

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

Union Texas Petroleum, A Division of Allied Chemical Corporation

## 3. ADDRESS OF OPERATOR

Suite 1122, 1860 Lincoln Street, Denver, Colorado 80295

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

At surface

SE NW Section 7-T31N-R9W (1840' FNL, 900' FWL)

At proposed prod. zone

Same

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

12 miles northeast of Aztec, New Mexico

## 15. DISTANCE FROM PROPOSED\*

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

900

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

2300'

## 16. NO. OF ACRES IN LEASE

2446

## 19. PROPOSED DEPTH

5900

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

209.5

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6619 GR

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

3/15/77

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4	9-5/8	36	275	275 sx (circulate)
8-3/4	7	20	3600	600 sx (tie into surface)
6-1/8	4-1/2 (liner)	10.5	3400-5900	200 sx (tie into 7")

Plan to drill well as follows:

1. MURRT, drill 12-1/4" hole to approximately 275'.
2. Set and cement 9-5/8" OD, 36#/ft., H-40 used casing at TD and cement with sufficient cement to circulate to surface.
3. Drill out with 8-3/4" bit to 3600'.
4. Run 7" OD 20#/ft. K-55 used casing to TD and cement back in surface casing.
5. Drill out of 7" using gas as fluid.
6. Drill to TD of approximately 5900' (through entire Mesaverde section) and log hole.
7. Run 4-1/2" OD, 10.5#/ft. used casing as liner. Use Burns liner hanger. Cement back to 7".
8. Complete well through casing perforations and stimulate Cliff House and Point Lookout separately.
9. Clean up drill site.  
(Continued on reverse side.)

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 Assistant Dist. Prod. Manager DATE 2-23-77

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

FEB 25 1977

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

## Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

• GPO 782-931

### Item 23 - Continued:

10. Approximately 11 days will be required to drill this well.

11. Gas is dedicated to El Paso Natural Gas Company.

12. Surface formation is Ojo Alamo.

13. Formation tops (estimated): Pictured Cliffs 3420

Menefee 5380

Point Lookout 5720

14. Mud program: 0 - 275 Spud mud

275 - 3600 Gel water - low solids to maintain good hole condition

3600 - TD Compressed gas

15. No coring or drill stem tests are anticipated.

16. Logs to be run: Compensated Density

Sidewall Neutron

Temperature

Induction

Gamma Ray

Deviation (single shot)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

Form approved.  
Budget Bureau No. 42-R1424.  
5. LEASE DESIGNATION AND SURVEY NO.

SF 078439

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Johnston-Federal

9. WELL NO.

7 A

10. FIELD AND POOL, OR WILDCAT

Blanco Mesaverde Pool

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Section 7-T31N-R9W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

Union Texas Petroleum, A Division of Allied Chemical Corporation

3. ADDRESS OF OPERATOR

Suite 1122, 1860 Lincoln Street, Denver, Colorado 80295

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

SE NW Section 7-T31N-R9W (1840' FNL, 900' FWL)

14. PERMIT NO.

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

6619 GL

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

SUBSEQUENT REPORT OF:

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(Other) Change well number & dedication x

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Change well number from "8 A" to "7 A", and alter dedicated acreage to North 266.77 acres as per attached plat.



RECEIVED

MAR 3 1977

U.S. GEOLOGICAL SURVEY

18. I hereby certify that the foregoing is true and correct

SIGNED

*Ronald B. Smith*

TITLE Assistant Dist. Prod. Mgr.

DATE March 1, 1977

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-123  
Effective 1-1-55

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

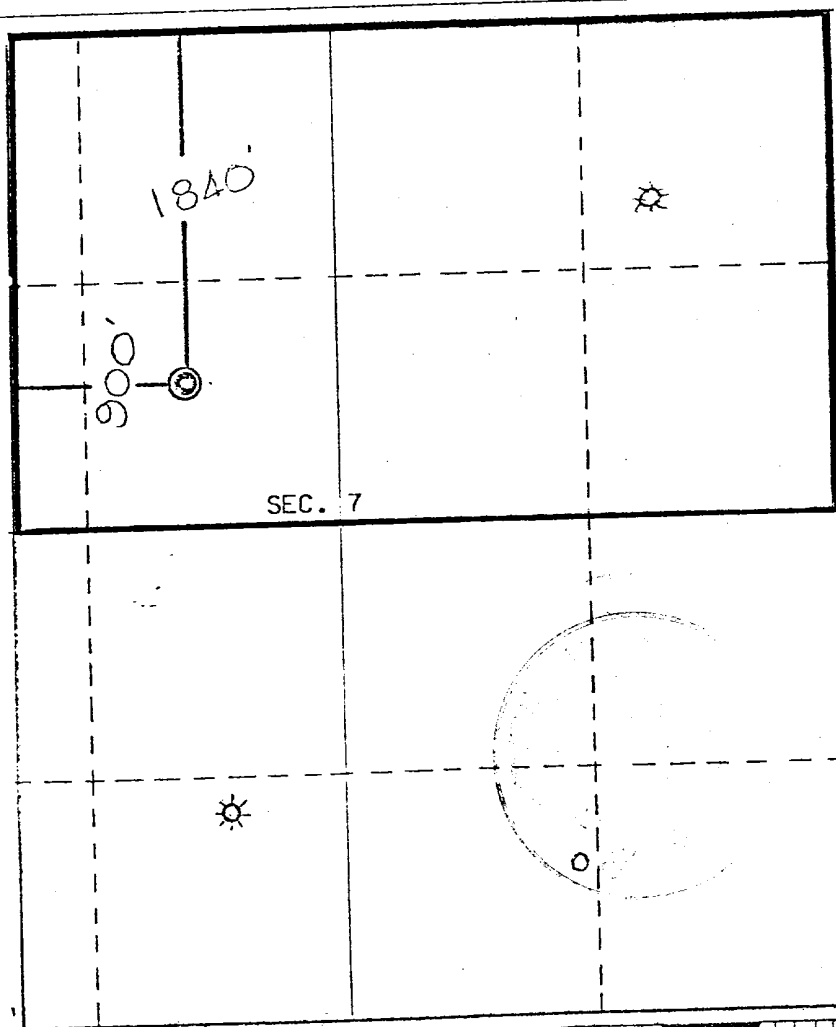
Union Texas Petroleum Corporation			Lease Johnson Federal		Well No. 7-A
Section 7	Township 31 North	Range 9 West	County San Juan		
Actual Feature Location of Well:					
1840	feet from the North	line and	900	feet from the West	line
Ground Level Elev. 6619	Producing Formation	Pool	Dedicated Acreage: N/266.77		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

Position

Company

Date

2.23.77

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

February 12, 1977

Registered Professional Engineer and/or Land Surveyor

Certificate No. 3602

E.V. Echohawk LS

**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.

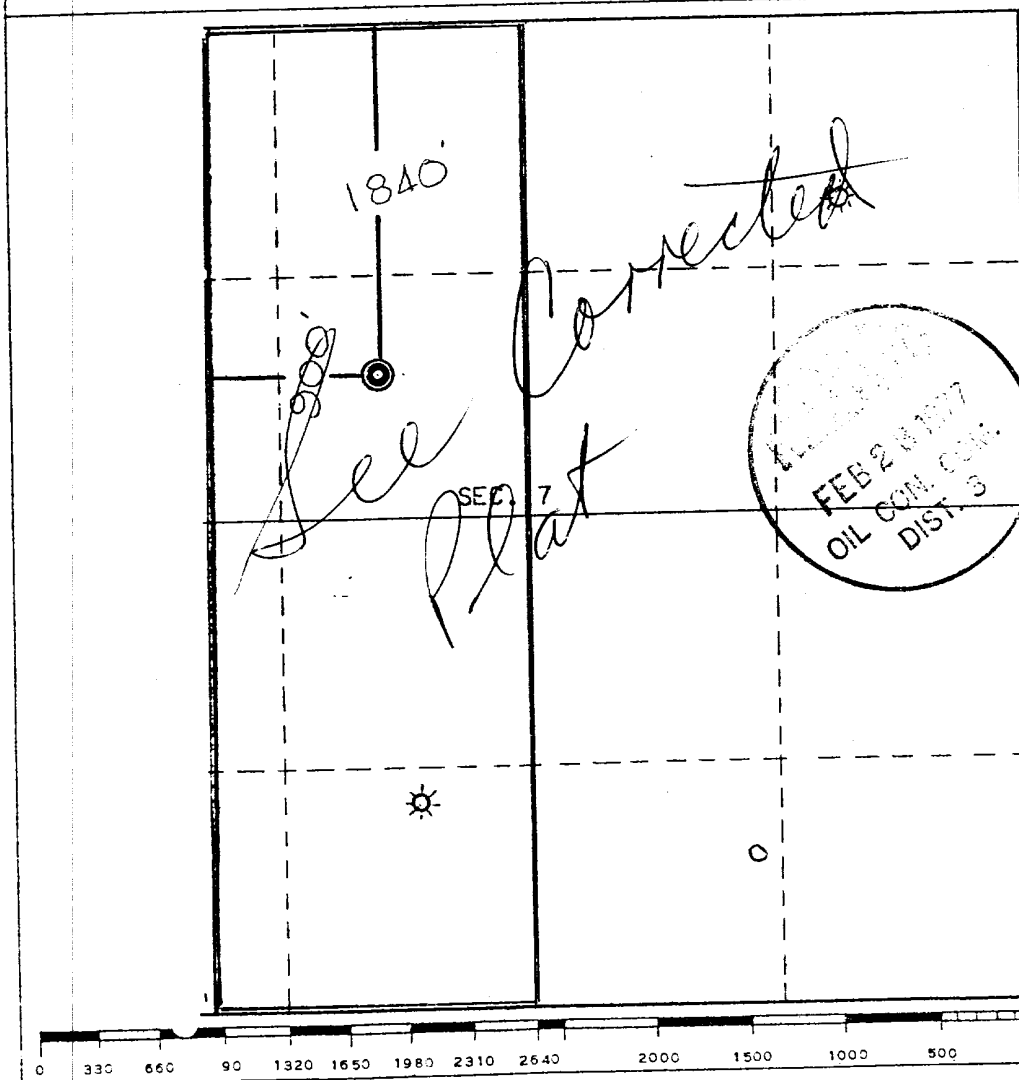
Operator <b>Union Texas Petroleum Corporation</b>			Lease <b>Johnson Federal</b>		Well No. <b>8-A</b>
Unit Letter	Section <b>7</b>	Township <b>31 North</b>	Range <b>9 West</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1840</b> feet from the <b>North</b> line and <b>900</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6619</b>	Producing Formation		Pool	Dedicated Acreage: <b>209.5</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 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.

*D. B. Shell*  
Name

Position  
*Asst. Prod. Mgr.*

Company  
*Union Texas Petr.*

Date  
*2-23-77*

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  
**February 12, 1977**

Registered Professional Engineer and/or Land Surveyor

Certificate No. **3602**  
**E.V. Echohawk LS**

Archaeological Clearance Survey Report

for

Union Texas Petroleum Corporation

Locations

Johnson Federal No. 7-A

Johnson Federal No. 8-A

Prepared by  
Pat Zarnowski

Submitted by  
Dr. J. Loring Haskell  
Operations Director and  
Principal Investigator  
Agency of Conservation Archaeology

February 18, 1977

### Introduction

The Agency of Conservation Archaeology of the San Juan County Museum Association and Eastern New Mexico University recently completed an archaeological clearance survey in the San Juan Basin Field on land that is to be impacted by the scheduled construction of two wells by Union Texas Petroleum of Denver, Colorado.

The survey project was initiated at the request of Mr. Donald Wells of Union Texas Petroleum on February 11, 1977. It was administered by Mr. Wells and by Dr. J. Loring Haskell, who serves as the principal investigator for the Agency of Conservation Archaeology in Portales, New Mexico.

The field work was conducted by Ms. Pat Zarnowski of the Agency of Conservation Archaeology in Farmington, New Mexico on February 14, 1977. This was done under provisions of permit No. 76-MM-023 which expires on March 7, 1977. Mr. Wells represented Union Texas Petroleum in the field.

### Survey

The requested archaeological clearance survey involved the two well locations described below, both located on land under the jurisdiction of the Bureau of Land Management. Please refer to the attached map and the Recommendations section of this report for specific details of locations.

The general survey method used was to walk the area of proposed construction in a zigzag manner. Visual inspection was made of the ground surface for evidence of any artifactual remains of historic or prehistoric origin. Floral, faunal and geological observations were made to briefly describe the environmental situation.

#### Johnson Federal No. 7-A

**Environment:** This well is to be located on a hill that separates Miller Canyon on the west and Long Glade Canyon on the east. The terrain is sloping to the west and the entire area where construction is to take place is disturbed as a result of chaining. There is a small sandstone ledge on the north and east sides of the pad area where pinyons (Pinus edulis) and junipers (Junipers sp.) are growing. The main vegetation in the open disturbed area is big sagebrush (Artemisia tridentata), snakeweed (Gutierrezia sarothrae), tumbleweed (Salsola kali), and various grasses.

**Cultural resources:** None.

Johnson Federal No. 8-A

Environment: This well will be located about three quarters of a mile northwest of the item above. It will be on a crest of a hill and the terrain is quite rugged. There is a heavy growth of trees here consisting of pinyon pines and junipers. Other vegetation in the area includes Mormon tea (Ephedra sp.) mountain mahogany (Cercocarpus montanus), prickly pear cactus (Opuntia sp.) and yucca (Yucca sp.). Sandstone bedrock is exposed in many areas.

Cultural resources: None.

Recommendations

<u>Well</u>	<u>Area</u>	<u>Location</u>	<u>Clearance Status</u>
Johnson Federal No. 8-A	Pad: 125' x 300' Road: 20' x 30'	1,450 feet from the East line, 790 feet from the South line, in the Southwest $\frac{1}{4}$ of the Southeast $\frac{1}{4}$ of Section 7, Township 31 North, Range 9 West, San Juan County, New Mexico. Map source: U. S. G. S. 15 minute Aztec Quadrangle.	Recommended
Johson Federal No. 8-A	Pad: 125' x 300' Road: Existing right-of- way.	1,640 feet from the North line, 900 feet from the West line in the Southeast $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 7, Township 31 North, Range 9 West, San Juan County, New Mexico. Map source: U. S. G. S. 15 minute Aztec Quadrangle.	Recommended

Because no archaeological material was located in the areas surveyed, it is recommended that archaeological clearance be granted for these two proposed well locations and access roads. It is felt that there will be no adverse impact on our cultural resources by this construction work.



## SURFACE USE PLAN

### UNION TEXAS PETROLEUM'S

Johnston-Federal #8 A, 1840' FNL & 900' FWL  
of Section 7, T31N, R9W, Lease SF 078439,  
San Juan County, New Mexico

This plan is to accompany "Application for Permit to Drill" for the above mentioned well.

The following is a discussion of pertinent information concerning possible effect which the proposed drilling of the well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and subcontractors will be aware of all items of this plan.

1. AREAL ROAD MAP - Exhibit "A" is a portion of a USGS topographic map, San Juan County, New Mexico, showing existing black top roads. Approximately 12 miles northeast from Aztec, New Mexico. Turn east (right) on Hart Canyon Road. Take first left hand fork 2-1/2 miles to site.
2. LOCATION OF EXISTING WELLS - Several wells have been drilled in a two mile radius and are shown on Exhibit "B".
3. PROPOSED WELL MAT AND IMMEDIATE AREA - Refer to Exhibit "C" for direction orientation and road access.
  - a. Mat size - 130' x 300'.
  - b. Surface - Will be native soil, bladed, watered and capped with clay only when necessary.
  - c. Reserve pit - 150' x 150' unlined pit, joining mat to the west.
  - d. Cut & Fill - 5' cut on east-northeast side. 5' fill on west. Natural drainage will be unaltered.
  - e. Drill Site Layout - Exhibit "C" shows position of mat, reserve pits, burn pits, trash pits, and mud pits in relation to the well bore. Rig will be erected with the V-Door to the north.
  - f. Setting & Environment -
    - (1) Terrain - See Exhibit "A", topographic map of area. Slping to the north.
    - (2) Soil - Sandy and rocky soil.
    - (3) Vegetation - Pine and cedar trees.
    - (4) Surface Use - Unknown, possibly used for grazing.

-2-

- (5) Other - Drill site, which is sloping to the south in semi-arid desert country, is in a low environmental risk area. The total effect of drilling and producing this and other wells in this area would be minimal.

g. Distances to:

- (1) Ponds and Streams - No ponds or streams in area.
- (2) Water Wells - No water well or windmill could be seen within 1/2 mile.
- (3) Residences and Buildings - There are no houses or buildings within 1/2 mile.
- (4) Aroyos, Canyons, etc. - See Exhibit "A". Miller canyon 1/2 mile northwest.

h. Well Sign - Sign identifying and locating well will be maintained at drill site with the spudding of the well.

i. Open Pits - All pits containing mud or other liquids will be fenced.

4. ROADS

- a. Existing Roads - All existing roads within one mile of the location are shown on Exhibit "A".
- b. Planned roads - Plan to construct 1400' of new 14 foot wide road in existing right-of-way.
- c. Fences, Gates and Cattleguards - None.

5. TANK BATTERY - One 300-barrel storage tank and production unit will be set as close to the well as practicable.

6. LEASE PIPELINES

- a. Existing - Not furnished by the Operator, to be connected by El Paso Natural Gas Company.
- b. Planned - If production is encountered, all lease lines are to be constructed on a well mat.

7. WASTE DISPOSAL - Well cuttings will be disposed in reserve pit. Barrel trash containers to be in accessible locations within drill site area during drilling and completion procedures. All detrimental waste will be hauled away, burned or buried with a minimum cover of 24" dirt. See Exhibit "C" for location of pits. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. No produced water is anticipated.

-3-

8. WATER SUPPLY - Supply water will be hauled from the San Juan River or nearest wash.
9. ARCHAEOLOGICAL RESOURCES - Report will be furnished by Pat Zarnowski from Salamon Ruins, Bloomfield, New Mexico.
10. RESTORATION OF SURFACE - If well is productive, pits will be backfilled and leveled as soon as practical to original condition.
11. OPERATOR'S REPRESENTATIVE - Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

Production & Drilling

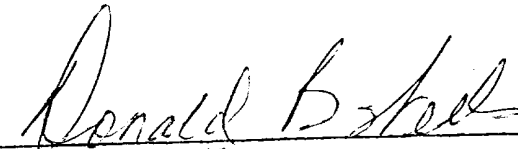
Donald B. Wells  
Suite 1122, 1860 Lincoln Street  
Denver, Colorado 80295

Office Phone: 303/534-8221  
Home Phone: 303/979-4872

12. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work performed by Union Texas Petroleum and its contractors and sub-contractors will conform to this plan.

2-23-77  
Date

  
Donald B. Wells  
Assistant District Production Manager

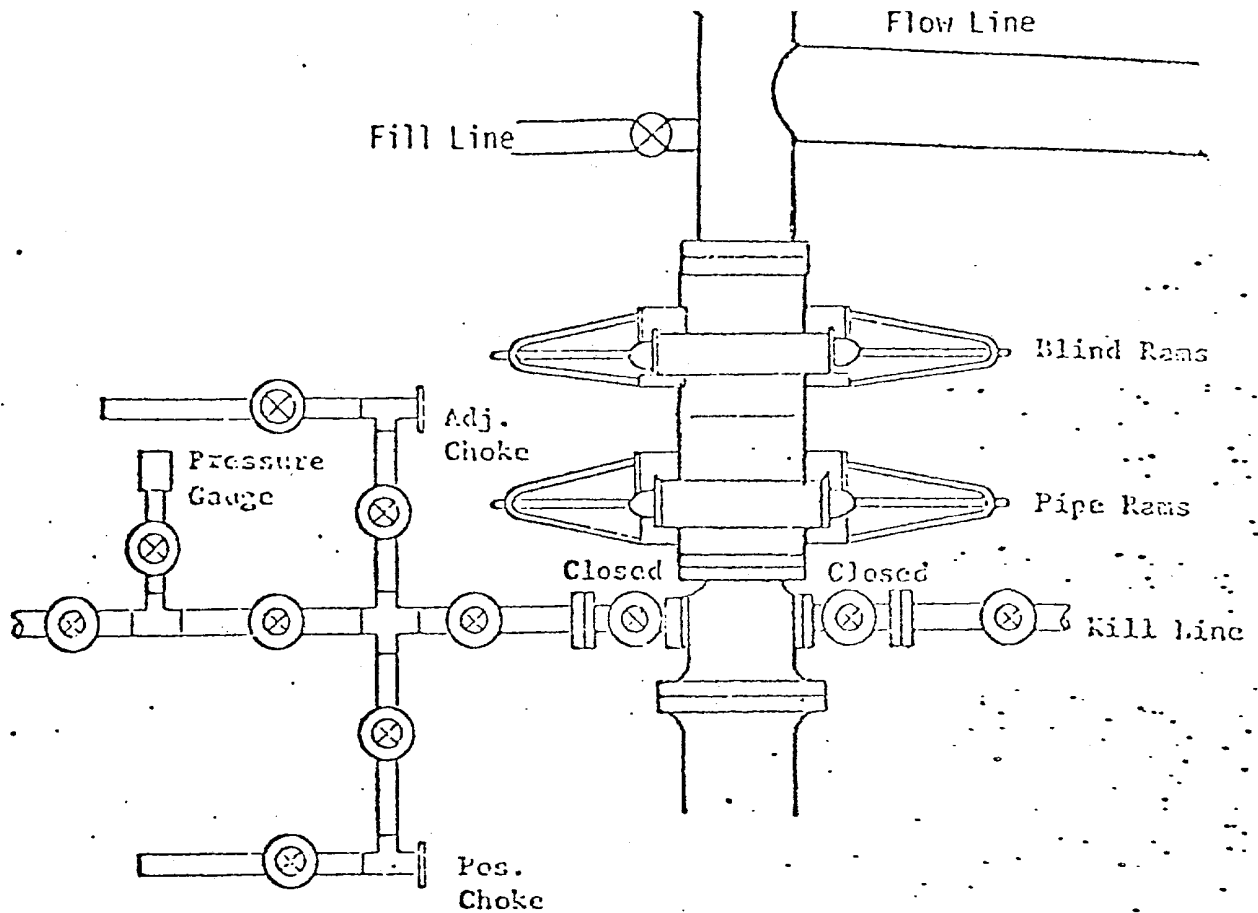
JOHNSTON--FEDERAL #8 A

7 POINT WELL CONTROL PLAN

1. Surface casing: 9-5/8", 36#, approximately 275', grade H-40, used condition.
2. Casinghead will be 10", 900 series, 3,000 psi rating.
3. Intermediate casing - 7", 20#, K-55, will be set at +3600' and cemented to surface casing.
4. Blowout preventors: Hydraulic, double ram, 10". One set of rams will be provided for each size drill pipe in the hole. One set of blind rams at all times. Fill line will be 2", kill line will be 2", choke relief line will be 2" with variable choke.
5. Auxiliary equipment:
  - (1) Kelly cock will be in use at all times.
  - (2) Stabbing valve to fit drill pipe will be present on floor at all times.
  - (3) Mud monitoring will be visual, no abnormal pressures are anticipated in this area.
  - (4) Rotating head will be used when drilling with gas.
6. Anticipated bottom-hole pressure:

This is an area of known pressure. Maximum anticipated pressure at TD is 1200 psi. Anticipate no H<sub>2</sub>S Gas.
7. Drilling Fluids:

0 - 275'	Spud mud.
275' - 3600'	Gel water - low solids as needed to maintain good conditions.
3600' - TD	Compressed gas.



All valves 2"

All BOP's, flanges, spools, valves & lines must be series 900 or 3000 psi working press.

Choke manifold must be at ground level and extended out from under substructure.

JOHNSTON FEDERAL 8A  
1840' FNL and 900' FWL  
Section 7 T31N-R9W  
San Juan County, N.M.

REQUIRED MINIMUM BLOWOUT PREVENTOR

HOOVER

Denver, Colorado

BLM SEEDING REQUIREMENTS  
IN THE FARMINGTON RESOURCE AREA

1. SEED MIXTURE 2

2. TIME:

All seeding will take place between July 1 and September 15.

3. EQUIPMENT:

Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. The seed will be planted not less than one-half inch deep or more than one inch deep. The seeder will be followed with a drag, packer, or roller to insure uniform coverage of the seed, and adequate compaction. Drilling will be done on the contour where possible, not up and down the slope. Where slopes are too steep for contour drilling, a "cyclone" hand seeder or similar broadcast seeder will be used. Seed will then be covered to the depth described above by whatever means is practical.

4. SPECIES TO BE PLANTED IN POUNDS PURE-LIVE-SEED PER ACRE:

CRESTED WHEATGRASS (Agropyron desertorum) - 3-1/4 lbs.

FOURWING SALTBUSH (dewinged) (Atriplex conescens) - 1/2 lb.

SAND DROPSEED (Sporobolus cryptandrus) - 3/4 lb.

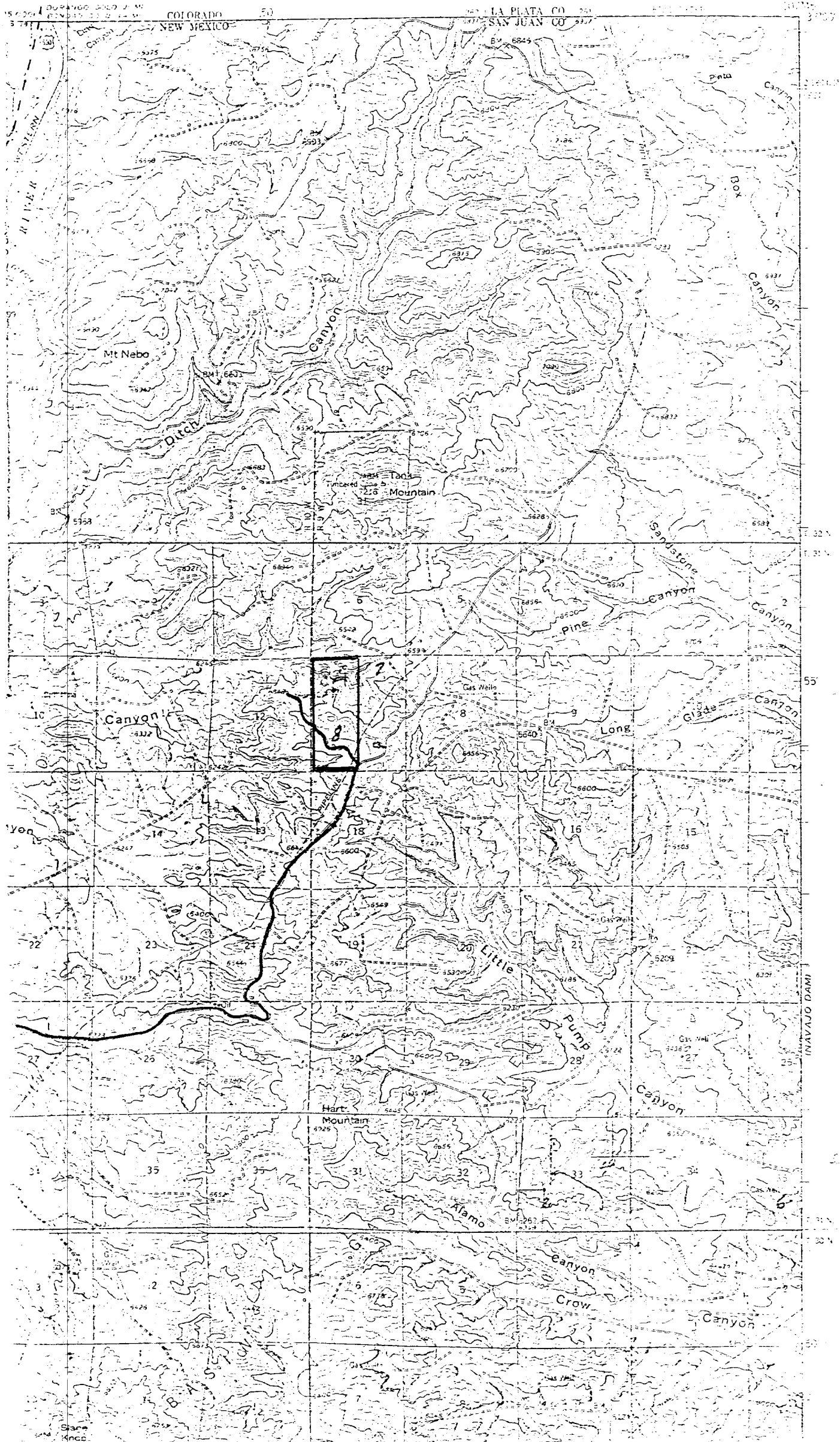
ALKALI SACATON (Sporobolus airoides) - 3/4 lb.

BLM COLOR REQUIREMENTS  
IN THE FARMINGTON RESOURCE AREA

1. All equipment shall be painted green to match the surrounding area.

EXHIBIT "A"

AZTEC QUADRANGLE  
NEW MEXICO  
15 MINUTE SERIES (TOPOGRAPHIC)



EXISTING ROAD  
ROAD TO BE CONSTRUCTED

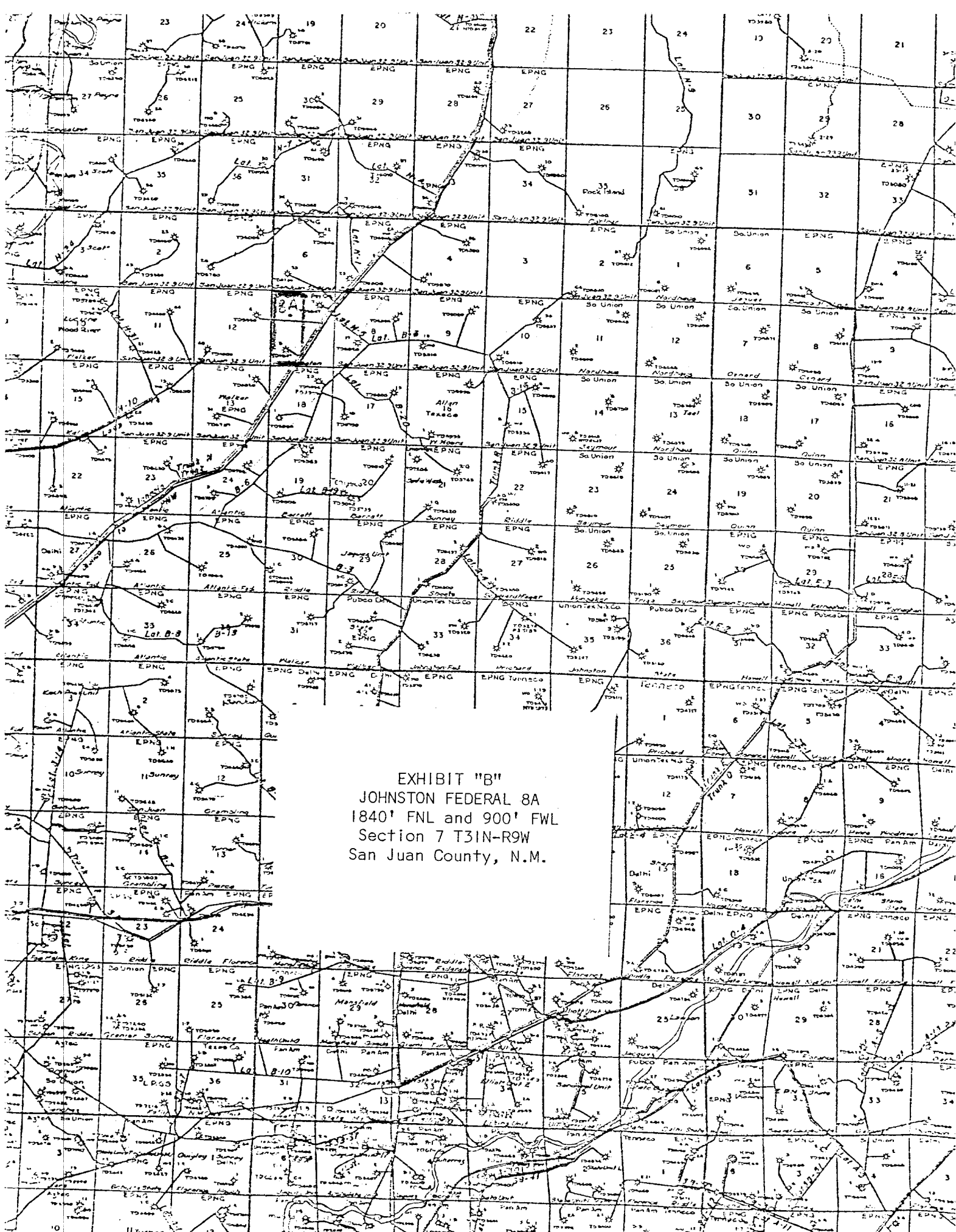
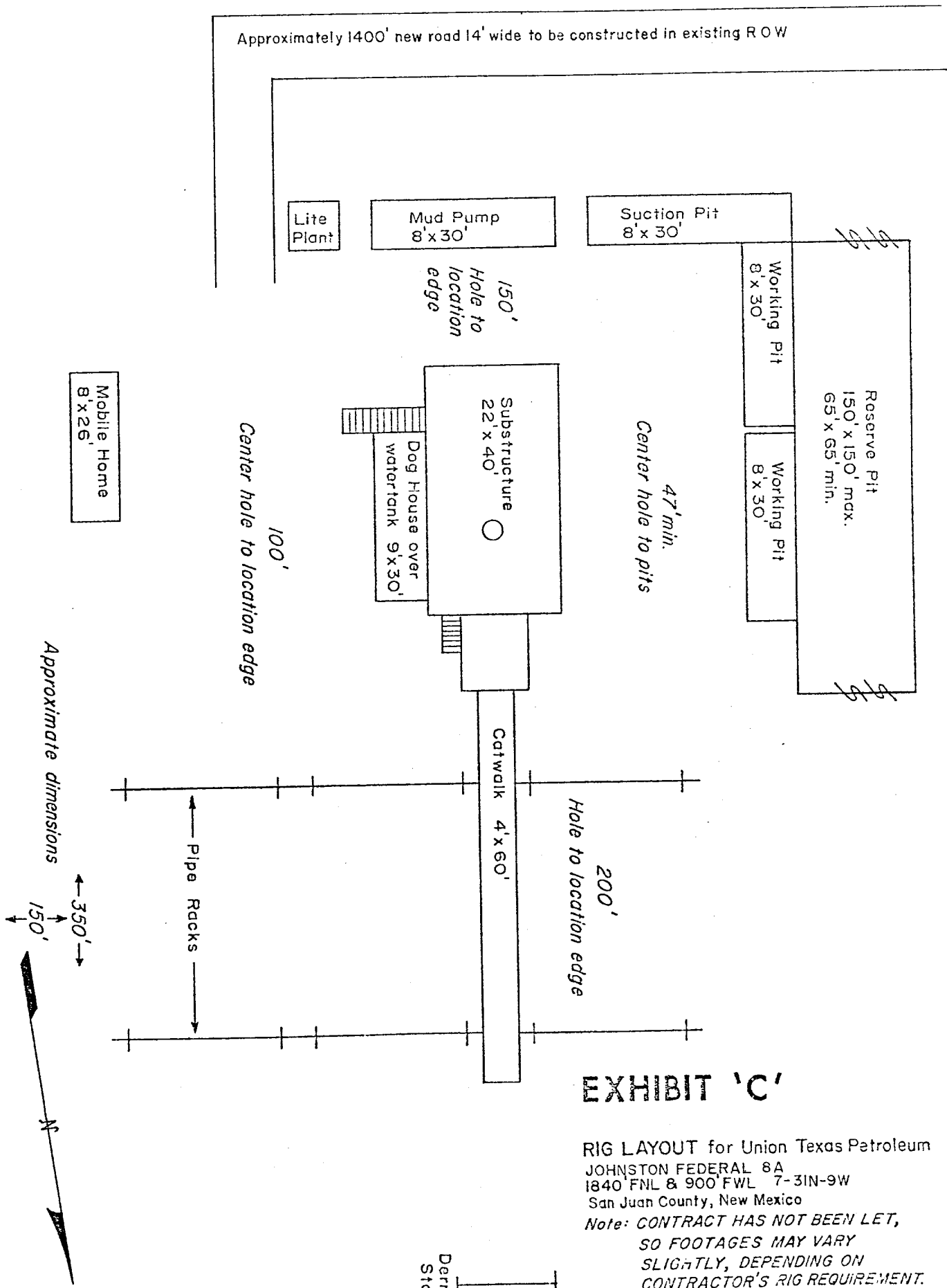


EXHIBIT "B"  
JOHNSTON FEDERAL 8A  
1840' FNL and 900' FWL  
Section 7 T31N-R9W  
San Juan County, N.M.





# EXHIBIT 'C'

RIG LAYOUT for Union Texas Petroleum  
 JOHNSTON FEDERAL 8A  
 1840 FNL & 900 FWL 7-3IN-9W  
 San Juan County, New Mexico  
 Note: CONTRACT HAS NOT BEEN LET,  
 SO FOOTAGES MAY VARY  
 SLIGHTLY, DEPENDING ON  
 CONTRACTOR'S RIG REQUIREMENT.