

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-095-2295

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
Kirby Exploration Company

3. ADDRESS OF OPERATOR
P.O. Box 1745, Houston, Texas 77001

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface
1850' FNL & 790' FWL

At proposed prod. zone
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
7 miles Southeast of Blanco Trading Post

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
790'

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
None

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6939 GR

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	23#	90'	75 sacks class "B" + 2% CaCl ₂
6 1/4"	4 1/2	10.5	2300'	150 sacks class "B" + 2% CaCl ₂
				100 sacks 65-35 Poz mix + 12% g

Move in - rig up rotary tool. Drill 12 1/4" hole to 90 feet. Set 90 feet of new 8 5/8 casing and cement as indicated above. Wait on cement 12 hours. Install 6" 900 series blow out preventers and test. Drill 6 1/4" hole to 2300 feet. No abnormal pressure or temperature are expected. Well will be drilled with gel-chem mud to total depth with mud characteristics of 9.0-9.2# per gallon. WL 8-10 cc and 30-40 viscosity. Upon reaching total depth open hole logs, consisting of DIL, FDC-CNL and GR-Caliper will be run. If commercial production is indicated, 4 1/2" casing will be run and cemented as above. If the well is non-commercial, same will be plugged and abandoned as per U.S.G.S. instructions.

Gas under this lease is not committed to a contract.

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.

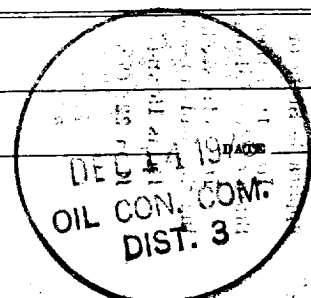
24. SIGNED William T. Jones TITLE Agent DATE 12-10-76
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:
OK

*See Instructions On Reverse Side



NEW MEXICO LAND COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form 10-1
Superior Oil Co.
Effective 10-67

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

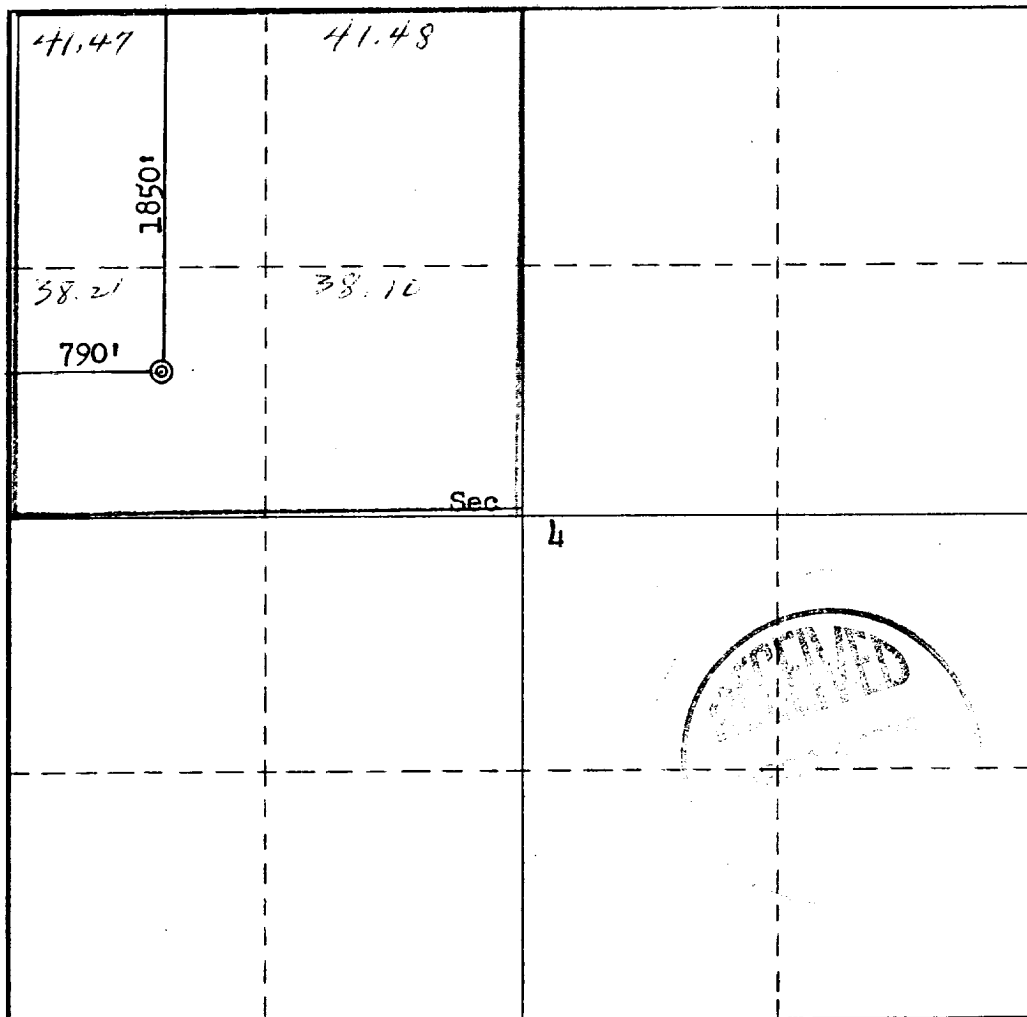
Operator Kirby Exploration Company			Lease Alloy-Federal		Well No. 1
Unit Letter E	Section 4	Township 24N	Range 8W	County San Juan	
Actual Footage Location of Well: 1850 feet from the North line and 790 feet from the West line					
Ground Level Elev. 6939	Producing Formation Picture Cliff		Pool Wildcat	Dedicated Acreage: 160 <i>159.26</i> 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.

William T. Jones

Name
Agent

Position
Kirby Exploration Company

Company
December 10, 1976

Date
William T. Jones

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
December 4, 1976

Registered Professional Engineer
and/or Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.
3950

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

3E COMPANY, INC.

Engineering • Energy • Exploration

P. O. Box 190 — 505/327-4020

FARMINGTON, NEW MEXICO 87401

December 10, 1976

U.S. Department of Interior
Geological Survey
P.O. Box 959
Farmington, NM 87401

Attention: Mr. Phil T. McGrath
District Engineer

RE: Development Plan for Surface Use
Kirby Exploration Company
Alley Federal #1
1850' FNL & 790' FWL
Sec 4, T24N, R8W
Wildcat
San Juan County, New Mexico

Gentlemen:

Attached for your approval is the "Application for Permit to Drill" (form#9-331C) for the captioned well. Also enclosed as support data for the Development Plan are the following reports and plats: Archaeological Report, Surveyor's Plat, Drill Site Plat, and Vicinity Map. The location has been inspected by Mrs. Nancy Hewett of the Agency of Conservation Archaeology, Mr. Bob Moore of the BLM, and Mr. M. L. Seelinger and Mr. Ray Swanson of the U.S.G.S.

The development plan for surface use is as follows:

Points 1 & 2 Vicinity map attached. As part of the access road we will use existing pipeline right-of-way. In order to do so, it will be necessary to roll out water bars. Should the well be non-commercial, the water bars will be restored and the pipeline reseeded. In SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec 5, T24N, R8W an archaeological site exists on a small ridge where a trail now exist. The trail will be used as a portion of the access road to the location. Mrs. Hewett has recommended clearance of this area provided no grading is done. We feel some light grading may be necessary in order to move the rig in. Mrs. Hewett has agreed to be on the site while any grading takes place so that she might observe and record any cultural resources that may be disturbed. Mrs. Hewett feels that this method would be acceptable.

Points 3, 4, 6, and 9 Vicinity map and drill site plat attached

Point 5 Water for drilling will be trucked from the Hilltop water hole approximately 20 miles to the north.

Point 7 A waste disposal pit will be provided for the garbage and trash. Location shown on drill site plat. Drilling fluids will be contained in the reserve pit until such time as evaporation occurs and then the pits will be covered. During dry out time the pit will be fenced to eliminate livestock entry.

Point 8 No camps or airstrip.

Point 10 Should the well be a commercial producer, it will be equipped to facilitate producing operations, with all drilling pits filled, location leveled, with reseeded of the area not used for day to day operations. In the event the well is a dry hole, all pits will be filled, location leveled and reseeded. All seeding will be done between July 1 and September 15, with equipment specified by the BLM. The seed mixture will be that specified for Area I of the Farmington Resource Area.

Point 11 Topography of the area is sloping with drainage by sheet wash erosion. Vegetation present includes sagebrush, various grasses, snakeweed, sparse yucca and scattered juniper trees higher on the slope. Grazing is evident and the soil is a brown sandy clay loam.

Point 12
William T. Jones
3 E Company, Inc.
P.O. Box 190
Farmington, NM 87401
505-327-4020

Point 13 I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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 Kirby Exploration Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

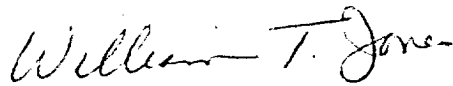
December 10, 1976
Date

William T. Jones
William T. Jones, Agent

U.S. Department of Interior
Page 3
December 10, 1976

Should further information be required, please advise.

Yours truly,

A handwritten signature in cursive script that reads "William T. Jones". The signature is written in dark ink and is positioned above the printed name.

William T. Jones

WTJ:st

Enclosures

Archaeological Clearance Survey Report

for

Kirby Exploration Company

December 9, 1976

Location

Alley Federal #1

Prepared by
Nancy S. Hewett

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

Introduction

The Agency of Conservation Archaeology of the San Juan County Museum Association and Eastern New Mexico University recently completed an archaeological clearance survey on lands near Crow Canyon, New Mexico, to be impacted by the proposed construction of one well pad and one access road by Kirby Exploration Company, Houston, Texas.

The survey project was initiated at the request of Mr. Bill Jones of the Three E Company, Farmington, on December 3, 1976. It was administered by Mr. Jones and Dr. J. Loring Haskell of the Agency of Conservation Archaeology, Portales.

The field work was conducted by Mrs. Nancy Hewett of the Agency of Conservation Archaeology, Farmington, on December 9, 1976 under provisions of Federal Antiquities permit No. 76-NM-023 which expires on March 7, 1977. Representing Kirby Exploration Company in the field was Mr. Jack Cook of the Three Company, Mr. Bob Moore of the Bureau of Land Management, and Mr. M. L. Seelinger and Mr. Ray Swanson of the U. S. Geological Survey.

Survey

The requested archaeological clearance survey involved one well pad and one access road described below and located on lands under the jurisdiction of the Bureau of Land Management. For specific details of location, please see the attached topographic map and the recommendations section of this report.

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

Alley-Federal No. 1

Environment: The terrain of the proposed access road and well pad is sloping with drainage by sheet wash erosion and a few erosional gullies to the north. The principal vegetation is big sagebrush (Artemisia tridentata), various grasses, snakeweed (Gutierrezia sarothrae), sparse yucca (Yucca baccata), and scattered juniper trees (Juniperus sp.) higher on the slope. Grazing is evident in the area, and the soil is a brown sandy clay loam. Because of the snow present, the entire area which were considered likely areas for sites to appear was searched.

Cultural Resources: No cultural resources were noted in the areas of proposed construction during the survey. However, upon checking records, ENM 10622 was located in a previous survey done June 27, 1976 for Northwest Pipeline Corp. for H-21 pipeline. The site is located on a small ridge composed of stabilized dunes where a trail now exists. The trail will be used to move equipment to the location.

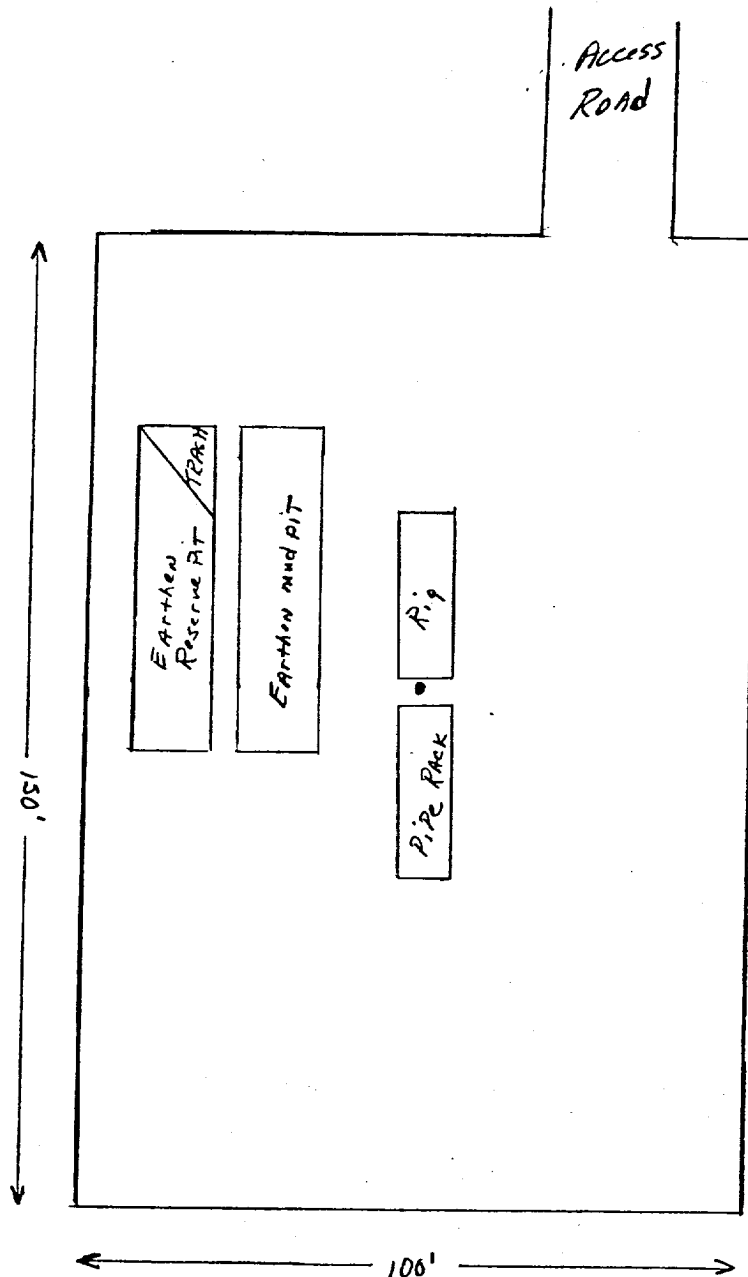
December 9, 1976

Recommendations

Because of the lack of cultural resources on the well pad and 300' access road in from the H-21 pipeline, these areas are recommended for archaeological clearance. The presence of a site in the NE $\frac{1}{4}$ of SE $\frac{1}{4}$ Sec. 5 T24N R8W which is on a narrow ridgeline trail precludes grading. The site was identified as a camp with no features or architecture noted on the surface. Grading, however, very possibly will disturb any features which may exist beneath the surface. Clearance for this area of the trail is recommended with the qualification that no grading take place.

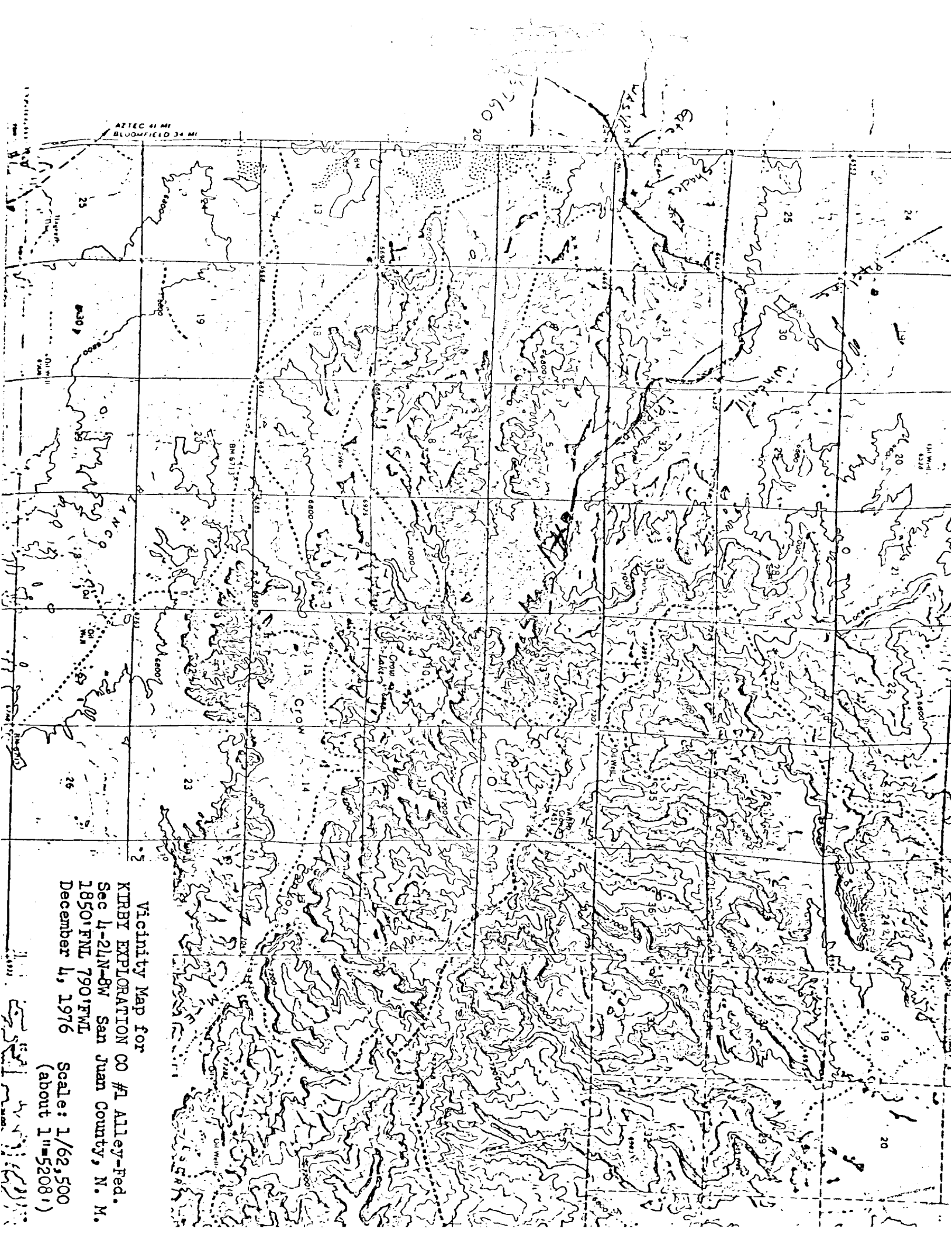
<u>Well</u>	<u>Area</u>	<u>Location</u>	<u>Clearance Status</u>
#1	125' x 125' (pad) 300' x 20' (road)	SW $\frac{1}{4}$ of NW $\frac{1}{4}$ Sec. 4 T24N R8W San Juan County, New Mexico. Map Source: 15' USGS Nageezi Quadrangle	Recommended
		200M x 150M on ridge of stabilized dunes SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 5 T24N R8W NMPM	Recommended with qualification

Well Site Plat



Scale 1" = 30'

KIRBY EXPLORATION COMPANY
ALLEY FEDERAL #1
1850' FNL & 790' FWL
Sec 4, T24N, R8W
San Juan County, New Mexico



AZTEC 41 MI
BLOOMFIELD 34 MI

Vicinity Map for
KIRBY EXPLORATION CO #1 Alley-Fed.
Sec 4-24N-8W San Juan County, N. M.
1850' FNL 790' FNL
December 4, 1976
Scale: 1/62,500
(about 1"=5208')