



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Conservation Division  
P. O. Box 26124  
Albuquerque, New Mexico 87125

APR 14 1978

Walter M. Krug  
Wallen Production Company  
P. O. Box 1960  
Midland, Texas 79701

Dear Mr. Krug:

Your Application for Permit to Drill well No. 3 Bass in the SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 21, T. 20 S., R. 34 E., Lea County, New Mexico, lease New Mexico 073240, to a depth of 3650 feet to test the Yates and Seven Rivers formation in the Oil Potash area is hereby approved, as amended by stipulations attached to the application.

One copy of the application is returned herewith. Please notify the District Engineer, Geological Survey, Hobbs, New Mexico, in sufficient time for a representative to witness all cementing operations.

Sincerely yours,

(ORIGINAL) GENE F. DANIEL

Acting Area Oil and Gas Supervisor

Enclosure

cc: Conservation Manager, Denter  
Area Mining Supervisor, Albuquerque (2)  
NMDC, Hobbs (2) (w/2 copies Notice)  
Roswell Area Office (2)  
Hobbs District Office



UNITED STATES  
DEPARTMENT OF THE INTERIOR

## GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Walter W. Krug DBA Wallen Production Company

## 3. ADDRESS OF OPERATOR

P.O. Box 1960, Midland, Texas 79702

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

At surface

660' FSL &amp; 330' FEL

At proposed prod. zone

Same as Above

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

28 miles WNW from Eunice, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

330'

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

3900'

## 16. NO. OF ACRES IN LEASE

640

## 19. PROPOSED DEPTH

3650'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

## 20. ROTARY OR CABLE TOOLS

Cable Tool

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

GR 3671

## 22. APPROX. DATE WORK WILL START\*

8/15/78

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15 1/2"	13 3/8	72#	225	300 Sxs Class "C" <b>CIRCULATE</b>
12 1/2"	10 3/4 "	48#	750	Mudded in
10"	8 5/8	32#	1200	Mudded in
8"	7"	23#	3300	1000 Sxs Class "C" w/ <b>CIRCULATE</b> 2% Gel & 1/4# flocele/Sx.
Liner 6 1/2"	4 1/2"	10 1/2#	3650'	50 Sxs Class "C" w/1/4# flocele/Sx.

"APPROVAL TO BE OBTAINED  
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

*Walter W. Krug*

TITLE Engineer

DATE 3/10/78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

7-10-19

7-10-19

7-10-19  
OIL CO. 1000 1000 1000  
1000 1000 1000

NEW MEXICO OIL CONSERVATION COMMISSION  
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.

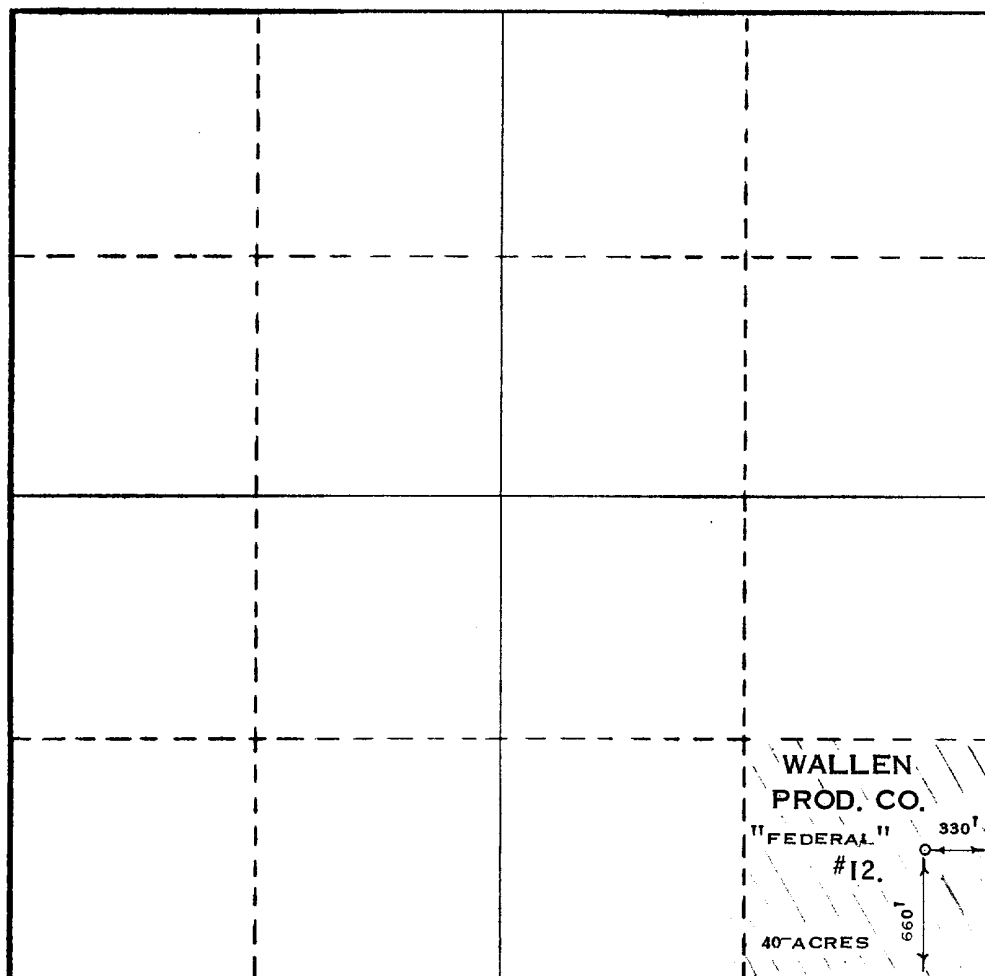
Operator <b>WALLEN PRODUCTION CO.</b>		Lease <b>FEDERAL</b> <i>Bass</i>		Well No. <b>42-3</b>
Unit Letter <b>"P"</b>	Section <b>21</b>	Township <b>20 S</b>	Range <b>-34-E</b>	County <b>LEA</b>
Actual Footage Location of Well: 660 feet from the <b>SOUTH</b> line and 330 feet from the <b>EAST</b> line				
Ground Level Elev. <b>3671</b>	Producing Formation <b>YATES &amp; SEVEN RIVERS</b>	Pool <b>MIDDLE LYNCH - YATES SEVEN RIVERS</b>		Dedicated Acreage: <b>40</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. 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 *Robert H. Krue*  
Position *Engineer*  
Company *Wallen Prod. Co.*  
Date *3/14/78*

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.

Date Surveyed  
**MARCH 7, 1978**

Registered Professional Engineer and/or Land Surveyor

*Max A. Schumann Jr.*  
MAX A. SCHUMANN JR.

Certificate No.

**1510**

REQUIREMENTS OF N T L -6

1. Geologic name of the surface where the <sup>Base 3</sup>~~Federal #12~~ is located is the Quarternary (Alluvium and sand).

2. The estimated tops of the geologic markers are:

A. Rustler (Anhydrite)	= 1350'
B. Top Salt	= 1473'
C. Base of Salt	= 3155'
D. Lime	= 3182'
E. Yates	= 3450'
F. Reef (Seven Rivers)	= 3675'

3. a. Surface Water	= 195'
b. Santa Rosa Water	= 835'
c. Yates Sand Oil	= 3450'
d. Seven River Reef Oil	= 3675'

4. Control equipment is a 1500# W.P. control head with double oil saver (if needed) (this will be a cabletool rig).

5. Drilling fluid is fresh water.

6. Logging program will be Gamma Ray-Neutron with CCL.

7. Estimated drilling duration is 60 days.

Walter W. Krug DBA Wallen Production Company

DEVELOPMENT PLAN FOR SURFACE USE

~~Wallen Federal #12~~ <sup>Burr</sup> Well  
660' FSL and 330 FEL  
Section 20, T 20 S,  
R 34 E, Lea County,  
New Mexico

The following discussion answers the items 1 through 12, concerning the above subject well.

1. AERIAL MAP

Plat # 1 is a portion of a USGS topographic map, Lea County, New Mexico, showing existing roads. The location is approximately 26½ miles from Hobbs. The location is along the county road.

2. LOCATION OF EXISTING  
WELLS

Plat # 2 shows all of the wells and dry holes within a one (1) mile radius of the proposed location.

3. PROPOSED WELL  
LOCATION

Plat # 3 shows the rig location with North orientation marker.

a. Mat size is 140' x 180'.

b. Surfaced with 8" of compacted, watered and leveled caliche from BLM quarry.

c. Pit is 40' x 60' x 8' deep.

d. Cut and fill isn't necessary, here the location is nearly level and only requires caliche.

e. Entrance road is 380' long and comes off of the county maintained road.

f. SETTING AND ENVIRONMENT

1. Terrain is gently rolling sand (see Plat # 1).

2. Soil is a very sandy clay.

3. Vegetation is scrub oak, mesquite, gramma grass, spanish dagger, general desert weeds and sand burrs.

4. Surface use is for grazing.

5. Other the area is nearly flat semi-arid desert country and is probably considered a low environmental risk area, There should be very little (if any) environmental effect of drilling and producing in this vicinity.

g. Distances to  
-----

1. Ponds and streams - there are none  
-----  
within 6 miles.
2. Water wells - none within one mile.  
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3. Residences and buildings - none within  
-----  
6 miles.
4. Arroyos, Canyons, etc none within  
-----  
1½ miles.

h. Well sign there will be a well sign at  
-----  
the entrance of the road.

i. Open Pit will be guarded while drilling,  
-----  
fenced while we are completing the well  
and then closed in.

4. ROADS  
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Plat # 1 shows all roads within 3 miles or more.  
Planned entrance is staked and road will be  
80' long and 15' wide and will be caliched  
with 8" mat note Plat # 3. There are no fences,  
gates or cattle guard.

5. TANK BATTERY  
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Plat # 4 shows the existing Fee tank battery  
in NW/4 of NW/4, Section 21, T 20 S, R 34 E.

6. LEASE PIPELINES  
-----

Plat # 4 shows all existing oil pipelines and salt  
water line and disposal well. This plat also shows  
the proposed oil flow line from this well if  
oil is established.

7. WASTE DISPOSAL  
-----

Well cuttings will be disposed of in slush pit.  
Barrel trash containers are on location and  
contents will be burned or buried with a  
minimum of 23" of dirt cover. Produced water  
will be disposed of by injecting in our own  
salt water disposal well.

8. WATER SUPPLY  
-----

Our water is hauled by commercial haulers.

9. ARCHAEOLOGICAL RESOURCES  
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None in the surrounding area.

10. RESTORATION OF SURFACE  
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Should the well be productive the pit will be  
back filled as soon as practical.



11. OPERATORS REPRESENTATIVE  
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Walter W. Krug  
P. O. Box 1960  
Midland, Texas 79701

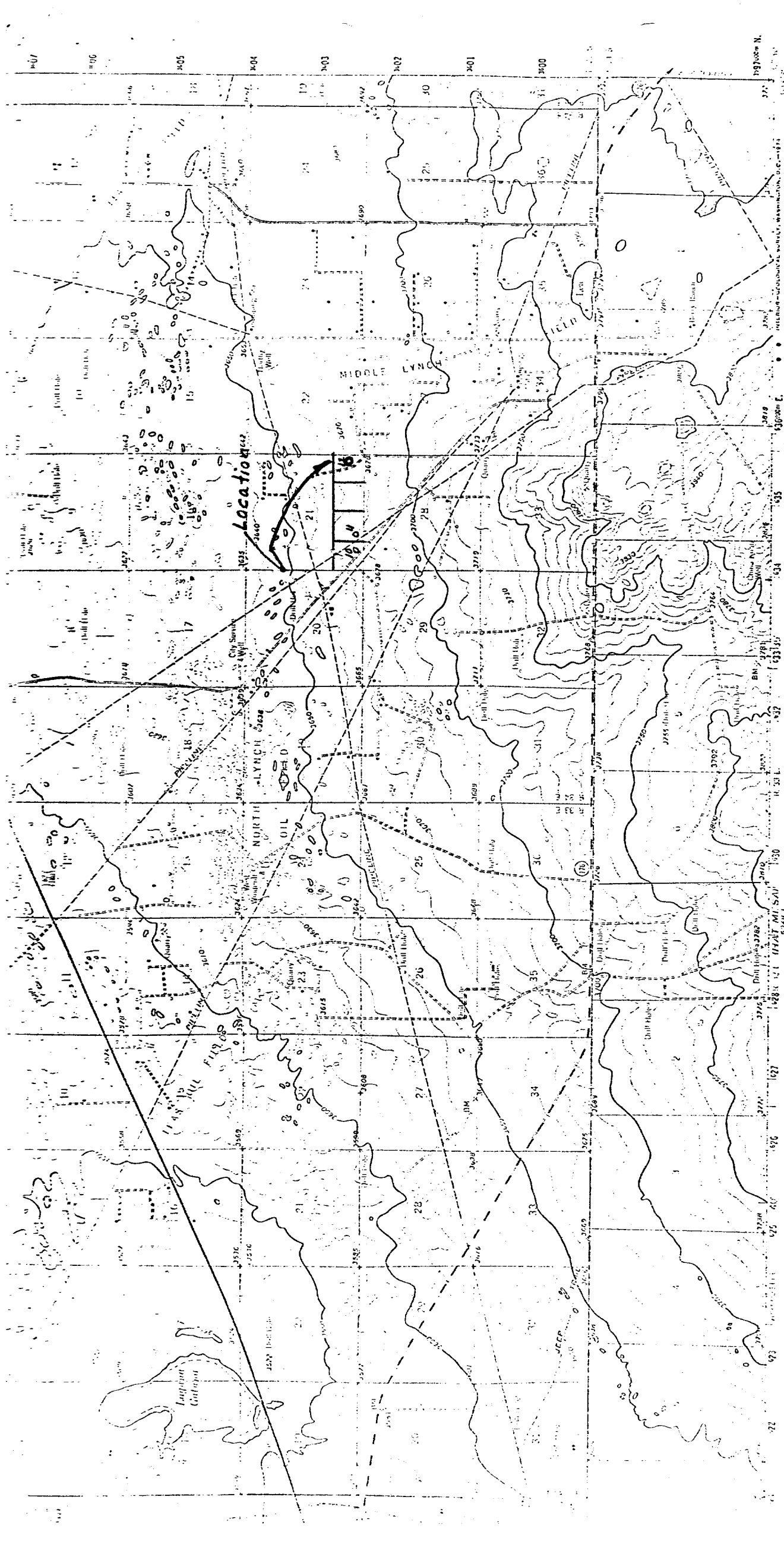
office phone	ac 915- 683-2600
	ac 915- 683-6526
home phone	ac 915- 563-0048

12. CERTIFICATION  
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I hereby certify that I have inspected the proposed drillsite and access route; that I am familiar with the conditions as they exist. The statements made in this plan are, to the best of my knowledge, true and correct and that the proposed work performed by Wallen Production Company its contractors and sub-contractors will conform to this plan.

March 13, 1978

  
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Walter W. Krug  
Engineer and authorized agent



**ROAD CLASSIFICATION**

Heavy duty	Light duty
Medium duty	Unimproved dirt

U.S. Route      State Route

**SCALE 1:62500**

0 1 2 3 4 MILES

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000 FEET

0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 METERS

CONTOUR INTERVAL 10 FEET  
DATUM IS NAD 83

UTM GRID AND 1972 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET

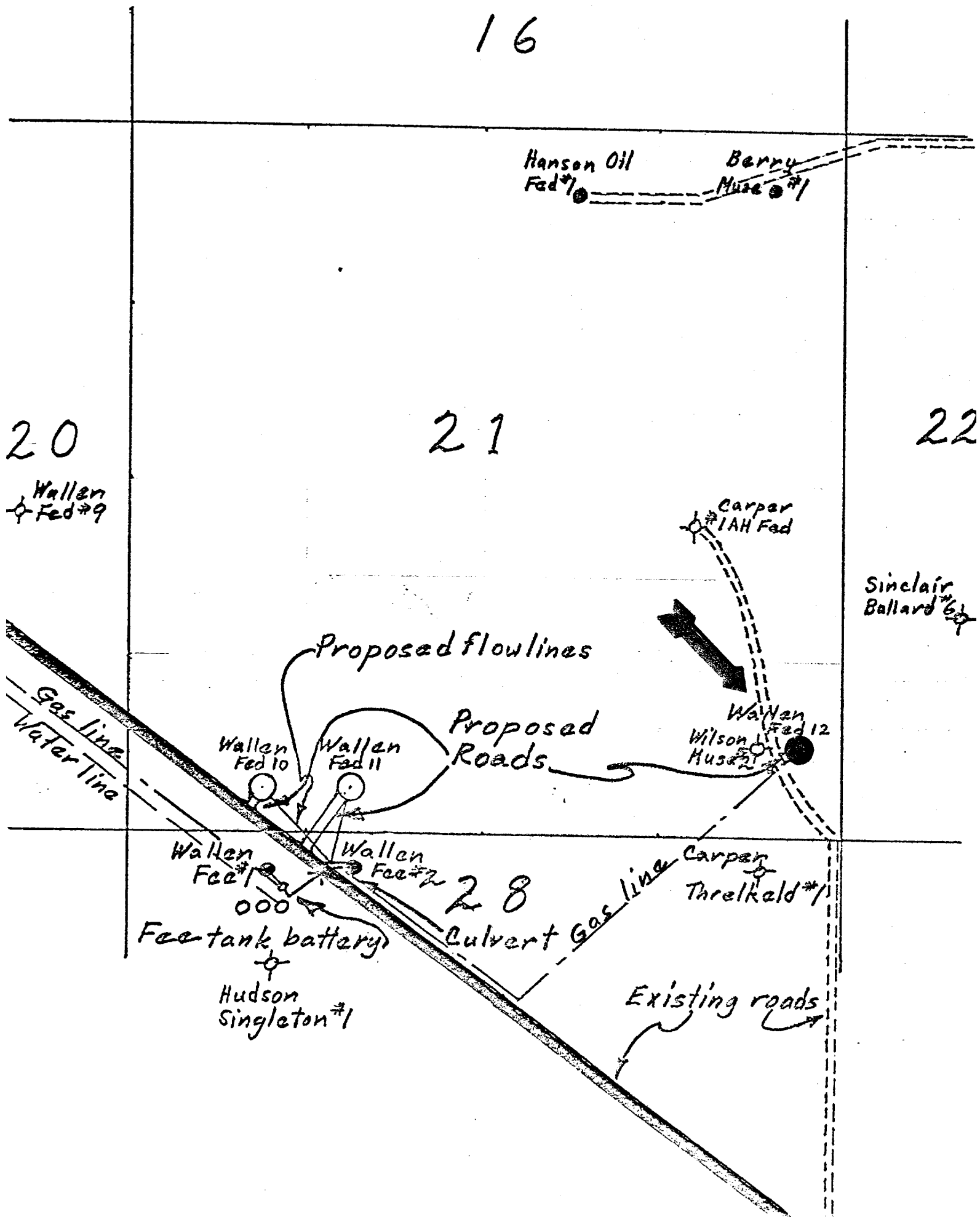
**LACUNA CATUNA, N. MEX.**

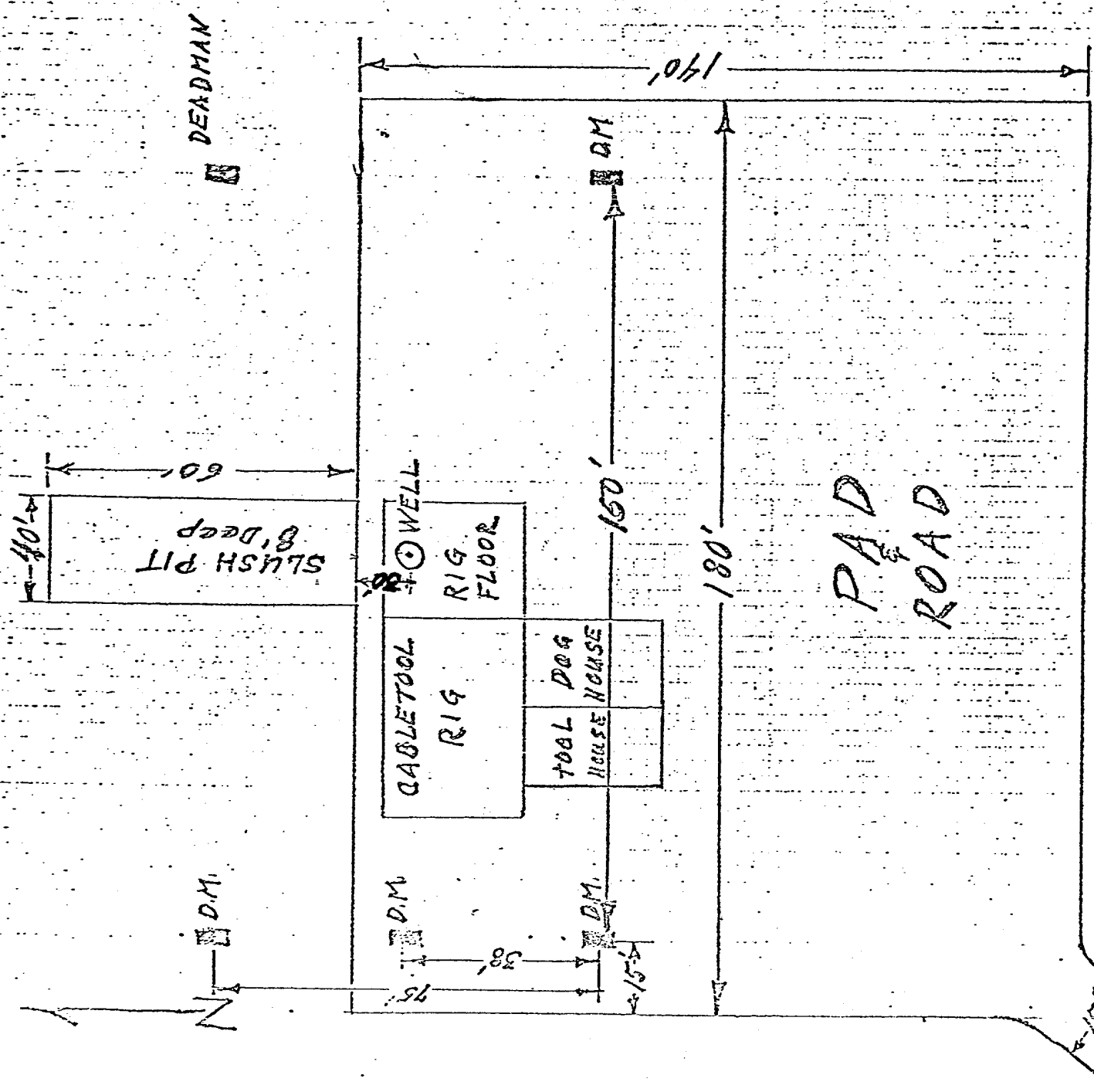


WALLEN PRODUCTION CO. - FED #12

E/2, SE/4, SE/4, Sec. 20, T20S, R34E

LEA COUNTY, NEW MEXICO





DEADMAN

CALICHE PAD ROAD  
8" Mat Compacted

DEAD MEN

7" Pipe, 6' Long &

6' Deep (or Umbrella 1 1/4" anchors 8' deep)

1" = 30'

PAD  
ROAD

AGREEMENT  
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U. S. GEOLOGICAL SURVEY  
DOCS, NEW MEXICO

████████████████████ Noranda Exploration, Inc have no objection to Walter W. Krug, DBA Wallen Production Co's casing program on a well located in 660 FSL and 330 FEL of Section 21, Block 20, T 34 E, Lea County, New Mexico (said well to be 3600 feet plus or minus) using the USGS approved requirements and that Wallen Production Co. will furnish Noranda Exploration, Inc an electric log, gamma ray and neutron run at as low a speed as possible through the salt section, and that Wallen Production Co. will build its brine with KCl through the interval of the 10th ore zone and allow Noranda Exploration Inc's man to study the drill cuttings through that section, if so requested by Noranda.

This is as per the conversation and agreement with James Brewer, Geologist, Noranda Exploration, Inc.

DATED this ---28--- day of March 1978

████████████████████  
-----  
NORANDA EXPLORATION, INC

BY *James Brewer*

Walter W. Krug, dba Wallen Production Co., does hereby agree  
by the terms of this consent as outlined above.

WALTER W. KRUG, dba  
WALLEN PRODUCTION CO.

By *Walter W. Krug*

U. S. Geological Survey

HOBBS DISTRICT

Wallen Production Co.  
No. 3 Bass  
SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 21-20S-34E  
Lea County, N. M.

Above Data Required on Well Sign

CONDITIONS OF APPROVAL

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Drilling Operations on Federal Oil and Gas Leases, dated January 1, 1977.
2. Notify this office (telephone (505) 393-3612) when the well is to be spudded and in sufficient time for a representative to witness all cementing operations. Attached are names and telephone numbers of Geological Survey and Bureau of Land Management personnel who are available for consultation during construction, drilling, completion, and rehabilitation activities.
3. Immediate notice is required of all blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life.
4. Secure prior approval of the District Engineer for variance from the approved drilling program and before commencing plugging operations, plug-back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely.
5. Blowout prevention equipment is to be installed, tested, and in working order before drilling below the surface casing and shall be maintained ready for use until drilling operations are completed.
6. Operator will provide the dirt contractor with a copy of the enclosed Bureau of Land Management "Standard Requirements for all Drilling in Relation to Oil and Gas Activities in the Roswell District" prior to commencing construction of road, pad, or other associated developments.
7. In the event the oil or gas test results in a dry hole, the drill pad and access road will be ripped in accordance with "BLM Roswell District's Ripping Recommendations for Caliche or Compacted Drill Pads and Access Roads". (Re seeding of the affected areas may be required at the discretion of the BLM authorized officer).
8. All ripped surfaces are to be protected from vehicular travel by constructing a dead-end ditch and earthen barricade at the entrance to these ripped areas. The barricade is to be constructed using spoil material from the ditch and should be of sufficient magnitude to discourage vehicle entry.
9. All above ground structures, not subject to applicable conservation and safety requirements, shall be painted to blend with the natural surroundings. The paint used should be a nonglare, nonreflective, flat, or semi-gloss that simulates Fed. Stand. No. 595, color 30318.
10. A Gamma Ray-Sonic log is required from the base of the Salado formation to the surface in open hole at a logging speed not to exceed 30 feet per minute.

RECEIVED

APR 17 1978

OIL CONSERVATION COMM.  
HOBBS, N. M.