



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Conservation Division
P. O. Box 26124
Albuquerque, New Mexico 87125

JUN 6 1 1978

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

Dear Mr. Krug:

Your Application for Permit to Drill well No. 2 Bass in the SE 1/4 SW 1/4 sec. 21, T. 20 S., R. 34 E., Lea County, New Mexico, lease LC 070315, 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,

(ORIG. SGD.) JAMES W. SUTHERLAND

AREA OIL AND GAS ENGINEER, SRMA

Enclosure

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



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Conservation Division
P. O. Box 26124
Albuquerque, New Mexico 87125

JUN 5 1978

Walter W. Krug
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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.

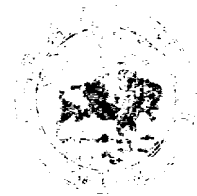
Sincerely yours,

(ORIG. SGD.) JAMES W. SUTHERLAND

AREA OIL / O. GAS SURVEYOR, SGMA

Enclosure

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



THE
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CHICAGO, ILL. 60637

1968

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

Box 1960, Midland, Texas 79702

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

At surface

1650 FWL & 330 FSL

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.

4400'

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 3675

22. APPROX. DATE WORK WILL START*

6/15/78

23.

PROPOSED CASING AND CEMENTING PROGRAM

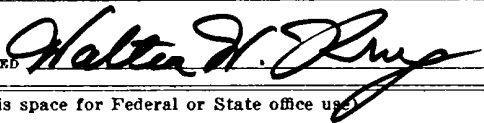
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15 1/2"	13 3/8"	72#	225	300 Sxs Class "C" CIRCULATE
12 1/2"	10 3/4"	48#	750	Mudded in
10"	8 5/8"	32#	1200	Mudded in
8"	7"	23#	3300	1000 Sxs Class "C" w/ 2% Gel & 1/4# flocele/Sx. CIRCULATE
Liner 6 1/4"	4 1/2"	10 1/2#	3650'	50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

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



TITLE

Engineer

DATE

3/10/78

(This space for Federal or State office use)

PERMIT NO.

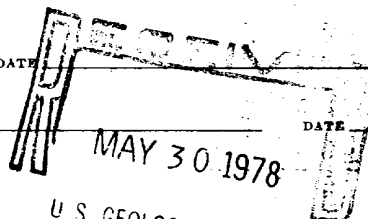
APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:



*See Instructions On Reverse Side

NEI 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 WALLEN PRODUCTION CO.		Lease FEDERAL <i>Bass</i>		Well No. # 2
Unit Letter "N"	Section 21	Township 20 -S	Range -34-E	County LEA
Actual Footage Location of Well: 330 feet from the SOUTH line and 1650 feet from the WEST line				
Ground Level Elev. 3675	Producing Formation YATES & SEVEN RIVERS	Pool MIDDLE LYNCH UNDESIGNATED YATES SEVEN RIVERS	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 *Halter H. King*
Position *Engineer*

Company *Wallen Prod. Co.*

Date *3/14/78*

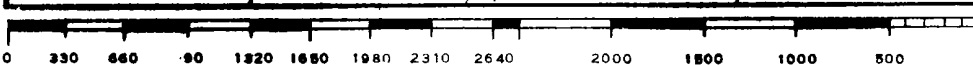
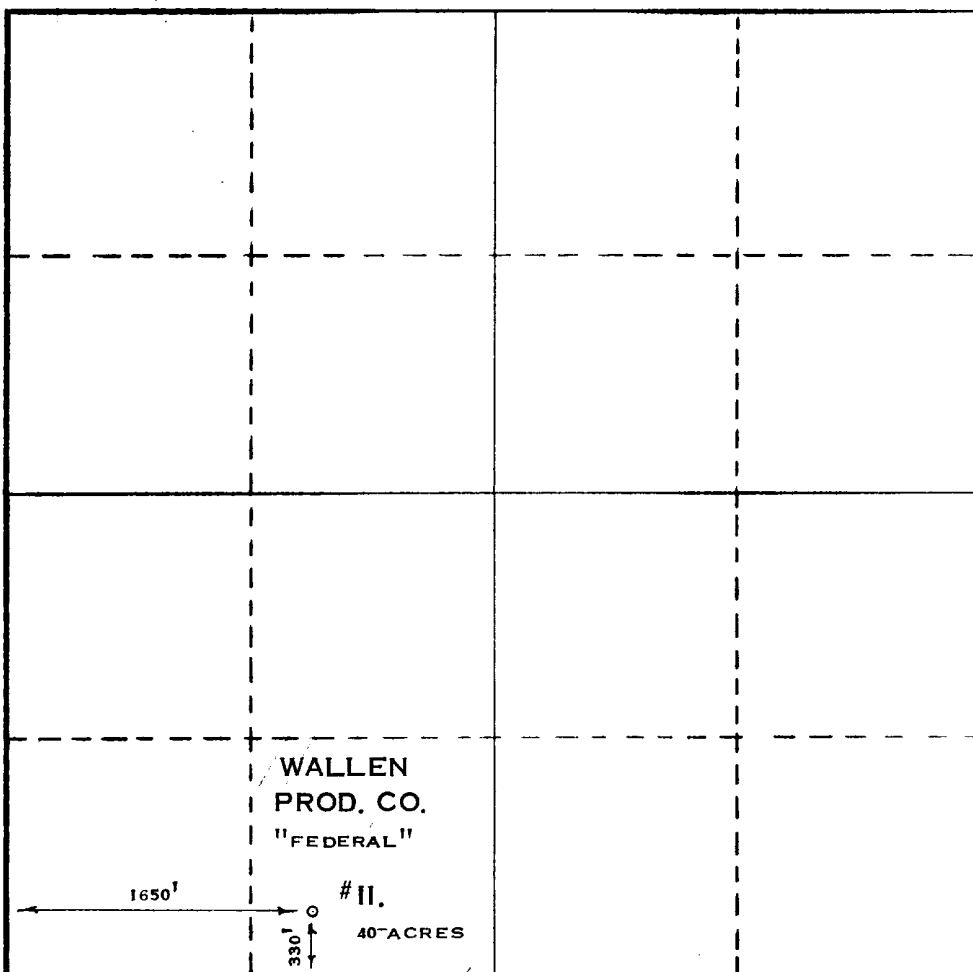
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
MARCH 7, 1978

Registered Professional Engineer
and/or Land Surveyor

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

Certificate No.
1510



Buss 2

1. Geologic name of the surface where the ~~Federal~~ # *H* 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

Burr 2
~~Wallen Federal #11~~ Well
165' 0" FWL and 330' FSL
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.
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

Plat # 1 shows all roads within 3 miles or more.
Planned entrance is staked and road will be
330' 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

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

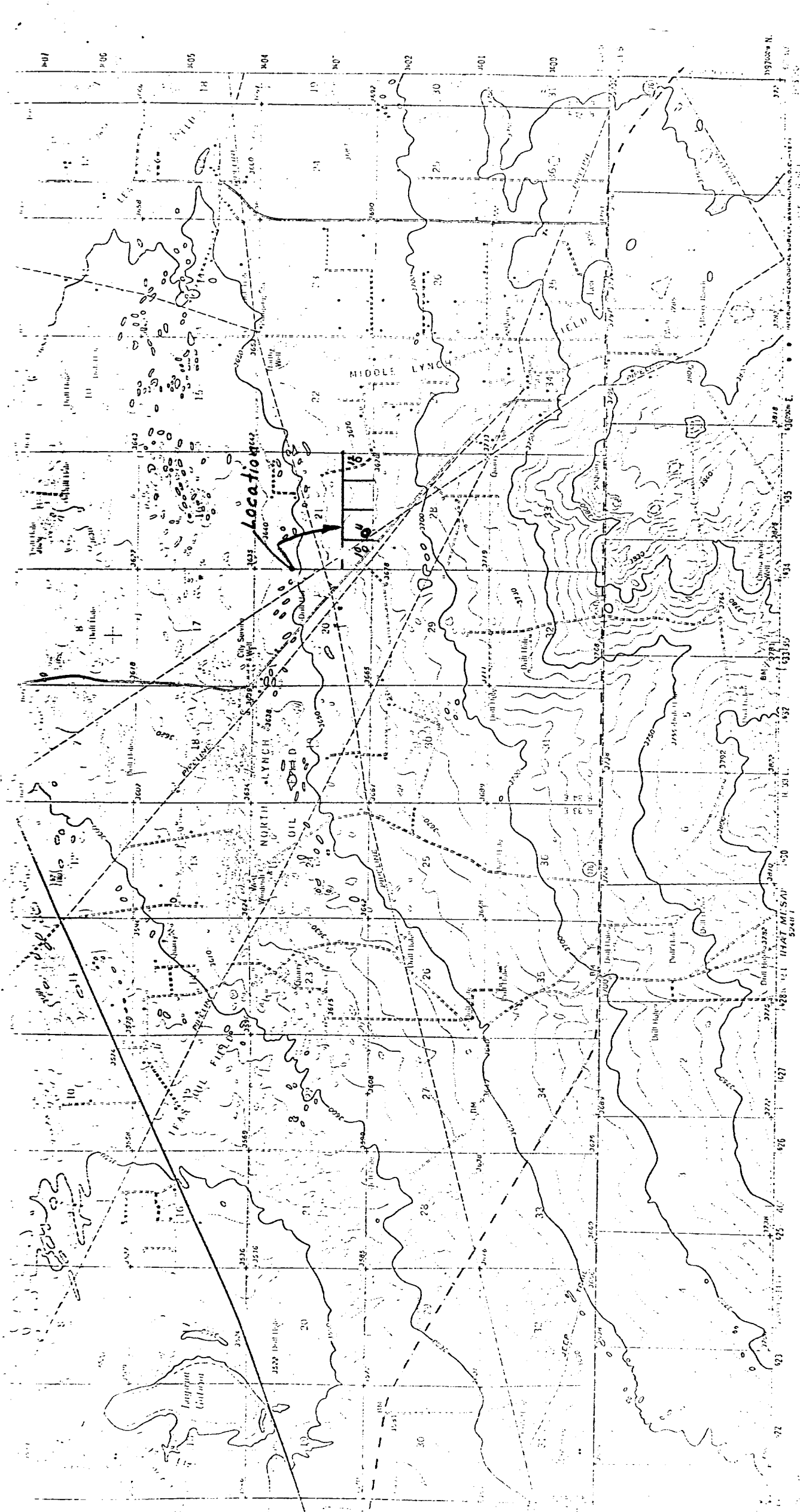
Our water is hauled by commercial haulers.

9. ARCHAEOLOGICAL RESOURCES

None in the surrounding area.

10. RESTORATION OF SURFACE

Should the well be productive the pit will be
back filled as soon as practical.



ROAD CLASSIFICATION

Heavy duty ——— Light duty ······
Medium duty - - - - - Unimproved dirt - · - · -
U.S. Route ——— State Route ———

NEW MEXICO

SCALE 1:62500

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000 21000 22000 23000 24000 25000 26000 27000 28000 29000 30000 31000 32000 33000 34000 35000 36000 37000 38000 39000 40000 41000 42000 43000 44000 45000 46000 47000 48000 49000 50000 51000 52000 53000 54000 55000 56000 57000 58000 59000 60000 61000 62000 63000 64000 65000 66000 67000 68000 69000 70000 71000 72000 73000 74000 75000 76000 77000 78000 79000 80000 81000 82000 83000 84000 85000 86000 87000 88000 89000 90000 91000 92000 93000 94000 95000 96000 97000 98000 99000 100000

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

CONTOUR INTERVAL 10 FEET
DATUM IS NAD 83 (1983)

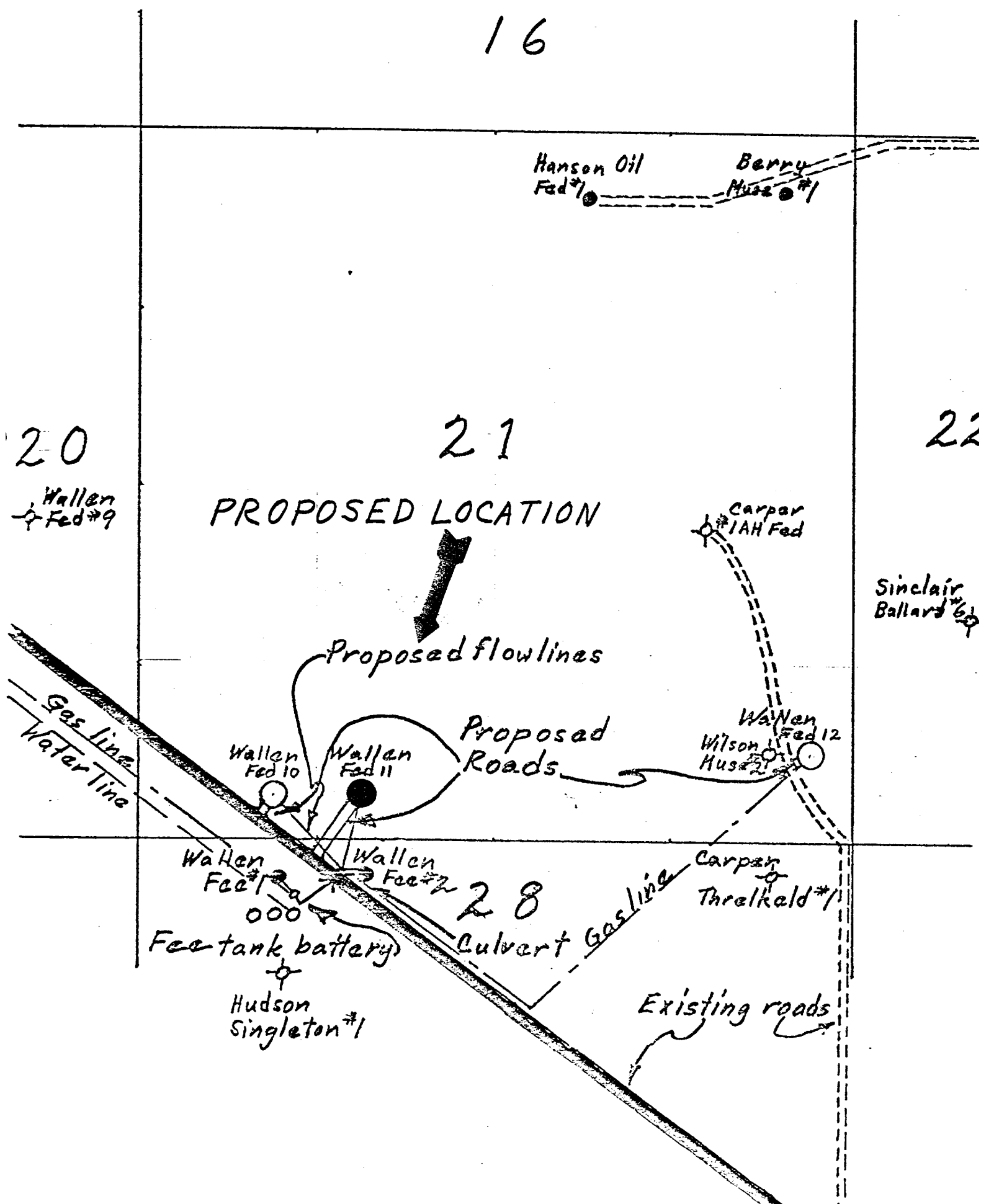
UTM GRID AND 1972 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

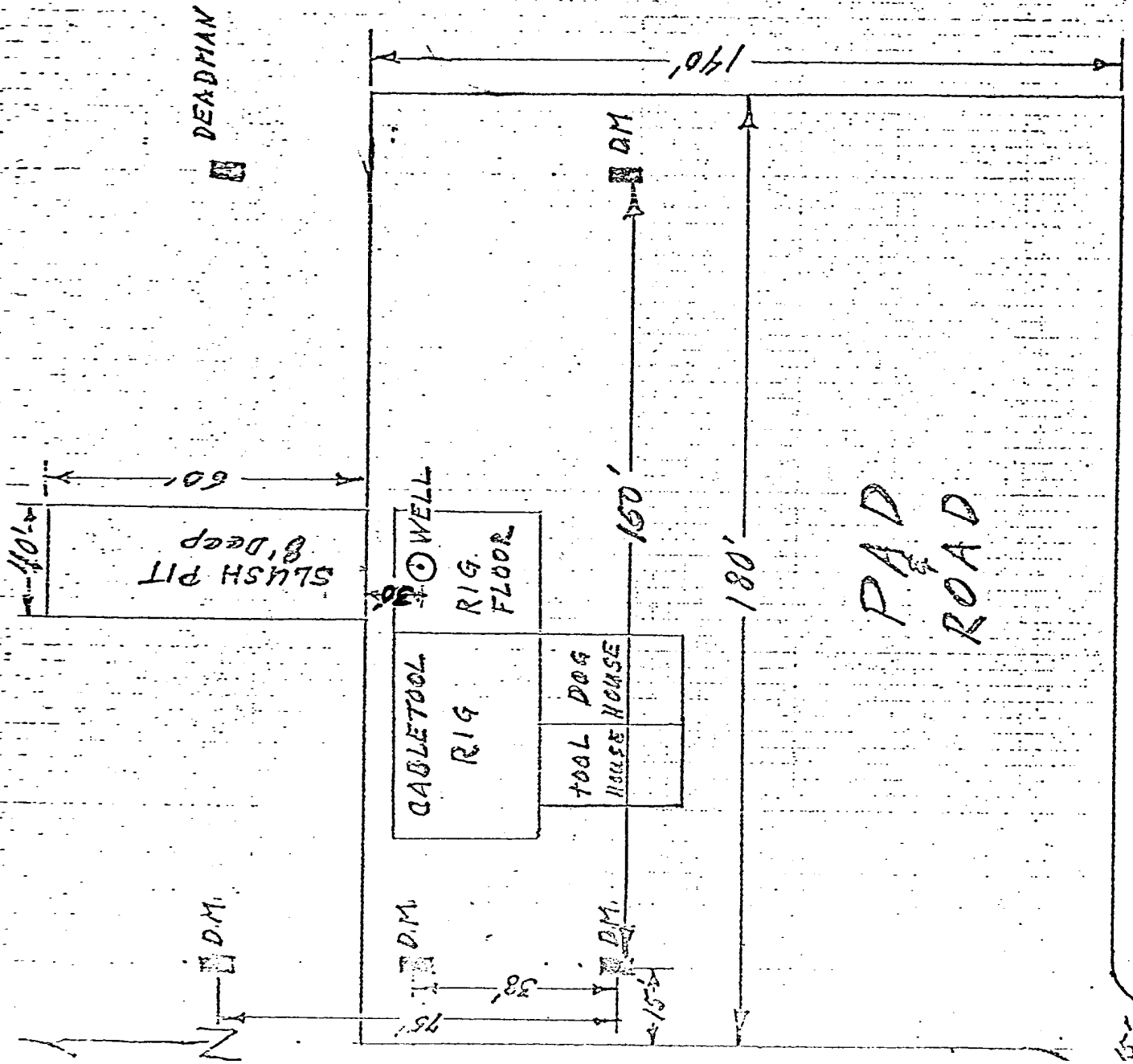
[illegible]

WALLEN PRODUCTION CO. - FED #11

SW/4, SE/4, SW/4, Sec. 20, T20S, R34E

LEA COUNTY, NEW MEXICO





CALICHE PADROAD
8" Mat Compacted

DEADMAN

7" Pipe, 6' Long

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

1" = 30'

AGREEMENT

██████████ Noranda Exploration, Inc have no objection to Walter W. Krug, DBA Wallen Production Co's casing program on a well located in 1650 FWL and 330 FSL 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

Walter W. Krug dba Wallen Prod. Co.
No. 2 Bass
SE $\frac{1}{4}$ SW $\frac{1}{4}$
Lea County, New Mexico

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". (Reseeding of the affected areas may be required at the discretion of the BLM authorized officer).

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.

8. 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.
9. 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.

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

Box 1960, Midland, Texas 79702

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

At surface

1650 FWL & 330 FSL

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 drig. unit line, if any)

330'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

4400'

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 3675

22. APPROX. DATE WORK WILL START*

6/15/78

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" CIRCULATE
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/ 2% Gel & 1/4# flocele/Sx CIRCULATE
Liner 6 1/4"	4 1/2"	10 1/2#	3650'	50 Sxs Class "C" w/1/4# flocele/Sx.

SEE ATTACHED
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

MAY 30 1978 DATE

CONDITIONS OF APPROVAL, IF ANY:

U.S. GEOLOGICAL SURVEY
ALBUQUERQUE, NEW MEXICO

*See Instructions On Reverse Side

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 WALLEN PRODUCTION CO.		Lease FEDERAL <i>Burn</i>		Well No. #2
Unit Letter "N"	Section 21	Township 20-S	Range -34-E	County LEA
Actual Footage Location of Well: 330 feet from the SOUTH line and 1650 feet from the WEST line				
Ground Level Elev. 3675	Producing Formation YATES & SEVEN RIVERS	Pool MIDDLE LYNCH UNDESIGNATED YATES SEVEN RIVERS	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

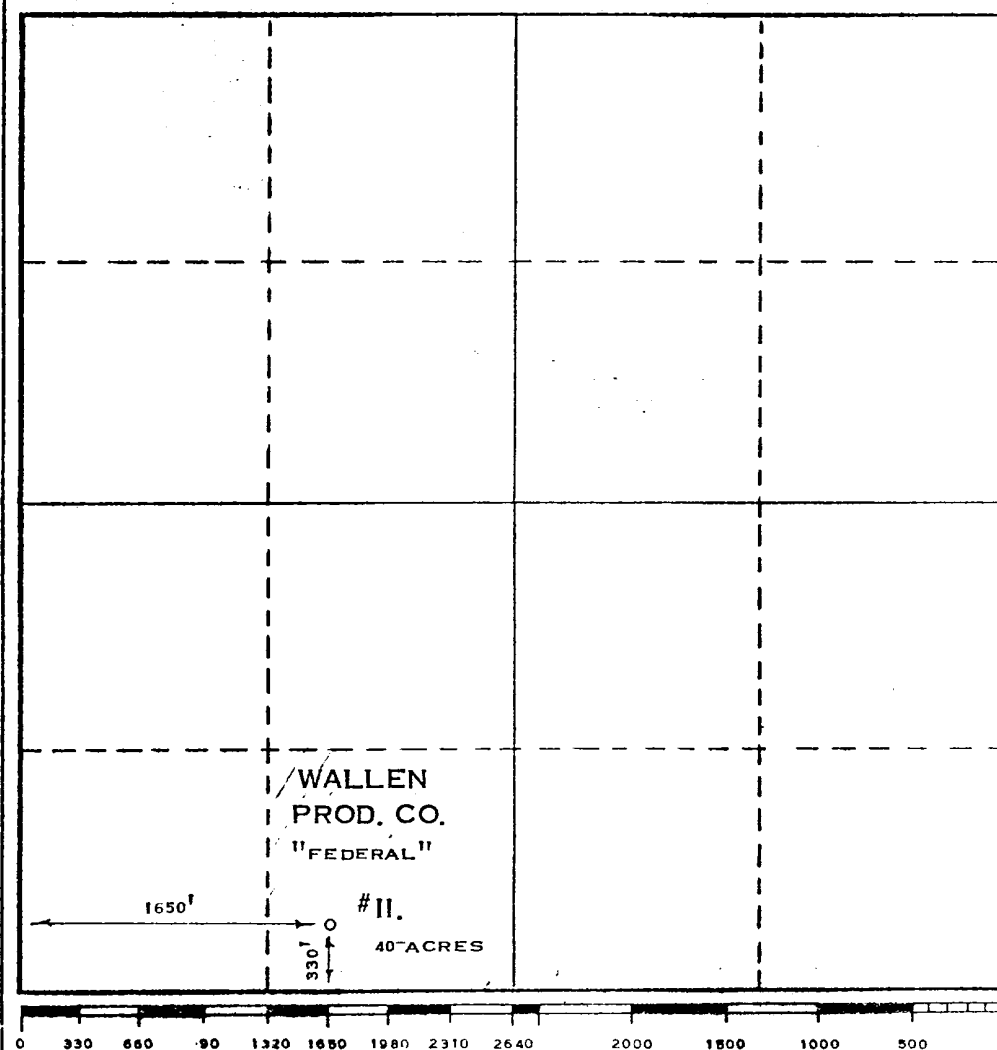
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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	<i>Walter H. Krueger</i>
Position	<i>Engineer</i>
Company	<i>Wallen Prod. Co.</i>
Date	<i>3/14/78</i>
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	<i>Max A. Schumann Jr.</i> MAX A. SCHUMANN JR.
Certificate No.	1510

REQUIREMENTS OF N T L -6

1. Geologic name of the surface where the ^{Buss 2}~~Federal~~ #H 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

Burr ²
~~Wallen Federal #11~~ Well
1650' FWL and 330 FSL
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.

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

Plat # 1 shows all roads within 3 miles or more.
Planned entrance is staked and road will be
330' 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

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

None in the surrounding area.

10. RESTORATION OF SURFACE

Should the well be productive the pit will be
back filled as soon as practical.

11. OPERATORS REPRESENTATIVE

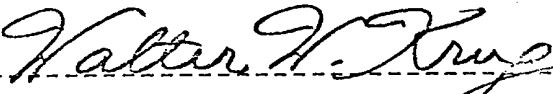
Walter W. Krug
P. O. Box 1960
Midland, Texas 79701

office phone	ac 915- 683-2600
	ac 915- 683-6576
home phone	ac 915- 563-0048

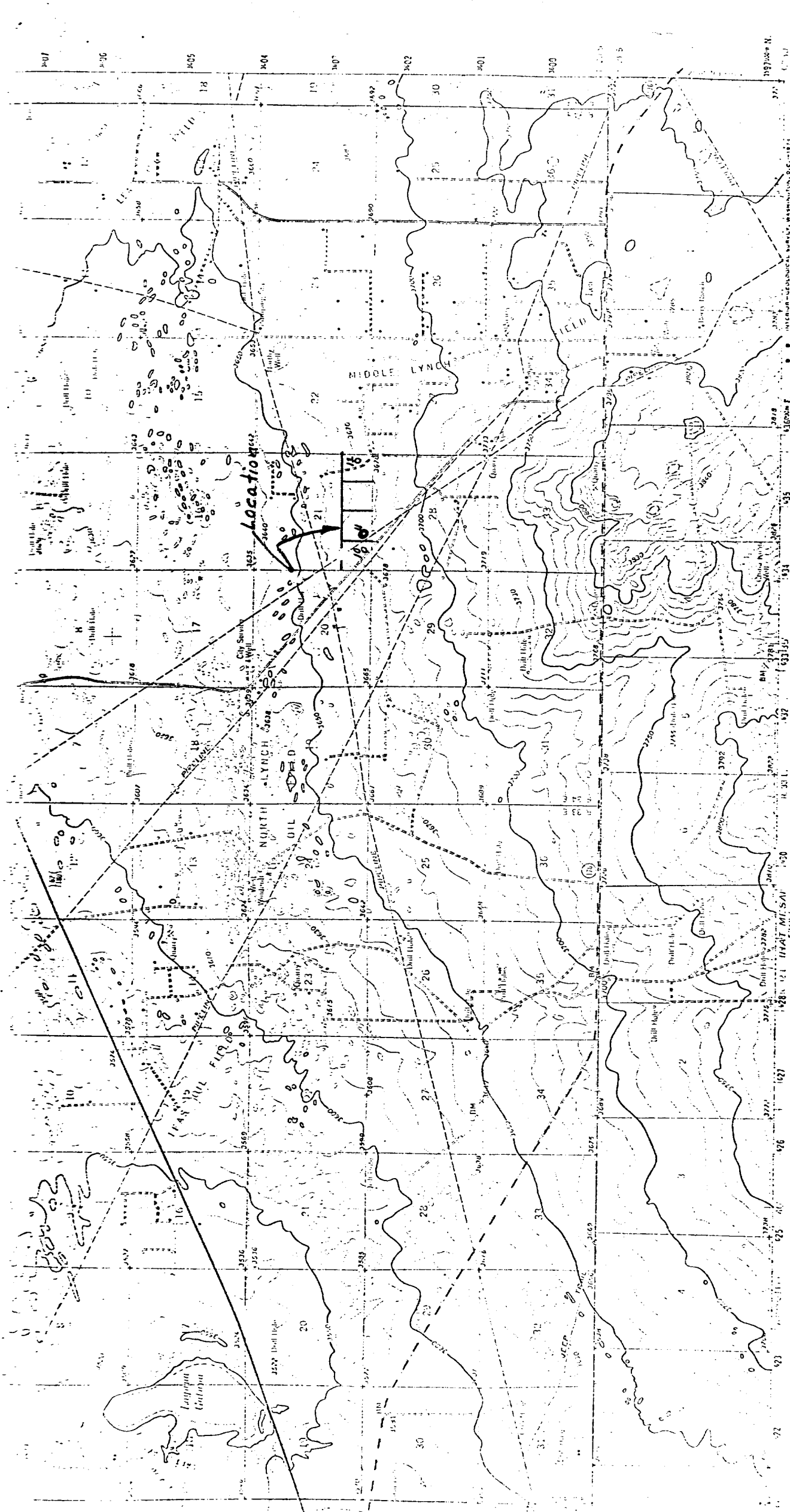
12. CERTIFICATION

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



Walter W. Krug
Engineer and authorized agent



ROAD CLASSIFICATION

Heavy duty	Light duty
Medium duty	Unimproved dirt
U.S. Route	State Route

SCALE 1:62,500

0 1 2 3 4 MILES

0 1 2 3 4 KILOMETERS

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

UTM GRID AND 1972 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

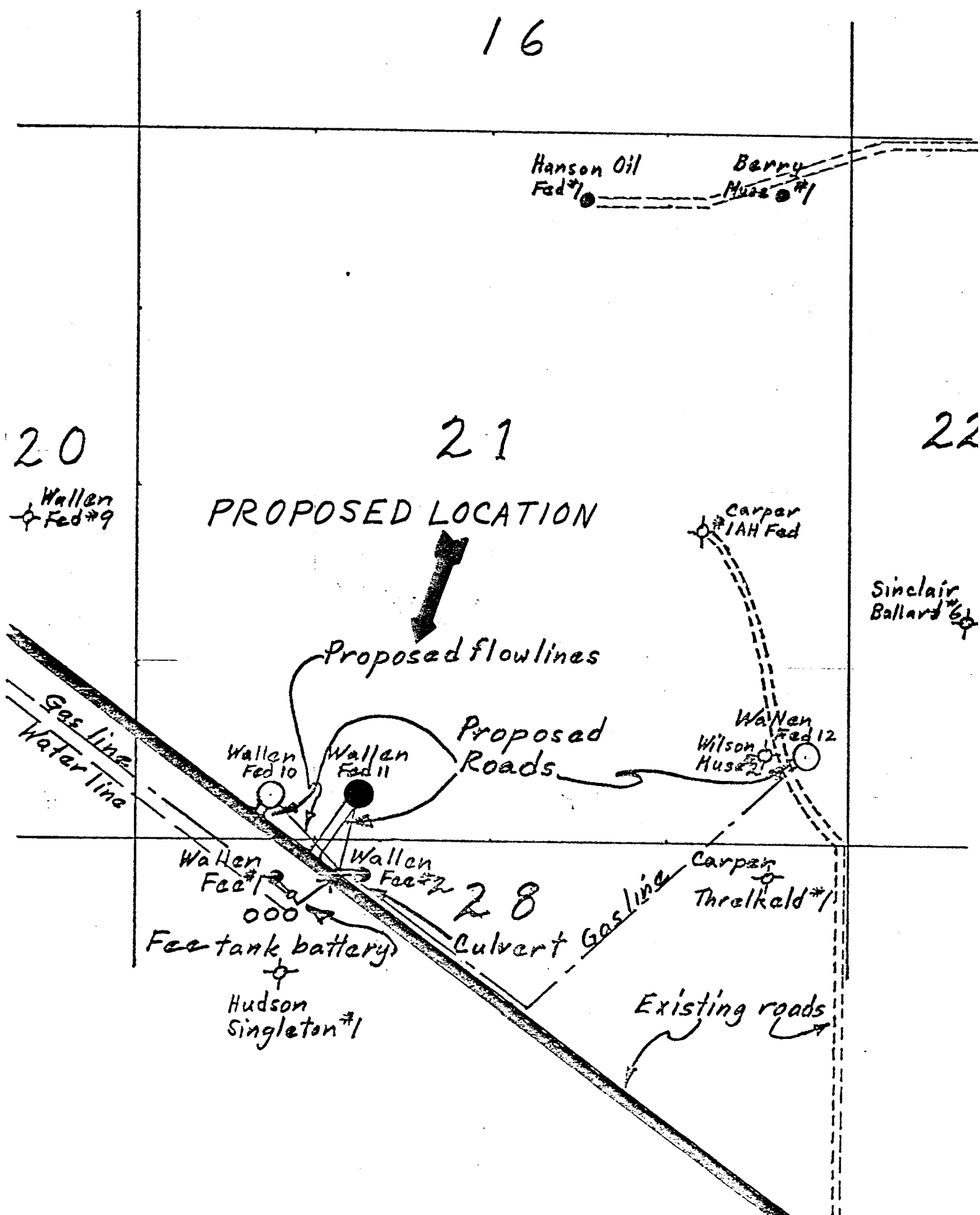
0°42' 13"N
11° 15'W

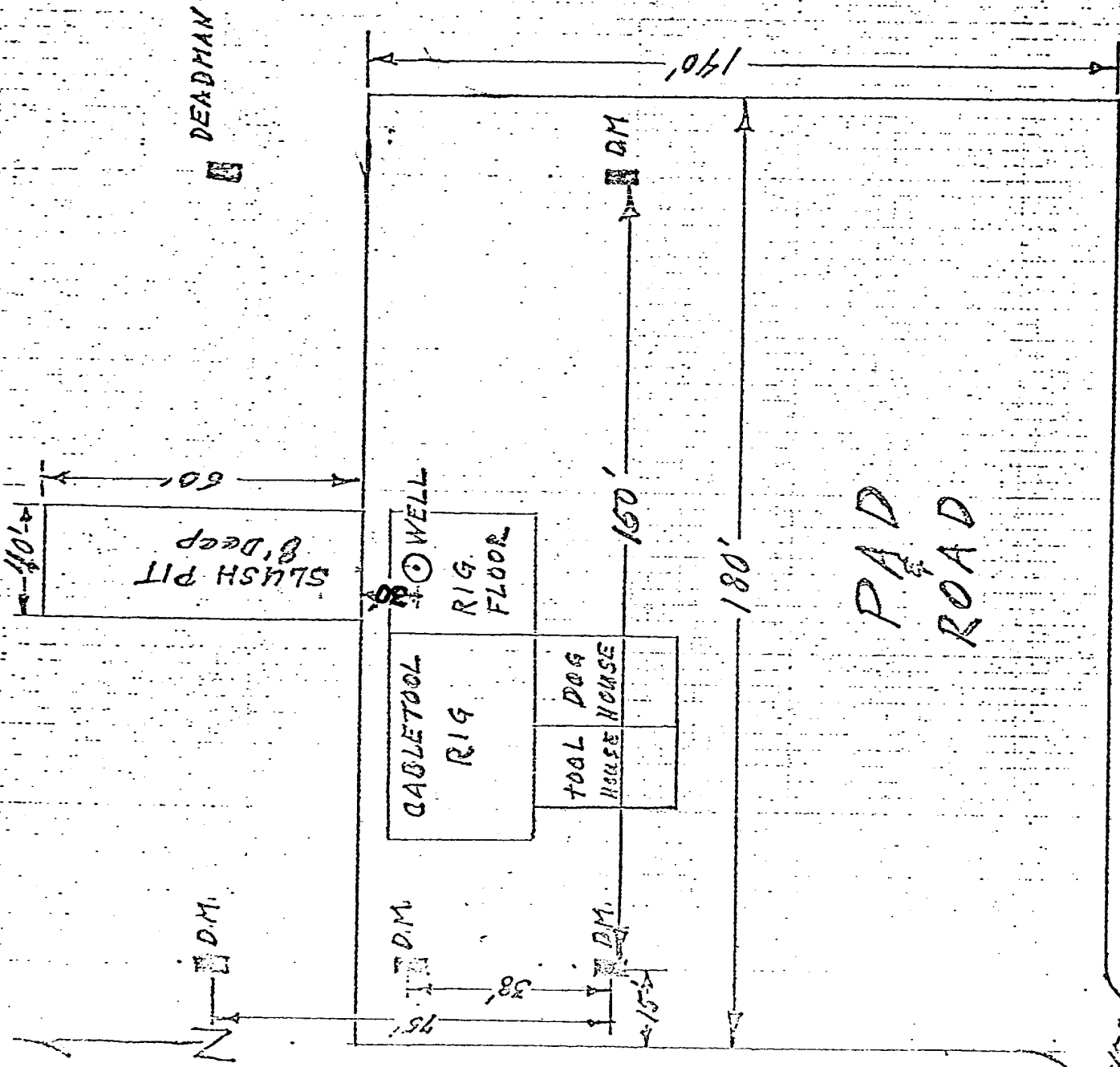
NEW MEXICO

LOCATION OF LOCATION

[illegible]

WALLEN PRODUCTION CO. - FED #11
SW/4, SE/4, SW/4, Sec. 20, T20S, R34E
LEA COUNTY, NEW MEXICO





CALICHE PAD ROAD
8" Mat Compacted

DEADMAN

7" Pipe, 6' Long

6' Deep (or Umbrella 14" anchors 8' deep)

1" = 30'

AGREEMENT

████████████████████ Noranda Exploration, Inc have no objection to Walter W. Krug, DBA Wallen Production Co's casing program on a well located in 1650 FWL and 330 FSL 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

Walter W. Krug dba Wallen Prod. Co. No. 2 Bass SE $\frac{1}{4}$ SW $\frac{1}{4}$ Lea County, New Mexico Above Data Required on Well Sign
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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". (Reseeding of the affected areas may be required at the discretion of the BLM authorized officer).

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.

8. 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.
9. 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.