w/water

Section 5. PLUGGING RECORD

Plugging Contractor ___

Address ___

Plugging Method ___

Date Well Plugged ___

Plugging approved by:

___
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received February 2, 1981

Quad ___ FWL ___ FSL ___

File No. L-8193 Use DTC Location No. 18.38.20.23141
Temp. N.E. Cor.

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	3	3	Top Soil
3	40	37	White Caliche
40	52	12	White Rock
52	120	68	Red Sand

Section 7. REMARKS AND ADDITIONAL INFORMATION

'81 FEB 2 AM 8 25
STATE ENGINEER OFFICE
ROSWELL, N.M.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office not later than 10 days after the completion of the well. Each item in Section 5 shall be answered as completely and accurately as possible when any well is

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Stoehr Wire Rope Owner's Well No. _____

Street or Post Office Address 3401 Enterprise

City and State Hobbs, N.M. 88240

Well was drilled under Permit No. L9475 and is located in the:

a. _____ ¼ _____ ¼ NE ¼ NE ¼ of Section 20 Township 18S Range 38E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Gene Eades License No. WD982

Address Rt. 4 Tahoka, Tx. 79373

Drilling Began 5-7-84 Completed 5-7-84 Type tools Rotary Size of hole 8 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 120 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
60	120	60	Water sand	35

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
4½	100				120		110	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by:

_____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received June 19, 1984

Quad _____ FWL _____ FSL _____

File No. L-9475 Use D & S Location No. 18.38.20.22433

18.38.20.22433

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	3	3	Top soil
3	20	17	Caliche
20	28	8	Hard caliche rock
28	35	7	Caliche
35	60	25	Sand
60	120	60	Water sand

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Gail Cobb
Driller

INSTRUCTIONS: This form be executed in triplicate, preferably typewritten, and submitted appropriate district office of the State Engineer. All sec. ..s, except Section 5, shall be answered as completely and accurate. as possible when any well is drilled, repaired or deepened. Wh en this form is used as a plugging record, only Section 1(a) and Section need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

FIELD ENGR. LOG

Section 1. GENERAL INFORMATION

(A) Owner of well Hobb-Tex Corporation Owner's Well No. _____

Street or Post Office Address 3404 Enterprise

City and State Hobbs, N.M. 88240

Well was drilled under Permit No. L-9319 and is located in the:

a. _____ ¼ SE ¼ NE ¼ NE ¼ of Section 20 (21) Township 18S Range 38E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____

Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Gene Eades License No. WD 982

Address Route 4 Tahoka, Tx. 79373

Drilling Began 9-13-83 Completed 9-13-83 Type tools Rotary Size of hole 8 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 135 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 65 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
65	135	70	Water sand	35

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
5 3/4	160 psi				135		125	135

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by:

_____ State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received September 23, 1983

Quad _____ FWL _____ FSL _____

File No. L-9319 Use D & S Location No. 18.38.20.22433

18.38.20.22433

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	3	3	Top soil
3	20	17	Caliche
20	28	8	Hard caliche rock
28	35	7	Caliche
35	65	30	Sand
65	135	70	Water sand

Section 7. REMARKS AND ADDITIONAL INFORMATION

SEP 22 03

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Gene Foster

Driller

INSTRUCTIONS: This form shall be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

Revised June 1972

FIELD ENGR. LOG

STATE ENGINEER OFFICE
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well SAMMY PENDLEY Owner's Well No. _____

Street or Post Office Address 2009 VEGA CT.

City and State HOBBS, N.M. 88240

Well was drilled under Permit No. L 9244 and is located in the:

a. _____ ¼ NW ¼ NE ¼ NE ¼ of Section 20 Township 18S Range 38E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. 8 of Block No. 1 of the COLLEGE PARK INDUSTRIAL Subdivision, recorded in LEA County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor GENE EADES License No. WD 982

Address RT. 4 TAHOKA, TX. 79373

Drilling Began 5 27-83 Completed 5-27-83 Type tools ROTARY Size of hole 8 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 135 ft.

Completed well is [x] shallow [ ] artesian. Depth to water upon completion of well 50 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
45	135	90	WATER SAND	35

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
5 3/4	160 psi				135		125	135

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by: _____ State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received August 30, 1983

Quad _____ FWL _____ FSL _____

File No. L-9244 Use D & S Location No. 18.38.20.22134

18.38.20.22134 J.H.

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	2	2	TOP SOIL
2	18	16	CALICHE
18	45	27	SAND
45	135	90	WATER SAND

Section 7. REMARKS AND ADDITIONAL INFORMATION

RECEIVED
AUG 10 3 29 PM '03

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Gene Rodgers
Driller

INSTRUCTIONS: This form sh[ould] be executed in triplicate, preferably typewritten, and submitted [to] appropriate district office of the State Engineer. All se[ctions] except Section 5, shall be answered as completely and accurat[ely] possible when any well is drilled, repaired or deepened. [If] this form is used as a plugging record, only Section 1(a) and Section [2] need be completed.

Attachment "S5"

Well Records
H. D. McKinley "B" #1
Shell N. Hobbs G/SA Unit #421

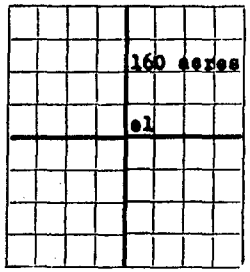
DUPLICATE

FORM C-105

RECEIVED
FEB 21 1947

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico



AREA 640 ACRES
LOCATE WELL CORRECTLY

WELL RECORD

Mail to Oil Conservation Commission, Santa Fe, New Mexico, or its proper agent not more than twenty days after completion of well. Follow instructions in the Rules and Regulations of the Commission. Indicate questionable data by following it with (?). SUBMIT IN TRIPLICATE. FORM C-110 WILL NOT BE APPROVED UNTIL FORM C-105 IS PROPERLY FILLED OUT.

Sun Oil Company — Box 2792, Odessa, Texas
Company or Operator — Address

H. D. McKinley "B" Well No. 1 is NE/4 of Sec. 20, T. 18-S
Lease

B. 38-E, N. M. P. M., Hobbs Field, Lea County.

Well is 330 feet South of the North line and 330 feet East of the West line of NE/4 of Section 20

If State land the oil and gas lease is No. ..... Assignment No. .....

If patented land the owner is Sadie McKinley, Address Box 352, Sterling City, Tex.

If Government land the permittee is ....., Address .....

The Lessee is Sun Oil Company, Address Box 2880, Dallas 1, Texas

Drilling commenced August 8, 1946 Drilling was completed January 25, 1947

Name of drilling contractor Trinity Drilling Company, Address Dallas, Texas

Elevation above sea level at top of casing 3651 feet.

The information given is to be kept confidential until ..... 19....

OIL SANDS OR ZONES

No. 1, from ..... to ..... No. 4, from ..... to .....

No. 2, from See attached list of drill stem tests to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from ..... to ..... feet. .....

No. 2, from ..... to ..... feet. .....

No. 3, from See attached list of drill stem tests feet. .....

No. 4, from ..... to ..... feet. .....

CASING RECORD

SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	PERFORATED FROM	PERFORATED TO	PURPOSE
13"OD	50#	10V	J-55	235'	Bell Jt.				Surface
7"OD	24#	10V	H-40	4113'	Baker				Intermediate
5½"OD	15.50#	8Rd	J-55	3920'					Oil string
5"OD	18	6V	N-80	3614	Baker				Oil string

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHODS USED	MUD GRAVITY	AMOUNT OF MUD USED
6¼"	5"&5½"	7543'	350	Halliburton		
		See attached list for plugging record				

Sun Oil Company

H. D. McKinley "B", Well #1

Plugging Record

On January 28, 1947 well was plugged with 65 sacks cement pumped in hole through open ended tubing. Open 4-1/4" hole from total depth 8010' to 7543' and 5" OD oil string casing from casing seat 7543' to 7328' was plugged.

On February 12, 13, 14 & 15, 1947 we pulled 1107' of 5½" OD oil string casing and pumped 15 sacks cement through open ended tubing placing cement plug at 1110'. We then pulled 916' of 7"OD intermediate casing and pumped 15 sacks cement through open ended tubing placing cement plug at 900'. Hole was then filled with heavy mud laden fluid and a cement plug was placed in the top of 13" OD surface casing with 15 sacks cement and well is now permanently abandoned.

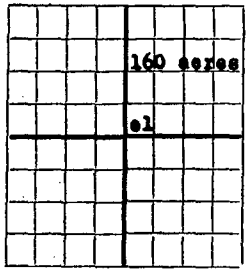
DUPLICATE

FORM C-105

RECEIVED
FEB 21 1947

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico



AREA 640 ACRES
LOCATE WELL CORRECTLY

WELL RECORD

Mail to Oil Conservation Commission, Santa Fe, New Mexico, or its proper agent not more than twenty days after completion of well. Follow instructions in the Rules and Regulations of the Commission. Indicate questionable data by following it with (?). SUBMIT IN TRIPLICATE. FORM C-110 WILL NOT BE APPROVED UNTIL FORM C-105 IS PROPERLY FILLED OUT.

Sun Oil Company (Company or Operator) Box 2792, Odessa, Texas (Address)

H. D. McKinley "B" (Lease) Well No. 1 in NE/4 of Sec. 20, T. 18-S

R. 38-E, N. M. P. M., Hobbs Field, Lea County.

Well is 330 feet south of the North line and 330 feet west of the East line of NE/4 of Section 20

If State land the oil and gas lease is No. ..... Assignment No. .....

If patented land the owner is Sadie McKinley, Address Box 352, Sterling City, Tex.

If Government land the permittee is ....., Address .....

The Lessee is Sun Oil Company, Address Box 2880, Dallas 1, Texas

Drilling commenced August 8, 1946 Drilling was completed January 25, 1947

Name of drilling contractor Trinity Drilling Company, Address Dallas, Texas

Elevation above sea level at top of casing 3651 feet.

The information given is to be kept confidential until ..... 19.....

OIL SANDS OR ZONES

No. 1, from ..... to ..... No. 4, from ..... to .....

No. 2, from See attached list of drill stem tests to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from ..... to ..... feet. .....

No. 2, from ..... to ..... feet. .....

No. 3, from See attached list of drill stem tests feet. .....

No. 4, from ..... to ..... feet. .....

CASING RECORD

SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	PERFORATED FROM	PERFORATED TO	PURPOSE
13"OD	50#	10V	J-55	235'	Bell ft.				Surface
7"OD	24#	10V	H-40	4113'	Baker				Intermediate
5½"OD	15.50#	8Rd	J-55	3920'					Oil string
5"OD	18	8V	N-80	3614	Baker				Oil string

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHODS USED	MUD GRAVITY	AMOUNT OF MUD USED
6¼"	5"&5½"	7543'	350	Halliburton		

See attached list for plugging record

No. 3, from See attached list of drill stem tests feet.

No. 4, from ..... to ..... feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	PERFORATED FROM	PERFORATED TO	PURPOSE
13"OD	50#	10V	J-55	235'	Bell Jt.				Surface
7"OD	24#	10V	H-40	4113'	Baker				Intermediate
5½"OD	15.50#	8Rd	J-55	3920'					Oil string
5"OD	18	6V	N-80	3614	Baker				Oil string

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHODS USED	MUD GRAVITY	AMOUNT OF MUD USED
6¼"	5"&5½"	7543'	350	Halliburton		
		See attached list for plugging record				

PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth Set .....

Adapters—Material ..... Size .....

RECORD OF SHOOTING OR CHEMICAL TREATMENT

SIZE	SHELL USED	EXPLOSIVE OR CHEMICAL USED	QUANTITY	DATE	DEPTH SHOT OR TREATED	DEPTH CLEANED OUT
		Low tension acid	4000 gal.	11/30/46	7543'-7658'	
		Low tension acid	3000 gal.	12/5/46	7543'-7658'	
3"	7	S.N.G.	110 qts.	12/19/46	7618'-7658'	7658' T.D.

Results of shooting or chemical treatment Did not improve well as it was swabbed down.

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto.

TOOLS USED

Rotary tools were used from 4242 feet to 8010 feet, and from ..... feet to ..... feet

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

PRODUCTION

Put to producing dry hole, 19.....

The production of the first 24 hours was ..... barrels of fluid of which ..... % was oil; ..... % emulsion; ..... % water; and ..... % sediment. Gravity, Be. .....

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

H. D. Wilson, Driller C. R. Cochran, Driller

L. M. Love, Driller ....., Driller

FORMATION RECORD ON OTHER SIDE

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Subscribed and sworn to before me this 18th day of February, 1947

Annie Mae Hice

Ector County, Texas Notary Public

My Commission expires June 1, 1947

Odessa, Texas 2/18/47
Place Date

Name W. D. Albright

Position Superintendent

Representing Sun Oil Company
Company or Operator

Address Box 2792, Odessa, Texas

FORMATION RECORD

FROM	TO	THICKNESS IN FEET	FORMATION
Surface	4242		Drilling completed 4/6/36
4242	4931	689	Lime
4931	4940	9	Lime and chert
4940	5635	695	Lime
5635	5680	45	Sandy lime
5680	5861	181	Lime
5861	5885	24	Sandy lime
5885	6135	250	Lime
6135	6141	6	Lime and gypsum
6141	7928	687	Lime
7928	7938	10	Lime and chert
7938	8010	72	Lime

Drill Stem

Tool oper
drilling

Drill

Tool
mud.
buil

Dr

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LAND OFFICE		
TRANSPORTER OIL		
TRANSPORTER GAS		
OPERATOR		
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION

REQUEST FOR ALLOWABLE

AND

AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104
Effective 1-1-65

I.

Operator: Shell Oil Company

Address: P. O. Box 991, Houston, TX 77001

Reason(s) for filing (Check proper box)

- New Well [ ]
- Recompletion [ ]
- Change in Ownership [X]

Change in Transporter of:

- Oil [ ]
- Dry Gas [ ]
- Casinghead Gas [ ]
- Condensate [ ]

Other (Please explain): Formerly: McKinley B #2

If change of ownership give name and address of previous owner: C.H. Sweet, Estate of

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease
N.Hobbs(G/SA)Unit Sec. 20	421	G/SA	~~State, Federal or Fee~~ XXXXXXXXXXX

Location

Unit Letter H : 2310 Feet From The North Line and 990 Feet From The East

Line of Section 20 Township 18S Range 38E , NMPM, Lea

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]	Address (Give address to which approved copy of this form is to be s
Shell Pipeline Company	P.O. Box 1910 Midland, TX 79702
Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]	Address (Give address to which approved copy of this form is to be s
Phillips Pipeline Company	4001 Penbrook St. Odessa, Tx 79762

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	NO CHANGE				Yes	NA

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	D

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations			Depth Casing Shoe

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE (Test must be after recovery of total volume of load oil and must be equal to or exceed allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

DUPLICATE

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator C. H. Sweet ~~Oil Company~~ Lease McKinley "B"

Well No. 2 Unit Letter H S 20 T 18-S R 38-E Pool Hobbs

County Lea Kind of Lease (State, Fed. or Patented) Patented

If well produces oil or condensate, give location of tanks: Unit H S 20 T 18-S R 38-E

Authorized Transporter of Oil or Condensate Shell Pipe Line Company

Address Box 1910, Midland, Texas

(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas Phillips Petroleum Company

Address Bartlesville, Oklahoma Date Connected May, 1960

(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership x ( ) Other ( )

Remarks: (Give explanation below)

This well was formerly owned and operated by Morris R. Antweil. Purchased by C. H. Sweet ~~Oil Company~~ effective June 1, 1960.

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 28 day of May 1960

By C. H. Sweet

Approved MAY 31 1960 19

Title Owner

OIL CONSERVATION COMMISSION

Company C. H. Sweet Oil Company

By

Address Box 1115, Hobbs, New Mexico

Title Engineer District 2

Form C-103

NEW MEXICO OIL CONSERVATION COMMISSION

COPY RECEIVED APR. 22, 1952

MISCELLANEOUS REPORTS ON WELLS

Submit this report in triplicate to the Oil Conservation Commission District Office within ten days after the work specified is completed. It should be signed and filed as a report on beginning drilling operations, results of shooting well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF	X	REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL			

Hobbs, New Mexico (Place) April 21, 1952 (Date)

Following is a report on the work done and the results obtained under the heading noted above at the

Sweet Oil Well Equipment , Inc. (Company or Operator) McKinley B (Lease) Well No. 2 in the Unit H of Sec. 20, T. 18S, R. 38E, N. M. P. M., Hobbs Pool Lea County.

The dates of this work were as follows: April 18, 1952

Notice of intention to do the work was ~~(was not)~~ submitted on Form C-102 on April 17, 1952, 19____, and approval of the proposed plan was (was not) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

This well was spudded on April 18,1952. 8 5/8" surface casing was set at 302' and cemented with 150 sacks. Circulated to surface. Casing was tested with 1000# pressure. Casing tested OK.

Witnessed by _____ (Name) _____ (Company) _____ (Title)

APPROVED:
OIL CONSERVATION COMMISSION

R. L. Greenwell
Name

Oil & Gas Inspector
Title

Apr 22, 1952
Date, 19

I hereby swear or affirm that the information given above is true and correct.

Name Fred Warren

Position Drilling Supt.

Representing Sweet Oil Well Equipment Co., Inc.
Company or Operator

Address Box 1115, Hobbs

Form C-122

DUPLICATE

NEW MEXICO OIL CONSERVATION COMMISSION

RECEIVED
MAY 6 1952

MISCELLANEOUS REPORTS ON WELLS

Submit this report in triplicate to the Oil Conservation Commission District Office within ten days after the work specified is completed. It should be signed and filed as a report on beginning drilling operations, results of shooting, well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF	X	REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL			

Hobbs, New Mexico (Date) May 5, 1952 (Place)

Following is a report on the work done and the results obtained under the heading noted above at the

Sweet Oil Well Equipment, Inc. (Company or Operator) McKinley B (Lease) Well No. 2 in the

Unit H of Sec. 20 T. 18S R. 38E N. M. P. M.,

Hobbs Pool Lea County.

The dates of this work were as follows: May 3, 1952

Notice of intention to do the work was (~~was not~~) submitted on Form C-102 on May 3, 1952, 19....

and approval of the proposed plan was (~~was not~~) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

5 1/2" casing was set in the above well at 4278' and cemented with 200 sacks cement with 2% Wellite. Casing was let set 24 hours and was tested with 1000 pounds pressure. Casing tested O. K.

Witnessed by (Name) (Company) (Title)

APPROVED:
OIL CONSERVATION COMMISSION

Roy Yarbrough (Name)
Oil & Gas Inspector (Title)
MAY 6 1952 (Date), 19..

I hereby swear or affirm that the information given above is true and correct.

Name Fred Warren

Position Drilling Superintendent

Representing Sweet Oil Well Equipment, Inc. (Company or Operator)

Address Box 1115, Hobbs, New Mexico

Form C-104

OIL CONSERVATION COMMIS ON
Santa Fe, New Mexico

PLICAT

RECEIVED
1952
OIL CONSERVATION COMMISSION

REQUEST FOR (OIL)-(GAS) ALLOWABLE

It is necessary that this form be submitted by the operator before an initial allowable will be assigned to any completed oil or gas well. Form C-110 (Certificate of Compliance and Authorization to Transport Oil) will not be approved until Form C-104 is filed with the Commission. Form C-104 is to be submitted in triplicate to the office to which Form C-101 was sent. Two copies will be retained there and the other submitted to the Proration Office, Hobbs, New Mexico. The allowable will be assigned effective 7:00 a.m. on date of completion, provided completion report is filed during month of completion. The completion date shall be that date in the case of an oil well when oil is delivered into the stock tanks. Gas must be reported on 15.025 P.B. at 60° Fahrenheit.

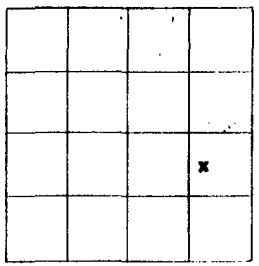
Hobbs, New Mexico (Place) — May 27, 1952 (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Sweet Oil Well Equipment, Inc. (Company or Operator) McKinley B (Lease) Well No. 2 in Unit H 1/4 ____ 1/4

section 20, T. 18S, R. 38E, N.M.P.M. Hobbs Pool Lea County

Please indicate location:



Unit letter: H

Elevation 3650 DF Spudded 4-18-52 Completed 5-9-52

Total Depth 4414' P.B. ____

Top Oil/Gas Pay 4252' Top water Pay ____

Initial Production Test: Pump 70 Flow ____ (BOPD OR CU.FT GAS PER DAY)

Based on 70 Bbls. Oil in 24 Hrs. ____ Mins.

Method of Test (Pitot, gauge, prover, meter run): ____

Size of choke in inches ____

Tubing (Size) 2 1/2" @ 4414 Feet

Pressures: Tubing 20# Casing 400#

Gas/Oil Ratio ____ Gravity ____

Casing Perforations: ____

Casing & Cementing Record

Size	Feet	Sax
8 5/8"	302	150
5 1/2"	4278'	200 with 25%

Acid Record:

500 Gals 4252 to 4256
____ Gals ____ to ____
____ Gals ____ to ____

Shooting Record.

____ Qts ____ to ____
____ Qts ____ to ____
____ Qts ____ to ____

Show of Oil, Gas and water

S/ ____
S/ ____
S/ ____
S/ ____
S/ ____
S/ ____
S/ ____
S/ ____

Natural Production Test: ____ Pumping ____ Flowing

Test after acid or shot: 70 BOPD Pumping ____ Flowing

Please indicate below Formation Tops (in conformance with geographical section of state):

Southeastern New Mexico		Northwestern New Mexico			
T. Anhy		T. Devonian		T. Ojo Alamo	
T. Salt		T. Silurian		T. Kirtland-Fruitland	
B. Salt		T. Montoya		T. Farmington	
T. Yates		T. Simpson		T. Pictured Cliffs	
T. 7 Rivers		T. McKee		T. Cliff House	
T. Queen		T. Ellenburger		T. Menefee	
T. Grayburg	4040	T. Gr. Wash		T. Point Lookout	
T. San Andres	4220	T. Granite		T. Mancos	
T. Glorieta		T. ____		T. Dakota	
T. Drinkard		T. ____		T. Morrison	
T. Tubbs		T. ____		T. Penn	
T. Abo		T. ____		T. ____	
T. Penn		T. ____		T. ____	
T. Miss		T. ____		T. ____	

(Form C-102)
(Revised 7/1/52)

RECEIVED
FEB 2 1953

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS NOTICES

Submit this notice in TRIPLICATE to the District Office, Oil Conservation Commission, before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commission or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate Nature of Notice by Checking Below

Notice of Intention to Change Plans		Notice of Intention to Temporarily Abandon Well		Notice of Intention to Drill Deeper	
Notice of Intention to Plug Well		Notice of Intention to Plug Back	X	Notice of Intention to Set Liner	
Notice of Intention to Squeeze		Notice of Intention to Acidize	X	Notice of Intention to Shoot (Nitro)	
Notice of Intention to Gun Perforate	X	Notice of Intention (Other)		Notice of Intention (Other)	

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Hobbs, New Mexico (Place) February 13, 1953 (Date)

Gentlemen:

Following is a Notice of Intention to do certain work as described below at the McKinley B Lease

MORRIS R. ANTWEIL (Company or Operator) Well No. 1-A in G (Unit)

SW ¼ NE ¼ (40-acre Subdivision) of Sec. 20, T. 18 S, R. 38 E, NMPM., Hobbd Pool

Lea County.

FULL DETAILS OF PROPOSED PLAN OF WORK
(FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS)

This well has 7" casing to 4100' with TD at 4270'. Liner was previously set from 4270 to 4050' and cemented. Well has been producing from perforations from 4252 to 4247'. Because of insufficient production, the Operator intends to work the well over in the following manner:

Baker wire line bridge plug will be set in 5" liner at 4240'. Lane-Wells will dump an 8-foot quick set cement with bailer and plug back to 4232'. Operator will then jet perforate liner in two zones--in the Grayburg from 4147 to 4157' and from 4178 to 4190'. Well will be swabbed to test for water shut off. If water is shut off, then Operator plans for Cardinal Chemical Company to acidize with 500 gallons of Jel, 750 gallons of Unisol acid plus 300 gallons of Jel and 750 gallons of Unisol acid.

Approved ....., 19.....
Except as follows:

MORRIS R. ANTWEIL, OIL OPERATOR
Company or Operator

By J. W. Adams

Position Agent

Send Communications regarding well to:

Name J. W. Adams

Approved
OIL CONSERVATION COMMISSION

By Roy Yarbrough

TONEY ANAYA
GOVERNOR

HEALTH ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020
Denise Fort, Director

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

P 612 423 409
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)
Sent to Mr. J. T. Janica
Street and No. P.O. Box 2188
P.O., State and ZIP Code Hobbs, NM 88240
Postage $
U.S.G.P.O. 1983-403-517

November 13, 1984

Mr. J.T. Janica, P.E.
Natural Resources Engineering, Inc.
P.O. Box 2188
Hobbs, NM 88240

Dear Mr. Janica:

As we discussed by phone on November 2nd, my review of discharge plan DP-353 for Salty Dog, Inc's proposed brine well was conducted on the assumption that Salty Dog was on the usual track in complying with the State's underground injection control regulations: that is, to obtain approval of a discharge plan prior to beginning any aspect of your operation. After sending you my letter of October 24th, commenting on the discharge plan, I recalled that this past summer I spoke with Mr. Larry Squires, also connected with Salty Dog, who expressed an interest in an alternative approach to complying with the regulations, available only to operators of in situ extraction wells.

This procedure involves your submittal of those items listed in Section 5-102.B.1.d. (page 47-48) of the Water Quality Control Commission regulations, by way of Notification to the EID that you are planning to construct a brine well. The materials required in your Notification constitute a partial discharge plan. Within 30 days of receipt of your Notification, the EID publishes a public notice of your planned operation, and responds to you regarding the adequacy of your bond or other demonstration of ability to carry out the terms of your plugging and abandonment plan (Section 5-102.B.1.d.11). Within 60 days of receipt of your Notification, EID provides comments to you on the adequacy of your partial discharge plan. If your bond or other materials submitted under the terms of Section 5-210.B.17 has been approved, you may begin construction of your well no less than 90 days from the date that your Notificiation was received at EID.

EID received from you on August 24th a fairly complete discharge plan, incorporating those elements listed in Section 5-102.B.1.d. of the regulations. The EID published a public notice of receipt of this plan within 30 days

(on or before September 12th). I sent you my comments on the plan 60 days from the date we received it. Included in my comments was a discussion of your plugging and abandonment plan and materials required under Section 5-210. B.17.

Please respond as soon as possible to my comments on these elements of the discharge plan. I will review your revised submittal of this material as soon as I can, but certainly within 30 days of receiving it. If it is approved, you may begin workover of the well no sooner than November 24th (90 days from EID's receipt of your discharge plan).

You are required to notify EID within 30 days of completing the workover; and please recall that you may not begin production at this facility until a complete discharge plan is approved.

I would be glad to answer any questions you may have on this procedure. My coworker on the UIC program and I are planning to visit the Hobbs area the week after Thanksgiving; if you would like to get together at that time, please be in touch so that we can arrange a meeting.

Sincerely,

Paige Grant Morgan

Paige Grant Morgan
Water Resource Specialist
Ground Water Section

PGM:jba

cc: Nolan Brunson, Salty Dog, Inc., Hobbs
Larry Squires, Salty Dog, Inc. Hobbs
John Guinn, EID District IV, Roswell

MSL

TONEY ANAYA
GOVERNOR

HEALTH ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020
Denise Fort, Director

October 24, 1984

J.T. Janica, P.E.
Natural Resources Engineering, Inc.
P.O. Box 2188
Hobbs, New Mexico 88240

RE: Discharge Plan DP-353 for Salty Dog Inc. Brine Extraction Well

Dear Mr. Janica:

Thank you for your submittal of the above-referenced discharge plan on behalf of Mr. Nolan Brunson. The following comments indicate areas of the plan which require clarification. By and large, your design of the facility seems quite adequate from the standpoint of ground water protection; but you must respond to these points I've raised before I can recommend to the Director that this plan be approved. Please bear in mind that your client may not begin construction without an approved discharge plan.

Surface Facilities

What type of pipe will be used to transport brine from the well to the storage pond and from there to the loading platform? Will these pipes primarily be buried, or on the surface?

I am not confident that a 1% slope is sufficient to deliver any possible leakage to your leak detection drain, nor that your lateral drains will be of much use unless the leak occurs directly above one of them. I suggest that you extend your central drain clear across the pond, do away with lateral drains, and utilize a sharper slope to the central drain to pick up any leakage. Please provide some information on the substrate beneath the pond and any method you plan to use to compact the substrate, if necessary, to reduce permeability and differential settling.

Please commit to notifying this office prior to constructing the leak detection system beneath the pond, to give us the opportunity to check the grade and other construction techniques.

Underground Facilities

In your sketch of the well as its exists at present, you indicate that 225 sacks of cement were used to set the surface casing. The sketch of the reworked well says that 255 sacks were used. The narrative accompanying both sketches reports that the amount of cement circulated was unknown. Please reconcile these statements.

What type of cement will be used, particularly in the plug at the base of the salt formation?

Please commit to notifying us prior to running the 1000-psi pressure test on your casing, so that we can try to have an EID representative present at the test. If no EID representative will be able to witness the test, please commit to recording the test by way of a graphical recorder on a chart with a scale apppropriate to the length of time and pressure at which the test is conducted. Please submit a description of the way in which the test was conducted at the time that you submit the chart.

Geology

What is the source(s) of your information?

What is the rest of the stratigraphic column above the Salado Formation and the anhydrite which occurs above and below it? In particular, what formation contains the water which is encountered at 75 feet below surface and what formations occur at 306 feet and 1700 below surface (the depths at which the surface and production casings, respectively, are set)?

What kind of pressures can be anticipated down-hole as a result of your expected operating pressure of 175-250 psi? Please demonstrate that this predicted down-hole pressure does not exceed the fracture pressure of the bedded salt.

Hydrology

Please provide the information specified in Section 5-210.B.5 of the Water Quality Control Commission regulations.

Please provide information on the total depth, depth to water, and, if possible, a driller's log for the AA Oilfield Service well. This information may be available from the State Engineer's office. Also, please indicate that you have checked with the State Engineer regarding any other water wells in the ¼-mile area of review around your proposed brine well, besides those that appear on the USGS topo map of the site.

With regard to flooding potential: I am aware that the Hobbs area has very little topographic relief and no major watercourse, as shown in your map in Attachment F. I am also aware that Hobbs experienced an extreme flooding event this past summer, despite its low profile. Your facility appears to be in a slight declivity trending from northwest to southeast, and it is not inconceivable that it might carry runoff after a heavy storm. Please submit evidence that indicates to the contrary, or discuss the factor of potential flooding in the design of the brine storage pond.

Nitrate is missing from the list of constituents analyzed for the sample from the AA Oilfield Service well. Please include this parameter in reporting the analysis from this well no later than one year from the date on which this discharge plan is approved. At that time, please also submit an analysis of the brine you produce, including the same constituents as for the AA Oilfield Service well, plus purgeable aromatic hydrocarbons. Subsequent monitoring need only entail sampling for TDS and chloride in your brine well and the AA Oilfield Service well every six months.

Protecting Ground Water Quality During Operation

What was the total depth of the H.D. McKinley "B" well which was plugged and abandoned in 1947? Please submit copies of any drilling record that gives this information. This well was inadequately plugged, and if it perforates the salt formaton, could provide a substantial conduit for excursion of brine from the cavity created at your facility.

Similarly, the OCD form for the temporarily abandoned Shell well offers no information about the condition of the well bore and casing in the interval of the salt formation. Please search for and submit information on the condition of this well above 4000 feet.

I note your commitment to perform a 1000-psi pressure test on this well once every 5 years. Please describe the procedure you will use in conducting this test, including a commitment to notify the EID Ground Water Section when a test is scheduled and to record the test results by way of pressure-sensitive mechanical recording device if no EID representative will be present for the test. Also, please note that the pressure at which the test is conducted must not exceed fracture pressure of the salt beds. Also note that conducting your own pressure test once every 5 years does not relieve you of the obligation to cooperate with an interim pressure test required by EID as a part of our periodic inspection procedure.

Your plan for a concrete loading platform is a good one. Is the sump also to be lined with concrete?

With regard to your contingency plan, what size of surface spill, of what materials(s) as well as brine, will you consider substantial enough to call for this major cleanup?

How will you detect a loss of mechanical integrity in the brine well?

Please commit to reporting significant spills and any loss of mechanical integrity of the well to the Ground Water Section of EID as specified in Sections 1-203.A.1. and 5-208.B.1. of the WQCC regulations.

Plugging and Abandonment

According to the best information I have been able to obtain, the most stable abandonment technique for a brine well entails filling the cavity with brine, placing a plug at the base of the casing and filling the casing from bottom to top with cement. Please revise your plugging plan to incorporate these elements, and include a commitment to decommission the brine pond by removing the brine, liner and leak detection system and restoring the site to approximately its natural contours.

Please submit a copy of your plugging bond and demonstrate that the amount would be sufficient for the State to carry out the terms of your plugging and abandonment plan, if you did not.

Please contact me if I can help to clarify any of the questions I've raised above. I can be reached at the address and telephone number listed on the letterhead (ext. 285).

Thank you for cooperating with this agency in designing a brine facility that will protect ground water supplies.

Sincerely,

Paige Grant Morgan

Paige Grant Morgan
Water Resource Specialist
Ground Water Section

PGM:jba

cc: Nolan Brunson, Salty Dog Inc., Hobbs

TONEY ANAYA
GOVERNOR

HEALTH & ENVIRONMENT Department

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020
Denise Fort, Director

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

P 612 423 336

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Nolan Brunson	
Street and No. P.O. Box 774	
P.O., State and ZIP Code Hobbs, NM 88240	
Postage	$

U.S.G.P.O. 1983-403-517

September 4, 1984

Nolan Brunson
SALTY DOG, INC.
P.O. Box 774
Hobbs, NM 88240

Dear Mr. Brunson:

Enclosed is a copy of the public notice pertaining to your proposed discharge which was issued by this division pursuant to New Mexico Water Quality Control Commission Regulations, Section 3-108.

If you have any questions, please do not hesitate to contact me at the above address and telephone number (ext. 279).

Sincerely,

Maxine S. Goad

Maxine S. Goad
Program Manager
Ground Water Section

MSG:jba

Enclosure

HEALTH ENVIRONMENT department

TONEY ANAYA
GOVERNOR

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 8750[illegible]
(505) 984-0020
Denise Fort, Director

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

P 612 423 332
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)
Sent to Bill Waldrop, Mayor
Street and No. P.O. Box 1117
P.O., State and ZIP Code Hobbs, NM 88240
Postage $
U.S.G.P.O. 1983-403-517

September 4, 1984

Bill Waldrop, Mayor
CITY OF HOBBS
P.O. Box 1117
Hobbs, NM 88240

Dear Mayor Waldrop:

Enclosed is a public notice which includes notice of a proposed discharge plan(s) for one or more operations in or near your city.

If you have any questions, please do not hesitate to contact me at the above address and telephone number (ext. 279).

Sincerely,

Maxine S. Goad/jba

Maxine S. Goad
Program Manager
Ground Water Section

MSG:jba

Enclosure

HEALTH ENVIRONMENT department

TONEY ANAYA
GOVERNOR

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020
Denise Fort, Director

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

P 612 423 335

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	Lea Cnty Commissioners
Street and No.	Lea Cnty Cthse
P.O., State and ZIP Code	Lovington, NM 88260
Postage	$

U.S.G.P.O. 1983-403-517

September 4, 1984

Lea County Commission
Lea County Courthouse
Lovington, NM 88260

Board of County Commissioners:

Enclosed is a public notice which includes notice of proposed discharge plan(s) for one or more operations located in your county.

If you have any questions, please do not hesitate to contact me at the address and telephone number given above.

Sincerely,

Maxine S. Goad/jba

Maxine S. Goad
Program Manager
Ground Water Section

MSG:jba

Enclosure

September 4, 1984

TO BE PUBLISHED ON OR BEFORE September 12, 1984

PUBLIC NOTICE
NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following proposed discharge plan(s) have been submitted for approval to the Director of the New Mexico Environmental Improvement Division, P.O. Box 968, Crown Bldg., Santa Fe, New Mexico 87504-0968; telephone (505) 984-0020.

(DP-81) PUEBLO DE LUNA (formerly Miranda Trailer Park) Louis Miranda, Owner, 440 High Street, Moorpark, California 93021 proposes to renew the previously approved discharge plan DP-81. This plan allows for the disposal of approximately 10,750 gallons per day of domestic effluent from 43 trailers into conventional drainfields. The trailer park and drainfields are located approximately 4 miles south of Deming on the west side of State Road 11, in Section 22 of T24S, R9W, Luna County, New Mexico. The ground water mostly likely to be affected is at a depth of 140 feet and has a total dissolved solids concentration of approximately 250 mg/l.

(DP-353) SALTY DOG, INC., Nolan Brunson, P.O. Box 774, Hobbs, New Mexico 88240, has submitted a discharge plan for a proposed brine in situ extraction well and associated facilities located in the NE¼ SW¼ NE¼ Section 20, T18S, R38E in Lea County, about two miles northwest of the center of Hobbs. The proposal involves reentering a plugged and abandoned oil well, setting a plug at the base of the salt formation at 2800 feet and setting new casing and tubing. Fresh water purchased from the City of Hobbs (total dissolved solids (TDS) concentration approximately 655 mg/l) is pumped down the casing-tubing annulus into dry salt beds, where it creates a dense brine and is brought to the surface, stored in a Hypalon-lined pond and pumped to tank trucks for sale on demand. Injection volumes are estimated to average 1000 barrels per day. The ground water most likely to be affected by this operation is at a depth of about 75 feet and has a TDS concentration of approximately 1340 mg/l.

Any interested person may obtain further information from the Ground Water Section, Ground Water/Hazardous Waste Bureau, EID, and may submit written comments to the Director of the EID at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of EID will allow thirty (30) days after the date of publication of this Notice during which comments may be submitted to him and a public hearing shall set forth the reasons why the hearing should be held. A hearing will be held if the Director determines that there is significant public interest.

natural resources engineering inc.

August 21, 1984

Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87504-0968

Attention: Paige Grant

RE: Discharge Plan
Salty Dog, Inc.
Hobbs #1
NB01-003-001

Dear Ms. Grant:

Attached please find a discharge plan for the above referenced brine extraction well.

We have tried to supply all the information called for in the Water Quality Control Commission Regulations. If there is anything which we may have overlooked or questions which you might have, please contact this office.

Thank you.

Sincerely yours,

J. T. Janica, P.E.
NRE, Agents for
Salty Dog, Inc.

Enclosures

cc: file
chrono
N. Brunson

phone (505) 397-6319 o 201 e. sanger o p. o. box 2188 o hobbs, new mexico 88240

natural resources engineering inc.

Discharge Plan For
Salty Dog, Inc.
Hobbs #1
S20 T18S R38E
Lea County, NM

phone (505) 397-6319 o 201 e. sanger o p. o. box 2188 o hobbs, new mexico 88240

LIST OF ATTACHMENTS

Attachment A	Current Wellbore Sketch
Attachment B	Proposed Wellbore Sketch
Attachment C	Geological Structure Map
Attachment D	Location of Fresh Water Wells
Attachment E	Ownership Plat
Attachment F	Flooding Potential
Attachment G	Water Analysis
Attachment H	Plugging Records
Attachment I	Plugging Procedure
Attachment J	Sample of Pit Lining & Spec Sheet

LIST OF DRAWINGS

Drawing 1	System Schematic
Drawing 2	Facility Plot Plan
Drawing 3	Brine Pit

I. GENERAL DESCRIPTION

A. Salty Dog, Inc.
Nolan Brunson
P. O. Box 774
Hobbs, New Mexico 88240

B. Located in Section 20, T-18-S, R-38-E
1650' FNL and 1650' FEL
Lea County, New Mexico

C. At the brine well fresh water from the city of Hobbs is injected down tubing casing annulus and brine is returned up tubing and sent to the storage facility. Brine is removed from the storage facility by the loading pump and metered as it is loaded on to transports. See Drawing #1, Brine System Schematic.

D. This well was initially drilled as an oil well. It was plugged and abandoned in 1967. It is proposed to reenter this well and convert it to a brine well.

II. DESCRIPTION OF FACILITY

A. Surface Facilities:

The site will be enclosed by a fence which will have a 24" sheet metal border along the bottom to prevent small animals from entering the site and getting into the brine storage facility. The surface facilities are arranged as shown in drawing #2. The brine storage facility is 177' by 177' with a slope of 30°. The brine facility is lined with hypolon type plastic sealed using a chemical fusing method (see Attachment J). Brine is carried 40' through 4" pipe to the storage facility. From the storage facility, brine is carried 40' to the loading station. Typically 1000 bbls./day are discharged to and withdrawn from the brine storage facility.

B. Underground Facilities:

The proposed brine well was drilled in March 1962 and is currently plugged and abandoned. Attachment A is a diagram of the well as it is now. Attachment B is a well bore sketch of the well as proposed. Salty Dog, Inc. proposes to re-enter the well and clean out the plugs from surface to 2800'. A new plug will be set from 2550' to 2800' on top of the existing plug at 2800'. A string of 5-1/2" casing will be set at 1700' and cemented back to surface. Then 2-3/8" tubing will be run in the hole to 2250'.

No stimulation program is planned.

Initial injection pressure is anticipated to be 175 psi with a maximum injection pressure of 250 psi. Injection volumes are estimated to be 1000 bbls./day with a maximum of 2100 bbls./day.

Fresh water is to be injected down the casing tubing annulus with brine produced up the tubing. This will prevent exposing the casing to more corrosive brine water and in the event of a leak in the casing, fresh water would be the fluid leaked limiting contamination of ground water.

III. SITE CHARACTERISTICS

Geology:

The salt section is bounded on the top by an anhydrite section approximately 100' thick, 1650' to 1750'. The bottom of the salt is bounded by anhydrite from 2750' to 3975' (1225' thick). The well is located on the Northeast edge of the "Hobbs High". See Attachment C

Hydrology:

Attachment D is a map showing the location of all fresh water wells within a 1/4 mile radius of the proposed brine well. There is only one producing water well and one abandoned water well within the area of review. Attachment E is an ownership plat showing all producing oil and gas wells, injection wells, and abandoned oil and gas wells within a 1/4 mile radius of the brine well.

Attachment F is a map showing the flooding potential of the site.

The ground water most likely to be affected by a spill/leak is approximatly 75 feet deep. An analysis of this water, from AA Oilfield Service's water well, is contained in Attachment G. Also contained in Attachment G is an analysis of the water used for injection.

IV. PROCEDURES TO PROTECT GROUND WATER

A. There are three (3) abandoned wells or shafts in the area of review which penetrate the injection zone. These wells have been plugged according to OCD requirements. Attachment H contains plugging records and completion information on these wells.

Prior to the start of operations, the well casing will be tested to 1000 psi. Also at regular intervals, at least every five years, the casing will be retested to 1000 psi to check for possible leaks.

The water injected, brine recovered and brine removed from the storage pit will be metered by turbine meters located as shown on the system schematic (drawing 1). The volumes injected and recovered will be compared to detect any underground losses.

The brine well is located NW of Hobbs (See Attachment A). Drawing #2 is a plot plan of the facility showing the general layout of the site. The system schematic (Drawing #1) shows locations of sample points used to obtain samples of water and brine for analysis. Drawing #3 shows the brine storage facility and details of the leak detection system. The leak detection system will consist of a network of 2-1/2" PVC pipe with holes in the top. This pipe will be buried 12" below the pit in trenches and then filled with pea gravel (Drawing #3, Detail B). The lateral lines will slope to the main collection line which will slope down to the riser located out side of the storage facility. The minimun required slope for all lines shall be 1' per 100'. If a leak occurs the brine will be collected by the leak detection system and moved to the riser. The riser will be checked monthly for signs of brine.

Attachment "D" shows the location of water wells within the area of review. Samples of the water produced from these wells will be analyzed yearly for quality.

Spills will be prevented during loading by connecting trucks directly to the loading line before any valves are opened to allow brine to be pumped on to the trucks. After the trucks are loaded all lines will be cleared of brine and all valves will be closed to prevent spillage of brine water. All trucks will be loaded on a 20' X 70' concrete loading pad. This pad will be constructed such that any brine water spilled will flow toward its center where a drain to the sump is located. This will prevent any minor spills from contaminating ground water.

In the event of a leak or spill at the surface facilities the following will be done.

A. If a spill occurs, contaminated soil will be removed and disposed of at a location approved by the state.

B. If a leak is detected in the brine pit liner, the brine pit will be drained and the leak repaired.

If there is a loss of mechanical integrity of the injection well, all operations will be suspended until

remedial action can be taken to correct the potential source of water contaminations.

At such time when this injection well is ready for plugging and abandonment the well will be plugged as per Attachment I (plugging procedure). This plugging procedure will be approved before any plugging operations begin.

B. A plugging bond is offered as proof of financial responsibility to properly abandon this well.

When all operations have been completed the brine storage facility liner will be removed. Any contaminated soil will be disposed of in an approved location and the land will be returned to its original contour.

V. SIGN-OFF REQUIREMENT

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Nolan Brunson — NOLAN H. BRUNSON

8/22/84 — DATE

NATURAL RESOURCES
ENGINEERING INC.
P. O. Box 2188 / 201 E. Sanger
Phone (505) 397-6319
Hobbs, New Mexico 88240

ATTACHMENT "B"

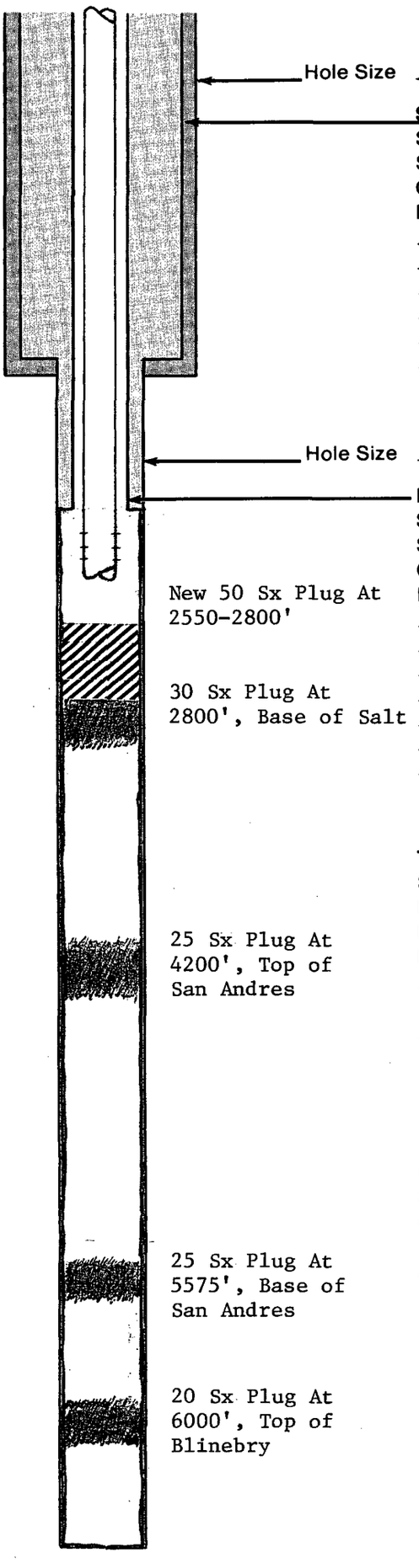
WELL BORE SKETCH

OPERATOR/LEASE/WELL Salty Dog, Inc./Hobbs #1

NRE JOB NUMBER NB01-003-001 DATE July 1, 1984

FIELD/POOL -- / --

PLUG BACK DEPTH 4200' KB 10' ELEVATION 3646'



Hole Size 12-1/4"

SURFACE CASING:

Size 8-5/8" Weight 24# Grade New

Set at 306' with 255 Sacks Cement

Circulate Yes Sacks to Surface

Remarks: Cement was circulated. There is no record of the number of sacks circulated. After 24 hours WOC, casing was tested to 1000 psi for 30 minutes. Tested O.K.

Hole Size 6-3/4"

PRODUCTION CASING:

Size 5-1/2" Weight 14# Grade J-55

Set at 1700 with 300 Sacks Cement

Cement Top: Calculated surface Temperature Survey

Remarks: Cement is calculated to circulate to surface with 100% excess.

TUBING:

Size 2-3/8" Weight 6.4# Grade J-55

Number of Joints 75 Set at 2250'

Packer Set at None

Bottom Arrangement: Open ended with 15' of perforations in tubing.

RODS:

Size Number

Gas Anchor Set at

Pump Set at

Arrangement:

NATURAL RESOURCES
ENGINEERING INC.
P. O. Box 2188 / 201 E. Sanger
Phone (505) 397-6319
Hobbs, New Mexico 88240

ATTACHMENT "A"

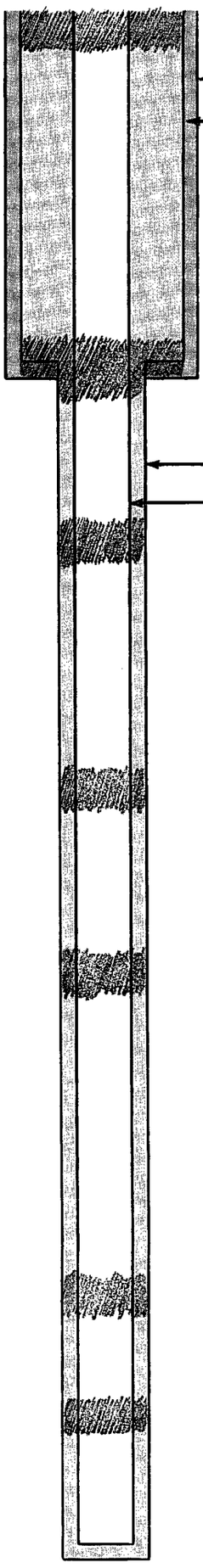
WELL BORE SKETCH

OPERATOR/LEASE/WELL Moran Oil Producing & Drilling Corp./SM-20/#1

NRE JOB NUMBER NB01-003-001 DATE July 1, 1984

FIELD/POOL Grayburg / --

PLUG BACK DEPTH 0 KB 10' ELEVATION 3646'



10 Sack Plug
At Surface

Hole Size 12-1/4"

SURFACE CASING:
Size 8-5/8" Weight 24# Grade New
Set at 306' with 225 Sacks Cement
Circulate ____ Sacks to Surface
Remarks: Cement was circulated. No record of number of sacks circulated. After 24 hours WOC, casing was tested to 1000 psi for 30 minutes. Tested O.K.

20 Sack Plug
At 300', Base
Of Surface Pipe

Hole Size 6-3/4"

PRODUCTION CASING:
Size -- Weight -- Grade --
Set at -- with -- Sacks Cement
Cement Top: Calculated -- Temperature Survey --
Remarks: Casing was not run. Well was plugged and abandoned. Plugs set at : 20 sx at 6000', 25 sx at 5575', 25 sx at 4200', 30 sx at 2800', 20 sx at 1700', 20 sx at 300', 10 sx at surface

20 Sack Plug
At 1700', Top
Of Salt

30 Sack Plug
At 2800', Base
Of Salt

TUBING:
Size ____ Weight ____ Grade ____
Number of Joints ____ Set at ____
Packer Set at ____
Bottom Arrangement: ____

25 Sack Plug
At 4200', Top
Of San Andres

RODS:
Size ____ Number ____
Gas Anchor Set at ____
Pump Set at ____
Arrangement: ____

25 Sack Plug
At 5575', Base
Of San Andres

20 Sack Plug
At 6000', Top
Of Blinebry

TD 6175'

NATURAL RESOURCES
ENGINEERING INC.
P. O. Box 2188 / 201 E. Sanger
Phone (505) 397-6319
Hobbs, New Mexico 88240

ATTACHMENT "B"

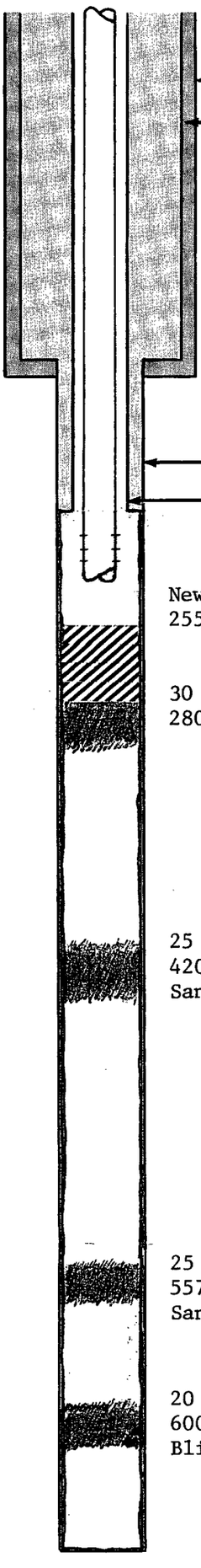
WELL BORE SKETCH

OPERATOR/LEASE/WELL Salty Dog, Inc./Hobbs #1

NRE JOB NUMBER NB01-003-001 DATE July 1, 1984

FIELD/POOL -- / --

PLUG BACK DEPTH 4200' KB 10' ELEVATION 3646'



Hole Size 12-1/4"

SURFACE CASING:

Size 8-5/8" Weight 24# Grade New

Set at 306' with 255 Sacks Cement

Circulate Yes Sacks to Surface

Remarks: Cement was circulated. There is no record of the number of sacks circulated. After 24 hours WOC, casing was tested to 1000 psi for 30 minutes. Tested O.K.

Hole Size 6-3/4"

PRODUCTION CASING:

Size 5-1/2" Weight 14# Grade J-55

Set at 1700 with 300 Sacks Cement

Cement Top: Calculated surface Temperature Survey

Remarks: Cement is calculated to circulate to surface with 100% excess.

New 50 Sx Plug At 2550-2800'

30 Sx Plug At 2800', Base of Salt

TUBING:

Size 2-3/8" Weight 6.4# Grade J-55

Number of Joints 75 Set at 2250'

Packer Set at None

Bottom Arrangement: Open ended with 15' of perforations in tubing.

25 Sx Plug At 4200', Top of San Andres

RODS:

Size Number

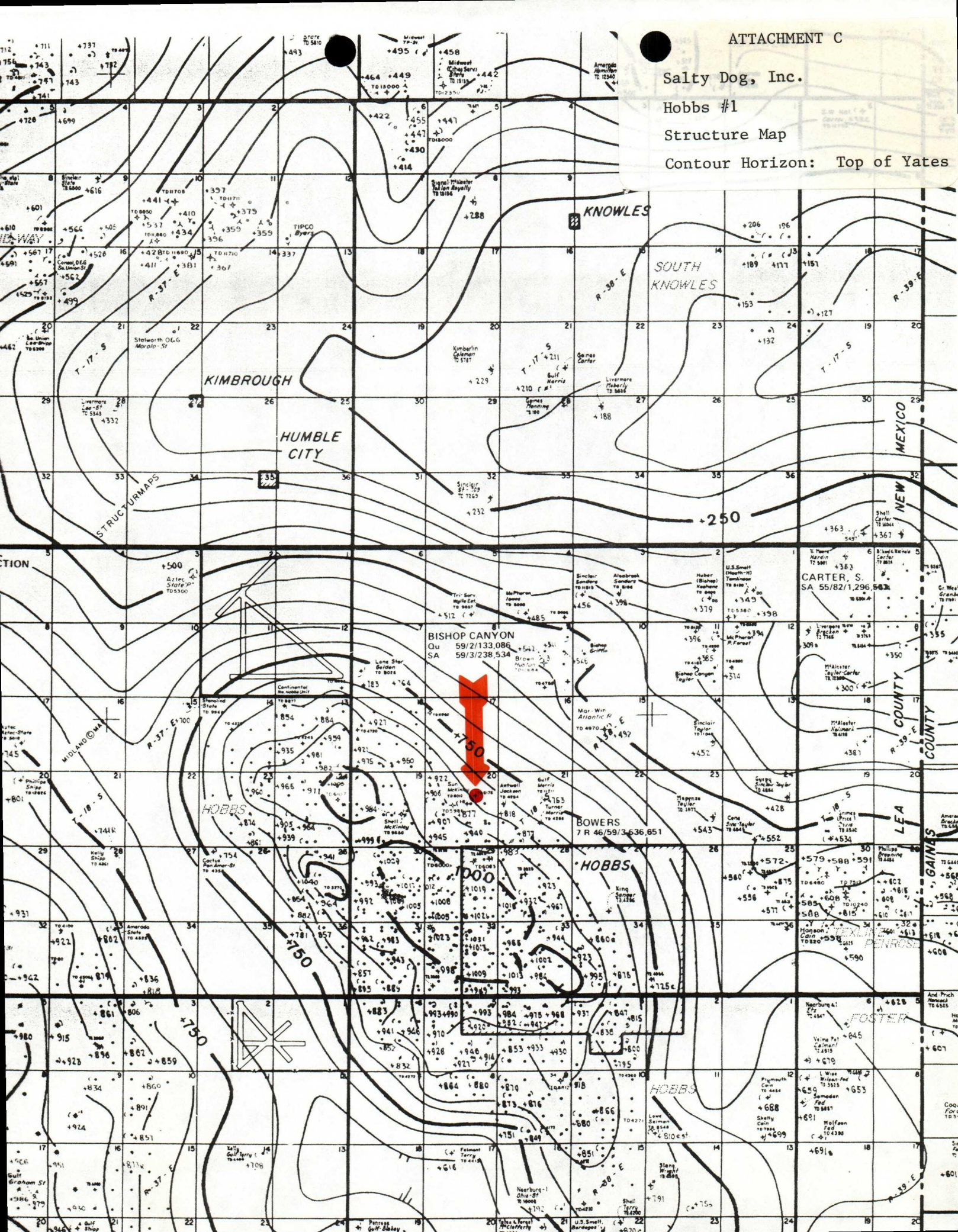
Gas Anchor Set at

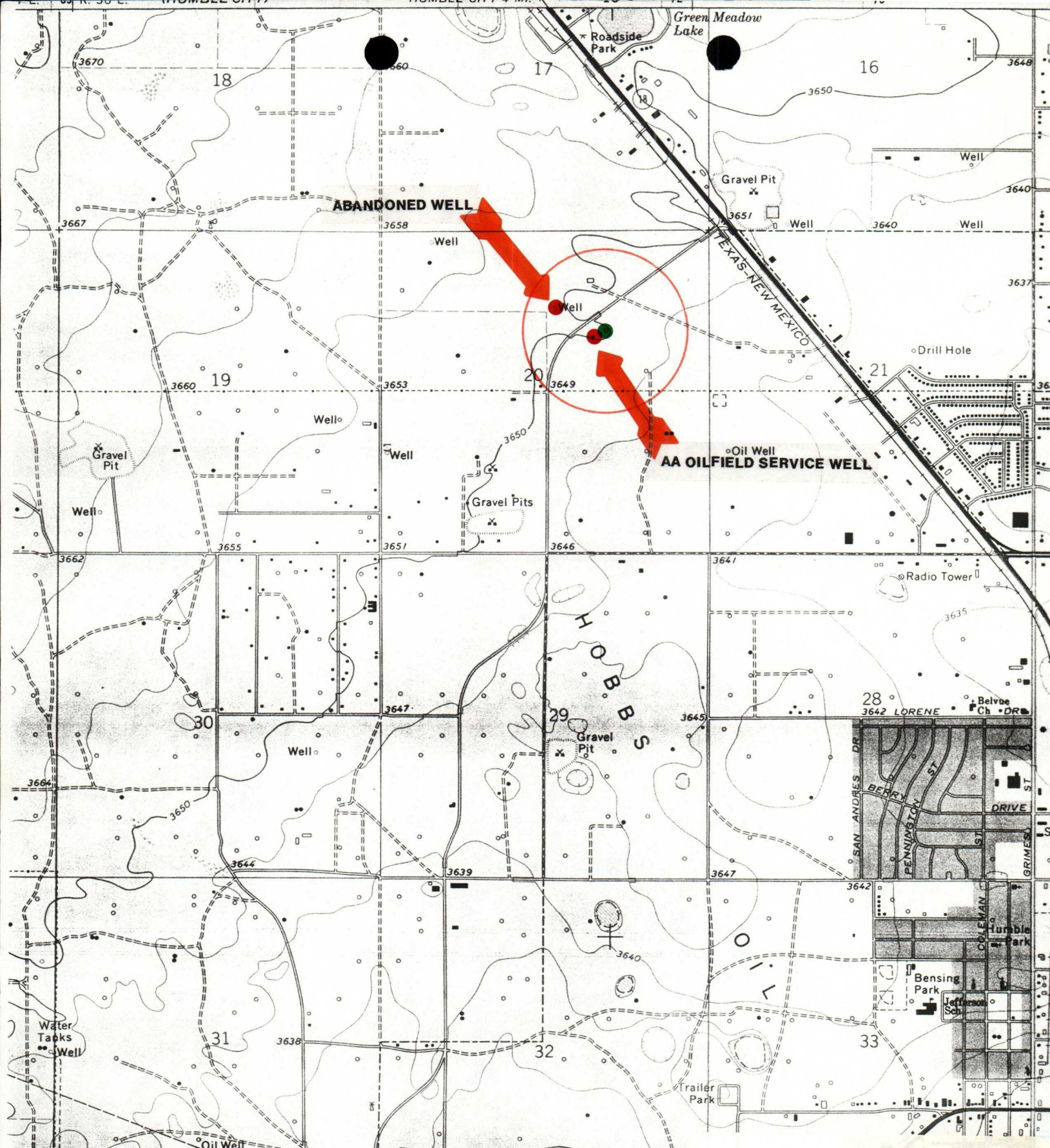
Pump Set at

Arrangement:

25 Sx Plug At 5575', Base of San Andres

20 Sx Plug At 6000', Top of Blinebry


ATTACHMENT C
Salty Dog, Inc.
Hobbs #1
Structure Map
Contour Horizon: Top of Yates
KNOWLES
SOUTH KNOWLES
KIMBROUGH
HUMBLE CITY
BISHOP CANYON
Qu 59/2/133,086
SA 59/3/238,534
CARTER, S.
SA 55/82/1,296,583
BOWERS
7 R 46/59/3,636,651
HOBBS
LEA COUNTY
NEW MEXICO
GAINES COUNTY
FOSTER
+250
+500
+750
+1000
STRUCTURMAPS

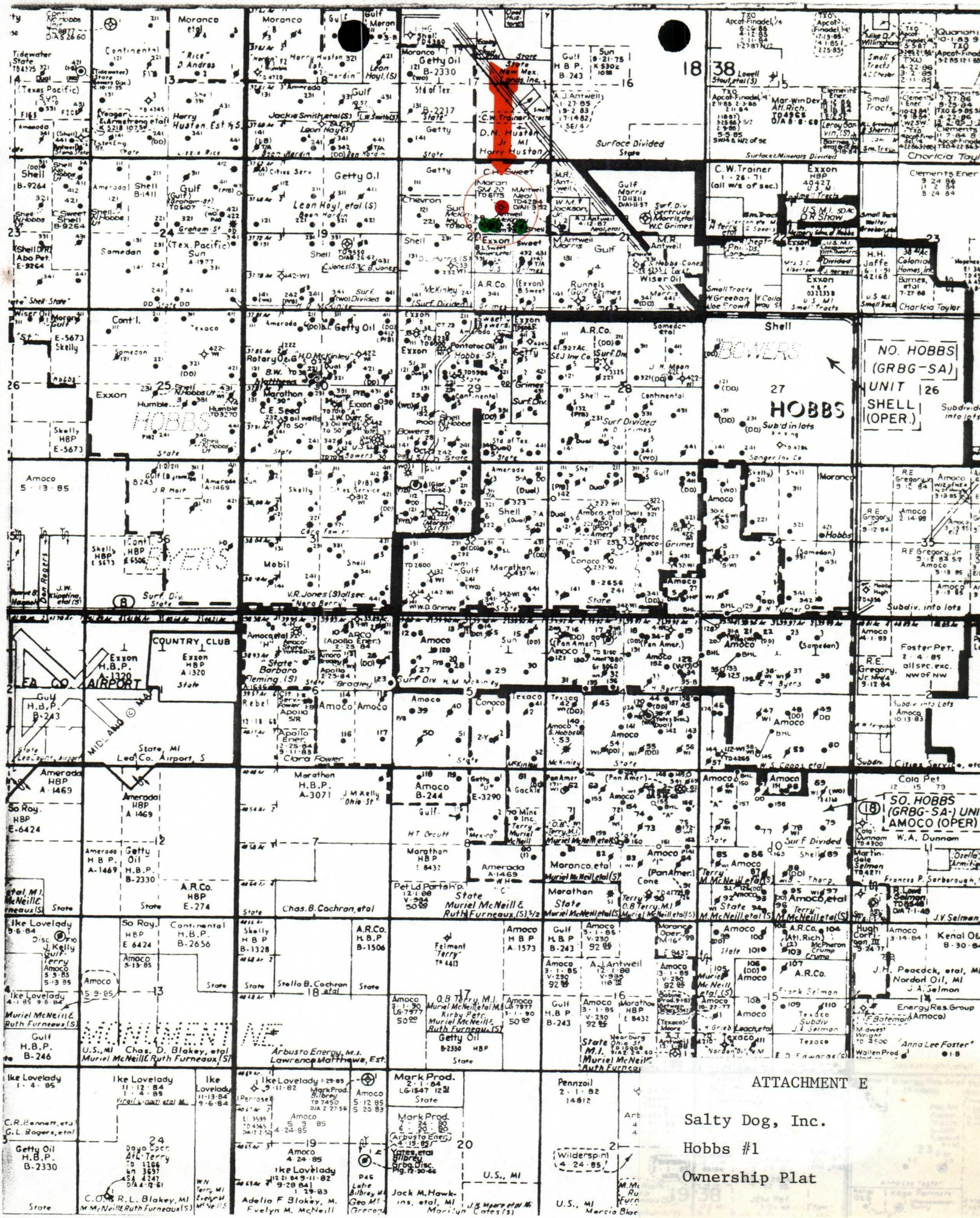


ATTACHMENT D

Salty Dog, Inc.

Hobbs #1

Location of Water Wells Within 1/4 Mile Radius

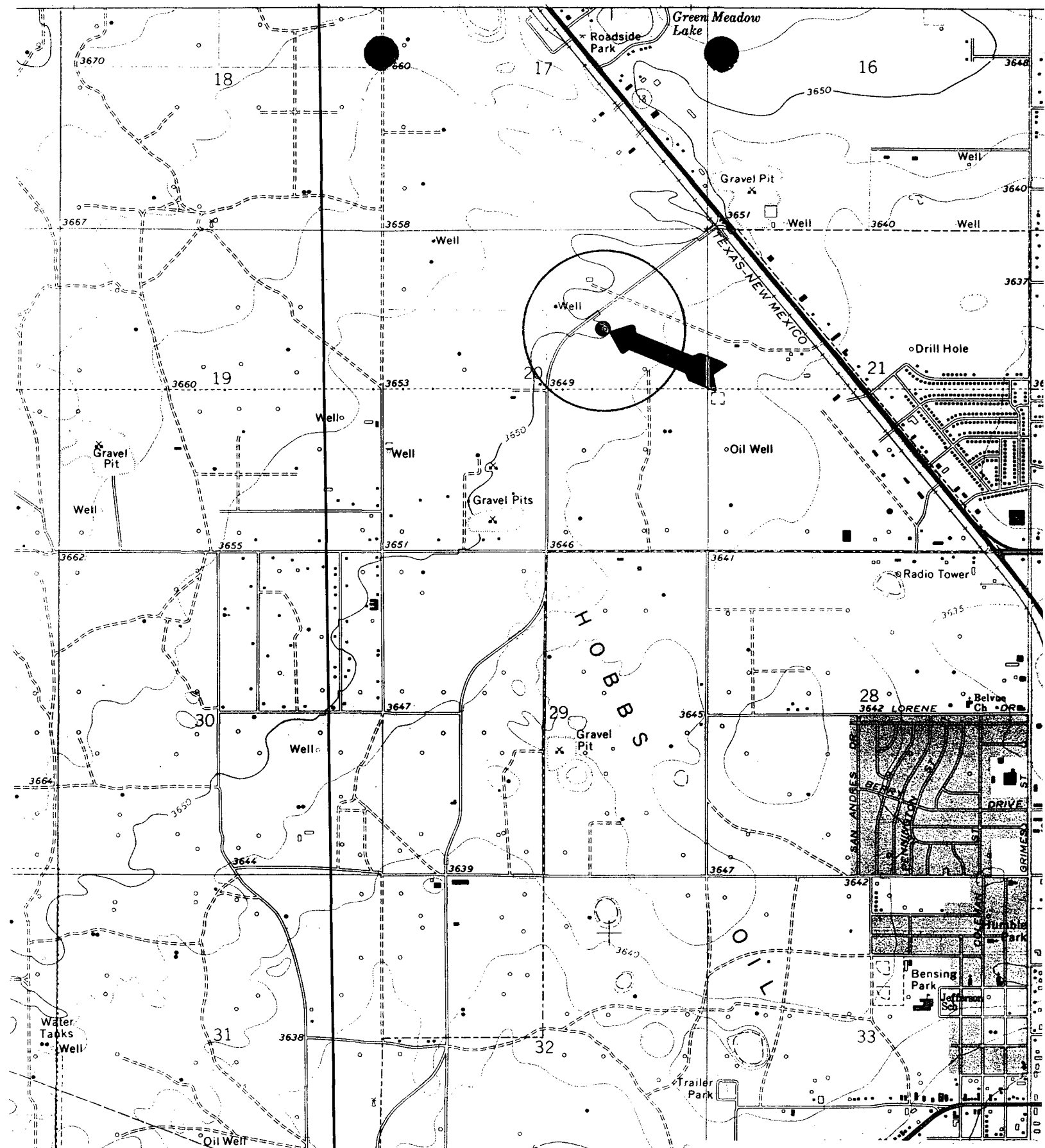


ATTACHMENT E

Salty Dog, Inc.

Hobbs #1

Ownership Plat



ATTACHMENT F

Salty Dog, Inc.

Hobbs #1

Location of Site and Flooding Potential

Attachment "G"

Water Analysis
Injected Water
Ground Water

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

LABORATORY NO. 884184

TO: Mr. J. T. Janica
P.O.Box 2188, Hobbs, NM

SAMPLE RECEIVED 8-13-84

RESULTS REPORTED 8-20-84

COMPANY Natural Resources Engineering, LEASE Salty Dog, Inc.

FIELD OR POOL Inc.

SECTION ___ BLOCK ___ SURVEY ___ COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Raw water - taken from Hobbs City water supply

NO. 2

NO. 3

NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0058			
pH When Sampled				
pH When Received	7.50			
Bicarbonate as HCO_3	237			
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	375			
Calcium as Ca	111			
Magnesium as Mg	24			
Sodium and/or Potassium	48			
Sulfate as SO_4	121			
Chloride as Cl	114			
Iron as Fe	0.12			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	654			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0			
Resistivity, ohms/m at 77° F.	11.50			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks Please contact us if we can be of any assistance in interpretation of the above results.

Form No. 3

By

Waylan C. Martin, M. A.

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

LABORATORY NO. 884128
SAMPLE RECEIVED 8-13-84
RESULTS REPORTED 8-15-84

TO: Mr. J. T. Janica
P.O. Box 2188, Hobbs, NM

COMPANY Natural Resources Engineering, Inc. LEASE AA Oilfield Service
FIELD OR POOL
SECTION BLOCK SURVEY COUNTY STATE
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Drinking water - taken from water well.
NO. 2 Maximum contents for drinking water as recommended by the Texas Dept. of Health.
NO. 3
NO. 4
REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0014			
pH When Sampled				
pH When Received	7.23			
Bicarbonate as HCO_3	293			
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	760			
Calcium as Ca	224			
Magnesium as Mg	49	125		
Sodium and/or Potassium	135			
Sulfate as SO_4	243	300		
Chloride as Cl	398	300		
Iron as Fe	0.12	0.3		
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	1,341	1,000		
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide				
Resistivity, ohms/m at 77° F.				
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks: Based on the determinations performed herein, we find this water to mildly exceed State standards for drinking water in the levels of chloride and total solids.

Form No. 3

By

Waylan C. Martin, M. A.

Attachment "H"

Plugging Records of
P&A Wells Within the
Area of Review

Form C-103

DUPLICATE

OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

RECEIVED
FEB 20 1947
HOBBS, N. M.

Sumbit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	X
REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL	X		

February 18, 1947 (Date) Odessa, Texas (Place)

OIL CONSERVATION COMMISSION,
SANTA FE, NEW MEXICO.

Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the

Sun Oil Company (Company or Operator) H. D. McKinley "B" (Lease) Well No. 1 in the NE/4 of Sec. 20, T. 18-S, R. 38-E, N. M. P. M., Hobbs Field, Lea County.

The dates of this work were as follows: February 12-13-14-15, 1947

Notice of intention to do the work was ~~not~~ submitted on Form C-102 on February 7, 1947 and approval of the proposed plan was ~~not~~ obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Pulled 1107' of 5½" OD csg. and placed cement plug at 1110' with 15 sacks cement. Pulled 916' of 7"OD csg. and placed cement plug at 900' with 15 sacks and mudded hole and placed cement plug in top of 13"OD surface csg. with 15 sacks cement. Well now permanently abandoned.

Witnessed by G. W. Soles (Name) Sun Oil Company (Company) Foreman (Title)

Subscribed and sworn before me this 18th day of February, 1947

Annie Mae Hill (Notary Public)

Ector County, Texas

ANNIE MAE HILL

My commission expires June 1, 1947

I hereby swear or affirm that the information given above is true and correct.

Name O. S. Albright

Position Superintendent

Representing Sun Oil Company (Company or Operator)

Address Box 2792, Odessa, Texas

Remarks:

APPROVED
FEB 20 1947

Roy Yarbrough (Name)
Oil & Gas Inspector

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

HOBBS OFFICE OCC

1960 DEC 1 PM 2:41

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company		Address				
Morris R. Antweil		Box 1058, Hobbs, New Mexico				
Lease		**Well No.**	**Unit Letter**	**Section**	**Township**	**Range**
McKinley "B"		1-A	G	20	18S	38E
Date Work Performed	**Pool**			**County**		
11/8/60	Hobbs			Lea		

THIS IS A REPORT OF: *(Check appropriate block)*

- ☐ Beginning Drilling Operations
- ☒ Plugging
- ☐ Casing Test and Cement Job
- ☐ Remedial Work
- ☐ Other *(Explain)*:

Detailed account of work done, nature and quantity of materials used, and results obtained.

The tubing was run to TD and the hole was loaded with mud laden fluid. A 25 sx plug was spotted on bottom. The casing was shot off at approximately 1270' and the tubing was run back to the stub and a 25 sx plug was spotted at this point. A 25 sx plug was spotted at 280' and a 10 sx plug in the top with a 4" marker.

Witnessed by	Position	Company
Bert Dodson	Fld. Supt.	Hobbs Pipe & Supply Co

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)	

Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

Approved by: Leslie A. Clements

Title:

Date:

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

MORRIS R. ANTWEIL, Oil Operator

Name: Allen Antweil

Position: Agent

Company:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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LAND OFFICE		
OPERATOR		

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

5a. Indicate Type of Lease: State ☐ Fee ☒
5. State Oil & Gas Lease No.:

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL ☐ GAS WELL ☐ OTHER- INJECTOR
7. Unit Agreement Name: N. HOBBS (G/SA) UNIT
2. Name of Operator: SHELL OIL COMPANY
8. Farm or Lease Name: SECTION 20
3. Address of Operator: P. O. BOX 991, HOUSTON, TEXAS 77001
9. Well No.: 421
4. Location of Well: UNIT LETTER H, 2310 FEET FROM THE NORTH LINE AND 990 FEET FROM THE EAST LINE, SECTION 20 TOWNSHIP 18-S RANGE 38-E NMPM.
10. Field and Pool, or Wildcat: HOBBS (G/SA)
15. Elevation (Show whether DF, RT, GR, etc.): 3654' GL
12. County: LEA

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER CONVERT TO UPPER BASAL GRAYBURG INJ. PMX - 89 (WELL TA'D) 4/25/82 ☒	

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

2-10-82: Clean out to 4278'.
2-14-82: Set cement retainer @ 4225'. Pumped 50 sx of Class "C" cmt down tbg. WOC 24 hrs.
2-16-82: Tagged btm @ 4196'. Ran GR/CBL/VDL/CCL logs from 4185' up to 100'. TOC @ 3204'.
2-17-82: Spotted 2 bbls 15% HCl acid @ 4180'. Perforated 4128' - 4176' (18' - 36 holes).
2-18-82: Tagged TD @ 4196'. Drld out cmt retainer.
2-19-82: Re-perforate additional interval 4192' - 4196' (5' - 10 holes), 4176' - 4178' (2' - 4 holes) and re-perforate 4172' - 4176' (5' - 10 holes), 4152' - 4156' (5' - 10 holes), and 4138' - 4140' (3' - 6 holes), 4128' - 4132' (5' - 10 holes). Total 38' - 68 holes.
2-24-82: Acidized perforation w/4700 gals HCL NEA plus 5% Pentafax AE-122.
2-25-82: Unable to inject wtr. Installed new Gray Oil Tool X-mas tree head. Well now temporarily abandoned.

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

Eddie Cutting for A. J. FORE TITLE SUPV. REG. & PERMITTING DATE APRIL 21, 1983

ORIGINAL SIGNED BY JERRY SEXTON
APPROVED BY DISTRICT I SUPERVISOR TITLE DATE APR 25 1983

CONDITIONS OF APPROVAL, IF ANY:

natural resources engineering inc.

Attachment "I"
PLUGGING PROCEDURE

OPERATOR: Salty Dog, Inc.

WELL: Hobbs #1 FIELD: Brine Well

COUNTY: Lea STATE: NM

LOCATION: 1650 FNL & 1650 FEL S20T18SR38E GR: 3646

DATE: 7/10/84 ELEV. RKB: 10 REV: 0

****

1. Move in and rig up plugging unit.
2. Set 25 sack plug across 5-1/2" casing shoe at 1750 (1700-1800).
3. Pull tubing above plug WOC (tag this plug)
4. Set 10 sack plug at surface and install dry hole marker
5. Rig down, clean location, move surface equipment (tank battery, loading station, etc.) off location.

ATTACHMENT J
Salty Dog, Inc.
Hobbs #1
Sample of Pit Lining Material
and Specification Sheet

BFGoodrich

The BFGoodrich Company
Fabricated Polymers Division
Environmental Products
Dept. 1914
500 South Main Street
Akron, Ohio 44318
(216) 379-3115

Product Bulletin

Flexseal™ reinforced lining material

30HP10 specification

1. Scope

This specification describes BFGoodrich Flexseal™ 30HP10, polyester reinforced lining of a nominal 30 mil Hypalon* thickness.

2. Liner Requirements:

2.1 Material Description:

2.1.1 The liner shall be a three ply construction. Two of the plies being Flexseal sheeting having Hypalon* as its principle polymer and compounded to meet the requirements of this specification.

2.1.2 The third ply shall be scrim fabric totally encapsulated between the Flexseal sheets with 1/8" to 3/4" of the unsupported sheet extending beyond the fabric.

2.1.3 The liner shall be so produced so as to be free of holes, undispersed raw materials, blisters or any sign of delamination. Any such defect shall be repaired using the elastomer sheeting and the manufacturer's approved adhesive.

2.2 Factory Fabrication of Blankets:

2.2.1 The finished roll goods shall be factory fabricated into panels up to 20,000 sq. ft. in size in order to reduce the amount of field seaming required. All seams shall be heat welded and provide a film tearing bond.

2.3 Field Seaming:

2.3.1 All field seaming will be performed using only the manufacturer's approved adhesives and application directions. The minimum width of field seams shall be 4" seal.

2.3.2 All field seams upon completion shall be visually inspected and any loose or questionable area repaired.

2.4 Physical Properties:

The Flexseal liner shall conform to the requirements outlined below.

3. Guarantee of Materials:

The liner purchaser shall be provided with a guarantee in writing from the manufacturer as to weathering. The degree and limitations of the guarantee shall be described within this guarantee.

PROPERTY	TEST METHOD	REQUIREMENTS
Tensile Strength	ASTM D 412	1,000 psi, minimum
Elongation at break	ASTM D 412	250 percent, minimum
Water absorption (7 days at 70°F)	ASTM D 471	5 percent max. by weight
Cold bend test	ASTM D 2136 (1/8 inch mandrel)	– 30°F, no cracks
Brittleness point	ASTM D 746 (Procedure "B")	– 45°F, no failures
Ozone Resistance 7 days @ 300 pphm @104°F with 20 percent strain	ASTM D 1149	No cracks visible under 7 times magnification
*Breaking strength	ASTM D 751	200 lb., minimum
*Tear strength, Tongue Tear	ASTM D 751	70 lb., minimum
*Puncture resistance	FTMS 101 B (Method 2031)	170 lb., minimum
*Factory and field seam strength	ASTM D 816 (Method B)	Parent material breaks prior to seam separation

*Tests performed on the reinforced sheets. All others on the material in its non-reinforced state.

HEALTH ENVIRONMENT department

TONEY ANAYA
GOVERNOR

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020
STEVEN ASHER, Director

Joseph Goldberg
SECRETARY
Ted Guambana
DEPUTY SECRETARY
JOSEPH F. JOHNSON
DEPUTY SECRETARY

CERTIFIED MAIL — RETURN RECEIPT REQUESTED

June 12, 1984

Larry Squires
P.O. Box 774
Hobbs, NM 88240

Dear Mr. Squires:

Pursuant to your telephone request this morning, enclosed please find a copy of the New Mexico Water Quality Control Commission Regulations and a copy of an outline for a brine well discharge plan. Use of the format presented in the outline is optional; it is offered as a convenience in interpreting the requlations. The codes in bold type in the outline refer to relevant sections of the regulations. (Incidentally, I find that I mailed a copy of the regulations and a brine well outline (then still in draft) to your consultant, Joe Janica, on May 1, 1984.)

I neglected to tell you over the telephone that the first step toward receiving a permit for your proposed brine well north of Hobbs, is to fill out the enclosed Notice of Intent to Discharge and return it to me. I will then prepare a letter for the Director of EID's signature, which will give you formal notification that a discharge plan will be required for such a facility. There is no need for you to wait for receipt of this letter before beginning the process of preparing a discharge plan: if you wish to expedite the process of receiving a permit, you would be well advised to begin preparing your discharge plan immediately.

I will be in touch with you by telephone no later than Thursday, June 14th, to let you know if the 90-day period between submittal of your discharge plan and receiving approval to commence construction, can be shortened at all. As I interpret the regulations, there is not much room for flexibility in that time frame.

Sincerely,

Paige Grant
Water Resource Specialist
Ground Water Section

cc: John Guinn, EID District IV, Manager

PG:egr

Enclosure: WQCC Regulations
Outline

HEALTH ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020
STEVEN ASHER, Director

TONEY ANAYA
GOVERNOR

Joseph Goldberg
SECRETARY

Ted Guambana
DEPUTY SECRETARY

JOSEPH F. JOHNSON
DEPUTY SECRETARY

May 1, 1984

Joe Janica
Natural Resources Engineering
P.O. Box 2188
Hobbs, NM 88240

Dear Mr. Janica:

In response to your request for guidance in preparing a discharge plan for your client's brine extraction well, I am sending you a draft outline for a brine well discharge plan. This outline is still under review by EID, and is therefore subject to change. However, the sections of the Water Quality Control Commission Regulations which are referenced throughout the outline (see the codes in bold type, e.g. "5-210.B.11"), will not change; they are the ultimate reference as to what should be contained in the discharge plan.

If I can be of any further assistance, please let me know.

Sincerely,

Paige Grant

Paige Grant
Hydrologist
Ground Water Section

PG:egr

Enclosure

MSR