Form 9-331C
(May 1963)

COPY TO O. C. C.

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-005-20689

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM 10280

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Dyan Federal

2. NAME OF OPERATOR: Adams Exploration Company

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: 410 West Ohio, Suite 202, Midland, Texas 79701

10. FIELD AND POOL, OR WILDCAT: Wildcat UNDESIGNATED

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 990' FNL & 330' FEL of Sec. 5
At proposed prod. zone: 990' FNL & 330' FEL of Sec. 5

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 5, T-8-S, R-32-E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 18 miles Southeast of Kenna, New Mexico

12. COUNTY OR PARISH: Chaves | 13. STATE: New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
330	320	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
None	4300'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4509 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
20"	16"	42#(.25"L.P)	40	1½ yds Redi mix
12¼"	8-5/8"	24#	1800	1250 sx CIRCULATE
7-7/8"	4-1/2"	10.5#	4300	250 sx

Drill conductor hole w/rat hole machine, set 40' of conductor and cement w/1½ yds of Redi Mix concrete. RURT. Drill a 12¼" hole to 1800'. Set & cement 8-5/8" OD 24# K-55 new casing @ 1800' & cement w/1250 sx cement. WOC 18 hrs. N.U. & test BOP. Test casing to 1000 psi. Drill out w/ 7-7/8" bit w/wtr. Mud up at 3900' to 9.5# 35 sec viscosity mud to drill the San Andres formation. Run DST if samples yield shows. At T.D. run Log Suite. If production is inducated, run 4½" 10.5#/ft K-55 new casing to T.D. & cement w/250 sx cement.

See attachments for additional operational and environmental details.

RECEIVED
JUL 17 1979
U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

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 J.T. Berry TITLE Operations Manager DATE July 13, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED AS AMENDED
JUL 26 1979
ACTING DISTRICT ENGINEER

*See Instructions On Reverse Side

APPLICATION FOR DRILLING PERMIT

ADAMS EXPLORATION COMPANY
DYAN FEDERAL #1
990' FNL & 330' FEL
Section 5, T8S, R32E
Chaves County, New Mexico

In support of Form 9-331-C, Application for Permit to drill the above described well, ADAMS EXPLORATION COMPANY submits the following exhibits and items of pertinent information in accordance w/Federal requirements.

Exhibit A. Surface Use Plan.
Exhibit B & B-1. Access Route Maps.
Exhibit C. Location and acreage dedication plat.
Exhibit D. Area plat showing wells in vicinity.
Exhibit E. Drill Site Layout.
Exhibit F. Drill Site Cross Section.
Exhibit G. Blowout prevention equipment schemetic drawing.
Exhibit H. Archaeological report.

1. The geologic surface formation is the Coppice Dune.

2. Estimated subsurface formation tops in this well are:

   Rustler 1920
   Yates 2400
   San Andres 3450
   Pi Marker 4020

3. Fresh water may be present in shallow sands. Hydrocarbons are possible only from the San Andres formation.

4. Pipe program:

   16" conductor @ 40', cemented to surface. Will provide protection for shallow fresh water, if present, and prevent washout of cellar while drilling surface hole.

   8-5/8" surface pipe @ 1800± or through the evaporites, cemented to surface.

   4-1/2" production casing @ TD, if well is indicated to be productive.

5. Pressure control equipment: See Exhibit "G".

6. Mud program: Surface hole-fresh and brine water w/paper added to control seepage. Mud up and add LCM as necessary if loss of circulation becomes a problem. Drill out below surface casing w/fresh water, and mud up to a 9.5#, 35 vis product to drill the San Andres.

7. Auxiliary equipment:

   A. Kelly cock in kelly.
   B. Float at the bit.
   C. Tool joint sub w/full opening valve to be stabbed into drill pipe when the kelly is not in the string.

8. Testing,coring, and logging program.

   A. Possible DST's in San Andres.
   B. No coring is anticipated.
   C. Compensated Density, Laterlog w/Gamma Ray Logs will be run from surface pipe shoe to total depth.

9. No abnormally pressured zones have been encountered in wells drilled to the east or west and thus are not expected at this location.

10. The anticipated starting date is August 15, 1979.

EXHIBIT "A"
SURFACE USE PLAN

ADAMS EXPLORATION COMPANY
DYAN FEDERAL #1
990' FNL & 330' FEL
Section 5, T8S, R32E
Chaves County, New Mexico

This plan is submitted with Form 9-331-C, Application for Permit to Drill, covering the above captioned well. The purpose of this plan is to describe the location of the proposed construction activity and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation, so that a complete appraisal can be made of environmental impact associated with the drilling and operation of the well.

1. Exhibit "B" is a portion of a USGS Topography map. Scale 1:250,000 showing by the red line the route of access to the location. Exhibit "B" also depicts the topography and elevation of the land by contour lines (C.I. 100'), and roads in the vicinity of the proposed well. The well site is approximately 18 air miles SSE of Kenna, New Mexico.

   Exhibit B-1 is a similar plat on a much larger scale (1:2000) and with much closer contours (C.I. 5').

   The location can be reached from Kenna, New Mexico by driving south approximately 12 miles, thence southeast approximately 6 miles to Gallina Well. Road "Ys" at Gallina Well and take southwest fork of "Y" for 0.4 mile and the location will be 0.3 mile northwest of this point.

   Location may also be reached from the south. At the starting point of Caprock Baptist Church on U.S. Hiway 380 (20 miles west of Tatum, New Mexico) turn north on black top road 10 miles. At cattle guard w/sign Cooper Ranch proceed north 0.5 mile, west 1.5 mile to Cooper Ranch Complex. Take northeast road from Cooper Ranch 12 miles to Gallina Well and proceed as described above to location.

   Exhibit "C", on a scale of 1" = 1000' shows the well site as staked.

   Existing roads to be used as access to the drill site are in reasonably good condition and it is not anticipated that improvement or maintenance will be required.

2. A single roadway on Federal surface will need to be constructed from a point on the east section line of Section 5, T8S, R32E approximately 1025 feet south of the NE corner of the section to the drill pad and will be approximately 250' in length. See Exhibit B-1 for route. We plan to build a 12' roadway by grading up a 6" crown with shallow bar ditches on either side. The 2000' access road & location will be caliched due to the sandy soil. This material will be purchased by the dirt contractor in an area that is off Federal Land. The access road will be on strike with the 4510 foot contour with only a slight depression prior to arriving at drilling pad. The proposed roadway has been flagged by the surveyor.

3. Exhibit "D" is an area plat on a scale of 1" = 4000', showing existing wells within a two mile radius of the proposed well.

4. At the present time, Adams Exploration neither owns or controls any facilities within a one mile radius of the proposed well.

   If the well is found to be productive, presumably of oil, it will be necessary to install a flowline from the wellhead to an oil production unit and oil tanks which will be located on the drill site pad. A small flare pit, approximately 30' x 30' may be required, and if constructed, will be fenced with sheep-tight fence to protect livestock and wildlife.

   Portions of the drill site pad not required for producing operations, if any, will be restored as closely as possible to original ground contours and seeded with native grasses as directed by the BLM.

5. Water for drilling will be purchased and trucked to location.

6. Surface material at the drill site is a sandy, rocky soil, and would be adequate for construction of the pad and road surface.

7. Drill cuttings from the well will be disposed of in the reserve pit. Drilling fluids will be trucked away to approved disposal facilities or allowed to dry in the reserve pit before closing. Water produced from the well, if any, will be retained in the reserve pit during testing of the well. If the well produces water on a continuing basis, such water will be stored in a corrosion resistant vessel and transported to approved disposal facilities. Any oil or condensate produced will be stored on site until sold and trucked to market by approved carriers. Current regulations pertaining to the disposal of human waste will be complied with. Trash, waste paper, garbage, and junk will be collected and buried in a separate trash pit and covered with two feet of soil. All waste materials will be collected in such a manner as to prevent scattering by the wind.

8. No auxiliary facilities will be required for the drilling of this well.

9. Exhibit "E" is a drill site layout drawn to No Scale showing the dimensions of the well pad and the location of the major drilling components, pits, etc. Exhibit "F" shows cross sections of the pad with approximate cuts and fills. Pits will be plastic lined.

10. After all drilling and completion operations are finished, excess and unnecessary equipment will be removed. The location will be cleared and cleaned and insofar as possible restored to original contours of the land. The pits will be allowed to dry before being closed and restored, and will remain fenced until closed. If the well is dry, all compacted areas, including the access road, will be ripped to a depth of at least 12", and reseeded if so directed by the BLM.

11. The proposed drill site is located on the Llano Eslacado and is 2 miles northeast of Button Mesa. This is an arid region and vegetation is sparse consisting of prickly pear, mesquite, oak brush & yucca. The soil is mainly sand with some caliche & rocks.

The contemplated operations are on Federally owned surface, and the land is not fenced. No livestock was noted, but it is assumed the land is leased for grazing. No wildlife was observed in the vicinity. Typical desert fauna should be expected to be present, however. There are no dwellings or other buildings in proximity of the site.

An archaeological investigation by Dr. Peter S. Miller of the proposed distrubed area has been made and a copy of the report is attached hereto as Exhibit "H". The following errata in Dr. Miller's report should be noted. The drilling site pad will measure approximately 130' x 210' rather than 400' x 400' as stated in Dr. Miller's report.

12. Lessee's representative will be as follows:

J. T. Berry
Operations Manager
410 West Ohio, Suite 202
Midland, Texas 79701
915-683-3303 - office
915-694-9900 - home

I hereby certify that I 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 Adams Exploration Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

DATE: July 13 1979

J. T. Berry
Operations Manager

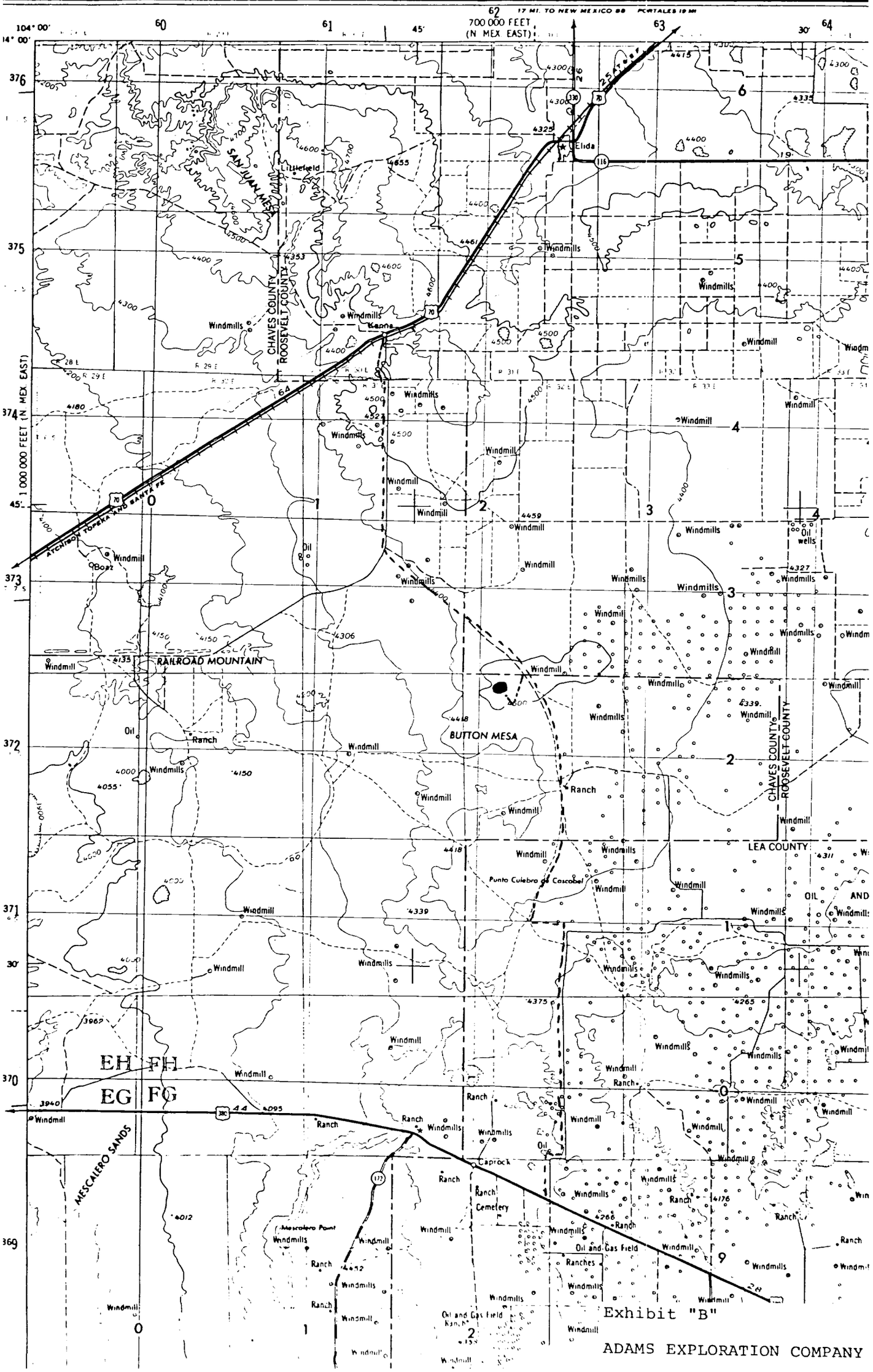


Exhibit "B"

ADAMS EXPLORATION COMPANY

Exhibit "B-1"

ADAMS EXPLORATION COMPANY

Dyan Federal #1

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	Lease	Well No.
ADAMS EXPLORATION COMPANY	DYAN FEDERAL	1

Unit Letter	Section	Township	Range	County
A	5	8 South	32 East	Chaves

Actual Footage Location of Well:
990 feet from the North line and 330 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4509'	San Andres	~~Wildcat~~ UNDESIGNATED	(34.87) 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

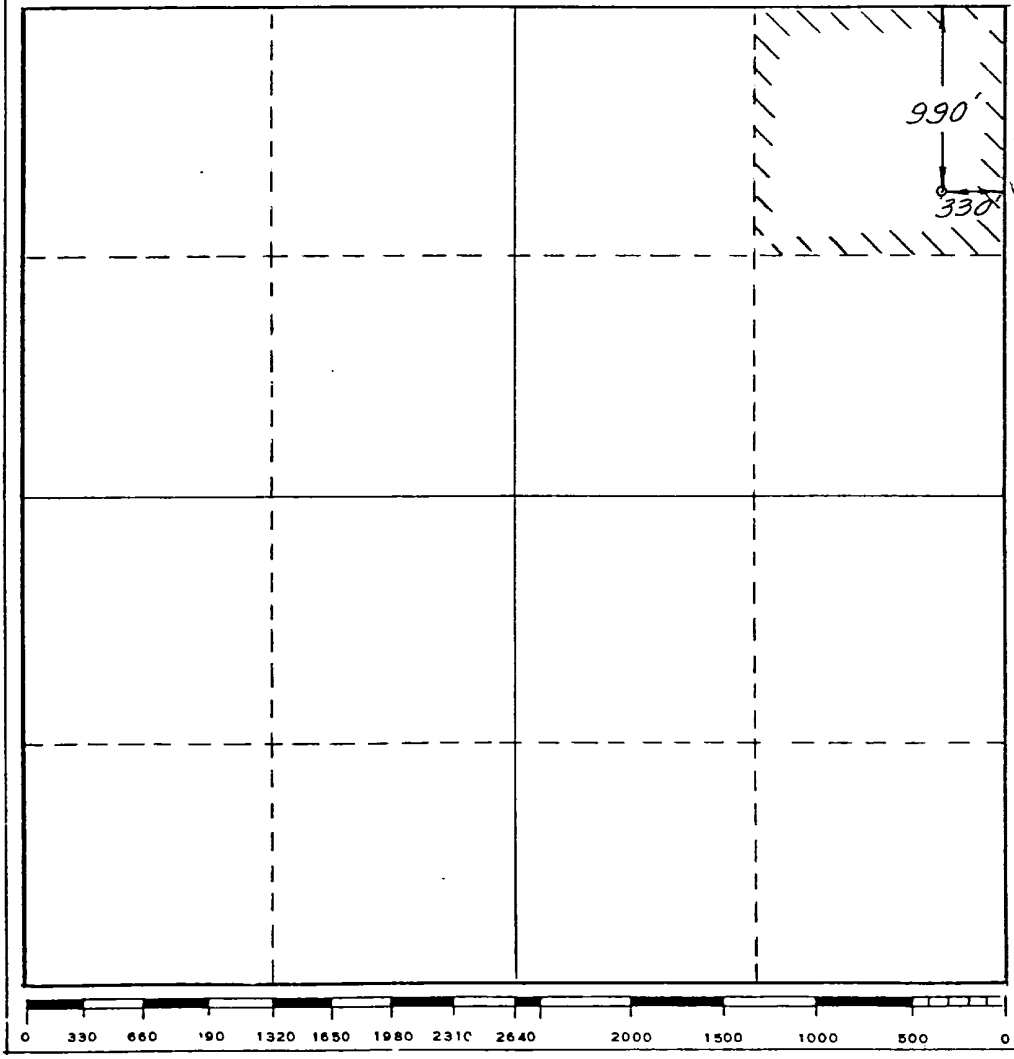
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

J. T. Berry
Name

Operations Mgr.
Position

Adams Exploration Company
Company

July 13, 1979
Date

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.

July 6, 1979
Date Surveyed

Richard B. Duniven
Registered Professional Engineer and/or Land Surveyor

Certificate No. 4882

EXHIBIT "C"

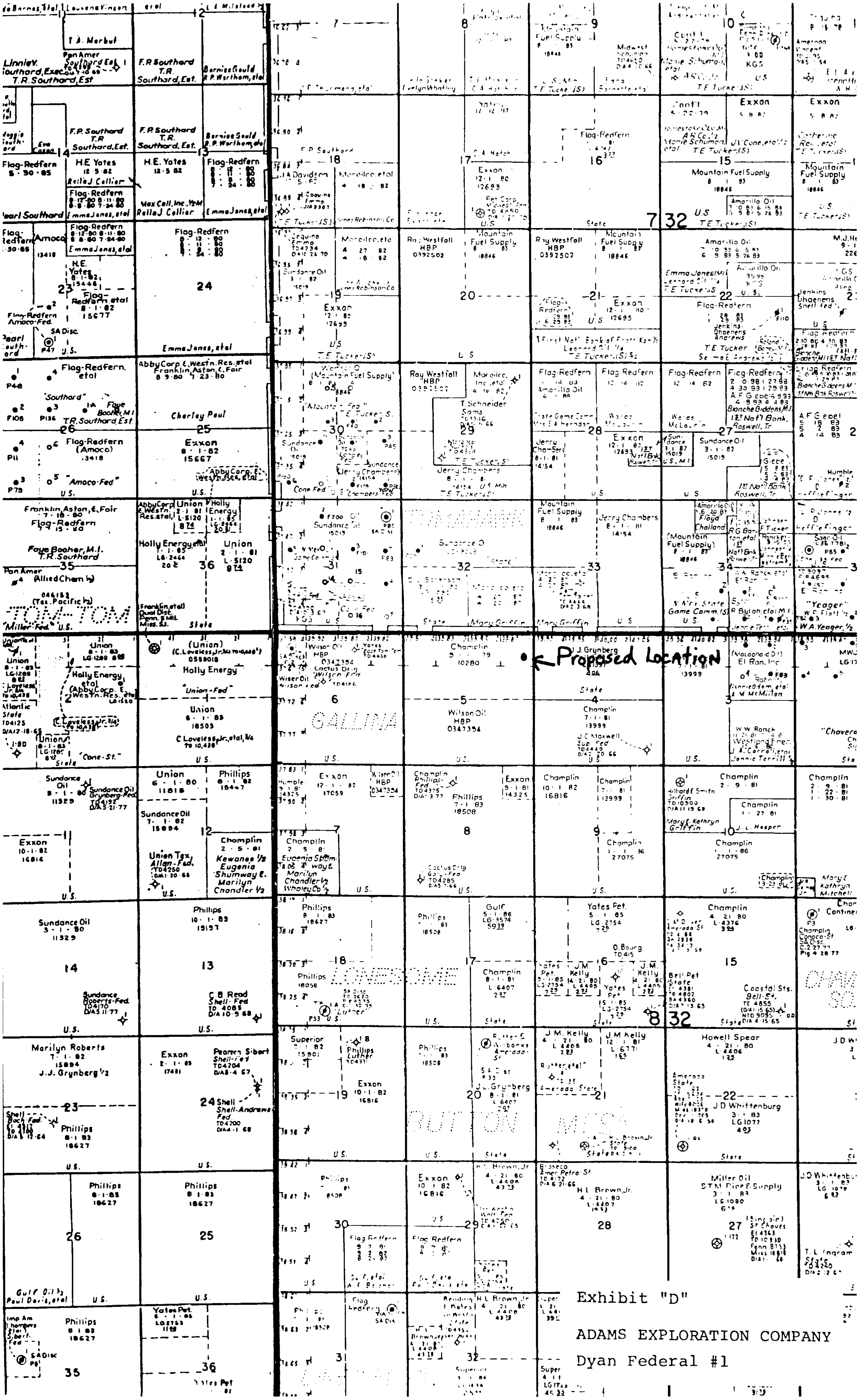
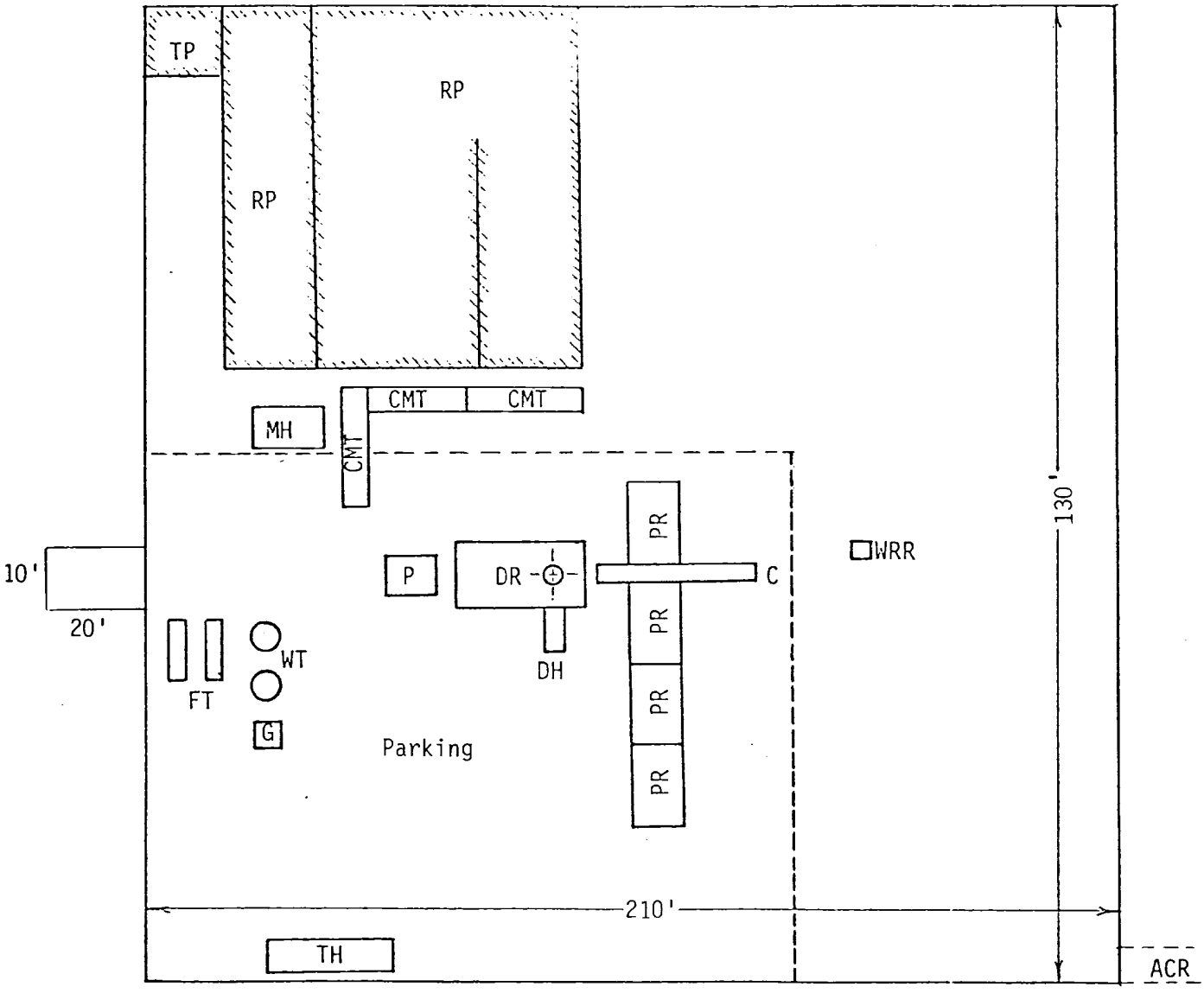


Exhibit "D"

ADAMS EXPLORATION COMPANY

Dyan Federal #1



No Scale

Legend :

TP	Trash Pit
RP	Reserve Pits
ACR	Access Road
MH	Mud House
CMT	Circulating Mud Tanks
P	Pump
DR	Drilling Rig
PR	Pipe Racks
C	Catwalk
WRR	Wire Rope Reel
FT	Fuel Tanks
WT	Water Tanks
G	Generator
DH	Dog House
TH	Trailer House

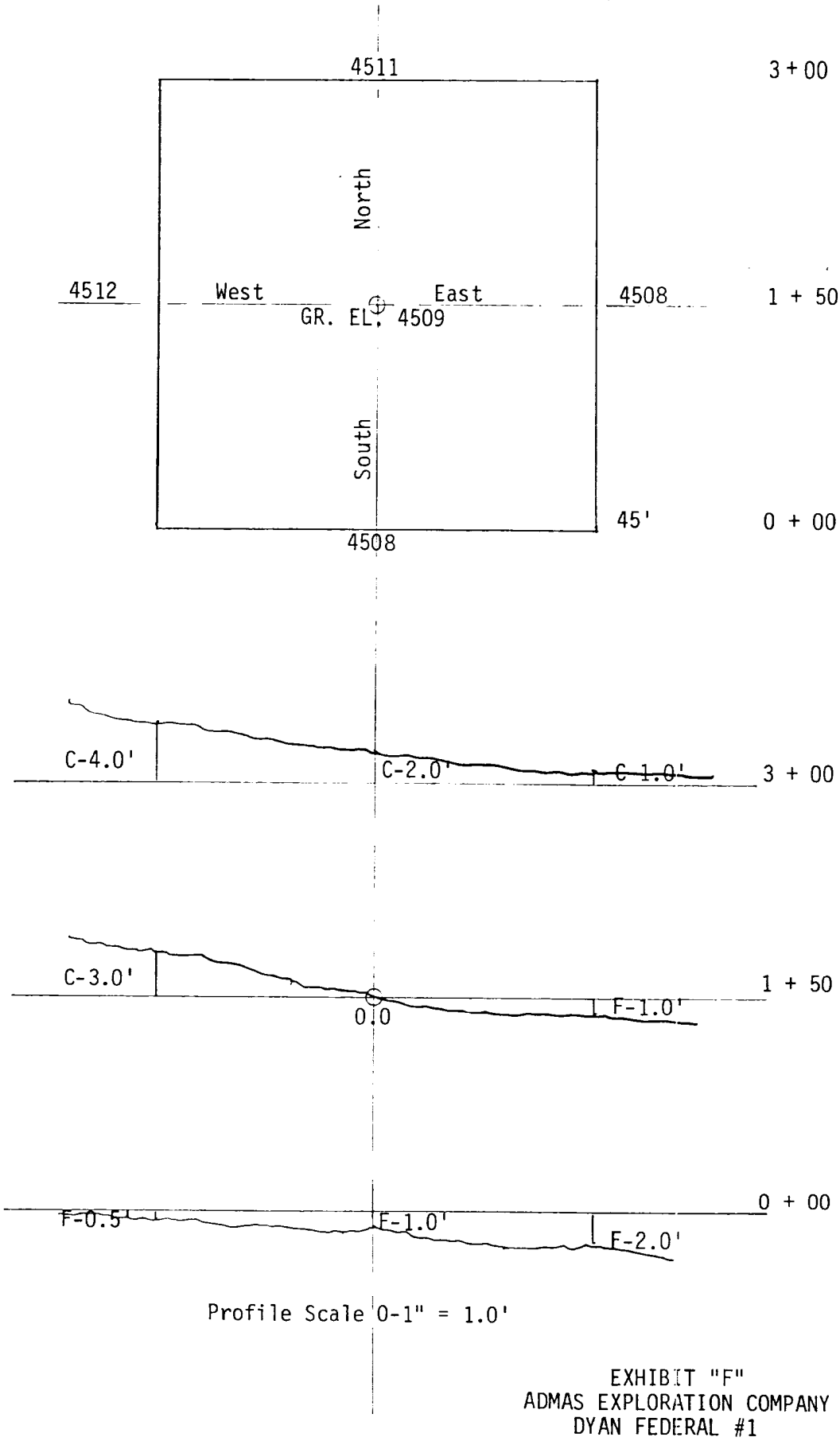
ADAMS EXPLORATION COMPANY
DYAN FEDERAL #1

NTL - 6

(Dotted line indicates maximum extent of heavily compacted area)

EXHIBIT "E"

Drill Site Layout



Profile Scale 0-1" = 1.0'

EXHIBIT "F"
ADMAS EXPLORATION COMPANY
DYAN FEDERAL #1

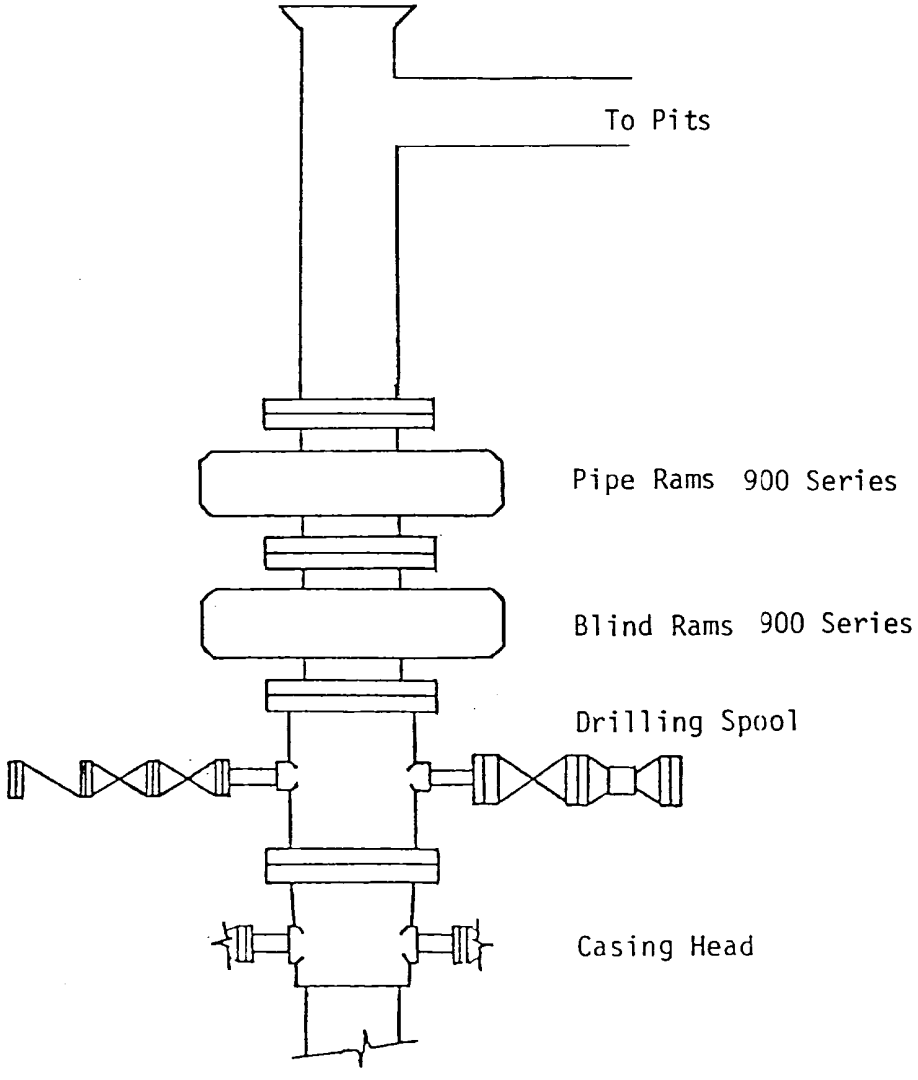


EXHIBIT "G"

Schematic Diagram of

Blowout Prevention Stack

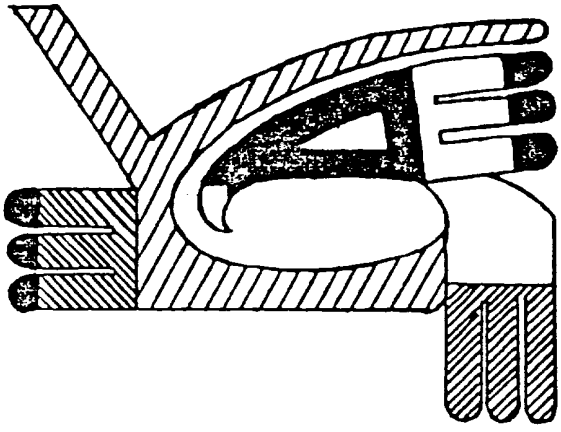
EXHIBIT "H"

AN ARCHAEOLOGICAL RECONNAISSANCE

FOR

ADAMS EXPLORATION
DYAN FEDERAL #1

79-151



by
Scott C. Schermer

Edited and Submitted by

Dr. Peter S. Miller
Director
Agency for Conservation Archaeology
Eastern New Mexico University
Portales

July 9, 1979

Introduction

An archaeological reconnaissance was recently completed by the Agency for Conservation Archaeology, Eastern New Mexico University for Adam's Exploration in Chaves County, New Mexico. The reconnoitered area will be impacted by the construction of a well pad. The project was administered by Mr. "Chic" Dunoven, Adam's Exploration and Dr. Peter S. Miller, Director, for ACA. This report was prepared by the Portales Office of ACA.

The field work was conducted on 6 July 1979 by Scott Schermer. This survey was conducted under Federal Antiquity Permit Number 79-NM-049. A search of the National Register has been made and properties within this area are not on the National Register. Field and weather conditions were good during the course of the survey.

Survey Technique

Visual inspection of the well pad was completed by walking a series of parallel transects. Each transect was covered in a tightly spaced zigzag. The distance between transects was 20 feet. This method maximized the opportunity of observing any cultural resources within or near the proposed area of impact.

Dyan Federal No. 1

The proposed well pad is located 18 miles southeast of Kenna, New Mexico, on the Llano Estacado. The pad measures 400 X 400 feet and is situated as follows:

NE¼NE¼, Section 5, T8S, R32E, NMPM, Chaves County, NM (BLM)

Map Reference: USGS Button Mesa North Quadrangle 7.5 minute series, 1978 (Advanced Proof). (See figure 1)

Terrain

The proposed well pad is located on the Llano Estacado and is 2 miles northeast of Button Mesa. It is situated on a southward facing slope which has a gradient of approximately 20%. This slope appears to be part of an alluviated draw which has been cut into the surface of a gently undulating plain. The surface of this area is overlain by a Coppice Dune Field, the height of these dunes is low on the pad, but larger dunes occur on the higher elevations to the north. The elevation is 4504.6 feet. The soils encountered in the area are predominantly loamy calcareous sands. Lithic inclusions within this soil consist of small to moderate amounts of caliche. Taxonomically this soil can be classified as a member of the Paleustalfs-Ustipsamments-Paleargids association.

Floristics

ACA encountered a moderate floral assemblage in this area. The density of the vegetation is approximately 40 percent. The floral community consists

primarily of grasses. Among the species present are engleman pricklypear (Opuntia phaecantha), mesquite (Prosopis juliflora), oak brush (Quercus havardii), plains yucca (Yucca campestris), blue gramma (Bouteloua gracilis) bush muhley (Muhlenbergia porteri), little bluestem (Androgon scoparis), plains lovegrass (Eragrostis intermedia), sideouta gramma (Bouteloua curtipendula), tabosa (Hilaria mutica), western wheatgrass (Agropyron smithii), nightshade (Solanum eleagnifolium), spectacle pod (Dithyrea wislizenii), broom snakeweed (Gutierrezia sarothrae), and buckwheat (Eriogonum havardii).

Cultural Resources

ACA did not encounter any archaeological sites or isolated manifestations, either within or near the proposed facilities. A review of the National Register did not find any properties listed for this location.

Recommendations

ACA recommends clearance for the well pad and suggests that construction be allowed to proceed as currently planned.

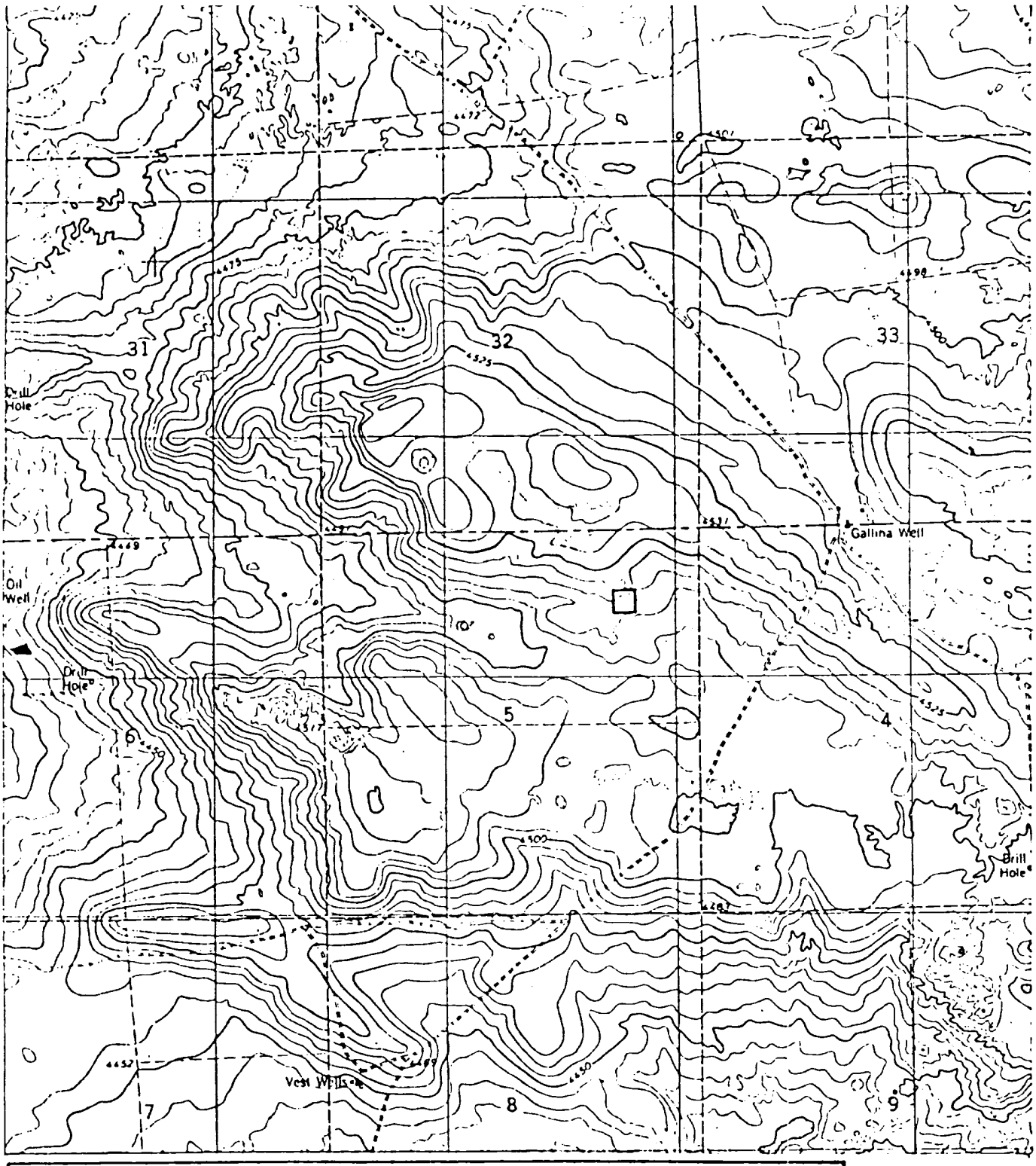


Figure 1: Location of Adams Exploration Dyan Federal No. 1

990 FNL, 330 FEL Section 5, T8S, R32E, NMPM, Chaves County, New Mexico.

Map Reference: USGS Button Mesa North Quadrangle, 1978 (advanced proof)