

LONE MOUNTAIN PRODUCTION COMPANY

P.O. BOX 3394
408 PETROLEUM BUILDING
BILLINGS, MONTANA 59103-3394
(406) 245-5077

May 15, 1987

RECEIVED
MAY 18 1987

Ron Firth
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180

**DIVISION OF
OIL, GAS & MINING**

Dear Ron:

Enclosed for your approval please find, in duplicate, an APD covering the drilling of our Bar-X Federal No. 1 well in Grand County, Utah. Attached to the APD is our Designation of Operator forms, from Tenneco. We hope to drill the wells in mid-June, 1987, so your expedient handling of this APD is appreciated.

Please advise if any further information is needed.

Very truly yours,

LONE MOUNTAIN PRODUCTION COMPANY

Jim Routson
James G. Routson

JGR/mo

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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
 LONE MOUNTAIN PRODUCTION COMPANY

3. ADDRESS OF OPERATOR
 408 Petroleum Building, P. O. Box 3394, Billings, MT 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
 550' FSL, 550'FWL Section 5
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 16 miles northwest of Mack, Colorado

10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
 (Also to nearest drlg. unit line, if any) 550'

16. NO. OF ACRES IN LEASE 496.97

17. NO. OF ACRES ASSIGNED TO THIS WELL 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 3210'

19. PROPOSED DEPTH 3770'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5283 GL, 5294 KB

22. APPROX. DATE WORK WILL START*
 June 20, 1987

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-40STC	300'	175 sx class G to surf.
7-7/8"	4-1/2" new	10.5# J-55	3770'	175 sx RFC

5. LEASE DESIGNATION AND SERIAL NO.
 U-41378

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Federal

9. WELL NO.
 1

10. FIELD AND POOL, OR WILDCAT
 Bar-X

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SW1/4 SW1/4 Sec. 5-17S-R26E SLBM

12. COUNTY OR PARISH
 Grand

13. STATE
 Utah

- Surface formation is the Mancos.
 - Anticipated geologic markers are: Dakota Silt 3124, Dakota 3199, Morrison 3454
 - Gas is anticipated in the Dakota and Morrison. No oil or other minerals are anticipated. No water sands are expected.
 - Proposed casing program: See Item No.23 above. Used, inspected casing may be substituted for the 10-5#, J-55.
 - 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 Page 2)

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 A. Rantion TITLE Petroleum Engineer DATE 5/15/87

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
 PERMIT NO. 43-019-31244 DATE 5-22-87
 APPROVED BY [Signature] DATE 5-22-87
 CONDITIONS OF APPROVAL, IF ANY: WELL SPACING: 13-g 8/28/86

RECEIVED
 MAY 18 1987

*See Instructions On Reverse Side

DIVISION OF OIL, GAS & MINING

Application for Permit to Drill, Deepen,
or Plug Back
Bar-X Federal No. 1
SW $\frac{1}{4}$ SW $\frac{1}{4}$, Sec.5-17S-R26E SLBM
Grand County, Utah
Lease U-41378

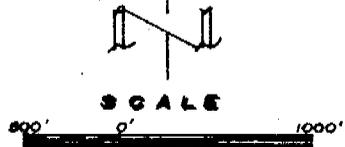
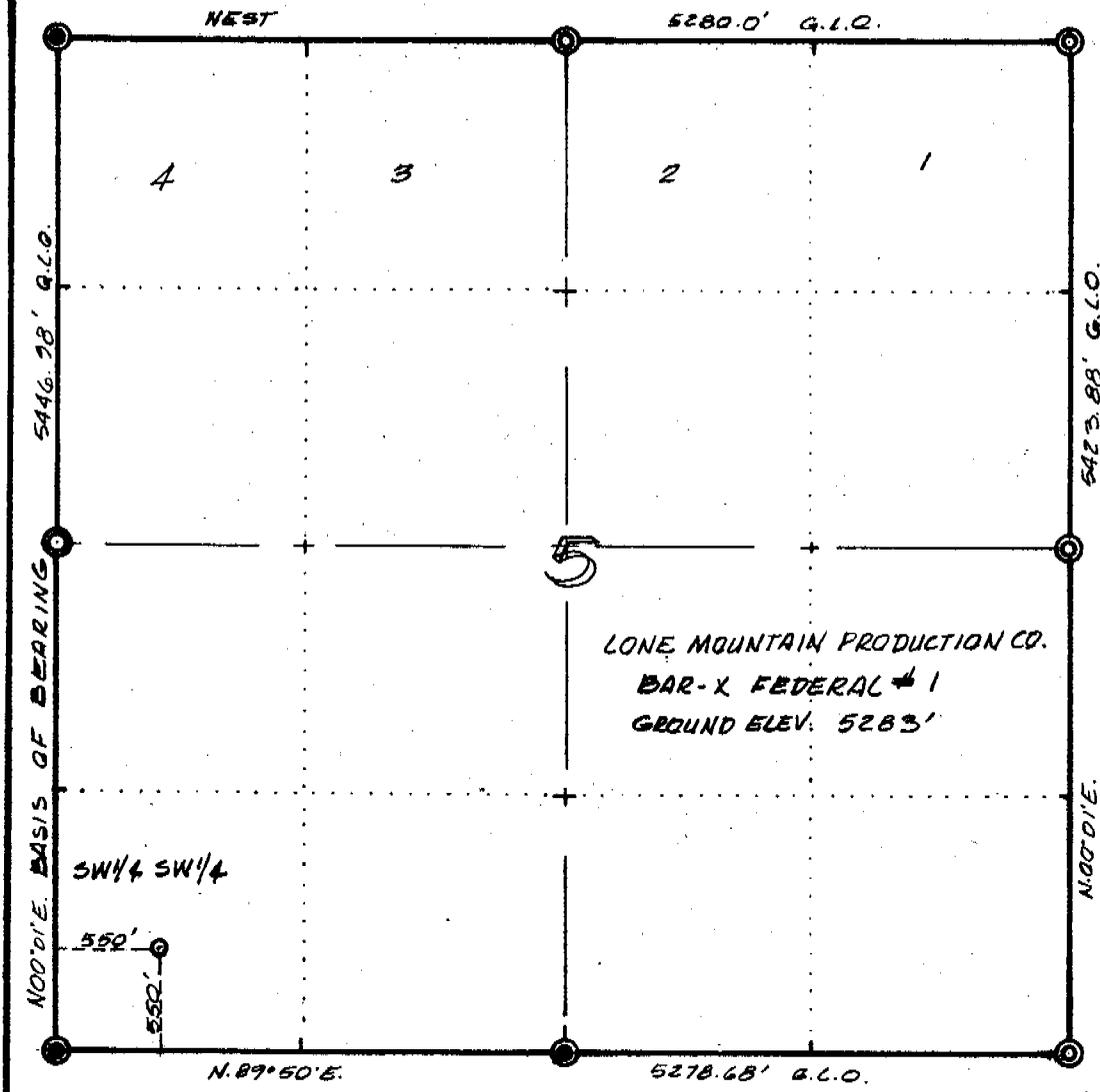
Page 2

8. The logging program will consist of a DIL log from TD to base of surface casing, and GR-FDC-CNL logs from TD to 500' above the Dakota Silt. 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 June 20, 1987. Completion operations should commence within 30 days of rig release.
11. Survey plats are attached.
12. The gas is dedicated to Southwest Gas Corporation
13. The spacing unit will be the SW $\frac{1}{4}$ of Section 5.
14. Designation of Operator forms from Tenneco to Lone Mountain Production Company are attached.
15. The well will be drilled under Lone Mountains Bond.

PLAT #1

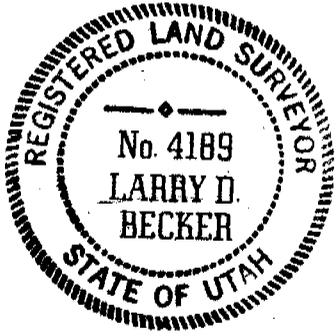
SEC. 5, T. 17S., R. 26E. OF THE S.L.M.

LOCATION PLAT



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

THIS WELL LOCATION PLAT WAS PREPARED FOR LONE MOUNTAIN PRODUCTION CO. TO LOCATE THE BAR-X FEDERAL #1, 550' F.S.L. 550' F.W.L. IN THE SW 1/4 SW 1/4, OF SECTION 5, T. 17S., R. 26E. OF THE S.L.M.P.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.

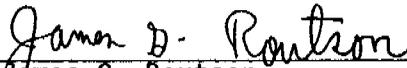
Larry D. Becker

SURVEYED	4/30/87	ENERGY SURVEYS & ENGINEERING CORP.	715 HORIZON DRIVE, SUITE 330 GRAND JUNCTION, CO 81501 (303) 246-7221	SCALE 1" = 1000'
DRAWN	5/2/87			JOB NO.
CHECKED	5/1/87			SHEET 07

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 (orequivalent) 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 1000 psi at 3300' or a gradient of .303 psi/ft or less. No abnormal temperatures or hydrogen sulfide gas are anticipated.

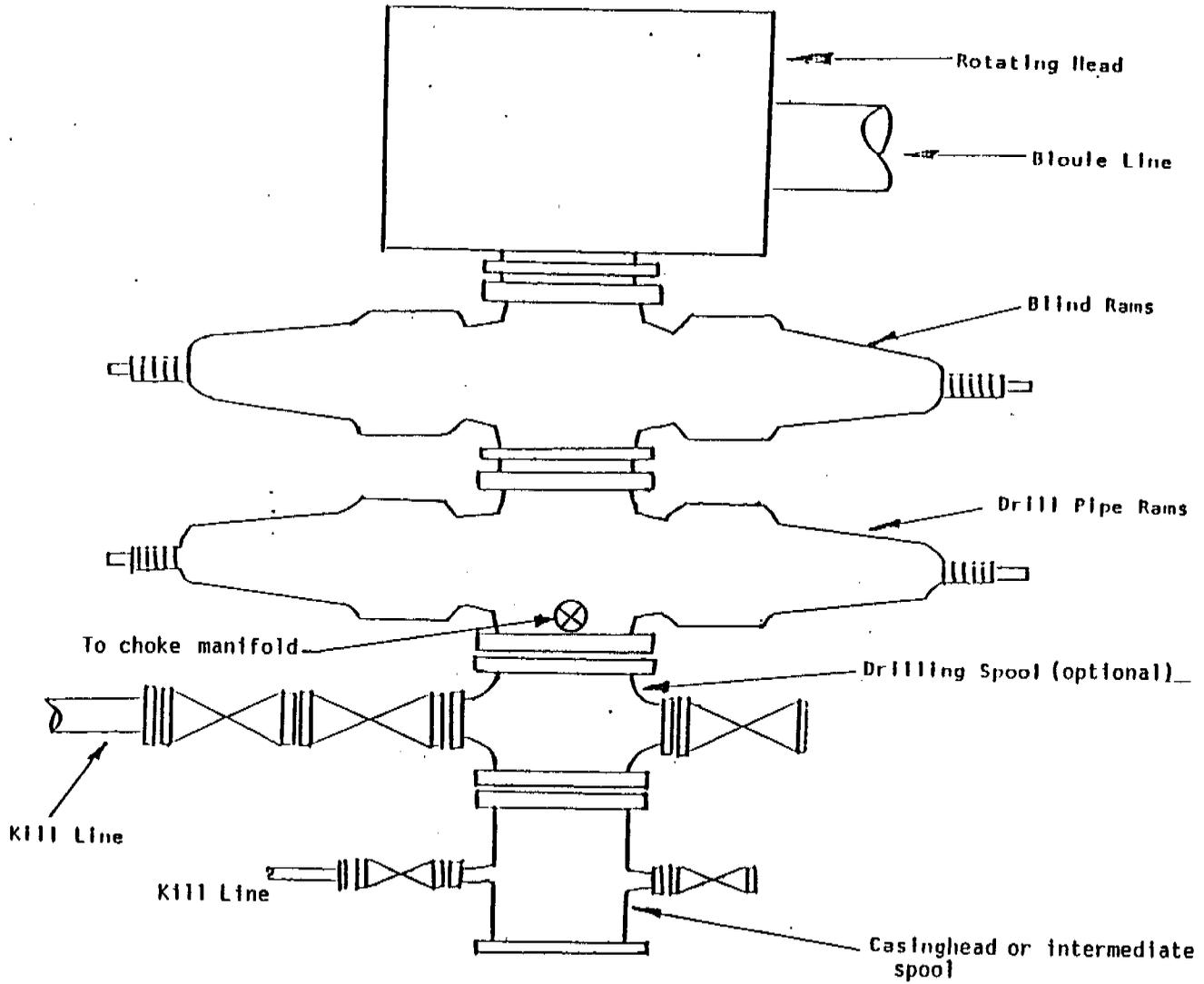
LONE MOUNTAIN PRODUCTION COMPANY


James G. Routson
Petroleum Engineer

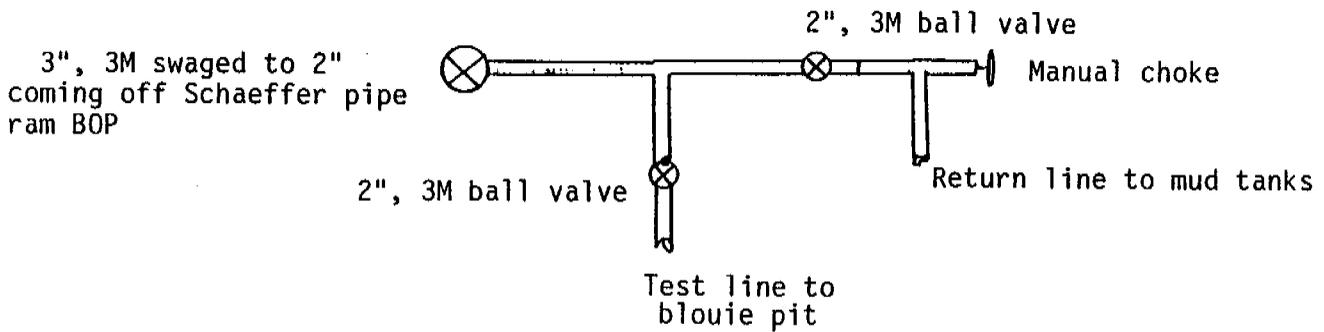
Bar-X Federal No. 1

SCHEMATIC OF BOP STACK

Air drilled wells using 900 series wellhead equipment.
Interval from 300' to total depth.



CHOKES MANIFOLD



SURFACE USE PROGRAM
LONE MOUNTAIN PRODUCTION
Bar - X Federal #1
SW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 5, T-17S, R26E
Grand County, Utah

1. Existing Roads

See Maps #1 and #2 and Plat #1. This proposed well is about 16 air miles northwest of Mack, Colorado. It is reached by going 9.5 miles west of Mack on Old Highway 6 & 5 to Mesa County 2 Road; turn right and go 4.1 miles up the road to the State Line fence road (Utah-Colorado line); than turn right and go 4.3 miles up (north) the State line fence road; turn left (west) and go 0.7 mile to the beginning of the 800 feet of new access road. Lone Mountain will maintain the existing access roads in conjunction with the county and area oil and gas operators.

All of the existing access road is county road except for the 0.7 mile of road running west from the State line fence road in the N $\frac{1}{2}$ N $\frac{1}{2}$ of Section 8. Lone Mountain Production Company hereby applies for an access road right-of-way (R/W) for that road and for the first 400 feet of new access road in NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 8. The total access road R/W is about 0.8 mile long. Attached is a check for the \$50.00 filing fee and \$20 monitoring fee.

2. Access Roads to be Constructed and reconstructed

See Map #1. The 800 feet 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 30 to 35 feet depending on topography. The road will be ditched and crowned. 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 cattleguards are necessary.

Road surfacing materials will be the existing native materials. The maximum road grade is 2%. 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. There are 4 producing wells, 1 dry hole, 1 abandoned well, and 1 shut-in well within 1 mile of the proposed location.

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

(a) On Well Pad - See Plat No. 4 (Paint everything desert Tan)

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.

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 Utah.

8. Ancillary Facilities

No facilities are planned

9. Wellsite layout

See Plat #2 - Pit and Pad Layout

See Plat #2A - Cross Sections of Pit and Pad

See Plat #3 - 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 east side of the location.

9. (Continued)

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.

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 1987.

11. Surface Ownership

All lands involving new construction are Federal lands.

12. Other Information

This APD includes an access road right-of-way application. The well site is on the Mancos desert floor. The vegetation is sparse and includes, sagebrush, western wheatgrass, Indian rice grass and a few annual plants.

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

James G. Routson
Lone Mountain Production Company
P. O. Box 3394
Billings, Montana 59103
Office Phone: 406/245-5077
Home Phone: 406/245/8797

Surface Use Program - page 4

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.

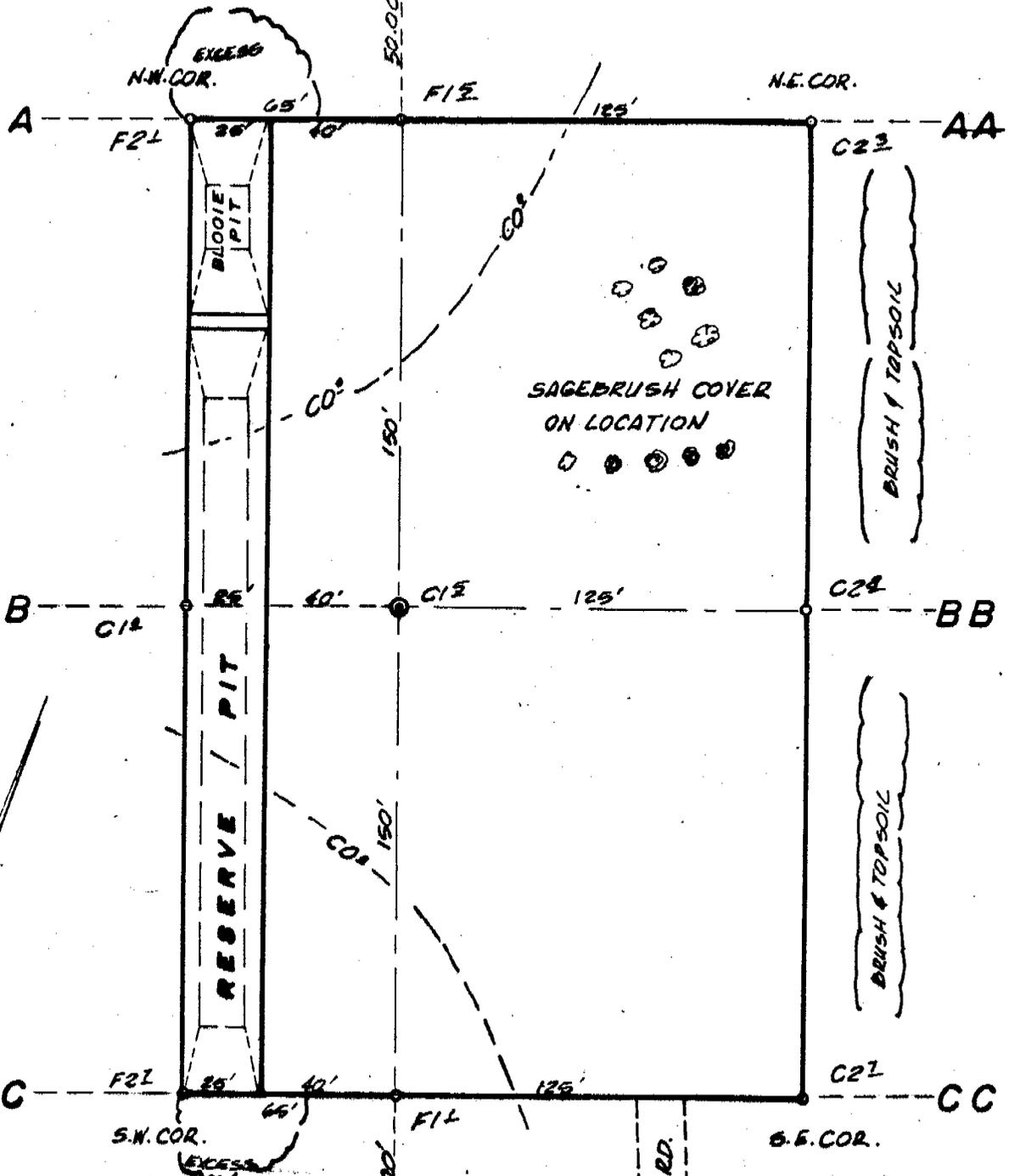
May 15, 1987

James G. Routson
James G. Routson

**PLAT # 2
PIT & PAD LAYOUT**

REF PT. N. 20° N. 200'

50.00'
50.00'



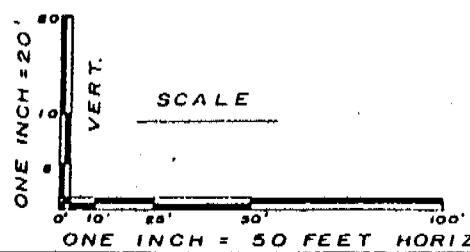
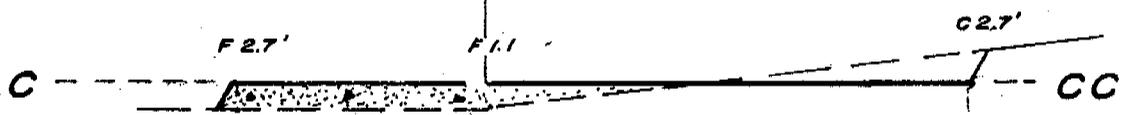
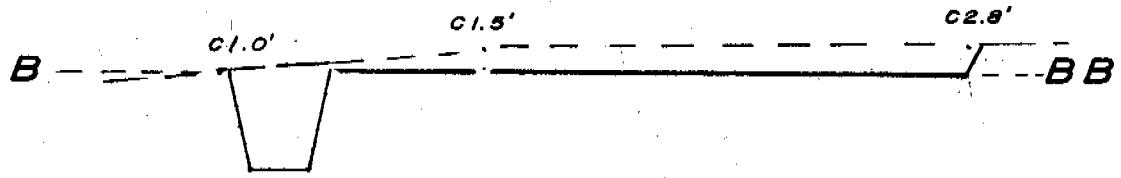
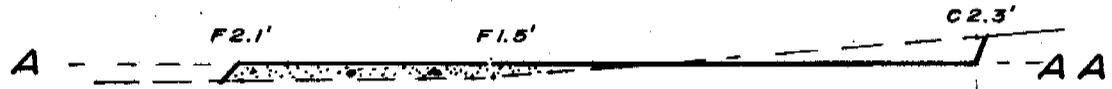
ESTIMATED DIRT QUANTITIES			
	CUT	FILL	TOPSOIL
PAD	1665	355	1055
PIT	1473	-	-
EXCESS 1788			

REF PT. S. 20° E. 200'

ACCESS RD.

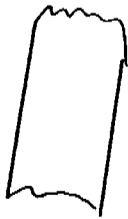
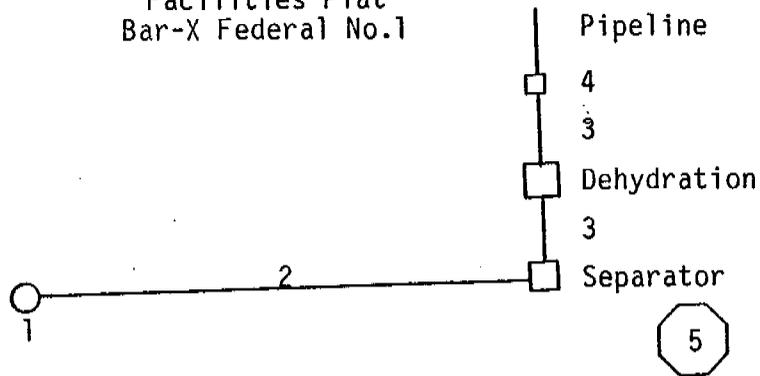
LONE MTN. PRODUCTION CO.
BAR-X FEDERAL # 1

CROSS-SECTIONS
OF PIT & PAD



LONE MOUNTAIN PRODUCTION CO.
BAR-X FEDERAL # 1

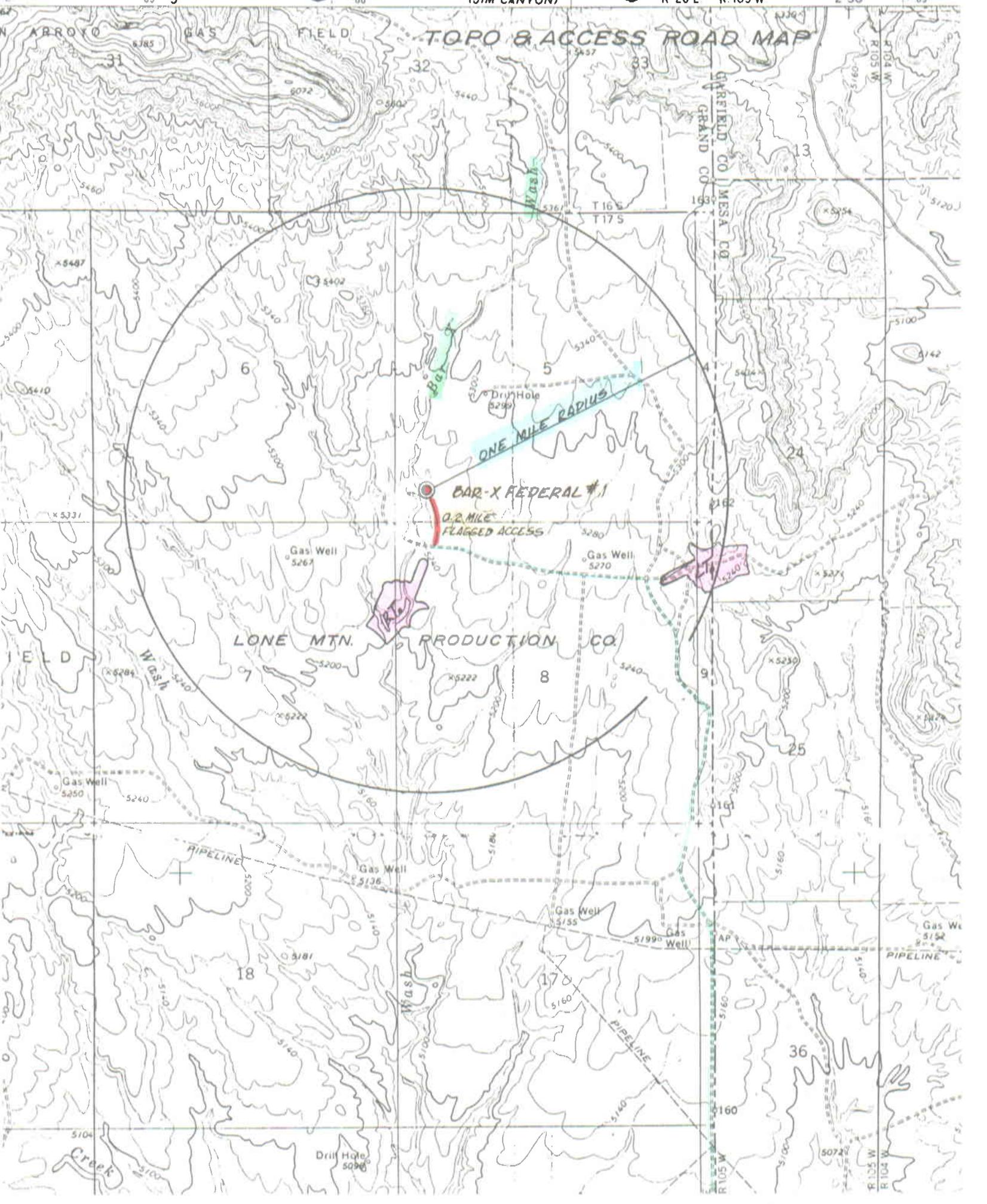
Plat No. 4
Facilities Plat
Bar-X Federal No.1



Access Road

1. Wellhead will be an 8-5/8" Larkin Fig. 92 or equivalent. Tubing head will be a 4 1/2" 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, or equivalent, 1000 psi static rating, 100' of water differential rating.
5. Pit will be 10'x 10', enclosed by dikes and fenced.

TOPO & ACCESS ROAD MAP



BAR-X FEDERAL #1

0.2 MILE FLAGGED ACCESS

ONE MILE RADIUS

LONE MTN. PRODUCTION CO.

Gas Well 5267

Gas Well 5270

Gas Well 5136

Gas Well 5155

Gas Well 5199

Gas Well 5152

Drill Hole 5096

5072

ARROYO

GAS

FIELD

FIELD

WASH

Wash

Creek

PIPELINE

PIPELINE

GRAND CO
MESA CO

R 105 W
R 101 E

R 105 W
R 101 E

965 5'

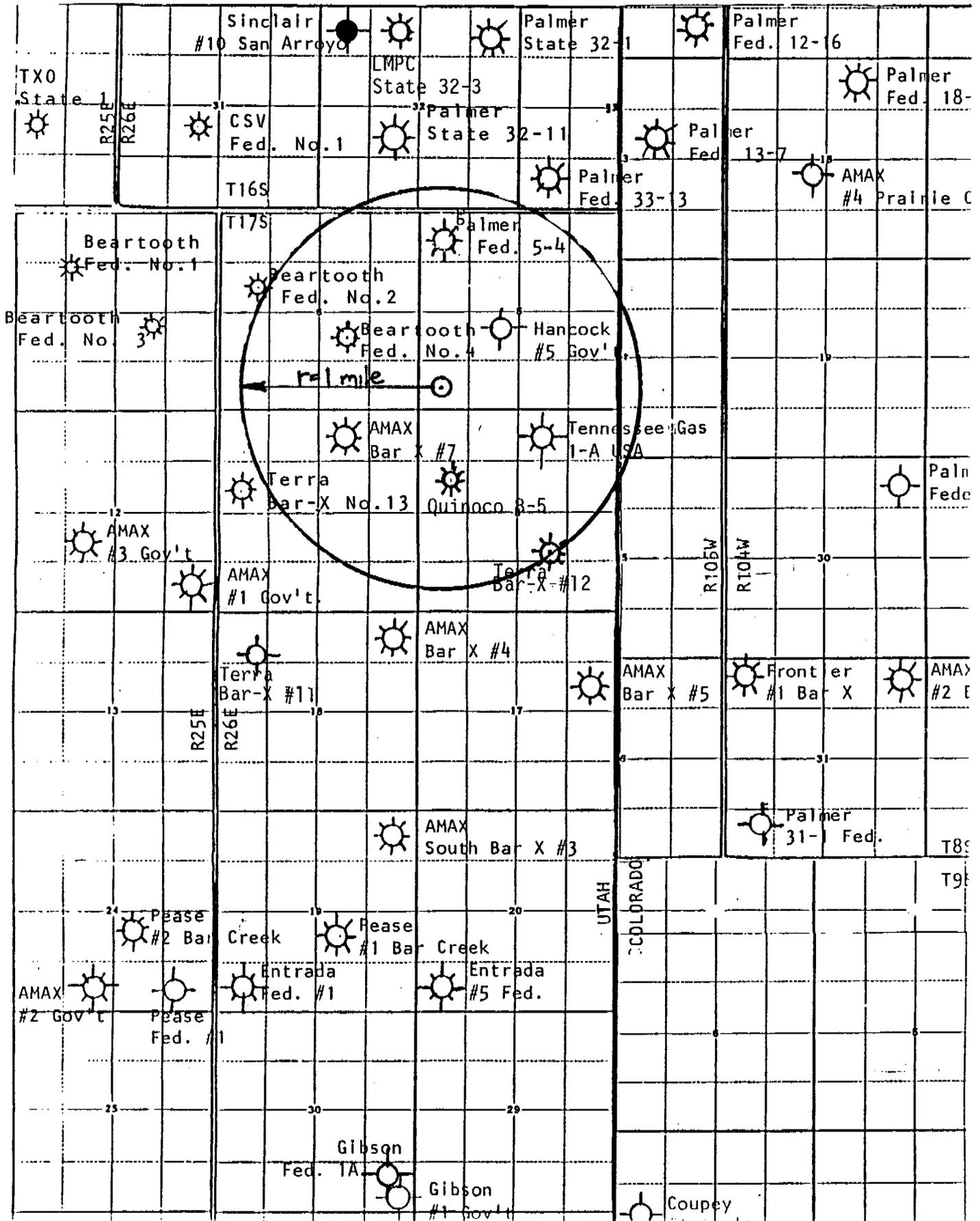
966

2' 30"

169

WELL MAP
MAP NO.3

Township 8S & 17S, Range 104W & 26E, County Gar



052806

OPERATOR Lone Mountain Prod. Co. DATE 5-21-87

WELL NAME Federal #1

SEC SW 34 T 17S R 26E COUNTY Grand

43-19-31244
API NUMBER

Fed.
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other wells within 2000 ft.

Water - Mark Co.

APPROVAL LETTER:

SPACING:

203

UNIT

302

13-6 8/28/86
CAUSE NO. & DATE

302.1

STIPULATIONS:



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

May 22, 1987

Lone Mountain Production Company
408 Petroleum Building
P. O. Box 3394
Billings, Montana 59103

Gentlemen:

Re: Federal #1 - SW SW Sec. 5, T. 17S, R. 26E - 550' FSL, 550' FWL
Grand County, Utah

Approval to drill the referenced well is hereby granted in accordance with the Order of Cause No. 13-6 dated August 28, 1986.

In addition, 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. All well operators are responsible for sending an Entity Action Form to the Division of Oil, Gas and Mining within five working days of the time that a new well is spudded or a change in operations or interests necessitates a change in Entity status.
3. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
4. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.

Page 2
Lone Mountain Production Company
Federal #1
May 22, 1987

5. Prior to commencement of the proposed drilling operations, plans for toilet facilities and the disposal of sanitary waste at the drill site shall be submitted to the local health department having jurisdiction. Any such drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of all local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 533-6163.
6. 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 43-019-31244.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals
8159T

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
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 LONE MOUNTAIN PRODUCTION COMPANY

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 At proposed prod. zone

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 16 miles northwest of Mack, Colorado

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21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5283 GL, 5294 KB

22. APPROX. DATE WORK WILL START*
 June 20, 1987

5. LEASE DESIGNATION AND SERIAL NO.
 U-41378 61841

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
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9. WELL NO.
 1

10. FIELD AND POOL, OR WILDCAT
 Bar-X

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SW $\frac{1}{2}$ SW $\frac{1}{2}$ Sec. 5-17S-R26E SLBM

12. COUNTY OR PARISH Grand

13. STATE Utah

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7-7/8"	4-1/2" new	10.5# J-55	3770'	175 sx RFC

Please lease change number on well checks.
 a.

RECEIVED
 JUN 11 1987
 DIVISION OF
 OIL, GAS & MINING

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 D. Rosten TITLE Petroleum Engineer DATE 5/15/87

(This space for Federal or State office use)

PERMIT NO. 43-019-31244 APPROVAL DATE 88 8 HV 61 17W 1981

APPROVED BY /S/ GENE NODINE TITLE DISTRICT MANAGER DATE JUN 05 1987

CONDITIONS OF APPROVAL IF APPLICABLE

FLARING OR BURNING OF GAS IS SUBJECT OF NPL 4-A DATED 1/1/80

CONDITIONS OF APPROVAL ATTACHED

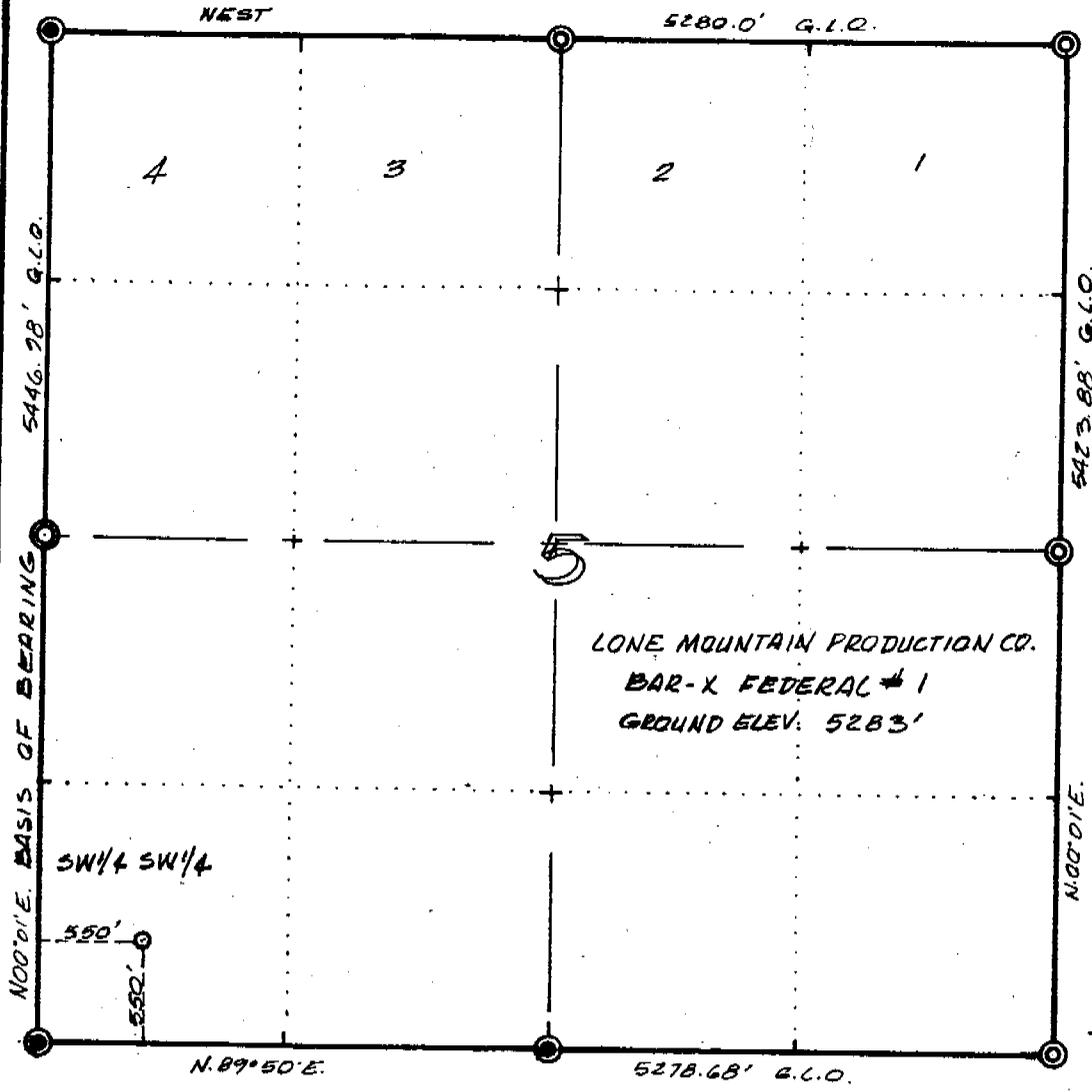
SUBJECT TO RIGHT OF WAY APPROVAL

*See Instructions On Reverse Side

PLAT #1

SEC. 5, T. 17 S., R. 26 E. OF THE S.L.M.

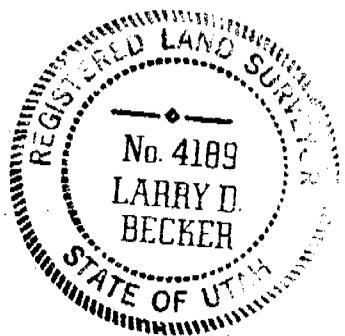
LOCATION PLAT



LONE MOUNTAIN PRODUCTION CO.
 BAR-X FEDERAL #1
 GROUND ELEV. 5283'

- LEGEND**
- STANDARD LOCATION OF GLO SECTION CORNERS
 - GLO CORNERS FOUND
 - WELL LOCATION STAKES
- REFERENCE DOCUMENTS**
- 1926 GLO PLAT
 - BAR-X WASH QUADRANGLE, USGS

THIS WELL LOCATION PLAT WAS PREPARED FOR LONE MOUNTAIN PRODUCTION CO.
 TO LOCATE THE BAR-X FEDERAL #1, 550' F.S.L. &
550' F.W.L. IN THE SW 1/4 SW 1/4, OF SECTION 5, T. 17 S., R. 26 E.
 OF THE S.L.M.P.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	4/30/87
DRAWN	5/2/87
CHECKED	5/1/87

ENERGY SURVEYS & ENGINEERING CORP.

715 HORIZON DRIVE, SUITE 330
 GRAND JUNCTION, CO 81501
 (303) 245-7221

SCALE 1" = 1000'
 JOB NO.
 SHEET OF

Lone Mountain Production Company
Well No. Federal 1
Sec. 5, T. 17 S., R. 26 E.
Grand County, Utah
Lease U-41378

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Lone Mountain Production is the bonded entity on this application. Liability will remain with the bonded party named above until we are formally notified by letter of the new bonded entity in reference to this Application for Permit to Drill.

A. DRILLING PROGRAM

8-5/8" casing will be pressure tested to 1000 psi prior to drilling casing shoe. This test will be recorded in the drillers log.

Well control equipment will be consistent with standards in API RP 53, including the choke manifold and accumulator.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Order 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to the field representative to insure compliance.

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 Office. If operations are to be suspended, prior approval of the District Office will be obtained and notification given before resumption of operations.

The spud date will be reported orally to the District Office within a minimum of 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

In accordance with Onshore 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 continued each month until the well is plugged and abandoned. This report will be sent to the District Office, P.O. Box 970, Moab, Utah 84532.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Area Office in accordance with requirements of NTL-3A.

If a replacement rig is needed for completion operations, a Sundry Notice (Form 3160-5) to that effect will be filed for prior approval from the District Office, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergency situations, verbal approval to bring on a replacement rig will be approved through the District Office.

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 to the District Office not later than thirty (30) 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, core analyses, well test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, work-over, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Moab District Manager.

If the well is to be completed for production the Area Office is to be contacted in order to set up a pre-production conference. When the well is placed in a producing status the District Office is to be notified by telegram or other written communication within five working days.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

No well abandonment operations will be commenced without the prior approval of the District Office. In the case of newly-drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Office. A Subsequent Report of Abandonment (Form 3160-5) will be sent to the District Office 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 Area Office, or the appropriate surface managing agency. Upon completion of approved plugging, a dry hole marker will be erected in accordance with 43 CFR 3162.6. The top of the marker will be closed or capped. The following minimum information will be permanently placed on the marker; "Fed" or "Ind", as applicable, "Lease Number", "Well number", location of well by 1/41/4 section, township, and range.

B. SURFACE USE PROGRAM

The operator will contact the Grand Resource Area at (801) 259-8193, forty-eight (48) hours prior to beginning any dirt work on this location.

Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed will be approved by the Area Manager in advance.

Immediately upon completion of drilling, the location, and surrounding areas, will be cleared of all remaining debris, materials, trash, and junk not required for production.

Produced waste water will be confined to an unlined pit.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the wellhead to the meter along with any other sections occurring on the pad. Meter runs will be housed and/or fenced.

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 (3) months on new meter installations and at least quarterly thereafter. The Area 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 Resource Area Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligation determined by the authorized officer.

The operator or his contractor will notify the Grand Resource Area at (801) 259-8193 forty-eight (48) hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

The following seed mixture will be used:

Species

Grasses

lbs/acre

Agropyron spicatum Bluebunch wheatgrass 2

Sitanion hystrix Bottlebrush squirreltail 2

Shrubs

Eurotia lanata Winterfat (Whitesage) 2

Artemesia tridentata Big sage 2

8

Broadcast seed will be applied at double the above rate.

Final location release will be issued when the seeding is shown to be successful (when perennial vegetation is established).

Your contact with the District Office is:

Steve Jones, Petroleum Engineer: Office Phone: (801) 259-6111

Home Phone: (801) 259-7404

Lynn Jackson, Chief, Branch of Fluid Minerals:

Office Phone: (801) 259-6111

Home Phone: (801) 259-7990

Paul Brown, I&E Coordinator:

Office Phone: (801) 259-6111

Home Phone: (801) 259-7018

ADDRESS:

82 East Dogwood, P. O. Box 970
Moab, Utah 84532

Your contact with the Grand Resource Area Office is:

Jeff Robbins, Office Phone: (801) 259-8193

Home Phone: (801) 259-7964

ADDRESS:

Sand Flats Road, P.O. Box M
Moab, Utah 84532

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

API #43-019-31244

NAME OF COMPANY: LONE MOUNTAIN PRODUCTIONWELL NAME: BAR X Federal 1SECTION SW SW 5 TOWNSHIP 17S RANGE 26E COUNTY GrandDRILLING CONTRACTOR VecoRIG # 2SPUDDED: DATE 6-28-87TIME 4:00 PMHow Rotary

DRILLING WILL COMMENCE _____

REPORTED BY Jim Routson

TELEPHONE # _____

DATE 6-29-87 SIGNED AS

070703

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

API #43-019-31244

NAME OF COMPANY: LONE MOUNTAIN PRODUCTION

WELL NAME: BAR X Federal 1

SECTION SW SW 5 TOWNSHIP 17S RANGE 26E COUNTY Grand

DRILLING CONTRACTOR Veco

RIG # 2

SPUDDED: DATE 6-28-87

TIME 4:00 PM

How Rotary

DRILLING WILL COMMENCE _____

REPORTED BY Jim Routson

TELEPHONE # _____

DATE 6-29-87 SIGNED AS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate
(Other instructions
verse side)

Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.
U-61841 PA

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
070704

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Bar-X

11. SEC., T., R. M., OR BLK. AND SURVEY OR AREA
SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 5-T17S-R26E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Lone Mountain Production Company

3. ADDRESS OF OPERATOR
408 Petroleum Building, P. O. Box 3394, Billings, Montana 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
550' FSL, 550' FWL Section 5

14. PERMIT NO.
43-019-31244

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5283' GL, 5294' KB

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Spud	<input checked="" type="checkbox"/>

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

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 $\frac{1}{4}$ " hole at 4:00 P. M., 6-28-87. Veco Drilling Co. Rig No. 2. Drilled to 315'. Ran 9 5/8", 36#, J-55 casing to 308'. Cemented to surface with 150 sacks Class "G", 3% CaCl₂, 1/4# Celloflake/sack.

Reported to Steve Jones, BLM, Moab, at 8:15 A. M., 6-29-87.
Reported to Arlene Sollis, Utah Division of Oil, Gas, & Mining, at 8:30 A. M., 6-29-87.

RECEIVED
JUL 01 1987
DIVISION OF OIL, GAS & MINING

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

SIGNED James D. Rantson TITLE Petroleum Engineer DATE 6-29-87

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Budget Bureau No. 1004-0135
Expires August 31, 1985

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.)

5. LEASE DESIGNATION AND SERIAL NO

U-61841

Duly
070749

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Bar-X

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

SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 5-T17S-R26E

14. PERMIT NO.

43-019-31244

15. ELEVATIONS (Show whether DP, RT, OR, etc.)

5283' GL, 5294' KB

12. COUNTY OR PARISH

Grand

13. STATE

Utah

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON*

SHOOTING OR ACIDIZING

ABANDONMENT*

REPAIR WELL

CHANGE PLANE

(Other) Spud

(Other)

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

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.)*

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Reported to Steve Jones, BLM, Moab, at 8:15 A. M., 6-29-87.

Reported to Arlene Sollis, Utah Division of Oil, Gas, & Mining, at 8:30 A. M., 6-29-87.

RECEIVED
JUL 01 1987

DIVISION OF
OIL, GAS & MINING

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

SIGNED

James D. Rowton

TITLE

Petroleum Engineer

DATE

6-29-87

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

LONE MOUNTAIN PRODUCTION COMPANY

P.O. BOX 3394
408 PETROLEUM BUILDING
BILLINGS, MONTANA 59103-3394
(406) 245-5077

July 2, 1987

RECEIVED
JUL 06 1987

BUREAU OF LAND MANAGEMENT
P. O. Box 970
Moab, Utah 84532

Re: Lease U-61841
Bar-X Federal No. 1
SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 5: T17S-R26E
Grand County, Utah

DIVISION OF
OIL, GAS & MINING

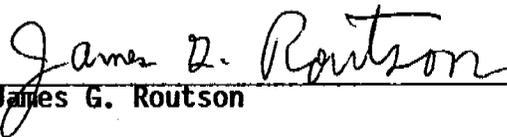
Dear Sirs:

Enclosed in triplicate is Form 3160-5, Sundry Notice, Report of Abandonment for the subject well.

Also enclosed in duplicate is Form 3160-4, Well Completion Report for the plugging of the subject well.

Very truly yours,

LONE MOUNTAIN PRODUCTION COMPANY


James G. Routson

JGR/lw

xc/Division of Oil, Gas & Mining ✓

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions re-
verse side)

Form approved,
Budget Bureau No. 1004-0135
Expires August 31, 1985

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 <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR Lone Mountain Production Company		8. FARM OR LEASE NAME Federal
3. ADDRESS OF OPERATOR 408 Petroleum Bldg., P.O. Box 3394, Billings, MT 59103		9. WELL NO. 1
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 550' FSL, 550' FWL, Section 5		10. FIELD AND POOL, OR WILDCAT Bar-X
14. PERMIT NO. 43-019-31244		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SW$\frac{1}{4}$ SW$\frac{1}{4}$ Sec. 5: T17S-R26E
15. ELEVATIONS (Show whether DF, RT, OR, etc.) 5283' GL, 5294' KB		12. COUNTY OR PARISH Grand
		13. STATE Utah

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANE <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 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.)*

Air drilled 7-7/8" hole to 3790 feet. Minor gas shows encountered in the Dakota.

LOG TOPS:	DAKOTA SILT	3140 (+2154)
	DAKOTA SAND	3218 (+2076)
	MORRISON	3390 (+1904)
	SALT WASH (MORRISON)	3728 (+1566)

Plugged and abandoned as follows:

PLUG #1: 3450 - 3220' with 80 sacks.
 PLUG #2: 358 - 258' with 35 sacks.
 PLUG #3: 30 - surface with 10 sacks.

Finished plugging at 9:00 AM, July 2, 1987. Plugging orders received from Steve Jones, BLM in Moab at 9:30 PM, July 1, 1987.

Dry hole marker will be installed and rehab work will begin within 30 days.

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

SIGNED James G. Routson TITLE Petroleum Engineer DATE July 2, 1987
 (This space for Federal or State office use)

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

RECEIVED
 JUL 06 1987

APPROVED BY _____ DATE: 7-7-87
 CONDITIONS OF APPROVAL, IF ANY _____ BY: [Signature] *See Instructions on Reverse Side

DIVISION OF
OIL, GAS & MINING

RECEIVED
JUL 06 1987

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
3 TRIAD CENTER, SUITE 350
SALT LAKE CITY, UT 84180-1203

DIVISION OF
OIL, GAS & MINING

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number BAR-X FEDERAL NO. 1

Operator LONE MOUNTAIN PRODUCTION COMPANY Address P.O. Box 3394, Billings, MT 59103

Contractor VECO DRILLING COMPANY Address P.O. Box 1705, Grand Junction, CO 81502

Location SW 1/4 SW 1/4 Sec. 5 T. 17S R. 26E County Grand

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</u>			
2.	_____			
3.	_____			
4.	_____			
5.	_____			

(Continue on reverse side if necessary)

Formation Tops

- See Sundry Notice, Form 3160-5.

Remarks

NOTE: (a) Report on this form as provided for in Rule 806, Oil and Gas Conservation General Rules.

(b) 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
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

13

WELL COMPLETION OR RECOMPLETION

RECEIVED
JUL 06 1987

1a. TYPE OF WELL: OIL WELL GAS WELL DRY
b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RENVR. Other _____

2. NAME OF OPERATOR
Lone Mountain Production Company

DIVISION OF OIL, GAS & MINING

3. ADDRESS OF OPERATOR
P. O. Box 3394, 408 Petroleum Bldg., Billings, MT 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface **550' FSL, 550' FWL, Section 5**
At top prod. interval reported below **Same**
At total depth **Same**

14. PERMIT NO. **43-019-31244** DATE ISSUED **5-22-87**

5. LEASE DESIGNATION AND SERIAL NO.
U-61841

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NO. **070819**

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Bar-X

11. SEC., T. R., M., OR BLOCK AND SURVEY OR AREA
SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 5: T17S-R26E

12. COUNTY OR PARISH
Grand 13. STATE
Utah

15. DATE SPUNDED **6-28-87** 16. DATE T.D. REACHED **7-1-87** 17. DATE COMPL. (Ready to prod.) **P&A 7-2-87** 18. ELEVATIONS (DF, RKB, RT, OR, ETC.)* **5283' GL, 5294' KB** 19. ELEV. CASINGHEAD **NA**

20. TOTAL DEPTH, MD & TVD **3790'** 21. PLUG, BACK T.D., MD & TVD **Surface** 22. IF MULTIPLE COMPL., HOW MANY* **→** 23. INTERVALS DRILLED BY **0 - TD** ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
None 25. WAS DIRECTIONAL SURVEY MADE
No

26. TYPE ELECTRIC AND OTHER LOGS RUN
GR-FDC-CNL, DIL 27. WAS WELL CORED
No *mud log 7-17-87*

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

CASINO SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36# J-55	308'	12-1/4"	150 sacks (to surface)	none

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
At surface	10 sacks Class "G" cement.
258 - 358'	35 sacks Class "G" cement.
3220 - 3450'	80 sacks Class "G" cement.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
None		P&A					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
			→				
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
		→					

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

35. LIST OF ATTACHMENTS
Plugging notice on SUNDRY NOTICE FORM 3160-5.

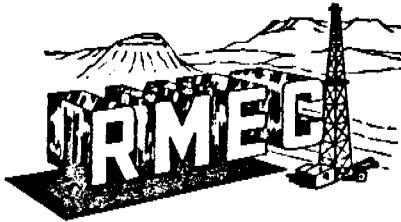
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED James G. Routson TITLE Petroleum Engineer DATE July 2, 1987

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

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Dakota	3298	3302	Tight, gas.	DAKOTA SILT	3140	+2154
Dakota	3317	3322	Tight, gas.	DAKOTA SAND	3218	+2076
Dakota	3374	3390	Tight, gas; gauged 152 MCFD while drilling.	MORRISON	3390	+1904
Salt Wash (Morrison)	3728	3746	Tight, gas and possibly salt water.	SALT WASH (Member of Morrison)	3728	+1566



ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL SITE GEOLOGY — MUD LOGGING

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81505

July 2, 1987

RECEIVED
JUL 06 1987

LONE MOUNTAIN PRODUCTION CO.
408 PETROLEUM BUILDING
BILLINGS, MONTANA 59103

ATTN: JIM ROUTSON

DIVISION OF
OIL, GAS & MINING

Dear Mr. Routson,

Enclosed is the final log on your well BAR-X FEDERAL NO. 1, located in Section 5, T17S, R26E of Grand County, Utah.

We appreciated the opportunity to serve you. If we can be of any further assistance in the final evaluation of zones encountered please feel free to call on us.

We are looking forward to working with you again in the near future.

Sincerely,

Andy Kelley
President

AWK/sm

Encls: 2 Final logs

XXC: Robert C. Balsam, Billings, MT.
T. H. McElvain Oil & Gas Properties, Santa Fe, NM
S. A. Chorney, Denver, CO
Bryson Canyon Partnership 87-6, Billings, MT
William H. Buniger, Loma, CO
Jack C. Routson, Billings, MT
David Schaenen, Billings, MT D & G Roustabout Service, Mack, CO
B & H Resources, Inc., Billings, MT
Mark & Kathleen Tokarski, Billings, MT
Victor L. Damon, Englewood, CO Barovich Associates, Inc., Billings, MT
Gordon E. Phifer, Lakewood, CO Bureau of Land Mgt., Moab, UT
Eugene C. Smaldone, Golden, CO Division of Oil, Gas & Mining, Salt Lake City
Gene M. DiTolla, Lakewood, CO
James H. Erfurdt, Wheat Ridge, CO
J & L Oil & Gas, Inc. (87-X), Billings, MT
Montana & Wyoming Oil Co., Billings, MT
Richard & Tamara Lowrie, Colorado Springs, CO
Dr. Brian Gamble, Chatham, Ontario-Canada
Harold B. Holden, Billings, MT

