

BEFORE THE BOARD OF OIL, GAS AND MINING

DEPARTMENT OF NATURAL RESOURCES

IN AND FOR THE STATE OF UTAH

---

IN THE MATTER OF THE PETITION	*	
OF LONE MOUNTAIN PRODUCTION	*	
COMPANY, TXO PRODUCTION	*	SECOND SET OF FINDINGS
CORPORATION, AND BURTON W.	*	OF FACT, AND CONCLUSIONS
HANCOCK FOR AN ORDER MODIFYING	*	OF LAW AND SECOND ORDER
PREVIOUS SPACING ORDERS TO	*	
ALLOW INFILL DRILLING UPON	*	Docket No. 86-009
ESTABLISHED DRILLING UNITS	*	Cause No. 13-6(2)
AND ESTABLISHING OTHER	*	
DRILLING/SPACING UNITS FOR THE	*	
DAKOTA AND MORRISON FORMATIONS	*	
UNDERLYING CERTAIN ENUMERATED	*	
LANDS IN GRAND COUNTY, UTAH	*	

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Pursuant to the Petition of Lone Mountain Production Corporation, TXO Production Corporation, and Burton W. Hancock, this cause initially was heard before the Board of Oil, Gas and Mining, Department of Natural Resources, State of Utah, on Friday, May 9, 1986, at 10:30 a.m. in the Board Room of the Division of Oil, Gas and Mining, 355 West North Temple, 3 Triad Center, Suite 301, Salt Lake City, Utah.

Statements were made for the record in this matter at the regularly scheduled Board hearings on May 22, June 26 and July 31, 1986. Petitioners filed an Amended Petition on August 5, 1986, which requested relief essentially based upon the findings of the Board as stated at the July 31 meeting. The Amended Petition was heard at the regularly scheduled Board meeting on August 28, 1986.

Pursuant to Paragraph G of the Order signed September 26, 1986, in this matter, the hearing upon the Amended Petition, insofar as it covered the W $\frac{1}{2}$  W $\frac{1}{2}$  of Section 2, Section 3, E $\frac{1}{2}$  Section 4, E $\frac{1}{2}$  NE $\frac{1}{4}$  Section 8, NW $\frac{1}{4}$  Section 9, and Section 10, all in Township 17 South, Range 25 East, S.L.M., was continued without date.

On January 12, 1987, Petitioners Lone Mountain Production Company and Burton W. Hancock filed a "Second Amended Petition Concerning Lands not Covered by Order dated September 26, 1986." The Second Amended Petition requested a hearing date for the lands mentioned in the above Paragraph G. In addition, relief was requested for lands not a part of the original petition. Pursuant to the Second Amended Petition, a hearing was held on Thursday, February 26, 1987 at 10:00 a.m. in the Board Room of the Division of Oil, Gas & Mining, 355 West North Temple, 3 Triad Center, Suite 301, Salt Lake City, Utah. The following Board Members were present:

Gregory P. Williams, Chairman  
James W. Carter  
John M. Garr  
Charles R. Henderson  
Richard B. Larsen  
Judy F. Lever

The Board was represented by Mark C. Moench, Esq.,  
Assistant Attorney General for the State of Utah.

Appearances for the Division of Oil, Gas & Mining were made by:

Dr. Dianne Nielson, Director  
Division of Oil, Gas & Mining

Ronald J. Firth, Associate  
Director, Oil & Gas

John R. Baza, Petroleum Engineer

The Division was represented by Barbara W. Roberts,  
Assistant Attorney General for the State of Utah.

The Petitioners were represented by John A. Harja, Esq.,  
1170 East 1300 South, Salt Lake City, Utah 84105.

NOW, THEREFORE, the Board having considered the testi-  
mony adduced and the exhibits reviewed in all said hearings, and  
being fully advised in the premises, now makes and enters the  
following:

FINDINGS OF FACT

1. Due and regular notice of the time, place and pur-  
pose of the February 26 hearing was given to all interested par-  
ties as required by law and the rules and regulations of the  
Board. The parties specifically served with notice are listed in  
Exhibit "1" attached to the original Petition, as updated for the  
1987 hearing, which names represent all persons who own the right  
to explore for and produce hydrocarbons from the subject lands  
and all lands immediately adjacent to and cornering upon the sub-  
ject lands in Utah.

2. The Board has jurisdiction over the subject matter  
of the Second Amended Petition and over all parties interested  
therein and has jurisdiction to make and promulgate the order  
hereinafter set forth.

3. The Second Amended Petition in this matter is a request to modify previously existing drilling/spacing units for the Dakota and Morrison formations in parts of Grand County, Utah so as to authorize additional wells to be drilled within the existing units (increased well density or "infill"). The Second Amended Petition requests that existing wells be designated the current initial production well for the infill units. Additional wells would be drilled, at the operator's option, within the opposite government quarter section from the existing well at a point not less than 500 feet from the unit boundaries and 2,000 feet from other wells producing from the same formations, with a 200 foot tolerance to each requirement to be administratively approved pursuant to Rule 302.1 of the General Oil and Gas Rules for the State of Utah.

In addition, the Second Amended Petition requests that other lands in Grand County be spaced for production from the Dakota and Morrison formations. One well would be authorized for each unit. New wells would be drilled at a point not less than 500 feet from the unit boundaries and not less than 2,000 feet from other wells producing from the same formations with a 200 foot tolerance to each requirement to be administratively approved pursuant to Rule 302.1 of the General Oil and Gas Rules for Utah. Certain of these units so established would then be modified to allow for three production wells per unit.

4. The Board has previously entered an Order in Cause Number 107-1 which established a drilling/spacing unit con-

sisting of Section 16, Township 16 South, Range 26 East, S.L.M. This section is an irregular 320 acre (approximate) section which borders Colorado. Pursuant to oral motion made at the hearing, the Second Amended Petition was further amended to request authorization for an additional production well for this unit, rather than the original request to establish two 160 acre units.

5. Information obtained from the Bureau of Land Management (BLM) after the Second Amended Petition was filed, demonstrated that both sections 21 and 28, Township 16 South, Range 26 East, S.L.M., lie within the federal San Arroyo Operational Unit. Because of this, Petitioners' motion to delete these lands from the Second Amended Petition was granted.

6. This Board has previously entered an Order (Cause No. 165-11) which allows for two production wells in each of the following 480 acre drilling/spacing units:

a) Township 17 South, Range 25 East, S.L.M.

Section 1: Lots 1, 2, 3, 4, S $\frac{1}{2}$  N $\frac{1}{2}$ , N $\frac{1}{2}$  S $\frac{1}{2}$

b) Township 17 South, Range 26 East, S.L.M.

Section 6: Lots 1, 2, 3, 4, S $\frac{1}{2}$  N $\frac{1}{2}$ , N $\frac{1}{2}$  S $\frac{1}{2}$

Petitioners have requested authorization for an additional production well (total of three) for each of these units.

7. The federal Winter Camp Operational Unit has been terminated by the Bureau of Land Management (BLM) effective December 31, 1986. Petitioners have requested that the Board

establish drilling/spacing units for the lands previously embraced by the Winter Camp Unit.

8. The following 480 acre (approx.) drilling/spacing units were created in Cause No. 4:

Township 17 South, Range 25 East, S.L.M.

- a) Section 2: E $\frac{1}{2}$ , E $\frac{1}{2}$  W $\frac{1}{2}$
- b) Section 2: W $\frac{1}{2}$  W $\frac{1}{2}$  plus Section 3: E $\frac{1}{2}$
- c) Section 3: W $\frac{1}{2}$  plus Section 4: E $\frac{1}{2}$  E $\frac{1}{2}$
- d) Section 4: W $\frac{1}{2}$  E $\frac{1}{2}$ , W $\frac{1}{2}$
- e) Section 9: E $\frac{1}{2}$  plus Section 10: W $\frac{1}{2}$  W $\frac{1}{2}$
- f) Section 10: E $\frac{1}{2}$  W $\frac{1}{2}$ , E $\frac{1}{2}$

(See more accurate descriptions under Zones 2 and 3 of Field Rule 4-4, Cause No. 4)

These drilling/spacing units were vacated in Cause No. 4-2 because said units had become part of the then new Winter Camp Unit. These lands have been developed upon a 480 acre basis. Valid 480 acre Communitization Agreements still exist covering some of these same (since vacated) units.

9. All previous testimony related to the geology, reservoir characteristics, and the like of the Dakota and Morrison formations was incorporated into the record of the February 26, 1987, hearing. Geologic evidence indicates that the Dakota and Morrison formations extend under the following unspaced lands, and, as such, constitute a common source of supply of (principally) natural gas:

a) Township 17 South, Range 25 East, S.L.M.

Section 7: All

Section 8: N $\frac{1}{2}$

Section 9: NW $\frac{1}{4}$

b) Township 17 South, Range 25 East, S.L.M.

Section 2: E $\frac{1}{2}$ , E $\frac{1}{2}$  W $\frac{1}{2}$

Section 2: W $\frac{1}{2}$  W $\frac{1}{2}$  plus Section 3: E $\frac{1}{2}$

Section 3: W $\frac{1}{2}$  plus Section 4: E $\frac{1}{2}$  E $\frac{1}{2}$

Section 4: W $\frac{1}{2}$  E $\frac{1}{2}$ , W $\frac{1}{2}$

Section 9: E $\frac{1}{2}$  plus Section 10: W $\frac{1}{2}$  W $\frac{1}{2}$

Section 10: E $\frac{1}{2}$  W $\frac{1}{2}$ , E $\frac{1}{2}$

10. Paragraph D of the Order dated September 26, 1986 in this matter established 160 acre units for the W $\frac{1}{2}$  of Section 4 and E $\frac{1}{2}$  of Section 9, both in Township 17 South, Range 25 East, S.L.M. In order to establish drilling/spacing units of uniform size on this area, these units should be modified as ordered below.

11. Paragraph F of the Order dated September 26, 1986 in this matter established 160 acre units for the SE $\frac{1}{4}$  of Section 8 and SW $\frac{1}{4}$  of Section 9, both in Township 17 South, Range 25 East, S.L.M., provided that the Communitization Agreement then in effect covering the W $\frac{1}{2}$  of Section 9 and E $\frac{1}{2}$  E $\frac{1}{2}$  of Section 8, Township 17 South, Range 25 East, S.L.M. was terminated prior to the production of any well drilled in the SE $\frac{1}{4}$  of Section 8. Said Communitization Agreement was terminated effective February 1, 1987.

12. Currently available geologic evidence indicates that one well will not drain the natural gas reserves underlying a spaced area 280 acres in size or larger. The geologic evidence indicates that one well will drain approximately 160 acres, and that a 160 acre drainage is not smaller than the maximum area that can be efficiently and economically drained by one well.

13. Due to the presence of existing communitization agreements and other factors, and in order to protect the correlative rights of the various interest owners, the geographic extent of several of the existing drilling/spacing units can not be altered. Increased well density authorization is appropriate for these units. Additional wells upon existing units are authorized to be drilled only at the option of the operator of each separate unit, such drilling decision to be based upon geologic and engineering data indicating that the well will recover additional hydrocarbons in an economically feasible manner. Economically feasible means that a prudent operator would have a reasonable opportunity to recover the costs of drilling, completing, producing and operating the well, plus a reasonable profit.

14. It is not the intent of this Order to change, amend or otherwise alter any existing contractual rights or relationships, express or implied, between any parties who share in the production (or proceeds therefrom) from previously spaced drilling units or tracts pooled or unitized for purposes of deve-

loping and producing wells (upon the lands not spaced at the date of hearing on this matter). It is not the intent of this Order to alter any interests based on previously existing communitization or participation agreements.

15. The various types of relief ordered by the Board in this matter will prevent the drilling of unnecessary wells, prevent waste, and protect correlative rights.

#### CONCLUSIONS OF LAW

1. The Dakota and Morrison formations underlying the subject lands are a "common source of supply" as that term is defined in U.C.A. §40-6-2(a) (1953, as amended).

2. The Board has the authority, pursuant to U.C.A. §40-6-6(3), (1953, as amended) to modify previous spacing orders to include additional areas which are underlain by a common source of supply.

3. The Board has the authority, pursuant to U.C.A. §40-6-6(4), (1953, as amended) to modify existing drilling/spacing units to permit additional wells to be drilled within established units.

4. The various types of relief ordered by the Board in this matter will prevent the drilling of unnecessary wells, prevent waste, and protect correlative rights.

Sufficient evidence now being available upon which to reach a decision, the Board issues the following:

ORDER

IT IS HEREBY ORDERED THAT:

A. NEW DRILLING/SPACING UNITS

1) The following drilling/spacing units are hereby established for production from the Dakota and Morrison formations:

a) 160 acre units

Township 17 South, Range 25 East, S.L.M.

Section 7: All

Section 8: N $\frac{1}{2}$

Section 9: NW $\frac{1}{4}$

b) 480 acre units (more or less)

Township 17 South, Range 25 East, S.L.M.

i) Section 2: E $\frac{1}{2}$ , E $\frac{1}{2}$  W $\frac{1}{2}$

ii) Section 2: W $\frac{1}{2}$  W $\frac{1}{2}$  plus Section 3: E $\frac{1}{2}$

iii) Section 3: W $\frac{1}{2}$  plus Section 4: E $\frac{1}{2}$  E $\frac{1}{2}$

iv) Section 4: W $\frac{1}{2}$  E $\frac{1}{2}$ , W $\frac{1}{2}$

v) Section 9: E $\frac{1}{2}$  plus Section 10: W $\frac{1}{2}$  W $\frac{1}{2}$

vi) Section 10: E $\frac{1}{2}$  W $\frac{1}{2}$ , E $\frac{1}{2}$

2) Each of the above 160 acre units shall be composed of and equivalent to a regularly surveyed quarter section or lots corresponding thereto.

3) One well is authorized upon each of the above established units, said well to be located anywhere within the unit that is not less than 500 feet from the unit boundaries

(with a 200 foot tolerance to be administratively granted pursuant to Rule 302.1 for geologic, topographic, cultural or other reasons) and not less than 2,000 feet from other wells producing from the same formations (with a 200 foot tolerance to be administratively approved pursuant to Rule 302.1 for geologic, topographic, cultural and other reasons).

B. INFILL AUTHORIZATION

1) Additional wells are authorized for production from the Dakota and Morrison formations within the following previously established drilling/spacing units:

a) Two Production Wells

Township 16 South, Range 26 East, S.L.M.

Section 16

b) Three Production Wells

i) Township 17 South, Range 25 East, S.L.M.

Section 1: Lots 1, 2, 3, 4, S $\frac{1}{2}$  N $\frac{1}{2}$ , N $\frac{1}{2}$  S $\frac{1}{2}$

ii) Township 17 South, Range 26 East, S.L.M.

Section 6: Lots 1, 2, 3, 4, S $\frac{1}{2}$  N $\frac{1}{2}$ , N $\frac{1}{2}$  S $\frac{1}{2}$

Township 17 South, Range 25 East, S.L.M.

iii) Section 2: E $\frac{1}{2}$ , E $\frac{1}{2}$  W $\frac{1}{2}$

iv) Section 2: W $\frac{1}{2}$  W $\frac{1}{2}$  plus Section 3: E $\frac{1}{2}$

v) Section 3: W $\frac{1}{2}$  plus Section 4: E $\frac{1}{2}$  E $\frac{1}{2}$

vi) Section 4: W $\frac{1}{2}$  E $\frac{1}{2}$ , W $\frac{1}{2}$

vii) Section 9: E $\frac{1}{2}$  plus Section 10: W $\frac{1}{2}$  W $\frac{1}{2}$

viii) Section 10: E $\frac{1}{2}$  W $\frac{1}{2}$ , E $\frac{1}{2}$

2) Existing wells capable of production from the Dakota/Morrison formations in the units stated in paragraph "B(1)" above are the authorized current initial wells per unit. Additional wells shall be located no less than 500 feet from the unit boundaries and no less than 2,000 feet from other wells producing from the same formations (with a 200 foot tolerance for each distance requirement to be administratively granted pursuant to Rule 302.1 for geologic, topographical, cultural or other reasons).

3) Said additional wells may be drilled only at the option of the operator of each separate drilling unit, based upon the criteria stated in Finding of Fact No. 13 above.

4) It is not the intent of this Order that existing contractual rights or relationships, express or implied, between all parties who share in the production, or proceeds therefrom, from any of the established drilling units stated in paragraph "B(1)" above be altered by virtue of this order.

C. All previous Orders of this Board which are inconsistent with this Order, are hereby vacated, to the extent of such inconsistency only.

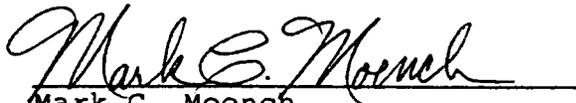
D. The Board retains exclusive and continuing jurisdiction over all matters covered by this Order and over all parties affected thereby and particularly reserves exclusive and continuing jurisdiction to make further orders as appropriate and as authorized by statute and regulation.

DATED this 26<sup>th</sup> day of March, 1987.

STATE OF UTAH  
BOARD OF OIL, GAS & MINING

  
\_\_\_\_\_  
Gregory P. Williams, Chairman

Approved as to form:

  
\_\_\_\_\_  
Mark C. Moench  
Assistant Attorney General

**LONE MOUNTAIN PRODUCTION COMPANY**

777 VALLEY COURT  
GRAND JUNCTION, CO. 81505  
(303) 243-5906 OFFICE  
(303) 858-1472 HOME

Ronald J. Firth  
State of Utah  
Division of Oil, Gas, and Mining  
3 Triad Center, Suite 350  
355 West North Temple  
Salt Lake City, Utah 84180

May 15, 1991

Dear Ron,

Enclosed for your approval, in duplicate, please find the Application for Permit to Drill covering the drilling of the Federal No. 20-R well in Grand County, Utah. We anticipate drilling this well in mid-July, 1991.

The proposed No. 20-R well is a replacement well for the No. 20 well in the same spacing unit. ~~The No. 20-R meets all applicable spacing requirements except for distance to the No. 20 well.~~ Please note item no. 14 on page 2 of the APD. The Government No. 20 well will be plugged when the No. 20-R well is completed. An abandonment proposal will be submitted to your office by Burton Hancock in the near future.

Please call if any further information is needed. Your expedient handling of this APD is appreciated.

Sincerely,

  
Joe Dyk, P.E.

Enclosures  
cc: Billings

**RECEIVED**

MAY 20 1991

DIVISION OF  
OIL GAS & MINING

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  
 P.O. Box 3394, Billings, MT 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface: 794 ft FWL, 2304 ft FSL  
 At proposed prod. zone: Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 25 miles Northwest of Mack, Colorado

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.  
 526 ft (Lse.Line)  
 (Also to nearest drlg. unit line, if any) 1752 ft (No.20)

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETION, OR APPLIED FOR, ON THIS LEASE, FT.  
 2400 ft (No.10-4)

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5462 ft GL, 5472 ft KB

5. LEASE DESIGNATION AND SERIAL NO.  
 U-04955  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 N/A  
 7. UNIT AGREEMENT NAME  
 None  
 8. FARM OR LEASE NAME  
 Federal  
 9. WELL NO.  
 No. 20-R  
 10. FIELD AND POOL, OR WILDCAT  
 Bar-X 100  
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 NWSW Sec 10-T17S-R25E  
 12. COUNTY OR PARISH  
 Grand  
 13. STATE  
 UT  
 16. NO. OF ACRES IN LEASE  
 NA  
 17. NO. OF ACRES ASSIGNED TO THIS WELL  
 NA  
 19. PROPOSED DEPTH  
 4162 ft OK-MR  
 20. ROTARY OR GEAR TOOLS  
 Rotary  
 22. APPROX. DATE WORKING START\*  
 July 13, 1991

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7" new	17.0#, H40	300 feet	140 sx 10-0 to surface
6-1/4"	4-1/2" new	10.5#, J55	4162 feet	175 sx 10-0 RFC

RECEIVED

MAY 20 1991

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: [Signature] TITLE: Petroleum Engineer DATE: May 15, 1991

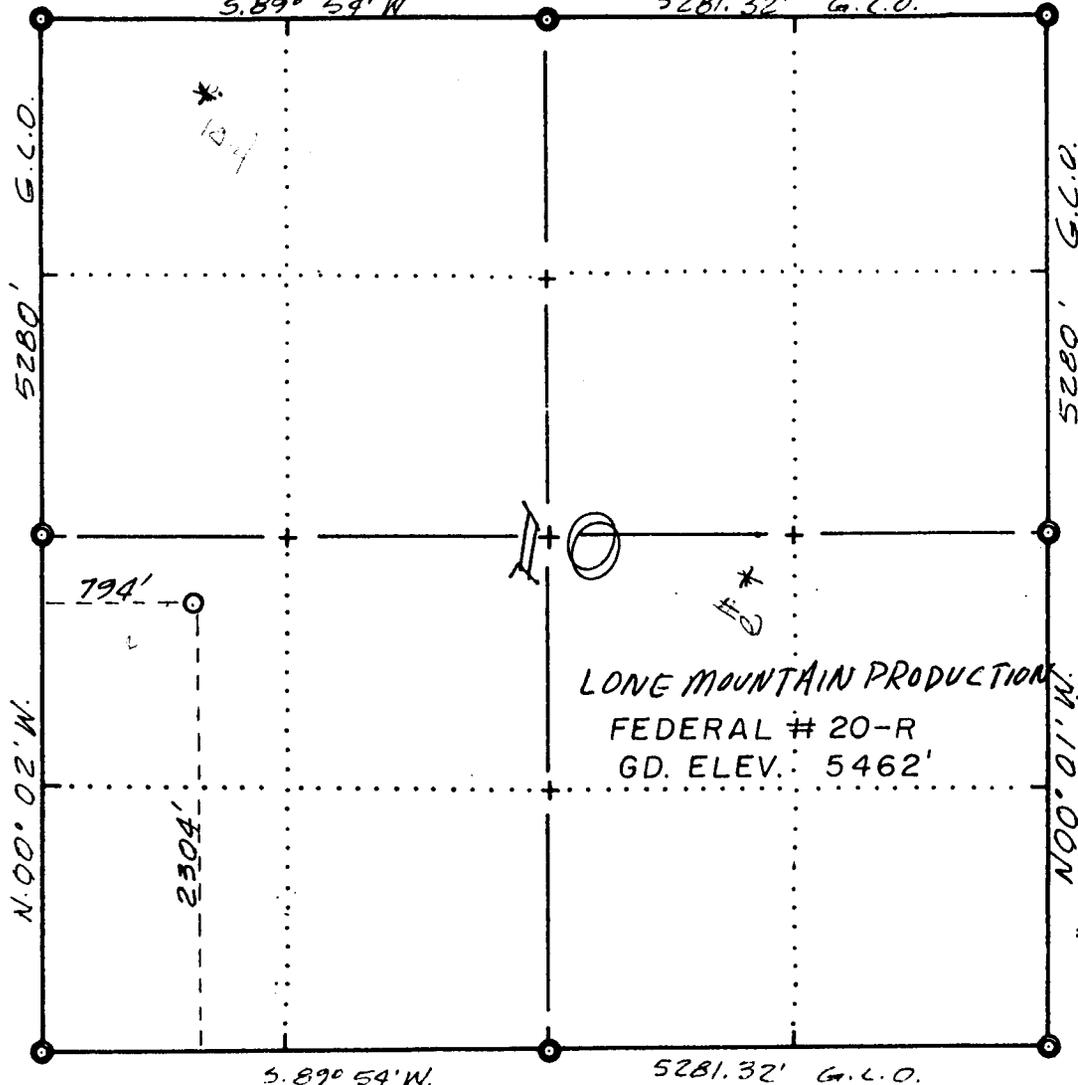
(This space for Federal or State office use)  
 PERMIT NO. 43-019-31320 APPROVAL DATE: APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

APPROVED BY: [Signature] TITLE: DATE: 6-3-91 BY: [Signature] WELL SPACING: 13-6(2)

\*See Instructions On Reverse Side

SEC. 10, T. 17S., R. 26E. OF THE S.L.M.

LOCATION PLAT



LONE MOUNTAIN PRODUCTION  
FEDERAL # 20-R  
GD. ELEV. 5462'



- LEGEND -

- ⊙ STANDARD LOCATION OF GLO SECTION CORNERS.
- GLO CORNERS FOUND.
- ⊙ WELL LOCATION STAKED.

REFERENCE DOCUMENTS

1925 GLO PLAT

BRYSDON CANYON  
QUADRANGLE, U.S.G.S.

THIS WELL LOCATION PLAT WAS PREPARED FOR: LONE MOUNTAIN PRODUCTION  
TO LOCATE THE FEDERAL # 20-R, 2304' F.S.L. &  
794' F.W.L. IN THE NW 1/4 SW 1/4, OF SECTION 10, T. 17S., R. 25E  
OF THE S.L.M. GRAND COUNTY, COLORADO

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*  
UTAH L.S. 9189

SURVEYED	10/90
DRAWN	10/90
CHECKED	10/90

ENERGY  
SURVEYS  
CORPORATION

381 PIKES PEAK DRIVE  
GRAND JUNCTION, CO. 81503  
(303) 243-7221

SCALE: 1" = 1000'  
JOB NO.  
SHEET OF.

Application for Permit to Drill  
Federal No. 20-R  
NWSW Section 10-T17S-R25E  
Grand County, Utah

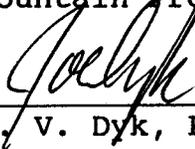
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1. The surface formation is the Mancos.
2. Anticipated geologic markers are: Dakota silt 3612', Dakota sand 3714', Morrison 3854', and TD 4162'.
3. Gas is anticipated in the Dakota and Morrison. No oil or other minerals are anticipated. No water sands are expected.
4. Proposed casing program: See item no. 23
5. 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.
6. The well will be air drilled from under surface casing to total depth.
7. Auxiliary equipment: See Well Control Plan.
8. The logging program will consist of a DIL log from total depth to base of surface casing and GR-FDC-CNL logs from total depth to above the Frontier. No cores or drill stem tests are planned.
9. No abnormal pressures or temperatures are anticipated. No poisonous gas is anticipated.
10. Anticipated spud date is July 15, 1991. Completion operations should commence within 30 days of rig release.
11. Survey plats are attached.
12. The gas is dedicated to Northwest Pipeline Corporation.
13. The completion program will be designed after the logs have been evaluated.
14. Upon successful completion of this well, the Govt. No. 20 well in NESE Sec. 9-T17S-R25E belonging to B. W. Hancock will be plugged and abandoned.

## WELL CONTROL PLAN

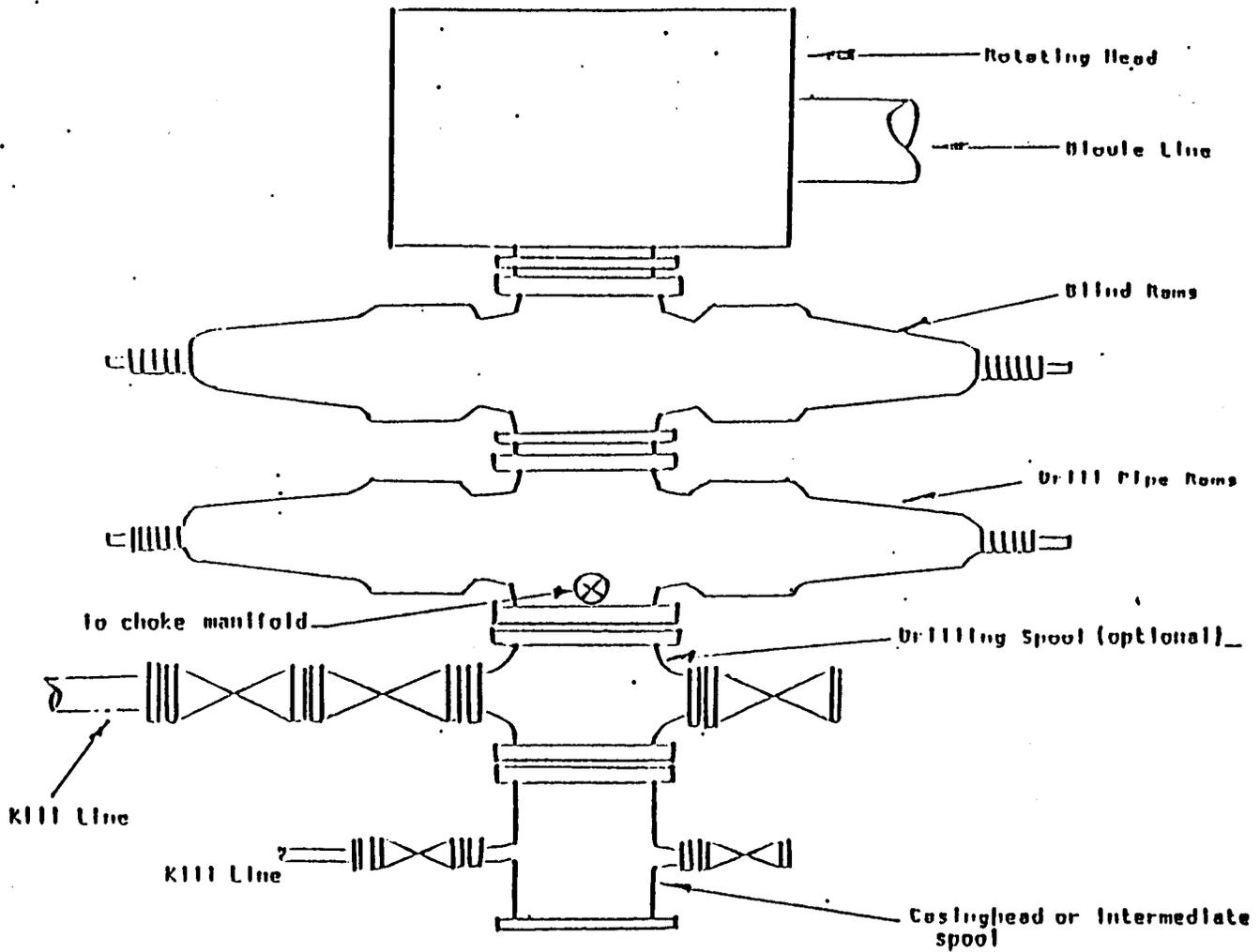
1. Surface casing: 7" O.D., 20.0# or 23.0#, used, STC (to meet new pipe specifications for bodywall thickness on 7 inch, 17.0 lb/ft, H-40 casing) set at 300' and cemented back to surface with 140 sx Standard cement + 2% CaCl<sub>2</sub> (yield=1.15 ft<sup>3</sup>/sk; compressive strength= 650 psi in 6 hours).
2. Casinghead Flange: 7" x 4-1/2" 600 series casinghead with two 2", 2000psi L.P. outlets.
3. Blowout Preventer: The rig is equipped with a 10" 3000 psi W.P. double gate hydraulic Shaffer BOP (or equivalent) with drill pipe rams and blind rams to meet requirements for a 2000 psi stack in Onshore Order No. 2. All fill, kill and choke lines will be a minimum of 2" 2000 psi W.P. A Grant rotating head will be used while air and mist drilling. A new rubber will be installed before drilling through the Dakota. BOP's will be worked daily. Blind rams will be checked during trips. BOP's will be tested to 2000 psi but not more than 70% of casing burst pressure prior to drilling the shoe joint on intermediate casing.
4. 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 the floor.
5. Anticipated bottom hole pressure is less than 900 psi at 4162' or 0.22 psi/ft. No abnormal temperatures or hydrogen sulfide gas are anticipated.

Lone Mountain Production Co.

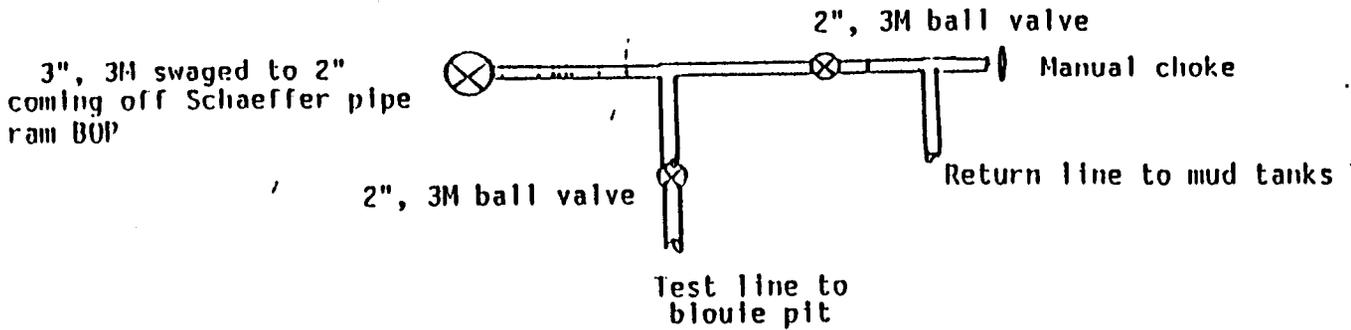
By: 

\_\_\_\_\_  
J. V. Dyk, P.E.

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



**CHIOKE MANIFOLD**



## SURFACE USE PLAN

Lone Mountain Production  
Federal No. 20-R  
NWSW Section 10-T17S-R25E  
Grand County, Utah

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### 1. EXISTING ROADS

See Maps #1 and #2 and Plat #1. This proposed well is located approximately 21 miles northwest of Mack, Colorado. It is reached by going west on Old Highway 6&50 8.8 miles to 2 Road. Turn right and go 4.1 miles to the state line fence. Continue northwesterly up 2 road for 5.8 miles. Take "Y" to the right and proceed north 0.5 miles. Take "Y" to right and proceed 0.7 miles. Turn sharply left at compressor station. Go 0.7 miles and turn left into location.

### 2. ACCESS ROADS TO BE CONSTRUCTED

The proposed 700 feet of access road will be constructed with an 18 foot travel width. The entire construction area is on private surface. Lone Mountain has obtained a surface use agreement with McIntyre Livestock Corporation (surface owner). See Map #1 and Plat #2.

Drivable waterbars or "thank-you-mams" will be installed at approximately 250 foot intervals on 1 to 4 percent grades. Placement of a culvert will take the place of a waterbar.

Drivable waterbars will be installed prior to moving the drilling rig onto the location.

### 3. LOCATION OF EXISTING WELLS

8 producing wells, 1 temporarily abandoned, and 1 dryhole are within one mile radius. See Map #3.

### 4. LOCATION OF PRODUCTION FACILITIES

See Plat #4. Every thing will be painted non reflective dark green.

### 5. LOCATION AND TYPE OF WATER SUPPLY

The source of water for this well is West Salt Creek. The pickup point is on old highway 6 & 50 out 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 MATERIAL

Cuttings will be buried in the reserve pit at cleanup. Garbage and other waste material will be contained in a trash cage. This cage will be dumped at an approved sanitary landfill. Human waste will be contained in chemically treated sanitary holes.

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, saltwater, 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 State Petroleum Engineer. After that time application will be made for approval of permanent disposal method in compliance with the rules and regulations of the State of Utah.

## 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 production equipment.

Topsoil will be stripped to a depth of 6 - 8 inches and stockpiled on the south edges of the location. No topsoil stripping will be done when soils are moisture saturated to a depth of 3 inches, or frozen below the stripping depth.

The reserve pit will be fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished. Fencing will be four strands of barb wire or 48 inch woven wire with one strand of barb wire above the woven wire. All corners will be braced. The fence construction will be on cut or undisturbed surface. The backslope of the location will not exceed 1/2:1.

All construction activities will be confined to the minimum area necessary. The exterior boundaries of the construction area will be clearly flagged prior to any surface disturbing activities or vegetation removal.

Lone Mountain will clear all brush prior to construction. Brush will be stock piled on the south edge of the location and will be kept separate from the soil stock piles. The brush will be used for mulch after the disturbed area has been seeded.

#### 10. PLANS FOR RECLAMATION OF THE SURFACE

A biodegradable mulch may be required if soil erosion or vegetation establishment is determined to be a problem by the authorized officer on the access or location reclamation.

All disturbed areas will be seeded with the approved seed mixture. Application rates are for pure, live seed (PLS). Seed tags will be submitted to the area manager within 30 days of seeding.

Lone Mountain will prepare seedbed by contour cultivating 4 - 6 inches deep and drilling seed 1/2 to 1 inch deep following the contour. In areas that cannot be drilled, seed will be broadcast at 1.5 times the application rate and covered 1/2 to 1 inch deep with a harrow or drag bar.

Seeding will be completed after August 15/September 1 and prior to October 1 of the fall of 1991, if feasible, but not later than the fall of 1992.

If the well is a producer:

Lone Mountain will upgrade and maintain access roads as necessary to prevent soil erosion and accomodate year-round traffic. Lone Mountain will reshape areas unnecessary to operation, rip or disk on the contour, and seed all disturbed areas outside the work area according to the above seed mixture. The top soil will be saved for use during final reclamation unless the site can be recontoured to blend with the natural topography as required for final abandonment. Perennial vegetation will be established. Additional work will be required in case of seeding failures. All permanent facilities placed on the location will be painted dark green to blend with the natural environment.

If the well is abandoned/dryhole:

Lone Mountain will restore the access road and location to blend with the natural topography. During reclamation of the site, fill material will be pushed into cuts and up over the backslope. No depressions will be left that could trap water or form ponds. Topsoil will be distributed evenly over the location and seeding according to the above seed mixture. The access road and location will be ripped or disked prior to seeding.

The area is considered to be satisfactorily reclaimed when:

- A) Soil erosion resulting from the operation has been stabilized.
- B) A vegetative cover at least equal to that present prior to disturbance and a plant species composition at least as desirable as that present prior to disturbance has been established. Establishment of seeded species in the approved seed formula will be considered as acceptance.

Additional work will be required until these conditions are satisfied.

#### 11. SURFACE OWNERSHIP

All lands involving new construction belong to McIntyre Livestock Company. Arrangements have been made with McIntyre for use of the surface.

#### 12. OTHER INFORMATION

The vegetation includes sagebrush, greasewood, shadscale, prickly pear cactus, cheatgrass, Indian rice grass, and Colorado wild rye.

Lone Mountain will contact the Grand Resource Area Manager at least 24 hours prior to commencing construction or maintenance of the access road and well pad.

Lone Mountain will immediately bring to the attention of the Grand Resource Area Manager any and all antiquities or other objects of historic or prehistoric ruins, artifacts, or fossils discovered as a result of operations under this permit. Lone Mountain will immediately suspend all activities in the area of the object and will leave such discoveries intact until told to proceed by the Area Manager. Notice to proceed will be based upon evaluation of the cultural significance of the object. Evaluation will be by a qualified professional selected by the Area Manager from a federal agency insofar as practical. When not practical, Lone Mountain will follow the mitigation requirements set forth by the Area Manager concerning protection, preservation, or disposition of any sites or material discovered. In those situations where the Area Manager determines that data recovery and/or salvage excavations are necessary, Lone Mountain will bear the cost of such data recovery and/or salvage operations.

The Grand Resource Area Manager will be notified at least 24 hours prior to commencing reclamation work.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVES AND CERTIFICATION

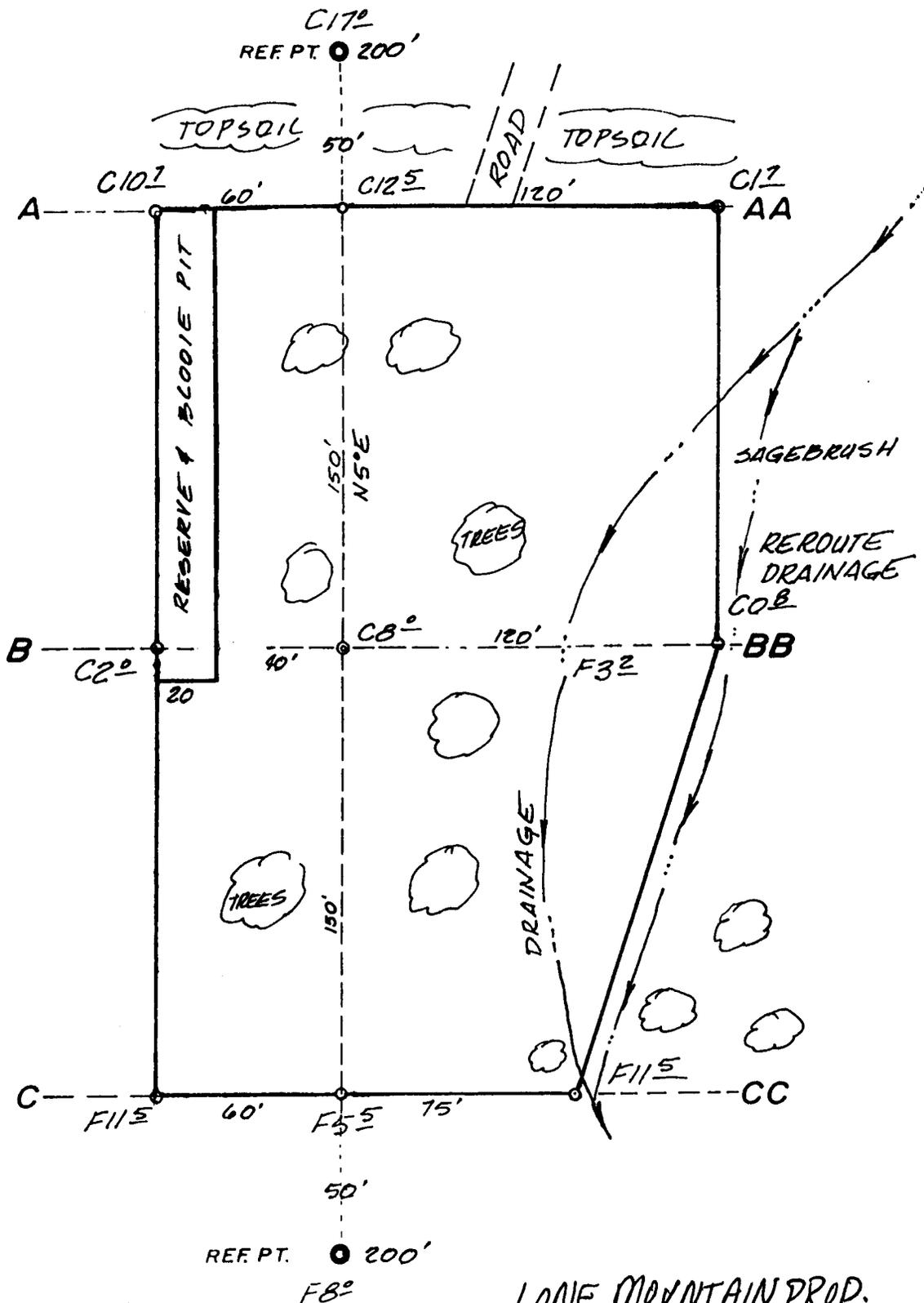
James G. Routson  
Petroleum Engineer  
P.O. Box 3394  
Billings, Montana 59103  
Office Phone: 406-245-5077  
Home Phone: 406-245-8797

Joe Dyk  
Petroleum Engineer  
777 Valley Court  
Grand Junction, Colorado 81505  
Office Phone: 303-243-5906  
Home Phone: 303-245-7907

I hereby certify that I, or persons under my 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 Lone Mountain and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

May 15, 1991  
Date

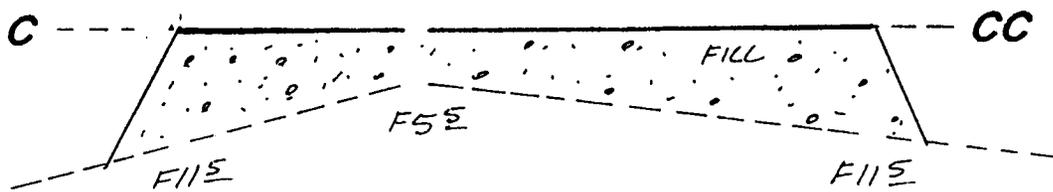
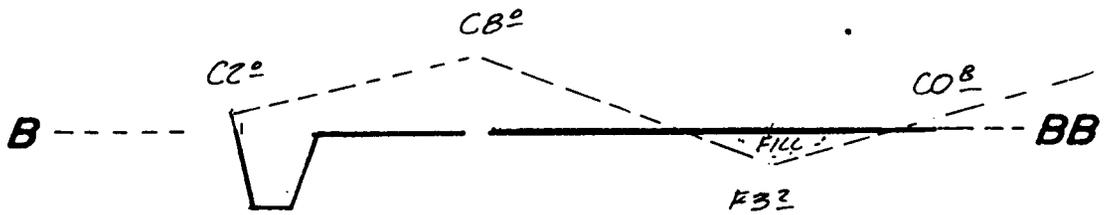
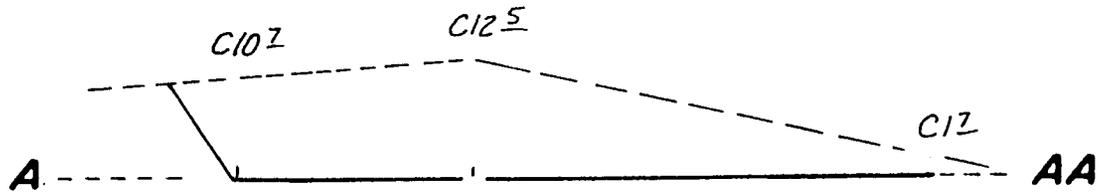
Joe Dyk  
Joe Dyk, P.E.



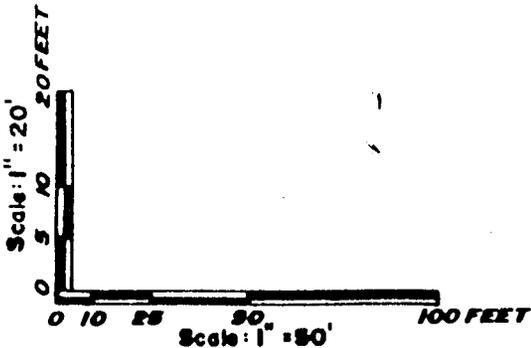
LONE MOUNTAIN PROD.  
FEDERAL #20-R

ESTIMATED DIRT QUANTITIES				
ITEM	CUT	FILL	TOPSOIL	EXCESS
PAD	6450	4700	1000	
PIT	750			
				1500

**PLAT NO. 3**  
**CROSS SECTIONS OF PIT & PAD**



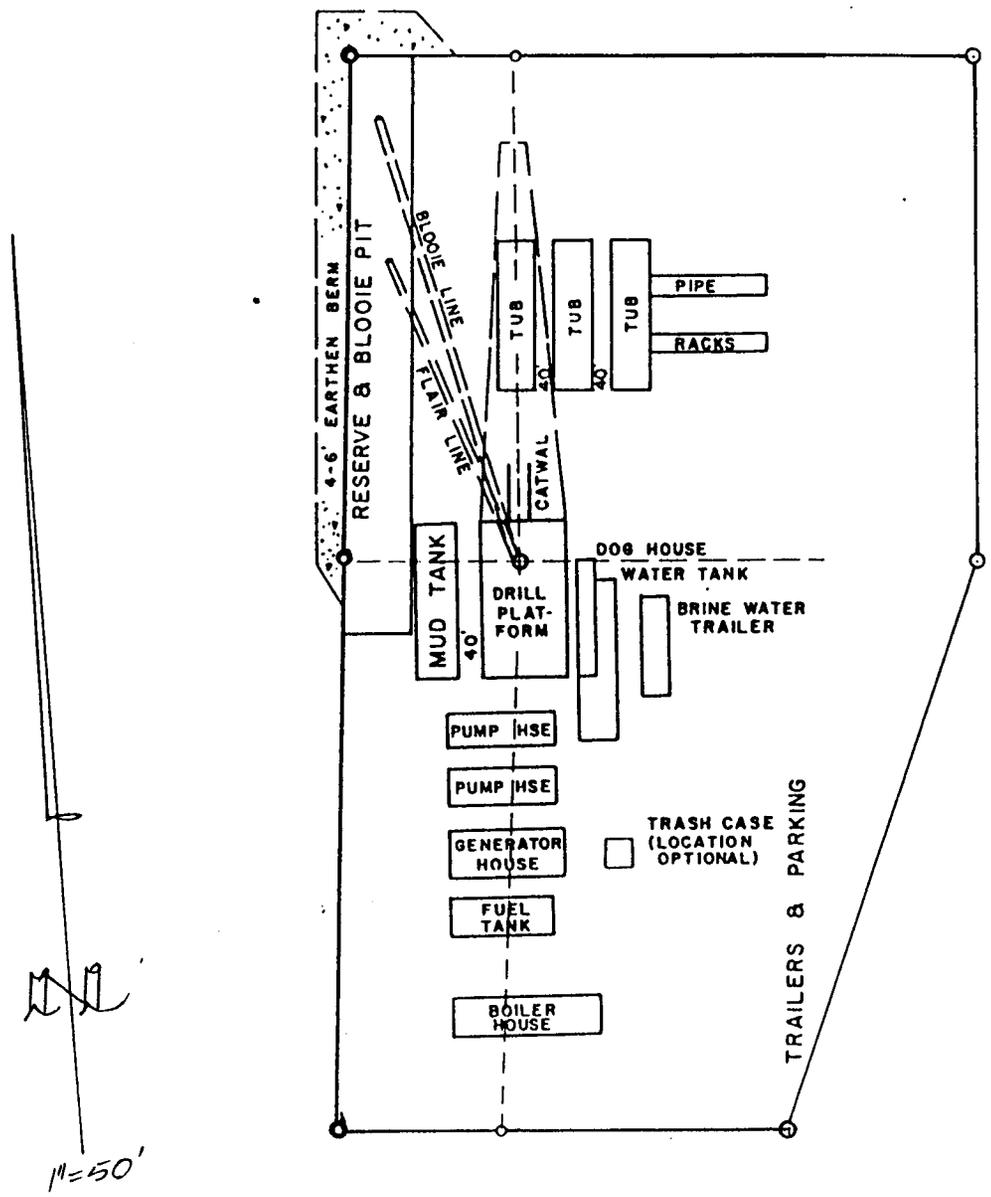
FEDERAL # 20-R



SURVEYED	10/90	
DRAWN	10/90	
CHECKED	10/90	

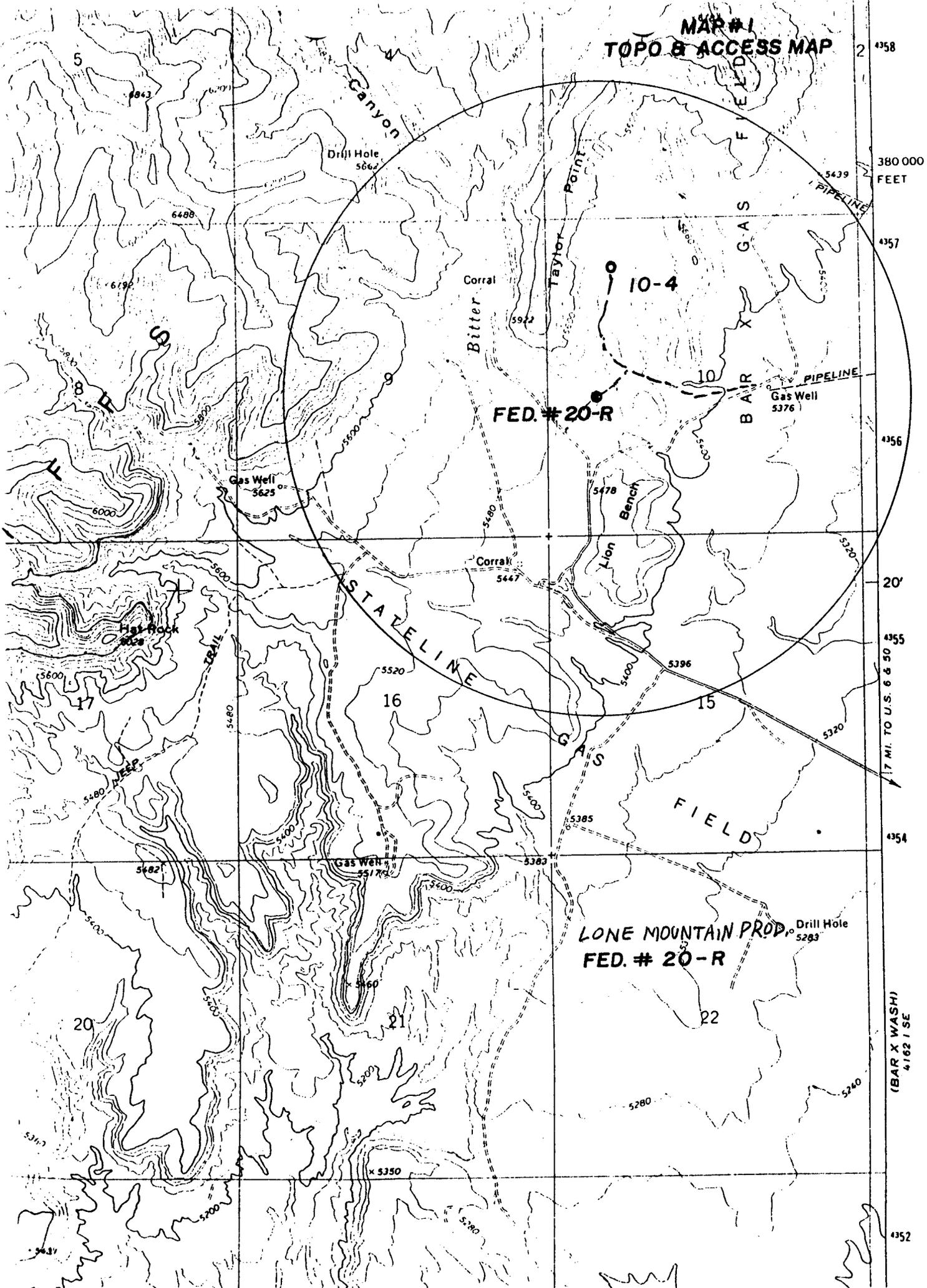
**ENERGY**  
**SURVEYS &**  
**ENGINEERING CORP.**

G LAYOUT



FEDERAL # 20-R

MAP #1  
TOPO & ACCESS MAP



380 000  
FEET

4357

4356

20'

4355

17 MI. TO U.S. 6 & 50

4354

(BAR X WASH)  
4162 / SE

4352

FED. # 20-R

10-4

LONE MOUNTAIN PROD.  
FED. # 20-R

STATELINE

B AIR X GAS FIELD  
PIPELINE

FIELD

Canyon

Taylor Point

Bitter Corral

Lion Bench

Flat Rock

Drill Hole

Gas Well

Gas Well

Gas Well

Drill Hole

Drill Hole

Corral

Corral

5

2

8

17

20

16

15

21

22

6843

6488

6190

6000

5600

5482

5363

6670

6488

6190

6000

5600

5482

5363

5862

5922

5478

5517

5360

5350

5439

5376

5396

5320

5293

5240

5280

5380

OPERATOR Iron Mountain Prod. Co. J-7010 DATE 5-03-91  
 WELL NAME Federal 00-R  
 SEC NW 10 T 17S R 05E COUNTY Grand

43-019-31300  
 API NUMBER

Federal (1)  
 TYPE OF LEASE

CHECK OFF:

- |                                           |                                                |                                                         |
|-------------------------------------------|------------------------------------------------|---------------------------------------------------------|
| <input checked="" type="checkbox"/> PLAT. | <input checked="" type="checkbox"/> BOND       | <input checked="" type="checkbox"/> NEAREST WELL        |
| <input checked="" type="checkbox"/> LEASE | <input checked="" type="checkbox"/> FIELD SLOM | <input checked="" type="checkbox"/> POTASH OR OIL SHALE |

PROCESSING COMMENTS:

~~Complies with Cause 13-6 order. Two wells in Sec 10~~  
~~Water Permit~~ Drilling unit: Section 9: E $\frac{1}{2}$ ,  
 Section 10: W $\frac{1}{2}$ W $\frac{1}{4}$   
 Additional well authorization in #13-6 (second order)  
 - Three production wells in dry unit.  
 Operator to P&A, Fed #20, NE $\frac{1}{4}$  & SE $\frac{1}{4}$  Sec. 9. -

APPROVAL LETTER:

SPACING:  R615-2-3 N/A  R515-3-2  
 UNIT

Cause 13-6(2) 3-26-87  R615-3-3  
 CAUSE NO. & DATE

STIPULATIONS:

~~Water Permit needed~~  
 1. Well Govt. No. 20 NESE Section 9, T17S, R2SE Grand County must be plugged if Federal 16 20-R is a producer as per Cause order 13-6(2) dated 3-26-87 requiring well separation of 200'

Burton W. Hancock

402 Petroleum Building  
Billings, Montana 59101

May 24, 1991

RECEIVED

MAY 28 1991

DIVISION OF  
OIL GAS & MINING

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

Attention: Ron Firth

Re: Govt. No. 20  
Section 21: T17S-R25E  
Grand County, Utah

Dear Ron:

Enclosed is a sundry notice, in duplicate, to plug a non-productive well on a federal lease in Grand County, Utah.

We plan to plug this well at the same time the No. 20-R replacement well is drilling - probably in mid-July.

We plan to do the rehab work and seed in the fall. If you have any questions, please call.

Very truly yours,



James G. Routson  
Consulting Petroleum Engineer

JGR/jlw

Enclosures

cc: Burton W. Hancock

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE  
(Other instructions on 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		5. LEASE DESIGNATION AND SERIAL NO. <b>U-04955</b>
2. NAME OF OPERATOR <b>BURTON W. HANCOCK</b>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR <b>402 PETROLEUM BLDG., P O BOX 989, BILLINGS, MT 59103</b>		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface <b>1593' FSL, 112' FEL</b>		8. FARM OR LEASE NAME <b>Federal</b>
14. PERMIT NO. <b>43-019-30225</b>	15. ELEVATIONS (Show whether DF, RT, OR, etc.) <b>5483' GL, 5493' KB</b>	9. WELL NO. <b>20</b>
		10. FIELD AND POOL, OR WILDCAT <b>State Line</b>
		11. SEC., T., S., M., OR BLK. AND SURVEY OR AREA <b>NE1/4 SE1/4 Sec. 9: T17S-R25E</b>
		12. COUNTY OR PARISH <b>Grand</b>
		13. STATE <b>UT</b>

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 checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANE <input type="checkbox"/>	(Other) <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.)\*

The Govt. No. 20 well has 7", 17# surface casing set at 120' and cemented to surface. Production casing is 4-1/2", 9.5# casing set at 3800', cemented with 65 sacks (calculated top is at approximately 3100'). The well is completed open hole 3800' - 3814'. The surface formation is the Mancos and the Dakota Sand top at 3700'.

The well has no commercial potential and Burton W. Hancock hereby proposes to plug it as follows:

- 1) spot a 13-sack plug, 3814' - 3667'.
- 2) load the hole with 9.5 - 10 ppg chem-gel drilling mud.
- 3) spot a 10-sack plug, 1875' - 2000'.
- 4) spot a 14-sack plug, 170' - surface.
- 5) pump 17-1/2 sacks down the 4-1/2"/7" annulus and 50' into the 4-1/2"/6-1/4" annulus.
- 6) remove wellhead equipment, install regulation dry hole marker.
- 7) rehab location in the fall of 1991.

RECEIVED  
MAY 28 1991

DIVISION OF  
OIL GAS & MINING

18. I hereby certify that the foregoing is true and correct  
SIGNED James G. Routson TITLE Consulting Petroleum Engineer DATE May 24, 1991  
(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

June 3, 1991

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

Gentlemen:

Re: Federal 20-R Well, 2304 feet from the South line, 794 feet from the West line, NW SW, Section 10, Township 17 South, Range 25 East, Grand County, Utah

Approval to drill the referenced well is hereby granted in accordance with the Order in Cause No. 13-6(2) dated March 26, 1987 subject to the following stipulation:

1. Upon successful completion of this well, the Burton W. Hancock Federal No. 20 Well, NESE, Section 9, Township 17 South, Range 25 East Grand County must be plugged to comply with the order in Cause 13-6(2) dated March 26, 1987 requiring a distance of 2000' between producing wells within the drilling unit.

In addition, the following actions are necessary to fully comply with this approval:

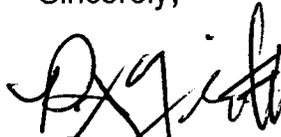
1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of Entity Action Form 6, within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification in the event it is necessary to plug and abandon the well. Notify R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, or J. L. Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Utah Admin. R.615-3-20, Gas Flaring or Venting.

Page 2  
Lone Mountain Production Company  
Federal 20-R  
June 3, 1991

6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of Drinking Water/Sanitation, telephone (801) 538-6159.
7. 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 43-019-31320.

Sincerely,



R. J. Firth  
Associate Director, Oil & Gas

tas  
Enclosures  
cc: Bureau of Land Management  
J. L. Thompson  
we14/1-12

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

5. LEASE DESIGNATION AND SERIAL NO.  
U-04955

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
N/A

7. UNIT AGREEMENT NAME  
None

8. FARM OR LEASE NAME  
Federal

9. WELL NO.  
No. 20-R

10. FIELD AND POOL, OR WILDCAT  
Bar-X

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
NWSW Sec 10-T17S-R25E

12. COUNTY OR PARISH  
Grand

13. STATE  
UT

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  
P.O. Box 3394, Billings, MT 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At <sup>surface</sup> 754 ft FWL, 2304 ft FSL  
At proposed prod. zone Same 43-019-31320

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
25 miles Northwest of Mack, Colorado

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any.)  
526 ft (Lse.Line)  
52 ft (No.20)

16. NO. OF ACRES IN LEASE  
NA

17. NO. OF ACRES ASSIGNED TO THIS WELL  
NA

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETION OR APPLIED FOR, ON THIS LEASE, FT.  
240 ft (No.10-4)

19. PROPOSED DEPTH  
4162 ft

20. ROTARY OR CABLE TOOL  
Rotary

21. ELEVATIONS (Show whether DF, BT, GR, etc.)  
5462 ft GL, 5472 ft KB

22. APPROX. DATE WORK BEGAN START\*  
July 15, 1991  
1991

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7" new	17.0#, H40	300 feet	140 sx 7/8" to surface
6-1/4"	4-1/2" new	10.5#, J55	4162 feet	175 sx 10-0 RFC

**RECEIVED**

JUL 10 1991

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 [Signature] TITLE Petroleum Engineer DATE May 15, 1991

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVED BY /S/ WILLIAM C. STRINGER TITLE Assistant District Manager for Minerals DATE 8 1991

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

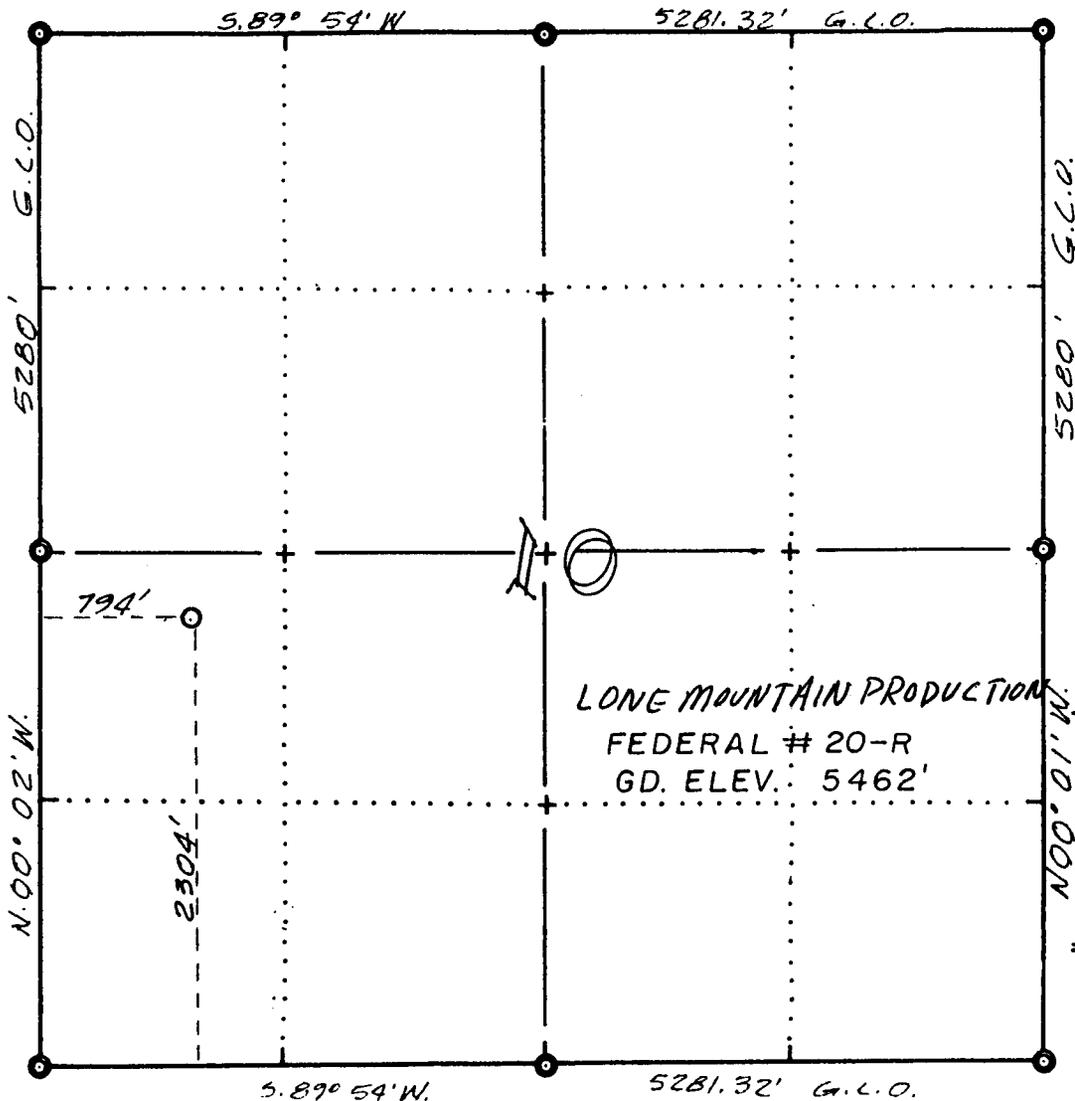
CONDITIONS OF APPROVAL ATTACHED

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

SEC. 10, T. 17S., R. 26E. OF THE S.L.M.

LOCATION PLAT



LONE MOUNTAIN PRODUCTION  
FEDERAL # 20-R  
GD. ELEV. 5462'



- LEGEND -

- ⊙ STANDARD LOCATION OF GLO SECTION CORNERS.
- GLO CORNERS FOUND.
- ⊙ WELL LOCATION STAKED.

REFERENCE DOCUMENTS

- 1925 GLO PLAT
- BRYSON CANYON QUADRANGLE, U.S.G.S.

THIS WELL LOCATION PLAT WAS PREPARED FOR: LONE MOUNTAIN PRODUCTION  
 TO LOCATE THE FEDERAL # 20-R, 2304' F.S.L. & 794' F.W.L. IN THE NW 1/4 SW 1/4, OF SECTION 10, T. 17S, R. 25E  
 OF THE S.L.M. GRAND COUNTY, COLORADO

RECEIVED

JUL 10 1991

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*  
 UTAH L.S. 4189

DIVISION OF OIL, GAS & MINING

SURVEYED	10/90
DRAWN	10/90
CHECKED	10/90

ENERGY  
SURVEYS  
CORPORATION

361 PIKES PEAK DRIVE  
GRAND JUNCTION, CO. 81503  
(303) 245-7221

SCALE: 1" = 1000'
JOB NO.
SHEET OF.

Lone Mountain Production Company  
Well No. Federal 20-R  
NWSW Sec. 10, T. 17 S., R. 25 E.  
Grand County, Utah  
Lease U-04955

#### 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.

Be advised that Lone Mountain Production Company is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by Letter of Credit (Principal - Lone Mountain Production Company) \$25,000 as provided for in 43 CFR 3104.1 (c)(5).

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

#### A. DRILLING PROGRAM

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders No. 1, 2, 3, 4 and 5 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.

All fresh water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth, cased, and cemented. All oil and gas shows will be tested to determine commercial potential.

BOP systems will be consistent with API RP 53. 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. Preventers will be pressure tested before drilling casing cement plugs.

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 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, 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 gas) will be submitted when requested by the Assistant District Manager.

To determine cement top and bond quality, cement bond log (CBL) or cement evaluation tool (CET) shall be run after the 4-1/2" production casing is run and cemented in place. Sufficient quantities of mud materials shall be on location to maintain the capacity of the hole and circulating tanks and pits.

LS 6/28/91  
files



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

1362  
U-04955  
(U-068)

Moab District  
Grand Resource Area  
885 So. Sand Flats Road  
Moab, Utah 34532

**JUN 25 1991**

## MEMORANDUM

To: District Manager, Moab (U-065)  
From: Area Manager, Grand  
Subject: Burton Hancock APD 20-R

This APD is on split estates. The Resource Area has complied with its review of appropriate Federal Mandates (see enclosure). We have no objections to the signing of the APD.

cc: 065, fluids

B. SURFACE PROGRAM

If a tank battery is constructed on this lease, it will be surrounded by a dike to sufficient capacity to contain 1-1/2 times the storage capacity of the largest tank in the battery.

All loading lines and valves will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43 CFR 3162.7-4 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 Assistant District Manager.

All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

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 well head to the meter and downstream for the remainder of 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-improving 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 and Onshore Order No. 4 for liquid hydrocarbons and the AGA standard and Onshore Order No. 5, 43 CFR 3160 for natural gas measurement.

Three sides of the reserve pit will be fenced with barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.

Produced water will be confined to a unlined pit for a period not to exceed ninety (90) days after initial production. During the ninety (90) day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the Assistant District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

There will be no deviation from the proposed drilling and/or workover program without prior approval from the Assistant 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 3162.6.

"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 3162.3-2.

The dirt contractor will be provided with an approved copy of the surface use plan of operations.

This permit will be valid for a period of one (1) year from, the date of approval. After permit termination, a new application will be filed for approval for any future operations.

No hexavalent chromate additives will be used in the mud system in order to protect usable quality water aquifers.

Daily drilling and completion progress reports shall be submitted to the District Office on a weekly basis.

C. Anticipated Starting Dates and Notifications of Operations:

Required verbal notifications are summarized in Table 1, attached. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within twenty-four (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.

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

Should the well be successfully completed for production, the Assistant District Manager, Minerals Division will be notified when the well is placed in producing status. Such notification will be sent by telegram or other written communication, not later than five (5) business days following the date on which the well is placed on production.

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.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the Assistant District Manager, Minerals Division within thirty (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 Manager or his representative, or the appropriate surface managing agency.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6.

The following minimum information will 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 1/4 1/4 section, township and range". "Lease number".

NOTIFICATIONS

Notify Elmer Duncan of the Grand Resource Area, at  
(801) 259-8193 for the following:

- 2 days prior to commencement of dirt work, construction or reclamation;
- 1 day prior to spudding;
- 50 feet prior to reaching casing depths;
- 3 hours prior to testing BOP's.

If the person at the above number cannot be reached, then notify Fred Oneyear in the Moab District Office at (801) 259-6111 or at home (801) 259-5937 (If unsuccessful, then notify one of the following people listed below).

Notify the Moab District Office, Branch of Fluid Minerals at (801) 259-6111 for the following:

No well abandonment operations will be commenced without the prior approval of the Assistant District Manager, Minerals Division. In the case of newly drilled dry holes, and in emergency situations, verbal approval can be obtained by calling the following individuals, in the order listed.

Dale Manchester, Petroleum Engineer	Office Phone: (801) 259-6111
	Home Phone: (801) 259-6239
Eric Jones, Petroleum Engineer	Office Phone: (801) 259-6111
	Home Phone: (801) 259-2214

If unable to reach the above individuals including weekends, holidays, or after hours please call the following:

Lynn Jackson, Chief, Branch of Fluid Minerals	Office Phone: (801) 259-6111
	Home Phone: (801) 259-7990

24 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS

DIVISION OF OIL, GAS AND MINING

API NO. 43-019-31320

SPUDDING INFORMATION

NAME OF COMPANY: LONE MOUNTAIN PRODUCTION COMPANY

WELL NAME: FEDERAL #20-R

SECTION NWSW 10 TOWNSHIP 17S RANGE 25E COUNTY GRAND

DRILLING CONTRACTOR VECO

RIG # 2

SPUDDED: DATE 7-27-91

TIME 3:30

HOW ROTARY

DRILLING WILL COMMENCE \_\_\_\_\_

REPORTED BY JOE DIKE

TELEPHONE # 303-244-6238

DATE 7-30-91 SIGNED TAS/CW

**LONE MOUNTAIN PRODUCTION COMPANY**

P.O. BOX 3394  
408 PETROLEUM BUILDING  
BILLINGS, MONTANA 59103-3394  
(406) 245-5077  
FAX 248-6321

July 29, 1991

Division of Oil, Gas & Mining  
State of Utah  
355 W. North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180

Gentlemen:

Enclosed please find, in duplicate, the Sundry Notice Status Report(s) for the following well(s).

**Lease #04955  
Federal No. 20-R  
NWSW Sec. 10: T17S-R25E  
Grand County, Utah**

Very truly yours,



James G. Routson

JGR/jlw  
Enclosures

**RECEIVED**

**JUL 31 1991**

**DIVISION OF  
OIL GAS & MINING**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE  
(Other instructions on reverse side)

Budget Bureau No. 1001-011  
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  GAS WELL  OTHER

2. NAME OF OPERATOR  
**Lone Mountain Production Company**

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface  
**794' FWL, 2304' FSL, Sec. 10**

14. PERMIT NO.  
**43-019-31320**

15. ELEVATIONS (Show whether DF, RT, OR, etc.)  
**5462' GL, 5472' KB**

5. LEASE DESIGNATION AND SERIAL NO.  
**U-04955**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
**Federal**

9. WELL NO.  
**No. 20-R**

10. FIELD AND POOL, OR WILDCAT  
**Bar-X**

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
**NWSW Sec. 10: T17S-R25E**

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 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) <input type="checkbox"/>	<b>Status Report</b> <input checked="" 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.)\*

Spudded well at 3:30 p.m., 7-27-91. Reported to BLM and Utah Division of Oil, Gas & Mining by Joe Dyk. Drilled 9-7/8" hole to 317', ran 7", 23#, J-55 casing to 307'. Cemented with 160 sx, circulated 70 sx to pit.

WOC, nipples up, pressure tested to 1500 psig. Drilled out at midnight, 7-28-91.

Present operation: air drilling at 775'.

**RECEIVED**  
JUL 31 1991  
DIVISION OF OIL GAS & MINING

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

SIGNED James G. Routson TITLE Petroleum Engineer DATE 7-29-91  
 (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  
FAX 248-6321

August 1, 1991

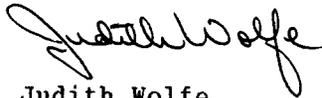
Division of Oil, Gas & Mining  
State of Utah  
355 W. North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180

Gentlemen:

Enclosed please find, in duplicate, the Entity Action Form for the following well.

**Lease #U-04955  
Federal No. 20-R  
NWSW Sec. 10: T17S-R25E  
Grand County, Utah**

Very truly yours,



Judith Wolfe

/jlw  
Enclosures

**RECEIVED**

**AUG 05 1991**

**DIVISION OF  
OIL GAS & MINING**

ENTITY ACTION FORM - FORM 6

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

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11257	43-019-31320	Federal No. 2-R 20-R	NWSW	10	17S	25E	Grand	7-27-91	7-27-91

WELL 1 COMMENTS: Federal-lease Prop Zone-DK-mk  
Field- Bar X (Entity added 8-8-91)  
Unit- N/A

WELL 2 COMMENTS:

WELL 3 COMMENTS:

WELL 4 COMMENTS:

WELL 5 COMMENTS:

- ACTION CODES (See instructions on back of form)
- A - Establish new entity for new well (single well only)
  - B - Add new well to existing entity (group or unit well)
  - C - Re-assign well from one existing entity to another existing entity
  - D - Re-assign well from one existing entity to a new entity
  - E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

**RECEIVED**

AUG 05 1991

DIVISION OF  
OIL GAS & MINING

Signature Judith Wolfe  
Secretary Judith Wolfe 8/1/91  
Title \_\_\_\_\_ Date  
Phone No. (406) 245-5077

**LONE MOUNTAIN PRODUCTION COMPANY**

P.O. BOX 3394  
408 PETROLEUM BUILDING  
BILLINGS, MONTANA 59103-3394  
(406) 245-5077  
FAX 248-6321

August 5, 1991

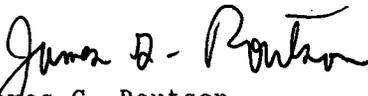
Division of Oil, Gas & Mining  
State of Utah  
355 W. North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180

Gentlemen:

Enclosed please find, in duplicate, the Sundry Notice Status Report and Report of Water Encountered for the following well.

Lease #U-04955  
Federal No. 20-R  
NWSW Sec. 10: T17S-R25E  
Grand County, Utah

Very truly yours,

  
James G. Routson

JGR/jlw  
Enclosures

**RECEIVED**

AUG 07 1991

DIVISION OF  
OIL GAS & MINING

REPORT OF WATER ENCOUNTERED DURING DRILLING - FORM 7 (1/89)

1. Well name and number: Federal NO. 20-R  
 API number: 43-019-31320
2. Well location: QQ NWSW section 10 township 17S range 25E county Grand
3. Well operator: Lone Mountain Production Company  
 Address: 408 Petroleum Bldg, P.O. Box 3394 phone: 406-245-5077  
Billings, MT 59103
4. Drilling contractor: Veco Drilling, Inc.  
 Address: P.O. Box 1705 phone: 303-242-6912  
Grand Junction, CO 81502

5. Water encountered (continue on reverse side if necessary)

Depth		Volume (flow rate or head)	Quality (fresh or salty)
from	to		
NONE ENCOUNTERED			

6. Formation tops: Dakota Silt 3586 (+1886)  
Dakota Sand 3662 (+1810)  
Morrison 3830 (+1642)

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I certify that this report is true and complete to the best of my knowledge.

Name James G. Routson Signature James G. Routson  
 Title Petroleum Engineer Date 8-5-91

Comments: Air drilled, dusted entire hole.



AUG 07 1991

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

Expires August 31, 1985  
5. LEASE DESIGNATION AND SERIAL NO.

U-04955

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

No. 20-R

10. FIELD AND POOL, OR WILDCAT

Bar-X

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

NWSW Sec. 10: T17S-R25E

12. COUNTY OR PARISH  
Grand

13. STATE  
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  
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.\* See also space 17 below.)  
At surface  
794' FWL, 2304' FSL, Sec. 10

14. PERMIT NO.  
43-019-31320

15. ELEVATIONS (Show whether DF, RT, OR, etc.)  
5462' GL, 5472' 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   
FRACTURE TREAT   
SHOOT OR ACIDIZE   
REPAIR WELL   
(Other)

PULL OR ALTER CASING   
MULTIPLE COMPLETE   
ABANDON\*   
CHANGE PLANE

WATER SHUT-OFF   
FRACTURE TREATMENT   
SHOOTING OR ACIDIZING   
(Other)

REPAIRING WELL   
ALTERING CASING   
ABANDONMENT\*

Status Report

(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.)\*

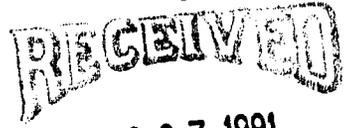
Air drilled 6 1/2" hole to TD 4162'. Reached TD at 4:30 a.m., 8-1-91.

Mudded up, Ran GR-FDC-CNL and DIL logs.

Log tops: Dakota Silt 3586' (+1886)  
Dakota Sand 3662' (+1810)  
Morrison 3830' (+1642)

Ran 4 1/2", 10.5#, J-55 casing to 3981'. Float at 3938'. Cemented with 175 sx 10-0 thixotropic. Plug down at 4:30 a.m., 8-2-91. Rig released 7:00 a.m., 8-2-91.

Present operation: waiting on completion rig.



AUG 07 1991

DIVISION OF OIL GAS & MINING

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

SIGNED *James D. Routson*  
James G. Routson  
(This space for Federal or State office use)

TITLE Petroleum Engineer

DATE 8-2-91

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

\*See Instructions on Reverse Side

**LONE MOUNTAIN PRODUCTION COMPANY**

P.O. BOX 3394  
408 PETROLEUM BUILDING  
BILLINGS, MONTANA 59103-3394  
(406) 245-5077  
FAX 248-6321

**RECEIVED**

**OCT 07 1991**

**DIVISION OF  
OIL GAS & MINING**

October 3, 1991

Division of Oil, Gas & Mining  
State of Utah  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utahh 84180

Gentlemen:

Enclosed please find, in duplicate, the Well Completion Report for the following well, located in Grand County, Utah:

-- Federal Lease U-04955  
Federal No. 20-R  
NW SW Section 10: T17S-R25E  
Grand County, Utah

If you are in need of further information, please advise.

Very truly yours,

Lone Mountain Production Company



James G. Routson

JGR:lw

Enclosures

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

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

**RECEIVED**

2. NAME OF OPERATOR  
Lone Mountain Production Company

OCT 07 1991

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

4. LOCATION OF WELL (Report location clearly and in accordance with any well log)  
At surface 794' FWL, 2304' FSL, Sec. 10  
At top prod. interval reported below  
At total depth same

14. PERMIT NO. 43-019-31320 DATE ISSUED 6-3-91

5. LEASE DESIGNATION AND SERIAL NO.

U-04955

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Federal

9. WELL NO.  
20-R

10. FIELD AND POOL, OR WILDCAT  
Bar-X

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
NWSW Sec. 10: T17S-R25E

12. COUNTY OR PARISH Grand 13. STATE Utah

15. DATE SPUNDED 7-27-91 16. DATE T.D. REACHED 8-1-91 17. DATE COMPL. (Ready to prod.) 9-27-91 18. ELEVATIONS (DF, RKB, RT, OR, ETC.)\* 5462' GL, 5472' KB 19. ELEV. CASINGHEAD 5463'

20. TOTAL DEPTH, MD & TVD 4162' 21. PLUG, BACK T.D., MD & TVD 3934' 22. IF MULTIPLE COMPL., HOW MANY\* -- 23. INTERVALS DRILLED BY -- ROTARY TOOLS 0-TD CABLE TOOLS None

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
Dakota 3774'-3824'

25. WAS DIRECTIONAL SURVEY MADE  
NO

26. TYPE ELECTRIC AND OTHER LOGS RUN  
GR-FDC-CNL, SP-DIL, GR-CBL-VDL 9-9-91

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
7"	23# J-55	307	9-7/8"	160 sx (cement to surface)	None
4 1/2"	10.5# J-55	3981	6 1/2"	175 sx (top @ 2380')	None

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
None					2-3/8"	3763'	None

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

3774'-3824', 1 SPF, 51 holes total.  
EHD = .36"

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3774'-3824'	acidized w/500 gallons 15% MSR, Fractured w/15,000# 100 mesh sand; 120,000# 20-40 sand; 47,670 gallons 2% KCl water.

33.\* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
9-18-91	Flowing	shut-in, WOPL					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9-27-91	24	1/4"	→		616		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
418 psi	480 psi	→		616			

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

35. LIST OF ATTACHMENTS  
None

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 9/30/91

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

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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):

GEOLOGIC MARKERS

38.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Dakota	3774'	3824'	Gas	Dakota silt Dakota sand Morrison	3586' 3662' 3830'	+1886 +1810 +1642

**RECEIVED**

OCT 07 1991

DIVISION OF  
OIL GAS & MINING

**LONE MOUNTAIN PRODUCTION COMPANY**

P.O. BOX 3394  
408 PETROLEUM BUILDING  
BILLINGS, MONTANA 59103-3394  
(406) 245-5077  
FAX 248-6321

October 9, 1991

**DIVISION OF OIL, GAS & MINING**

State of Utah  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180

Gentlemen:

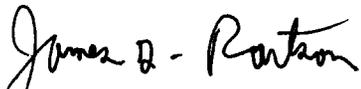
Enclosed please find two (2) copies of the **Sundry Notice - Report of First Production** for the following well, located in Grand County, Utah:

Federal Lease U-04955  
Federal No. 20-R  
NW SW Sec. 10: T17S-R25E

If you are in need of further information, please advise.

Yours very truly,

**LONE MOUNTAIN PRODUCTION COMPANY**

  
James G. Routson

JGR:lw

Enclosures

**RECEIVED**

OCT 11 1991

DIVISION OF  
OIL GAS & MINING

(November 1983)  
(Formerly 9-331)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBJECT OF TRIPLICATE  
(Other instructions on re-  
verse side)

Expires August 31, 1985  
5. LEASE DESIGNATION AND SERIAL NO.

U-04955  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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.)

OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Lone Mountain Production Company

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface

794' FWL, 2304' FSL, Sec. 10

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

20-R

10. FIELD AND POOL, OR WILDCAT

Bar-X

11. SEC., T., B., M., OR PLE. AND  
SUBVT OR AREA

NWSN Sec. 10; T17S-R25E

12. COUNTY OR PARISH 13. STATE

Grand Utah

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, OR, etc.)

43-019-31320

5462' GL, 5472' 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

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 PLANS

(Other)

REPORT of 1st PRODUCTION

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Identify scale 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 some perti-  
nent to this work.)

FIRST DELIVERED INTO ROCKY MOUNTAIN NATURAL GAS PIPELINE AT 12:30 PM, 10/8/91.

REPORTED TO BUREAU OF LAND MANAGEMENT IN MOAB, UTAH BY JOE DYK ON OCTOBER 9, 1991.

RECEIVED

OCT 11 1991

DIVISION OF  
OIL GAS & MINING

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

SIGNED James G. Routsen

TITLE Petroleum Engineer

DATE October 9, 1991

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

\*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the  
United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-04955
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> FEDERAL 20-R
<b>2. NAME OF OPERATOR:</b> LONE MTN PRODUCTION CO	<b>9. API NUMBER:</b> 43019313200000
<b>3. ADDRESS OF OPERATOR:</b> PO Box 80965 , Billings , MT, 59108	<b>9. FIELD and POOL or WILDCAT:</b> BAR X
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2304 FSL 0794 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 10 Township: 17.0S Range: 25.0E Meridian: S	<b>COUNTY:</b> GRAND  <b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>11/1/2015</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input checked="" type="checkbox"/> <b>PLUG AND ABANDON</b>  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Plugging Procedure for Federal #20-R Move in and rig up ND wellhead NU stripper head Strip rods and tubing from well RIH CICR and set at 3724' Fill hole with 9 ppg mud Test casing Mix & pump 25 sx cement (15 sx below and 10sx above CICR) Lay down 2 3/8" tubing Perforate 4 1/2" casing at 357' Mix and pump 64 sx cement down 4 1/2" casing and up 4 1/2" X 7" annulus or until cement is to surface Cut wellhead off and weld on dry hole marker 3' below surface

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining**

**Date:** October 13, 2015  
**By:** Derek Duff

<b>NAME (PLEASE PRINT)</b> Nettie Reed	<b>PHONE NUMBER</b> 970 858-7546	<b>TITLE</b> Vice President
<b>SIGNATURE</b> N/A	<b>DATE</b> 10/7/2015	