

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

30-039-20800  
5. LEASE DESIGNATION AND SERIAL NO.

NM - 4452

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

SCHALK - 52

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

Undesignated  
PICTURED CLIFFS11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

SEC 24, T-29N, R-5W

12. COUNTY OR PARISH

13. STATE

RIO ARRIBA NEW MEXICO

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

LONE STAR INDUSTRIES, INC. C/O JOHN E. SCHALK

3. ADDRESS OF OPERATOR

P.O. BOX 2078, FARMINGTON, NEW MEXICO 87401

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

At surface

2058' FROM THE SOUTH LINE, 1312' FROM THE EAST LINE

At proposed prod. zone

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

40 MILES EAST OF BLOOMFIELD, NEW MEXICO

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

1312'

16. NO. OF ACRES IN LEASE

548.52

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

114.26 114.31

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

1/2 MILE

19. PROPOSED DEPTH

3700'

20. ROTARY OR CABLE TOOL

ROTARY

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

6508' GR

22. APPROX. DATE WORK WILL START\*

DECEMBER 3, 1973

23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	250'	250 SACKS
7-7/8"	4-1/2"	10.5#	3700'	300 SACKS

WILL DRILL WITH ROTARY TOOLS TO TEST THE PICTURED CLIFFS  
FORMATION. WILL RUN AN INDUCTION LOG AND FORMATION DENSITY  
CALIPER GAMMA LOG AT TOTAL DEPTH. IF PRODUCTIVE, WILL  
CEMENT 4-1/2" CASING AND PERFORATE AS NEEDED.

## ESTIMATED TOPS

OJO ALAMO	-	2598'
KIRTLAND	-	2838'
FRUITLAND	-	3185'
PICTURED CLIFFS	-	3453'
TOTAL DEPTH	-	3700'

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 John E. Schalk TITLE AGENT DATE 11-30-73

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

# NEW MEXICO OIL CONSERVATION COMMISSION

## WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator <b>LONE STAR INDUSTRIES, INC.</b> <del>JOHN E. SCHALK</del>		Lease <b>SCHALK-52</b> <del>LONE STAR INDUSTRIES-SCHALK</del>		Well No. <b>4</b>
Unit Letter <b>J</b>	Section <b>24</b>	Township <b>29 NORTH</b>	Range <b>5 WEST</b>	County <b>RIO ARriba</b>
Actual Footage Location of Well: <div style="display: flex; justify-content: space-between;"> <span><del>6556</del> feet from the <b>SOUTH</b> line and</span> <span><b>1312</b> feet from the <b>EAST</b> line</span> </div>				
Ground Level Elev. <b>6508</b>	Producing Formation <b>PICTURED CLIFFS</b>	Pool <b>Undesignated</b>	Dedicated Acreage: <del>114.26</del> <b>114.31</b> 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 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 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. 1

### CERTIFICATION

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

*John E. Schalk*  
Name

**JOHN E. SCHALK**

Position

**AGENT**

Company

Date

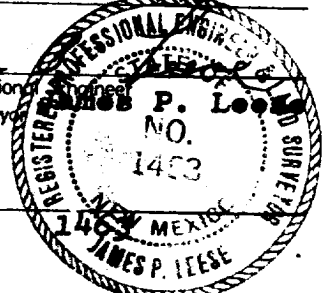
**NOVEMBER 30, 1973**

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.

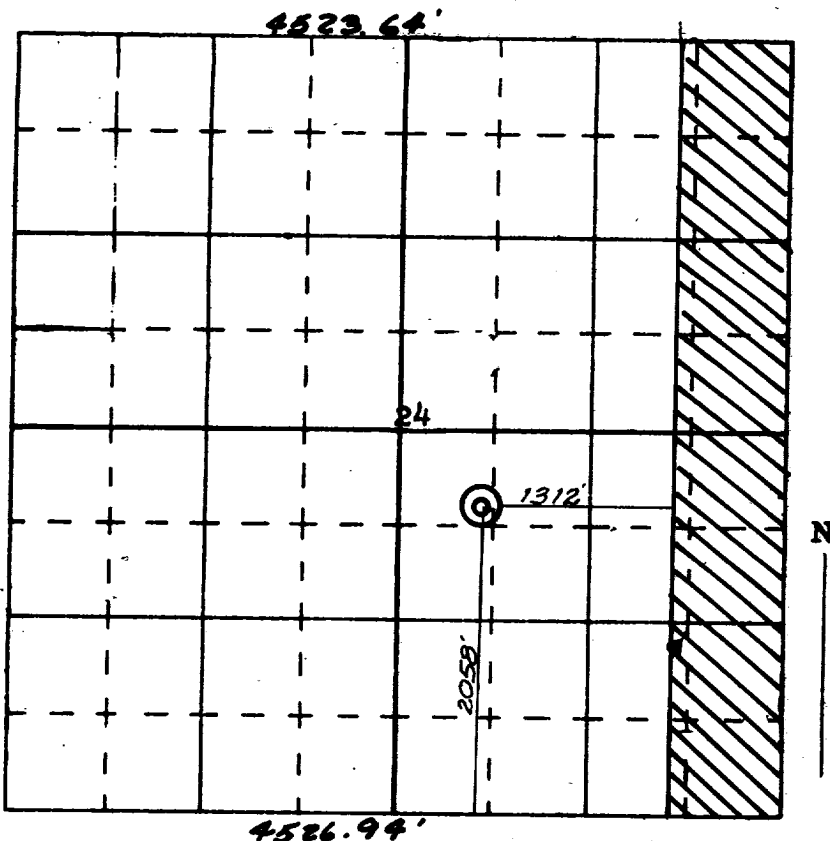
**9 October 1973**

Date Surveyed

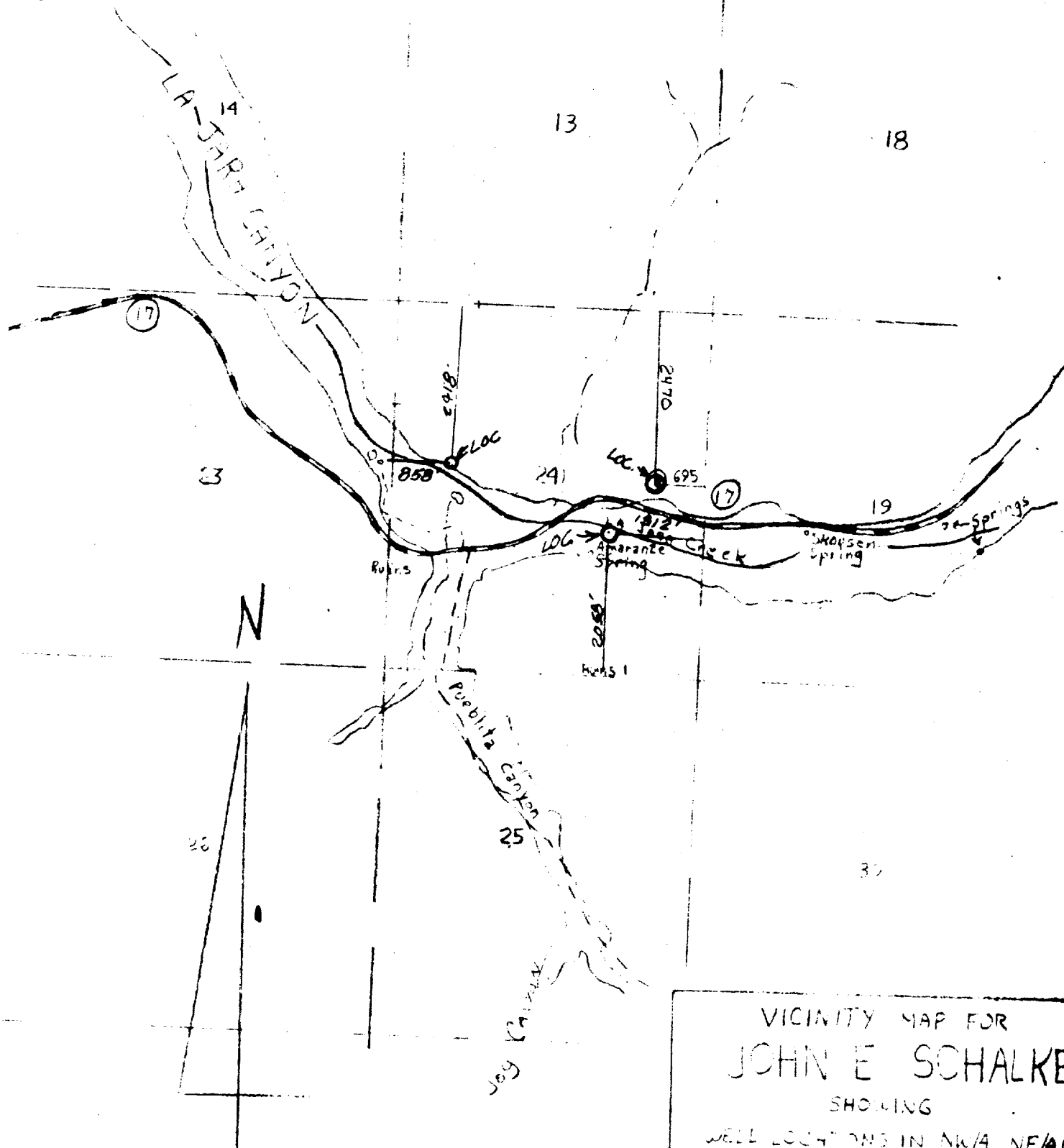
Registered Professional Engineer  
and/or Land Surveyor



Certificate No.



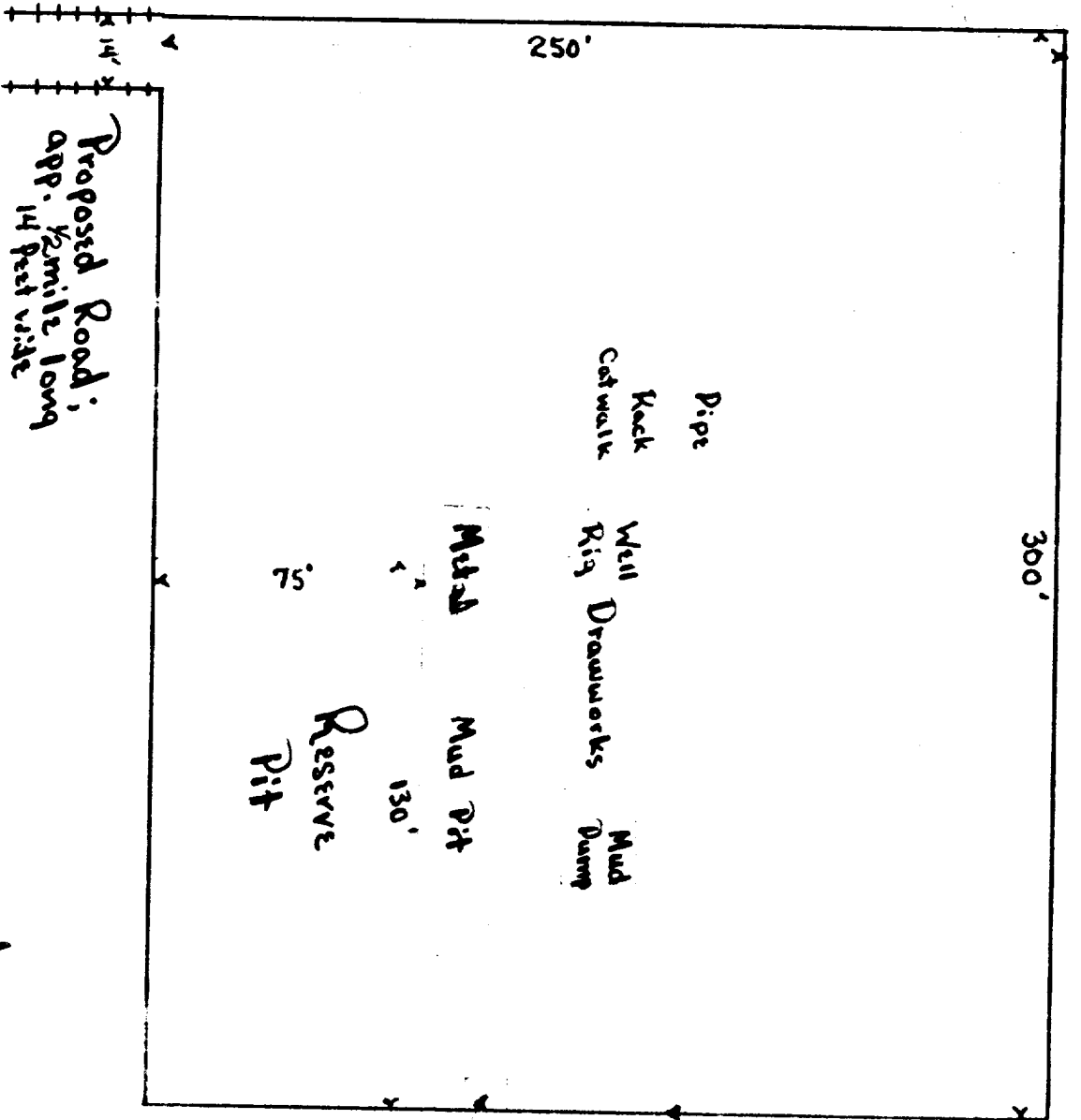
RANGE  
4  
WEST



VICINITY MAP FOR  
JOHN E SCHALKE  
SHOOTING

WELL LOCATIONS IN NW/4, NE/4,  
SE/4 OF SEC 24 T29N, R5W,  
N47M, R04PRIBA CO., N.M.  
Scale 1"=2000' DATE 1 AUG, 1973  
San Juan Co. Mapping Co.

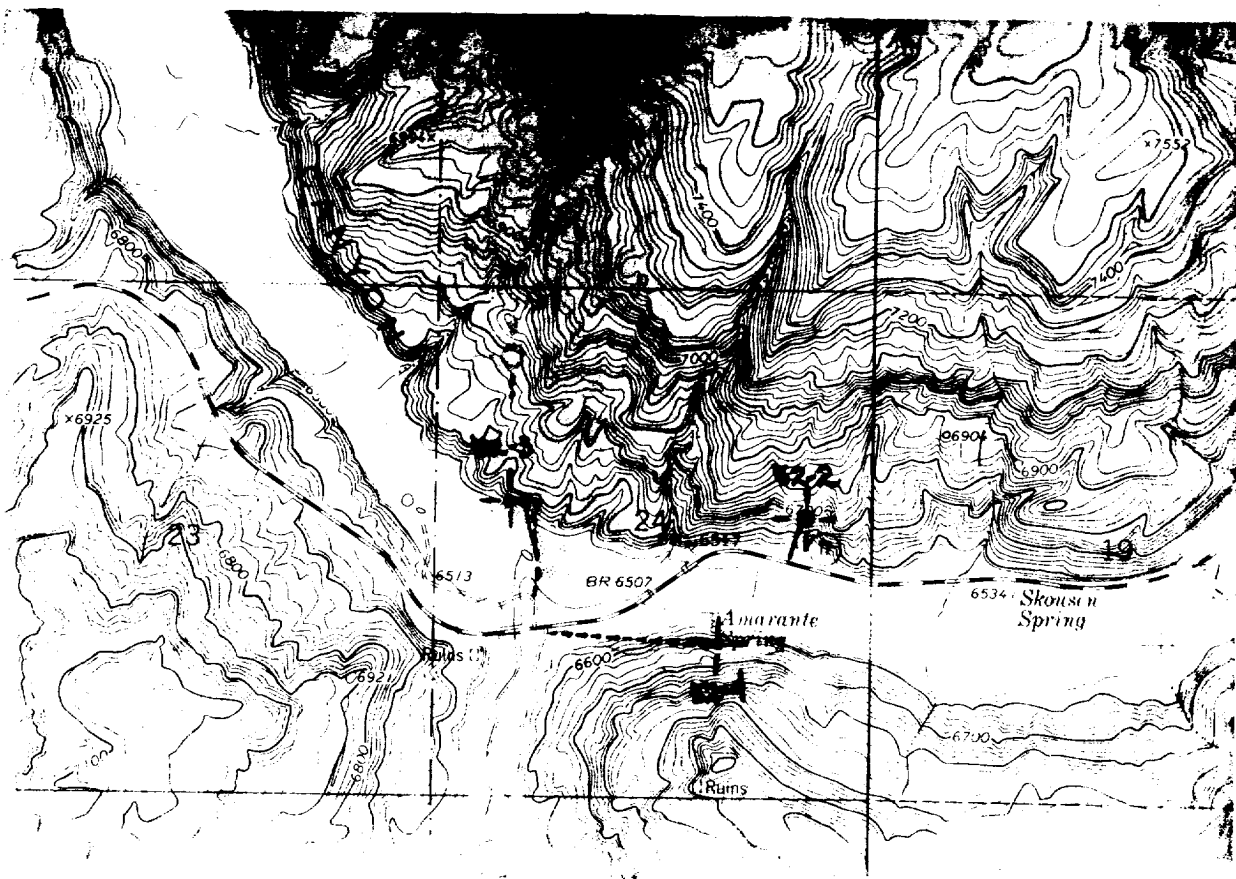
North



John E. Schalk

Lone Star Industries 82-4

Sec. 24, T29N, R5W



Proposed Road;  
 app.  $\frac{1}{2}$  mile long,  
 14 feet wide

John E. Schalk  
 Lone Star Industries 52-4  
 Sec. 24, T29N, R5W



**SPECIAL USE PERMIT**

Act of June 4, 1897

This permit is revocable and nontransferable  
(Ref. FSM 2710)

a. Record no. (1-2)	b. Region (3-4)	c. Forest (5-6)
70	03	02
d. District (7-8)	e. Use number (9-12)	f. Kind of use (13-15)
03	2724	420
g. State (16-17)	h. County (18-20)	i. Cord no. (21)
35	039	1

Permission is hereby granted to c/o John E. Schalk, Lone Star Industries

of P.O. Box 2078, Farmington, New Mexico 87401

hereinafter called the permittee, to use subject to the conditions set out below, the following described lands or improvements:

A one acre tract in the NW 1/4 SE 1/4 Section 24 and a temporary access road through the NW 1/4 SE 1/4 and the NE 1/4 SW 1/4 Section 24 T29N R5W NMPM as shown on the attached map.

This permit covers 1 acres and/or 0.2 miles and is issued for the purpose of:

1. Constructing, drilling and producing the Lone Star Schalk 52-4 gas well under terms of lease NM 4452 located 2058' FSL and 1312' FEL.
2. Constructing, using and closing an access road thereto.

1. Construction or occupancy and use under this permit shall begin within 1 months, and construction, if any, shall be completed within 12 months, from the date of the permit. This use shall be actually exercised at least 365 days each year, unless otherwise authorized in writing.

2. In consideration for this use, the permittee shall pay to the Forest Service, U.S. Department of Agriculture, the sum of Free 36 CFR 251.2 Dollars (\$                     ) for the period from                      19    , to                      19    , and thereafter annually on                      Dollars (\$                     ):

*Provided, however,* Charges for this use may be made or readjusted whenever necessary to place the charges on a basis commensurate with the value of use authorized by this permit.

3. This permit is accepted subject to the conditions set forth herein, and to conditions 18 to 38 attached hereto and made a part of this permit.

PERMITTEE	NAME OF PERMITTEE <u>Lone Star Industries</u> <u>c/o John E. Schalk</u>	SIGNATURE OF AUTHORIZED OFFICER <u>[Signature]</u>	DATE <u>11/17/73</u>
ISSUING OFFICER	NAME AND SIGNATURE <u>[Signature]</u> <u>W.R. Snyder</u>	TITLE <u>Forest Supervisor</u>	DATE <u>11/16/73</u>

(CONTINUED ON REVERSE)

2700-1 (10/68)

18. As a further guarantee of the faithful performance of the provisions of the permittee's special use permits for oil and gas exploration on the Carson National Forest, the permittee has delivered and agrees to maintain a surety bond in the amount of ten thousand dollars (\$10,000.00). Should the sureties or bonds delivered under this permit become unsatisfactory to the Forest Service, the permittee shall, within thirty (30) days of demand, furnish a new bond with surety, solvent and satisfactory to the Forest Service.

The permittee agrees that all moneys deposited under these permits may, upon failure on his part to fulfill all and singular the requirements herein set forth or made a part hereof, be retained by the United States to be applied as far as may be to the satisfaction of his obligations assumed hereunder, without prejudice whatever to any other rights and remedies of the United States.

19. Chemical materials may not be used to control undesirable woody and herbaceous vegetation, insects, rodents, etc., without the prior written approval of the Forest Service. A report of planned use of pesticides will be submitted annually by the permittee on the due date established by the District Ranger. The report will cover a 12 month period of planned use beginning 3 months after the reporting date. Information essential for review will be provided in the forms specified. Exceptions to this schedule may be allowed only when unexpected outbreaks of pests require control measures which were not anticipated at the time the annual report was submitted.
20. This permit shall have no force or effect until the permittee has signified his acceptance of its provisions and conditions by signing the original and all carbon copies and returning the copies to the District Ranger.
21. A muffler or spark arrester satisfactory to the Forest Service shall be maintained on the exhausts of all trucks and tractors or other internal combustion engines used in connection with this permit.

The permittee will make arrangements to have all equipment inspected for compliance with fire requirements prior to entry onto the National Forest. In addition to an adequate muffler or spark arrester all vehicles or equipment will have a shovel. All heavy equipment and vehicles except sedans and pickups will also be equipped with a fire extinguisher.

Each drilling rig will be equipped with adequate fire extinguishers and a tool cache containing a minimum of 3 shovels and 2 axes.

22. The permittee shall save the United States harmless from and indemnified against claims for injury to persons or damages to property, due to development, operation or use under this permit.

23. All liquids and solids discharged from the well will be vented into storage tanks or fenced drip pits. The permittee will provide that the location and all equipment will be kept in satisfactory condition to prevent damage to livestock and wildlife.
24. The permittee shall take all practicable precautions to minimize damage to the soil, and to prevent the creation of conditions conducive to continuing or accelerated soil erosion. The precautions may include but shall not necessarily be limited to, bank sloping, benching, wattling, sod planting, seeding, fertilizing, and mulching as determined by the District Ranger to be practicable and necessary. All earth cuts or fill slopes on any disturbed areas which are favorable to revegetation or other areas on which the soil and/or ground cover is destroyed in the course of construction, will be revegetated with suitable vegetation or otherwise treated by the permittee as required by the District Ranger. Such seeding or planting shall be done at a time of the year, in a manner, and with the kinds and amounts of species which in the opinion of the District Ranger offers the best chance of success.
25. A chemical toilet or similar adequate sanitary facilities will be provided on the location while men are regularly employed there. Untreated sewage will not be permitted to enter any stream course.
26. If, during construction, items of a substantial archaeological or paleontological value are discovered, or a known deposit of such items is disturbed, the permittee will cease work in the area so affected. He will then notify the District Ranger and will not resume work until written approval is given.
27. This permit authorizes only such use and occupancy of National Forest land as is essential for purposes directly connected with the construction, maintenance, and use of the road and well site. It does not authorize uses such as borrow pits, stockpiles, quarries or any other similar use except with the written approval of the District Ranger.
28. All or portions of the work herein described for revegetation, brush disposal, fence construction and/or reseeding for which the permittee is responsible, may upon written request of the permittee and approval by the Forest Supervisor be performed by the Forest Service on a operative or assistance basis under Section 5, Act of April 24, 1959, 64 Stat. 83, U.S.C. 572. When the work is to be so performed, the permittee shall make advance deposits as requested by the Forest Service. The total deposits will be sufficient to cover the cost of the work including necessary overhead charges. Deposits for the control of erosion may be used to maintain installations made for erosion control for a period not to exceed three years or until site stabilization is accomplished, whichever is less. Advance estimates of the cost of this work may be obtained from the District Ranger.

29. The road will be constructed in accordance with the specifications set forth in Exhibit I. Cuts in earth will not be steeper than 2:1, cuts in rock will not be steeper than 1/4:1. Fill material will not be steeper than 2:1. All roads will be ditched and crowned with adequate wing ditches and culverts for proper ditch relief.
30. This road will be maintained a minimum of twice each year. To insure proper care of the improvements, the District Ranger may require more frequent maintenance.
31. To protect vegetation and prevent scorching of top soil, drilling gas will be burned in a pit and against a dirt bank.
32. Gates, cattleguards, culverts and other structures installed as part of this road shall become the property of the United States and may not be removed without the consent of the District Ranger. The Forest Service, or its cooperator, (with Forest Service consent) may improve this road in any manner so long as it does not materially interfere with its use by the permittee. Specifications for construction of these improvements are given in Exhibit 2.
33. None of the conditions of the permit as set forth herein can be varied or modified, except with the written consent of the District Ranger.
34. If the use granted under this permit is not exercised within one calendar year from date of issue the permit will be terminated.
35. The prescribed seed mixture for revegetation of disturbed areas is shown in Exhibit #3.
36. All construction slash will be buried, chipped or removed.
37. When roads become dry and dusty they will be watered to reduce rutting, improve visibility and reduce air pollution.
38. Construction at the site shall be in accordance with the specifications set forth in exhibit #4, attached hereto.

52-4

Exhibit 1

The old closed road will be used for temporary access. Clearing and maintenance will be restricted to a 14' width along the old road. The road will be left outsloped and no ditches will be cut except at Amarante Spring.

Exhibit 3

The prescribed seed mixture for revegetation of disturbed areas is:

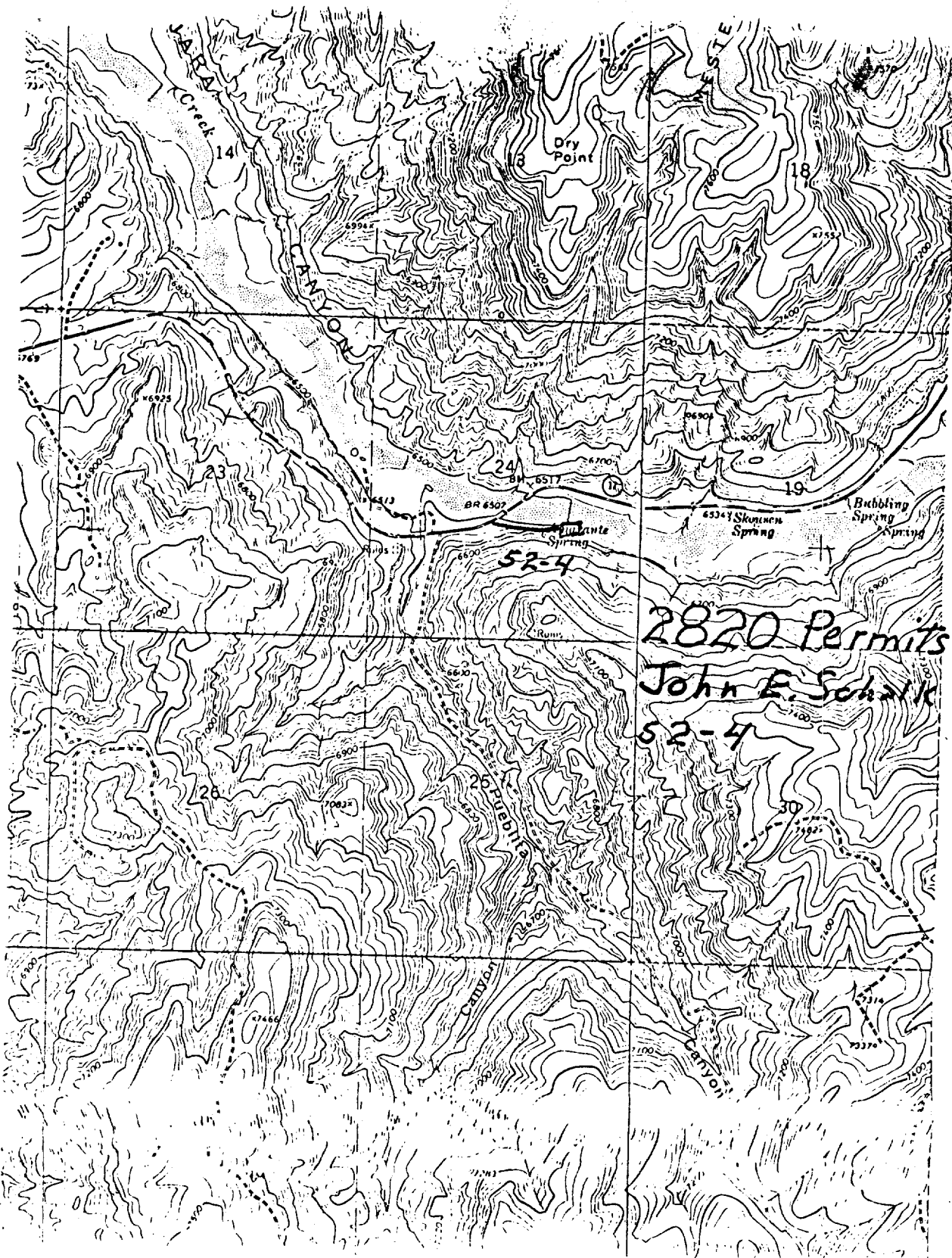
Pubescent Wheat Grass	6 lbs. per acre
Sand Drop Seed	1 lb. per acre
Fourwing salt bush	5 lbs. per acre

EXHIBIT # 4

1. No equipment will be allowed on slopes in excess of 20 percent. Clearing limits will be flagged by the Forest Officer. To reduce cut and fill it may be necessary to construct the well location on more than one level.
2. The permittee will provide a copy of the Highway Access Agreement from the State Highway Department.
3. No pits, dehydrators, storage tanks or other such improvements will be allowed on the site. These will be located at the end of the pipeline on the 52-1 location. Any necessary valves or appurtenances will be below ground level or as low as safety regulations will allow.
4. As soon as the drilling operation and testing is completed all liquids will be removed from pits and the location cleaned up completely.

Following completion of the well, all temporary roads will be closed and dirt will be backfilled against all cut banks.

5. Seeding will be repeated as often as necessary to establish an adequate ground cover. If the Highway right-of-way is not fenced the permittee will fence all seeded areas. Planting of trees and shrubs may be required to screen the well locations.
6. Organic trash generated during drilling operations will be buried in the mud pit.



# Exhibit 2

Covert Location

