

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

M.S.  
12/8/  
12/11  
12/11  
CASE NO. 9736  
ORDER NO. R- 9082

APPLICATION OF WALLEN PRODUCTION COMPANY  
FOR A WATERFLOOD  
PROJECT, LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 6, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this \_\_\_\_\_ day of December, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Wallen Production Company, seeks authority to institute a ~~pilot~~ waterflood project on its Wallen Tonto lease comprising the SW/4, N/2 SE/4 and SE/4 of Section 30, Township 19 South, Range 33 East, NMPM, Lea County, New Mexico, by the injection of water into the South Tonto Yates - Seven Rivers Pool through ~~its~~ the open-hole interval located 1650 feet from from approximately 2900 feet to 3113 feet in its Wallen Tonto Well No. 7

the South line and 990 feet from the East line  
(Unit I) of Section 30  
*said*

(3) The volumes which ~~\_\_\_\_\_~~ proposes to inject do not exceed the current reservoir voidage from the proposed injection well and the offsets thereto and the correlative rights of operators in the pool will therefore not be impaired by the proposed injection.

<sup>3</sup>  
(4) The wells in the proposed project area are in an advanced state of depletion and should therefore be properly classified as "stripper wells."

(5) ~~\_\_\_\_\_~~ proposes to utilize the \_\_\_\_\_ to inject water produced from the \_\_\_\_\_ back into this pool in the perforated interval from approximately \_\_\_\_\_ feet to \_\_\_\_\_ feet.

<sup>4</sup> (4) The proposed waterflood area is within the Oil Conservation Division "Oil Potash Area" which is governed by the provisions of Division Rule R-111-P.

<sup>5</sup> (5) Applicant has provided Noranda Exploration Inc., the only potash lessee in the area, with a copy of the applicant's complete Division Form C-108 with attachments and Noranda has signed and filed its waiver with the Division indicating it has no objection to the applicant conducting a waterflood project as proposed.

<sup>6</sup> (6) When the proposed injection well, Wallen Tonto Well No. 7, was originally drilled and completed it was cased and cemented <sup>pursuant to Special Provisions as promulgated by Division Order No. 4853 and 4857,</sup> as a producing Yates-Seven Rivers <sup>well.</sup> formation ~~well as required by Division rules for wells in~~

<sup>7</sup> (6) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.

<sup>8</sup> (7) Injection should be accomplished through 2 3/8-inch plastic-coated tubing installed in a packer set at approximately 2800 feet; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

<sup>9</sup> (8) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(9) The injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than ~~1743~~ <sup>580</sup> psi.

<sup>10</sup> (9) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such high

SECTION(S) APPLIED FOR 102

DATE APPLICATION RECEIVED April 8, 1985

APPLICATION INCOMPLETE Per your letter dated December 19, 1986 (see attached), the subject filing is hereby withdrawn and is being returned to you.

Sincerely,  
*Michael E. Steyer*

DATE: January 30, 1989

NOTE:

THIS FORM LETTER MUST ACCOMPANY TWO COPIES OF THE SUPPLEMENTARY INFORMATION.

The New Mexico Oil Conservation Division has received your

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

FINDS THAT:

NOW, on this December day of December, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

before Examiner Michael E. Steyer

*South Tonto Yates - Seven Rivers Pool.*

pressure will not result in migration of the injected waters from the ~~Delaware formation.~~

<sup>11</sup>/<sub>12</sub> (10) The operator should give advance notification to the supervisor of the <sup>Hall</sup> Artesia District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

<sup>12</sup>/<sub>13</sub> (11) The subject application should be approved and the project should be governed by the provisions of Rules 702 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, *Wallen Production Company*, is hereby authorized to institute a pilot waterflood project on its *Wallen Tonto lease*, as described below, by the injection of water into the *South Tonto Yates - Seven Rivers Pool* through its *Wallen Tonto Well No. 2* located 1650 feet from the South line and 990 feet from the East line (Unit I) of Section 30, Township 19 South, Range 33 East, NMPM, Lea County, New Mexico:

LEA WALLEN TONTO LEASE  
LEA LEA COUNTY, NEW MEXICO

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM,  
Section 30: SW/4, 1/2 SE/4, and SE/4 SE/4

(2) Injection into said well shall be accomplished through 2 3/8 inch ~~plastic-coated~~ tubing installed in a packer set at approximately 2800 feet, with injection into the ~~perforated~~ interval from approximately 2900 feet to 3113 feet; *open-hole*

PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid, and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Halle District Office.

(3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 580 psi.

(4) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the South Tonto Yates formation - Seven Rivers Pool,

(5) The operator shall notify the supervisor of the Halle District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(6) The operator shall immediately notify the supervisor of the Division's Halle District Office of the failure of the tubing, casing or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(7) The subject waterflood project is hereby designated the WALLEN TONTO Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

LEASE

Case No. 9646  
Order No. R-9001  
Page No. 5

(8) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY  
Director

S E A L

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse side)

Form approved,  
Budget Bureau No. 42-111424  
5. LEASE DESIGNATION AND SERIAL NO.

N.M. 073240  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

\*\*\*\*\*  
7. UNIT AGREEMENT NAME

\*\*\*\*\*  
8. FARM OR LEASE NAME

Wallen Tonto

9. WELL NO.

# 7

10. FIELD AND FOOT, OR WILDLIFE

Rivers  
S. Tonto, Yates, Seven

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA

Sec 30, T 19 S, R 33

12. COUNTY OR PARISH 13. STATE

Lea New Mexico

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Walter W. Krug DBA Wallen Production Company

3. ADDRESS OF OPERATOR

Box 1960 Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

990 F E L & 1650 F S L

14. PERMIT NO.

\*\*\*\*\*

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 3589

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

On 7/15/78 we plugged the above well with 100 sx of class H cement through 2 3/8 tubing on bottom. Left overnight and in morning cement had fallen 120', still well up inside 7" pipe. We filled to 1450' with gel (25 sxs/100 bbl.) and placed another 100 sxs of class H and fill to surface with gel. Last we put 10 sx plug and a well monument.

RECEIVED  
JUN 25 1979  
OIL CONSERVATION DIVISION  
SANTA FE

RECEIVED  
JUL 27 1978

U. S. GEOLOGICAL SURVEY  
HOBBS, NEW MEXICO

19. I hereby certify that the foregoing is true and correct

SIGNED Walter Krug

TITLE Engineer

DATE 7/21/78

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

APPROVED  
JUN 13 1979  
ACTING DISTRICT ENGINEER

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE  
(Other instructions on re-  
verse side)

Form approved  
Budget Bureau No. 42-R1424  
6. LEASE DESIGNATION AND SERIAL NO.

N.M. 073240  
G. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Walter W. Krug DBA Wallen Production Company

3. ADDRESS OF OPERATOR  
Box 1960 Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

990 F E L & 1650 F S L



7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Wallen Tonto

9. WELL NO.  
# 7

10. FIELD AND POOL, OR WILDLAND  
Rivers

S. Tonto, Yates, Seven

11. SEC. T., R., S., OR BLK. AND SURVEY OR AREA

12. COUNTY OR PARISH 13. STATE  
Lea New Mexico

14. PERMIT NO.  
\*\*\*\*\*

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 3589

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

ABANDONMENT\*

REPAIR WELL

CHANGE PLANS

(Other)

(Other)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

On 7/15/78 we plugged the above well with 100 sx of class H cement through 2 3/8 tubing on bottom. Left overnight and in morning cement had fallen 120', still well up inside 7" pipe. We filled to 1450' with gel (25 sxs/100 bbl.) and placed another 100 sxs of class H and fill to surface with gel. Last we put 10 sx plug and a well monument.

AUG 17 1978

Santa Fe

RECEIVED

JUL 27 1978

U. S. GEOLOGICAL SURVEY  
HOBBS, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNER

*Walter Krug*

TITLE Engineer

DATE 7/21/78

(This space for Federal or State oil use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved. Budget-Bureau No. 42-R355.5

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

5. LEASE DESIGNATION AND SERIAL NO.

N.M. 073240

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

\*\*\*\*\*

7. UNIT AGREEMENT NAME

\*\*\*\*\*

8. FARM OR LEASE NAME

Wallen Tonto

9. WELL NO.

# 7

10. FIELD AND POOL OR WILDCAT

Rivers S. Tonto, Yates, Seven

11. SEC., T. & R. OR BLOCK AND SURVEY OR AREA

Sec 30, T 19 S, R 33 E

12. COUNTY OR PARISH

Lea

13. STATE

New Mexico

1a. TYPE OF WELL: OIL WELL [ ] GAS WELL [ ] DRY [X] Other [ ]

b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESERV. [ ] Other [ ] Plug out

2. NAME OF OPERATOR

Walter W. Krug DBA Wallen Production Company

3. ADDRESS OF OPERATOR

Box 1960, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 990 F E L & 1650 F S L

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

Same \*\*\*\*\*

15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, REB, ET, GR, ETC.)\* 19. ELEV. CASING HEAD

5/16/78 7/15/78 7/18/78 Plug GR 3589 3591

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY 23. INTERVALS DRILLED BY

3119 3119 \*\*\*\*\*

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

None

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

GRN

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

Table with columns: CASING SIZE, WEIGHT, LB./FT., DEPTH SET (MD), HOLE SIZE, CEMENTING RECORD, AMOUNT FULLED

29. LINER RECORD 30. TUBING RECORD

Table with columns: SIZE, TOP (MD), BOTTOM (MD), SACKS CEMENT\*, SCREEN (MD), SIZE, DEPTH SET (MD), PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

NONE

AUG - 3 1978

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

NONE

33. PRODUCTION

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in)

DATE OF TEST HOURS TESTED CHOKER SIZE PROD'N. FOR TEST PERIOD OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO

Table with columns: FLOW, TUBING PRESS., CASING PRESSURE, CALCULATED 24-HOUR RATE, OIL—BBL., GAS—MCF., WATER—BBL., OIL GRAVITY (API (CORR.))

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED [Signature] TITLE Engineer DATE 7/21/1978

\*(See Instructions and Spaces for Additional Data on Reverse Side)

RECEIVED JUL 27 1978 U.S. GEOLOGICAL SURVEY HOBBS, NEW MEXICO

2101201211

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.

N.M. 073240

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

\*\*\*\*\*

7. UNIT AGREEMENT NAME

\*\*\*\*\*

8. FARM OR LEASE NAME

Wallen Tonto

9. WELL NO.

# 7

10. FIELD AND POOL, OR WILDCAT

Rive:  
South Tonto, Yates, Sever

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec 30, T 19 S, R 33 E

12. COUNTY OR PARISH 13. STATE

Lea New Mexico

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Walter W. Krug D.B.A. Wallen Production Company

3. ADDRESS OF OPERATOR

Box 1960 Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)

At surface

990 F E L & 1650 F S L

14. PERMIT NO.

\*\*\*\*\*

15. ELEVATIONS (Show whether DF, RT, CR, etc.)

GR 3589

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

On 7/15/78 we will run tubing (2 3/8) to total depth of 3119 and will place 100 sx plug of class H neat cement; leave it overnight to harden. The following morning we'll fill from top of cement plug to 1400' with gel and then another 100 sx plug of class H neat cement. Then fill the rest of hole with gel and a 10 sx plug at top of ground with 5'-4 1/2" csg marker with all necessary information.

AUG - 3 1978

Santa Fe

RECEIVED

JUL 27 1978

U. S. GEOLOGICAL SURVEY  
HOBBS, NEW MEXICO

I hereby certify that the foregoing is true and correct

SIGNED

*Walter Krug*

TITLE Engineer

DATE 7/10/78

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

MMU

TITLE

APPROVED

Orally  
JUL 11 1978

ACTING DISTRICT ENGINEER

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

COPY TO O. C.  
SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO. NM 073240

6. IF INDIAN, ALLOTTEE OR TRIBE NAME \_\_\_\_\_

7. UNIT AGREEMENT NAME \_\_\_\_\_

8. FARM OR LEASE NAME Wallen Tonto

9. WELL NO. # 7

10. FIELD AND POOL, OR WILDCAT Rivers S. Tonto Yates-Seven

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 30, T 19 S, R 33 E

12. COUNTY OR PARISH Lea 13. STATE New Mexico

14. PERMIT NO. \_\_\_\_\_ 15. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 3589

JUL 27 1978

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input checked="" type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Cementing salt string</u>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

On July 1 & 2, 1978 we ran 2900' of 23#, 7" casing; we then pulled our 8 5/8" cave string and our 10 3/4' water shutoff string this was done on July 3 & 4, 1978. We then circulated and cemented the 7" with 900 sxs of Halliburton A-2 cement and 100 sxs of class "c" with 1/4# of Flo-Celo per sxs, 112 sxs was circulated to pit.

RECEIVED

JUL 21 1978

U. S. GEOLOGICAL SURVEY  
HOBBS, NEW MEXICO

18. I hereby certify that the foregoing is true and correct  
SIGNED Walter W. Krug TITLE Engineer DATE 7/12/1978

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

ACCEPTED FOR RECORD  
JUL 21 1978  
U. S. GEOLOGICAL SURVEY  
HOBBS, NEW MEXICO

# JOB SUMMARY

HALLIBURTON LOCATION

*Hobbs*

BILLED ON TICKET NO. *369517*

FIELD *Lusk* SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RNG. \_\_\_\_\_ COUNTY *L22* STATE *N.M.*

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_

FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_

INITIAL PROD: OIL \_\_\_\_\_ SPD. WATER \_\_\_\_\_ SPD. GAS \_\_\_\_\_ MCFD \_\_\_\_\_

PRESENT PROD: OIL \_\_\_\_\_ SPD. WATER \_\_\_\_\_ SPD. GAS \_\_\_\_\_ MCFD \_\_\_\_\_

COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_

PACKER TYPE \_\_\_\_\_ SET AT \_\_\_\_\_

BOTTOM HOLE TEMP. \_\_\_\_\_ PRESSURE \_\_\_\_\_

MISC. DATA \_\_\_\_\_

## WELL DATA

	NEW USED	SIZE	FROM	TO	WEIGHT	MAXIMUM PSI ALLOWABLE
CASING		<i>7</i>	<i>0</i>	<i>2900</i>	<i>24</i>	
LINER						
TUBING						
OPEN HOLE		<i>8</i>		<i>2900</i>	TOTAL DEPTH:	
PERFORATIONS						SHOTS/FT.
PERFORATIONS						SHOTS/FT.
PERFORATIONS						SHOTS/FT.

## TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
FLOAT COLLAR		
FLOAT SHOE	<i>7"</i>	<i>1E2 Joy</i>
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEADS		
PACKERS		
OTHER		

## JOB DATA

CALLED OUT DATE	ON LOCATION DATE	JOB STARTED DATE	JOB COMPLETED DATE
<i>7-4-78</i>	<i>7-4-78</i>	<i>7-9-78</i>	<i>7-5-79</i>
TIME <i>0400</i>	TIME <i>0700</i>	TIME <i>1230</i>	TIME <i>1130</i>

## PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<i>B Roberts</i>	<i>12794 Cont</i>	
<i>Jackson</i>	<i>3332</i>	<i>Hall</i>
<i>M. Kerton</i>		<i>Hobbs</i>
<i>D. Strappe</i>	<i>4344</i>	
<i>M. White</i>		<i>6MCO</i>
<i>M. Shuley</i>		<i>FL</i>

## MATERIALS

TREAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. API \_\_\_\_\_

REPL. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. API \_\_\_\_\_

PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB. \_\_\_\_\_

PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB. \_\_\_\_\_

ACID TYPE \_\_\_\_\_ GAL. \_\_\_\_\_

ACID TYPE \_\_\_\_\_ GAL. \_\_\_\_\_

ACID TYPE \_\_\_\_\_ GAL. \_\_\_\_\_

SURFACTANT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN. \_\_\_\_\_

HE AGENT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN. \_\_\_\_\_

FLUID LOSS ADD. TYPE \_\_\_\_\_ GAL-LB. \_\_\_\_\_ IN. \_\_\_\_\_

GELLING AGENT TYPE \_\_\_\_\_ GAL-LB. \_\_\_\_\_ IN. \_\_\_\_\_

FRIC. RED. AGENT TYPE \_\_\_\_\_ GAL-LB. \_\_\_\_\_ IN. \_\_\_\_\_

BREAKER TYPE \_\_\_\_\_ GAL-LB. \_\_\_\_\_ IN. \_\_\_\_\_

BLOCKING AGENT TYPE \_\_\_\_\_ GAL-LB. \_\_\_\_\_

PERFPAC BALLS TYPE \_\_\_\_\_ QTY. \_\_\_\_\_

OTHER \_\_\_\_\_

OTHER \_\_\_\_\_

DEPARTMENT *Operation*

DESCRIPTION OF JOB *Sumo 1036 Csg 1 case*

*5 Cont 20 Prod. (0.5)*

JOB DONE THRU: TUBING  CASING  ANNULUS  TEG. ANN.

CUSTOMER REPRESENTATIVE *X*

HALLIBURTON OPERATOR *B Roberts*

COPIES REQUESTED \_\_\_\_\_

## CEMENT DATA

STAGE	NUMBER OF SACKS	API CLASS	BRAND	BULK BAGGED	ADDITIVES	YIELD CU. FT./SK.	MIXED LBS./GAL.
	<i>400</i>	<i>1-1/2 C</i>	<i>C</i>	<i>B</i>	<i>7/16 (net) 1/4 flocc</i>	<i>1.31</i>	<i>12.7</i>
	<i>100</i>	<i>C</i>		<i>B</i>	<i>1/4 flocc</i>	<i>1.32</i>	<i>14.2</i>

## PRESSURES IN PSI

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_

BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_

AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_

SHUT-IN INSTANT \_\_\_\_\_ 5-MIN. \_\_\_\_\_ 15-MIN. \_\_\_\_\_

HYDRAULIC HORSEPOWER \_\_\_\_\_

ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_

AVERAGE RATES IN BPM \_\_\_\_\_

TREATING \_\_\_\_\_ OVERALL \_\_\_\_\_

CEMENT LEFT IN PIPE \_\_\_\_\_

REASON *Required*

## SUMMARY

## VOLUMES

PREFLUSH: EBL-GAL *90* TYPE *H-0*

LOAD & SKIDS: EBL-GAL \_\_\_\_\_ PADI: EBL-GAL \_\_\_\_\_

TREATMENT: EBL-GAL \_\_\_\_\_ DISPLI: EBL-GAL *113*

CEMENT SLURRY: EBL-GAL *245*

TOTAL VOLUME: EBL-GAL \_\_\_\_\_

## REMARKS

*Plug down @ 1129*

*Circ. 112 ex Cont. + 6 pit*

CUSTOMER

CUSTOMER: *W. L. Co. Hobbs, N.M.*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM 073240

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Wallen Tonto

9. WELL NO.

# 7

10. FIELD AND POOL, OR WILDCAT

Rivers  
S. Tonto Yates, Seven

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec 30, T 19 S, R 33 E

12. COUNTY OR PARISH

Lea

13. STATE  
New Mexico

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Walter W. Krug DBA Wallen Production Company

3. ADDRESS OF OPERATOR

Box 1960, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)

At surface

990 FEL & 1650 FSL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 3589'

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) 13 3/8 surface casing

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Cut 15 1/2" hole 225' deep. Ran 13 3/8" casing(68 lbs) to bottom. Halliburton cemented 13 3/8" in hole with 300 sacks class H with 2% calcium chloride 1/4 lb, flo-cell per sack of cement. Circulated 20 sacks of cement into pit upon completion. This was cemented May 22, 1978 at 10:00 A.M.

RECEIVED

MAY 25 1978

U. S. GEOLOGICAL SURVEY  
HOBBS, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED

*Walter W. Krug*

TITLE Engineer

DATE

5-23, 1978

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

ACCEPTED FOR RECORD

DATE

MAY 25 1978

U. S. GEOLOGICAL SURVEY  
HOBBS, NEW MEXICO

\*See Instructions on Reverse Side

# HALLIBURTON SERVICES JOB SUMMARY

HALLIBURTON LOCATION

Hubbs, New Mexico

BILLED ON TICKET NO. 314685

## WELL DATA

WELL: 2010 SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RNG. \_\_\_\_\_ COUNTY Lin STATE N. Mexico

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_

FORMATION THICKNESS FROM \_\_\_\_\_ TO \_\_\_\_\_

INITIAL PROD. OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD \_\_\_\_\_

PRESENT PROD. OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD \_\_\_\_\_

COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_

PACKER TYPE \_\_\_\_\_ SET AT \_\_\_\_\_

BOTTOM HOLE TEMP. \_\_\_\_\_ PRESSURE \_\_\_\_\_

NISC. DATA TOTAL DEPTH 220

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	used	545	1 7/8	0	220	
LINER						
TUBING						
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

## JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 5-22-78	DATE 5-22-78	DATE 5-22-78	DATE 5-22-78
TIME 0600	TIME 0930	TIME 1215	TIME 1445

## PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
D. D. Dighy	HT-400	Hubbs
H. S. S. S.	HL-16	Hubbs
W.S.	Bulk 8430	Hubbs
P. Brining	24790	Hubbs
N. Betch	Field sup	Hubbs

## TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEADS		
PACKER		
OTHER		

## MATERIALS

TREAT. FLUID	DENSITY	LB/GAL	API
DISPL. FLUID	DENSITY	LB/GAL	API
PROP. TYPE	SIZE	LB.	
PROP. TYPE	SIZE	LB.	
ACID TYPE	GAL.		
ACID TYPE	GAL.		
ACID TYPE	GAL.		
SURFACTANT TYPE	GAL.	IN.	
SE AGENT TYPE	GAL.	IN.	
FLUID LOSS ADD. TYPE	GAL-LB.	IN.	
GELLING AGENT TYPE	GAL-LB.	IN.	
FRIC. RED. AGENT TYPE	GAL-LB.	IN.	
BREAKER TYPE	GAL-LB.	IN.	
BLOCKING AGENT TYPE	GAL-LB.		
PERF PAC BALLS TYPE	QTY.		
OTHER			
OTHER			

## CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
1	300		H		B	24% C-15 - 1/2" Phosphate	5.2	15.6

## PRESSURES IN PSI

## SUMMARY

## VOLUMES

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_ PRESLUSH: BBL-GAL \_\_\_\_\_ TYPE H30

BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_ LOAD & BNDH: BBL-GAL \_\_\_\_\_ PADI BBL-GAL \_\_\_\_\_

AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_ TREATMENT: BBL-GAL \_\_\_\_\_ DISPLI BBL-GAL 245

SHUT-IN INSTANT \_\_\_\_\_ 9-MIN. \_\_\_\_\_ 15-MIN. \_\_\_\_\_ CEMENT SLURRY: BBL-GAL 144

HYDRAULIC HORSEPOWER \_\_\_\_\_ TOTAL VOLUME: BBL-GAL \_\_\_\_\_

ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_ REMARKS NOTE

AVERAGE RATES IN BPM \_\_\_\_\_

TREATING \_\_\_\_\_ DISPL. \_\_\_\_\_ OVERALL \_\_\_\_\_

CEMENT LEFT IN PIPE \_\_\_\_\_

FEET 30' REASON Shut in

CUSTOMER

copy

CUSTOMER: Halliburton P.T. Co. WELL NO. 47 JOB TYPE: Cement Surface DATE: 5-22-78

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

COPY TO O.

3-125-2511

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL OIL WELL [X] GAS WELL [ ] OTHER [ ] SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR Walter W. Krug DBA Wallen Production Company

3. ADDRESS OF OPERATOR Box 1960, Midland Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 990 FEL & 1650 FSL At proposed prod. zone Same as above

RECEIVED MAR 9 1978

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE GEOLOGICAL SURVEY 42 miles WSW of Hobbs, New Mexico HOBBS, NEW MEXICO

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 990'

16. NO. OF ACRES IN LEASE 240

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 660'

19. PROPOSED DEPTH 3100'

20. ROTARY OR CABLE TOOLS cabletool

21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 3589'

22. APPROX. DATE WORK WILL START 4/15/78

23. PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Includes rows for 15 1/2", 12 1/2", 10", and 8" hole sizes with corresponding casing and cement details.

APPROVED APR 11 1978 U.S. GEOLOGICAL SURVEY

"APPROVAL TO FLARE UNLIMITED WHILE DRILLING AND TESTING."

SEE ATTACHED FOR CONDITIONS OF APPROVAL

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED [Signature] TITLE Engineer DATE 3/6/78

(This space for Federal or State office use) PERMIT NO. APPROVAL DATE

APPROVED BY CONDITIONS OF APPROVAL, IF ANY: TITLE DATE

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator <b>WALLEN PRODUCTION CO.</b>		Lease <b>TONTO</b>		Well No. <b>7</b>
Unit Letter <b>I</b>	Section <b>30</b>	Township <b>19-S</b>	Range <b>33-E</b>	County <b>LEA</b>

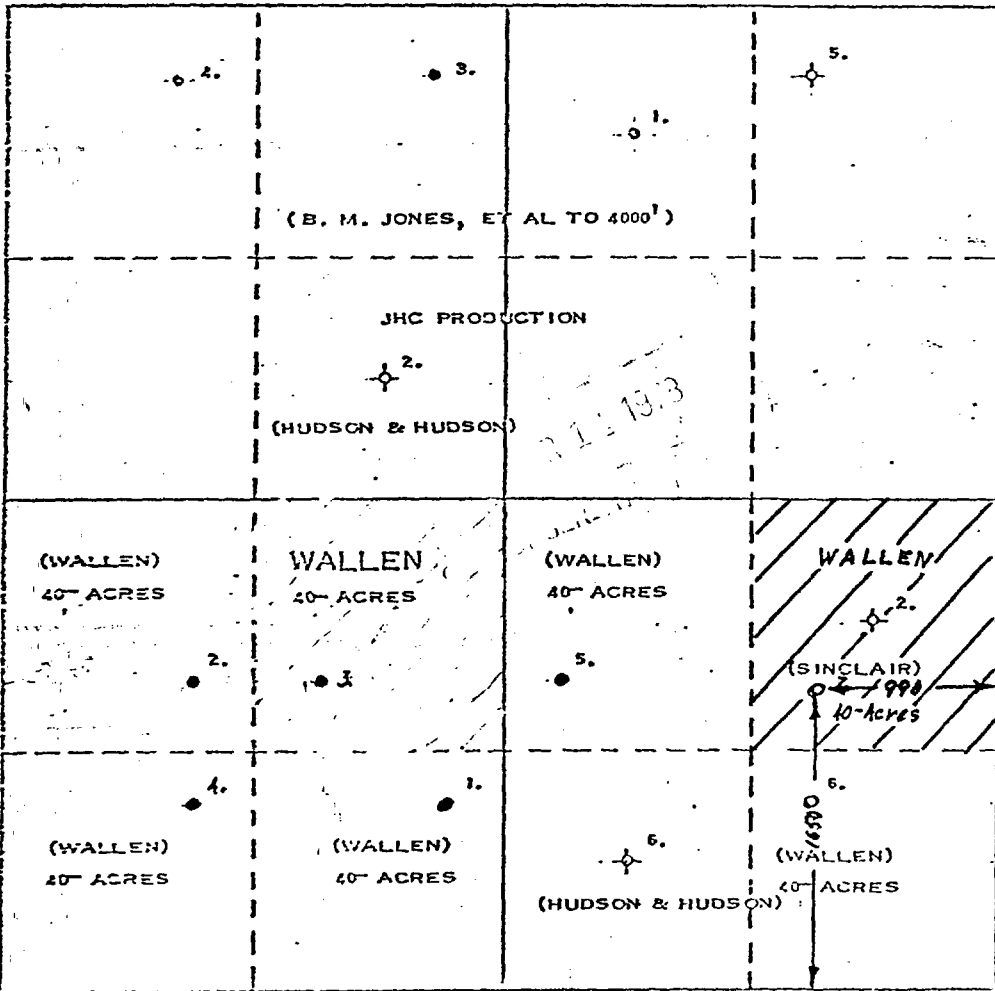
Actual Footage Location of Well:  
 1650 feet from the **SOUTH** line and 990 feet from the **EAST** line.  
 Ground Level Elev. **3589** Producing Formation **SEVEN RIVER YATES** Pool **SOUTH UNDESIGNATED** Dedicated Acreage **40** Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

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

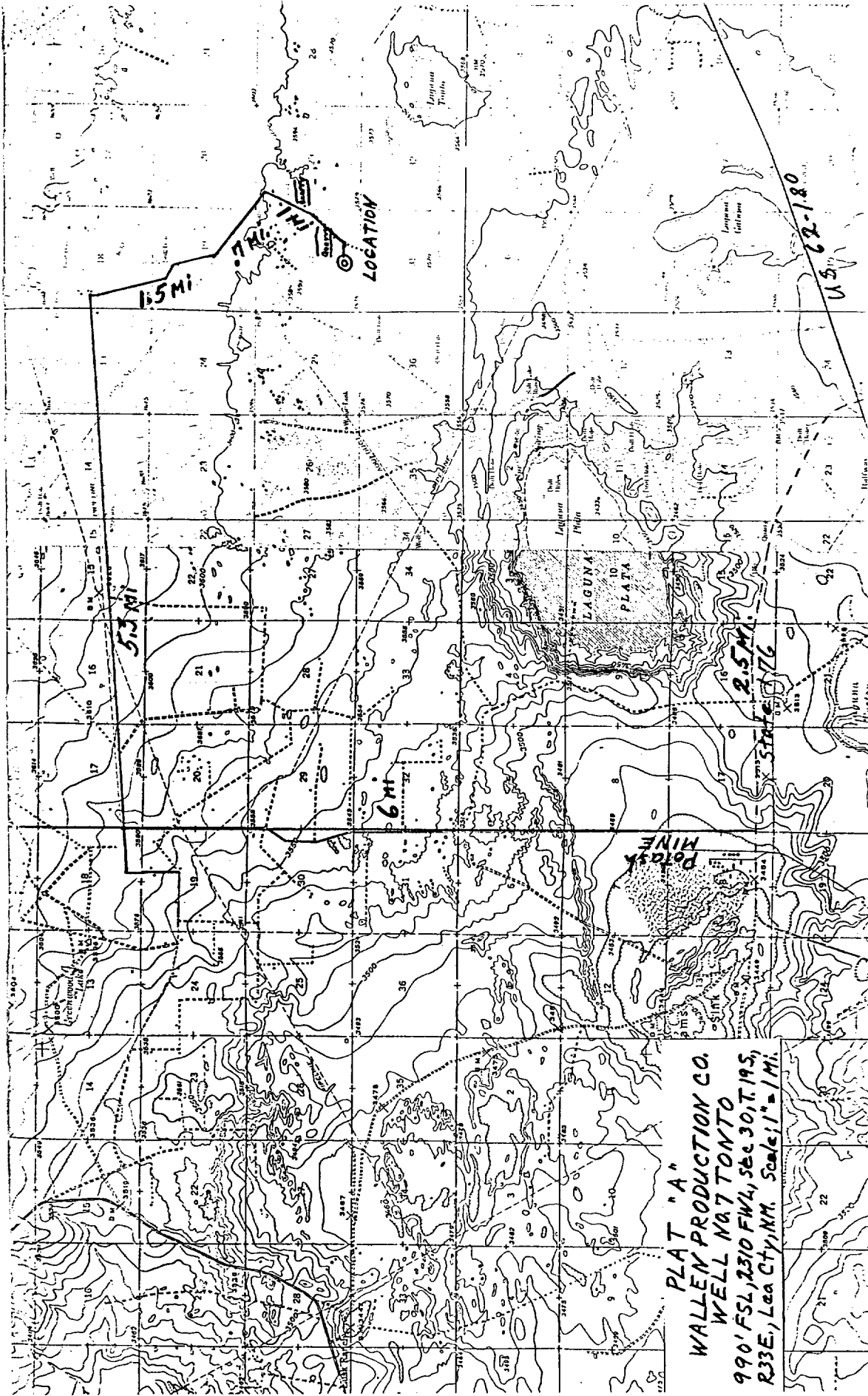
Name *Walter H. King*  
 Position *Engineer*  
 Company *Waller Prod. Co.*  
 Date *3/10/78*

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

*3/6/78*  
 Date Surveyed \_\_\_\_\_  
 Registered Professional Land Surveyor and/or Land Surveyor:  
*Walter H. King*

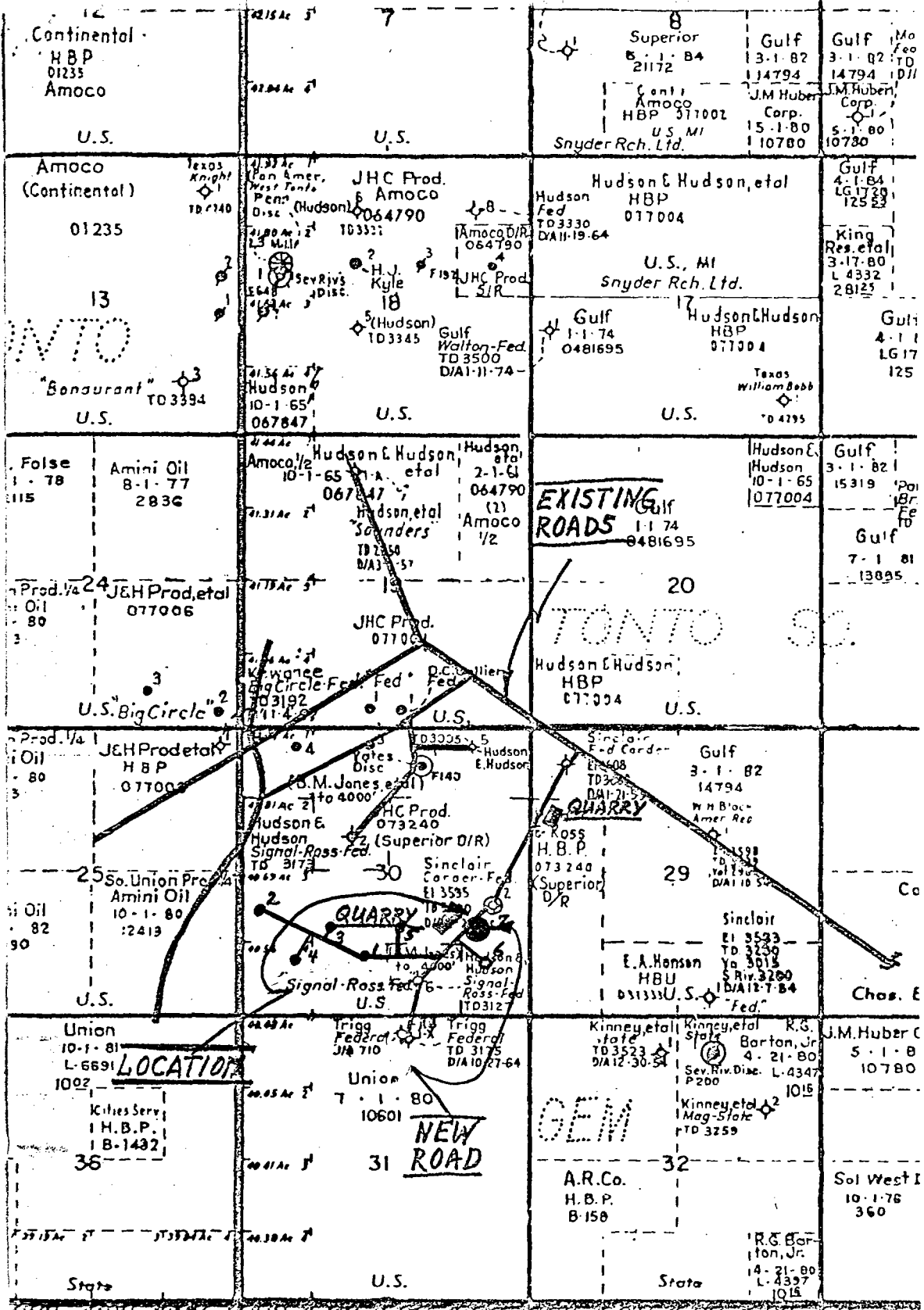






PLAT "A"  
WALLEN PRODUCTION CO.  
WELL NAT TONTO  
990' FSL, 2310 FWL, SEC 30, T. 19S,  
R. 33E., Lea Cty, NM. Scale: 1" = 1/2 MI.

U.S. 62-180



PLAT "B"  
 WALLEN PRODUCTION CO.  
 WELL NO 7 TONTO  
 1650 FSL, 990 FEL, T. 19S, R. 33E.  
 Lea Cty, NM Scale: 2 7/8" = 1 Mi

GEM

NEW ROAD

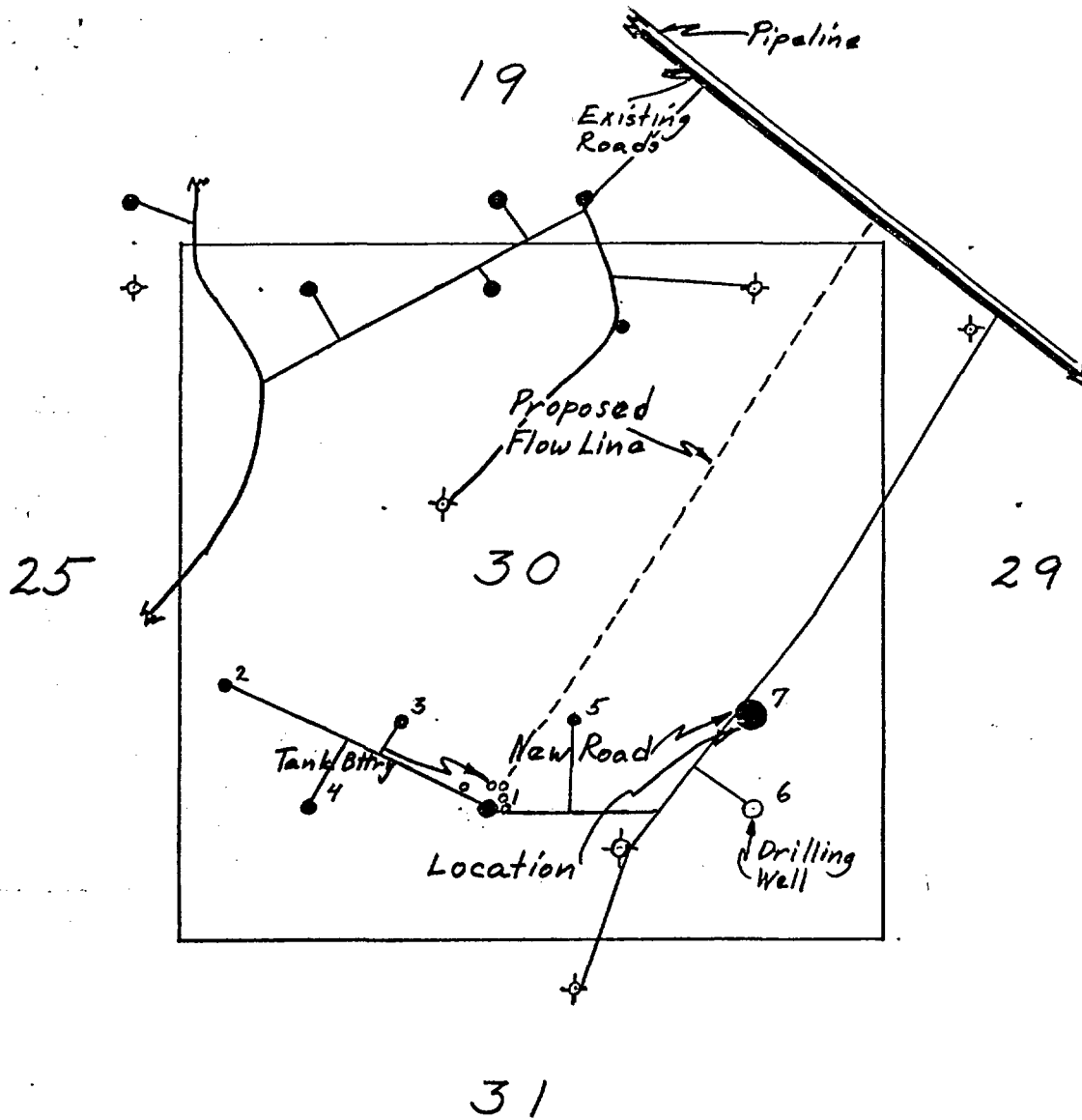
A.R.Co.  
 H.B.P.  
 B-150

Richardson  
 E. Bass  
 7-1-71 (3)  
 069944

Gulf  
 2-1-83  
 15030

Rich. & B  
 HBP  
 L 5231

Ur



PLAT "C"  
 WALLEN PRODUCTION CO.  
 WELL NO. 7 TONTO  
 990 F L, 0 F L, Sec 30, T19S, R33E  
 Lea Cty., N.M.                      Scale: 1" = 1000'

PLAT "D"

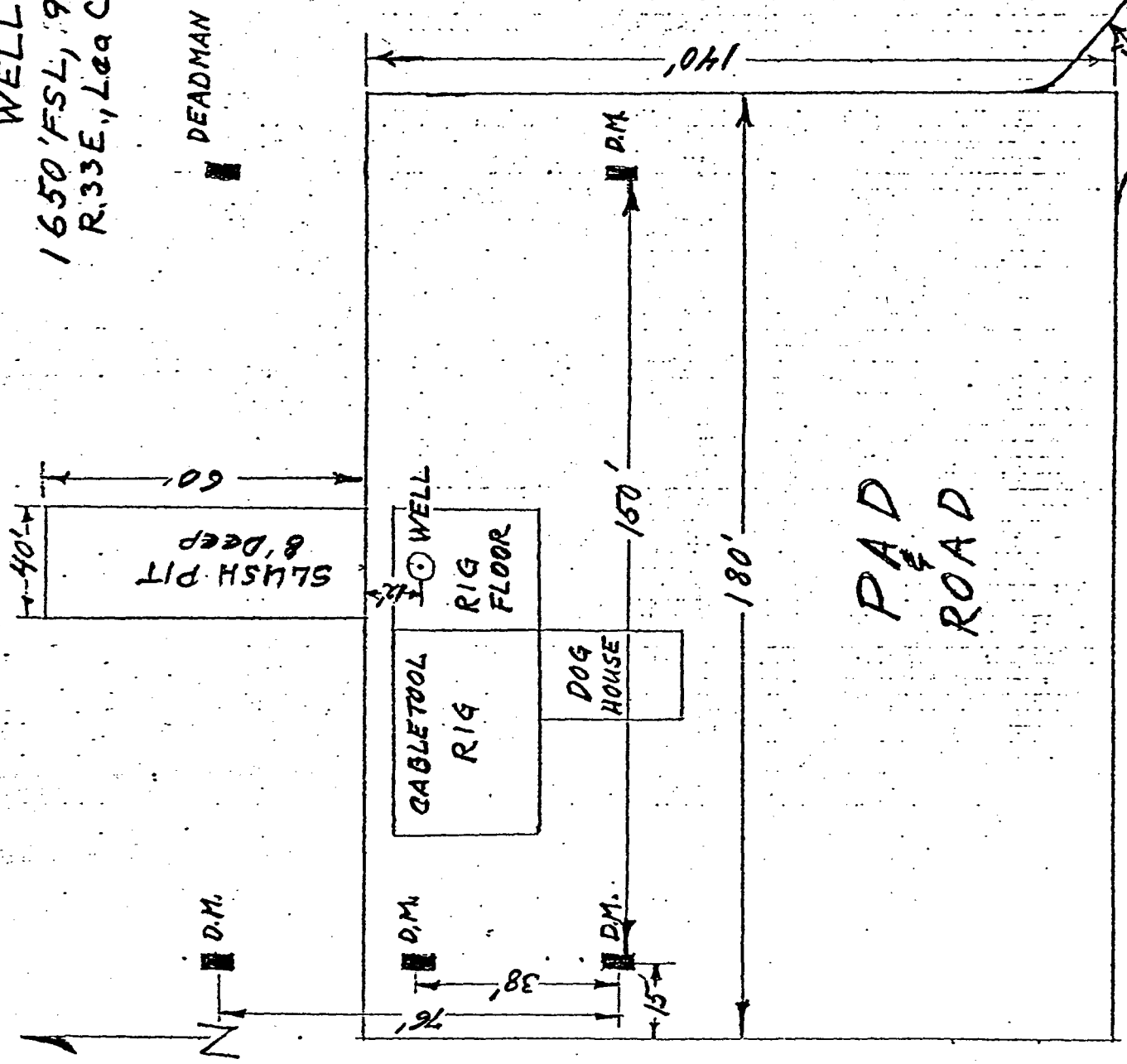
WALLEN PRODUCTION CO.  
WELL NO. 7 TONTO

1650' FSL, 990' FEL, See 30, T. 19S.  
R. 33E., Lea Cty, NM Scale 1" = 30'

CALICHE PAD ROAD  
8" Mat Compacted

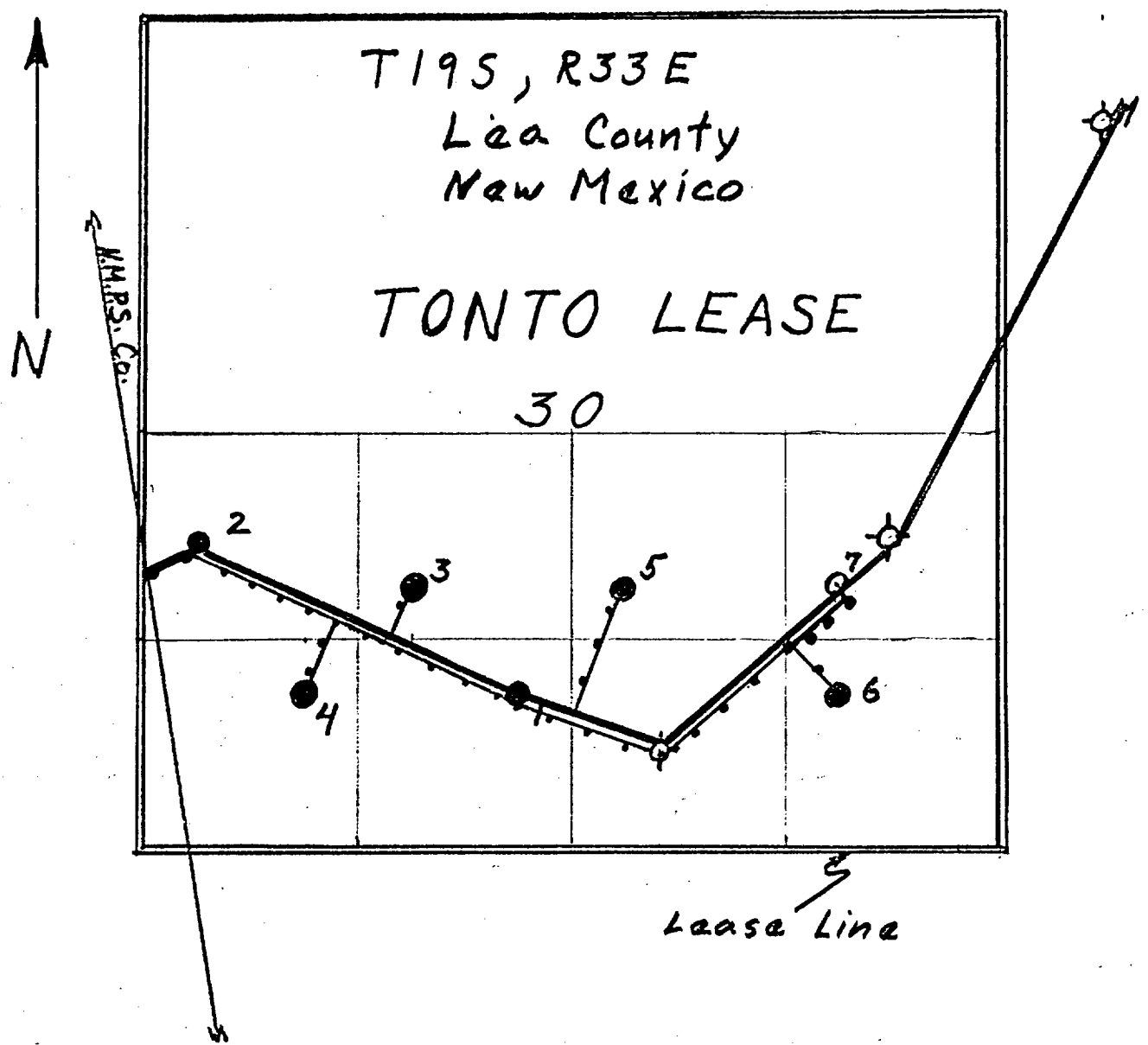
DEADMEN  
7" Pipe, 6' Long  
6' Deep

1" = 30'



15' 1/2"

# WALLEN PRODUCTION COMPANY



## Electric Power Line Outline

