

UTAH DIVISION OF OIL AND GAS CONSERVATION

REMARKS: WELL LOG \_\_\_\_\_ ELECTRIC LOGS \_\_\_\_\_ FILE X WATER SANDS \_\_\_\_\_ LOCATION INSPECTED \_\_\_\_\_ SUB. REPORT/abd. \_\_\_\_\_

**OPERATOR NAME CHANGE 11-26-79**

DATE FILED 6-6-77

LAND: FEE & PATENTED \_\_\_\_\_ STATE LEASE NO. \_\_\_\_\_ PUBLIC LEASE NO. U-14350 \_\_\_\_\_ INDIAN \_\_\_\_\_

DRILLING APPROVED: 6-6-77

SPUDED IN: \_\_\_\_\_

COMPLETED: \_\_\_\_\_ PUT TO PRODUCING: \_\_\_\_\_

INITIAL PRODUCTION: \_\_\_\_\_

GRAVITY A.P.I. \_\_\_\_\_

GOR: \_\_\_\_\_

PRODUCING ZONES: \_\_\_\_\_

TOTAL DEPTH: \_\_\_\_\_

WELL ELEVATION: 5151' 80"

DATE ABANDONED: 11-14-79 - Location Abandoned; Approval suspended until drilling commences

FIELD: Wildcat 3/96 Undesignated

UNIT: \_\_\_\_\_

COUNTY: Grand

WELL NO. Federal 350-#1

API NO: 43-019-30365

LOCATION 2054' FT. FROM ~~XX~~ (S) LINE. 673' FT. FROM ~~XX~~ (W) LINE. NE NW SW 1/2 1/4 - 1/4 SEC. 4

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
				18S	24E		TEXOMA PRODUCTION CO.

FILE NOTATIONS

Entered in NID File

Entered On S R Sheet \_\_\_\_\_

Location Map Pinned \_\_\_\_\_

Card Indexed

IWR for State or Fee Land \_\_\_\_\_

Checked by Chief \_\_\_\_\_

Copy NID to Field Office \_\_\_\_\_

Approval Letter \_\_\_\_\_

Disapproval Letter \_\_\_\_\_

COMPLETION DATA:

Date Well Completed \_\_\_\_\_

Location Inspected \_\_\_\_\_

OW \_\_\_\_\_ WW \_\_\_\_\_ TA \_\_\_\_\_

Bond released \_\_\_\_\_

GW \_\_\_\_\_ OS \_\_\_\_\_ PA \_\_\_\_\_

State of Fee Land \_\_\_\_\_

LOGS FILED

Driller's Log \_\_\_\_\_

Electric Logs (No. ) \_\_\_\_\_

E \_\_\_\_\_ I \_\_\_\_\_ E-I \_\_\_\_\_ GR \_\_\_\_\_ GR-N \_\_\_\_\_ Micro \_\_\_\_\_

Lat \_\_\_\_\_ Mi-L \_\_\_\_\_ Sonic \_\_\_\_\_ Others \_\_\_\_\_

LWP  
4-5-90



# ENVIRONMENTAL ENGINEERING COMPANY

Professional Engineering Services

P. O. Box 3341  
Casper, Wyoming 82601  
Phone (307) 234-6186

1645 Court Place  
Suite 229  
Denver, Colorado 80202  
Phone (303) 892-1506

June 1, 1977

Mr. Edgar W. Guynn  
U. S. Geological Survey  
8440 Federal Building  
Salt Lake City, Utah 84198

RE: Filing NTL-6 and APD  
The Anschutz Corporation  
#2 Federal 258  
#3 Federal 258  
#4 Federal 258  
#5 Federal 258  
#1 Federal 350  
Grand County, Utah

Dear Mr. Guynn:

Enclosed are three copies of the filing for the five development wells of the Anschutz Corporation. Please forward one copy to the BLM and advise us when it would be convenient to make on-site inspections.

Very truly yours,

George H. Fentress  
Agent Consultant for  
The Anschutz Corporation, Inc.

GHF/bk  
Encl.

cc: Mr. Phil Herrington



DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.

U-14350

6. IF INDIAN, ALLOTTED OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

#1 Federal 350

10. FIELD AND POOL, OR WILDCAT

New Field

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

Sec. 4, T-18S - R24E

12. COUNTY OR PARISH | 13. STATE

Grand | Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL

DEEPEN

PLUG BACK

b. TYPE OF WELL

OIL WELL

GAS WELL

OTHER

SINGLE ZONE

MULTIPLE ZONE

2. NAME OF OPERATOR

THE ANSCHUTZ CORPORATION, INC.

3. ADDRESS OF OPERATOR

1110 Denver Club Building, Denver, Colorado

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

At surface

673' FWL 2054' FSL *hwsu*

At proposed prod. zone

Same

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

Approximately 8 miles NW of Harley Dome, Utah

15. DISTANCE FROM PROPOSED\*

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

673'

16. NO. OF ACRES IN LEASE

2598.05

17. NO. OF ACRES ASSIGNED TO THIS WELL

80 acres

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

19. PROPOSED DEPTH

4065'

20. ROTARY OR CABLE TOOLS

Rotary

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

5151' GR 5161 KB

22. APPROX. DATE WORK WILL START\*

July 15, 1977

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/8"	8 5/8"	32.00#	200'	180 sacks
7 7/8"	4 1/2"	9.50#	4500'	200 sacks

- To Drill 9 3/4" hole and set 7 5/8" surface casing
- Log BOP tests daily while drilling with air or air mist
- Run electric logs and set casing, if productive
- THIS IS A CONSOLIDATED REPORT TO COVER FIVE (5) DEVELOPMENT WELLS

EXHIBITS ATTACHED INCLUDE

- Location and elevation plat on each of the 5 wells
- A Ten-Point Compliance
- Blow out preventer diagram for all wells
- Cut and fill section and pad layout for each well
- A central tank battery and flow line layout
- Map into location
- Multipoint Compliance program.

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. George Fentress

Agent for

The Anschutz Corporation

June 1, 1977

SIGNED *George Fentress* TITLE

DATE

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONSERVATION DIVISION

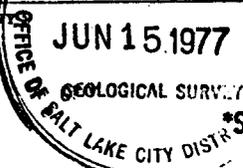
TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY

JUN 15 1977

GEOLOGICAL SURVEY



\*See Instructions On Reverse Side

ESTIMATED IMPORTANT GEOLOGIC MARKERS

<u>Formation</u>	<u>#2 Fed 258</u>		<u>#3 Fed 258</u>		<u>#4 Fed 258</u>		<u>#5 Fed 258</u>		<u>#1 Fed 350</u>	
	<u>Depth</u>	<u>Elevation</u>								
Mancos	78'	+5090'	352'	+4903'	486'	+4690'	194'	+4963'	50'	+5113'
Dakota	3783'	+1385'	4055'	+1200'	4190'	+986'	3897'	+1260'	3751'	+1410'
Cedar Mountain	3903'	+1265'	4180'	+1075'	4315'	+861'	4022'	+1135'	3871'	+1290'
Morrison	3998'	+1170'	4275'	+980'	4411'	+765'	4118'	+1039'	3961'	+1200'
E.T.D.	4100'	+1068'	4375'	+880'	4515'	+661'	4220'	+927'	4065'	+1096'

TABLE II

ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS

<u>Formation and Anticipated Fluid</u>	<u>#2 Fed 258</u>	<u>#3 Fed 258</u>	<u>#4 Fed 258</u>	<u>#5 Fed 258</u>	<u>#1 Fed 350</u>
Dakota Gas and/or oil or water	3783'	4055'	4190'	3897'	3751'
Cedar Mountain Gas and/or water	3903'	4180'	4315'	4022'	3871'
Morrison Gas and/or water	3998'	4275'	4411'	4118'	3961'

LEASE U-14350 DATE 7/5/77

WELL NO. #1 Federal 350

LOCATION: NW 1/4 SW 1/4, SEC. 4, T. 18S, R. 24E

FIELD New COUNTY Grand STATE Utah

ENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-B

I. PROPOSED ACTION

Anschutz Corporation PROPOSES TO DRILL AN OIL AND GAS TEST WELL WITH ROTARY TOOLS TO ABOUT 4065 FT. TD. 2) TO CONSTRUCT A

DRILL PAD 125 FT. X 230 FT. AND A RESERVE PIT 50 FT. X 100 FT.

3) TO CONSTRUCT ~~1/2~~ FT. WIDE X \_\_\_\_\_ MILES ACCESS ROAD AND UPGRADE

FT. WIDE X \_\_\_\_\_ MILES ACCESS ROAD FROM AN EXISTING AND IMPROVED ROAD. TO CONSTRUCT

GAS  OIL PRODUCTION FACILITIES ON THE DISTURBED AREA FOR THE DRILL PAD

AND  TRUCK  TRANSPORT THE PRODUCTION THROUGH A PIPELINE TO A TIE-IN IN

SECTION \_\_\_\_\_, T. \_\_\_\_\_, R. \_\_\_\_\_

2. LOCATION AND NATURAL SETTING (EXISTING ENVIRONMENTAL SITUATION).

(1) TOPOGRAPHY:  ROLLING HILLS  DISSECTED TOPOGRAPHY  DESERT OR PLAINS  STEEP CANYON SIDES  NARROW CANYON FLOORS  DEEP DRAINAGE IN AREA  SURFACE WATER \_\_\_\_\_

(2) VEGETATION:  SAGEBRUSH  PINION-JUNIPER  PINE/FIR  FARMLAND (CULTIVATED)  NATIVE GRASSES  OTHER cactus

(3) WILDLIFE:  DEER  ANTELOPE  ELK  BEAR  SMALL  
MAMMAL  BIRDS  ENDANGERED SPECIES  OTHER \_\_\_\_\_

(4) LAND USE:  RECREATION  LIVESTOCK GRAZING  AGRICULTURE  
 MINING  INDUSTRIAL  RESIDENTIAL  OIL & GAS OPERATIONS

REF: BLM UMBRELLA EAR *Oil & Gas Leasing Program*  
~~USFS EAR~~ *Grand Resource Area* 8-13-75  
~~OTHER ENVIRONMENTAL ANALYSIS~~

3. Effects on Environment by Proposed Action (potential impact)

1) EXHAUST EMISSIONS FROM THE DRILLING RIG POWER UNITS AND SUPPORT TRAFFIC ENGINES WOULD ADD MINOR POLLUTION TO THE ATMOSPHERE IN THE LOCAL VICINITY.

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR VISUAL IMPACTS FOR A SHORT TERM DUE TO OPERATIONAL EQUIPMENT AND SURFACE DISTURBANCE.

4) TEMPORARY DISTURBANCE OF WILDLIFE AND LIVESTOCK.

5) MINOR DISTRACTION FROM AESTHETICS FOR SHORT TERM.

6)

4. Alternatives to the Proposed Action

1) NOT APPROVING THE PROPOSED PERMIT -- THE OIL AND GAS LEASE GRANTS THE LESSEE EXCLUSIVE RIGHT TO DRILL FOR, MINE, EXTRACT, REMOVE AND DISPOSE OF ALL OIL AND GAS DEPOSITS.

2) DENY THE PROPOSED PERMIT AND SUGGEST AN ALTERNATE LOCATION TO MINIMIZE ENVIRONMENTAL IMPACTS. NO ALTERNATE LOCATION ON THIS LEASE WOULD JUSTIFY THIS ACTION.

3) LOCATION WAS MOVED \_\_\_\_\_ TO AVOID \_\_\_\_\_  
 LARGE SIDHILL CUTS     NATURAL DRAINAGE     OTHER \_\_\_\_\_

4)

5. Adverse Environmental Effects Which Cannot Be Avoided

1) MINOR AIR POLLUTION DUE TO EXHAUST EMISSIONS FROM RIG ENGINES AND SUPPORT TRAFFIC ENGINES.

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR AND TEMPORARY DISTURBANCE OF WILDLIFE.

4) TEMPORARY DISTURBANCE OF LIVESTOCK.

5) MINOR AND SHORT-TERM VISUAL IMPACTS.

6)

6. DETERMINATION:

(THIS REQUESTED ACTION ~~DOES~~ (DOES NOT) CONSTITUTE A MAJOR FEDERAL ACTION SIGNIFICANTLY AFFECTING THE ENVIRONMENT IN THE SENSE OF NEPA, SECTION 102(2) (C).

DATE INSPECTED 7/5/77

INSPECTOR A.R. Cook

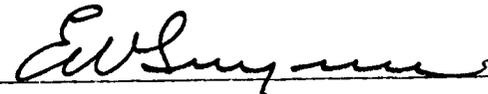
  
U. S. GEOLOGICAL SURVEY  
CONSERVATION DIVISION - OIL & GAS OPERATIONS  
SALT LAKE CITY DISTRICT

EXHIBIT "B"

TEN-POINT COMPLIANCE PROGRAM  
OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C  
The Anschutz Corporation

- |     |  |                           |  |
|-----|--|---------------------------|--|
| (1) | #2 - Federal - 258<br>630' FSL 660' FEL<br>Sec. 5 - T18S - R24E  | (4)                       | #5 - Federal - 258<br>653' FNL 2035' FEL<br>Sec. 8 - T18S - R24E |
| (2) | #3 - Federal - 258<br>1887' FNL 695' FEL<br>Sec. 5 - T18S - R24E | (5)                       | #1 - Federal - 350<br>2054' FSL 673' FWL<br>Sec. 4 - T18S - R24E |
| (3) | #4 - Federal - 258<br>610' FNL 1910' FEL<br>Sec. 5 - T18S - R24E | All in Grand County, Utah |  |

1. The Geologic Surface Formation

The five development wells are all situated on the northwestern edge of the Grand Valley. The surface consists of alluvial and colluvial deposits derived from the sedimentary formations which form the steep faces of the Book Cliffs. The surface formation is the dark gray Mancos Shale and the Cliffs are formed from resistant Cretaceous and Tertiary sandstones.

2. Estimated Important Geologic Markers

See Table I

3. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

See Table II

4. The Proposed Casing Program

The casing program for all five wells is identical. 200 feet of 8 5/8" new K-55, 24# casing will be set in a 12 1/4" surface hole. This will be set with 180 sacks of Class G cement with return flow to the surface.

4. The Proposed Casing Program cont'd

In the event of production, each well will set new 4 1/2", 9.5# production casing in a 7 7/8" hole at T.D. This will be set with 200 sacks of 50-50 Posmix with 2% gel and 2% CaCl<sub>2</sub>.

5. The Operator's Minimum Specifications for Pressure Control

Exhibit "C" is a schematic diagram of the blowout preventer equipment planned for used in these wells. The BOP's will be hydraulically tested to the full working pressure after nipling up and after any use under pressure. Pipe rams will be operationally checked each 24 hour period. The blind rams and annula preventer will be checked each time pipe is pulled out of the hole. All testings will be recorded in the daily drill sheets. Accessories to BOP's include upper and lower kelly cock, floor safety valve, drill string BOP and choke manifold with pressure rating equivalent to the BOP stack.

6. The Type and Characteristics of Proposed Muds

- (a) It is planned that each well will be drilled with air from the base of the surface casing to the total depth. If air is abandoned, then (b) and (c) will be used.
- (b) If air drilling is abandoned, then the hole will be drilled with native muds to 4000'.
- (c) From 4000' to TD the hole will be drilled with Chem-Gel with the mud weighted as necessary for good hole conditions. The water loss will be kept from 8 to 12cc and the viscosity between 35 and 45.

7. The Auxilliary Equipment to be Used

- (a) A kelly cock will be kept in the string at all times.
- (b) A float will be used at the bit at all times.
- (c) A gas detecting device will monitor the system.
- (d) A stabbing valve will be on the floor to be stabbed into the drill pipe when kelly cock is not in the string.

8. The Testing, Logging, and Coring Programs

- (a) All valid shows will be tested. The objective for each well is the Morrison Formation.
- (b) If air drilled, an induction log will be run from TD to the base of the surface casing and gamma ray, compensated formation density, and sidewall neutron porosity logs will be run at the minimum footage. If the hole is fluid filled, a dual induction log will be run from TD to the base of the surface casing and gamma ray, compensated formation density, and compensated neutron logs will run at the minimum footage.
- (c) No coring is anticipated.

9. Any Anticipated Abnormal Pressures or Temperatures Expected

No abnormal pressures or temperatures have been noted or reported in the wells drilled in this area to these depths. No hydrogen sulphide or other hazardous gases or fluids have been found reported or known to exist at these depths in this area.

10. The Anticipated Starting Date and Duration of Operations

The anticipated starting date is set for July 1, 1977, or as soon as possible after examination of the surface and approval of all drilling requirements.

It is anticipated that each well should be completed within 20 days after spudding the well.

TABLE I

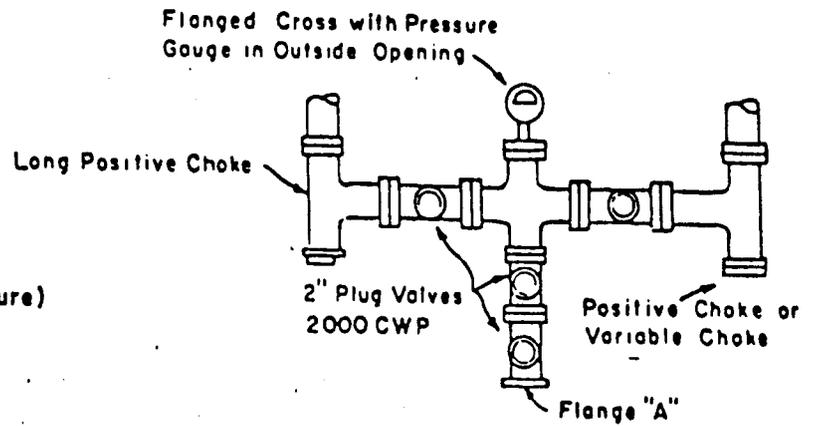
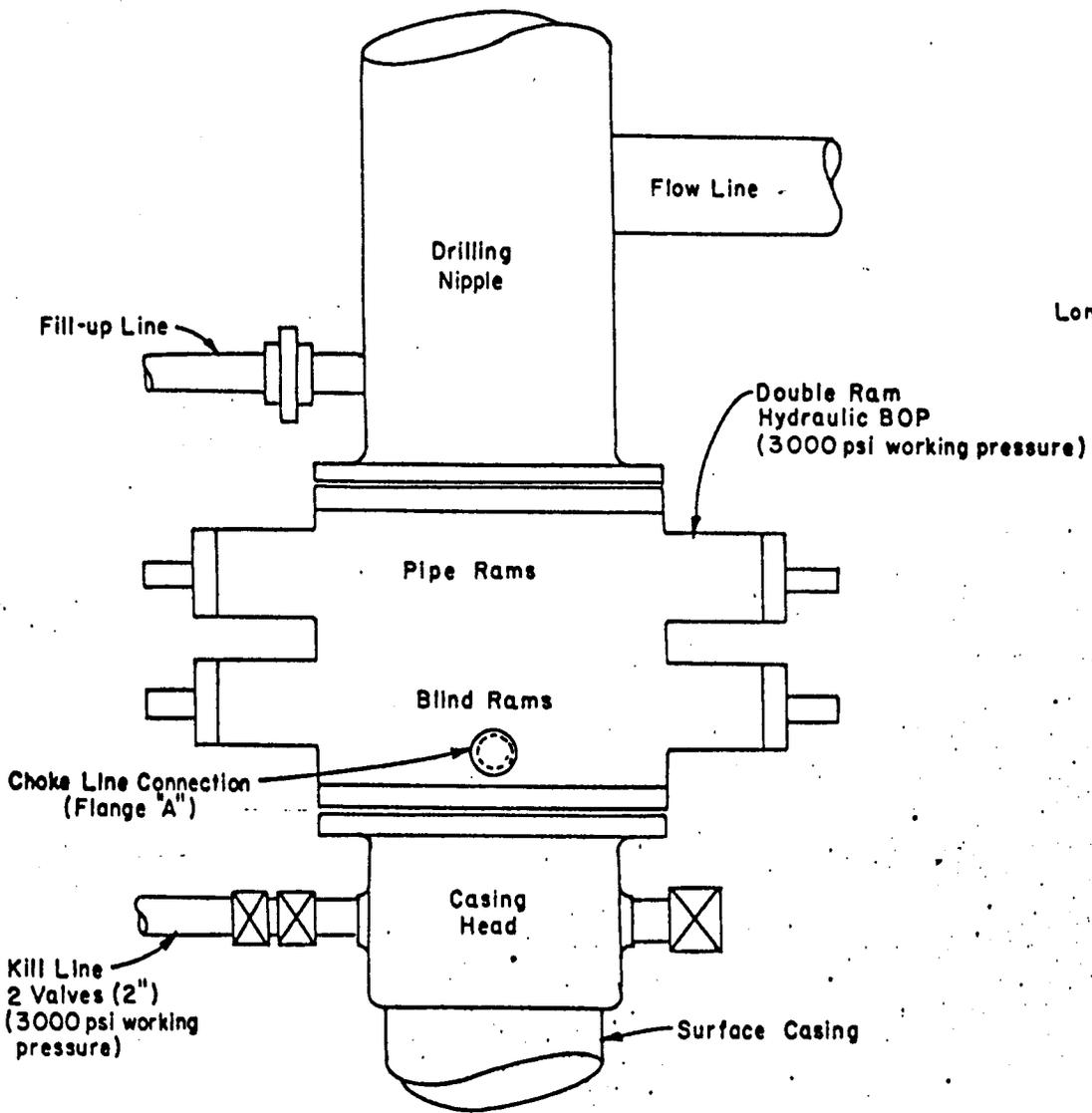
## ESTIMATED IMPORTANT GEOLOGIC MARKERS

<u>Formation</u>	<u>#2 Fed 258</u>		<u>#3 Fed 258</u>		<u>#4 Fed 258</u>		<u>#5 Fed 258</u>		<u>#1 Fed 350</u>	
	<u>Depth</u>	<u>Elevation</u>								
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TABLE II

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OR MINERALS

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Morrison Gas and/or water	3998'	4275'	4411'	4118'	3961'



PLAN VIEW - CHOKE MANIFOLD

EXHIBIT "C"  
 BLC CUT PREVENTER DIAGRAM  
 The Anschutz Corporation  
 #2 Federal 258  
 #3 Federal 258  
 #4 Federal 258  
 #5 Federal 258  
 #1 Federal 350

EXHIBIT "D"  
MULTIPOINT REQUIREMENTS TO ACCOMPANY APD

Attached to Form 9-331C  
The Anschutz Corporation

- |  |  |
|--|--|
| (1) #2 Federal 258<br>630' FSL - 660' FEL<br>Sec. 5, T18S, R24E  | (4) #5 Federal 258<br>653' FNL - 2035' FEL<br>Sec. 8, T18S, R24E |
| (2) #3 Federal 258<br>1887' FNL - 695' FEL<br>Sec. 5, T18S, R24E | (5) #1 Federal 350<br>2054' FSL - 673' FWL<br>Sec. 4, T18S, R24E |
| (3) #4 Federal 258<br>610' FNL - 1910' FEL<br>Sec 5, T18S, R24E  | All in Grand County, Utah  |

1. Existing Roads

- A. EXHIBIT "A", 1 - 5, are the proposed well sites as staked by Powers Elevation Service, and the ground elevations are shown thereon.
- B. EXHIBIT "E" is a color coded map prepared from the Southeastern Central Utah Map No. 2 of the Utah Travel Council, and was used because general features show more prominently than other maps found. One travels 40 miles on I-70 from Thompson, Utah, east to the Harley Dome exit, then proceed north and east on U.S. 6 and 50. At the Westwater Unit turnoff, it is approximately 11 miles northwest on gravel and dirt road to the five locations. All locations are within 1,000 feet of this road, which can be used in most weather conditions. The red color in Exhibit "E" indicates this good, passable road.
- C. EXHIBIT "F" is prepared from 7 1/2' U.S.G.S. Dry Canyon Topographic Quadrangle. The red color shows the existing, usable road and ranch buildings in the area. The green color indicates the roads which must be built to provide access to each location.
- D. This is not an exploratory well.

## EXHIBIT "D"

### Multipoint Requirements to Accompany APD

Page 2.

- E. These are development wells around Anschutz's Discovery well #1 - FED - 258. All known existing roads in the area are shown in Exhibit "F". Generally, all roads are gravel or hard packed dirt.
- F. There is no plan to improve or maintain existing roads.

### 2. Planned Access Roads

- (1), (2), (3), (4), (5). The short access roads are shown in green in Exhibit "F". These roads need not exceed 16 feet, the maximum grades will be less than 1%, and there will be no need for turnouts, drainage design, culverts, or cut and fill.
- (6) No surfacing materials will be needed during drilling operations. If production is obtained, the access roads will be surfaced with local stream gravel.
- (7) No gates, fence cuts, or cattle guards are needed.
- (8) The access roads will all be less than 1,000' in length and therefore do not need to be center line flagged.

### 3. Location of Existing Wells

A one mile radius from each of the proposed development wells is indicated in Exhibit "F". All known wells and their current status are indicated thereon.

- (1) No known water wells exist in the area.
- (2) As shown in Exhibit "F" there are no dry holes within the one mile radius. The closest dry holes are in Sec. 10 and 16 and in Sec. 29, T17S-R24E.
- (3), (4), (5) There are no known temporarily abandoned, disposal or drilling wells in the area.

EXHIBIT "D"

Multipoint Requirements to Accompany APD

Page 3.

3. Location of Existing Wells Cont'd

(6) The only producing well in this area is the Anschutz Corporation's Discovery well #1-Fed-258, as shown in Exhibit "F".

(7), (8), (9). There are no known shut-in, injection, or observation wells in this area.

4. Location of Existing and/or Proposed Facilities

Exhibit "F" is color-coded with blue, in addition to red for the access and existing roads. The blue represents 2 3/8" flow lines, gas or oil, that will follow the used roads to the central tank battery at #1-Fed-258. Flow lines will not be buried, except at the central battery, unless allowed otherwise.

Exhibit "I" is an example of present existing tank battery for #1-Fed-258 and proposed additional facilities, if needed.

5. Location and Type of Water Supply

Water, if needed, will be obtained from flowing water in Westwater Creek.

6. Construction Materials

A,B,C,D. No construction materials are needed for drilling operations. The sand, gravel and rock located in situ are adequate for any construction necessary in connection with either dry or producing wells. There are no access routes needed for crossing Indian land. The access routes for crossing Federal land are shown in green in Exhibit "F".

7. Handling Waste Disposals

For all five wells:

(1) Drill cuttings will be buried in the reserve pit when covered.

7. Handling Waste Disposals Cont'd

- (2) Drilling fluids will also be handled in the reserve pit.
- (3) Any fluids produced while drill stem testing or producing or other testing will be collected in a test tank set near the pipe baskets or near the well head. Any unavoidable spills of oil or other adverse substances or materials will be covered or removed immediately during drilling progress or during completion operations.
- (4) Any sewage will be covered or removed.
- (5) Garbage, wastes and non-flammable wastes, salts and other chemicals produced or used during drilling or testing will be handled in the reserve pit or kept in the trash or burn pit. The trash or burn pit will be covered with small wire mesh to prevent scattering.
- (6) The reserve pit, in addition to the trash or burn pit, will be fenced on three sides during drilling operations, and iron or other posts and wire fencing will be available on each location immediately upon cessation of drilling and the fourth side of the reserve pit will be fenced prior to full removal of the rig from the location. Any other dangerous or harmful pits or sewage areas will also be fenced or covered at the time rig moved off location.

8. Ancillary Facilities

No airstrips, camps, or other living facilities will be built or needed.

9. Well Site Layout

- (1) Exhibit "G", 1 through 5, are the drill pad layouts as staked by Powers Elevation Company. The elevation contours have been drawn on these plats by Beathard. The cut and fill cross section for each location is designated A-A' and location has been constructed from these contours. The top 6 inches of soil will be stockpiled as shown on each plat. The location of the excess material removed during the drill pad preparation is also shown on each plat.
- (2) The mud tanks, pits, rig orientation, etc. for all five wells are Exhibit "H". If the wells are drilled by air, these facilities may change accordingly.
- (3) Exhibit "H", also shows the rig orientation, parking areas and access roads for each location.
- (4) The reserve pit will not be lined. Steel mud pits, if used, will be as shown in Exhibit "H".

10. Plans for Restoration

- (1) Backfilling, leveling and contouring will be accomplished as soon as possible after plugging of each well, or immediately on those areas unused if production is obtained. Waste disposal and spoils materials will be buried or hauled away immediately before rig moves off location.
- (2) Rehabilitation will be accomplished by spreading the banked topsoil over the area and contouring the banks that will be created in this heavily eroded area so that vegetation planted will be best protected from erosion. Revegetation will be accomplished using grasses or mixtures suited best for the dry, arid conditions encountered here. The access roads will be revegetated as needed.

10. Plans for Restoration Cont'd

- (3) Prior to rig release, the fourth side of the reserve pit at each drill site will be fenced and maintained until clean up operations are finished.
- (4) Any oil or spills will be immediately cleaned up or flagged.
- (5) Rehabilitation operations will commence as soon as the rig moves off location. However, revegetation will be delayed until the fall of 1977 or the spring of 1978 for optimum growth potential.

11. Other Information

These development wells are located on the northwestern edge of the Grand Valley at the foot of the Book Cliffs. The topography of the immediate area grades from flat prairie to gullied hills, steepening with increasing proximity to the Cliffs. Long, narrow canyons, the majority of which carry only intermittent stream flow, form the chief topographic features of the Book Cliffs. This area receives very little annual precipitation; however, as this area is located at the mouth of Hay Canyon, it is subject to flash flooding.

The canyon bottoms and adjacent flatlands are composed predominantly of alluvial and colluvial material consisting of poorly sorted boulders, gravel, sand and silt. The soil on all locations is a sandy, silty clay formed from this material and is primarily derived from the Cretaceous Mancos Shale and the resistant Cretaceous and Tertiary sands forming the cliffs (refer to Item 1 of Exhibit "B").

The Flora at all five locations is identical and consists of sagebrush, tumbleweed, cactus, bunch grass and other sparse grasses, and occasionally Pinyon Pine and Juniper. The vegetation constitutes approximately 40-70% of the ground cover. The remaining exposed soil material is highly erodible. The observed animal population is

11. Other Information Cont'd

domesticated sheep and cattle and a few deer, rabbits, snakes and lizards. Other wildlife indigenous to a rugged, semiarid environment is presumed to exist.

(2) Grazing is the only observed current surface use in this area. The location for #4 Federal 258 adjoins an abandoned ranch which at one time supported cultivated crops. The surface ownership is by Frank Spadafore of Montrose, Colorado, and BLM.

(3) These locations are close to a small intermittent stream, as can be seen on the topographic map reproduced in Exhibit "F". However, each location should be far enough from the stream that there will be no danger of contamination from seepage from the reserve pits, and any runoff of oil or chemicals from the drill site will not be permitted (refer to Item 7 above).

All five sites have been surveyed for evidence of cultural resources of both historic and prehistoric origin. All five locations have been cleared and approved. Reference is made to the archaeological report of the Agency of Conservation Archaeology of the San Juan County Museum dated 16 May, 1977, prepared by Mary L. Thul. Copies of this report have been distributed to all concerned agencies.

The commencement of the five well program is planned for approximately July 1, 1977, or as soon as possible after approval.

12. Lessee's or Operator's Representative

George H. Fentress  
Environmental Engineering Company  
Agent Consultant for The Anschutz Corporation  
1645 Court Place, Suite 229  
Denver, Colorado 80202

Phone: (303) 892-1506

Res: (303) 279-4880

12. Lessee's or Operator's Representative Cont'd

Phil Herrington  
The Anschutz Corporation, Inc.  
1110 Denver Club Building  
Denver, Colorado 80202

Phone: (303) 573-5665  
Res: (303) 494-0576

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by The Anschutz Corporation, Inc. and its contractors and sub-contractors in conformity with this plan and their terms and conditions under which it is approved.

Date: June 1, 1977



Name: George H. Fentress  
Title: Agent Consultant for  
The Anschutz Corporation

EXHIBIT "E"

Access Road to Anschutz Corporation

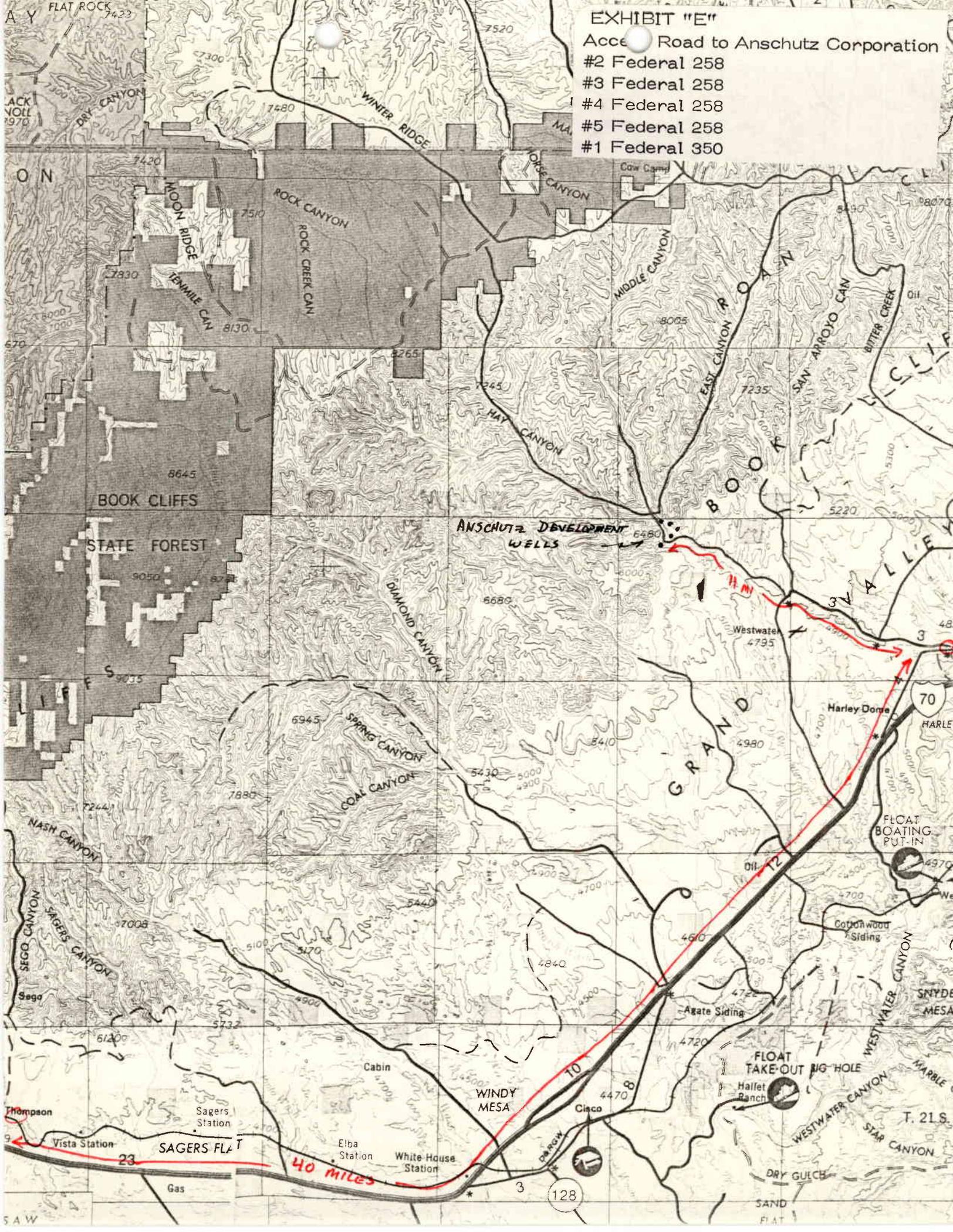
#2 Federal 258

#3 Federal 258

#4 Federal 258

#5 Federal 258

#1 Federal 350



40 MILES

128

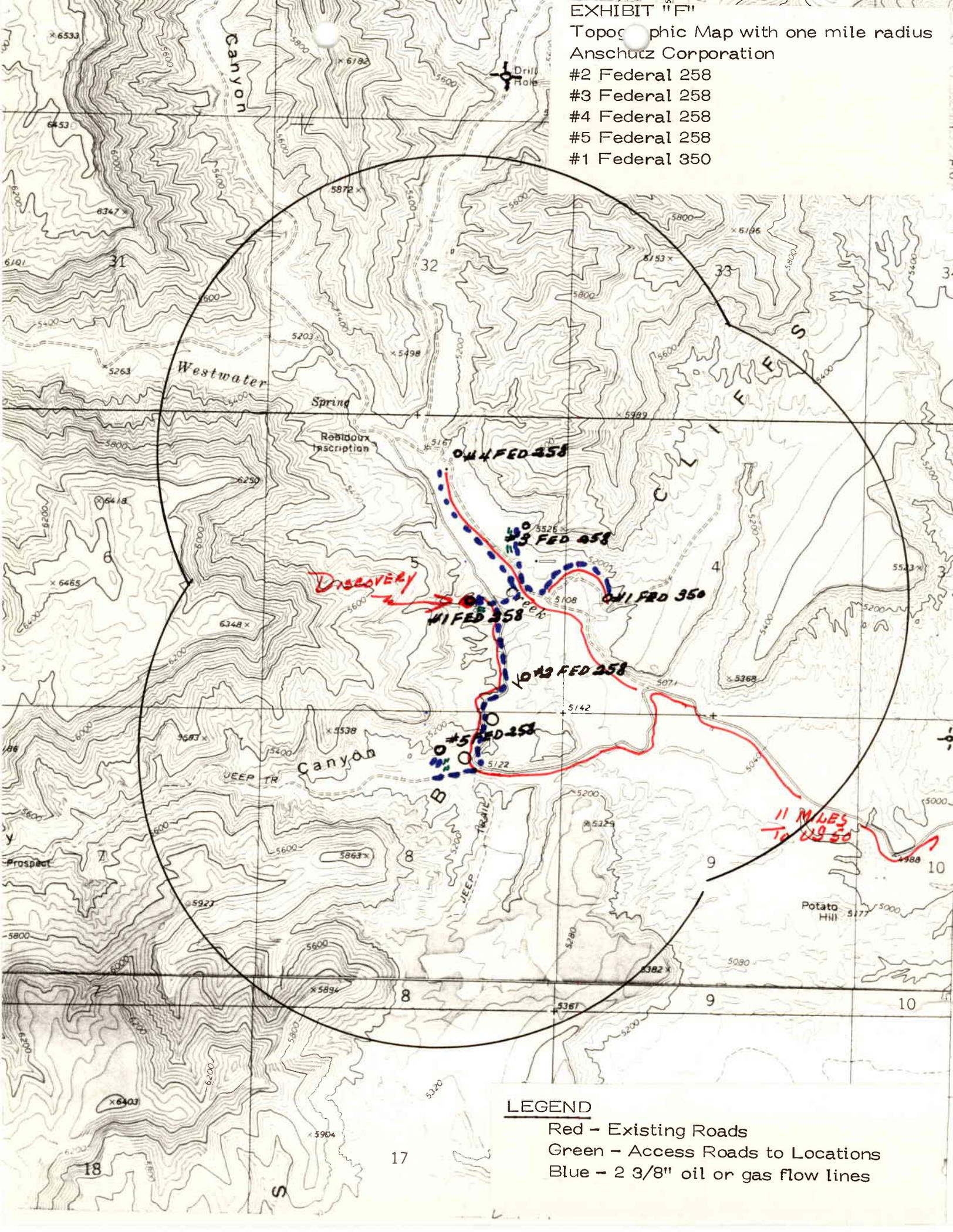
70

S A W

EXHIBIT "F"

Topographic Map with one mile radius  
Anschutz Corporation

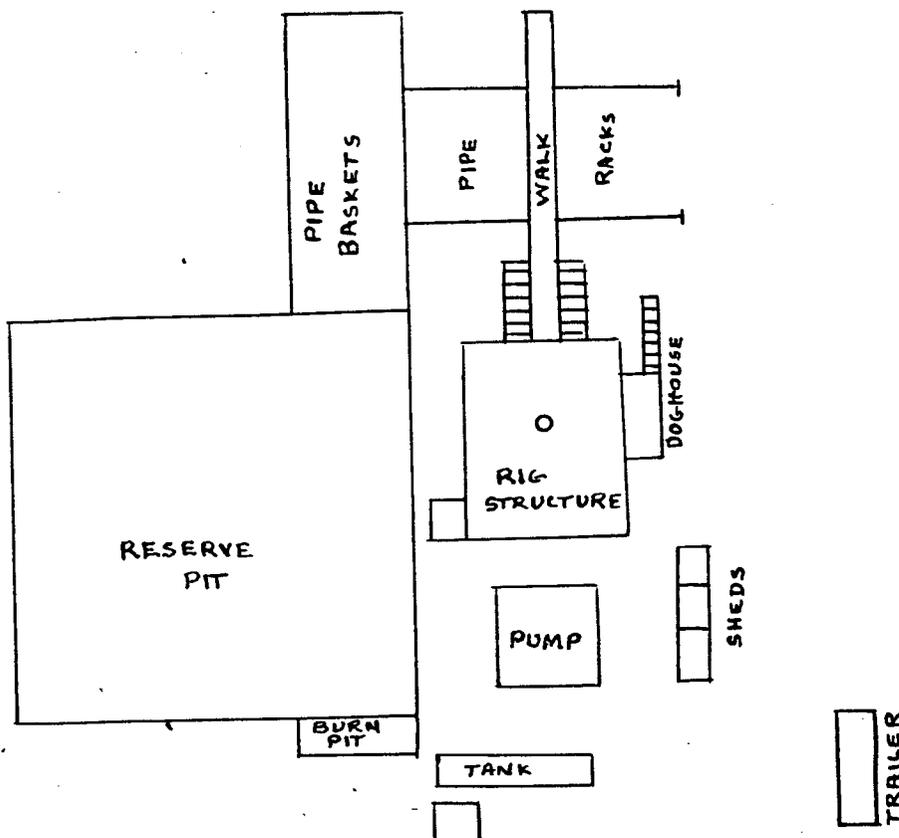
- #2 Federal 258
- #3 Federal 258
- #4 Federal 258
- #5 Federal 258
- #1 Federal 350



LEGEND

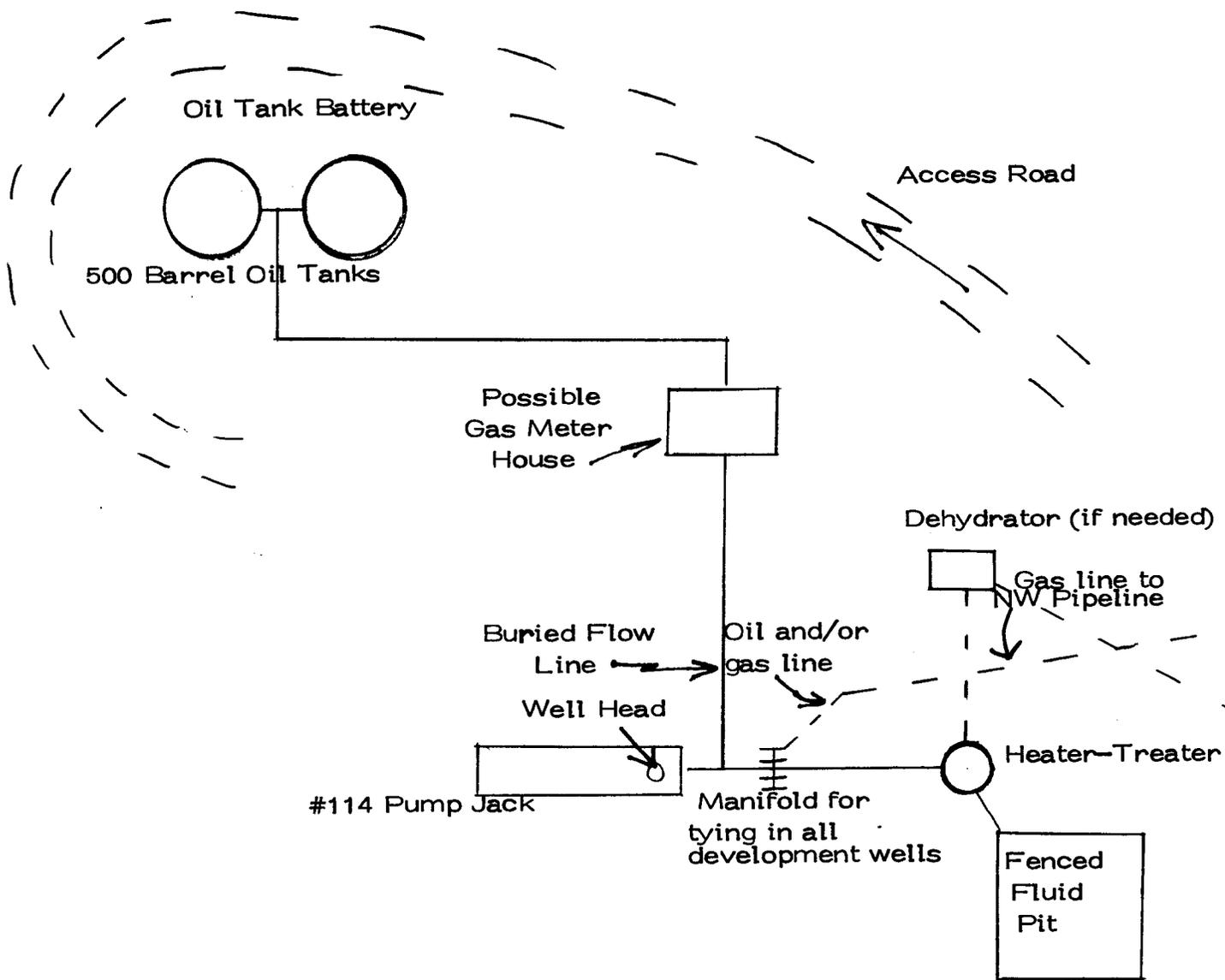
- Red - Existing Roads
- Green - Access Roads to Locations
- Blue - 2 3/8" oil or gas flow lines

EXHIBIT "H"  
SIMPLIFIED RIG LAYOUT  
SMALL LOCATION  
For Each of 5 - Anschutz  
Development Wells



1. Rig will be oriented on drill pad as best suited for pits and topography
2. Each drill pad is immediately off of existing roads except #3 - Fed - 258 (See Exhibit "F" for its access)

EXHIBIT "I"  
Central Production Battery  
Located on #1 Federal 258  
NW SE Sec. 5, T18S-R24E



ALL LINES ARE PLANNED TO BE 2 3/8" O.D.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

(REVERSE SIDE)

5. LEASE DESIGNATION AND SERIAL NO.  
**U-14350**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
**Federal**

9. WELL NO.  
**#1 Federal 350**

10. FIELD AND POOL, OR WILDCAT  
**New Field**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
**Sec. 4, T-18S - R24E**

12. COUNTY OR PARISH  
**Grand**

13. STATE  
**Utah**

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. TYPE OF WORK  
**DRILL  DEEPEN  PLUG BACK**

b. TYPE OF WELL  
OIL WELL  GAS WELL  OTHER  SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
**THE ANSCHUTZ CORPORATION, INC.**

3. ADDRESS OF OPERATOR  
**1110 Denver Club Building, Denver, Colorado**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface **673' FWL 2054' FSL *hwsd***  
At proposed prod. zone  
**Same**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**Approximately 8 miles NW of Harley Dome, Utah**

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest grid, unit line, if any)  
**673'**

16. NO. OF ACRES IN LEASE  
**2538.05**

17. NO. OF ACRES ASSIGNED TO THIS WELL  
**80 acres**

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

19. PROPOSED DEPTH  
**4065'**

20. ROTARY OR CABLE TOOLS  
**Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**5151' GR 5161 KB**

22. APPROX. DATE WORK WILL START\*  
**July 15, 1977**

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/3"	8 5/8"	32.00#	200'	180 sacks
7 7/8"	4 1/2"	9.50#	4500'	200 sacks

- To Drill 9 3/4" hole and set 7 5/8" surface casing
- Log BOP tests daily while drilling with air or air mist
- Run electric logs and set casing, if productive
- THIS IS A CONSOLIDATED REPORT TO COVER FIVE (5) DEVELOPMENT WELLS

EXHIBITS ATTACHED INCLUDE

- Location and elevation plat on each of the 5 wells
- A Ten-Point Compliance
- Blow out preventer diagram for all wells
- Cut and fill section and pad layout for each well
- A central tank battery and flow line layout
- Map into location
- Multipoint Compliance program.

*Approval notice - Div of Oil, Gas, Mining, Utah*  
 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. **George Fentress** Agent for  
**The Anschutz Corporation** DATE **June 1, 1977**

SIGNED *George Fentress* TITLE \_\_\_\_\_

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY **(Orig. Sgd.) E. W. Guynn** TITLE **DISTRICT ENGINEER** DATE **APR 28 1978**

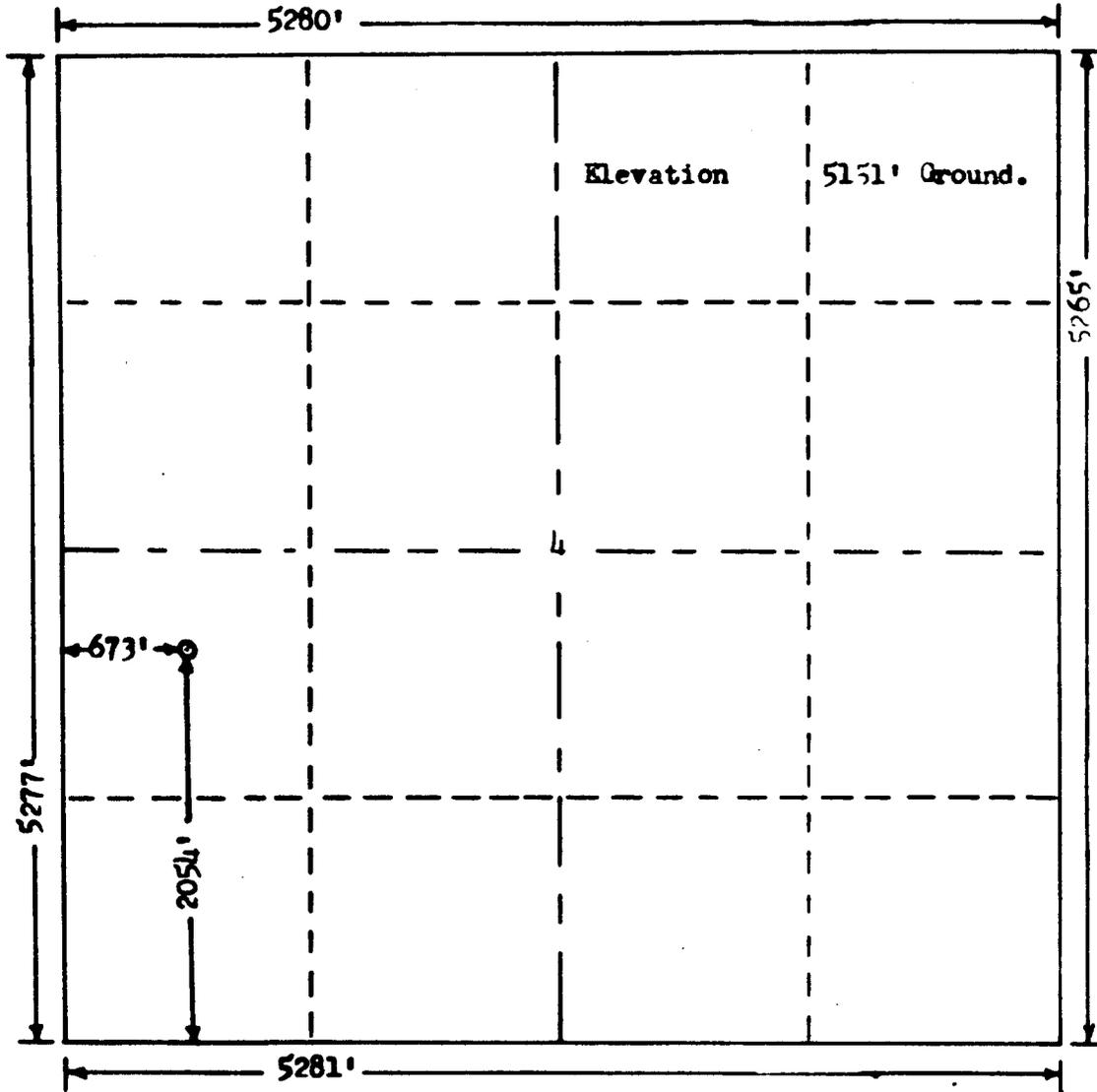
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side  
**CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY**

NECESSARY FLARING OF GAS DURING DRILLING AND COMPLETION APPROVED SUBJECT TO ROYALTY (NGL-4)



R. 24 E.



T. 18 S.

Scale... 1" = 1000'

**Powers Elevation Company, Inc. of Denver, Colorado**  
 has in accordance with a request from George Fentress  
 for Anschutz Corporation  
 determined the location of #1 Federal-350  
 to be 2054' FS & 673' FW Section 4 Township 18 S.  
 Range 24 E. of the Salt Lake Principal Meridian  
 Grand County, Utah

I hereby certify that this plat is an  
 accurate representation of a correct  
 survey showing the location of  
 #1 Federal-350

Date: 5-13-77

J. Nelson  
 Licensed Land Surveyor No. 2711  
 State of Utah



U.S. GEOLOGICAL SURVEY, CONSERVATION DIVISION

FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, SALT LAKE CITY, UTAH

Well	Location	Lease No.
<p>ANSCHUTZ CORPORATION, INC. #1 FEDERAL 350</p>	<p>673' FWL &amp; 2054' FSL (NW 1/4 SW 1/4) SEC. 4, T. 18S., R. 24E., S. 4M GRAND Co., UTAH G. E. 5151'</p>	<p>U-14350</p>
<p>1. <b>Stratigraphy and Potential Oil and Gas Horizons</b> The well will commence in the Castlegate Sandstone member of the Price River Formation of the Mesaverde group. The operator plans to test the Dakota, Cedar Mountain and Morrison for oil and natural gas. Estimated thickness by operator is reasonable. Proposed location is about 500 feet north of fault (downthrown side).                  2. <b>Fresh Water Sands</b> Possible water may occur in the Castlegate Sandstone and Mancos sande (Ferron). The aquifers of deeper formations will probably yield salty water or brine.                  3. <b>Other Mineral Bearing Formations. (Coal, Oil Shale, Potash, Etc.)</b> In area considered valuable prospectively for coal. The well will spud stratigraphically below the major coal zones of the Price River Formation which outcrop near the proposed site. Dakota coals are not expected to have economic value in this area.                  4. <b>Possible Lost Circulation Zones</b> Unknown.</p>		
<p>5. <b>Other Horizons Which May Need Special Mud, Casing, or Cementing Programs.</b> Protect any fresh water aquifers penetrated.</p>		
<p>6. <b>Possible Abnormal Pressure Zones and Temperature Gradients.</b> Unknown</p>		
<p>7. <b>Competency of Beds at Proposed Casing Setting Points.</b> Probably adequate.</p>		
<p>8. <b>Additional Logs or Samples Needed.</b> None.</p>		
<p>9. <b>References and Remarks</b> Within 2 mile radius of KGS. U.S.G.S. Bull 852, Fisher, 1936</p>		
<p>Date: 6-21-77</p>		<p>Signed: REG.</p>

STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING

\*\* FILE NOTATIONS \*\*

Date: June 6 - 1979  
Operator: Buschert Corp.  
Well No: #1 Sec. 350  
Location: Sec. 7 T. 18S R. 24E County: Grand

File Prepared  Entered on N.I.D.   
Card Indexed  Completion Sheet

CHECKED BY:

Administrative Assistant [Signature]  
Remarks: OK - no other well in Sec. 4  
Petroleum Engineer [Signature]  
Remarks:  
Director [Signature]  
Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required  Survey Plat Required   
Order No.  Surface Casing Change to

Rule C-3(c), Topographic exception/company owns or controls acreage within a 660' radius of proposed site

O.K. Rule C-3  O.K. In \_\_\_\_\_ Unit: \_\_\_\_\_

Other:

Letter Written/Approved

June 6, 1977

The Anschutz Corporation  
c/o Mr. George H. Fentress  
1645 Court Place  
Suite 229  
Denver, Colorado 80202

Re: Well No's:                      API NO.  
#2 Federal 258 - 43-019-30361  
#3 Federal 258 - 43-019-30362  
#4 Federal 258 - 43-019-30363  
#5 Federal 258 - 43-019-30364  
#1 Federal 350 - 43-019-30365  
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to wells is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon these wells, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer  
HOME: 582-7247  
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

Further, it is requested that this Division be notified within 24 hours after drilling operations have commenced, and that the rig number and drilling contractor be identified.

The API numbers assigned to these wells are indicated above.

Very truly yours,

CLEON B. FEIGHT  
Director

cc: U.S. Geological Survey



1110 DENVER CLUB BUILDING  
518 SEVENTEENTH STREET  
DENVER, COLORADO 80202  
TELEPHONE 303-573-5665  
TWX 910 931 2620

July 18, 1978

State of Utah  
Dept. of Natural Resources  
Division of Oil, Gas, and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Attention: Kathy Ostler, Records Clerk

Dear Ms. Ostler:

As requested in your letter of June 8, 1978 the following is submitted.

To update your records the following wells have not yet been drilled and our plans have not changed.

Well No. Federal 258-#4, Sec. 5, T. 18S, R. 24E,  
Grand County, Utah

Well No. Federal 335-#2, Sec. 20, T. 19S, R. 23E,  
Grand County, Utah

Well No. Federal 335-#4, Sec. 19, T. 19S, R. 23E,  
Grand County, Utah

Well No. Federal 350-#1, Sec. 4, T. 18S, R. 24E,  
Grand County, Utah

Well No. State 400-#1, Sec. 17, T. 16S, R. 23E,  
Grand County, Utah

Well No. State 402-#1, Sec. 36, T. 17S, R. 20E,  
Grand County, Utah

Well No. State 404-#1, Sec. 23, T. 17S, R. 21E,  
Grand County, Utah

Well No. State 411-#2, Sec. 23, T. 18S, R. 20E,  
Grand County, Utah

Well No. State 414-#1, Sec. 32, T. 18S, R. 21E,  
Grand County, Utah





2400 ANACONDA TOWER  
555 SEVENTEENTH STREET  
DENVER, COLORADO 80202  
TELEPHONE 303-825-6100  
TWX 910-931-2620



May 15, 1979

Mr. Cleon B. Feight, Director  
Division of Oil, Gas & Mining  
State of Utah  
1588 West, North Temple  
Salt Lake City, Utah 84116

Dear Mr. Feight:

The following wells have not commenced drilling and have been removed from our active files. Hence we no longer plan upon drilling them.

Federal 335 No. 2  
Federal 335 No. 4  
Federal 4275 No. 1  
Federal 7674 No. 1

The following wells have not yet commenced drilling pending further geological evaluation:

Federal 258 No. 4  
Federal 258 No. 7  
Federal 258 No. 8  
~~Federal 350 No. 1~~  
Federal 350 No. 2  
Federal 350 No. 3  
State 400 No. 1  
State 404 No. 1  
State 414 No. 1  
Federal 675 No. 3  
State 7265 No. 2  
State 7265 No. 3  
Federal 4076 No. 14-23  
State 920 No. 1

We are sorry if our lack of correspondence has created an inconvenience for you.

Very truly yours,



Peter B. Doty  
Operations Coordinator

PBD:jp

P.S. Enclosed are the forms you requested on the Federal 675 No. 2.



2400 MACDONALD TOWER • 555 SEVENTEENTH STREET • DENVER, COLORADO 80202 • 303-825-6100 • TWX 910-931-2620

July 3, 1979

Mr. Cleon B. Feight, Director  
Division of Oil, Gas & Mining  
State of Utah  
1588 West, North Temple  
Salt Lake City, Utah 84116

Dear Mr. Feight:

The following wells have not commenced drilling and have been removed from our active files. Hence we no longer plan upon drilling them.

Federal 335 No. 2  
Federal 335 No. 4  
Federal 4275 No. 1  
Federal 7674 No. 1

The following wells have not yet commenced drilling pending further geological evaluation:

~~Federal 258 No. 4~~  
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Federal 350 No. 1  
Federal 350 No. 2  
Federal 350 No. 3  
State 400 No. 1  
State 404 No. 1  
State 414 No. 1  
Federal 675 No. 3  
State 7265 No. 2  
State 7265 No. 3  
Federal 4076 No. 14-23  
State 920 No. 1

We are sorry if our lack of correspondence has created an inconvenience for you.

Very truly yours,

  
Peter B. Doty  
Operations Coordinator

PBD:jp



ATTACHMENT, WELLS.

- 1) Fereral 258 No. 7
- 2) Fereral 258 No. 8
- 3) Federal 350 No. 1
- 4) Federal 350 No. 2
- 5) Federal 350 No. 3
- 6) State 400 No. 1
- 7) State 402 No. 1
- 8) State 404 No. 1
- 9) State 414 No. 1
- 10) State 7265 No. 2
- 11) State 7265 No. 3
- 12) State 920 No. 1
- 13) Federal 675 No. 3
- 14) Federal 4076 No. 14-23
- 15) State 915 No. 1
- 16) Federal 258 No. 4