

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☐DEEPEN ☒
Re-entryPLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

James K. Folk

3. ADDRESS OF OPERATOR

Rt. 1 Box 41 Aztec, New Mexico 87410

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

At surface

1850' FNL & 1850' FEL

At proposed prod. zone

Same

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

5.2 Miles north of Regina, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

790'

16. NO. OF ACRES IN LEASE

162.65

17. NO. OF ACRES ASSIGNED
TO THIS WELL

162.65

18. DISTANCE FROM PROPOSED LOCATION*

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

19. PROPOSED DEPTH

700'

20. ROTARY OR CABLE TOOLS

Rotary

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

7267' G.L.

22. APPROX. DATE WORK WILL START*

January 1979

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#	126 (GL)	150 sx (already set)
7 7/8	5 1/2	14#	650	150 sx

Re-enter old hole.

Drill out cement plugs (1) surface - 10 sks
(2) 100 - 150 - 15 sks
(3) 450 - 650 - 60 sks

Run and cement 5 1/2" casing w/150 sks.

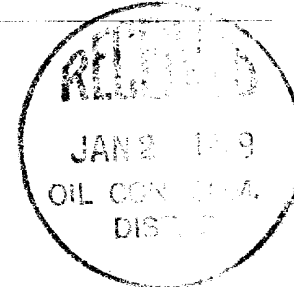
Perforate & acidize pay zones 500 to 650

Flow back to pits and test for production

Possibly sand-water frac and clean out

Run tubing and install well head if warranted

Plug and abandon if not warranted.

you not dedicated

RECEIVED

DEC 29 1978

U. S. GEOLOGICAL SURVEY
DOWNTOWN

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

Owner

DATE

12-27-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ok Brook

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-55

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

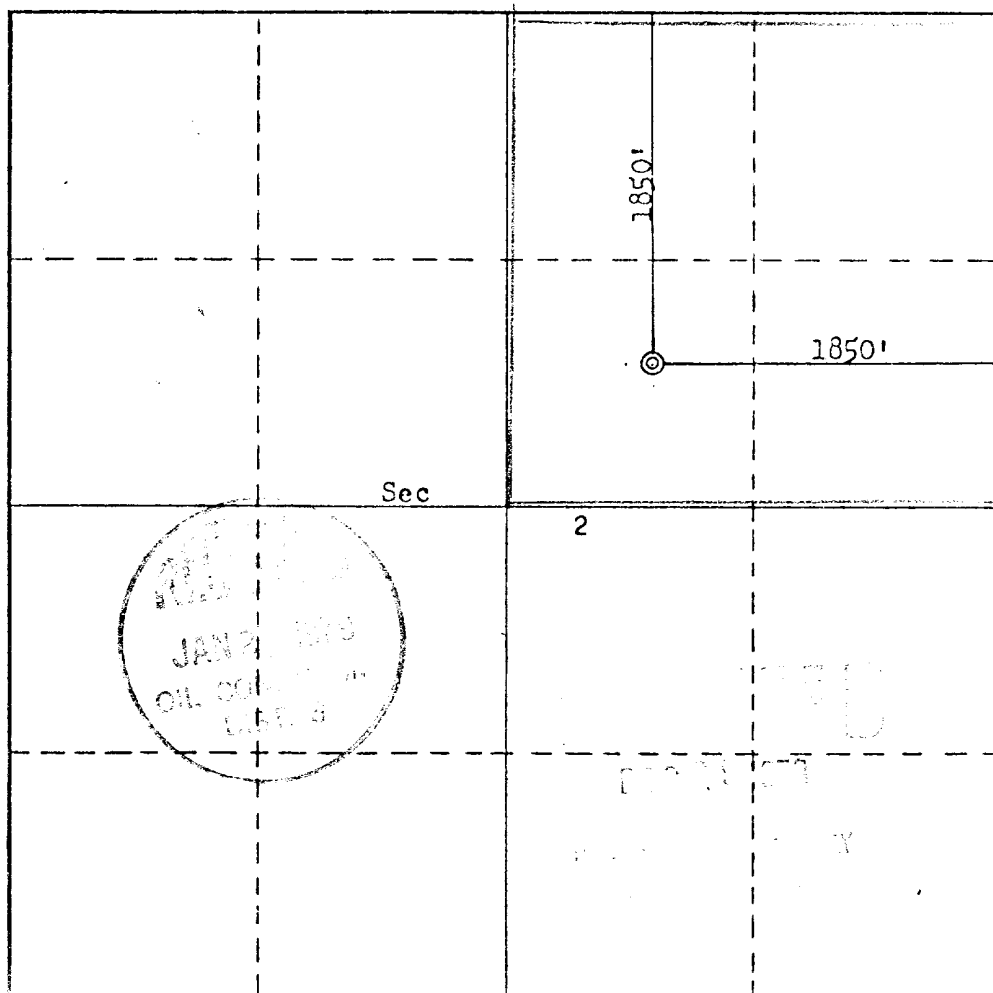
Operator JAMES K. FOLK		Lease HARVARD-FEDERAL		Well No. 1
Unit Letter G	Section 2	Township 23N	Range 1W	County Rio Arriba
Actual Footage Location of Well:				
1850 feet from the North line and		1850 feet from the East line		
Ground Level Elev. 7267	Producing Formation X Richard M. H.	Pool 1-5-79	Dedicated Acreage: 1.00 Acres	

- X 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
X **James K. Folk**

Position
X **Owner**

Company
X **Same**

Date
X **1-5-79**

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 10, 1978

Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.

Certificate No.
3950

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

JAMES K. FOLK

10 Point Plan

1. The surface formation is the Ojo Alamo formation of the Tertiary Period.
2. The estimated tops of important geological markers with depths calculated from an estimated RKB elevation of 7265' are as follows:

Ojo Alamo	0'
Base of Ojo Alamo	470'
Pictured Cliffs	560'
Total Depth	700'

3. Of the formations listed above, it is anticipated that the Pictured Cliffs may be gas bearing in this well.
4. The proposed casing program for completion of this well will consist of used 5½" 14# J-55 casing.
5. The operators minimum specifications for pressure control are:

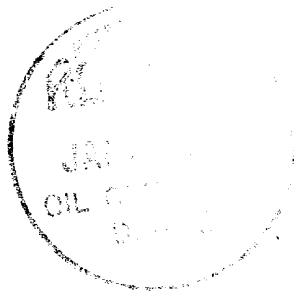
A Shaffer 8" 900 double gate hydraulic BOP with closing unit. The BOP will be tested to 1000 psi after installation and checked daily.
6. It is proposed to re-enter the hole with water and drill to + or - 700'.
7. Auxiliary equipment to be used will be a kellycock and a mud monitor. A full opening safety valve will be on the rig floor.
8. No cores or DST's are planned for this well. The logging program will consist of Gamma Ray and Correlation Log before perforating. If the well is productive, it is planned to complete in the Pictured Cliffs formation. If the well does not flow naturally, a small acid and/or frac treatment may be necessary.
9. It is not anticipated that abnormal pressures or temperatures will be encountered or that any other abnormal hazards such as hydrogen sulfide gas will be encountered in this area.
10. It is anticipated that this well will be started approximately January 1979 and that the operations will last approximately 4 days.



JAMES K. FOLK

13 Point Surface Use Plan
For
Well Location

Harvard Federal No. 1
Located
Section 2, T23N - R1W
Rio Arriba County, New Mexico



30
7-20-73
12

1. Existing Roads

See Survey Plat for well location.

To reach James K. Folk well location, Harvard Federal #1 in the SW NE Sec. 2, T23N, R1W, Rio Arriba County, New Mexico from Regina, New Mexico -- proceed north from Regina on State Route 96 for 3-1/2 miles, where State Route 96 turns east, proceed on north on State Route 112 for 1.5 miles to an existing unimproved road. Turn right and follow unimproved road in an easterly direction and north to the proposed location.

See Topographic Map "B" and Item #2.

There are no plans to improve existing roads. Roads will be maintained and kept at necessary standards required for an orderly flow of traffic during the drilling and completion of this well.

2. Planned Access Road

See Topographic Map "A".

The proposed access road leaves the existing unimproved road and proceeds in an easterly direction for about 500' to the proposed location in the SW/4 NE/4 of Section 2.

The proposed access road will be an 18' crown road (9' either side of centerline) with drain ditches along either side of the proposed road where it is determined to be necessary in order to handle any run-off from any normal meteorological conditions in this area.

The grade of this road will be from flat to 3° and will be constructed from native borrow accumulated during construction.

Any fences that are encountered along this access road will be cut and replaced with a cattleguard with a minimum width of 18' and a loading factor large enough to facilitate the heavy trucks required in the drilling and production of this well.

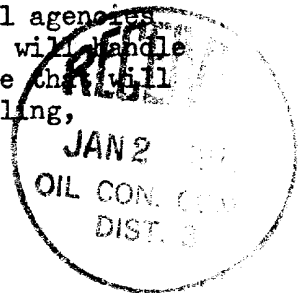
if cattleguards are to be located at existing gates, they will be installed with the above requirements and with a new gate installed at one end of the cattleguard.

Culverts will not be installed unless deemed necessary by all agencies involved. If a culvert is necessary, it will be a size that will handle any normal meteorological conditions in this area and a gauge that will handle the heavy traffic loads that are required in the drilling, completion and production phases of this location.

3. Location of Existing Wells

See Topographic Map "B".

The nearest well is located approximately one-half mile to the northwest of the proposed location.



4. Location of Existing and Proposed Facilities

There are no facilities owned or controlled by James K. Folk within a one mile radius.

In the event production is established, plans for a gas flow line from this location to existing gathering lines or a main production line shall be submitted to the appropriate agencies for approval.

The rehabilitation of the disturbed area that is not required for the production of this well, will meet the requirements of Item #7 and Item #10.

5. Location and Type of Water Supply

Water for the drilling of James K. Folk well Harvard Federal #1 will be obtained from the Mobil water hole in Section 16, T23N, R1W and will be moved by truck via State routes 95, 96 and 112 to the access road and to the location. No water well will be drilled.

See Map "B".

6. Source of Construction Material

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. No additional road gravels or pit lining material from other sources are anticipated at this time.

7. Methods for Handling Waste Disposal

See Location Layout Sheet.

A reserve pit and burn pit will be constructed. The reserve pit will be approximately 8' deep and at least one-half of this depth shall be below the surface of the existing ground.

The reserve pit will be used to store non-flammable materials such as cuttings, drilling fluids, chemicals, produced fluids, etc.

If deemed necessary by the agencies concerned, to prevent contamination to surrounding areas, the reserve pit will be lined with a gel.

The pits will have wire and overhead flagging installed at such time as deemed necessary to protect water fowl, wildlife and domesticated animals.

At the time drilling activities are completed, the reserve pit will be fenced and allowed to completely dry prior to the time that back-filling and reclamation activities are attempted.

When the reserve pits dries and the reclamation activities commence, the pits will be covered with a minimum of 4' of soil and all requirements in Item #10 will be followed.

The burn pit will be constructed and fenced on all four sides with a small mesh wire to prevent any flammable materials from escaping and creating a fire hazard.

All flammable materials will be burned and then buried upon completion of this well.

A portable chemical toilet will be supplied for human waste. The well site will be cleaned of all trash and debris.

8. Ancillary Facilities

There are no ancillary facilities planned for at the present time and none foreseen in the future.

9. Well Site Layout

See Location Layout Sheet.

As mentioned in Item #7, the pits will be unlined unless it is deemed necessary by the representatives of the agencies involved; then the pits will be lined with a gel and any other type material necessary to make it safe and tight.

10. Plans for Restoration of Surface

All topsoil will be stripped and stockpiled (see Location Layout Sheet). When all drilling and production activities have been completed, the location site and access road will be reshaped to the original contour and stockpiled topsoil spread over the disturbed area.

Any drainages re-routed during the construction activities shall be restored to their original line of flow as near as possible. Upon completion of drilling activities, all waste being contained in trash pits shall be buried with a minimum of 5' of cover.

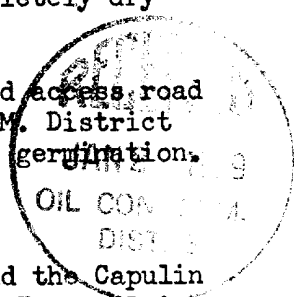
The reserve pit will be completely fenced and overhead wire and flagging installed if there is oil on the pits and then allowed to completely dry before covering.

When restoration activities are complete, the location site and access road shall be reseeded, with a seed mixture recommended by the B.L.M. District Manager, when the moisture content of the soil is adequate for germination.

11. Other Information

This location is between the Continental Divide to the west and the Capulin Mesa on the east, with moderate relief to the north and east. The soil is sandy loam and is covered with short native grass and sagebrush with a scattering of pinon and juniper trees. There are a few pine trees in the area, but not at the location site. The surface is used mostly for grazing, but there is a cultivated field about 400' west of the location. A small lake (Laguna Colorado) lies about 1/4 mile to the southwest.

There are ranch buildings about 1 mile northeast of the location and abandoned buildings about 2000' to the southwest.



The wildlife consists of deer, rabbits and small rodents.

The surface owners are Mr. C. Marshal Shimtzt and Rosa J. Shimtzt:
Regina, New Mexico 87046.

12. Leesee's or Operators Representative

James K. "Ken" Folk
Consultant Geologist
Rt. 1 Box 41
Aztec, New Mexico 87410

Phone: 505-334-2396

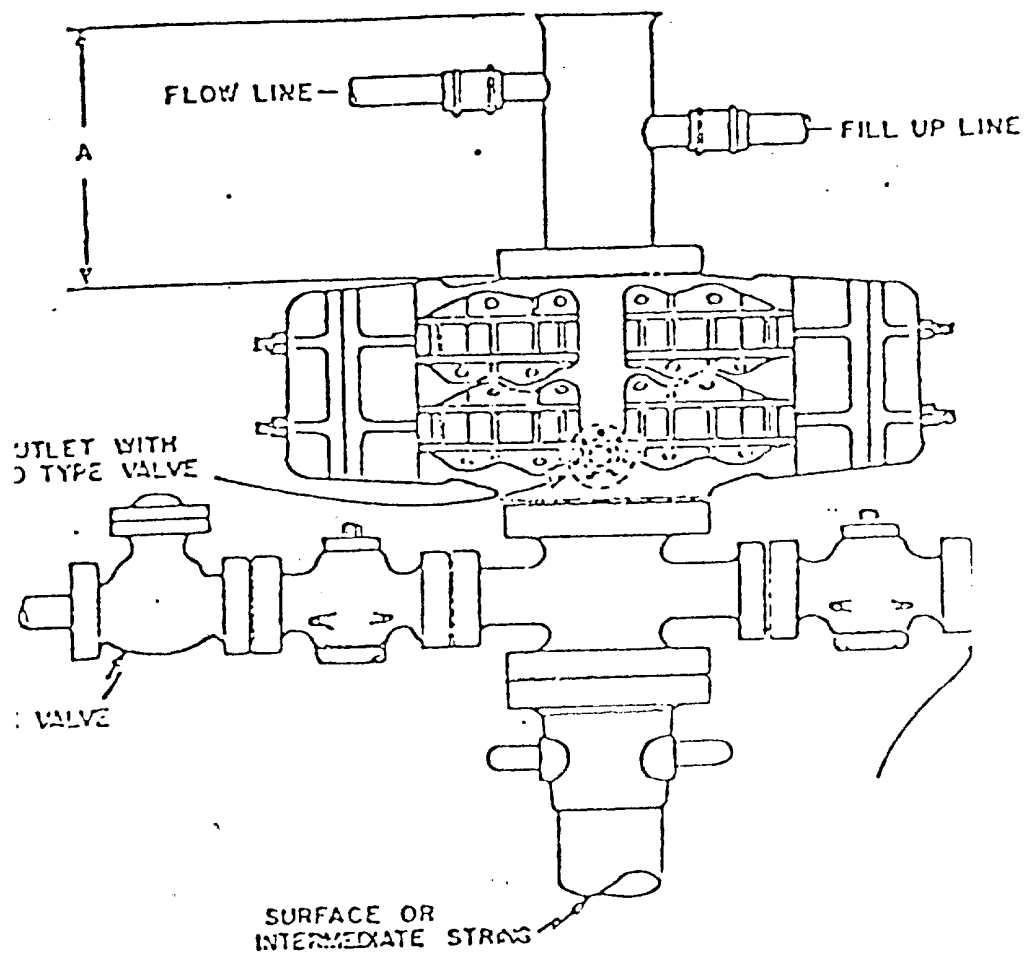
13. Certification

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 James K. Folk, and its contractors and sub-contractors in conformity with this Plan and terms and conditions under which it is approved.

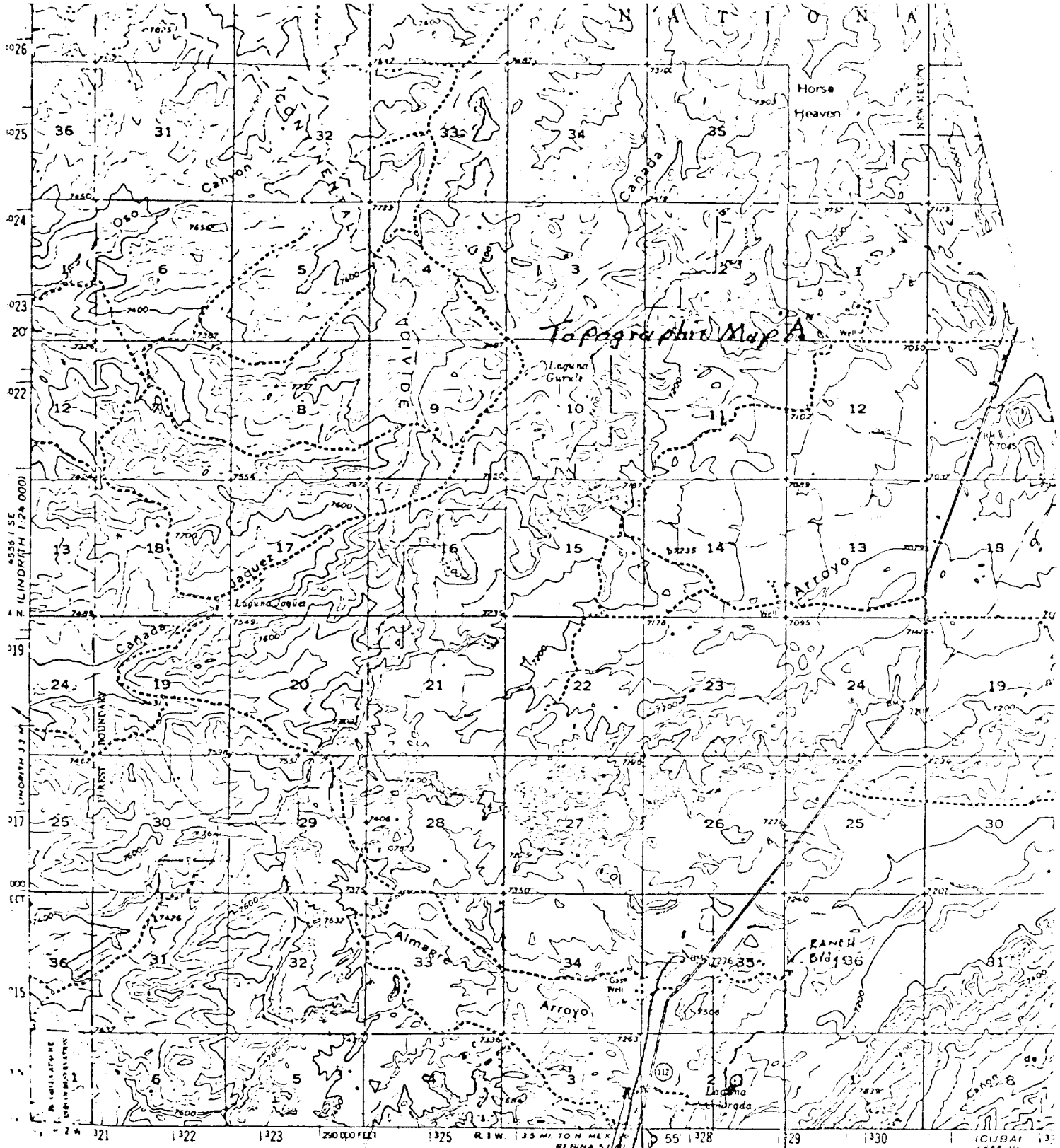
Date

James K. Folk



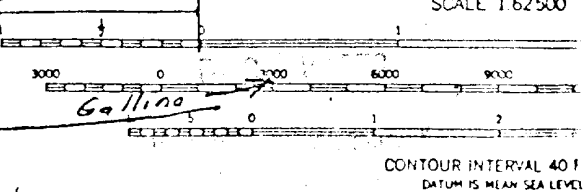
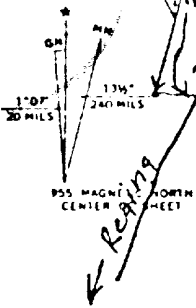


BOP
 James K. Folk
 Harvard Federal No. 1
 SW NE Sec. 2, 23N-1W
 Rio Arriba County, NM



Prepared, edited, and published by the Geological Survey
 by USGS and USC&GS
 from aerial photographs by photogrammetric methods
 photographs taken 1952. Field check 1955
 projection, 1927 North American datum
 and based on New Mexico coordinate system,

Vicinity Map for
 JAMES K. FOLK #1 HARVARD-FEDERAL
 1850' FNL 1850' FEL Sec 2-T23N-R1W
 Rio Arriba County, New Mexico

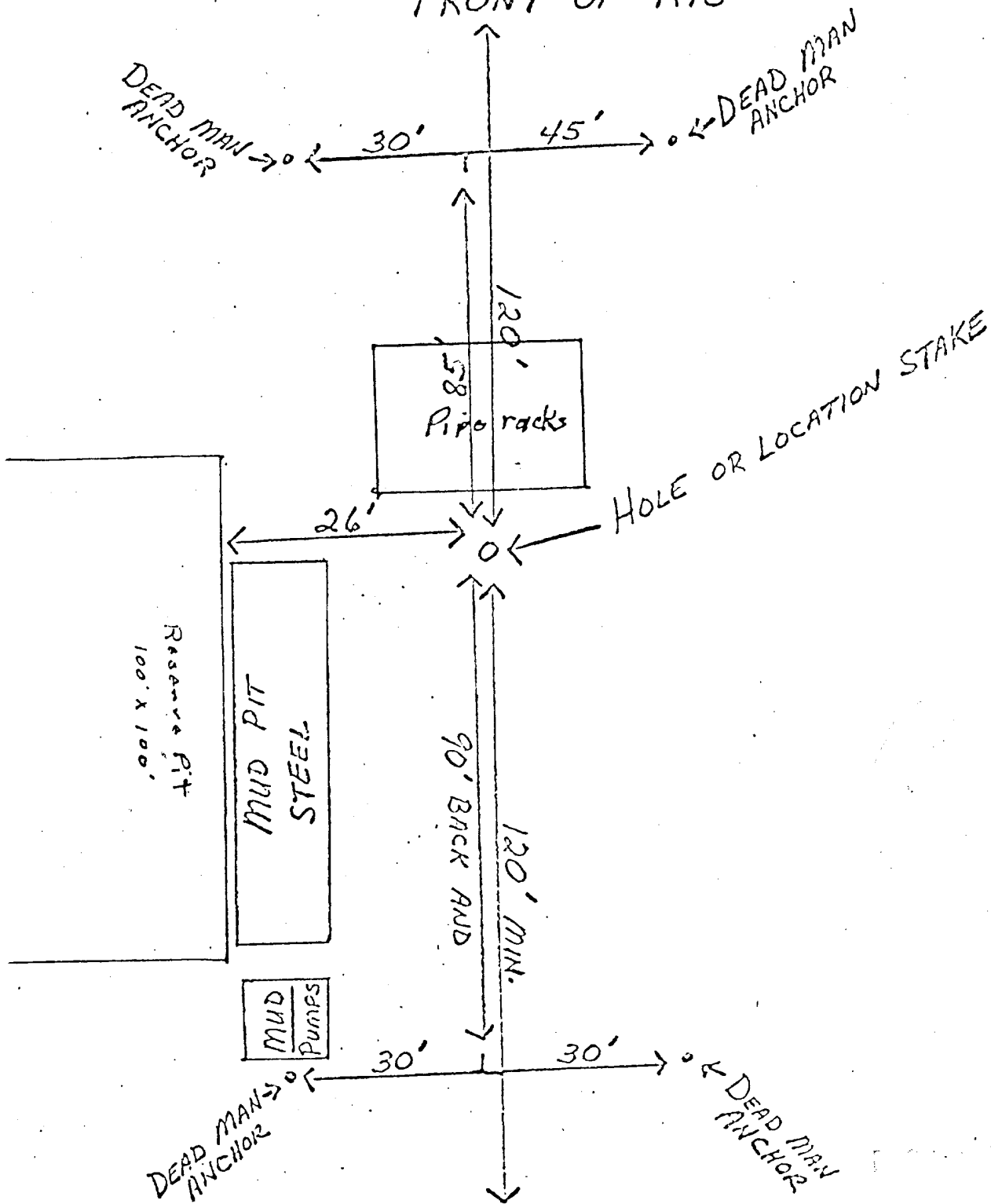


Planned Access Road
 THIS MAP COMPLIES WITH NATIONAL MAP ACT
 FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLOR.
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYM

BLOOMFIELD OILFIELD SERVICE CO.
P. O. Box 1058
BLOOMFIELD, NEW MEXICO 87413

RIG #2

FRONT OF RIG



100' X 100' X 10' DEED

