PERTINENT INFORMATION

For

AVON ENERGY CORPORATION No.102 Turner "B" NENW Sec.20-17S-31E Eddy County, N.M.

LOCATED: ·

5.5 air miles ENE of Loco Hills, New Mexico

FEDERAL LEASE NUMBER:

LC 029395-B

LEASE ISSUED:

June 13, 1934 - HBP

ACRES IN LEASE:

1,786.15 Ac.

RECORD LESSEE:

Atlantic Richfield Company

BOND COVERAGE:

Statewide Bond of

Avon Energy Corporation

AUTHORITY TO OPERATE:

Assignment of Operating Rights

SURFACE OWNERSHIP:

Federal

GRAZING PERMITTEE:

Charles R. Martin, Inc.

P.O. Box 706

Artesia, New Mexico 88210

Phone 505-746-2796

POOL RULES:

General Oil Rules - 40 Ac. Spacing

EXHIBITS:

A. Lease and Contour Map

B. Road and Well Map

C. Rig Layout
D. BOP Diagram

SUPPLEMENTAL DRILLING DATA

AVON ENERGY CORPORATION No.102 Turner "B" NENW Sec.20-17S-31E Eddy County, N.M.

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The following items supplement Form 3160-3 in accordance with instructions contained in Onshore Oil and Gas Order No.1:

- 1. SURFACE FORMATION: Recent
- 2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler	625 '	Queen	2600 '
Salt	700 '	Grayburg	2950 '
Yates	1600'	San Andres	3400'
Seven Rivers	1800'		

3. ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATION:

Water - Possible groundwater from 0' to 300'

Oil - 2000' to TD

Gas - None anticipated

- 4. PROPOSED CASING PROGRAM:
 - 8-5/8" Casing Set 600' of 24#, J-55, Surface Casing Pressure tested to 1000 psi.
 - 5-1/2" Casing Set 3700' of 15.5#, K-55, Production Casing Pressure tested to 1500 psi.
- 5. PRESSURE CONTROL EQUIPMENT: Install a 2M, Series 600, Type
 "E" Shaffer Double Hydraulic BOP on the 8-5/8" surface
 casing prior to drilling into the Queen. Due to depleted
 nature of the reservoir, it is requested that a waiver be
 granted to test pressure control equipment to 1000 psi.
 using rig pump, instead of the normal 2000 psi. test.
 Exhibit D is a diagramatic sketch of the BOP equipment.

- 6. CIRCULATING MEDIUM: Drill with fresh water from surface to setting depth of surface casing. Drill remainder of hole with brine water, using additives to control water loss, viscosity and mud weight.
 - 7. AUXILIARY EQUIPMENT: Equipment will include pit level monitor, a full-opening safety valve and a gas detector.
 - 8. TESTING, LOGGING AND CORING PROGRAM:

Samples: Samples will be caught at 10' intervals from

below the surface casing to total depth.

DST and Cores: None anticipated

Logging: Density-Neutron log

Gamma Ray-Neutron log

Mud Log

9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE:

No abnormal pressures or temperatures anticipated.

Precautions will be taken to monitor possible traces hydrogen sulfide gas in the Grayburg.

10. ANTICIPATED STARTING DATE: Drilling will commence upon Federal and State approval. Drilling and completion will require about 30 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

AVON ENERGY CORPORATION No.102 Turner "B" NENW Sec.20-17S-31E Eddy County, N.M.

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This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The well is approximately 5.5 miles east northeast of Loco Hills, New Mexico.
- B. <u>Directions</u>: Go east from Loco Hills, N.M. on U.S. 82 a distance of 4.9 miles. Go northeast on lease road for 0.5 mile. Go east 400' on new access road to drillsite.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new road will be about 400' long and about 14' wide.
- B. Surfacing Material: The new road and well pad will be surfaced with 6" of caliche.
- C. Maximum Grade: Less than 2%
- D. Turnouts: No traffic turnouts are necessary.
- E. <u>Drainage Design</u>: The road will be constructed with a 6" crown and appropriate water turnouts to provide proper drainage.
- F. Culverts: None necessary

- G. <u>Cuts and Fills</u>: Construction of the drill pad will require leveling of 3' sand dunes and diverting one small drainage around the pad.
- H. Gates, Cattle Guards: None necessary

3. LOCATION OF EXISTING WELLS:

A. See Exhibit B

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Temporary production and storage facilities will be located on the well pad.
- B. An application for permanent flow lines will be filed at a later date, if the well is commercial.
- C. An abandoned power line will be removed by the power company.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. Water for drilling and completion will be obtained from a commercial source and trucked over existing roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the road and pad will be purchased from a Federal pit located in the SESW Sec.20-17S-31E. Topsoil will be stock-piled at the edge of the location for rehabilitation.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during test will be disposed of in the drilling pits. Oil produced during test will be stored in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

- E. Trash, waste paper, garbage, and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "C".
 - F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

A. None required

9. WELL SITE LAYOUT:

- A. The wellsite, surrounded by a 400' X 400' area has been surveyed and flagged.
- B. Dimensions and relative location of the drill pad and pit are shown on Exhibit C.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the well is non-productive the disturbed area will be rehabilitated to surface owner requirements and will be accomplished as expeditously as possible.

11. OTHER INFORMATION:

- A. <u>Topography</u>: The wellsite and access road are located on a sandy flood plain. The project area drains to the southwest toward Cedar Lake Draw.
- B. <u>Soil</u>: The surface soil is fine sand with caliche and chert inclusions.

- C. Flora and Fauna: Vegetation consists of mesquite, sage-brush, yucca, and various weeds and grasses. Ground cover is about 15%. Wildlife in the area is that typical of semi-arid desert land, such as coyotes, rodents, reptiles and birds.
- D. Ponds or Streams: None
- E. Residences and Other Structures: None
- F. Archaeological, Historical and Other Cultural Sites:
 A review by Archaeological Services Consultants determined that no cultural resources will be disturbed by this operation.
- G. Land Use: The surface is used for cattle grazing.
- H. Surface Ownership: The drillsite and access road are on-lease Public surface. The grazing lessee is Charles R. Martin, Inc., P.O. Box 706, Artesia, N.M. 88210.

12. OPERATOR'S REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface Use Plan:

Mr. Robert Setzler
P.O. Box 38
Loco Hills, New Mexico 88255
Phone 505-677-3223

13. CERTIFICATION:

I hereby certify that I, or person under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; that the work associated with the operations proposed herein will be performed by AVON ENERGY CORPORATION and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

February 12, 1991

Date:

JERRY W. LONG, Permit Agent for: AVON ENERGY CORPORATION AVON ENERGY CORPORATION No.102 Turner "B" NENW Sec.20-17S-31E Eddy County, N.M.

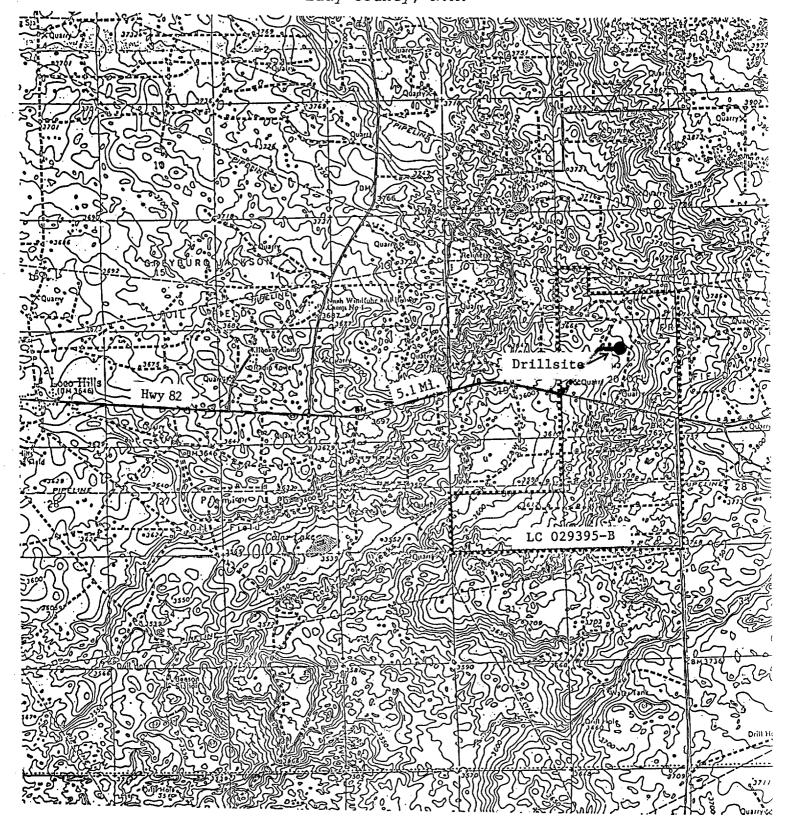
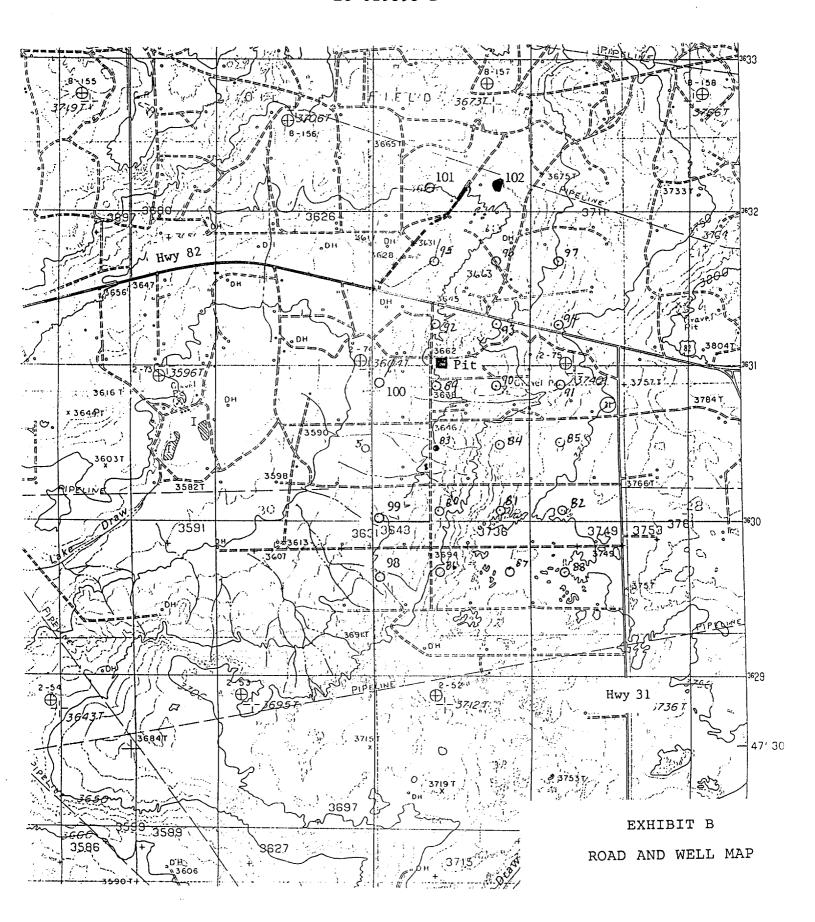


EXHIBIT A

LEASE AND CONTOUR MAP

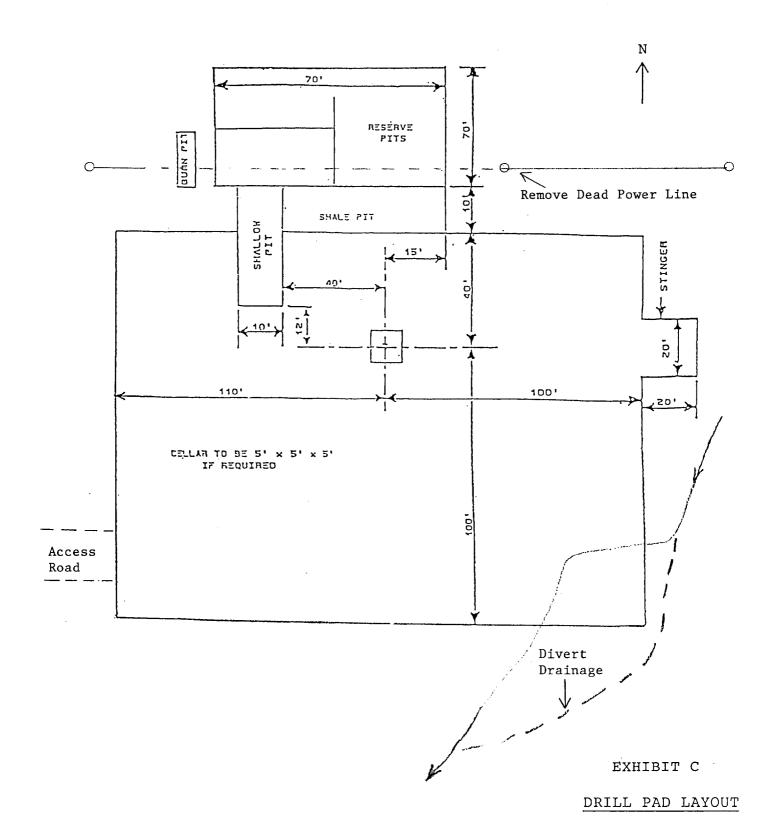
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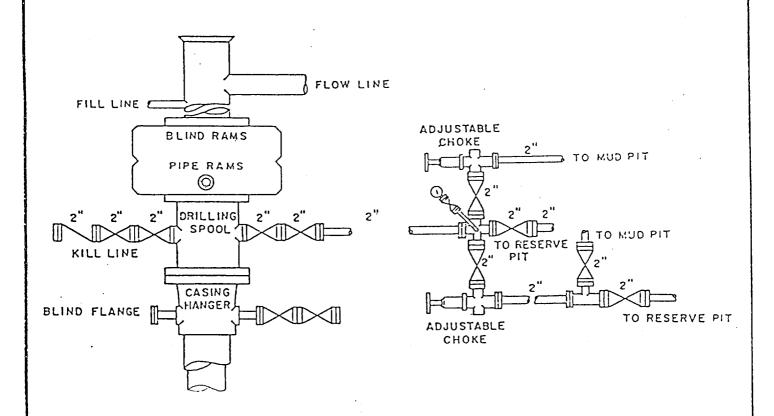
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BOP DIAGRAM

2000# Working Pressure Rams Operated Daily