

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 42-21425

30-039-20998

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

LONE STAR INDUSTRIES, INC.

3. ADDRESS OF OPERATOR

%JOHN E. SCHALK, P. O. BOX 2078, FARMINGTON, N. MEX.

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

At surface

980' FROM THE NORTH LINE, 1180' FROM THE EAST LINE  
At proposed prod. zone

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

50 MILES EAST OF BLOOMFIELD, NEW MEXICO

15. DISTANCE FROM PROPOSED\*

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

980'

16. NO. OF ACRES IN LEASE

397.60

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

305'

19. PROPOSED DEPTH

5850'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

317.60320

20. ROTARY OR CABLE TOOLS

ROTARY

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

6486' GR

22. APPROX. DATE WORK WILL START\*

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#	5850'	300 SACKS

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

ESTIMATED TOPS

OJO ALAMO	2470'	POINT LOOKOUT	5600'
KIRTLAND	2680'	MANCOS	5760'
FRUITLAND	3075'	TOTAL DEPTH	5850'
PICTURED CLIFFS	3175'		

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 prevented program, if any.

24.

SIGNED

*John E. Schalk*

TITLE

AGENT

DATE

7-31-74

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

*an*

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

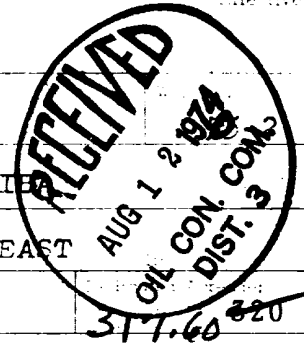
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## WELL LOCATION AND ACREAGE DEDICATION PLAT

Form 7-1  
Supersedes C-128  
Effective 1-1-74

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

LONE STAR INDUSTRIES, INC.			Schalk 55		
Section	Range	Meridian	Section	Range	Meridian
A	3	30 NORTH	5 WEST	RIO ARRIERO	
Section 980 North 1180 East Township 6486 MESA VERDE Blanco MESA VERDE					



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.

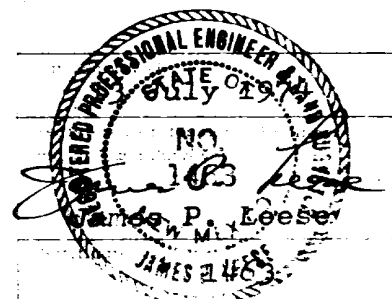
JOHN E. SCHALK

AGENT

LONE STAR INDUSTRIES, INC.

7-31-74

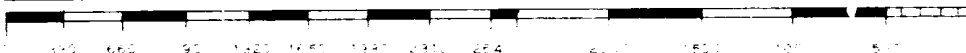
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.



RECEIVED

AUG 8 1974

U. S. GEOLOGICAL SURVEY  
DURANGO, COLO.



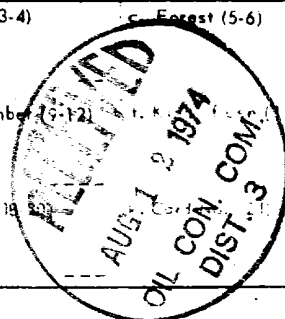
United States Department of Agriculture  
Forest Service

**SPECIAL USE  
APPLICATION AND REPORT**

Rev. FSI 2712

FOREST SERVICE USE ONLY

a. Record no. (1-2)	b. Region (3-4)	c. Forest (5-6)
70		
d. District (7-8)	e. User number (9-12)	f. National Forest (13-15)
g. State (16-17)	h. County (18-20)	



**PART I - APPLICATION (To be completed by applicant)**

Application is hereby made for a permit to use National Forest land as indicated below:

1. Description of land. (State NE/4, NW/4, etc.)

**A TWO ACRE PLOT IN THE NE/4, NE/4 SECTION 3, TOWNSHIP 30 NORTH, RANGE 5 WEST; AND AN ACCESS ROAD OF APPROXIMATELY 1/4 MILE, RIGHT-OF-WAY THROUGH THE NE/4 SECTION 3, TOWNSHIP 30 NORTH, RANGE 5 WEST UNDER THE TERMS OF LEASE NM-4455. (ACCESS ROAD IS ALREADY TO LOCATION.)**

2. Purpose of use.

**CONSTRUCTION AND DRILLING SCHALK 55 WELL NO. 2 GAS WELL.**

3. Land Area (in Acres) **.08**  
Length in **14** Width **0.10**

4. Improvement

a. Describe

**IMPROVEMENTS WILL CONSIST OF A TWO ACRE GAS WELL LOCATION, AN ACCESS ROAD, A NATURAL GAS PIPELINE, STORAGE TANK, COLLECTION PITS, AND OTHER PARAPHERNALIA NECESSARY FOR THE DRILLING, MAINTENANCE, AND PRODUCTION OF NATURAL GAS.**

b. If for multiple use, check ☒ Yes ☐ No. If "No," show date when will be turned over.

c. Estimate cost of construction will begin within

**3,500.00**

**ONE MONTH**

**ONE MONTH**

Date of Application

Applicant's name and signature

Applicant's address

**7-23-74**

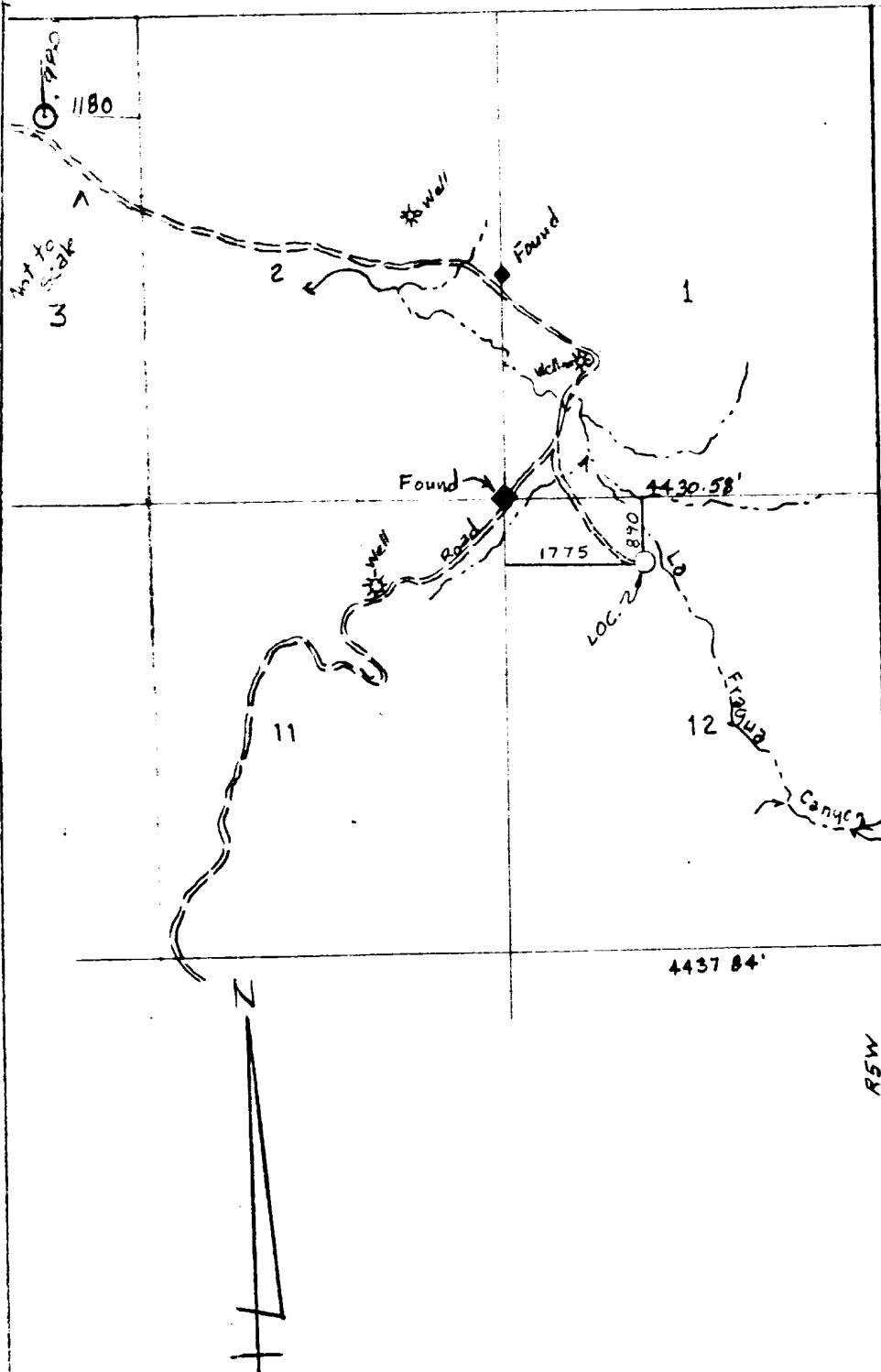
**LONE STAR INDUSTRIES, INC.**

*John E. Schalk*  
**JOHN E. SCHALK, AGENT**

**P. O. BOX 2878  
FARMINGTON, NEW MEXICO  
87401**

OVER:

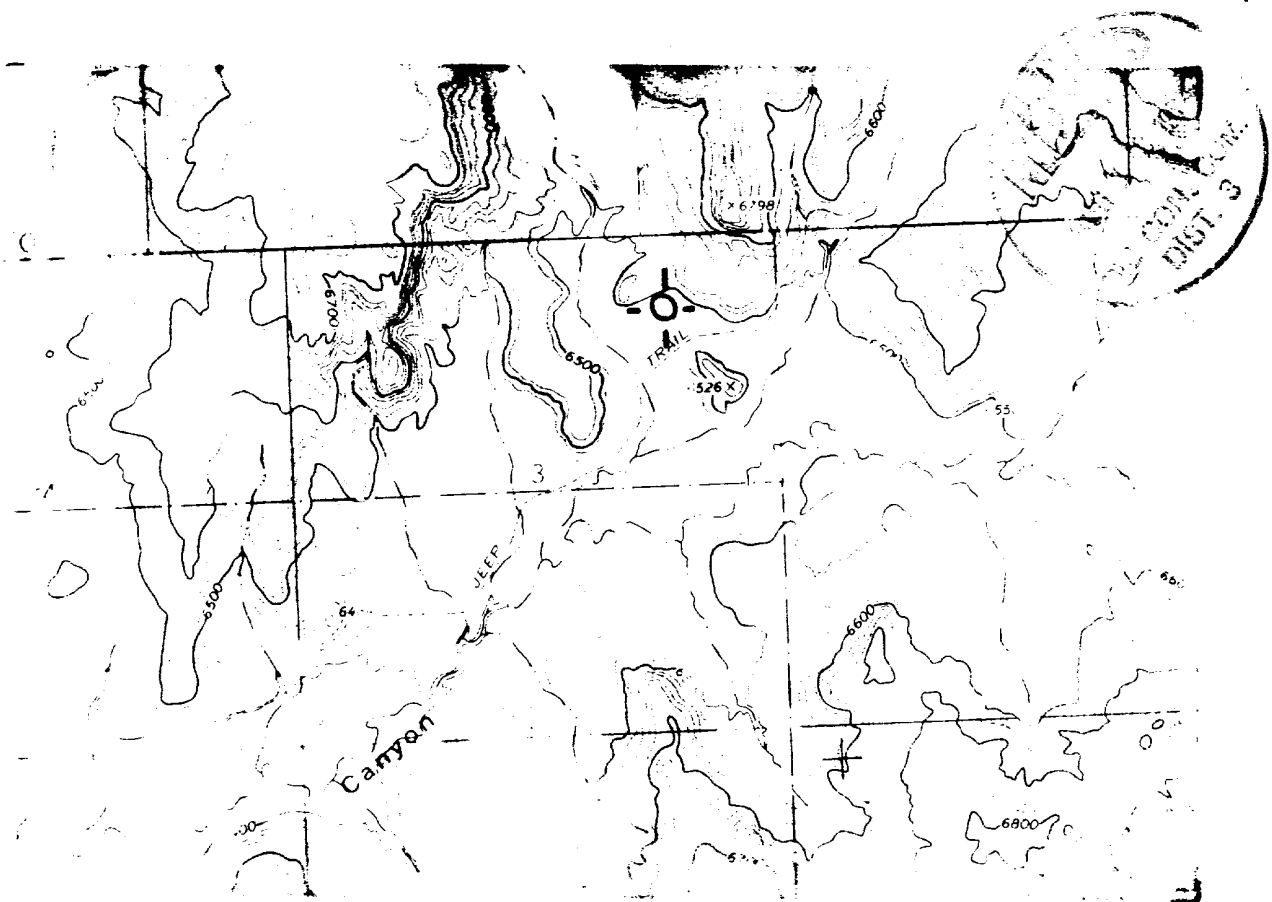
111-13674



U. S. NATIONAL SURVEY  
DALLAS, TEXAS

Scale. 1"=2000 Date: 22 March, 1973

350 Luan Engineering Company - Farmington, New Mexico



Proposed Road;  
 app. 2/10 mile long  
 14 feet wide

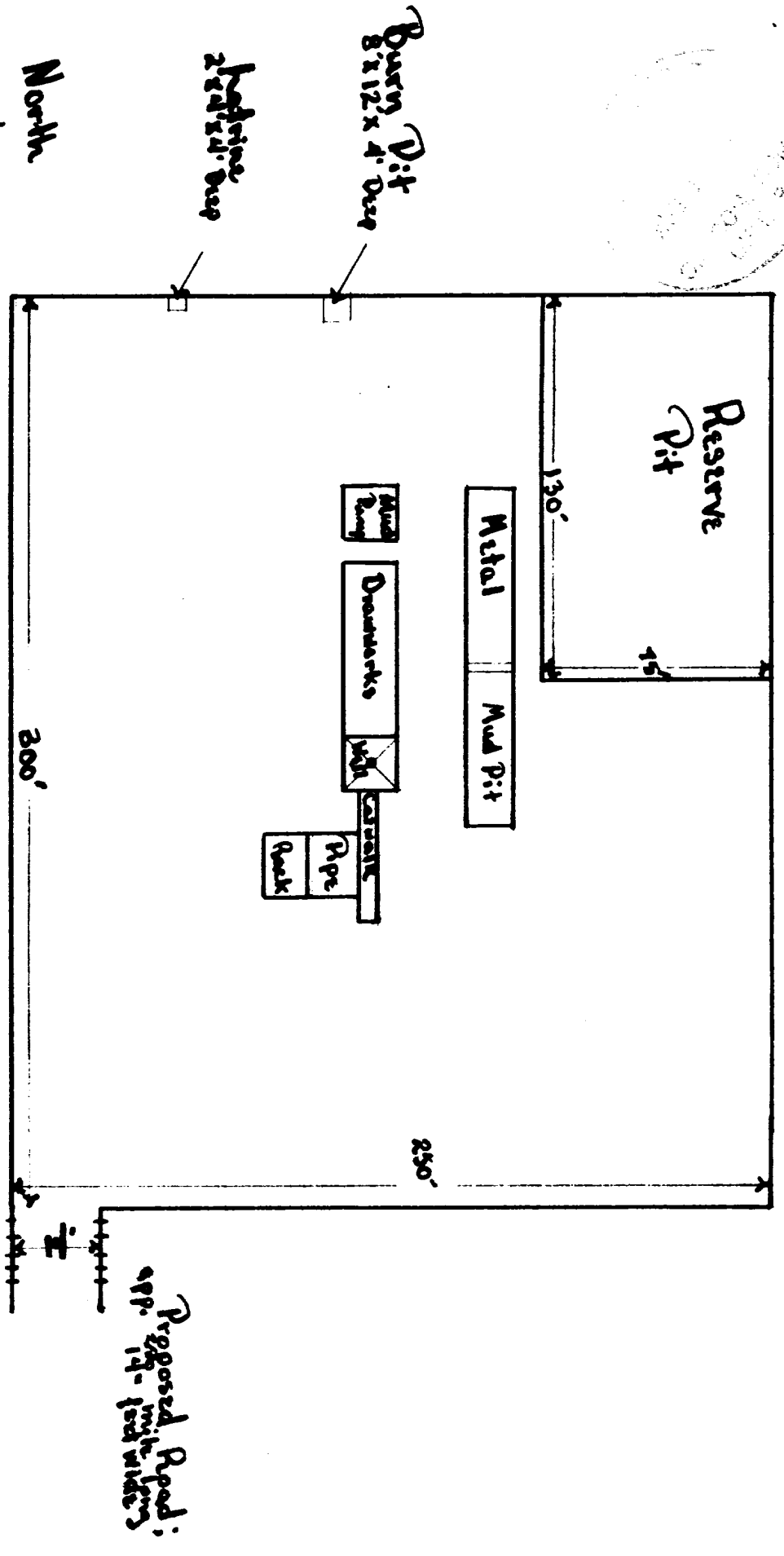
Scale;



honz Star Industries

Schalk 55-#2

Sec. 3, T30N, R5W



honz Star Industries  
Schalk 55 #2  
Sec. 9, T30N, R5W

**AMENDMENT  
FOR  
SPECIAL USE PERMIT**  
Ref: FSM 2714

THIS AMENDMENT IS ATTACHED TO AND MADE A PART  
OF THE

☐ TERM

☐ ANNUAL PERMIT

a. Record no. (1-2)

70

b. Region (3-4)

03

c. Forest (5-6)

02

d. District (7-8)

03

e. Use number (9-12)

2724

f. Kind of use (13-15)

420

g. State (16-17)

35

h. County (18-20)

039

k. Cord no. (21)

1

For Lone Star Schalk 55-#2 Gas Well issued to \_\_\_\_\_

(KIND OF PERMIT)

Lone Star Industries P.O. Box 2078, Farmington N.M. 87401, on March 7, 1973

(NAME OF PERMITTEE)

(DATE OF PERMIT)

which is hereby amended as follows:

1. Constructing, drilling, and producing the Lone Star Schalk 55-#2 gas well located 980' FNL and 1180' FEL under terms of lease NM-4455.

The 55-#2 gas well will require the reshaping on the existing 55-#1 well pad. No new ground disturbance will result from this work.

All stipulations that are covered in the Schalk 55-#1 permit will apply to the Schalk 55-#2 gas well.

Since no new ground disturbance will be required, no archaeological clearance will be required.

This Amendment is accepted subject to the conditions set forth herein, and to conditions 16 to 38 attached hereto and made a part of this Amendment.

PERMITTEE	NAME OF PERMITTEE Lone Star Industries	SIGNATURE OF AUTHORIZED OFFICER <i>John Schalk</i>	DATE 2/2/74
ISSUING OFFICER	NAME AND SIGNATURE Victor W. Jenkins	TITLE District Ranger	DATE 8/1/74

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 form 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 arrestor 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 arrestor 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 other 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 an operative or assistance basis under Section 5, Act of April 24, 1909,, 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. Free roaming horses are protected by law and are known to frequent this area. Persons found harassing or capturing these animals will be subject to fine.

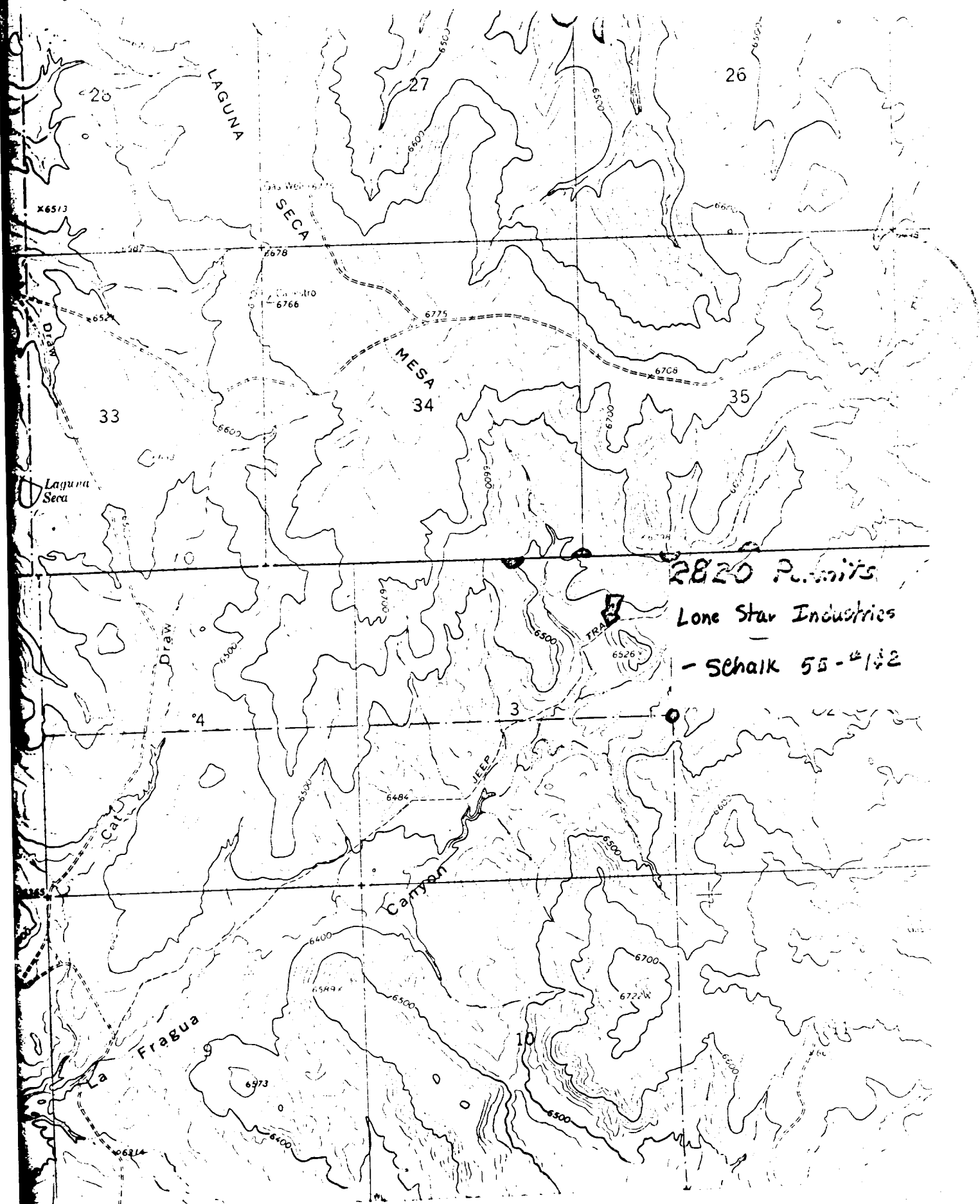


EXHIBIT #3

Seed Mixture

Crested Wheat	4 lbs. per acre
Pubescent Wheat	6 lbs. per acre
Sand drop	1 lb. per acre
Ranger Alfalfa	1 lb. per acre

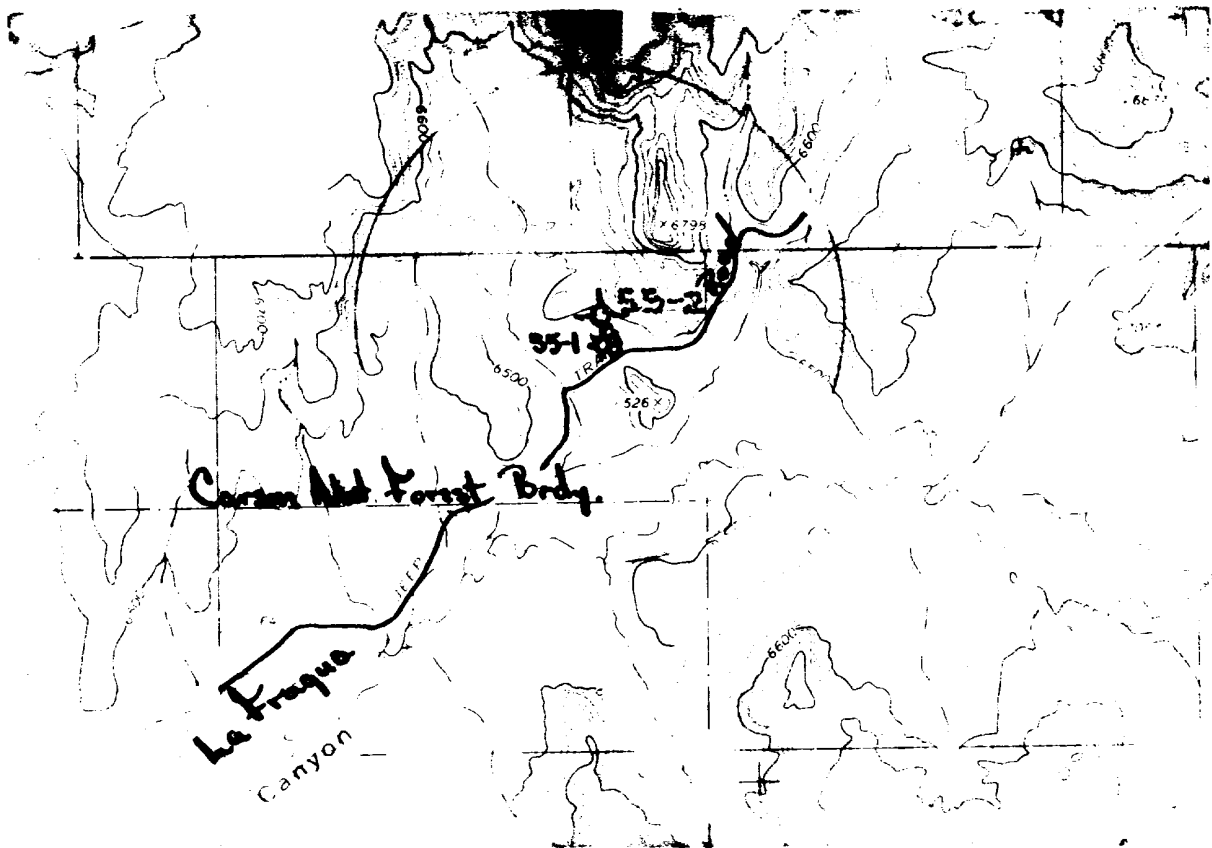
Exhibits #1 and #2 not required

12 Point - Development Plan for Surface Use

Lone Star Industries, Inc.      Schalk 55-2

1. Existing roads: Attached map shows existing road running from the Southwest corner of Section to the Northwest.
2. Proposed Access road: Will depart from main (existing) road and run 75 yards along East edge of the Schalk 55-1 location.
3. Existing Wells: Lone Star Industries, Schalk 55-1; 150' South of Proposed location.
4. Lateral Roads: none.
5. Location of Tank Batteries: see attached.
6. Location and Type of Water Supply: Water will be taken from La Jara Wash and transported by truck to location.
7. Methods for Handling Waste Disposal: Cuttings to be disposed of in reserve pit, a burn pit to be used for disposal of trash, garbage, etc., and covered on cleanup of location.
8. Location of Camps: None.
9. Location of Airstrips: None.
10. Rig Layout: Per attached drawing.
11. Restoration of Surface: Upon completion of drilling operations, the disturbed surface area will be restored as near as practical to its original contours. If sufficient top soil is encountered, it will be stockpiled for restoration of surface. Restoration will be to the satisfaction of the United States Geological Survey.
12. This location slopes at an increase of 20' per 700' to the North. There will be approximately a four foot cut on the North side of proposed location. Vegetation is sage brush and no trees. The surrounding area is comparable and any disturbances to the wildlife will be only temporary. With the restoration of surface, surface damage will be minimal.

AUG 20 1974



Proposed road;  
15 yards long, 14 ft. wide  
just along east side of  
Schalk 55-1 location

Proposed location;  
150 feet north  
of Schalk 55-1

..... Proposed Road & location  
— Existing roads & location



Lone Star Industries

Schalk 55-2

section 3, township 30 north, range 5 west

AUG 22 1974