



99999999

STATE OF COLORADO
OIL & GAS CONSERVATION COMMISSION
Department of Natural Resources

RECEIVED

NOV 24 1971

APPLICATION FOR PERMIT TO USE EARTHEN PIT OIL & GAS CON. COMM.

1. CHECK ONE:

NEW PIT ☐EXISTING PIT ☒TREATMENT FACILITY ☐

OTHER

2. NAME OF OPERATOR

~~W. C. McBride, Inc.~~

KWB Oil

Mount Hope east

3. ADDRESS OF OPERATOR

230 Denver Club Building, Denver, Colorado 80202

PHONE NO.

825-2366

4. LEASE NAME

R. W. Davis

5. PRODUCING FORMATION

10" Sandstone

6. GROUND ELEVATION

4197

7. LOCATION (Report location clearly to the nearest 10 acres)

NE SE NE Sec. 29-9N-53W

8. COUNTY

Logan

9. STATE

Colorado

10. SIZE OF PIT:

LENGTH 165 FT.WIDTH 45 FT.DEPTH 6 FT.

11. CAPACITY

18,000 BBLS.

12. ESTIMATED INFLOW

290 BIS/DAY

13. DISPOSAL OF PIT CONTENT:

HAULED

DISPOSAL WELL

EVAPORATION

☒

14. MAXIMUM FLUID LEVEL ABOVE AVG. GROUND LEVEL

At Ground Level FT.

15. DRAINAGE DISTANCE IN FEET TO CLOSEST FRESH WATER POND, STREAM OR LAKE

6,000 FT.

16. SUBSOIL TYPE

Clay

17. TYPE OF SEALING MATERIAL (Including specifications and Method of Application)

None

18. ADDITIONAL INFORMATION (By attachment include detailed plan of operation, chemical analysis of produced water, necessary maps, logs and other information as may be required by Rules 325 and 326 of the Rules and Regulations of the Oil and Gas Conservation Commission.)

19. I HEREBY CERTIFY THAT THE FOREGOING IS TRUE AND CORRECT

SIGNED

David PaoliTITLE Production Supt.DATE 11-19-71

David Paoli

THIS SPACE FOR COMMISSION USE

APPROVED BY

Mr. Rogers

TITLE

DIRECTOR
O & G CON. COMM.DATE MAR 21 1973

CONDITIONS OF APPROVAL, IF ANY:



00684654

116324

MEMORANDUM

TO: D. V. Rogers

FROM: C. G. McDowell

On September 27, 1972, I drove to the Mount Hope East Field, Logan County.

McBride-R. W. Davis lease, SE NE 29-9N-53W. One pit 45' X 45' X 6', clean, water. One pit 100' X 75' X 6', clean, water. One pit 165' X 45' X 6', clean, water. TDS 11,492 per test "O" Sand. Some water wells in the area. Nearest creek approximately $\frac{1}{2}$ mile west. No alluvium. White River on surface. Top of Pierre Shale approximately 50'. Recommend pits be lined or sealed.

10/3/74, GCH:

1 - Skim pit, 10' x 6', wire screen cover, 100% oil

Pit 1 - ~ 75x85, shallow, unlined, uncovered, clean water in bottom, no oil.

Pit 2 - ~ 40x50, unlined, uncovered, shallow, 5% chemical scum, 95% clean water. Very slight oil rainbow with chem. scum.

Pit 3 - 40x75, unlined, uncovered, shallow, all clean water, no oil.

(Pits 2 & 3 seem to be the active pits. Pit 1 is separated & appears to be a standby)

STATE OF COLORADO
DEPARTMENT OF NATURAL RESOURCES
OIL AND GAS CONSERVATION COMMISSION
Room 237 Columbine Building
1845 Sherman Street
Denver, Colorado 80203

McBride - R.W. Davis

Gentlemen:

1st
~~On~~ *1972* *sent 2/14/73* a field inspection was made of the retaining pits at the above described lease. Your application, For Permit To Use Earthen Pit, OGCC Form 15 (cannot be approved) (approval is rescinded) because certain requirements of the rules and regulations must be met as checked below.

1. ☐ Removal of the oil accumulation on the surface of the produced water in the pit and maintenance of an oil-free pit in the future. (Rule 326)
2. ☐ Construction of a small skim pit or skimming facility to maintain an oil-free retaining pit. (Rule 325)
3. ☒ Underlying soil conditions require the retaining pit to be sealed or lined to prevent seepage. (Rule 326)
4. ☐ Other. _____

You are hereby given 60 days from receipt of this notice to correct the deficiencies or make application to this Commission for a hearing on the matter.

Very truly yours,

D. V. Rogers
Douglas V. Rogers
Director



RECEIVED

NOV 24 1971

COLD OIL & GAS CONS. COMM.

ROCKY MOUNTAIN TECHNOLOGY, INC.

490 Orchard Street, Golden, Colorado 80401 • 303 279-4527

WATER ANALYSIS REPORT

Operator: W.C. McBride, Inc.

Date: November 5, 1971

Sample: W.C. Mc Bride, R.W. Davis #1
Sec. 29-9N-53W, Logan County, Colo. (NE SE NE)
Treater Sample, "O" sand water produced with oil

Results are reported in parts per million
(ppm) except as indicated.

Analysis For

Calcium	35.4
Magnesium	7.8
Chloride	2775
Carbonate	40.1
Bicarbonate	1488
Sulfate	3885
Sodium	2700
pH	7.9
Resistivity (ohms)	7.3×10^1
Total Dissolved Solids	11492

Rocky Mountain Technology, Inc.

Gary C. Stebbins

Gary C. Stebbins
Project Manager



RECEIVED

NOV 24 1971

MIN. OIL & GAS CONS. COMM.

ROCKY MOUNTAIN TECHNOLOGY, INC.

490 Orchard Street, Golden, Colorado 80401 • 303 279-4527

WATER ANALYSIS REPORT

Operator: W.C. McBride, Inc.

Date: November 5, 1971

Sample: Mr. Green

Sec. 29-9N-53W (NE NW)

Logan County, Colo.

Domestic water supply

3000' Northwesterly from Davis Pit

Originally Drilled to about 200' Deep

Deepened to about 400' Deep

No log of shallow formations.

Results are reported in parts per million

Analysis For

(ppm) except as indicated.

Calcium	2.3
Magnesium	4.2
Chloride	122
Carbonate	<0.1
Bicarbonate	624
Sulfate	2.5
Sodium	263
pH	7.9
Resistivity (ohms)	7.9×10^2
Total Dissolved Solids	922

Rocky Mountain Technology, Inc.

Gary C. Stebbins

Gary C. Stebbins

Project Manager

March 16, 1973

MEMO from Douglas V. Rogers

RE: Pit Permit, W. C. McBride, Davis Lease
SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 29, T. 9 N., R. 53 W., Logan County

After a discussion with M. C. Hoffman, we decided to approve the pit permit without requiring that the pits be lined. This decision was made because the cost of lining the pits would result in the premature abandonment of the well and the loss of badly needed oil reserves. There is no evidence of pollution.

MEMORANDUM

TO: D. V. Rogers

FROM: C. G. McDowell

March 12, 1973

SUBJECT: Re-evaluation of W. C. McBride, Inc., R. W. Davis lease in the SE NE 29-9N-53W, Logan county. The area concerned is the Mount Hope East Field.

On March 9, 1973, we received a letter from W. C. McBride, objecting to the retaining pits being sealed or lined. No oil accumulation was found when I inspected on September 27, 1972. However, the 3 pits did contain produced water. The water analysis per operator had a TDS 11,492 per test "O" Sand, which exceeds the safety tolerance for human and most domestic animal consumption and is also unfit for most crops. The estimated inflow to the pit is 290 barrels per day. The water is evidently seeping laterally, and the extent of the pollution would be difficult to estimate.

The nearest domestic water well lies 3,000 feet to the northwest, in the NE NW 29-9N-53W. This well was drilled to a total depth of 400 feet, has a TDS 922, but no log available. There are no registered water wells within a one mile radius.

The geology of the area is controversial. Geological Survey Water Supply Paper 1809-L shows the White River formation on the surface. The estimated thickness being 50-100 feet. Geological Survey Water Supply Paper 1378 shows the Pierre Shale with sandstone lenses on the surface.

Although there may have been no complaints from individuals concerning pollution problems, there is a favorable probability the problem will exist in the near future if past or present conditions are allowed to continue.

W. C. McBRIDE, INC.

230 Denver Club Building
DENVER, COLORADO 80202

RECEIVED

MAR 12 1973

HOME OFFICE
25 NORTH BRENTWOOD BLVD.
ST. LOUIS, MO. 63105

COLO. OIL & GAS CON. COM. 825-2366

March 9, 1973

State of Colorado
Oil & Gas Conservation Commission
1845 Sherman St. Room 237
Denver, Colorado 80203

Attention: Mr. D. V. Rogers, Director

Re: R. W. Davis
NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 29
T9N-R53W
Logan County, Colo.

Gentlemen:

This letter is written in reply to your form letter of like caption dated February 14, 1973 disallowing, after 60 days, further use of produced water retaining pits for the R. W. Davis Well No. 1 under present conditions. Future use of these pits would be allowed only if they were first sealed or lined to prevent water seepage. We do not think that sealing or lining these pits would be economically feasible for reasons given below.

R. W. Davis No. 1, the only well on the lease, was completed in September, 1963 as a dual producer pumping 57 BOPD from the "O₂" Sandstone and producing gas from the practically depleted "J" sandstone for lease operations. Production presently averages about 11 BOPD with close to 300 BOPD. The gas has been depleted from the "J", and gas is now purchased for lease operations. In 1972, oil production was 4137 barrels and cumulative production through 1972 was about 44,600 barrels. Operations were practically trouble-free during 1972 and resulted in a profit after expenses of about \$6,000 to the working interest owners. Oil production is declining at a rate of about 15 percent per year, so this well can be expected to produce profitably for about another three or four years under present conditions. Reserves based on present operating costs are about 11,000 barrels of oil.

From inspection of the ground surface in the vicinity of the Davis lease evaporation pits, we believe it is unlikely that downward seepage of water is occurring - rather, it is seeping laterally through and below the pit walls and evaporating from the surrounding soil as well as off the top of the pits. Because of the heavy precipitation in the vicinity this winter, the area surrounding the pits is unusually wet and the pits are quite full at this time. This will dry considerably in the summer and we have had no complaints from the farmer of the surrounding soil.

This is an isolated well, there being only one other well still producing in Section 29. That well is Gulf Oil Company's - Carey "B" Well No. 1, SW $\frac{1}{4}$ SE $\frac{1}{4}$, which still produces from the "D" sandstone. Therefore, there are no wells in

State of Colorado
March 9, 1973

the vicinity that potentially could be used for subsurface disposal of water.

In our opinion, there are three possible alternatives for the R. W. Davis lease regarding this produced water.

1. To be allowed to continue producing this property as is to economic limit followed by abandonment and clean-up of the land. This, of course, would be our choice because it would result in recovery of the most oil and at the highest profit before abandonment.

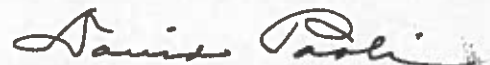
2. Sub-surface disposal of the "O₂" water into the depleted "J" sandstone with packer set between the two. This would entail an unknown expenditure of funds because the rate of imbibing of water by the "J" sandstone is unknown and could lead to the necessity of hydraulic fracturing and/or disposing of water under pressure. This property obviously could not support any large expenditure that might be required for treating and equipping.

3. Shutting down of the Davis Well No.1 at the expiration of the 60-day time limitation and abandonment of the property when weather permits. This would result in leaving the remaining oil reserves in the ground, and drilling for this relatively small amount of oil at some future time could probably never be justified because of economic factors.

If we can be of any further assistance in providing you with additional information or in clarifying anything in this letter, please advise.

Very truly yours,

W. C. McBRIDE, INC.



David Paoli, Prod. Supt.

NWE:pm

cc: St. Louis Office
cc: Stuarco Oil Co.

MEMORANDUM

TO: D. V. Rogers

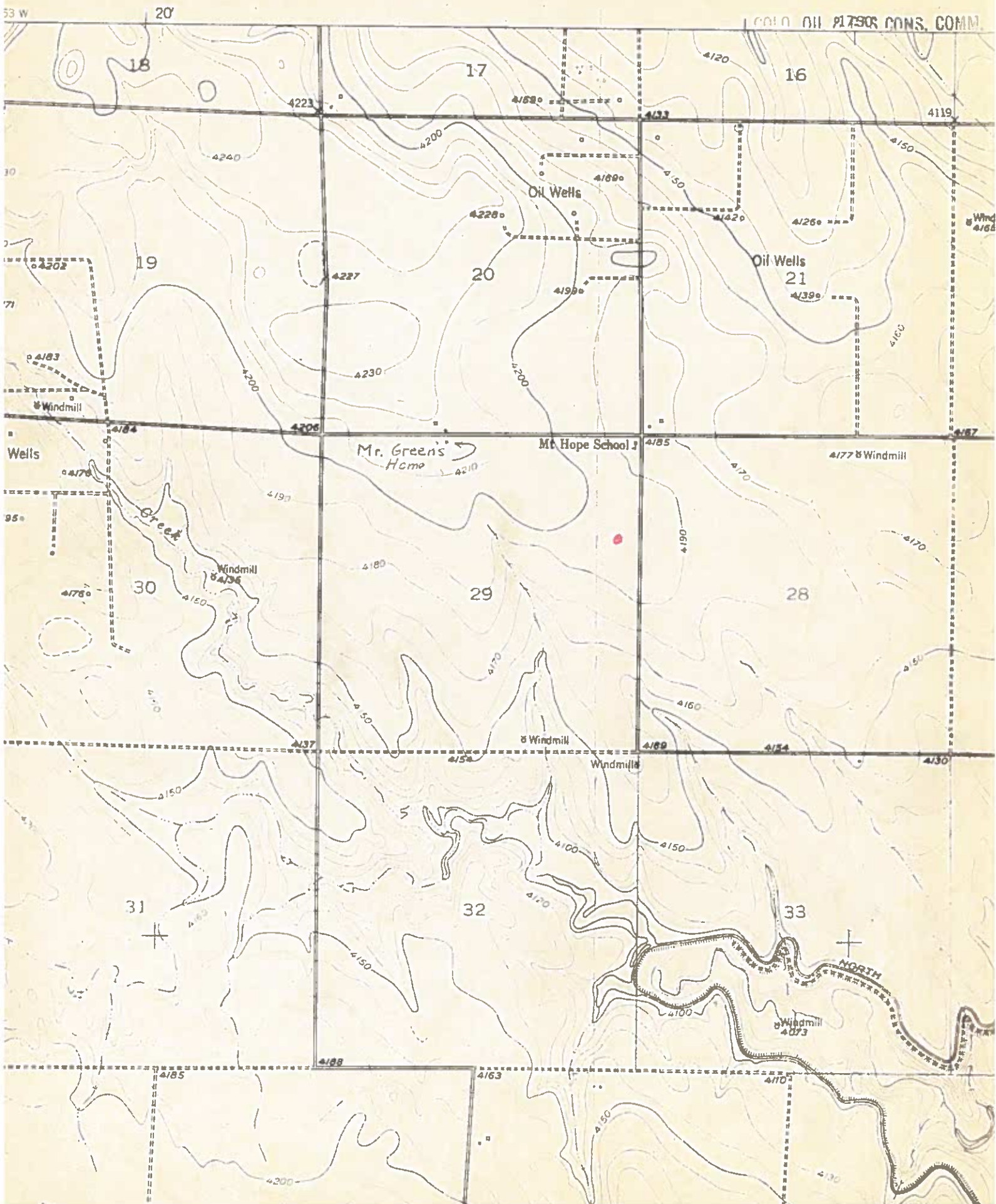
FROM: C. G. McDowell

On September 27, 1972, I drove to the Mount Hope East Field, Logan County.

McBride-R. W. Davis lease, SE NE 29-9N-53W. One pit 45' X 45' X 6', clean, water. One pit 100' X 75' X 6', clean, water. One pit 165' X 45' X 6', clean, water. TDS 11,492 per test "O" Sand. Some water wells in the area. Nearest creek approximately $\frac{1}{4}$ mile west. No alluvium. White River on surface. Top of Pierre Shale approximately 50'. Recommend pits be lined or sealed.

*May 11, 1974, 9264: 1- skim pit 8'sq., wire screen cover, 100% oil
Pit 1 - ~ 75'sq., uncovered, all clean water, no oil
Pit 2 - ~ 30x40, uncovered, all clean water, no oil
Pit 3 - ~ 30x100, uncovered, all clean water, no oil*

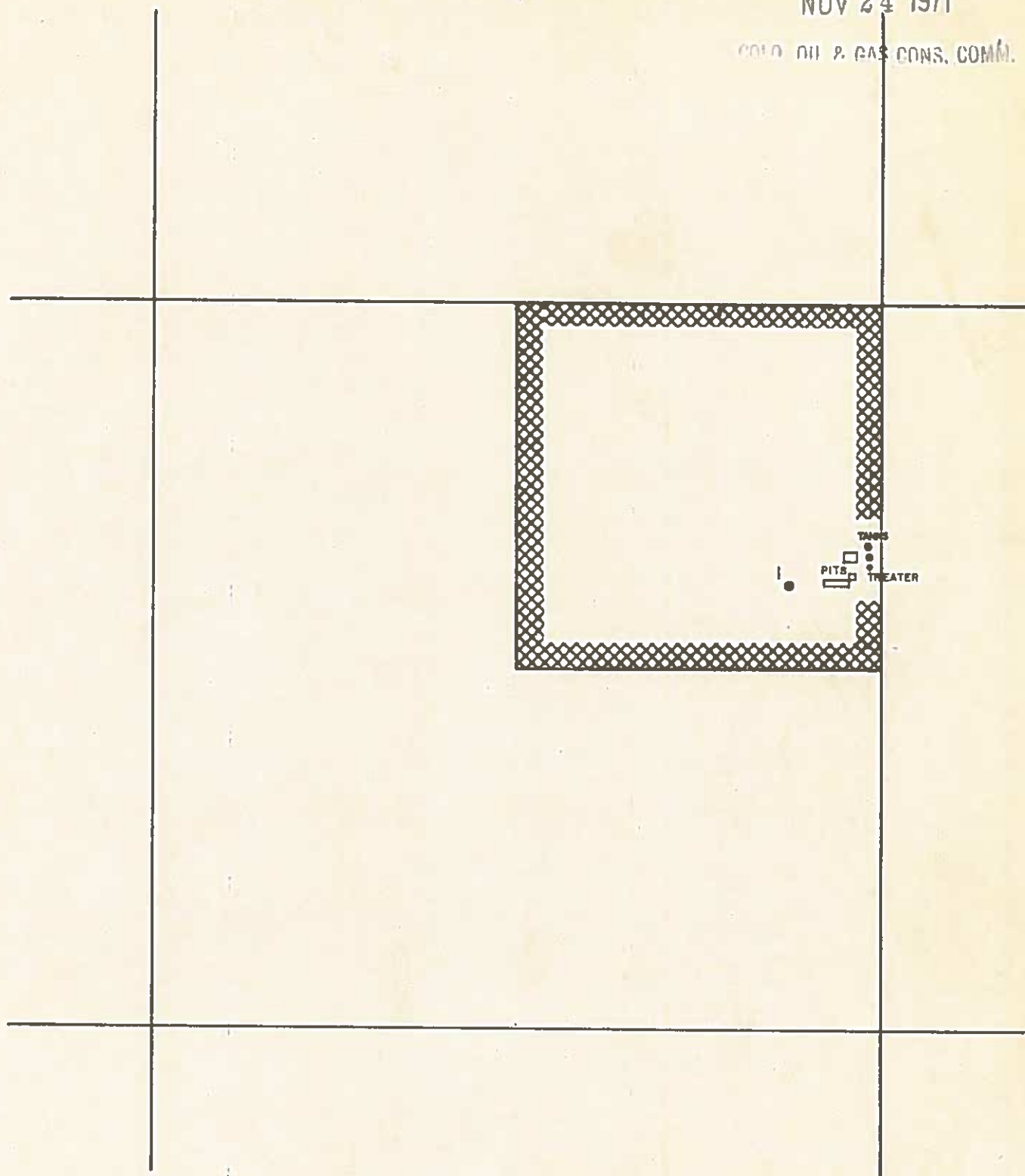
T9N-R53W RECEIVED
Logan County, Colo. NOV 24 1971



RECEIVED

NOV 24 1971

COLD OIL & GAS CONS. COMM.



Scale 1" = 1 mile



Company W.C. McBRIDE INC.
Lease Name: R.W. Davis
Location: Sec. 29- T9N-R53 W
County: Logan
State: COLORADO