RECR - 10
Windmill Oil

Correspondence

Pre-2012

Bill Olson

From: Wayne Price
Sent: Thursday, December 14, 1995 9:28 AM
To: Roger Anderson
Cc: Bill Olson; Wayne Price; Jerry Sexton; Gary Wink
Subject: Ground Water Contamination
Importance: High

Dear Roger,

NMOCD District I has been notified by a Mr. Chuck Bradford, 506 Carr Lane West Hobbs that his water well is contaminated with oil. Gray Wink has made a preliminary investigation and has sampled the well. There is a small thin layer of PSH in the sample.

Please advise us on further investigations, notifications, actions, etc.

Thanks!

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

To: BILL OLSON
From: LWP-HOBBS
For your files!
1/29/97

MEMORANDUM

TO: **Valdean Severson, Manager - Audit and Compliance**
Taxation & Revenue Department

FROM: **William J. LeMay, Director**
Oil Conservation Division

DATE: **January 23, 1997**

SUBJECT: **Water Wells**

The wells in question are producing water from the Ogallala formation and are part of the Hobbs, NM contamination problem of the 1960's. No new wells have been drilled and they have never had API numbers identifying them. These wells are not producing oil from any recognized oil pool nor do they follow any OCD rules. Accordingly, the Oil Conservation Division will not be issuing API numbers for these wells.

If you need further information, please do not hesitate to contact me.

cc: Hobbs District Office
Artesia District Office
Aztec District Office
Santa Fe District Office

Bill Olson

From: Wayne Price
Sent: Friday, April 18, 1997 2:47 PM
To: Roger Anderson
Cc: Gary Wink; Jerry Sexton; Bill Olson
Subject: Ground Water Contamination
Importance: High

Dear Roger,

Eades Water Well drilling Co. requested I witness well drilling of new water well at a Jan Pfeiffer's residence located at 4011 W. Bender. According to Eades and Ms Pheiffer's father their existing well had become contaminated with oil & gas. I believe this location is at the northern edge of the West Hobbs Pool historical crude oil contamination of the water table.

The new well was drilled with no noticeable contamination.. They drilled it to 188' and just tagged the top of the Red Bed. This well was screened 20' at the bottom.

Please note Eades pointed out that they have performed quite a bit of work in this area and it appears the red beds might be dipping to the north and east. The new well drilled is north of existing wells that have become contaminated. The old Windmill Oil co. area lies mostly to the south and west of this location. The ground water gradient normally is to the SE however it appears there might be a localized gradient to the north or east. This was also experienced at the Dowell location just east about 1/2-3/4 mi.

It might be that all these years the contamination plume is moving in a direction that would not normally be expected giving us a false sense of security thinking that the plume is stationary. Obviously there must be more scientific information than what I am giving you here but maybe we have been looking in the wrong direction. I have not investigated what lies ahead of this plume if it were heading in the N or NE direction.

Please note I understand that Channel 7 KOAT was going to be on site later that day they were with Gary earlier in the day.

I am going to set up a file on this for tracking purposes. Please let me know if you require any further information, sampling testing etc.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

July 1, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-326-936-264

Mr. Alex M. Correa
EXXON Company, USA
P.O. Box 1600 ML 14
Midland, Texas 79702-1600

RE: BOWERS "A" FEDERAL LEASE

Dear Mr. Correa:

The New Mexico Oil Conservation Division (OCD) will take no action against EXXON Company, USA (EXXON) for plugging and abandoning the shallow wells completed in the ogallala aquifer on the Bowers "A" Federal Lease in Lea County, New Mexico.

Please be advised that the absence of OCD action against EXXON will not relieve EXXON of liability should it be determined in the future that EXXON is responsible party for the contamination existing in the ogallala fresh water aquifer at this location.

If you have questions please contact Roger Anderson at (505) 827-7152.

Sincerely,

William J. LeMay
Director

WJL/rca

xc: OCD Hobbs District Office
Armando Lopez, BLM Roswell

Wayne Price

From: Wayne Price
Sent: Tuesday, June 24, 1997 3:05 PM
To: Roger Anderson
Cc: Chris Williams
Subject: Exxon - BLM well plugging- west Hobbs pool area.
Importance: High

Dear Roger,

Per your recent request I have the following information for you;

The contact person for Exxon concerning the plugging of the shallow wells located in the "Bowers "A" Federal lease is;

Mr. Alex M. Correa
EXXON Company, USA
P.O. Box 1600-ML 14
Midland, Texas 79702-1600

P.S. Mr. Correa would like to discuss this issue with you and reiterate the chronologic history of these wells. Mr. Correa may be contacted at 915-688-6782.

NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

NMOCD INTER-OFFICE CORRESPONDENCE

TO: Jerry Sexton-NMOCD District I Supervisor

From: Wayne Price-Environmental Engineer

Date: August 15, 1996

Reference: Request to investigate dead vegetation at Floyd Ayers residence located at the corner of 1700 Robert Lane and Mahon, Lea Co. NM west side of Hobbs.

Subject: Field Report

Comments:

Mr. Ayers pointed out a small area in his backyard approximately 5 feet in diameter that was mostly barren. There were ants and ant lions (doodle bugs) noted to be living in the bare spot. The soil was dry and tree roots noted. The area sets between a pecan and peach tree. The surrounding area has grass and or weed growth.

Area was sampled using a post hole digger. A sample was taken at approximately 8" deep and tested for volitle organics with a PID. Results varied between 0-11 ppm. Another sample was taken in the yard in which there was grass growing, same depth, results were 0-17 ppm. Both soil samples were observed as negative on contamination from a visual and olfactory smell standpoint. The top soil is native and noted to be dark brown to black. It was not classified. The trees around the yard and other grass did not appeared to be stressed in any way.

Mr. Ayers has lived in this residence since 1964. He could not recall any buried pipelines, septic systems, etc. near the area of lack of vegetation. He also indicated he has not used any herbicides or pesticides in this area.

Mr. Ayers property comprises a 2.5 acre lot which is located in the area of a historical crude oil leak from years ago. This area became know as the "Windmill Oil Co. Area" because windmills were used to pump the oil from the shallow ground water aquifer below.

Mr. Ayers property had three of these wells at one time. All three produced oil and per Mr. Ayers royalty checks were received from this production.

The well located just east of the house near the shop in the backyard was sampled using a 3 foot PVC bailer. The depth to ground water is estimated at 33 feet below ground surface. The sampled revealed a minimum of two feet of light crude oil, no water was observed.

Mr. Ayers noted this material was very volitle and was placed into a coffee can and was lighted with a match. The crude oil burned vigorously and consistent until put out.

Mr. Ayers drilled another well sometime in the early 1980's north of his house hoping to find good water. He indicated it had oil in it also. They are presently drinking bottle water, but are connected to a Marathon Oil Co. water well which is approximately 300 yards SW of their house. He indicated it had a gassy smell to it from time to time. They use this water for bathing, watering lawn, washing clothes etc.

Conclusion:

The small surface area in question did not show any definite signs of contamination from any Oil & Gas activity that I could find at this time. The PID readings were significantly lower than our NMOCD guidelines limits of 100 ppm for BTEX volatiles. The areas around the spot appeared normal.

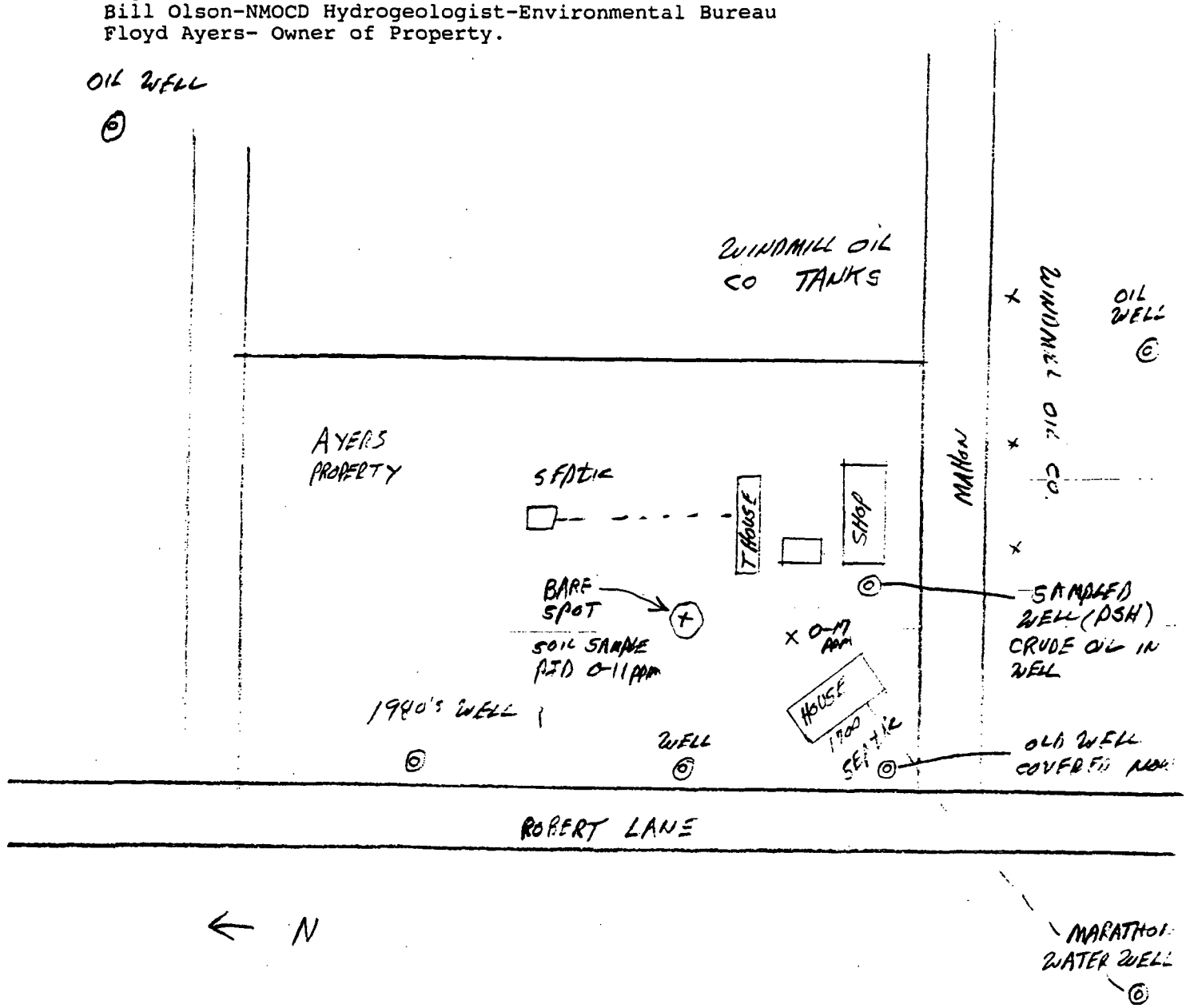
There is significate ground water contamination in this area which has been a matter of record for many years.

Recommendation:

I recommended to Mr. Ayers to contact the Lea County Extension agent Mr. Wallace Cox who might be able to assist him if it is a horticulture problem.

Recommend NMOCD have Marathon sample the fresh water supply to ensure the water quality meets human health standards under WQCC regulations.

cc: Roger Anderson-Environmental Bureau Chief
Bill Olson-NMOCD Hydrogeologist-Environmental Bureau
Floyd Ayers- Owner of Property.



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

JERRY APODACA
GOVERNOR

NICK FRANKLIN
SECRETARY

March 21, 1979

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

File
H. D. McGinley Est
Damage

Mr. D. T. Isbell
Star Route, Box 780
Hobbs, NM 88240

RE: Complaint from Mr. Stone on Getty operations on Mr. Azerbill's land west of Hobbs

Dear Sir:

Mr. Clements of the Oil Conservation Division checked out your complaints against Getty Oil Company on the Azerbill property west of Hobbs and obtained the following information:

1. (a) When the fruit trees were damaged Getty offered to remove the trees and replant trees and offered $200 damages.

   (b) Mr. Azerbill requested $2000 damages be paid.

   (c) Getty requested the trees be examined by the County agent. This was done and the County agent determined the trees died of bore damage.

2. (a) Getty had an oil spill on Mr. Azerbill's land and offered to take out the oil-soaked dirt and replace it with new dirt.

   (b) Mr. Azerbill requested nothing be done until his boy got home from the navy.

3. The adjoining tank battery was not emitting odor at the time it was inspected and the vapor recovery unit was properly working. Cards were left and we were to be notified whenever odors were coming from this battery.

From the above, it is clear problems have occurred, but it appears to be a legal matter beyond our jurisdiction. By law, the Oil Conservation Division does not set damages. The Getty lease was operating according to normal industry standards and to our rules and regulations at the time of our inspection.

Very truly yours,

Jerry Sexton

Jerry Sexton
Supervisor, District I

cc: R.F. Stone
Dale Crockett
Leslie A. Clements

Jean

NEW MEXICO OIL CONSERVATION COMMISSION

NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

NAME OF OPERATOR Getty Oil Company					ADDRESS P. O. Box 730; Hobbs, New Mexico 88240		
REPORT OF	FIRE	BREAK	SPILL	LEAK X	BLOWOUT	OTHER*	
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE	GASO PLNT	OIL RFY	OTHER*
NAME OF FACILITY H. D. McKinley							
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION) NE/4 of NE/4					SEC. 30	TWP. 18	RGE. 38	COUNTY Lea
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK 1.5 Miles NW of Hobbs, New Mexico 88240							
DATE AND HOUR OF OCCURENCE 12 Noon 7-23-77					DATE AND HOUR OF DISCOVERY 1 P.M. 7-23-77		
WAS IMMEDIATE NOTICE GIVEN?	YES	NO X	NOT REQUIRED		IF YES, TO WHOM		
BY WHOM					DATE AND HOUR		
TYPE OF FLUID LOST Oil					QUANTITY OF LOSS 5 bbls.		VOLUME RECOVERED None
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO X	QUANTITY				

IF YES, DESCRIBE FULLY**

DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**

Gasket on header blew-out. Repaired gaskets.

DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**

150' x 150' Area around battery. Did spray near by houses. Covering oil and washing houses and cars.

DESCRIPTION OF AREA	FARMING	GRAZING X	URBAN	OTHER*			
SURFACE CONDITIONS	SANDY	SANDY LOAM	CLAY	ROCKY X	WET	DRY X	SNOW

DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**

95°F Wind SW 8-10 MPH

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

SIGNED [signature] TITLE Area Superintendent DATE July 26, 197

*SPECIFY **ATTACH ADDITIONAL SHEETS IF NECESSARY

RELEASE

STATE ON NEW MEXICO)
KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF LEA)

THAT I D. T. ISBELL, being the owner of the hereinafter described land, for and in consideration of the sum of One Hundred Fifty Three and 50/100 DOLLARS ($153.50) to me this day in hand paid by Getty Oil Company, a Delaware corporation, the receipt and full sufficiency of which is hereby acknowledged, do hereby release, remise and forever discharge the said Getty Oil Company, its successors and assigns, of and from any and all claims and demands (whether known or unknown) of whatsoever nature that I may have or may have had, on account of, or due to, damage to livestock, stock water, pasture, growing crops, trees, land surface, fences, structures, and any other real or personal property, which was occasioned by, arose out of, or resulted from, the operations of the said Getty Oil Company in connection with the installation, maintenance and use of a pipeline or tank battery including without limitation, damages caused by breaks and/or leaks therein, and the escape of oil, distillate, condensate, or other substances, on the following described land, to wit:
H. D. McKINLEY Lease, Section 30, T18S, R38E, Lea County, New Mexico

This release includes, without limitation as to the generality thereof, the release of the said Getty Oil Company from any duty to restore the surface of the above described land to the condition existing prior to the commencement of said operations by the Getty Oil Company.

IN WITNESS WHEREOF, this instrument is executed this 25th day of August, 1977.

Mrs. D. T. Isbell

2 - Mr. A. L. Taylor - Houston
1 - Mrs. D. T. Isbell - Hobbs
1 - File (H. D. McKinley Lse.)

REQUEST FOR VOUCHER CHECK

(TO BE USED IN THE ABSENCE OF A REGULAR INVOICE)

GETTY OIL COMPANY

(Indicate Company Name if Other Than Getty Oil Co.)

DATE August 17, 1977

TO: DISBURSEMENT DEPARTMENT

PLEASE ISSUE VOUCHER CHECK IN AMOUNT OF $ 153.50

TO ORDER OF: D. T. Isbell

STREET & NUMBER: Star Route A, Box 780

CITY & STATE: Hobbs, N. Mex. 88240

NOTE. UNLESS OTHERWISE DIRECTED, VOUCHER CHECK WILL BE SENT TO ADDRESS OF PAYEE SHOWN ABOVE.

WORDING TO APPEAR ON VOUCHER CHECK:

Damages due to oil spray, July 23, 1977 on the H. D. McKinley Lease.

NOTE: Please mail check to D. R. Crockett, Box 730, Hobbs, N.M.88240

ACCOUNT DISTRIBUTION:

H. D. McKinley Lease

APPROVED:

Original Signed By
Dale R. Crockett

D. T. Isbell
Star Rt A Box 780
Hobbs, N. M. 88240

1. Oil Spray on 1/2 acre of pasture	125.00
3 Vehicles @ $9.50	28.50
Total	153.50

Reference Oil Spray on H. D. McKinley

RELEASE

STATE OF NEW MEXICO)
KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF LEA)

THAT I Mrs. Jack Kirk, being the owner of the hereinafter described land, for and in consideration of the sum of Fifteen and 60/100 Dollars ($15.60) to me this day in hand paid by Getty Oil Company, a Delaware corporation, the receipt and full sufficiency of which is hereby acknowledged, do hereby release, remise and forever discharge the said Getty Oil Company, its successors and assigns, of and from any and all claims and demands (whether known or unknown) of whatsoever nature that I may have or may have had, on account of, or due to, damage to livestock, stock water, pasture, growing crops, trees, land surface, fences, structures, and any other real or personal property, which was occasioned by, arose out of, or resulted from, the operations of the said Getty Oil Company in connection with the installation, maintenance and use of a pipeline or tank battery, including without limitation, damages caused by breaks and/or leaks therein, and the escape of oil, distillate, condensate, or other substances, on the following described land, to wit:

H. D. McKINLEY LEASE, NE/4, section 30, T18S,R38E, Lea County, New Mexico.

This release includes, without limitation as to the generality thereof, the release of the said Getty Oil Company from any duty to restore the surface on the above described land to the condition existing prior to the commencement of said operations by the said Getty Oil Company.

IN WITNESS WHEREOF, this instrument is executed this 25 th day of August, 1977.

Jack T. Kirk, Sr.

2 - Mr. A. L. Taylor - Houston
1 - Mrs. Jack Kirk
1 - Hobbs File (H. D. McKinley Lse.)

RELEASE

STATE ON NEW MEXICO)
KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF LEA)

THAT I E. W. Bensing, being the owner of the hereinafter described land, for and in consideration of the sum of Eighteen and 72/100 DOLLARS ($ 18.72) to me this day in hand paid by Getty Oil Company, a Delaware corporation, the receipt and full sufficiency of which is hereby acknowledged, do hereby release, remise and forever discharge the said Getty Oil Company, its successors and assigns, of and from any and all claims and demands (whether known or unknown) of whatsoever nature that I may have or may have had, on account of, or due to, damage to livestock, stock water, pasture, growing crops, trees, land surface, fences, structures, and any other real or personal property, which was occasioned by, arose out of, or resulted from, the operations of the said Getty Oil Company in connection with the installation, maintenance and use of a pipeline or tank battery including without limitation, damages caused by breaks and/or leaks therein, and the escape of oil, distillate, condensate, or other substances, on the following described land, to wit:

H. D. McKINLEY LEASE, SECTION 30, T18S, R38E, Lea County, New Mexico

This release includes, without limitation as to the generality thereof, the release of the said Getty Oil Company from any duty to restore the surface of the above described land to the condition existing prior to the commencement of said operations by the Getty Oil Company.

IN WITNESS WHEREOF, this instrument is executed this 25th day of August, 1977.

E. W. Bensing

2 - Mr. A. L. Taylor - Houston
1 - E. W. Bensing - Hobbs
1 - File (H. D. McKinley Lse.)

REQUEST FOR VOUCHER CHECK

(TO BE USED IN THE ABSENCE OF A REGULAR INVOICE)

GETTY OIL COMPANY

(Indicate Company Name If Other Than Getty Oil Co.)

DATE August 17, 1977

SBURSEMENT DEPARTMENT

PLEASE ISSUE VOUCHER CHECK IN AMOUNT OF $ 18.72

DER OF: E. W. Bensing

STREET & NUMBER: Star Route A, Box 822

CITY & STATE: Hobbs, New Mexico 88240

TE. UNLESS OTHERWISE DIRECTED, VOUCHER CHECK WILL BE SENT TO ADDRESS OF PAYEE SHOWN ABOVE.

ING TO APPEAR ON VOUCHER CHECK:

Damages due to oil spray, July 23, 1977 on the H. D. McKinley Lease.

NOTE: Please mail check to Dale R. Crockett, Box 730, Hobbs, N.M. 88240 *

UNT DISTRIBUTION:

H. D. McKinley Lease

APPROVED:

Original Signed By
Dale R. Crockett

E. W. Bensing
Star Rt. A Box 822
Hobbs, N. M. 88240

1.	Car Clean Up	6.24
	Camper & Pick-up Clean Up	12.48
	Total	18.72

Reference: Oil Spray on H. D. McKinley

RELEASE

STATE ON NEW MEXICO)
KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF LEA)

THAT I MR. C. J. TAYLOR, being the owner of the hereinafter described land, for and in consideration of the sum of One Hundred Fifty and no/100 DOLLARS ($150.00) to me this day in hand paid by Getty Oil Company, a Delaware corporation, the receipt and full sufficiency of which is hereby acknowledged, do hereby release, remise and forever discharge the said Getty Oil Company, its successors and assigns, of and from any and all claims and demands (whether known or unknown) of whatsoever nature that I may have or may have had, on account of, or due to, damage to livestock, stock water, pasture, growing crops, trees, land surface, fences, structures, and any other real or personal property, which was occasioned by, arose out of, or resulted from, the operations of the said Getty Oil Company in connection with the installation, maintenance and use of a pipeline or tank battery including without limitation, damages caused by breaks and/or leaks therein, and the escape of oil, distillate, condensate, or other substances, on the following described land, to wit:

H. D. McKINLEY Lease, Section 30, T18S, R38E, Lea County, New Mexico

This release includes, without limitation as to the generality thereof, the release of the said Getty Oil Company from any duty to restore the surface of the above described land to the condition existing prior to the commencement of said operations by the Getty Oil Company.

IN WITNESS WHEREOF, this instrument is executed this 25th day of August, 1977.

Mr. C. J. Taylor

2 - Mr. A. L. Taylor - Houston
1 - C. J. Taylor - Hobbs
1 - File (H. D. McKinley Lse.)

1158-1

REQUEST FOR VOUCHER CHECK

(TO BE USED IN THE ABSENCE OF A REGULAR INVOICE)

GETTY OIL COMPANY

(Indicate Company Name If Other Than Getty Oil Co.)

DATE August 17, 1977

TO: DISBURSEMENT DEPARTMENT

PLEASE ISSUE VOUCHER CHECK IN AMOUNT OF $ 150.00

TO ORDER OF Mr. C. J. Taylor

STREET & NUMBER Star Route A, Box 766

CITY & STATE Hobbs, New Mexico 88240

NOTE. UNLESS OTHERWISE DIRECTED, VOUCHER CHECK WILL BE SENT TO ADDRESS OF PAYEE SHOWN ABOVE.

WORDING TO APPEAR ON VOUCHER CHECK:

Damages due to oil spray, July 23, 1977 on the H. D. McKinley Lease.

NOTE: Please mail check to D. R. Crockett, Box 730, Hobbs, N.M.88240

ACCOUNT DISTRIBUTION:

H. D. McKinley Lease

APPROVED:

Original Signed By
Dale R. Crockett

C. J. Taylor
Star Rt. A Box 766
Hobbs, N. M. 88240

1 Oil Spray Damage to ½ acre 150.00
Total $150.00

Reference: Oil Spray on H. D. McKinley

RELEASE

STATE OF NEW MEXICO)
COUNTY OF LEA)

KNOW ALL MEN BY THESE PRESENTS:

THAT I Wayne A. Nash, being the owner of the hereinafter described land, for and in consideration of the sum of Ninety Three and 40/100 Dollars ($93.40) to me this day in hand paid by Getty Oil Company, a Delaware corporation, the receipt and full sufficiency of which is hereby acknowledged, do hereby release, remise and forever discharge the said Getty Oil Company, its successors and assigns, of and from any and all claims and demands (whether known or unknown) of whatsoever nature that I may have or may have had, on account of, or due to, damage to livestock, stock water, pasture, growing crops, trees, land surface, fences, structures, and any other real or personal property, which was occasioned by, arose out of, or resulted from, the operations of the said Getty Oil Company, in connection with the installation, maintenance and use of a pipeline or tank battery, including without limitation, damages caused by breaks and/or leaks therein, and the escape of oil, distillate, condensate, or other substances, on the following land, to wit:

H. D. McKinley Lease, NE/4, Section 30, T18S, R 383
Lea County, New Mexico

This release includes, without limitation as to the generality thereof, the release of the said Getty Oil Company from any duty to restore the surface of the above described land to the condition existing prior to the commencement of said Getty Oil Company.

IN WITNESS WHEREOF, this instrument is executed this 8/12/77 day of August, 1977.

Wayne A. Nash

2 - Mr. A. L. Taylor - Houston
1 - Mr. Wayne A. Nash, Star Rt. A, Box 835, Hobbs, N. Mex. 88240
1 - File (H. D. McKinley Lease)

103 File

REQUEST FOR VOUCHER CHECK

(TO BE USED IN THE ABSENCE OF A REGULAR INVOICE)

GETTY OIL COMPANY

(Indicate Company Name If Other Than Getty Oil Co.)

DATE July 29, 1977

TO: DISBURSEMENT DEPARTMENT

PLEASE ISSUE VOUCHER CHECK IN AMOUNT OF $ 93.40

TO ORDER OF: Wayne A. Nash

STREET & NUMBER: Star Rt. A - Box 835

CITY & STATE: Hobbs, NM 88240

NOTE. UNLESS OTHERWISE DIRECTED, VOUCHER CHECK WILL BE SENT TO ADDRESS OF PAYEE SHOWN ABOVE.

WORDING TO APPEAR ON VOUCHER CHECK:

Expenses incurred cleaning up oil spray on home. 7/13/77

ACCOUNT DISTRIBUTION:

H. D. McKinley lease - 82140

APPROVED:

Original Signed By
Dale R. Crockett
Area Superintendent

Received by _____

Hobbs, N. Mex. 88240

RELEASE

STATE OF NEW MEXICO }
COUNTY OF LEA }

KNOW ALL MEN BY THESE PRESENTS:

THAT I Robert B. Cox, being the owner of the hereinafter described land, for and in consideration of the sum of One Hundred Eight and 75/100 Dollars ($108.75) to me this day in hand paid by Getty Oil Company, a Delaware corporation, the receipt and full sufficiency of which is hereby acknowledged, do hereby release, remise and forever discharge the said Getty Oil Company, its successors and assigns, of and from any and all claims and demands (whether known or unknown) of whatsoever nature that I may have or may have had, on account of, or due to, damage to livestock, stock water, pasture, growing crops, trees, land surface, fences, structures, and any other real or personal property, which was occasioned by, arose out of, or resulted from, the operations of the said Getty Oil Company in connection with the installation, maintenance and use of a pipeline of tank battery, including without limitation, damages caused by breaks and/or leaks therein, and the escape of oil, distillate, condensate, or other substances, on the following described land, to wit:

Getty's H. D. McKinley Lease, NE/4, Section 30, T18, R 38
Lea County, New Mexico

This release includes, without limitation as to the generality thereof, the release of the said Getty Oil Company from any duty to restore the surface of the above described land to the condition existing prior to the commencement of said operations by the said Getty Oil Company.

IN WITNESS WHEREOF, this instrument is executed this 8/12/77 day of August, 1977.

Robert B. Cox

2 - Mr. A. L. Taylor - Houston
1 - Mr. Robert B. Cox, Star Route A, Box 800, Hobbs, N. Mex. 88240
1 - File (H. D. McKinley Lease)

RELEASE

STATE OF NEW MEXICO }
COUNTY OF LEA }

KNOW ALL MEN BY THESE PRESENTS:

THAT I J. W. Sayer, being the owner of the hereinafter described land, for and in consideration of the sum of Two Hundred Fifteen and no/100 Dollars ($215.00) to me this day in hand paid by Getty Oil Company, a Delaware corporation, the receipt and full sufficiency of which is hereby acknowledged, do hereby release, remise and forever discharge the said Getty Oil Company, its successors and assigns, of and from any and all claims and demands (whether known or unknown) of whatsoever nature that I may have or may have had, on account of, or due to, damage to livestock, stock water, pasture, growing crops, trees, land surface, fences, structures, and any other real or personal property, which was occasioned by, arose out of, or resulted from, the operations of the said Getty Oil Company in connection with the installation, maintenance and use of a pipeline or tank battery including without limitation, damages caused by breaks and/or leaks therein, and the escape of oil, distillate, condensate, or other substances, on the following described land, to wit:

H. D. McKINLEY Lease, N E/4 Section 30, T18S,
R 38 E, Lea County, New Mexico

This release includes, without limitation as to the generality thereof, the release of the said Getty Oil Company from any duty to restore the surface of the above described land to the condition existing prior to the commencement of said operations by the said Getty Oil Company..

IN WITNESS WHEREOF, this instrument is executed this 8/12/77 day of August, 1977.

Mr J W Sayre

2 - Mr. A. L. Taylor - Houston
1 - Mr. J. W. Sayre, Star Rt. A, Box 834, Hobbs, N. Mex. 88240
1 - File (H. D. McKinley Lease)

RELEASE

STATE OF NEW MEXICO)
KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF LEA)

THAT I Mrs. Jack Kirk, being the owner of the hereinafter described land, for and in consideration of the sum of Fifteen and 60/100 Dollars ($15.60) to me this day in hand paid by Getty Oil Company, a Delaware corporation, the receipt and full sufficiency of which is hereby acknowledged, do hereby release, remise and forever discharge the said Getty Oil Company, its successors and assigns, of and from any and all claims and demands (whether known or unknown) of whatsoever nature that I may have or may have had, on account of, or due to, damage to livestock, stock water, pasture, growing crops, trees, land surface, fences, structures, and any other real or personal property, which was occasioned by, arose out of, or resulted from, the operations of the said Getty Oil Company in connection with the installation, maintenance and use of a pipeline or tank battery, including without limitation, damages caused by breaks and/or leaks therein, and the escape of oil, distillate, condensate, or other substances, on the following described land, to wit:

H. D. McKINLEY LEASE, NE/4, section 30, T18S,R38E, Lea County, New Mexico.

This release includes, without limitation as to the generality thereof, the release of the said Getty Oil Company from any duty to restore the surface on the above described land to the condition existing prior to the commencement of said operations by the said Getty Oil Company.

IN WITNESS WHEREOF, this instrument is executed this 25th day of August, 1977.

Jack L. Kirk, Wm.

2 - Mr. A. L. Taylor - Houston
1 - Mrs. Jack Kirk
1 - Hobbs File (H. D. McKinley Lse.)

RELEASE

STATE ON NEW MEXICO)
KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF LEA)

THAT I E. M. DIXON, being the owner of the hereinafter described land, for and in consideration of the sum of One Hundred Twenty Five and no/100 DOLLARS ($125.00) to me this day in hand paid by Getty Oil Company, a Delaware corporation, the receipt and full sufficiency of which is hereby acknowledged, do hereby release, remise and forever discharge the said Getty Oil Company, its successors and assigns, of and from any and all claims and demands (whether known or unknown) of whatsoever nature that I may have or may have had, on account of, or due to, damage to livestock, stock water, pasture, growing crops, trees, land surface, fences, structures, and any other real or personal property, which was occasioned by, arose out of, or resulted from, the operations of the said Getty Oil Company in connection with the installation, maintenance and use of a pipeline or tank battery including without limitation, damages caused by breaks and/or leaks therein, and the escape of oil, distillate, condensate, or other substances, on the following described land, to wit:

H. D. McKinley Lease, Section 30, T18S, R38E, Lea County, N. Mex.

This release includes, without limitation as to the generality thereof, the release of the said Getty Oil Company from any duty to restore the surface of the above described land to the condition existing prior to the commencement of said operations by the Getty Oil Company.

IN WITNESS WHEREOF, this instrument is executed this 25 day of August, 1977.

E. M. Dixon

2 - Mr. A. L. Taylor - Houston
1 - E. M. Dixon
1 - File (H. D. McKinley Lse.)

GO-H. D. McKinley Lease
Water Well

Mr. R. H. Coe - Midland — Production — Hobbs

Mr. H. B. Berg - Houston
Mr. John F. Sullivan - Houston

December 2, 1963

Mr. Wesberry advised that he discussed the above subject with regard to the water well located immediately west of tank battery and referred to in Mr. Shackelford's letter of March 4, 1957 and that you could not remember any agreement made by Tidewater or Getty.

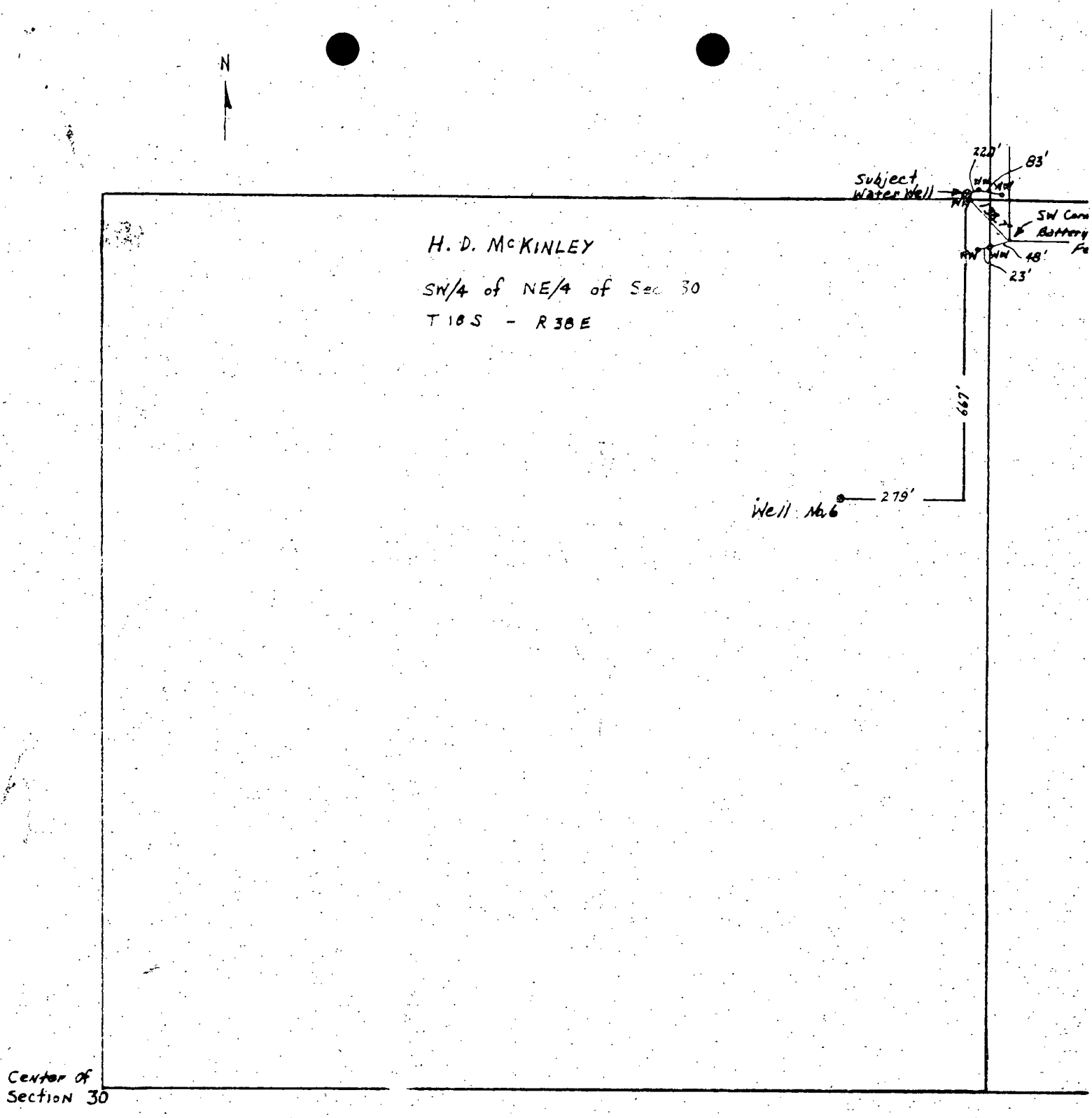
Mr. John F. Sullivan's letter of November 7, 1963 indicates that nothing to this effect is contained in the Law Department files, Mr. Boone's files or lease files.

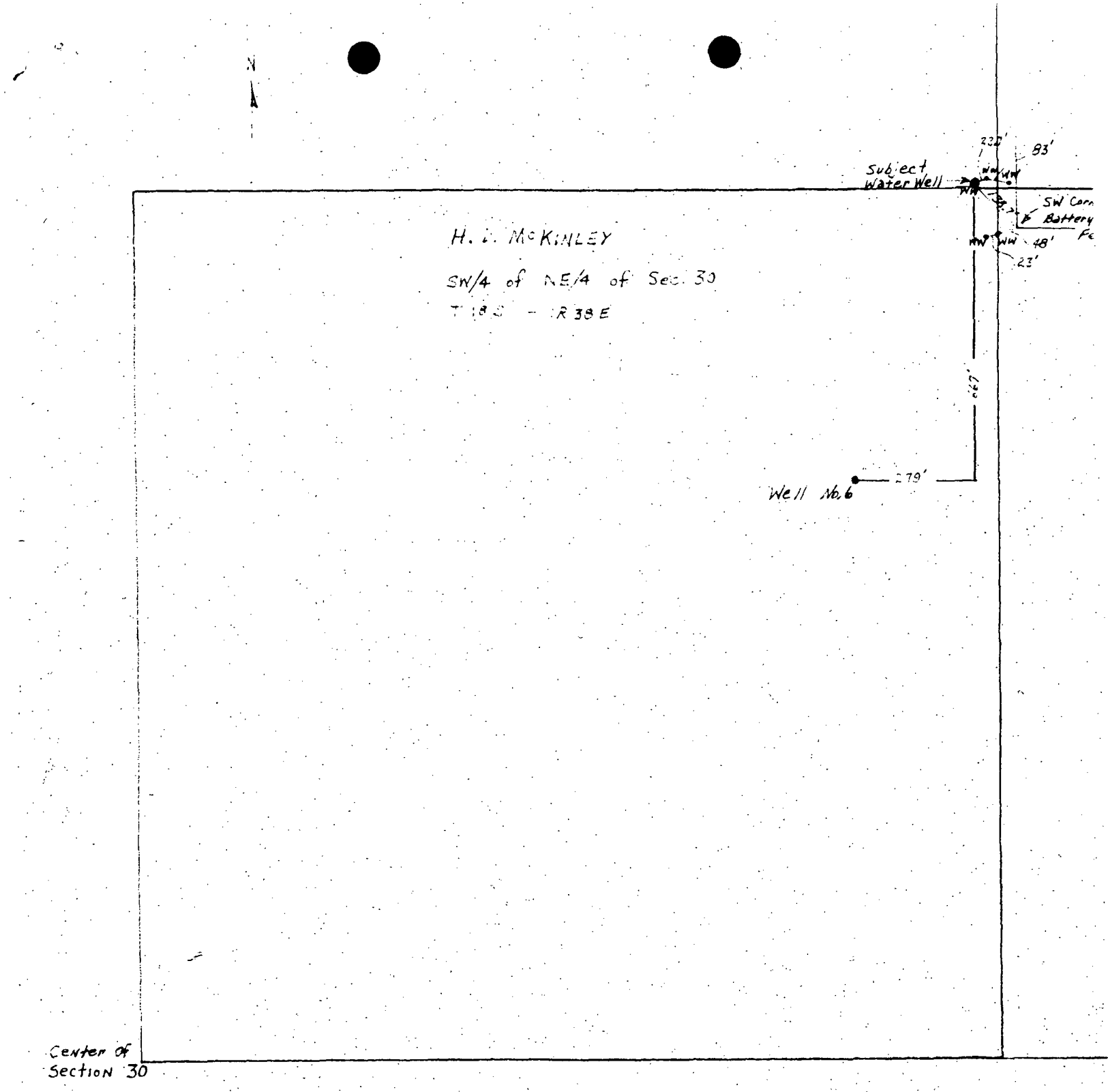
Plat showing location is attached. Although this plat was not surveyed, it is sufficiently accurate to definitely locate subject well.

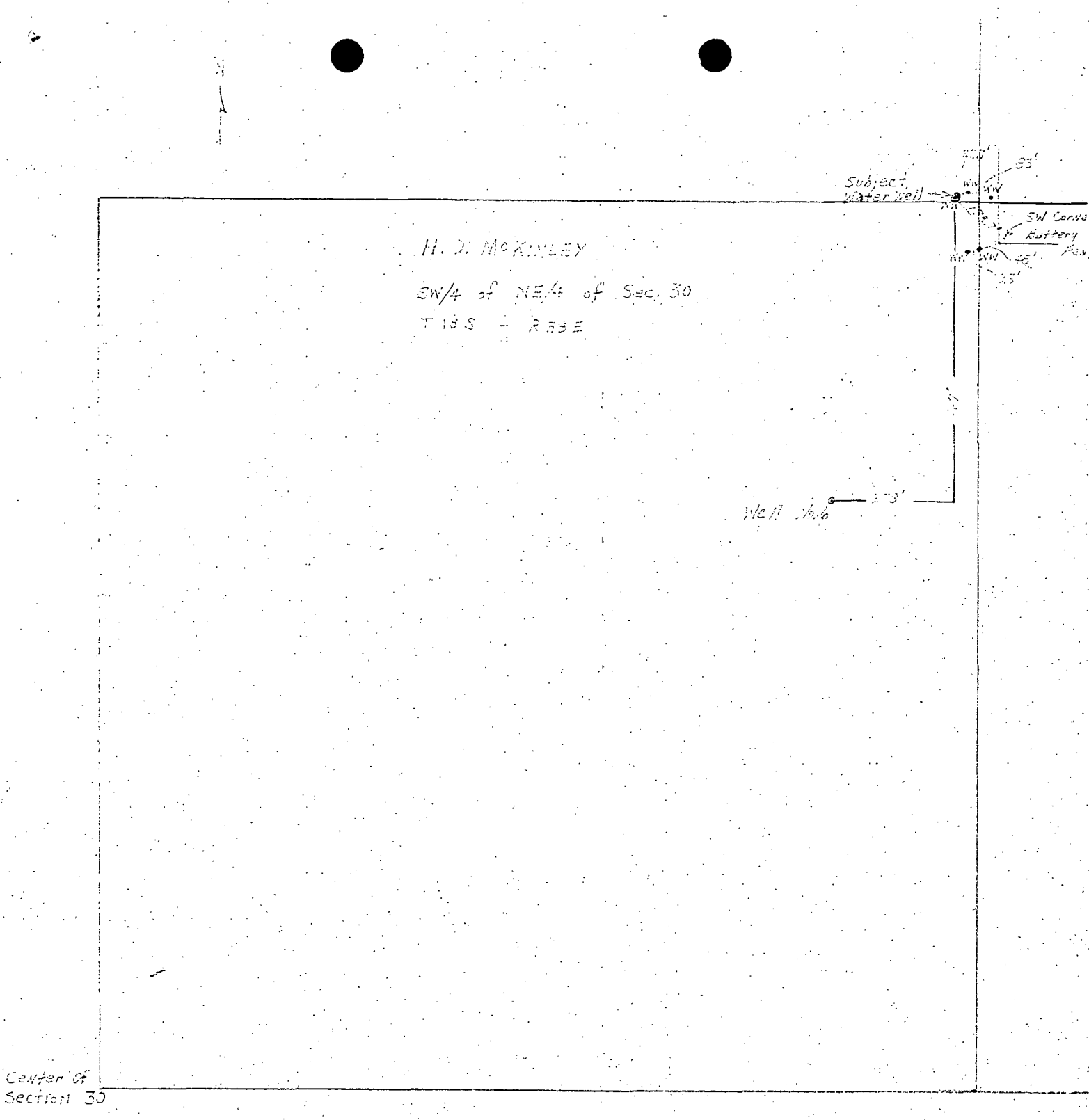
As suggested in my letter of October 31, 1963, I would recommend our allowing Mr. Kirkendall the use of this well for his purposes. As stated before, the equipment present is junk. I would suggest a similiar agreement as was recently furnished for the Boone Hardin water well which releases Tidewater and/or Getty from liability regarding present or future condition of water.

C. L. Wade
C. L. Wade

CLW:bw

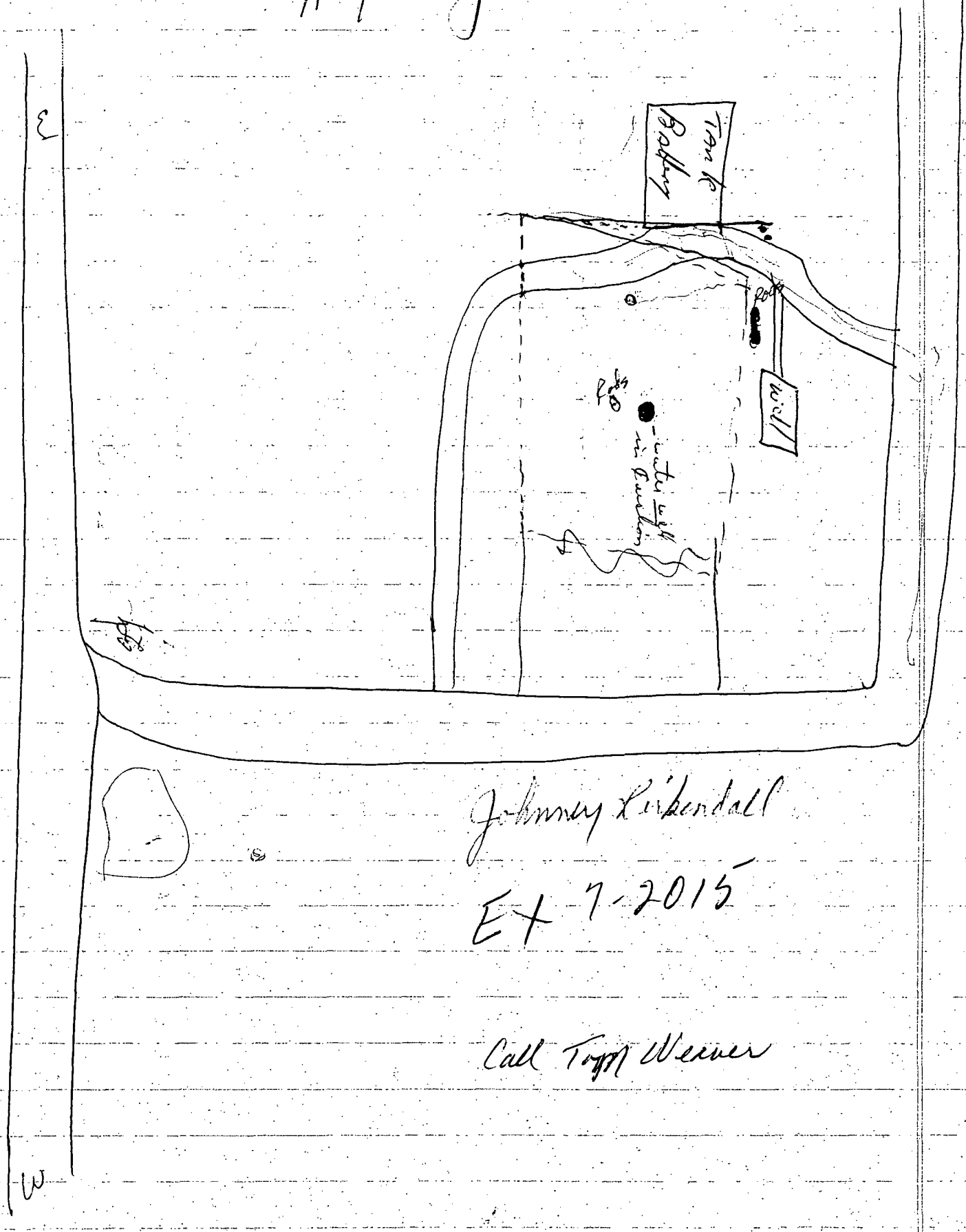

N
Subject Water Well
220'
83'
48'
23'
SW Corn
Battery
H. D. McKINLEY
SW/4 of NE/4 of Sec 30
T 18 S - R 38 E
667'
279'
Well No. 6
Center of Section 30


N
232'
83'
Subject Water Well
SW Corn
Battery
48'
23'
H. L. McKINLEY
SW/4 of NE/4 of Sec. 30
T 18 S - R 38 E
667'
279'
Well No. 6
Center of Section 30


Subject Water Well
SW Corner of Battery
H. D. McKINLEY
SW/4 of NE/4 of Sec. 30
T 18 S - R 33 E
Well No. 6
Center of Section 30

McKinley

10-2



Johnny Kendall

Ext 7-2015

Call Tom Weaver

TW-397-1-A

INTER-OFFICE CORRESPONDENCE

TIDEWATER OIL COMPANY

Title File 80458 OUR FILE NO.

SUBJECT: GO-H. D. McKinley Lease
Lea County, New Mexico YOUR FILE NO.

TO: Mr. C. L. Wade - Hobbs FROM: Law - Houston

COPIES: Mr. H. E. Berg DATE: November 7, 1963
Mr. R. H. Coe - Midland
Mrs. Geraldine Love

The Law Department files, Mr. Boone's files and subject lease files do not contain any indication that an instrument was prepared in accordance with Mr. Shackelford's memorandum recommendations of February 20, 1957 and March 4, 1957 to Mr. Berg that Mr. Gail Boman be assigned the 180' x 200' tract west of the tank battery on subject lease and the water well located thereon. However, the March 4, 1957 memorandum indicates that Mr. Coe was personally familiar with the matter, and in all probability he will be able to advise as to the outcome of Mr. Shackelford's recommendation.

If you find that we continue to own the water well and that Mr. Kirkendall has acquired the land upon which it is situated and if the sale of the well is approved by Management, please furnish us a description of the well and its exact location so that we can prepare a proper instrument of sale.

John F. Sullivan

John F. Sullivan

JFS:kl

(Coe not furnished)

GO-H. D. McKinley Lease

Mr. Jack Jones - Houston

Mr. H. E. Berg - Houston
Mr. R. H. Coe - Midland

Production Hobbs

October 31, 1963

Mr. Johnny Kirkendall recently contacted this office, stating he had purchased some acreage immediately west of the tank battery on this lease. He further stated that it was his understanding that the purchase included an irrigation well and water rights. His reason for contacting us was that someone told him that Getty Oil Company owned the well in question, the pump and water rights and he thought we might be able to clarify the situation.

I have examined our file on subject lease and found copies of two letters pertaining to a plot west of the tank battery. Copy of each letter is attached. Judging from these letters, I assume there is a possibility that some type of agreement was made with Mr. Boman which would possibly explain the status of this property. I would appreciate any clarification you might give us regarding previous agreement, or if none has been made, advising the proper handling.

The above mentioned pump-head probably was originally installed by Getty Oil Company, however, the engine is gone and what is left is definitely junk and is of no use to us.

I believe our primary concern is the elimination of any liability due to the present or future condition of the water. Otherwise, in the absence of any existing agreement, I would recommend our allowing Mr. Kirkendall this well for his purposes.

C. L. Wade

C. L. Wade

CLW:bw

Attachments

ROSE AND JOHNSON
ATTORNEYS AT LAW
119 NORTH DALMONT
HOBBS, NEW MEXICO

December 14, 1960

U. M. ROSE
LAWRENCE H. JOHNSON

P. O. BOX 937
PHONES EXPRESS 3-3842
EXPRESS 2927

Tidewater Oil Company
P. O. Box 1404
Houston 1, Texas

Attention: Mr. J. H. Graves

Dear Mr. Graves:

Thank you for your letter of December 12, 1960, enclosing the partial release of right of way executed by your company.

We realize that Tidewater was under no legal compulsion to execute the release. The owners of the property and this firm are both very grateful for your cooperation.

With best wishes, we are

Yours very truly,

ROSE AND JOHNSON

By Lawrence H. Johnson

LHJ/c

cc: Mr. Thomas E. Weaver, Superintendent
Tidewater Oil Company
P. O. Box 547
Hobbs, New Mexico

So H. D. McKinley

Right-of-Way Grant, H. D. McKinley

Mr. R. H. Coe - Midland

Production Hobbs

October 28, 1960

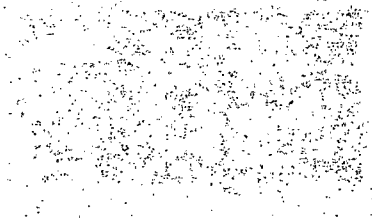
We received the attached letter from Mr. Johnson in regards to the above subject. They are extremely interested in getting an answer from Tidewater on the right-of-way release as the loan commitments which they have with the Veterans Administration expires November 5, 1960.

Will you please find out what action the Company has taken on this matter and advise us.

Thomas E. Weaver

TEW:bh

Attachments



ROSE AND JOHNSON
ATTORNEYS AT LAW
119 NORTH DALMONT
HOBBS, NEW MEXICO

U. M. ROSE
LAWRENCE H. JOHNSON

P. O. BOX 937
PHONES EXPRESS 3-3842
EXPRESS 2927

October 26, 1960

Mr. Thomas E. Weaver, Superintendent
Tidewater Oil Company
P. O. Box 547
Hobbs, New Mexico

Re: Right of Way Grant from H. D. McKinley and wife to Tidal Refining Company dated September 18, 1930, recorded September 22, 1930, in Book 24, Page 313, Deed Records of Lea County, New Mexico.

Dear Mr. Weaver:

By letter dated July 28, 1960, we advised you that we were representing Gulf Coast Investment Corporation which proposed to make a Veterans Administration insured loan on the property shown on the enclosed plat of survey.

In our letter we requested that Tidewater release the property, except for two 35 foot strips, the center line of each being the location of the existing pipelines. We advised you that the proposed loan could not be closed so long as the entire property was subject to the right of way grant. With our letter we enclosed a proposed partial release of right of way.

The Veterans Administration commitment on this property expires November 5, 1960. The purchasers are threatening to back out of their agreement to purchase this property unless the loan can be closed without further delay. The sellers are also becoming uneasy.

We would appreciate it if Tidewater would, at the earliest possible time, either execute the partial release of right of way and forward it to us or else advise us what its requirements are for execution of a partial release. Please advise the proper officials of your company that they may call me collect if they have any questions.

Thank you.

Yours very truly,

ROSE AND JOHNSON

By

LHJ/cf
Enclosure

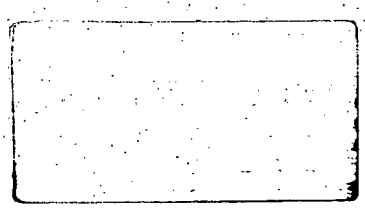
"GO" H. D. McKINLEY LEASE

9:30 A.M.
September 22, 1959

Mr. E. C. Oliver has drilled a water well and is starting construction of a house in the NE quarter of the "GO" H. D. McKinley lease. The house will be built near well #5 flow line. This line was dug out just west of the house location so that it could be properly located in relation to the house. Mr. Oliver was shown the line, and understands that should a leak occur, it would have to be repaired. He is planning to build his house approximately 10' from the flow line.

W. L. Green

H. P. Shackelford



The following is a text of the speech given by E. G. Minton, Lea County Water Basin Commissioner, at the Chamber's monthly luncheon on November 11, 1957. It is being sent to you merely in the interest of public service to our members.

HOBBS CHAMBER OF COMMERCE

IS THERE A NECESSITY FOR A CONSERVANCY DISTRICT IN LEA COUNTY?

GENERAL HYDROLOGIC CONDITIONS

"The northern part of Lea County is a typical part of the Staked Plains--an elevated plain extending from the Canadian River southward almost to the south boundary of New Mexico and from near the western boundaries of Curry, Roosevelt and Lea Counties east into the panhandle of Texas. This plain is separated by escarpments several hundred feet high from the surrounding county on the west, north and east. The western escarpment closely follows the line between Lea and Chaves Counties from the northwest corner of the county to about the latitude of Lovington. Thence it trends southeastward, becoming more and more indefinite, past Monument, to the Texas line." (C.V. Theis, N.M., U.S.G.S. State Engineer Biennial, 1934-1938, pages, 123-124.)

From the above information presented by a man who is renowned for his knowledge in ground water hydrology, we find in one simple statement, that our Lea County underground water basin is virtually cut off, geologically speaking, from any other part of New Mexico from the Canadian River south, and from the western escarpment (or Caprock) eastward. This information would nullify therefore, any other presentments that the water of the Lea County underground basin was and is being recharged from far away sources. Let us continue with further facts.

"Recharge to the ground water occurs by rainfall penetration. Much of the larger part of the rainfall in the county is evaporated either directly or through the agency of plants, and the only remaining small part eventually

joins the ground water." (Theis, C.V., U.S.G.S., N.M. State Engineer 12 & 13th Biennial Report, 1934-1938.) In his statement as quoted above, Mr. Theis is emphatic, that the only recharge to the Lea County underground water basin comes from rainfall which falls directly upon the basin proper. He states further as follows: "There is no surface runoff. It has been estimated that the average annual recharge to the ground water is less than the equivalent of one-half inch of water over the area of the county." This one-half inch may be in excess of the actual average annual recharge. From the report, "Water Available For Artificial Recharge, Texas High Plains", published by the High Plains Underground Water Conservation District of Lubbock, they have the following to say:

"As has been stated before, a large part of the natural recharge to the underground reservoir is derived from the water that collects in the depressions. But, since studies by the U. S. Geological Survey indicated that total natural recharge to the underground reservoir beneath the Texas High Plains is less than one-tenth of an inch, it follows that at least 90 percent of the water that collects in the depressions is lost to the atmosphere."

From the above statement, and from various tests and experiments by the Division of Underground Water Recharge in Lea County, it has become the opinion of the hydrologist that the natural average recharge in Lea County is probably closer to that found by the U.S.G.S. in the Texas High Plains than the approximate one-quarter inch estimated by Theis.

Assuming then that the average annual natural recharge to the Lea County underground water basin is one-tenth of an inch or about 0.0083 feet, would deliver to the ground water system each year a total of about 12,000 acre feet (3 billion 910 million gallons), rather than the approximate 29,000 to 30,000

acre feet (9 billion, 780 million gallons) as was first estimated by the U.S.G.S. in New Mexico.

In 1952-53, the engineers of the New Mexico State Engineer, in cooperation with the U.S.G.S. made as completely as possible, an inventory of the water in storage beneath the Lea County underground water basin. This was done by collecting about 10,000 logs of water wells, oil wells, and seismograph holes which had been drilled within the underground water basin. These logs were carefully studied and correlated with each other, and eventually a plat was drawn showing the thickness of the strata of fresh water. The formations were carefully studied to determine how much water was contained in each cubic foot of water saturated sand and gravel. The resultant facts reported were as follows:

1. That each cubic foot of saturated material in the basin contained from 15 to 20 percent water and probably nearer 15%.
2. That there was sufficient recoverable water for irrigation, municipal, ranching and industrial use for a period of from 40 to 45 years based on the present rate of withdrawal, (1953).
3. The U.S.G.S. has determined that the present rate of withdrawal is on the order of 500,000 acre feet per year (163 billion gallons).
4. That based on the above unpublished figures there remained in storage in 1953, about 21,000,000 acre feet (6,840 billion gallons).
5. That at the end of about 45 years, there would be very little water available for use by industry, municipal or other uses.

Mr. C. V. Theis in his report for 1932-34, stated as follows:

"---- the pumpage in Lea County results in a comparable reduction in storage of water in the aquifer below the county, and there must therefore be some progressive decline in water levels. As the underground reservoir furnishing this water is large, the lowering of water levels will proceed slowly if the wells are properly spaced and the pumpage not too great." Twenty-five years later we find that the wells have not been spaced properly, and that the pumpage is great, much greater than it possibly should be without increased recharge. "Is There A Necessity For a Conservancy District in Lea County?" The answer is obvious.

The present assessed valuation of Lea County at the present time is on the order of $180 million to $200 million dollars. The present valuation of the area within the underground water basin is on the order of 80 millions of dollars. This valuation depends entirely upon the underground water of Lea County for its existence. We are, with the possible exception of Bernalillo County, the richest county in New Mexico. Do we as the present guardians of Lea County and its prized economy, have any right to endanger the future heritage of our children through malpractice and misadministration today? We are at that threshold. We are faced today with the question: "Is There A Necessity For A Conservancy District in Lea County?" The answer is obvious.

About a year ago a group of qualified experts estimated that by 1965, th City of Hobbs would have a population of 80,000 or an increase of over twice that at present. On the same basis, it can safely be assumed that the City of Lovington will be by that date, a city of 25,000 to 30,000 people. By 1965, Hobbs will be pumping 20 millions of gallons of water a day (if it is available), the City of Lovington will be pumping nearly 7 millions of gallons per day (if it is available). There will be a great many livestockmen who will

be unable to pump available water for stock use. The agriculturist, who is paying about $2.25 for each acre foot (326,000 gallons) of water that he pumps, will be paying about $2.50 for each 326,000 gallons, or an increase of an average of $63.00 per year, per acre. This is the minimum cost. Add to this the additional cost of pumping equipment as the water declines lower and lower, and horsepower requirements become greater and greater. Other areas and other cities are being faced with "a too little too late" problem today.

The City of Lubbock only within the past year, begun developing a project to pump water in Bailey County, Texas and pipe it to Lubbock, over 70 miles away. They discovered a necessity for water---costly water.

Lea County is no different from Lubbock. We are all existing on the High Plains and under similar conditions. We simply have not grown as fast, and have not reached the "out of water" condition as has Lubbock, but we will. In the Pecos Valley, New Mexico, many hundreds of acres of farm land have been abandoned due to declining water levels and many hundreds of acres are in the process of being abandoned at the time of this writing, to salt water encroachment, due to declining water levels. In other areas in the Pecos Valley, the cost of water has increased over several times in the past ten years. The City of Roswell is facing a problem of salt water entering their municipal wells, again due to declining water levels.

In the Portales Valley, New Mexico, hundreds of acres of farm land are on the verge of abandonment, due to declining water levels. One farm in that area originally using three wells, is now using 14 wells---and is short of water. The City of Portales, originally obtaining its water supply from wells within the city boundaries are now preparing to pipe water to the city from the Black Water Draw area, about 6 to 8 miles away. What will their water cost?

The City of Carlsbad for the past few years has been trying to decide to begin a project of piping water to the city, when they had discovered their existing wells are declining at such a serious rate, they will soon not be able to supply the demand. What will their water cost?

Cities and industry can pay more for water, but they most have a faithful source on which they can depend, a source which will provide every increasing amounts due to the rapid growth of all of our southwestern cities. The growth will continue and it is our duty to ourselves and to a secured future to see that the first requirement of man is available.

In 1955, it cost the people of Lea County a total of about 1 million, 125 thousand dollars to pump their water, industry, municipal and agriculture. In 1965, if we sit idly by, it will cost us one million, 250 thousand dollars. In 1975, the cost will be one million, 400 thousand dollars. By 1995, the cost will be considerably less, since there will be very little water to pump. What is the necessity? What has been paid in increased pumping costs from 1955 to 1975? Two hundred seventy five thousand dollars!

With an average annual recharge to the Lea County Underground basin, we can be assured of a continual, cheap, sufficient supply of water to continue the high level economy in the County which would not otherwise be possible.

RELEASED BY

THE

WATER CONSERVATION COMMITTEE

Mr. Hobdy Gann	Lovington, New Mexico	Chairman
Mr. W. A. Anderson	Lovington, New Mexico	Member
Mr. M. D. Markham	Tatum, New Mexico	Member
Mr. Finn Watson	Hobbs, New Mexico	Member
Mr. Frank Walker	Eunice, New Mexico	Member

H. D. McKinley Lease

Mr. H. E. Berg - Tulsa — Production — Hobbs

Mr. H. G. Wesberry - Midland — June 12, 1957

The Getty Oil Company's H. D. McKinley lease is located in the NE/4 Sec. 30-18S-38E Lea County, New Mexico. Various claims on pollution of fresh water strata in this area have been a problem for many years. This has developed again since the acquisition of the surface on the McKinley lease by Mr. R. L. Bensing. He has been sub-dividing this 160 acre into 2-1/2 - 5 acre tracts with the idea of selling them for homestead sites. These tracts are located some 2-1/2 miles west from the nearest city water mains and occupants living here must necessarily depend on water wells for domestic purposes. Recently Tidewater has been notified that a possible law suit for contamination of fresh water strata around the McKinley #6 may be forth coming. Mr. Bensing is thought to be helping in collecting data on this pollution and being a very influential man, Local Justice of the Peace, U. S. Commissioner and Chairman of Lea County Democracts, this may become a very serious problem. It is the purpose of this letter to set out some operational history of Getty's McKinley lease as well as the method and history of water wells in this immediate area.

Development began on the Getty H. D. McKinley lease in 1930 with the completion of well #1 in the San Andres. Development continued and at the present time there are seven wells producing on the lease. Four (Nos. 1,2,4, and 5) produce from Hobbs pool and three (Nos. 3,6, and 7) produce from the Bowers pool. Wells #6 and #7 were the latest wells drilled, being completed in 1947.

Tidewater acquired operation of Getty Oil Company properties on January 1, 1956. Prior to Tidewater's operating this property, some remedial work had been performed on the McKinley lease. Outlined below is a brief summary of remedial work operations prior to January 1, 1956.

Well #1: Completed 7/4/30.

ORIGINAL CASING RECORD

Size	Depth	Cement
12-1/2	245	200
9-5/8	2758	600
7	3856	250

In 1953 indications were that holes had developed in the 7" OD oil string in this well. Both oil and gas had shown up at the 9-5/8" and 13-5/8" Bradenheads and both were carring 250# pressure.

The 7" casing was perforated @ 2800' and cemented with 1325 sks. cement. During this job cement circulated out of annulus between 7" & 9-5/8" casing. Cement was drilled out, casing tested with pressure was okay, and well was cleaned out to a total depth of 4202'. Ran 5" OD 8R J-55 casing (99 jts.) and set @ 4202' with MONCO DV cementing tool @ 3732'. Cemented 5" casing shoe with 115 sks., 4% gel and 1/4# flowseal per sack. Circulated through DV tool and recovered 50 sks. cement. Cemented through DV tool w/ 290 sks., 4% gel and circulated out 150 sks. cement. Drilled out cement and tested casing, okay. Perforated 5" casing for production. Job completed September 23, 1953.

Well #2: Completed 7/15/30

ORIGINAL CASING RECORD

Size	Depth	Cement
12-1/2	251	200
9-5/8	2756	600
7	3858	250

In 1954, after checking this well for leaks as instructed by the N.M.O.C.C., indications were that the 7" casing had holes in it. Casing was perforated several times trying to establish circulation between 7" and 9-5/8" casing. Finally established circulation and cemented 7" casing with 450 sks. cement through perforations @ 2450'. Circulated out 20 sks. cement between 7" and 9-5/8" casing. Drilled out cement and found sections 4010-4070' taking 30 gals. fluid per minute and section 3900-3940' taking 20 gals. per minute. Ran 5" OD 13# casing (127 jts.) and set @ 4202' with DV tool @ 3802'. Cemented around shoe with 100 sks., 4% gel plus 1/4# flowseal per sack. Opened DV tool and circulated out 45 sks. Cemented through DV tool with 350 sks., 4% gel. Cement circulated to the surface. Drilled out cement and casing tested okay. Perforated 5" casing for production. Job completed July 7, 1954.

Well #3: Completed 4/28/47

ORIGINAL CASING RECORD

Size	Depth	Cement
13"	270	?
9-5/8	2755	600
7	3150	100

Operation commenced 6-19-30. This well was drilled to a T.D. of 2755' and 9-5/8" casing set @ 2755' with 600 sks. Due to enactment of laws by N.M.O.C.C. prohibiting the drilling of more than one well per forty acres, operation was suspended 6-26-30. On April 11, 1947, rotary tools were rigged up and mud cleaned out of 9-5/8" casing to 2695'. 9-5/8" casing was tested with 1000# pressure and held okay. Drilled cement, shoe and formation to 2760'. Retested casing shut off, okay. Drilled to a depth of 3150' and set 7" casing @ 3150' with 100 sks. Drilled to a T.D. of 3199' and completed well. Only remedial work performed on this well was a clean out job in April, 1951.

Well #4: Completed 8/16/30.

ORIGINAL CASING RECORD

Size	Depth	Cement
12-1/2	245	200
9-5/8	2753	600
7	3998	250

Completed 8/16/30 at a T.D. of 4194'. No remedial work.

Well #5: Completed 12/12/30.

ORIGINAL CASING RECORD

Size	Depth	Cement
12-1/2	247	247
9-5/8	2756	600
6-5/8	4042	250

Completed 12/12/30 at a T.D. of 4200'. Only remedial work has been the setting of formation packer and use of jelly-seal plugs to shut off formation water.

Well #6: Completed 5/9/47.

ORIGINAL CASING RECORD

Size	Depth	Cement
8-5/8	1474	400
5-1/2	3160	200

Completed 5/9/47 at a T.D. of 3200'. Only remedial work to this well has been a clean out in April, 1951 and a sand frac in April, 1955.

Well #7: Completed 7/12/47.

ORIGINAL CASING RECORD

Size	Depth	Cement
8-5/8	1503	400
5-1/2	3175	200

Completed 7/12/47 at a T.D. of 3224'. No remedial work has been performed on this well.

Several complaints of landowners in the vicinity of Getty's H. D. McKinley lease regarding contamination of fresh water wells prompted the New Mexico Oil Conservation Commission to schedule a casing leak survey on wells within a one-half mile radius of the McKinley lease. Casing pressures on the McKinley lease were checked by Mr. Rieder, O.C.C. engineer, on August 6, 1956, bled off and rechecked on August 7, 1956. This was seven months after Tidewater acquired operation.

McKinley #1 and #3 had no pressures at any outlet and were considered safe from possible contamination of fresh water strata.

McKinley #2 had pressure between the 9-5/8" and 7" casing. This pressure was bled off, but at the end of a 24 hr. shut in period was again 200 psi. As shown in the remedial work outlined, Skelly repaired a leak in the 7" casing in 1954 by cementing through holes in the 7" casing and then running 5" casing to bottom. Both jobs were shown to have circulated cement to the surface, so apparently a channel exists on the cement job performed on the 7" casing. Mr. Reider stated that with no pressure between the surface and intermediate strings, he did not believe this well would cause contamination.

McKinley #4 indicated a casing leak from a prior Commission survey and Mr. Reider insisted that immediate action be taken. He was informed that authorization had been obtained to repair this leak and work would be started.

McKinley #5 had pressure between the 9-5/8" and 6-5/8" casing which was 80 psi. This was bled off and after a 24 hr. shut in period, had a pressure of 20 psi. As this well did not have pressure between the intermediate and surface strings, Mr. Reider was not concerned about fresh water contamination from this well.

McKinley #6 and #7 indicated pressures between the 8-5/8" and 5-1/2" casings of 440 psi and 600 psi respectively. After a 24 hr. shut in period these pressures were 440 psi & 560 psi respectively. These wells do not have surface casing letting the 8-5/8" double as both the surface and intermediate strings with a setting depth of around 1500'. The amount of cement used in setting the 5-1/2" oil strings was not sufficient to tie into the 8-5/8" casing strings. Both wells flowed salt water and gas from the bradenheads without weakening. Mr. Reider did not know the course of action that should be taken on these wells. They would of course, cause no contamination if the 8-5/8" strings remained intact, however, immediate contamination would occur should a hole develope in these strings.

Since this survey, Tidewater, as operator, has performed the following remedial work.

Well #4: A casing leak survey indicated leaks in the 7" casing and possible leaks in the 9-5/8" casing. A bridge plug was set in casing @ 3900', the 7" tested with 1000# and held okay. The 7" casing was perforated @ 2601' and cemented with 500 sks. Cement circulated to the surface. Pumped 300 sks. cement between 12-1/2" and 9-5/8" casings at 300 psi. Drilled out cement to below 2601' and tested with 1000 psi. Casing held okay. Drilled out bridge plug and swabbed well to flowing. Job completed 9-12-56.

Well #6: Casing leak survey did not indicate leak in 5-1/2" casing, however, sweet gas would flow between 5-1/2" and 8-5/8" casing strings and the O.C.C. requested that cement be brought to the surface between these strings. An attempt was made to squeeze cement between 8-5/8" and 5-1/2" casings, but could not break formation down. Set bridge plug @ 2500' and perforated 5-1/2" casing @ 1453'.

Cemented with 335 sacks cement and when cement reached the surface the casing valves were closed and 89 sks. of cement were squeezed below 1453', between 8-5/8" and 5-1/2" casing. Drilled out cement and tested casing with 1000#. Held okay. Drilled out bridge plug and put well back on production. Job completed 9-14-56.

Well #7: Casing leak survey showed sweet gas between 5-1/2" and 8-5/8" casing strings and the O.C.C. requested that cement be brought to the surface between casing strings. 325 sks. cement were squeezed between the strings at 1200 psi pressure. Job completed 9-6-56.

These three workovers completed all work requested by the O.C.C. after the August, 1956 casing leak survey. Another survey in February, 1957 indicated no danger of fresh water contamination in wells #1 thru #6. Well #7 was not tested, until June 11, 1957 and showed no danger of contamination. The well had 20# pressure, but when opened up bled off readily with a very small volume.

As previously mentioned, Tidewater realized the increasing hazard of the operations of wells near homesites. To prevent injury of children, the wells on the Getty - McKinley lease and the tank battery sites were fenced using 6' cyclone fence with 3 strands of barb wire on top, during February, 1957. This work cost approximately $12,800.

Although this water has been contaminated for over 15 years, problems and threatened law suits arise occasionally. This water is not contaminated in just this vicinity, but over a much wider area. Approximately two years ago, Dowell, Inc. built a new yard and office on the north edge of Hobbs, located approximately three miles east of GO-McKinley lease. As the location of this yard was outside of the city limits at the time, it was necessary that Dowell drill a water well for their use. This well was contaminated with gas to such an extent that a flame will burn when opening a water spigot.

Due to the dip of the fresh water strata in the area, normal flow (without withdrawals) was in a SE direction. Most of the water wells were drilled by Mr. Ellison in his back yard (See well "A" on attached map) recently, the location of which is some 600-700' from GO-H. D. McKinley #6. A sample of this water was taken by Commission engineers and indicated quite a bit of free oil. Another well was drilled in the front of Mr. Ellison's house (Well #B") with samples of the water indicating gas. Since that time several more wells have been drilled around our McKinley #6 and samples taken from the wells. On the attached plat of this lease is shown the location of the water wells and the quality of water sampled from each. Since Mr. Ellison does not own the surface on which water wells #1 thru #9 were drilled, we have assumed Mr. Bensing is assisting in this testing.

All of these wells are being drilled to a depth of approximately 26-35' and 4' of casing run in the wells.

After sampling of these wells, a meeting was called by the O.C.C. This meeting was of an informal nature, the purpose being, methods which operators thought would be the most economical in shutting off pressure between intermediate and surface casing strings, even though no casing leaks are indicated. During this meeting samples of water from these water wells were shown to those attending the meeting, although the owner, operator and lease name of the GO-H.D. McKinley #6 was withheld. Mr. Porter, secretary of the O.C.C., and Mr. Cooley, O.C.C. lawyer, were both present. They reported that the complaints of land owners regarding contamination of fresh water strata is greatly increasing and they feel the situation is becoming alarming. They also expressed concern for the Hobbs city water system, utilizing the shallow water sand, since, if the direction of water flow in this strata is continuing to be SE, with withdrawals, it is moving toward Hobbs and could eventually render this water unfit for domestic purposes.

The main water supply used for the city of Hobbs is obtained from the Edgaloga sand at approximately 100'. This is the most prolific producer in this area.

Mr. Cooley stated, at the meeting, that New Mexico Courts followed Texas rulings in oil and gas cases very closly and cited the recent ruling in Texas for passing on to company lawyers. This case Gulf Oil vs Alexander was unusual in that Gulf was not proven to be negligent, but required to pay damages. The court ruled that although no negligence could be proven, Gulf had voliated the NMC order of not confining O/G to their zones.

Refernces for this case:

(A) Gulf Oil vs Bob Alexander
Court of Civil Appeals
291 SW Reporter second series 792

(B) November, 1956 Texas Law Review
Volume 35 Symbol 1
"Liability in the Oil & Gas Industry"

Skelly was contacted and they informed us that while operator for GO-H. D. McKinley, they were contacted several times about salt water contamination of fresh water in this area. They invited individuals to sue as they did not believe themselves liabile, but none accepted.

We believe this ruling in Texas will change land owner's views in regard to this matter and will becomes more of a problem in the future.

According to Mr. Cooley, he believes that all a landowner will be required to prove prior to collecting of damages is (1) The water well contaminated, (2) A nearby well had a casing leak.

From the action occuring around the GO-McKinley #6 it would appear that the interested party believes a casing leak was repaired on this well in September, 1956. This is not the case and remedial work was performed to prevent casing pressure between the surface and oil strings of casing.

We believe the problem of fresh water contamination is a serious one and could develop into an alarming situation on the G[illegible]-McKinley where the surface will be sub-divided and various landowners will eventually be encountered.

We hope this data will help enlighten you on the history and recent developments around this lease.

Since this letter has been prepared, the water well machine has moved in the vicinity of the McKinley #7. We believe a similiar program, to that used around well #6, is planned here. We will keep you informed on this matter.

H. P. Shackelford

PNM:bh

Attachment

FORM 397—1-50

INTER-OFFICE CORRESPONDENCE

TIDE WATER ASSOCIATED OIL COMPANY
TIDAL PIPE LINE COMPANY

SUBJECT: Ellison v. Tidewater and Getty

Our File No._____

Your File No._____

TO: Mr. H. P. Shackelford - Hobbs

FROM: Law (Dep't.) Tulsa (Location)

COPIES:_____

DATE: November 18, 1957

I have had no further information from Mr. Neal as to the preparation of the above case; I will advise you as soon as I do.

Harry D. Page

HDP:LB

11-23-57

McKinley Lease Damage Suit

Mr. H. D. Page - Tulsa

Messrs: H. G. Wesberry - Midland
H. E. Berg - Tulsa

Production - Hobbs

November 14, 1957

A copy of the report on protection of fresh water sands in the Hobbs area, was delivered to Mr. C. Melvin Neal about one month ago.

At the time this report was delivered, we asked Mr. Neal if there was anything we should do in regards to this suit. He told us there was nothing to do at the present time, consequently, to date, this office has made no preparation.

If you desire us to do anything, please advise.

H. P. Shackelford

HPS:bh

Rules Governing Water
State of New Mexico

Mr. H. D. Page - Tulsa

Messrs: H. G. Mosberry - Midland
R. H. Coe - Tulsa

Production Hobbs

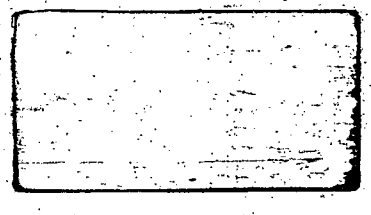
October 17, 1957

Attached is a copy of rules governing water in the State of New Mexico. This you asked for on your recent visit to Hobbs.

H. P. Shackelford

HPS:bh

Attachment



STATE OF NEW MEXICO

WATER

Controlling State Agency

State Engineer

GENERAL

The laws of 1907 created the office of the State Engineer and provided for his general supervision of the waters of the state including the measurement, appropriation and distribution thereof. The State Engineer has formulated the following regulations which effect water well construction standards.

DRILLING OF WELL

No well may be drilled in a declared underground water basin except by a licensed well driller. Before licensed driller may drill a well, he shall ascertain that the land owner has a valid permit for such work. He shall keep a reliable log of each well drilled, showing formations, water-bearing strata, etc.

In general, the casings of irrigation wells penetrating artesian aquifers shall not exceed the following maximum outside diameters: for irrigated areas less than 100 acres in size, 10-3/4 inches; for irrigated areas exceeding 100 acres, 13-3/8 inches.

EXPLORATION IN ARTESIAN AQUIFERS

Any person proposing to drill a well or wells for oil, gas or other minerals, or for geological or geophysical prospecting within any area of artesian water supply in any declared underground water basin shall notify the State Engineer of the purpose of proposed exploration, the type of equipment to be used, the location and specifications of the proposed work and the schedule of performance. He shall furnish bond to the State of New Mexico in the sum of $5,000.00 for the drilling of one well or $10,000.00 for the drilling of more than one well. Said bond shall be approved by and filed with

the New Mexico Oil and Gas Commission or the State Engineer. Such drilling shall be undertaken only under permit of the State Engineer.

LOG AND WELL RECORDS

The well driller shall keep a log of each well drilled, repaired or deepened, making current records as drilling progresses. The well driller shall submit to the Groundwater Supervisor, State Engineer Sub-Office, P. O. Box 810, Roswell, New Mexico, in triplicate, on forms supplied by the State Engineer, a complete and properly executed well record, not later than ten (10) days after completion of the well. Records shall be submitted for each artesian or non-artesian well drilled, repaired, deepened or cleaned.

SAMPLES

The well driller shall, when requested by the State Engineer, furnish (in sample bags supplied by the State Engineer) samples of the formations encountered during drilling operations. The method of sampling and the quantities required will be stipulated by the State Engineer.

SUSPENSION OR REVOCATION OF DRILLER'S LICENSE

The State Engineer may, upon notice and hearing, suspend or revoke a water well driller's license if he find that said well drilled has:

(a) intentionally made a material misstatement of facts in his application for a license;

(b) intentionally made a material misstatement of facts in a Well Record report;

(c) been found to be incompetent as a well driller;

(d) wilfully violated any of the prescribed rules and regulations;

(e) failed to submit a Well Record report of well or wells drilled, repaired, or deepened in accordance with the rules and regulations; or

(f) wilfully violated any other condition of the bond maintained by him as a prerequisite for such license.

After one year following the date of revocation of a Water Well Driller's license the well driller may make application to the State Engineer for a new license. Appeals from the decision of the State Engineer may be taken to the District Courts of the State in the same manner as now provided for other appeals from action of the State Engineer.

Should the bond be violated, the principal and sureties are liable for damages to the State of New Mexico and any other person who may be injured thereby. In addition, the State Engineer is authorized to recover on behalf of the State of New Mexico a civil penalty in an amount to be determined by the District Court in which the action is tried, but not to exceed $1,000.00.

CONSTRUCTION OF ARTESIAN WELLS

The casing for artesian wells shall be inspected by the State Engineer or his representative and shall be of proper weight, of good quality, smooth and without pits. The threads shall be in good shape. The threads, if worn or damaged, must be redressed. A casing shoe of standard make shall be used in all instances. In no case shall the outer or water-carrying casing be perforated.

Casing of various sizes shall meet the following minimum A.P.I. specifications:

TABLE 7

WATER WELL CASING SPECIFICATIONS

Outside diameter, inches	Weight, lbs. per foot: Pipe only	Pipe and couplings	Wall thickness, inches	Length of coupling, inches	Threads per inch	Grade of casing
5-1/2	12.84	13.12	.228	6-3/4	10 or 8	F-25
6	14.65	15.03	.238	7	10 or 8	F-25
6-5/8	16.69	17.29	.245	7-1/4	10 or 8	F-25
7	19.54	20.01	.272	7-1/4	10 or 8	H-40
7-5/8	23.47	24.26	.300	7-1/2	8	H-40
8-5/8	27.02	28.13	.304	7-3/4	8	H-40
9-5/8	31.03	32.25	.312	7-3/4	8	H-40
10-3/4	38.88	40.50	.350	8	8	J-55
11-3/4	45.56	46.94	.375	8	8	J-55
13-3/8	52.74	54.28	.380	8	8	J-55

After the hole has been drilled to the confining bed overlying the artesian aquifer and the casing has been landed theron, it whall be cemented with oil-well cement. The cementing procedure to be followed depends upon whether the well has been drilled by the cable tool method or by the rotary method.

The following procedure shall be used in the case of a well drilled with cable tools. Two-inch tubing shall be run inside the casing to within two feet of the bottom of the hole. A heavy slurry of oil-well cement and water shall then be pumped or poured through the tubing. During this operation the casing shall be raised from six to fifteen feet from the bottom depending upon the density and stability of the formation immediately above the fonfining stream. After the cement has been run, the tubing shall be removed and the casing released or driven to the bottom. The cement shall be allowed to set for seventy-two hours before drilling is resumed. The following table shows minimum amounts of cement to be used in wells drilled with cable tools:

TABLE 8

MINIMUM AMOUNTS OF CEMENT ALLOWED
IN CABLE TOOL WELLS

Outside diameter of casing, inches	Minimum size of hole, inches	Minumum sacks of cement to be used
5-1/2	6-5/8	5
6-5/8	8-1/4	5
7	9-5/8	15
8-5/8	10	15
10-3/4	12-1/2	20
13-3/8	15-1/2	20

If a well is drilled by the rotary method, cementing shall proceed as follows: After the casing has been run and landed, the pump shall be started and mud circulation maintained for a time with the casing raised slightly in order to equalize the mud pressure inside and outside of the casing. A heavy slurry of oil-well cement and water is then mixed and poured into the top of the casing. A casing plug of standard make is placed in the casing above the cement. A swedge nipple is then screwed onto the top of the casing and connected to the mud pump. The pump is started and mud slurry is pumped into the casing forcing the cement and casing plug down the casing.

It is advisable to place a length of two by four about six feet long ahead of the plug to act as a guide and keep it from going to the bottom as it is important to retain some of the cement in the casing to insure complete cementing around the shoe. A measuring line is run behind the plug so that the driller may know its location at all times. When the plug reaches a point from five to seven feet above the bottom, the pump should be stopped and the casing lowered to the bottom. The cement must set seventy-two hours before drilling is resumed.

The following table shows the minimum amounts of cement to be used in wells drilled with rotary tools:

TABLE 9

MINIMUM AMOUNTS OF CEMENT ALLOWED
IN ROTARY TOOL WELLS

Outside diameter of casing, inches	Minumum sacks of cement to be used
5-1/2	10
6-5/8	12
7	12
8-5/8	15
10-3/4	20
13-3/8	30

If any soft unstable formation is encountered below the casings seat a perforated liner may be set. The liner shall extend from a hard seat on the bottom of the hole to a point five to ten feet above the bottom of the casing. If the water-bearing formation is stable, no liner will be required.

Flowing wells must be equipped with a suitable valve.

REPAIR OF ARTESIAN WELLS

Faulty, leaking artesian wells sometimes waste more water underground than they deliver at the surface. When leaks in the casing are found below ground and the casing and well are otherwise in good condition, the

well may be repaired by relining with a casing which will slip down inside the original casing. The liner shall be set at the bottom of the original casing regardless of the location of the point of leakage. If this were not done, any new leaks developing below the relined section could not be repaired.

A packer of standard make approved by the State Engineer shall be used in all well repairs. It shall be installed on the bottom of the first or lowest joint of the liner and shall be set immediately above the casing shoe of the original casing. Homemade packers will not be permitted.

The following table shows the recommended sizes of liners to be used if the walls of the original casing are comparatively smooth. All dimensions are in inches.

TABLE 10

RECOMMENDED LINER SIZES

in inches

Original casing size		Recommended liner size
Outside diameter	Inside diameter	Outside diameter
6-5/8	6.135	4-1/2
8-5/8	8.9	7
10-3/4	10.92	8-5/8
13-3/8	12.24	10-3/4

The removal of any of the original casing in an artesian well to be relined is prohibited.

Where it is found necessary to set large surface pipe for the installation of a turbine pump, the following procedure shall be followed. The surface pipe shall be driven to the desired depth outside the original casing after which the original casing shall be cut off with casing cutters at a point approximately ten feet above the bottom of the new pipe. The original casing shall not be removed until the new pipe has been landed. A lead seal shall then be driven between the original casing and the new surface pipe to make the joint watertight.

PLUGGING OF ARTESIAN WELLS

If an artesian well is to be replaced by a new well, the owner shall file a $1,000 bond with the State Engineer to insure the proper plugging of the well to be abandoned, and such well shall be plugged immediately following the completion of the new well. If the old well is plugged before the drilling of the new well, however, such plugging bond will not be required, and the work

shall be done under the supervision of the State Engineer or his representatives who shall designate the amount of cement to be used and the depths at which cement plugs shall be set. Plugging expense shall be borne by the owner, or may be borne by the conservancy district, if one has been organized to do and finance such work.

Two approved procedures of plugging are recognized--the hydraulic method and the spudding method.

In the hydraulic method, 2 inch tubing is run into the well to a point at or near the bottom where the first cement plug is to be set. Clay mud mixed into a slurry weighing from 12 to 15 pounds per gallon is pumped through this tubing until all flow of water is shut off and the mud slurry coming out of the top of well is of same consistency as that pumped into the well. Oil well cement is then mixed with water to the same or a slightly heavier consistency than the mud slurry and is either pumped through or poured into the tubing, either method being acceptable.

When the specified amount of cement for the first plug has been run into the well, the tubing is raised to the point where the next cement plug is to be poured. Cement plugs shall thus be set in the impermeable strata between each artesian water-bearing formation and above the uppermost artesian water-bearing formation. The depth at which each cement plug shall be set and the amount of cement to be used in each plug shall be determined by the State Engineer or his representative. When this has been done, the tubing is removed from the well and the hole filled to the top with heavy mud.

In the spudding method, the hole is filled with fine gravel to the point where the first cement plug is to be set, the gravel being poured in slowly so as not to bridge the hole. Oil well cement and water are then mixed and poured through two-inch tubing on top of the gravel. The tubing is then plugged and additional gravel poured to fill the well to the next plug location. The process is repeated until all necessary cement plugs have been set. The hole is then filled to the surface with soil, gravel, or mud.

SPECIFICATIONS FOR OIL, GAS, MINERAL AND TEST WELLS

All test, exploratory or producing mineral wells shall be so constructed, maintained and operated that each water shall be confined to the aquifer in which it is encountered. All test or exploratory wells penetrating artesian aquifers shall be cased. The casing shall be subject to inspection of the State Engineer or his representative and shall be of proper weight, of good quality, smooth and without pits. The threads shall be in

good condition. If worn or damaged, the threads must be redressed. A casing shoe of standard make shall be used in all instances.

Casing of various sizes shall meet the minimum A.P.I. specifications set forth in "Construction of Artesian Wells".

The surface string of pipe must be bonded to the confining bed overlying the artesian aquifer by the method described in "Construction of Artesian Wells", using sufficient neat cement to effectively seal off the aquifer and protect it from contamination. The cement shall be allowed to set for a period of not less than seventy-two hours. The amount of cement to be used shall be stipulated by a representative of the State Engineer or the Oil Conservation Commission.

The second (oil-carrying) string of casing shall be set through the artesian aquifer and landed into the formation underlying the artesian aquifer after the aquifer has been mudded off by a mud slurry weighing at least twelve pounds per gallon. The second string shall be properly cemented between the shoe of the inside casing and the bottom of the surface string by the method described in "Construction of Artesian Wells" applying to rotary equipment. Not less than 150 per cent of the calculated amount of cement required to fill the space between the inside casing and the drilled hole below the base of the surface casing shall be used. The cement shall be allowed to set for a period of not less than seventy-two hours. A test shall then be made of the adequacy of the sealing off of the artesian water by the pressure or bailer method in the presence of a representative of the State Engineer or the Oil Conservation Commission.

Shot holes for geophysical exploration shall not penetrate closer than twenty-five feet above any known artesian aquifer.

In the event that the test well is to be abandoned, the State Engineer and the Oil and Gas Inspector shall be notified and such well shall be plugged in compliance with the specifications of the Oil Conservation Commission or the State Engineer and in such manner that waters will be permanently confined to the aquifers in which they were encountered.

SPECIFICATIONS FOR NON-ARTESIAN WELLS

The State Engineer has not adopted any general specifications for non-artesian or shallow wells. Any specific requirements and provisions which may be made are set forth in the permit which he approves for the drilling, repair, deepening or cleaning of such well.

It is desirable that each well be constructed so as to leave an opening for measuring line to be run in between the outside casing and the pump housing in order that the water level in the well may be measured at any time. If desired for sanitary purposes a removable plug may be provided for such opening.

ABANDONED WELLS-WASTE OF WATER

Any artesian well which has been abandoned for more than four years, from which any water right has been forfeited, which is found to be wasting water may be summarily plugged without notice to the owner by the State Engineer, his representative, or the Artesian Conservancy District within which the well is located.

The State Engineer or the Artesian Conservancy District may require the owner of any artesian well currently in use which is found to be leaking or wasting water to repair or correct the same in a satisfactory manner. If, after proper notification, the owner fails or refuses within ten days to abate the nuisance, the officials having jurisdication may do whatever is necessary and proper to prevent such waste and the cost thereof shall be in lien against the land, provided that claim of lien is filed with the County Clerk within five days after the repairs or corrections are completed.

Water Pollution
Hobbs Pool

Mr. H. G. Mesberry - Midland

Mr. R. H. Coe - Tulsa
Mr. S. E. Cavannough - Los Angeles
Mr. H. D. Page - Tulsa

Production Hobbs

October 10, 1957

Attached is a news item that appeared on the front page of the Hobbs Daily News-Sun, Wednesday, October 9, 1957.

H. P. Shackelford

HPS:bh
Attachment

City Water Supply Found Safe from Oil Contamination

Oil in water-bearing sands poses no threat to the city's water supply, a committee appointed by the New Mexico Oil Conservation Commission has reported.

Meeting here with city officials yesterday, representatives of the special committee said that:

1. There is no possibility of oil contamination in Hobbs' water wells.

2. Contamination by gas is "within the realm of possibility," but is considered unlikely.

3. Continual tests should be made in the process of keeping the water supply "clean."

Reporting after seven full scale meetings and a larger number of sub-committee sessions, the study group appointed three months ago examined a total of 378 water wells in its survey.

They found nine of these had oil standing in the bores, and three others contaminated by oil. Seventeen were suspected to be contaminated by gas, in varying degrees.

All the oil-contaminated wells but one are in a single area northwest of the city; the gas contamination is northwest and west of the city, they reported.

There is no practical way, they said, to clean up wells that have been polluted by oil. But, in areas where oil exists in water sands, the investigators said good water can be obtained by (1) drilling deeper into the water strata, below the oil which works its way to the top of the strata; and (2) by casing water wells from the intake area to the surface.

Wells contaminated by gas, they said, can be made usable by aerating the water, or by other methods.

A number of recommendations for future action, and several suggestions on which organizations should be responsible for various carrective measures, grew out of yesterday's session.

Among the recommendations was one on the drilling, completing and abandoning of water wells. These actions should be more rigidly controlled by the state, the committee suggested.

A. L. (Pete) Porter, secretary-director of the OCC, instructed the commission staff here to prepare a directive on the commission's areas of responsibility for study by the full committee. Tentatively designated as the OCC were (1) the control of casing [illegible] (2) [illegible] the use of [illegible] (3) [illegible] atmosphere and (5) possible action requiring methods to prevent

been polluted by oil. But, in areas where oil exists in water sands, the investigators said good water can be obtained by (1) drilling deeper into the water strata, below the oil which works its way to the top of the strata; and (2) by casing water wells from the intake area to the surface.

Wells contaminated by gas, they said, can be made usable by aeriating the water, or by other methods.

A number of recommendations for future action, and several suggestions on which organizations should be responsible for various carrective measures, grew out of yesterday's session.

Among the recommendations was one on the drilling, completing and abandoning of water wells. These actions should be more rigidly controlled by the state, the committee suggested.

A. L. (Pete) Porter, secretary-director of the OCC, instructed the commission staff here to prepare a directive on the commission's areas or responsibility for study by the full commission. Tentatively designated to the OCC were (1) the continuing of casing leak surveys, (2) establishment of a salt

(Continued on Page 8)

the use of casings open to the atmosphere, and (5) possible action requiring methods to prevent casing corrosion.

Tentatively regarded as city responsibilities were (1) the prevention of indiscriminate dumping of waste matter that might cause contamination, and (2) an observation program, through use of existing wells, to guard against future gas contamination.

Oil reaching the water sands, the committee reported, could not reach the city's water wells. This, they explained, is because such oil would be filtered out through the sand as the oil migrated.

Gas contamination, though considered unlikely, is regarded as a possibility because gas can be carried in solution with water.

There are a number of possible causes of contamination, the committee found. Among them are oil waste disposal pits, the lake at the Phillips gasoline plant where salt water is placed, and a storm sewer ditch southwest of the city.

Porter, at the conclusion of yesterday's session, commended the committee for a "a fine job."

Representatives at the meeting included Porter and Jack Cooley, OCC attorney; Frank Irby, of the state engineer's office; City Commissioners Audra Kemnitz and Walter Linam; City Manager Neal Harr; City Attorney Donald Hallam; Water Department Superintendent M. H. Alexander; and members of the OCC Hobbs Staff.

TIDEWATER OIL COMPANY
POST OFFICE BOX 731
TULSA 2, OKLAHOMA

LAW DEPARTMENT
CENTRAL DIVISION

HARRY D. PAGE
DIVISION COUNSEL

CLOY D. MONZINGO
JACK D. JONES

October 7, 1957

AIRMAIL

Mr. C. M. Neal
Neal & Neal
Attorneys at Law
Box 278
Hobbs, New Mexico

Dear Mr. Neal:

Re: Ellison v. Tidewater and Getty

Reference is made to Mr. Shackelford's letter of August 6 with reference to the tests made by Fort Worth Laboratories of crude oil samples taken from Ellison's water wells. Mr. Shackelford makes the statement that "McKinley #6, being drilled and completed in 1947 as a Bowers sand well, has never been drilled to a sufficient depth to encounter the San Andres and could not have possibly caused the contamination of this fresh water bearing strata." The laboratory samples show that the crude taken from the Ellison wells is San Andres oil. However, the fact that McKinley #6 is a Bowers sand well will not exonerate Getty from San Andres pollution inasmuch as there are four Getty San Andres wells on the McKinley tract.

An analysis of the surface contours as well as the base of the Caliche indicates that Getty Wells #1 and #3, both San Andres producers, could have caused this pollution, and particularly Well #1, which has a history of having a casing leak repaired. The drainage area is such that it would seem that the McKinley wells are more likely to be a source of contamination of the Ellison wells than the Humble wells on the south, located structurally lower. Humble wells to the east do not have a history of having repaired casing leaks. The fact that Getty Oil Company has San Andres wells and that the source of contamination is from San Andres wells puts us in the position of having to prove the source of contamination to disprove Getty Oil Company as having the offending

wells. I will discuss this more fully with you in Hobbs the latter part of this week.

Yours very truly,

Original Signed
HARRY D. PAGE

HDP:LB

Harry D. Page

cc Messrs. Brown
Cavanaugh
Coe
Shackelford

HOBBS POOL OPERATORS
August 25, 1953

ATTENDANCE RECORD

NAME-	COMPANY	ADDRESS
Rex C. Cabaniss	Shell Oil Company	Hobbs, New Mexico
Paul D. Sweitzer	The Texas Company	Monument, New Mexico
L. C. Hudry	Atlantic Refining Company	Denver City, Texas
J. S. Hutchins	" " "	" " "
R. W. Yarbrough	Union Oil Company of Calif.	Hobbs, New Mexico
L. B. Curtis	Continental Oil Company	" " "
Bill Kearley	Ohio Oil Company	" " "
E. Van Vranken	" " "	" " "
John A. Disch	Sinclair Oil and Gas Company	" " "
C. J. Merryman	Sun Oil Company	Odessa, Texas
D. C. Capps	Amerada Petroleum Corporation	Monument, New Mexico
W. G. Abbott	" " "	" " "
Paul S. Johnston	Texas-Pacific Coal and Oil Co.	Hobbs, New Mexico
C. C. Wilson	Continental Oil Company	" " "
R. S. Dewey	Humble Oil & Refining Company	Midland, Texas
K. C. Heald, Jr.	" " " "	Hobbs, New Mexico
M. M. Rogers	" " " "	" " "
Max E. Curry	Skelly Oil Company	" " "
Chas F. Dwyer, Jr.	Standard Oil Company of Texas	Royalty, Texas
W. B. Macey	Oil Conservation Commission	Santa Fe, New Mexico
George E. Trimble	Samedan Oil Corporation	Midland, Texas
S. J. Stanley	Oil Conservation Commission	Hobbs, New Mexico
H. A. DuPont	U. S. Geological Survey	" " "
H. E. Massey	Cities Service Oil Company	" " "
H. Lucchi	" " " "	" " "
E. E. Noble	Samedan Oil Corporation	Midland, Texas
Earl Woolwine	" " "	Hobbs, New Mexico
R. L. Hendrickson	Stanolind Oil and Gas Company	" " "

N. M. Oil and Gas Engineering Committee
Hobbs, New Mexico
8-26-53.

HOBBS AREA & RELATED POOLS

CASING LEAKS & LEAKS REPAIRED JULY 1957

OPERATOR / LEASE - DATE COMP - POOL	WELL & UNIT	S-T-R	CASING PROGRAM (All fractions Dropped) Surface	Intermediate	Production	Liner / Patch Liner / Full String	Date Leak Found	String and Depth of Leak	Repaired Date	Remarks
AMERADA PET. CO.										
State B Bowers	5-O	29-18-38	10" 220/200	7" 1665/300	5" 3136/300					
State B Sept 11'30 Hobbs	1-F	29-18-38	12" 210/200	9" 2740/400	7" 3997/500					
State B Sept 6 '30 Hobbs	2-G	29-18-38	12" 221/250	9" 2756/500	7" 3995/200		8/25/53	7" 1788/1810	12/22/53	
ATLANTIC RFG. CO.										
Grimes Hobbs	1-O	20-18-38	12" 232/200	9" 2790/500	6" 4037/300					
CITIES SERVICE OIL CO.										
Fowler May 14'30 Hobbs	1-A	31-18-38	12" 242/N.R.	9" 2744/N.R.	7" 3938/N.R.		9/22/53	7" 964/1894 2187/2211	10/29/53	
Fowler Apr 16'34 Hobbs	4-H	31-18-38	12" 242/100	9" 2760/300	7" 3955/150	5" New String 4190?/?35	7/26/54	7 x 9 2700	8/16/54	
CONTINENTAL OIL CO. (Min Cost $1,900 Max Cost $15,000 Avg. $6,516)										
Grimes July 14'34 Hobbs	1-O	28-18-38	12" 222/180	9" 1637/300	7" 3975/400	5" Liner @ 3927/4277	9/23/53	7" 370'	11/21/53	
Grimes May 13'35 Hobbs	3-J	38-18-38	10" 245/150	7" 1635/300	5" 4015/300		7/7/54	5" 292/412	7/16/54	
State A-29 Hobbs	3-K	29-18-38	15" 252/1000	9" 2729/600	7" 3953/300		9/11/56		2/3/57?	
State A-29 Apr 16'47 Bowers	5-K	29-18-38	10" 380/200	7" 1573/425	5" 3197/450		8/29/56	7" x 5"	7/1/57	Leak in well head Tested 1500 p.s.i O.K.
State A-33 Sept 16'30 Hobbs	1-M	33-18-38	12" 209/165	9" 2738/500	7" 3976/275	No leak indicated in well file				
State A-33 Nov 12'31 Hobbs	4-J	33-18-38	15" 232/425	9" 2757/600	7" 3928/325	5" Liner 3871/4232	10/22053	7" 524 1116/1176	11/13/53	
State A-33 Mar 1'32 Hobbs	6--N	33-18-38	15" 223/387	9" 2754/600	7" 3971/350	5" 3911/4236	7/6/54	7" 259	7/26/54	
State A-33 Feb 1'33 Hobbs	7-G	33-18-38	15" 237/235	9" 2756/600	7" 3970/350	5" 4243/300	7/26/54	7" x 9" ?	12/3/54	
GETTY OIL CO. (Opr. by Tidewater) Min Cost $2,500 Max Cost $25,000.										
McKinley July 4'30 Hobbs	1-G	30-18-38	12" 245/200	9" 2758/600	7" 3856/250	5" 99jts. 4% gel. 405	9/10/53	7" 400/500	7/1/54	

HOBBS AREA & RELATED POOLS

CASING LEAKS & LEAKS REPAIRED JULY 1957

OPERATOR / LEASE & DATE COMP - POOL	WELL & UNIT	S-T-R	CASING PROGRAM (All fractions Dropped) Surface	Intermediate	Production	Liner / Patch Liner / Full String	Leak Found	String and Depth of Leak	Repaired Date	Remarks
GETTY OIL CO. (Continued)										
McKinley July 15 '30 Hobbs	2-H	30-18-38	12" 251/200	9" 2756/600	7" 3858/250	5" 4202/450	6/3/54	7" 227/903	7/7/54	$35,000+
[illegible]inley Aug 21 '30 Hobbs	4-B	30-18-38	12" 245/200	9" 2753/600	7" 3998/250		9/6/56	Could not get circulation	9/12/56	
McKinley May-29-'47 Bowers	6-G	30-18-38	11" 1474/400		5" 3160/200		9/4/56	Could not get circulation	9/14/56	
McKinley July 13 '47 Bowers	7-B	30-18-38	8" 1503/400		5" 3175/200		9/4/56		9/6/56	
GULF OIL CORP.										
Graham St. A Aug 10 '32 Hobbs	2-A	24-18-37	13" 229/300	9" 2790/600	7" 3975/250		12/7/55		1/10/56	
Grimes, W.D.BNov 1 '32 Hobbs	2-H	33-18-38	13" 221/175	9" 2761/500	6" 3959/250	5" Liner 3914/4169	4/17/56	7" ?	5/22/56	
Grimes, W.D. Aug 16 '34 Hobbs	3-B	33-18-38	13" 292/200	9" 2746/350	7" 3930/250	5" 4086/75	(7/2/46) (10/9/53)	5" 3589/3775 489/499	(7/10/46) (3/5/54)	
Grimes, W.D. Nov 16'34 Hobbs	4-A	33-18-38	13" 285/200	9" 2739/350	7" 3970/150	5" Liner 3919/4175	2/14/56		5/21/56	
Grimes, W.D.COct. 16'35 Hobbs	2-N	21-18-38	13" 281/225		7" 4109/1300	5" 250w/4% 0/4224	12/28/54	7" 425/1687	1/4/55	
Grimes, W.D. A Apr. 18'30 Hobbs	1-D	32-18-38	15" 200	9" 3000	6" 4200		12/28/53	6" 1049/1080	4/12/54	
[illegible]imes, W.D. A June 13'30 Hobbs	2-F	32-18-38	15" 200 N. A.	9" 3000 N.A.	6" 4200 N.A.		5/24/53	7" Sur. Nipple	7/4/53	Replaced Surface Connections
Grimes, W.D. Feb 16'31 Hobbs	7-C	32-18-38	13" 220 N.A.	9" 2750 N.A.	7" 3950 N.A.		6/21/54	7" above 1208	6/28/54	
Grimes, W.D. July 1'34 Hobbs	8-E	32-18-38	15" 238/200	9" 2757/350	7" 3954/200		4/2/54	7" 1725/1935	4/10/54	
Grimes, W.D. Sept 16'34 Hobbs	9-L	32-18-38	13" 212/200	9" 2740/350	7" 3966/150		10/8/53	7 x 9"	5/15/54	
HUMBLE OIL & RFG. CO.										
Fed. Bowers A Oct 1'30 Hobbs	8-O	30-18-38	12" 220/210	9" 2738/650	7" 3974/300		2/27/46	7" @ 60'	3/14/46	
" " " " "	8-O	30-18-38					9/ /47		10/10/47	
Fed. Bowers A Sept. 1'30 Hobbs	5-I	30-18-38	12" 210/200	9" 2739/650	7" 3963/300	5" 3905	Aug.26'47	7" @ ?	9/15/47	

HOBBS AREA & RELATED POOLS

CASING LEAKS & LEAKS REPAIRED JULY 1957

OPERATOR LEASE - DATE COMP - POOL	WELL & UNIT	S-T-R	CASING PROGRAM (All fractions Dropped) Surface Cement	Intermediate	Production	Liner Patch Liner Full String	Leak Found	String and Depth of Leak	Repaired Date	Remarks
HUMBLE OIL & RFG. (Continued)										
Fed. Bowers A Aug 28'30 Hobbs	4-P	30-18-38	12" 204/200	9" 2750/650	7" 3960/300		10/2/47	7" @ ?	10/24/47	
Fed. Bowers A Aug 12'30 Hobbs	2-J	30-18-38	12" 242/225	9" 2750/650	7" 3960/300 (3500)	5" 4208	8/7/47	7" @ ? Temp Anoms.		
" " "	"	"					8/2/53	18" 2165&2676		
Fed. Bowers A Aug28'30 Hobbs	3-M	29-18-38	12" 203/200	9" 2736/650	7" 3960/300	5" 3940 circ	8/7/47	7" numerous holes	9/29/47	
MAGNOLIA PET. CO.										
Berry Nov 18'30 Hobbs	1-K	31-18-38	13" 245 N.A.	9" 2800 N.A.	7" 3955 N.A.	5" Liner 3347/4190	9/6/56		11/11/56	
OHIO OIL CO.										
State 30 Oct 3'30 Hobbs	3-L	30-18-38	12" 243/225	9" 2751/550	7" 3900/350		1/30/57		3/8/57	
State 32 Aug 14'30 Hobbs	3-I	32-18-38	12" 205/225	9" 2750/475	7" 3968/350	5" 4244/65sx	6/29/54	7" 266/1567/1200 & 1567	9/3/54	
State 32 Oct 5'30 Hobbs	5-O	32-18-38	16" 221/250	9" 2750/556	7" 3925/225	5" 4235	7/26/54	7" aprox. 1200	9/9/54	
PAN AMERICAN PET. CORP.										
Byers NE-4 Mar 1'33 Hobbs	26-H	4/19/38	16" 199/85	10" 1570/75	8" 3961/150	5" 4205/675	3/8/47	8" @ 3140	3/8/47	
Byers NE-4 Aug 13'30 Hobbs	33-G	4/19/38	16" 152/360	10" 1523/75	8" 3250/60	6" 3952/50	9/24/53	6" 1865	6/1/55	
" " "							3/3/55	7" @ 1500	3/7/55	
H.D.McKinley NW-5 Oct. 20'30 Hobbs	1-C	5-19-38	16" 162/55	10" 2749/300	6" 3920/150		6/18/57			
McKinley Oct 7'30 Hobbs	6-D	5-19-38	13" 185/75	10" 2782/350	6" 3977/150		9/10/53		3/17/54	
McKinley Dec 9'30 Hobbs	26-F	5-19-38	13" 212/150	9" 2780/300	6"3950/150		10/13/53?		12/2/54	
McKinley Jan 1'45 Hobbs	29-E	5-19-38	13" 210/200	9" 2780/500	7" 3999/300		10/17/53	7" 2095/2126	11/3/54	
State A "5" May 16'33 Hobbs	8-B	9-19-38	16" 217/100	10" 2810/450	7" 3993/100		6/20/57			

HOBBS AREA & RELATED POOLS

CASING LEAKS & LEAKS REPAIRED JULY 1957

OPERATOR LEASE - DATE DOMP - POOL	WELL & UNIT	S-T-R	CASING PROGRAM (All fractions Dropped) Surface	Intermediate	Production	Liner Patch Liner Full String	Leak Found	String and Depth of Leak	Repaired Date	Remarks
PAN AMERICAN PET. CORP (Cont)										
State A-7 Aug 16'30 Hobbs	3-D	10-19-38	16" 158/50	10" 1543/75	8" 4016/40		9/23/53	8" 0/227	11/2/54	
Terry 1 Sept 1'32 Hobbs	11-I	9-19-38	16" 196/100	10" 1593/75	8" 4031/150	DV 3874/450 5" 4196/100	9/28/53	8" 1224	11/2/54	
Terry 2 June 1'32 Hobbs	8-L	10/19/38	16" 204/125	10" 1597/75	8" 4034/150	5" 4175/100 DV 3839/450	11/11/53	8" 1182/1160	10/17/54	
State B Sept 15'30 Hobbs	2-F	33-18-38	12" 200	9" 2300	7" 4012	5" 4242/100	9/2[illegible]/53	7"	4/7/54	
State A Tr 10 Dec 16'31 Hobbs	26-P	33-17-38	16" 209/125	10" 2752/400	8" 3946/140	5" 4220/300	8/26/46	No leak found	8/12/46	
State A Tr 3 Nov 30'30 Hobbs	26-N	4-19-38	16" 193/50	10" 3275/650	8" 3933/100	5" 4190/[illegible]3	6/13/47	8" 1043	7/14/47	Liner 3939/419
State A Tr 1 Feb 16'32 Hobbs	11-C	4-19-38	16" 201/125	10" 2754/400	8" 3976/150	5" 4212/75	6/30/48	8" 83[illegible]	6/24/48	Liner 3900/421
B. H. Turner Tr 1 Sept 1'34 Hobbs	2-D	34-18-38	16" 223/90	10" 1646/350	7" 397[illegible]/150	5" 3972/50	2/17/48	7" 815/1160	3/4/48	Liner 3872/422
SAHEDAN OIL CO.										
State B Oct 11'35 Hobbs	1-F	25-18-37	12" 205/175		7" 4039/500				8/12/54	No record in we file.
State C June 21'34 Hobbs	2-K	24-18-37	12" 212/150	9" 2423/200	7" 3983/150	5" 3917 4171/50	1/2/51	7" 2163	1/8/51	
SHELL OIL COMPANY (Cost to add packers & Sweet Oil in annulus to Flowing wells in Hobbs Pool $30,000(1953 & 1946)										
Rice Sept 4,'32 Hobbs	1-P	13-18-37	12" 228/200	9" 2786/600	7" 3922/250		2/14/57	7" 1500 p.s.i for 30 min.NF.	5/27/57	
Rice Dec. 14'35 Hobbs	3-I	13-18-37	12" 264/200	9" 1591/600	7" 3960/160		8/4/54	7" above 400'	9/3/54	
State B June 12'34 Hobbs	2-C	33-18-38	12" 296/150	9" 2760/150	7" 3930/250	5" 3884/250	9/2[illegible]/53	7" 526/557	11/16/53	

HOBBS AREA & PRATT POOLS

CASING LEAKS & LEAKS REPAIRED JULY 1957

OPERATOR OPERATOR LEASE - DATE COMP - POOL	WELL NO. UNIT	S-T-R	CASING PROGRAM (All fractions Dropped) Surface	Intermediate	Production	Liner Patch Liner Full String	Leak Found	String and Depth of Leak	Repaired Date	Remarks
SHELL OIL CO. (Continued)										
State F Dec 10'41 Bowers	1-A	23-16-37	8⅝" 1592/525		4½" 4099/130		3/?/57	4½" 3300/2575	6/5/57	
Sanger Inv. Co. Jun 15'35 Hobbs	3-J	27-18-38	12¾" 257/155	9⅝" 1645/200	7" 4076/250		9/2?/53	7" 3300		
Sanger Inv. Co. Feb. 1'35 Hobbs	2-K	27-18-37	12½" 233/700	9⅝" 1648/350	7" 4060/250				6/6/57	
SKELLY OIL CO.										
Fowler Hobbs	2-F	31-18-38	12¾" 208/300	9⅝" 2796/400	7" 3964/450	5½" 4211/325	12/5/55	No Leak 7"	12/11/55	
Fowler Hobbs	1-C	31-18-38	12¾" 200/145	9⅝" 2750/400	7" 3973/450	5½" 4215	9/29/53	7" No leak	5/26/54	
SOUTHERN PET. EXPL CO. INC.										
Morris A Mar 1'36 Hobbs	1-O	21-18-38	12¾" 252/200		7" 4046/468	5½" 0-572	4/23/57 7"/57			
Morris B Nov 28 '37 Hobbs	1-P	21-18-38	10¾" 259/175		7" 4097/400	4½" 4072/400 4"	7/10/56		7/20/56	
STANDARD OF TEXAS										
T/A State Sent 17'30 Bowers	2-O	29-17-37	13⅜" 242/150	9⅝" 2822/725	7" 3951/300		3/27/57		5/10/57	
SUN OIL COMPANY										
McKinley Aug 15'30 Hobbs	1-A	5-19-38	12¾" 192/190	9⅝" 2746/500	7" 3914/225	5½" 4170 NA.	3/26/54	7" ?	5/4/54	
McKinley Aug 13'30 Hobbs	2-H	5-19-38	12¾" 200 NA	9⅝" 2900 NA	7" 4000 NA	5½" 4162/50	9/28/53	7" 1226/1650	4/26/54	
McKinley Aug 19'30 Hobbs	3-B	5-19-38	12¾" 200 NA	9⅝" 2900 NA	7" 4000 NA	5½" 4175 NA	9/28/53	7" 1877/1882	4/2/54	
McKinley Oct 16'30 Hobbs	4-G	5-19-3	12¾" 2000NA	9⅝" 2900 NA	7" 4000 NA	5½" 4200/65	9/9/53	7" 77/3790	4/2/54	Bad Collars
SUNRAY MID-CONTINENT OIL CO.										
Fowler Nov 12'30 Hobbs	1-D	31-18-38	13⅜" 300	9⅝" 2750/600	7" 3950/425		9/30/53	7" 3100	10/21/53	

HOBBS AREA & RELATED POOLS

CASING LEAKS & LEAKS REPAIRED JULY 1957

OPERATOR LEASE - DATE COMP - POOL	WELL & UNIT	S-T-R	CASING PROGRAM (All fractions Dropped) Surface Cement	 Intermediate	 Production	Liner Patch Liner Full String	Leak Found	String and Depth of Leak	Repaired Date	Remarks
TEXAS PACIFIC COAL & OIL CO.										
State G July 2'30 Hobbs	1-P	24-18-37	20" 105/125	12" 1521/300	9" 2815/700	7" 3880/200	9/30/53	7" 2350	3/15/57	
State G Nov 7'30 Hobbs	3-J	24-18-37	12" 215/200	9" 2810/400	7" 3870/300		No Leak just remedial		7/9/56	
TIDEWATER OIL CO.										
Bome Hardin Nov 6'30 Hobbs	3-B	19-18-38	12" 217/200	9" 2750/600	7" 3952/300		12/18/42	7" x 9"	2/23/43	
Grimes Oct 4'30 Hobbs	3-I	29-18-38	15" 228/200	9" 2715/600	7" 3900/300	5" 3691 4233/120	10/18/46	7" 368/403	11/1/46	
Grimes (P&A) Sept 15'30 Bowers	2-H	29-18-38	15" 230/200	9" 2718/600	7" 3880/300	5" 3350/100	9/25/46	7" Bad Conditions	9/27/46	