

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

Canyon Resources, Inc.

3. ADDRESS OF OPERATOR

Suite 180, 5310 Harvest Hill Road, Dallas, Texas 75230

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

At surface

1650' FWL & 920' FNL, Sec. 25, T13N, R31E, NMPM

At proposed prod. zone

Same

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

12 miles Northeast of Tucumcari, New Mexico

15. DISTANCE FROM PROPOSED*

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

410'

16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED

TO THIS WELL
160

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

NA

19. PROPOSED DEPTH

3400'

20. ROTARY OR CABLE TOOLS

Rotary

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

4088.5

22. APPROX. DATE WORK WILL START*

5-23-85

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#	550' 550' 800'	550 sacks CIRCULATE
7-7/8"	5-1/2"	15.5#	3400'	250 sacks



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

Jan E. Clark

TITLE

NRE, Agents for Canyon Res.

DATE

May 21, 1985

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

S/Phil Kirk

TITLE

Area Manager

DATE

5-24-85

CONDITIONS OF APPROVAL, IF ANY:

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

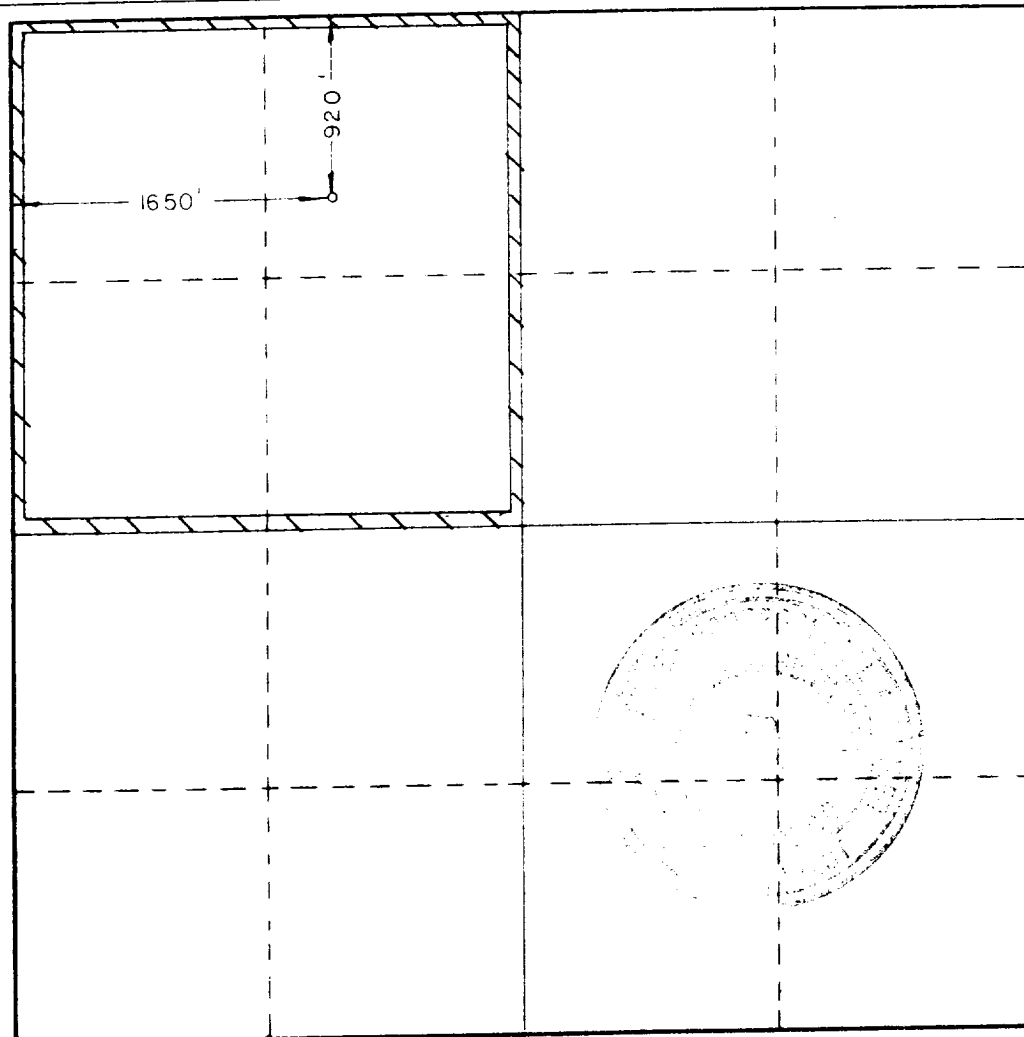
Operator CANYON RESOURCES			Lease HARVEY USA		Well No. 1
Unit Letter C	Section 25	Township 13 NORTH	Range 31 EAST	County QUAY	
Actual Footage Location of Well: 920 feet from the NORTH line and 1650 feet from the WEST line					
Ground Level Elev. 4088.5	Producing Formation Granite Wash		Pool Wildcat		Dedicated Acreage: 160 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 Communitization Pending

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.

Joe T. Janica
 Name

Joe T. Janica

Position

NRE, Agents for

Company

Canyon Resources

Date

May 22, 1985

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

MAY 21, 1985

Registered Professional Engineer
 and/or Land Surveyor

Ronald J. Eidson

Certificate No. **JOHN W. WEST,** 676

RONALD J. EIDSON, 3239



SURFACE USE AND OPERATIONS PLAN

FOR

Canyon Resources, Inc.
Harvey/US #1
1650' FWL & 920' FNL
Section 25, T-13-N, R-31-E
Quay County, New Mexico

LOCATED: 12 air miles Northeast of Tucumcari, New Mexico.

FEDERAL LEASE NUMBER: NM-55810

LEASE ISSUED: May 1, 1983

RECORD LESSEE: M. J. Harvey Jr.

ACRES IN LEASE: 80

SURFACE OWNER: Ralph Bell
Route 4
Box 42
Tucumcari, NM 88401

POOL: NA-Wildcat

POOL RULES: Statewide 160 acre spacing for gas

EXHIBITS:

- A. Road Map
- B. Plat Showing Existing Wells and Existing Roads
- C. Surface Facility Arrangement
- D. Drilling Rig Layout
- E. Topo Plat
- F. Archaeological Clearance Report
(To Follow)
- G. Blow-Out Preventer



Surface Use and Operations Plan (Cont'd)
Canyon Resources - Harvey/US #1

I. Existing Roads:

- A. Exhibit "A" is a map showing existing roads in the area of the proposed location.
- B. Exhibit "B" is a portion of an ownership map showing the location of the proposed well as staked. Proposed location is approximately 12 miles Northeast of Tucumcari, New Mexico.
- C. Any repair to existing roads does not appear necessary at the present time.

II. Access Roads:

- A. Length and Width: The new road will be 15 feet wide and approximately 200 feet long, and is shown on Exhibit "E". The center line of the proposed new road is staked and flagged.
- B. Surfacing Material: Caliche or gravel. Watered, compacted and graded.
- C. Maximum Grade: Less than one percent.
- D. Turnouts: None required.
- E. Drainage Design: The new road will be crowned with drainage to both sides.
- F. Culverts: None necessary.
- G. Cuts and Fills: None necessary.
- H. Gates and Cattle Guards: None necessary.

III. Location of Existing Wells:

- A. Existing wells in the area are shown on Exhibit "B". All wells in this area have previously been plugged and abandoned.



Surface Use and Operations Plan (Cont'd)
Canyon Resources - Harvey/US #1

IV. Location of Existing And/Or Proposed Facilities:

- A. Necessary production facilities will be located on the well pad.
- B. Proposed arrangement of tank battery and surface equipment is shown on Exhibit "C".

V. Location and Type of Water Supply:

- A. Surface water in the immediate area is located approximately 1/2 mile North and East (The Canadian River).
- B. All water in drilling operations will be trucked to the drill site from commercial sources.

VI. Source of Construction Materials:

- A. Construction materials, if used, will be caliche and/or gravel, which will be purchased by dirt contractors from a commercial pit in the area.

VII. Methods for Handling Waste Disposal:

- A. Drill cuttings will be disposed in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits.
- D. Oil produced during tests will be stored in test tanks until sold.



Surface Use and Operations Plan (Cont'd)
Canyon Resources - Harvey/US #1

- E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "D".
- F. All trash and debris will be buried or removed from the well site within 30 days after completion of drilling and/or completion operations.

VIII. Auxiliary Facilities:

- A. None anticipated.

IX. Well Site Layout:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, mud pits, reserve pit, and trash pit, and the location of major rig components.
- B. No cut and fill will be necessary, however clearing and levelling of the well site will be required.
- C. The well site area is staked and flagged.

X. Plans for Restoration of the Surface:

- A. After completion of the well, pits will be filled and the location cleaned of all trash and junk to leave the well site in good condition.
- B. Any unguarded pits containing fluids will be fenced off until they are filled.
- C. The reserve pits will be backfilled and leveled and the surface returned to its original contour.



Surface Use and Operations Plan (Cont'd)
Canyon Resources - Harvey/US #1

XI. Other Information:

- A. Topography: The proposed location will be situated on an irregular landform whose surface is broken by the irregular occurrence of low hemmocks. Immediately to the North is a drop off of approximately 200' into the Canadian River bottom. Areal drainage is to the North and East into the river bottom.
- B. Soil: See Archaeological Clearance Report
- C. Vegetation: See Archaeological Clearance Report
- D. Fauna: See Archaeological Clearance Report
- E. Ponds and Streams: The nearest surface water is the Canadian River which is approximately 1/2 mile to the North and East of the proposed location.
- F. Residences and Other Structures: There is one dwelling approximately 300' to the Northwest. This house is currently under construction but will be occupied by the surface owner in the near future.
- G. Surface Usage: The surface of the land is being utilized to a limited extent as grazing land.
- H. Ownership: The surface is privately owned.
- I. Cultural Resources: See Archaeological Clearance Report



Surface Use and Operations Plan (Cont'd)
Canyon Resources - Harvey/US #1

XII. Operator's Representative:

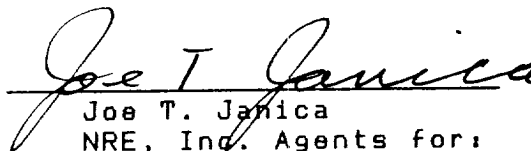
The representative responsible for assuring compliance with the approved Surface Use and Operations Plan is:

Canyon Resources
Suite 180
5310 Harvest Hill Road
Dallas, TX 75230
Office: 214-239-0158

XIII. 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 which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Canyon Resources and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

May 21, 1985
Date


Joe T. Janica
NRE, Inc. Agents for:
Canyon Resources



SUPPLEMENTAL DRILLING DATA

CANYON RESOURCES
HARVEY/US #1
1650'FWL & 920'FNL S25-T13N-R31E

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Base of Santa Rosa	943'
Top of San Andres	1185'
Top Yeso	2604'
Top Granite Wash	3098'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Granite Wash 3098' - 3400'

4. PROPOSED CASING AND CEMENTING PROGRAM:

<u>CASING SIZE</u>	<u>SETTING DEPTH</u>		<u>WEIGHT</u>	<u>GRADE</u>	<u>JOINT</u>
	<u>FROM</u>	<u>TO</u>			
8-5/8"	0	550'	24*	J-55	STC
5-1/2"	0	3400'	15.5*	J-55	STC

8-5/8" will be cemented with approximately 550 sacks of Class "C". Cement to circulate to surface.

5-1/2" will be cemented with 250 sacks of Class "C". Cement to cover the Penn.

5. PRESSURE CONTROL EQUIPMENT:

A 3000 psi working pressure, double ram type preventer will be in use while drilling below the surface casing.



6. CIRCULATING MEDIUM:

Surface to 550 feet: Fresh water with lime or gel as needed for viscosity control.

550 feet to Total Depth: Brine conditioned as necessary for control of viscosity, pH, and water-loss. Weighted as necessary for well control. ..

7. AUXILIARY EQUIPMENT:

Drill string safety valves will be maintained on the rig floor while drilling operations are in progress.

8. TESTING, LOGGING AND CORING PROGRAMS:

Two drill stem tests are planned. These tests will be made in the granite wash (3098'-3400'). The exact depth will be determined when samples, drilling time, and other data indicate a test is warranted.

The proposed suite of electric logs is as follows:

GR-DNL-Caliper
Litho Density Log
Dual Latero Log-Micro Latero Log

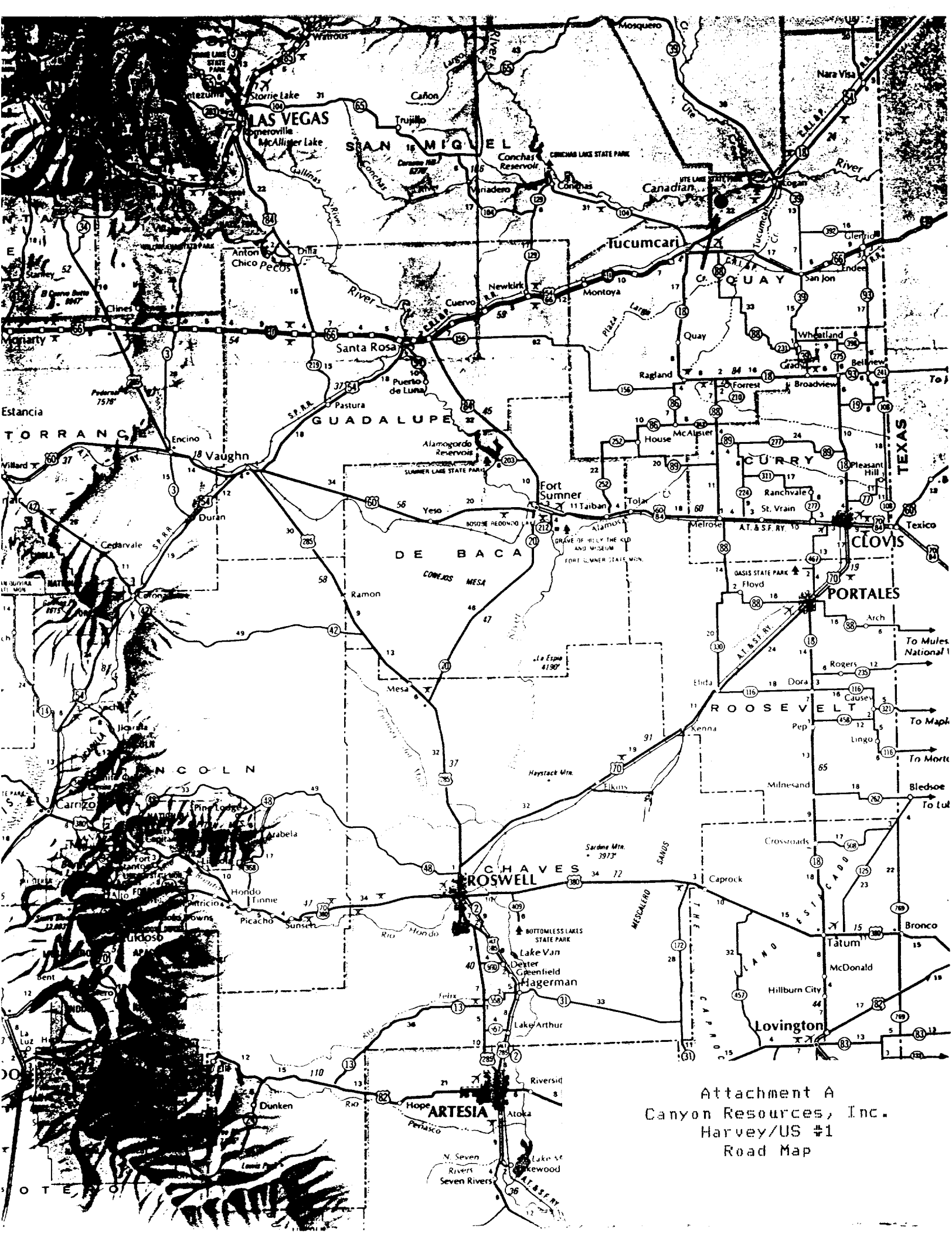
No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

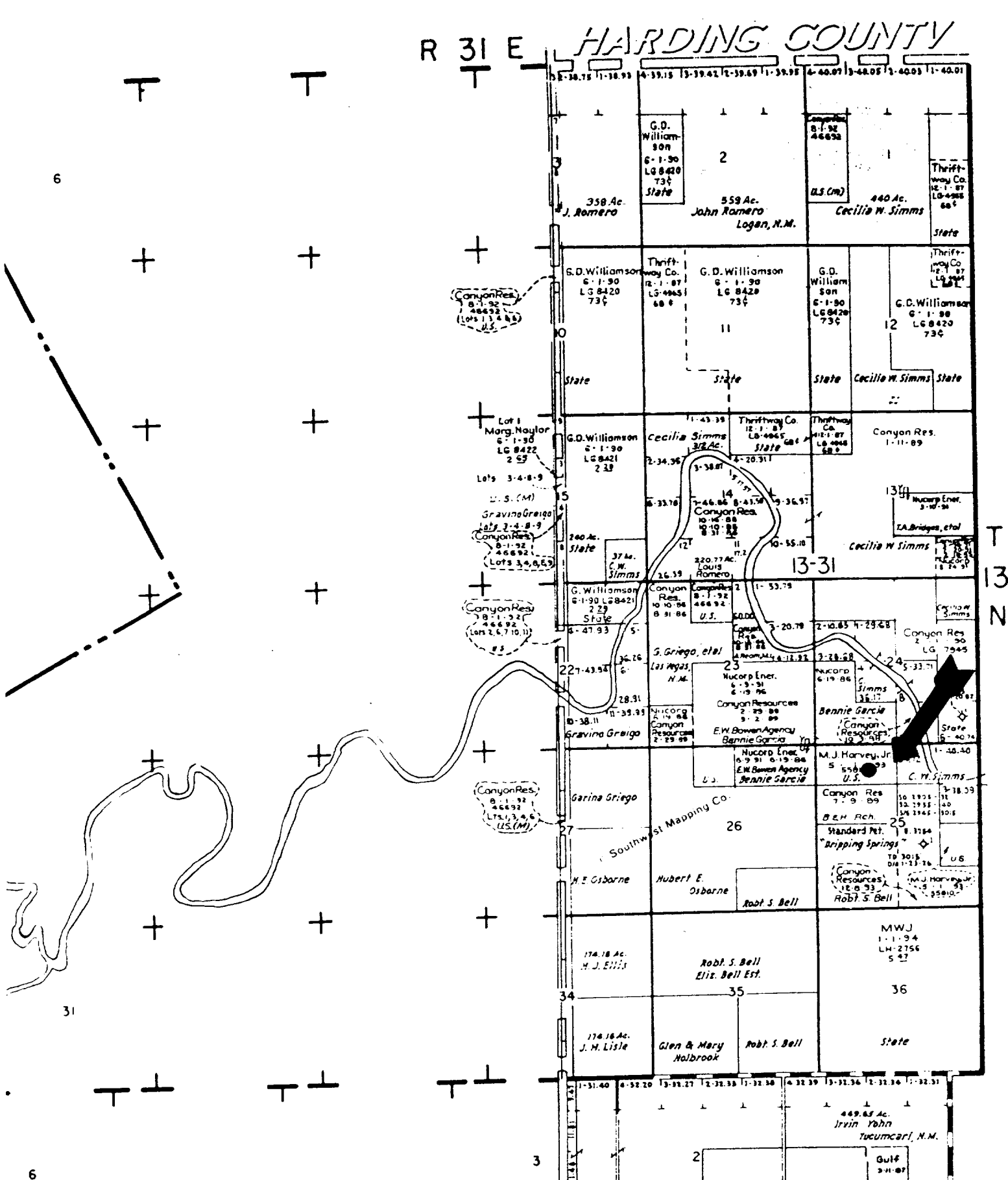
No abnormal pressures or temperatures are anticipated.
No excessive concentrations of H₂S is anticipated.

10. ANTICIPATED STARTING DATE:

It is planned that work will commence upon approval of this application with drilling and completion operations lasting about 20 days.



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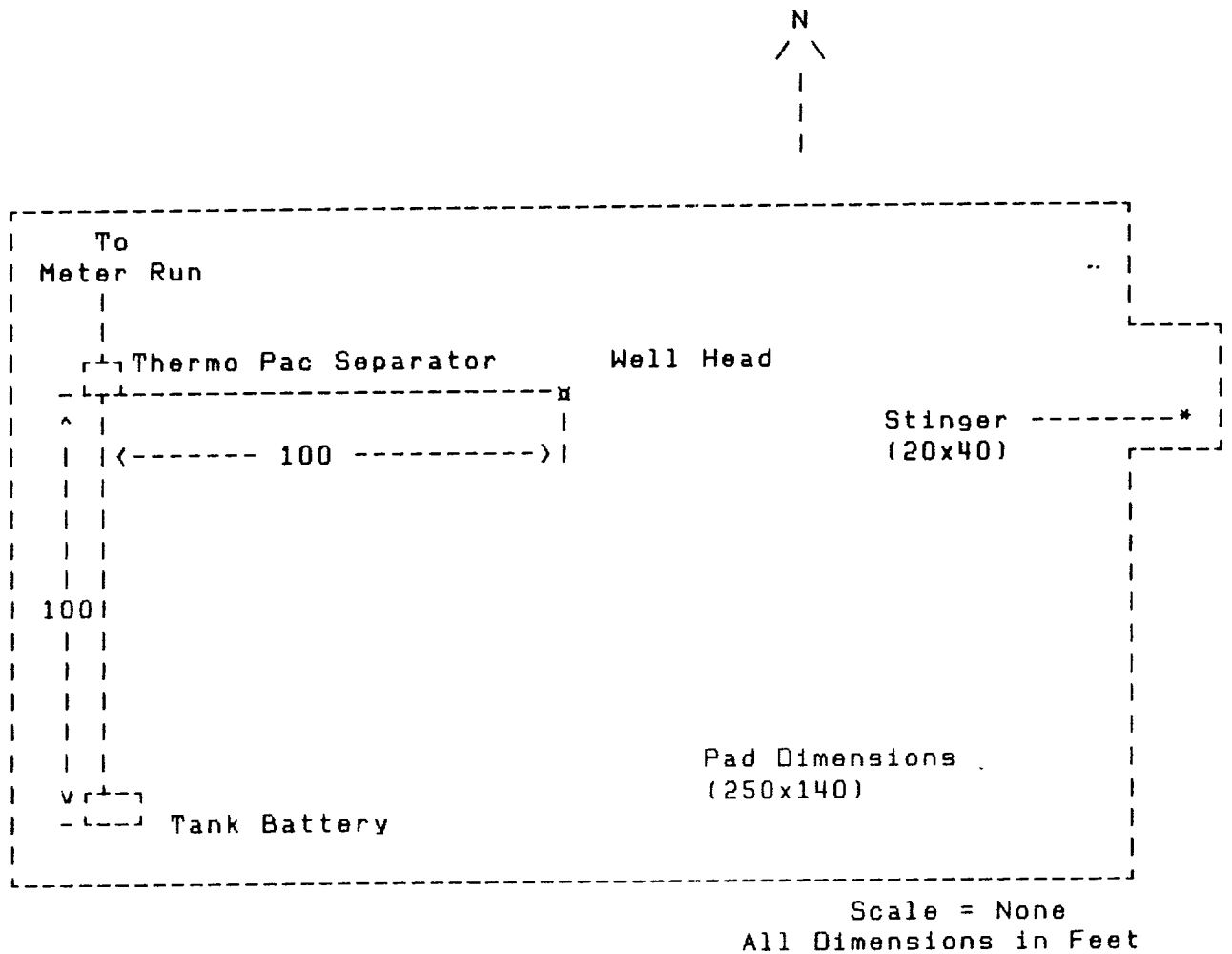
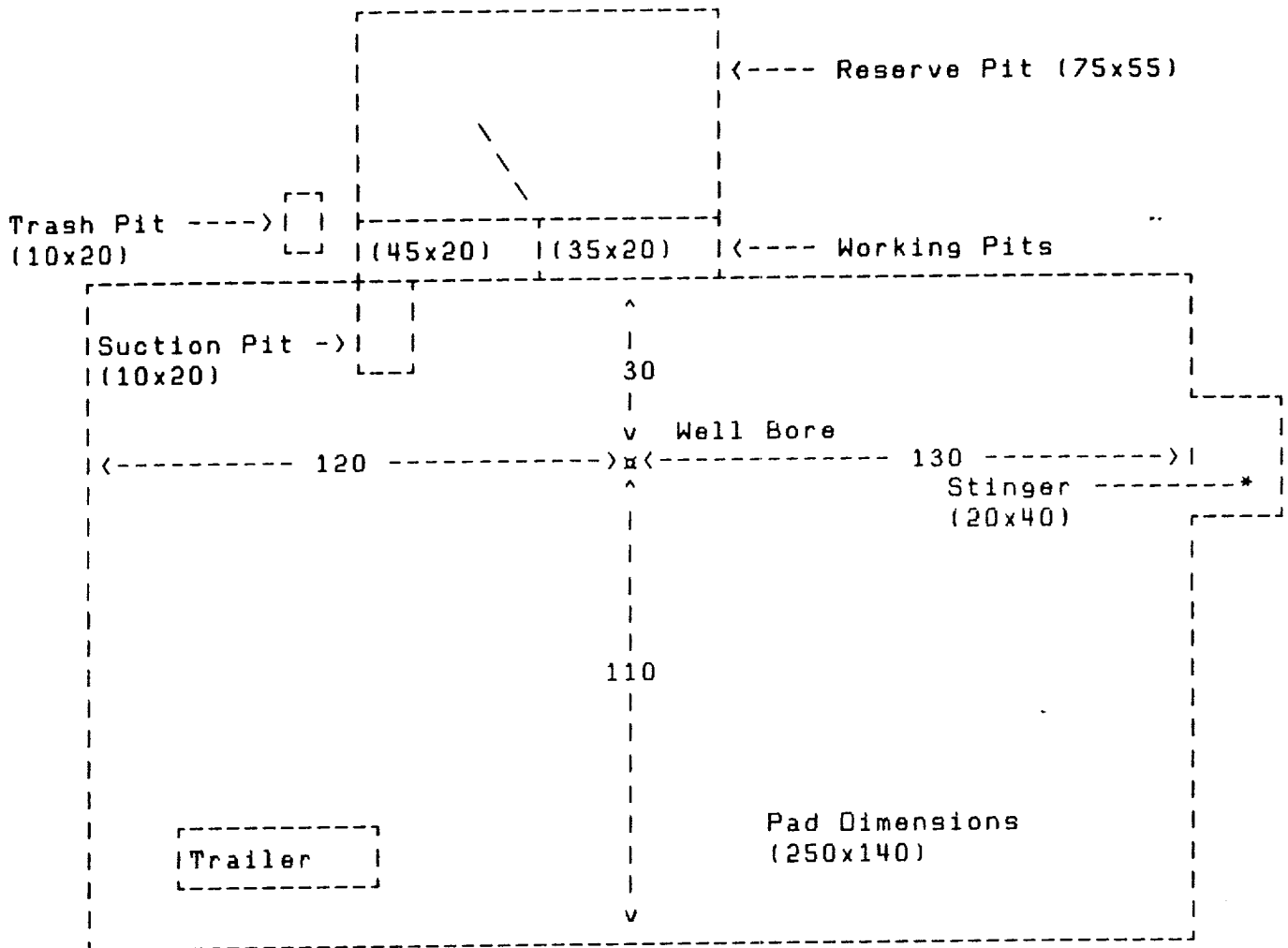
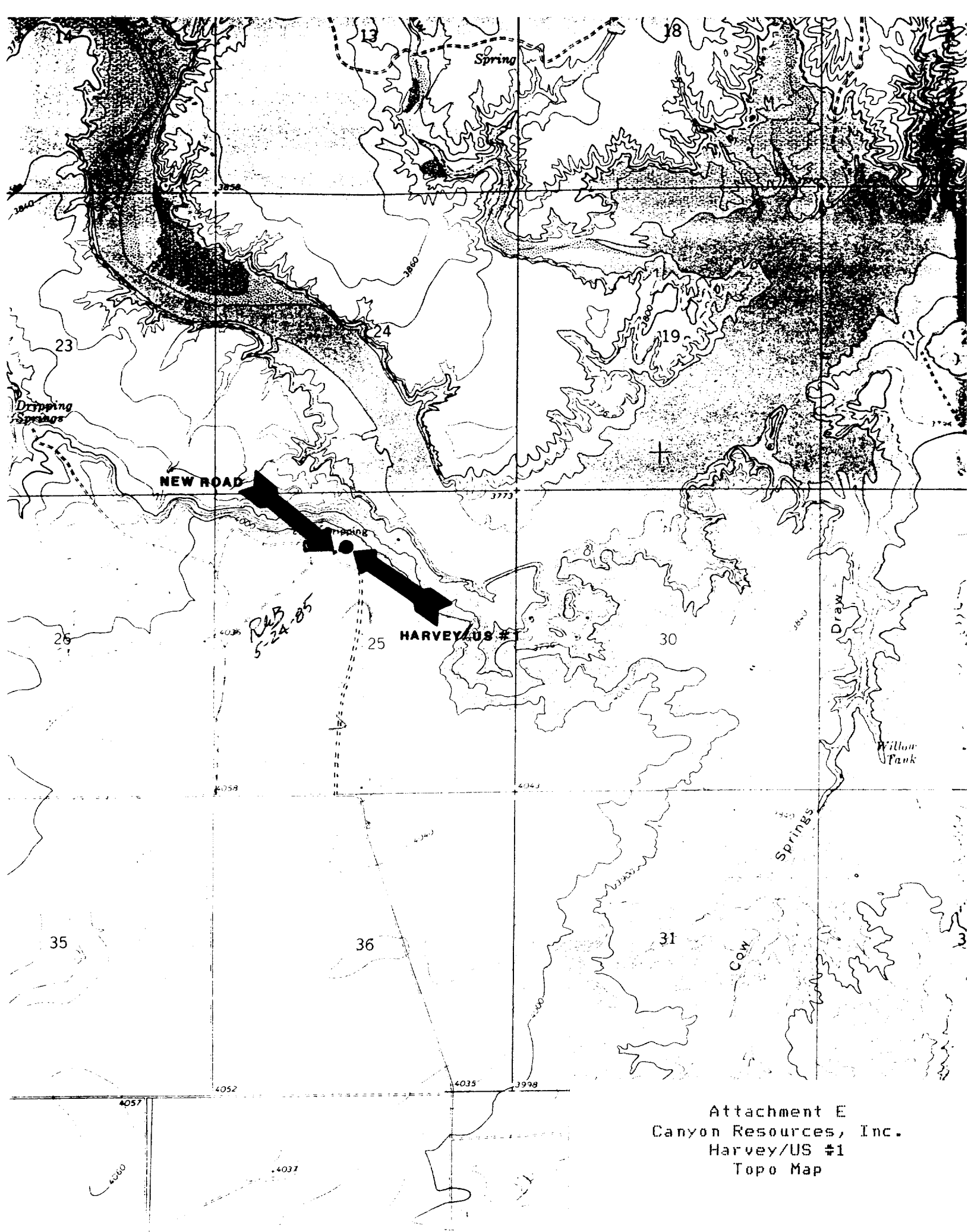


EXHIBIT "C"
Surface Facility Arrangement
Canyon Resources Inc.
Harvey/US #1
1650'FWL & 920'FNL S25-T13N-R31E

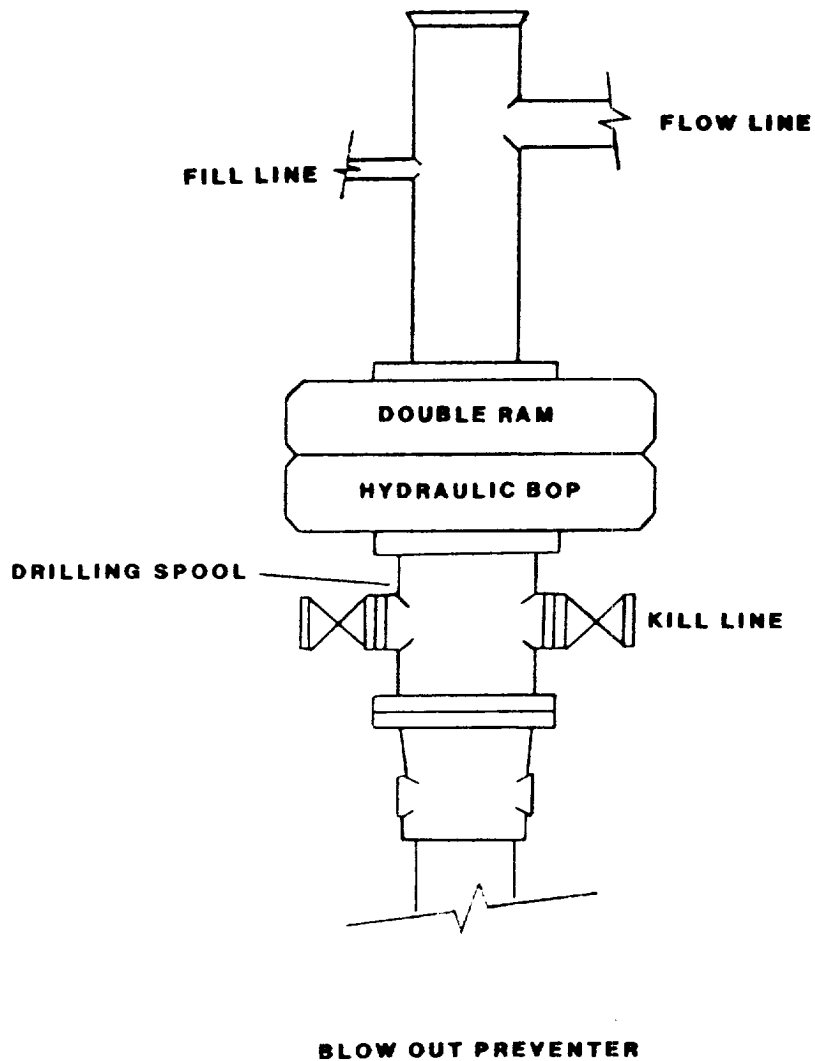


Scale = None
All Dimensions in Feet

EXHIBIT "D"
Drilling Rig Lay Out
Canyon Resources Inc.
Harvey/US #1
1650'FWL & 920'FNL S25-T13N-R31E



Attachment E
Canyon Resources, Inc.
Harvey/US #1
Topo Map



Attachment G
Canyon Resources, Inc.
Harvey/US #1
Blow-Out Preventer