

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.

U-25888

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

North Bar X Federal No. 1

10. FIELD AND POOL, OR WILDCAT

State Line
UNDESIGNATED

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

Lot 3 (NE $\frac{1}{4}$ NW $\frac{1}{4}$) 1-17S-25E

12. COUNTY OR PARISH 13. STATE

Grand Utah

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

Beartooth Oil & Gas Company

3. ADDRESS OF OPERATOR

P. O. Box 2564, Billings, Montana 59103

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

At surface

1323' FNL, 1372' FWL, Section 1 (Lot 3)

At proposed prod. zone same

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

20 miles northwest of Mack, Colorado

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

1323'

16. NO. OF ACRES IN LEASE

263.52

17. NO. OF ACRES ASSIGNED TO THIS WELL

480 ✓

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

None

19. PROPOSED DEPTH

4094'

20. ROTARY OR CABLE TOOLS

Rotary

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

5469' GL, 5480' KB

22. APPROX. DATE WORK WILL START*

April 20, 1984

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" new	24# H-40 STC	300'	175 sacks Class "G" to surface
7-7/8"	4-1/2" new	10.5# J-55 LTC	4094'	175 sacks RFC

- Surface formation is the Mancos.
- Anticipated geologic markers are: Frontier 3098', Dakota 3490', Morrison 3625', Salt Wash 3994'.
- Gas is anticipated in the Dakota, Morrison and in the Salt Wash. No oil or other minerals are anticipated. No water sands are expected.
- Proposed casing program: See Item No. 23 above.
- Pressure control equipment: See attached well control plan and schematic of drilling contractor's BOP stack. BOP's will be tested before drilling out from under surface casing and checked daily.
- Air or mist drilling will be used to drill the surface hole unless water is encountered. If water is encountered, chemical-gel type mud will be used. The well will be air drilled from under surface casing to total depth.
- Auxiliary equipment: See well control plan.

(continued on back page)

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 James G. Routson
James G. Routson

TITLE Petroleum Engineer

DATE 2/27/84

(This space for Federal or State office use)

PERMIT NO. _____

APPROVED BY _____

CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: _____

BY: _____

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.

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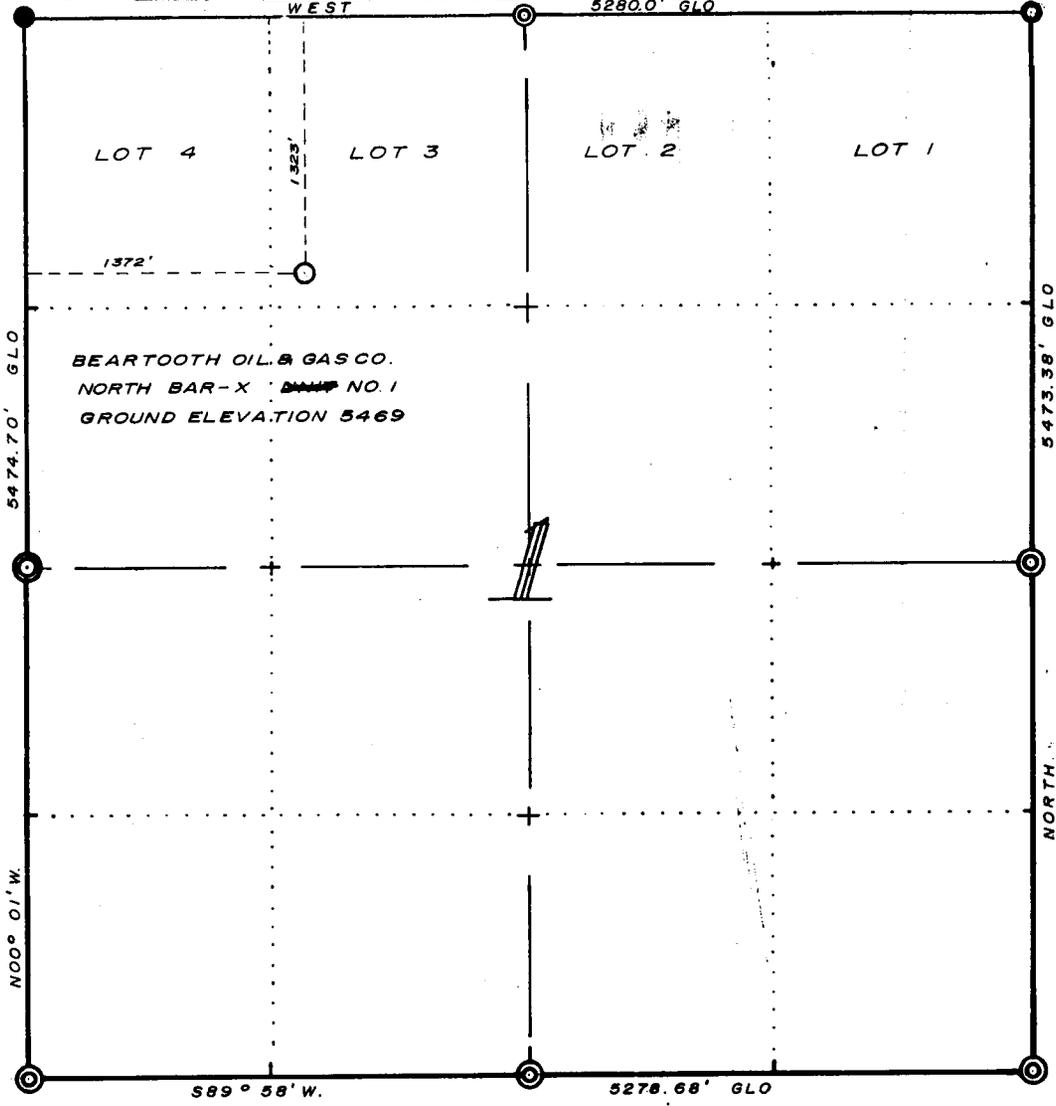
★ U.S. GOVERNMENT PRINTING OFFICE: 1974-781-025 / VIII-239

8. The logging program will consist of a DIL log from TD to base of surface casing, and GR-FDC-SNP or CNL logs from TD to above the Frontier. No cores or DST's are planned.
9. No abnormal pressures or temperatures are anticipated. No poisonous gas is anticipated.
10. Anticipated spud date is April 20, 1984. Completion operations should commence within 30 days of rig release.
11. Survey plats are attached.
12. The gas is not dedicated.
13. The spacing unit will be the $N\frac{1}{2}N\frac{1}{2}S\frac{1}{2}$ of Section 1.
14. Designation of Agent forms from Tenneco have been sent to the BLM in Moab, Utah.
15. The well will be drilled under Tenneco's bond.

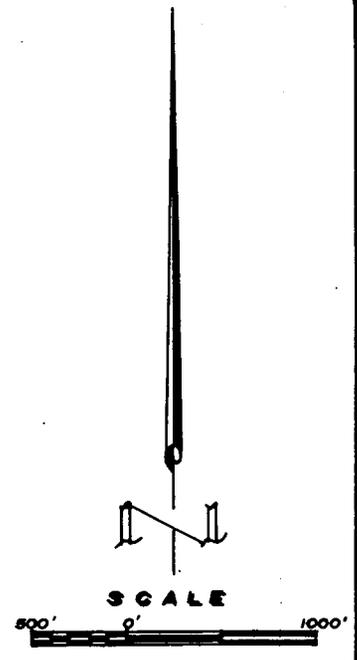
STATE OF UTAH
DEPARTMENT OF HERITAGE
DIVISION OF OIL AND GAS
MAY 17 1984

LOCATION PLAT

SEC. 1, T. 17S., R. 25E. OF THE S.L.M.

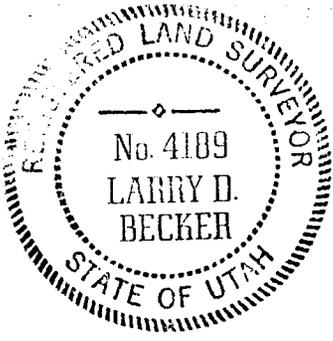


BEARTOOTH OIL & GAS CO.
NORTH BAR-X ~~WASH~~ NO. 1
GROUND ELEVATION 5469



- LEGEND**
- ⊙ STANDARD LOCATION OF GLO SECTION CORNERS
 - ⊙ GLO CORNERS FOUND
 - ⊙ WELL LOCATION STAKED.
- REFERENCE DOCUMENTS**
- 1926 GLO PLAT
 - BAR-X WASH UTAH-COLO. QUADRANGLE, USGS

THIS WELL LOCATION PLAT WAS PREPARED FOR BEARTOOTH OIL & GAS CO.
TO LOCATE THE NORTH BAR-X ~~WASH~~ # 1, 1323' F.N. L. &
1372' F.W. L. IN THE NE 1/4 NW 1/4, OF SECTION 1, T. 17S., R. 25E.
OF THE S.L.M., GRAND COUNTY, UTAH



SURVEYOR'S CERTIFICATE

I, LARRY D. BECKER A REGISTERED LAND SURVEYOR IN THE STATE OF UTAH DO HEREBY CERTIFY THAT THIS SURVEY WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT REPRESENTS SAID SURVEY.

Larry D. Becker

SURVEYED	2-15	ENERGY SURVEYS & ENGINEERING CORP. 715 HORIZON DRIVE, SUITE 330 GRAND JUNCTION, CO 81501 (303) 245-7221	SCALE 1" = 1000'
DRAWN	2-16		JOB NO.
CHECKED	2-17		SHEET OF

SURFACE USE PROGRAM

BEARTOOTH OIL & GAS COMPANY
NORTH BAR X FEDERAL #1
Lot 3 (NE $\frac{1}{4}$ NW $\frac{1}{4}$) Sec. 1-T17S-R25E, S.L.M.
GRAND COUNTY, UTAH

1. Existing Roads

See Maps #1 and 2 and Plat #1. This proposed well is located 17 air miles northwest of Mack, Colorado. It is reached by going 9.5 miles west of Mack on old Highway 6 & 50 to Mesa County 2 Road, then turn right and go 7.3 miles northwesterly up 2 Road, turn right on the existing oil field/ranch road and go 1.6 miles north, turn right and go 0.1 mile east on the oilfield road, turn left and go 1.6 miles northerly to the beginning of the 0.2 mile of new access road.

Maintenance blading will be done on the county road segments by Beartooth as well as the County and other oil & gas operators in the area. The oil field road segments will be maintained by Beartooth as BLM-Moab Class II access roads.

Existing roads are colored green on both Maps #1 and #2.

2. Access Roads to be Constructed and Reconstructed

See Map #1. The 0.2 mile of new road will be constructed as BLM-Moab Class III well access road. It will have an 18 foot wide driving surface with a total disturbed width of 35 to 55 feet depending on topography. The road will be ditched and crowned on flat ground and insloped 2% on sidehill cuts. Drainage design will utilize natural land contour and water will be carried across the road with water dips. No culverts will be used. No fences, modifications, nor cattle-guards are necessary.

Road surfacing materials will be the existing native materials. The maximum road grade is 5%-6%. The road is flagged with orange flagging. The new access road is colored red on Map #1.

3. Location of Existing Wells

See Map No. 3

4. Location of Existing and/or Proposed Facilities if Well is Productive

(a) On Well Pad - See Plat No. 5

(b) Off Well Pad - See Facilities Map

5. Location and Type of Water Supply

The water source for this well is West Salt Creek. The pickup point is on Old Highway 6 & 50 approximately 2.5 miles west of Mack, Colorado.

/Colorado

6. Source of Construction Materials

No construction materials will be used other than native materials. Soil from cuts will be used in fills. No outside material will be brought in.

7. Methods for Handling Waste Disposal

Cuttings will be buried in the reserve pit at clean up. Garbage and other waste material will be contained in a trash cage. This cage will be dumped at an approved sanitary land fill. Human waste will be disposed of in chemically treated sanitary pits.

Drilling fluids will be contained in the reserve pit and left to evaporate. Any fluids produced during testing operations will be collected in a test tank. If a test tank is not available, the fluids will be contained in the reserve pit. Any spills of oil, gas, salt water or noxious fluid will be cleaned up and removed.

If the well is productive, produced water will be disposed of on site for 30 days only, or 90 days with the permission of the District Manager. After that time, application will be made for approval of permanent disposal method in compliance with old MMS Order NTL-2B, and the rules and regulations of the State of Colorado.

8. Ancillary Facilities:

No ancillary facilities are planned.

9. Wellsite Layout

See Plat #2 - Pit and Pad Layout

See Plat #3 - Cross Sections of Pit and Pad

See Plat #4 - Rig Layout

The location will be constructed large enough to accommodate the drilling rig and associated equipment with allowance made for future completion and fracturing equipment.

The location construction will begin by stripping and stockpiling all available (4-6") topsoil. The stockpile will be along the north end of the location.

The reserve pit will be constructed along the west side of the well pad. The pit will be fenced on three sides during drilling and closed on the fourth side at rig release. The fence will be maintained through completion and while the pit area is drying.

10. Plans for Reclamation of the Surface

If the well is productive, the reserve pit will be allowed to dry and then backfilled. All of the area not necessary for production will be resloped, covered with available topsoil and revegetated using a seed formula supplied by the BLM.

10. (continued)

If the well is abandoned, the entire area of disturbance will be returned to a reasonable contour approximating the topography of the surrounding area. The topsoil will be distributed over the recontoured area and revegetated using the appropriate seed formula.

Clean-up will begin after completion rig release and resloping should be completed by the Fall of 1984.

11. Surface Ownership

All lands involving new construction are Federal lands.

12. Other Information

The well site is on the upper reaches of the Mancos desert floor. The vegetation is sparse and includes juniper, sagebrush, western wheatgrass, Indian rice grass and a few annual plants.

13. Lessee's or Operator's Representatives and Certification

James G. Routson
Beartooth Oil & Gas Company
P. O. Box 2564
Billings, Montana 59103
Office Phone: 406-259-2451
Home Phone: 406-245-8797

Ken Currey
Beartooth Oil & Gas Company
P. O. Box 1491
Fruita, Colorado 81521
Office/Home: 303-858-3257
Mobile: 303-245-3660, Unit 5858

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

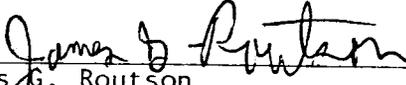
Feb-27, 1984
Date

James G. Routson

WELL CONTROL PLAN

1. Surface Casing: 8-5/8" O.D., 24#/ft., Grade H-40, ST&C, set at 300' or deeper, cemented with pump and plug method back to the surface or bottom of cellar.
2. Casinghead Flange: 8-5/8" x 8" - 900 Series casinghead with two 2" 2000 psi L.P. outlets.
3. Intermediate Casing: None
4. Blowout Preventor: An 8" 3000 psig W.P. double gate hydraulic shaffer BOP (or equivalent) with drill pipe rams and blind rams. All fill, kill and choke lines will be minimum of 2" 2000 psi W.P. A Grant rotating head will be used while air and mist drilling. BOP's will be worked daily. Blind rams will be checked during trips. BOP's will be tested to 1000 psi prior to drilling shoe joint on surface casing.
5. Auxiliary Equipment: (a) Drill pipe floats will be allowed at contractor's discretion. (b) Visual monitoring of air returns will be maintained. (c) Upper kelly cock will be used. (d) Stabbing valve will be kept on floor.
6. Anticipated bottom hole pressure is less than 900 psi at 4094' or a gradient of .22 psi/ft or less. No abnormal temperatures or hydrogen sulfide gas are anticipated.

BEARTOOTH OIL & GAS COMPANY

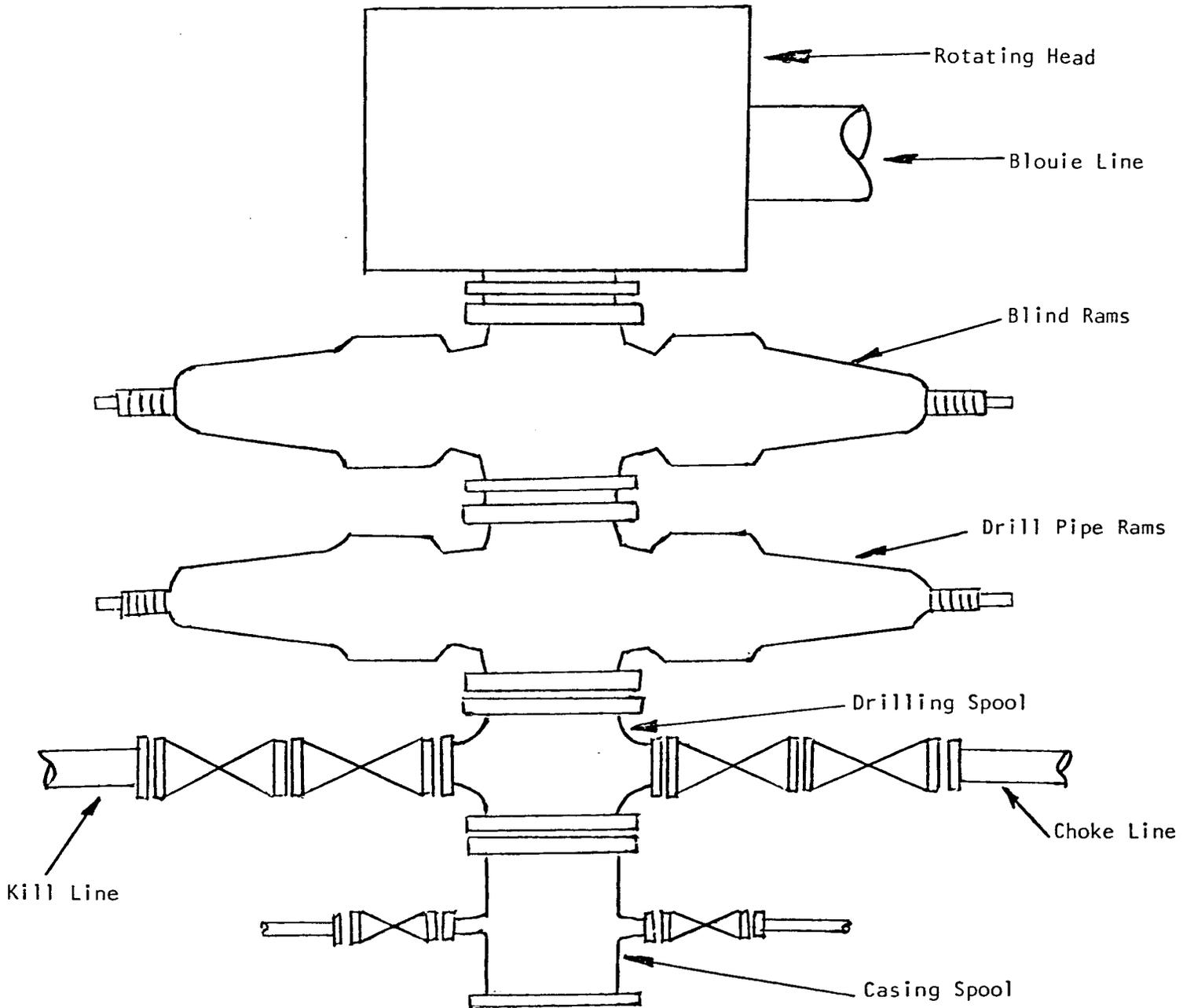


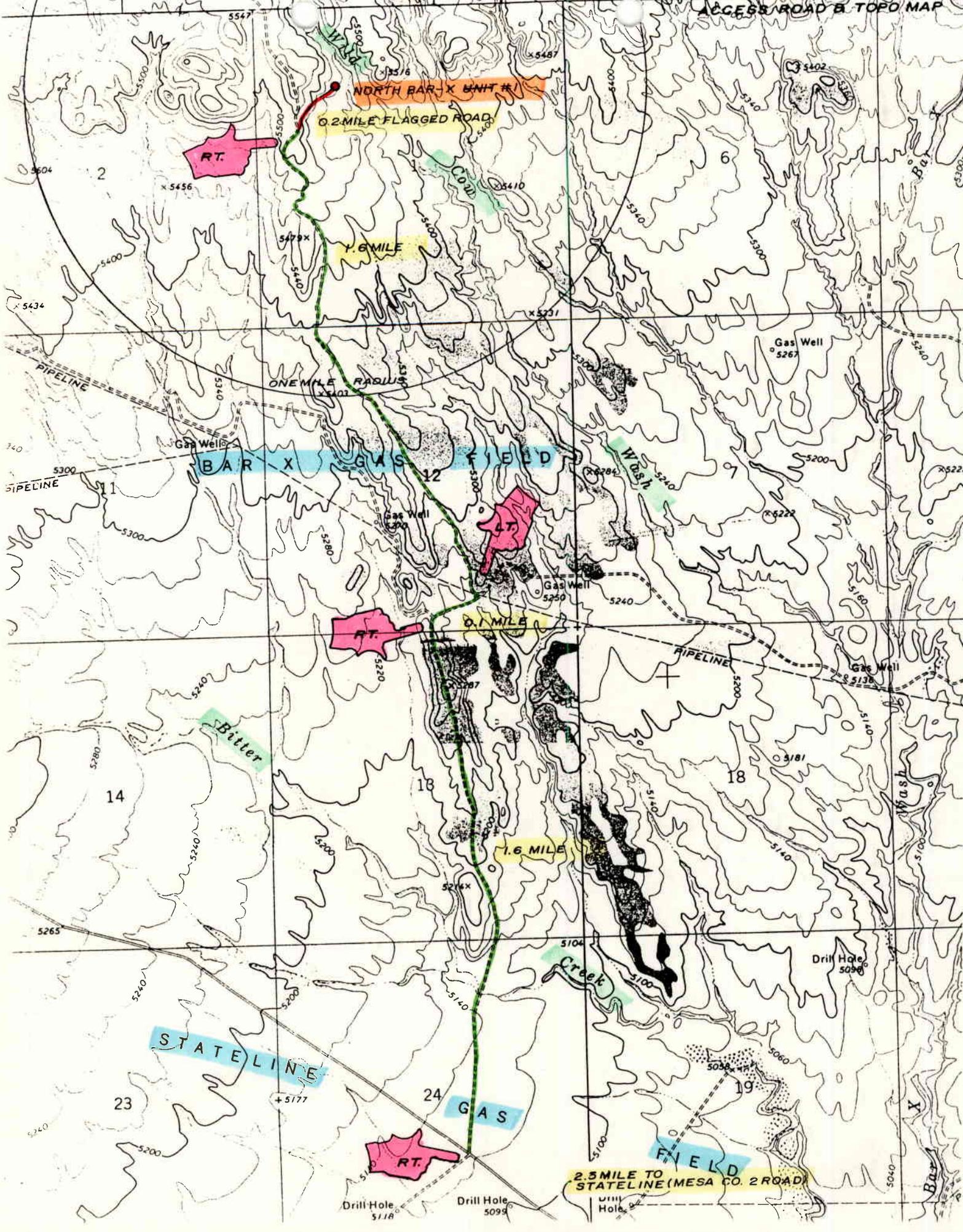
James G. Routson
Petroleum Engineer

SCHEMATIC OF BOP STACK

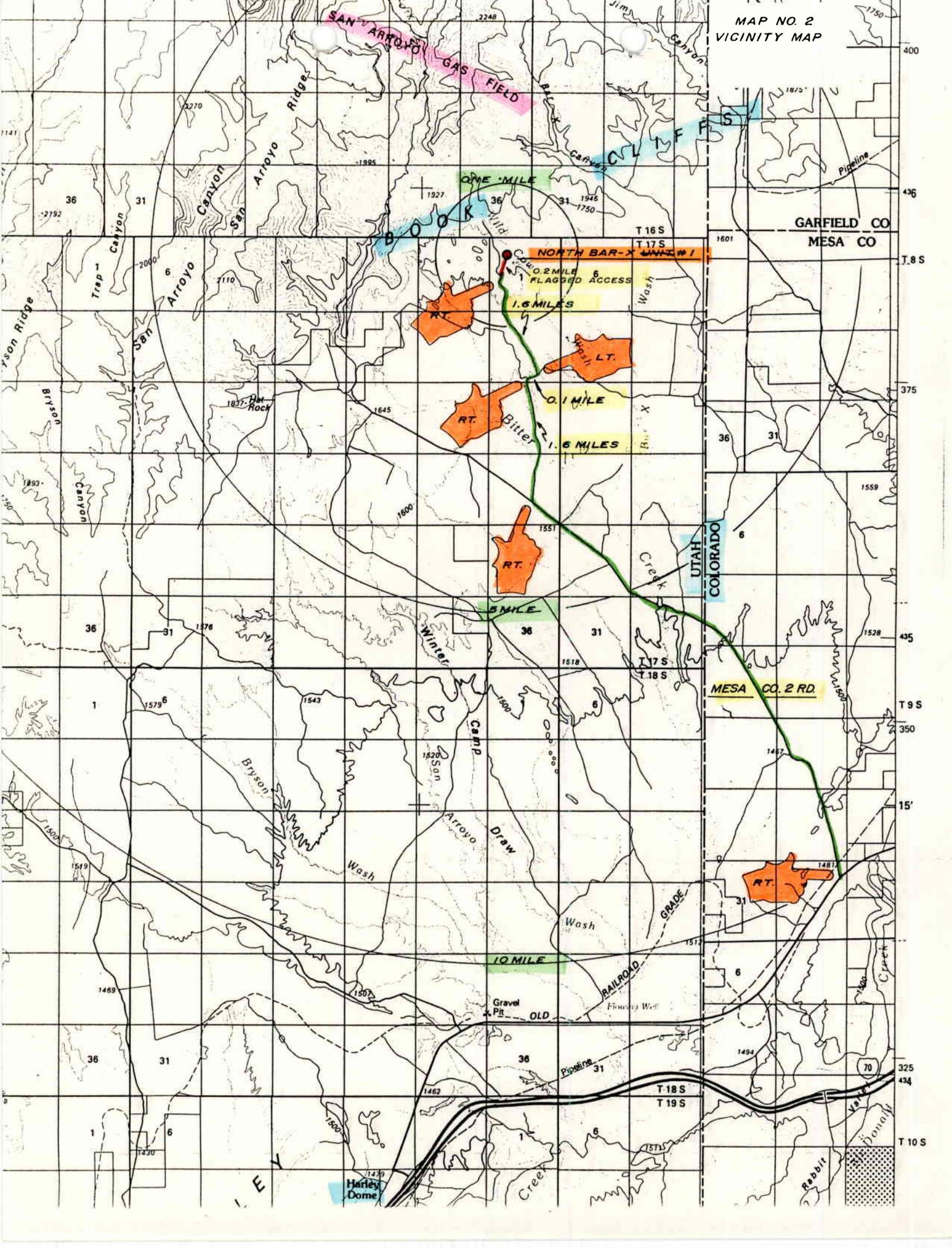
Air drilled wells using 900 series wellhead equipment.

Interval from 300' to total depth.

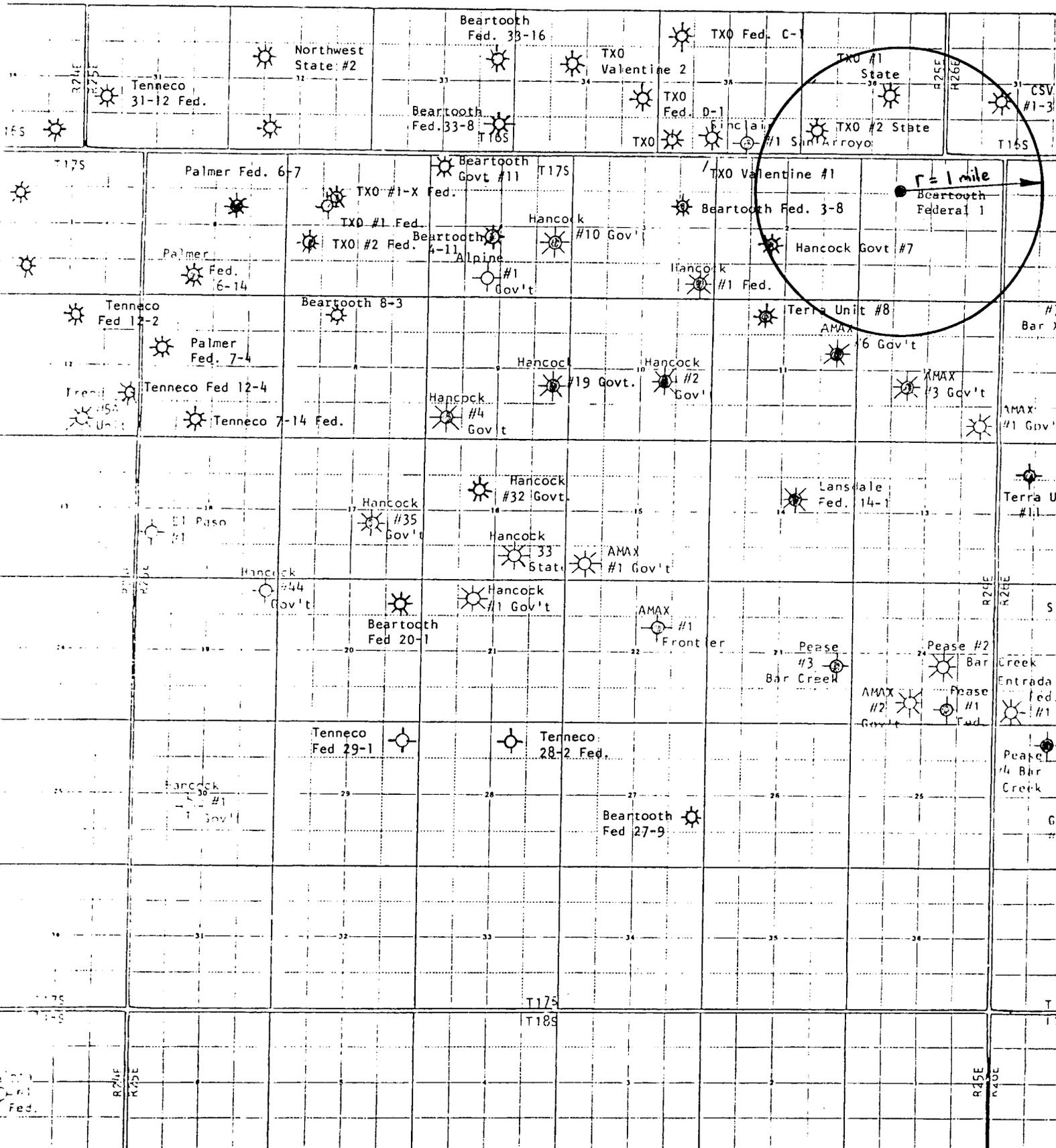




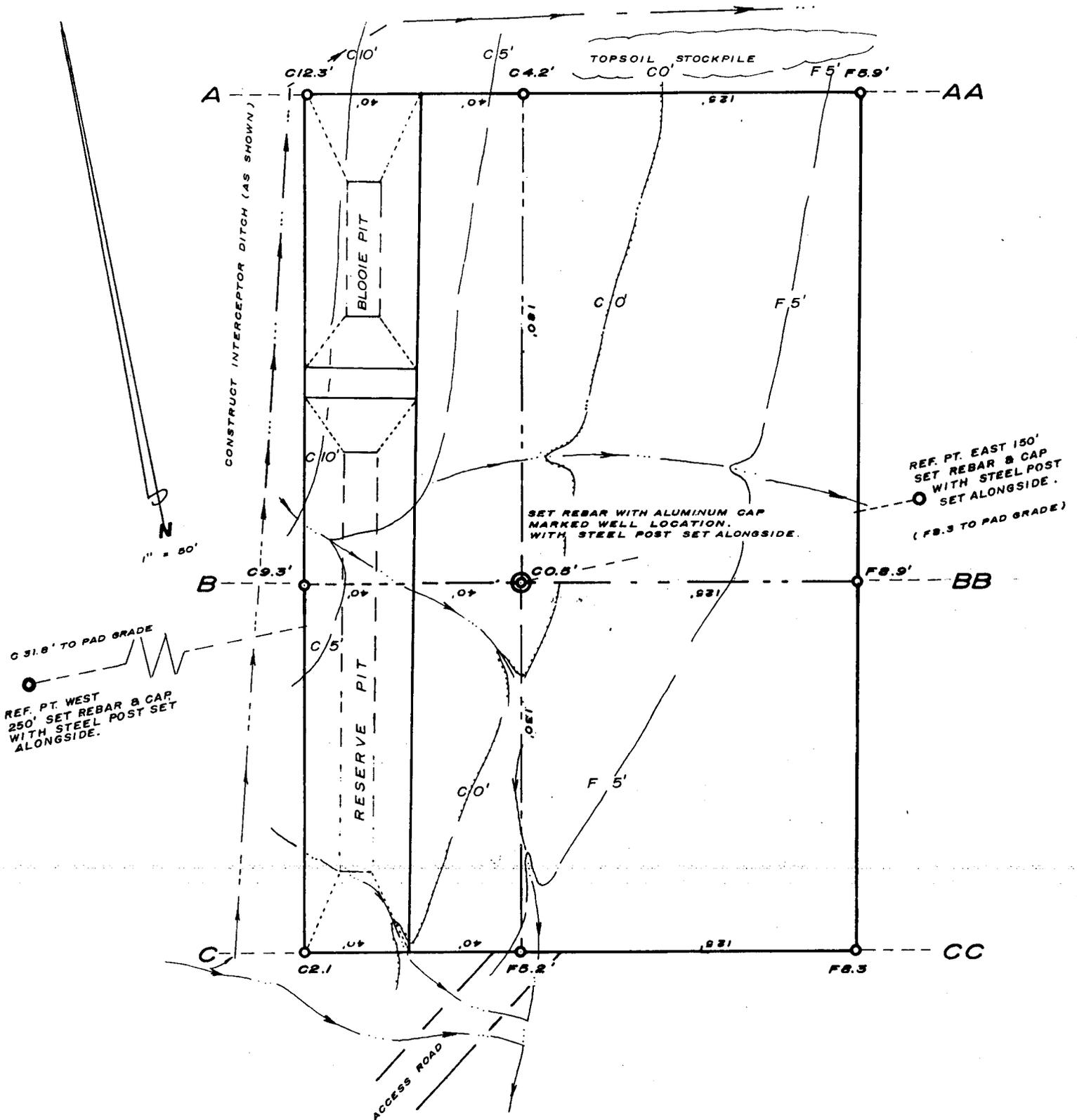
MAP NO. 2
VICINITY MAP



Township 16, 17, 18S, Range 24, 25, 26E, County Grand, State Utah



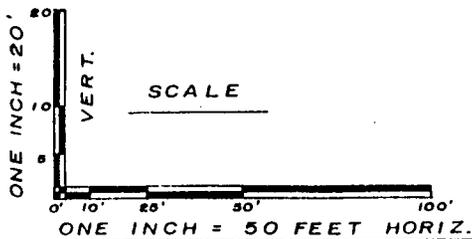
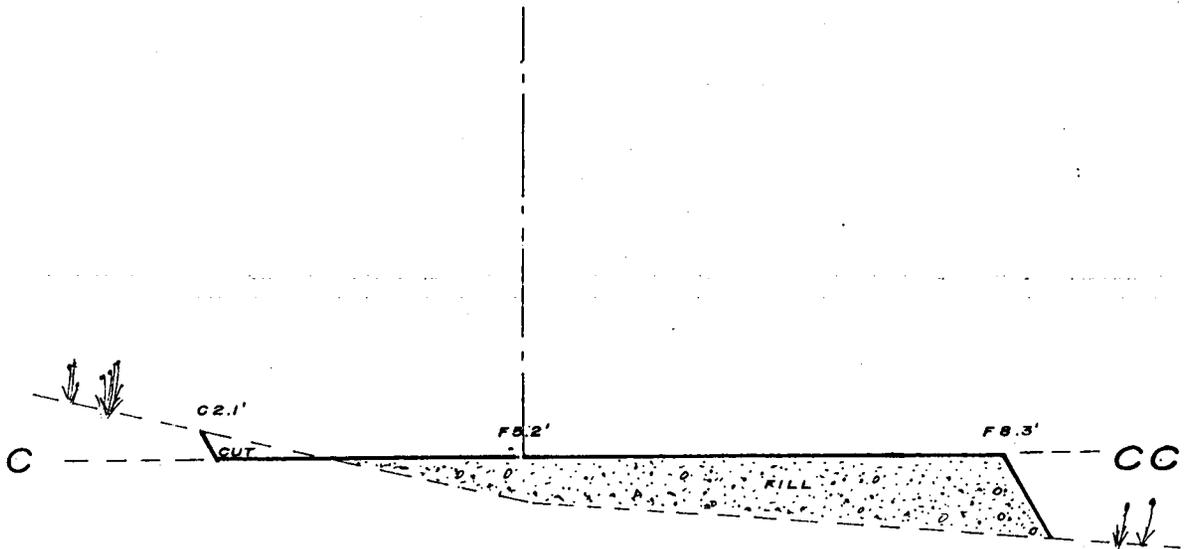
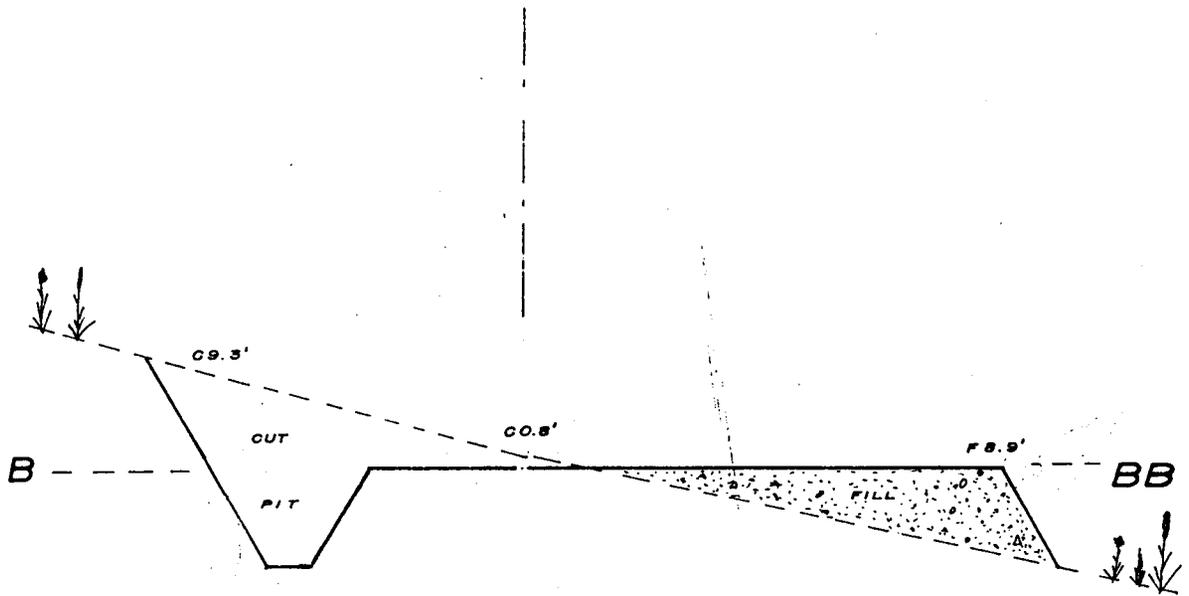
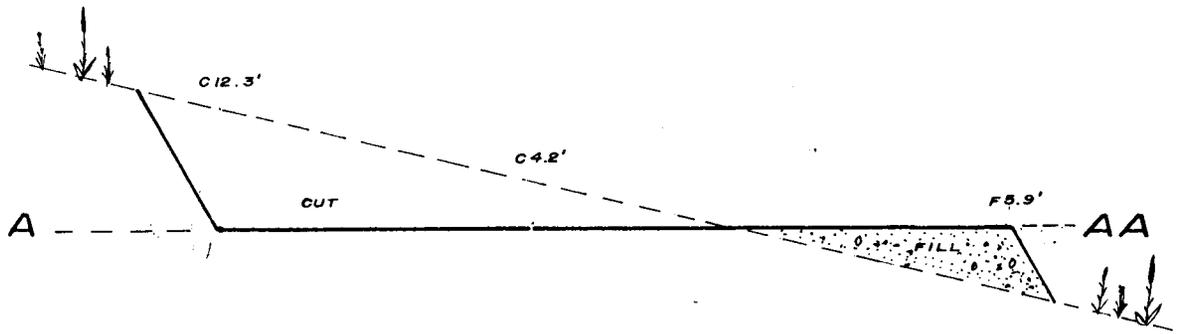
PLAT NO. 2
PIT & PAD LAYOUT



ESTIMATED CU. YDS. OF MATERIAL			
ITEM	PAD	PIT	TOTAL
CUT	4609	2696	7305
FILL	5837	0	5837
TOPSOIL	947	230	1177
EXCESS			291

BEARTOOTH OIL & GAS CO.
NORTH BAR-X UNIT NO. 1

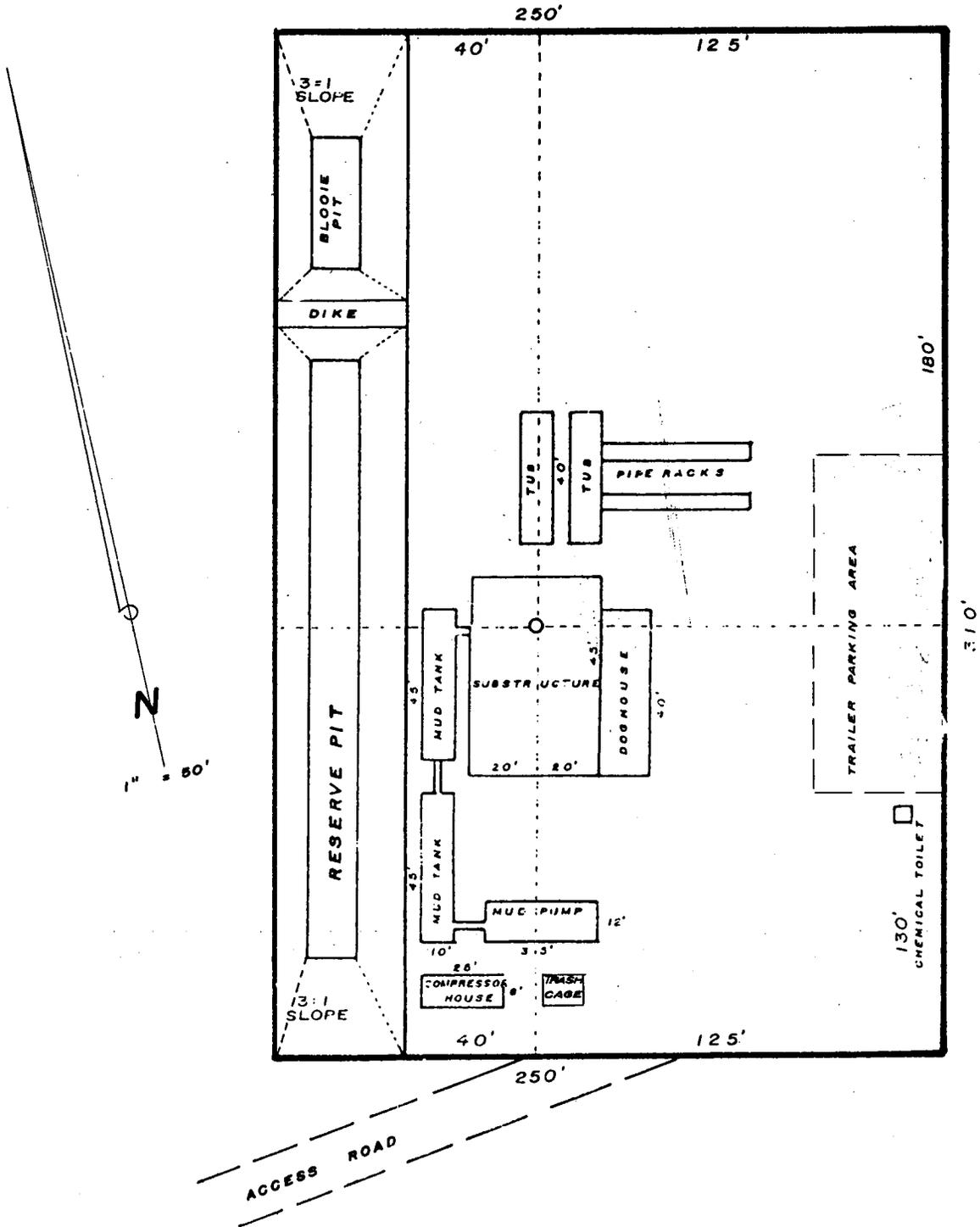
CROSS-SECTIONS
OF PIT & PAD



BEARTOOTH OIL & GAS CO.

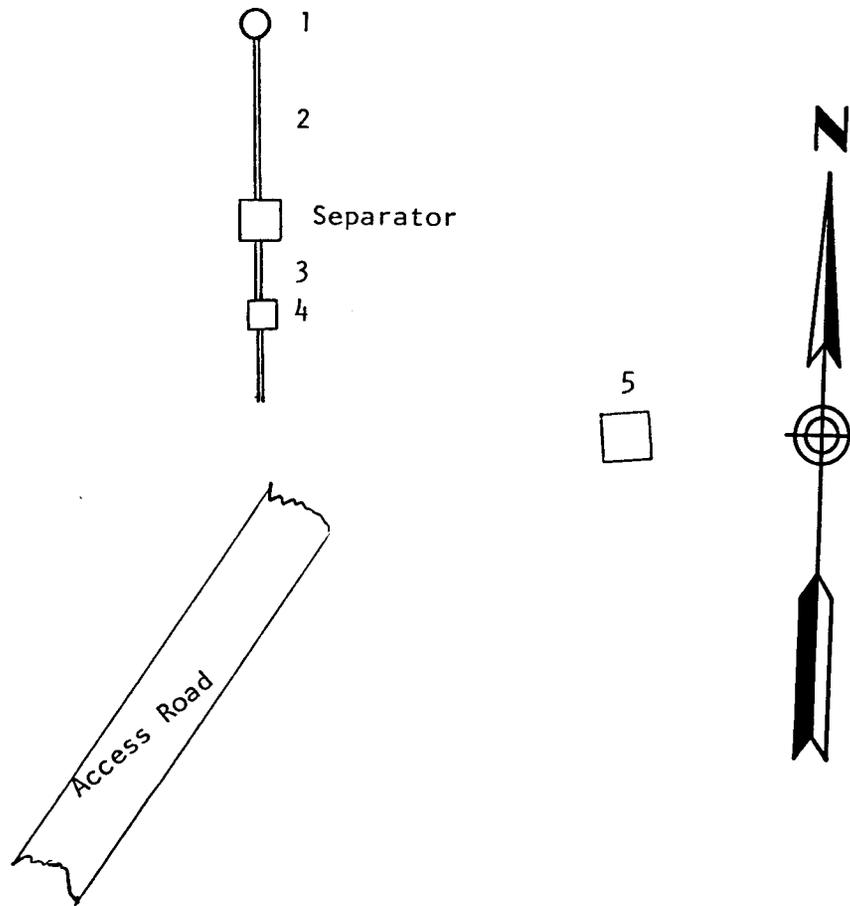
PREPARED BY ENERGY SURVEYS & ENGINEERING CORP.

PLAT NO. 4
RIG LAYOUT



BEARTOOTH OIL & GAS CO.
DRILL RIG LAYOUT

PLAT NO. 5
ON PAD FACILITIES LAYOUT
NORTH BAR X FEDERAL NO. 1



1. Wellhead will be an 8-5/8" Larkin Fig. 92 or equivalent. Tubing head will be a 4½" x 6" - 900 Series with two 2" 3000 psi screwed valves. Tree will be 2" screwed x 2000 psi W.P.
2. Line between wellhead and separator will be approximately 100 feet in length and constructed of 2-3/8" .218 wall seamless, welded, wrapped and buried approximately 5 feet deep.
3. Line between separator and meter will be 4" or 4.028 OD seamless, welded, coated, wrapped and buried, and will be approximately 25 feet in length.
4. Meter run will be American 2" run, 1000 psi static rating, 100" of water differential rating.
5. Pit, if necessary, will be 10' x 10', enclosed by dikes and fenced.

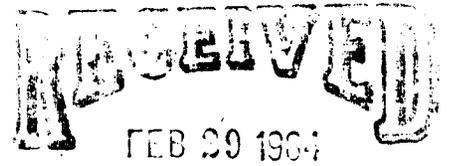
BEARTOOTH OIL & GAS COMPANY

P.O. Box 2564

Billings, Montana 59103

(406) 259-2451

February 27, 1984



Bureau of Land Management
Moab District Office
P. O. Box 970
Moab, Utah 84532

**DIVISION OF
OIL, GAS & MINING**

Gentlemen:

Enclosed please find ~~original~~ original and three copies of an APD covering the drilling of our North Bar X Federal No. 1 well in Grand County, Utah for your approval.

Yours very truly,

BEARTOOTH OIL & GAS COMPANY

A handwritten signature in cursive script that reads "Grace E. Brown".

Grace E. Brown
Drilling Department

cc: Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Mr. Ken Currey
P. O. Box 1491
Fruita, Colorado 81521

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
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 P. O. Box 2564, Billings, Montana 59103

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24. SIGNED James G. Routson TITLE Petroleum Engineer DATE 2/27/84
James G. Routson
 (This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY /s/ GENE NODINE TITLE DISTRICT MANAGER DATE 27 MAR 1984
 CONDITIONS OF APPROVAL, IF ANY:

FLARING OR VENTING OF
 GAS IS SUBJECT TO NTL 4-A
 DATED 1/1/80

SUBJECT TO RIGHT OF WAY
 APPROVAL

*See Instructions On Reverse Side

CONDITIONS OF APPROVAL ATTACHED

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★ U.S. GOVERNMENT PRINTING OFFICE: 1974-781-025/VIII-239

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15. The well will be drilled under Tenneco's bond.

Beartooth Oil & Gas
North Bar X Federal #1
Sec. 1, T. 17 S., R. 25 E.
U-25888

Supplemental Stipulations and
Conditions of Approval

1. All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative and dirt contractor to insure compliance.
2. All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth, cased and cemented. All oil and gas shows will be tested to determine commercial potential.
3. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventors will be pressure tested before drilling casing cement plugs.
4. Blooie line will be misted to reduce fugitive dust when air drilling.
5. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 15 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160.4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the District Manager.
6. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.
7. The spud date will be reported orally to the Area Manager within 24 hours prior to spudding. If the spudding occurs on a weekend or holiday, the report will be submitted on the first regular work day before the spudding occurs.

8. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 3160-6 "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed, in duplicate, directly with Royalty Management Accounting Center, Minerals Management Service, P.O. Box 2859, Casper, Wyoming 82602, and a copy forwarded to the Moab BLM District Office, P.O. Box 970, Moab, Utah 84532.
9. If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the District Manager, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
10. Should the well be successfully completed for production, the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than the first business day following the date on which the well is placed on production.
11. No well abandonment operations will be commenced without the prior approval of the District Manager. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Manager. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the District Manager within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the District Manager or his representative, or the appropriate Surface Managing Agency.
12. A first production conference will be scheduled within 15 days after receipt of the first production notice.
13. Upon completion of approved plugging, erect the regulation marker in accordance with 43 CFR 3162.2 and clean up the location. The marker should not be less than 4 inches in diameter and extend approximately 4 feet above general ground level. Heap up dirt around the base of the marker about 18 inches to take care of any settling of the cellar. The top of the marker must be closed or capped.

The following minimum information shall be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch:

"Fed" or "ind", as applicable.

"Well number, location by $\frac{1}{4}$ section, township and range."

14. All produced liquids must be contained, including the dehydrator vent/condensate line effluent.

15. All off-lease storage, off-lease measurement, or summing on-lease or off-lease will have prior written approval from the District Manager.
16. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the well head to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced. Suitable color for production facilities will be juniper green.
17. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The District Manager will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Moab District office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.
18. A copy of the gas sales contract will be provided to this office and the Royalty Accounting Department.
19. Produced waste water will be contained to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period an application for approval of a permanent disposal method and location, along with required water analysis, will be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance, and will be grounds for issuing a shut-in order.
20. Stockpiled topsoil will be located on the north side of the pad on the cut.
21. Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris, materials, trash, and junk not required for production.
22. Before any dirt work to restore the location takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc. will be removed.
23. Prior to reseeding, all disturbed areas, including the access roads, will be scarified to a depth of 8" and left with a rough surface.
24. Seed will be broadcast or drilled at a time during the fall (Oct.-Dec.) If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage. If the seed is broadcast, the following application rate should be doubled.
25. The following seed mixture will be used:

Oryzopsis hymenoides	Indian ricegrass	2 lbs/acre
Elymus salinas	Salina wildrye	2 lbs/acre
Sphaeralcea coccinea	Scarlet globemallow	1 lb/acre
Eurotia lanata	Winterfat	2 lbs/acre
Atriplex confertifolia	Fourwing saltbush	2 lbs/acre

26. The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed.
27. There will be no deviation from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.2.
28. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.
29. If any cultural resources are found during construction, all work will stop and the Area Manager will be notified.
30. This permit will be valid for a period of one year from the date of approval. After permit termination a new application will be filed for approval for any future operations.

OPERATOR Beartooth Oil & Gas DATE 2-29-84
WELL NAME North Bar X Fed. No 1
SEC Lot 3 NENW Sect T 17S R 25E COUNTY Grand

43-019-31140
API NUMBER

Fed
TYPE OF LEASE

POSTING CHECK OFF:

INDEX

MAP

HL

NLD

PI

PROCESSING COMMENTS:

~~Unit water~~
No other wells in drilling unit.



CHIEF PETROLEUM ENGINEER REVIEW:

APPROVAL LETTER:

SPACING:

A-3

UNIT

c-3-a

4 12/5/56
CAUSE NO. & DATE

c-3-b

c-3-c

Zone 1
Drilling unit no. 4

SPECIAL LANGUAGE:

~~Unit water~~

RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.

AUTHENTICATE LEASE AND OPERATOR INFORMATION

VERIFY ADEQUATE AND PROPER BONDING

AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.

APPLY SPACING CONSIDERATION

ORDER 4 12/5/26

UNIT _____

c-3-b

c-3-c

CHECK DISTANCE TO NEAREST WELL.

CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.

IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER

IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.

VERIFY LEGAL AND SUFFICIENT DRILLING WATER

March 6, 1984

Beartooth Oil & Gas Company
P. O. Box 2564
Billings, Montana 59103

RE: Well No. North Bar X Fed. #1
Lot 3, NENW Sec. 1, T. 17S, R. 25E
1323' PNL, 1372' FWL
Grand County, Utah

Gentlemen:

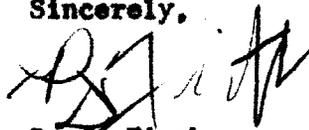
Approval to drill the above referenced gas well is hereby granted in accordance with Order of Cause No. 4, dated December 5, 1956.

The following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify R. J. Firth, Chief Petroleum Engineer, Telephone (801) 533-5771 (Office), 571-6068 (Home).
4. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-019-31140.

Sincerely,



R. J. Firth
Chief Petroleum Engineer

RJF/as
cc: Branch of Fluid Minerals
Encl.

Water
x

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: BEARTOOTH OIL & GAS

WELL NAME: NORTH BAR X Federal #1

SECTION NENW 1 TOWNSHIP 17S RANGE 25E COUNTY Grand

DRILLING CONTRACTOR Veco

RIG # 2

SPUDDED: DATE 4-29-84

TIME 3:00 P.M.

How Rotary

DRILLING WILL COMMENCE _____

REPORTED BY Grace

TELEPHONE # 406-259-2451

DATE 4-30-84 SIGNED AS

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 Form 9-331-C for such proposals.)

1. oil well gas well other

2. NAME OF OPERATOR
Beartooth Oil & Gas Company

3. ADDRESS OF OPERATOR
P. O. Box 2564, Billings, Montana

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1323' FNL, 1372' FWL
AT TOP PROD. INTERVAL: same
AT TOTAL DEPTH: same

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

LEASE
U-25888

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
North Bar-X Federal No. 1

10. FIELD OR WILDCAT NAME
Undesignated

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Lot 3 (NE $\frac{1}{4}$ NW $\frac{1}{4}$ 1-17S-25E)

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.
43-019-31140

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5469' GL, 5480' KB

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

PULL OR ALTER CASING

MULTIPLE COMPLETE

CHANGE ZONES

ABANDON*

(other) _____ Status Report _____

SUBSEQUENT REPORT OF:

RECEIVED

MAY 9 1984

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

DIVISION OF OIL
GAS & MINING

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.)*

Spudded 12-1/4" hole at 3:00 PM 4/29/84 with Veco Drilling Company Rig No. 2.

Ran 8 joints 8-5/8", 24#, J-55 casing to 333' KB. Cemented with 175 sacks Class "H", 3% CaCl₂, 1/4# celloflake. Good returns to surface.

Total Depth 4115'.

Ran 98 joints 4 1/2", 10.5#, J-55 casing to 4113'. Cemented with 175 sacks 10-2 Thixotropic cement, 1/4# celloflake/sx. Good returns. Plug down at 10:51 AM 5/4/84.

Waiting on completion tools.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Grace E. Brown TITLE Drilling Dept. DATE May 7, 1984

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

RECEIVED

MAY 9 1984

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

DIVISION OF OIL
GAS & MINING

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number: North Bar-X Federal No. 1
Operator: Beartooth Oil & Gas Company Address: Box 2564, Billings, Montana
Contractor: Veco Drilling Company Address: Box 1705, Grand Junction, CO
Location NE 1/4 NW 1/4; Sec. 1 T. 17 xNx R. 25 E; Grand County.
S xWx

Water Sands:

<u>Depth:</u>		<u>Volume:</u>	<u>Quality:</u>
From-	To-	Flow Rate or Head	Fresh or Salty
1.	<u>No water encountered while drilling</u>		
2.	<u></u>		
3.	<u></u>		
4.	<u></u>		
5.	<u></u>		

(Continue on Reverse Side if Necessary)

Formation Tops:

Remarks:

- NOTE: (a) Upon diminishing supply of forms, please inform this office.
 (b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
 (c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATES*

(See instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5

5. LEASE DESIGNATION AND SERIAL NO.

U-25888

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR CEASE NAME

Federal

9. WELL NO.

North Bar-X Federal No. 1

10. FIELD AND POOL, OR WILDCAT

Undesignated

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

Lot 3 (NE1/4NW1/4) 1-17S-25E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

RECEIVED

MAY 21 1984

DIVISION OF OIL
GAS & MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR
Beartooth Oil & Gas Company

3. ADDRESS OF OPERATOR
P. O. Box 2564, Billings, Montana 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 1323' FNL, 1372' FWL
At top prod. interval reported below same
At total depth same

14. PERMIT NO. 43-019-31140 DATE ISSUED 3/6/84

15. DATE SPUNDED 4/29/84 16. DATE T.D. REACHED 5/3/84 17. DATE COMPL. (Ready to prod.) 5/16/84 18. ELEVATIONS (DF, REB, RT, QR, ETC.)* 5469' GL, 5480' KB 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 4115' 21. PLUG, BACK T.D., MD & TVD 4055' 22. IF MULTIPLE COMPL., HOW MANY* Commingled 23. INTERVALS DRILLED BY → 24. ROTARY TOOLS 0-TD 25. CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
3603-3646 - Dakota
4040 - Salt Wash NK-MR per John B 3-10-86

26. TYPE ELECTRIC AND OTHER LOGS RUN ~~DTL~~ ~~CPT~~ ~~CNL~~ ~~ZGR~~ 27. WAS WELL CORED no

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	333' KB	12-1/4"	175 sacks	-
4-1/2"	10.5# J-55	4113' KB	6-1/4"	175 sacks	-

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-3/8"	4034'	

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3603-4030	750 gal. 15% MRS acid; foam
fract w/20,000# 100 mesh sand, 80,000#	
20-40 sand,	14,400 gal. 15% HCl foamed to
57,600 gal.	75% Quality foam w/1.2 MMSCF N ₂

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
5/16/84	flowing	shut-in					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
5/16/84	18 hrs	3/4"	→		861		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
80 psi	300 psi	→		1148			

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) to be sold TEST WITNESSED BY Ralph Snow

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Robert D. Ballantyne TITLE Drilling Supervisor DATE 5/16/84
Robert D. Ballantyne

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency 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. See instructions on items 22 and 24, and 38, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample, and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

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 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 38. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORRECTION INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS	
				NAME	DEPTH
				Dakota Silt	3457'
				Dakota Sand	3533'
				Morrison	3654'
				Salt Wash	4024'

REPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY
 DIVISION OF RECONSTRUCTION

UNITED STATES
DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO. 2

U-25888

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

North Bar-X Federal #1

10. FIELD AND POOL, OR WILDCAT

Undesignated

11. SEC., T., R., M., OR BLE. AND SUBVY OR AREA

Lot 3 (NE $\frac{1}{4}$ NW $\frac{1}{4}$) 1-17S-25E

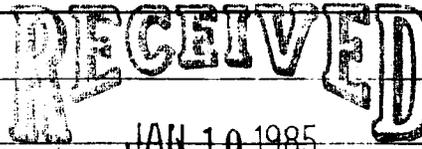
12. COUNTY OR PARISH 13. STATE

Grand

Utah

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.)



1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
 Beartooth Oil & Gas Company

3. ADDRESS OF OPERATOR
 P. O. Box 2564, Billings, Montana 59103

4. LOCATION OF WELL (Report location clearly and in accordance with State requirements. See also space 17 below.)
 At surface
 1323' FNL, 1372' FWL

14. PERMIT NO.
 43-019-31140

15. ELEVATIONS (Show whether DF, RT, CR, etc.)
 5469' GL, 5480' KB

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	First Delivery <input checked="" type="checkbox"/>

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input type="checkbox"/>	

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATION: (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.)*

First production - 3:00 PM 1/4/85

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

SIGNED Grace E. Brown
 Grace E. Brown

TITLE Production Department

DATE 1/8/85

(This space for Federal or State office use)

APPROVED BY _____
 CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

*See Instructions on Reverse Side