

FILE NOTATIONS

Entered in NID File ✓
Location Map Pinned
Aerial Indexed ✓

Checked by Chief
Approval Letter ✓
Disapproval Letter

COMPLETION DATE:

6-22-78

Location Inspected

SIGW ✓
..... PA.....

State or Fee Land

LOGS FILED

Operator's Log ✓
Electric Logs (No.) ✓

..... I Dual I Lat GR-N Micro
..... GR Lat Mi-L Sonic

8-3. 9- Operations sold to: Narnes, Inc.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

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

2. NAME OF OPERATOR
 The Anschutz Corporation, Inc.

3. ADDRESS OF OPERATOR
 1110 Denver Club Building, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
 500 FNL, 1400' FEL TOPOGRAPHY DICTATES
 At proposed prod. zone THIS LOCATION FOOTAGE
 Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately 24 miles from Thompson, Utah (Exhibit "E")

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 660'

16. NO. OF ACRES IN LEASE 2395.16

17. NO. OF ACRES ASSIGNED TO THIS WELL
 40 OR 80 (oil)
 320 Ac 160 (gas)

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

19. PROPOSED DEPTH 3910'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6195' Ground

22. APPROX. DATE WORK WILL START*
 15, Aug. 1977

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	200'	180 sacks
7 7/8"	4 1/2"	9.5#	3910'	200 sacks

1. Drill 12 1/4" hole to 200' and set surface casing.
2. Drill 8 5/8" hole to T. D.
3. Log B. O. P. tests daily.
4. Run electric logs; if productive, run 4 1/2" casing.
5. Run other logs as needed, perforate and stimulate as needed.

THIS REPORT COVERS THREE WELLS

Exhibits Attached

- "A" Location and Elevation
- "B" Ten-Point Compliance Program
- "C" Blowout Preventer Diagram
- "D" Multipoint Requirements
- "E" Access Road Map
- "F" Map of Existing Wells
- "G" Drill Pad Layout; Cut & Fill
- "H" Drill Rig and Production Facilities

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 George Lentress Agent Consultant for
 TITLE The Anschutz Corporation DATE June 25, 1977

(This space for Federal or State office use)

PERMIT NO. 43-09-30303 APPROVAL DATE _____
 75

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: July 1- Syoma Production
Operator: Auschutz Corp.
Well No: #1 Fed. 104
Location: Sec. 4 T. 20S R. 21E County: Grand

File Prepared Entered on N.I.D. ^{APIV}
Card Indexed Completion Sheet

CHECKED BY:

Administrative Assistant AJ

Remarks: Outside spaced area - 102-12

Petroleum Engineer ok P

Remarks: 7

Director 7

Remarks: ok 10 po. Legit

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 Willow Creek East unit

Other:

Letter Written/Approved



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

July 19, 1977

Cleon Feight
Utah Oil & Gas & Mining
1588 West, North Temple
Salt Lake City, Utah 84116

RE: Permits to drill
Anschutz Corporation
Various wells
Grand Co., Utah

Dear Cleon:

Enclosed are several items on the above with comments or questions, as follows:

- (1) REVISED TYPE OF WORK ON 9-331C AND ACRES ASSIGNED:
On Anschutz #1 & #2 Federal 675 and #1 Federal 104, and
#1, #2, #3 and #4 Federal 335

AMEND TO READ: "Oil Well or Gas Well" "single or multiple zones" (1a and 1b).
"40-acres or 80-acres, if an oil well", and
"160-acres or as spaced, if gas well, and
to not produce from same gas zone horizon
of any other gas wells within the spacing
unit area" (#17 on 9-331C).

Revised copies of Form 9-331 C are enclosed for changes.

- (2) ANSCHUTZ #1, #2, #3 and #4 FEDERAL 335:

It is possible I have not sent you applications for permission to drill the four wells. Therefore these applications are enclosed, together with location plats and maps.

- (3) STATUS OF REQUESTS TO DRILL BY ANSCHUTZ:

I enclose a three-page status sheet of wells ready or being prepared to drill by Anschutz, on which I have worked. Would you kindly examine this report and advise me of any changes from this or any reports that you might need. I believe all these wells have now been filed with you now, and, I am wanting to make certain that Utah has approved, or is about to approve, all of these locations as noted.

I am most appreciative of all the help you have given us there in the Oil, Gas and Mining Division.

Best wishes!

George H. Fentress
Agent Consultant Anschutz

cc. Anschutz

July 26, 1977

The Anschutz Corporation
1110 Denver Club Building
Denver, Colorado 80202

Re: Well No's:
#1 Federal 104,
Sec. 4, T. 20 S, R. 21 E,
#2 Federal 675
Sec. 9, T. 20 S, R. 21 E,
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure. However, the approval to drill the #2 Federal 675 shall be contingent upon said well not being completed in the same stratigraphic interval as the well located in the NW1/4 of the NE 1/4 of Section 9.

Should you determine that it will be necessary to plug and abandon this well, 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 commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-019-303⁷⁵~~84~~ (Fed. 104) and 43-019-30384 (Fed. 675).

Very truly yours,

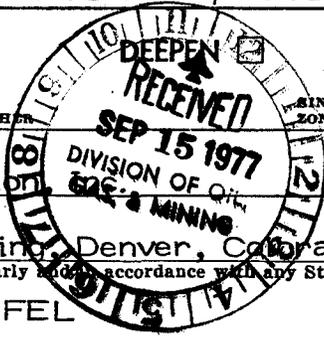
DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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 19. PROPOSED DEPTH 3910'
 20. ROTARY OR CABLE TOOLS Rotary
 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6195' Ground
 22. APPROX. DATE WORK WILL START* 15, Aug. 1977



5. LEASE DESIGNATION AND SERIAL NO. U-15104
 6. IF INDIAN, ALLOTTED OR TRIBE NAME
 7. UNIT AGREEMENT NAME
 8. FARM OR LEASE NAME Federal
 9. WELL NO. #1-Federal 104
 10. FIELD AND POOL, OR WILDCAT Wildcat
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 4, T20S-R21E
 12. COUNTY OR PARISH Grand
 13. STATE Utah

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
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- "A" Location and Elevation
- "B" Ten-Point Compliance Program
- "C" Blowout Preventer Diagram
- "D" Multipoint Requirements
- "E" Access Road Map
- "F" Map of Existing Wells
- "G" Drill Pad Layout; Cut & Fill
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24. SIGNED George Lentress Agent Consultant for
 TITLE The Anschutz Corporation DATE June 25, 1977

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
 APPROVED BY E. W. [Signature] TITLE DISTRICT ENGINEER DATE SEP 14 1977
 CONDITIONS OF APPROVAL, IF ANY:

Approval notice, Utah & state O & M

*See Instructions On Reverse Side

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 104</p>	<p>500' FNL > 1400' FEL (NW$\frac{1}{4}$ NE$\frac{1}{4}$) SEC. 4, T. 20 S., R. 21 E., SLM GRAND CO., UTAH G.E.I. 6195'</p>	<p>U-15104</p>
<p>1. Stratigraphy and Potential Oil and Gas Horizons. The well will spud in the Costlegate Sandstone member of the Price River Formation. Toledo Mining Co. #1 Bull Canyon (G.E.I. 5967') same section, reported the following tops: Dakota - 3270', Cedar Mountain - 3386', Morrison - 3454', Salt Wash - 3644', Summerville - 3954', Entrada - 4044'. Location just north of graben structure.</p> <p>2. Fresh Water Sands.</p>		
<p>Near surface (500'±) sands of the Mancos may contain usable water.</p>		
<p>3. Other Mineral Bearing Formations. (Coal, Oil Shale, Potash, Etc.) This location falls within boundary considered valuable prospectively for geothermal resources. Land is also considered valuable prospectively for coal; however at this location well will spud in lower Price River which is stratigraphically below the main coals zones (Chesterfield & Palisade) of this formation. Lower Mancos or Dakota coals probably have no economic value.</p> <p>4. Possible Lost Circulation Zones.</p>		
<p>(5967') in this section, reported lost circulation at 95, 800', 1628' and 1815'. Toledo Mining Co. #1 (Bull Canyon)</p>		
<p>5. Other Horizons Which May Need Special Mud, Casing, or Cementing Programs. Protect any fresh water aquifers penetrated.</p>		
<p>6. Possible Abnormal Pressure Zones and Temperature Gradients. Willard Lease Oil & Gas Co. Anschutz CC #1 well (G.E.I. 5695') section 3, same township had blowout at 2940' (Dakota Formation).</p>		
<p>7. Competency of Beds at Proposed Casing Setting Points. Probably adequate.</p>		
<p>8. Additional Logs or Samples Needed. None</p>		
<p>9. References and Remarks Within Bull Canyon KGS. Fisher, 1936, USGS Bull. 852</p>		
<p>Date: JUL 20 1977 State Oil & Gas</p>	<p>Signed: R.E.G.</p>	

EXHIBIT "B"
Ten Point Compliance Program of NTL-6
Approval of Operations

Attached to Form 9-331 C
 The Anschutz Corporation
#1 Federal 675
 660' FNL 2104' FWL
 Sec. 10, T 20 S - R 21 E
#2 Federal 675
 1000' FNL, 1000' FEL
 Sec. 9, T 20 S - R 21 E
 All in Grand County, Utah

✓ #1 Federal 104
 500' FNL, 1400' FEL
 Sec. 4, T 20 S - R 21 E

1. The Geologic Surface Formation

All three wells are situated on the edge of the Book Cliffs. The surface formation is the dark gray Mancos Shale. This shale forms the bare, steep hills of badlands-type topography. The cliffs immediately above #2-675 are composed of the resistant buff and gray fine grained massive Castlegate sandstone. Both the Castlegate and the Mancos are Upper Cretaceous in age .

A short distance from the cliffs the Mancos is covered by pediment deposits. These flat erosional surfaces are evident over a large portion of this area. The #1-675 site is located on a terrace of this pediment complex.

2. Estimated Important Geologic Markers

Formation	#1 Fed 675 Depth	#2 Fed 675 Depth	#1 Fed 104 Depth
Mancos Shale	Surface	Surface	Surface
Dakota Sandstone	2522	2879	3369
Cedar Mountain	2666	3023	--
Morrison	2712	3069	3509
Salt Wash	--	--	3600
Entrada	--	--	3790
E TD	2820	3180	3910

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

<u>Formation</u>	<u>#1 Fed 675</u>		<u>#2 Fed 675</u>		<u>#1 Fed 104</u>	
	<u>Depth</u>	<u>Fluid</u>	<u>Depth</u>	<u>Fluid</u>	<u>Depth</u>	<u>Fluid</u>
Dakota	2522	Water	2879	Water	3369	Water
Cedar Mountain	2666	Oil	3023	Oil	--	--
Morrison	2712	Tight	3069	Tight	3509	Oil
Salt Wash	--	--	--	--	3600	Tight
Entrada	--	--	--	--	3790	Gas

4. The Proposed Casing Program

All three wells will run 200' of 8 5/8" new K-55, 24# casing in a 12 1/4" surface hole. Casing will be set with 180 sacks of Class G cement with return flow to the surface.

In the event of production, each well will set 4 1/2" new J-55 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% CaCl₂.

5. The Operator's Minimum Specifications for Pressure Control

Exhibit "C" is a schematic diagram of the blowout preventer equipment planned for use in these wells. The BOP's will be hydraulically tested to the full working pressure after nipping up and after any use under pressure. Pipe rams will be operationally checked each 24 hour period. The blind rams and annular 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 12 cc 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

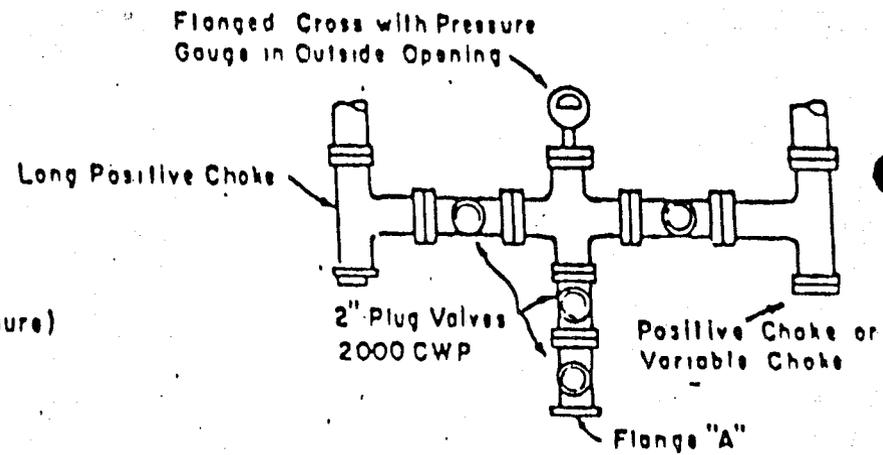
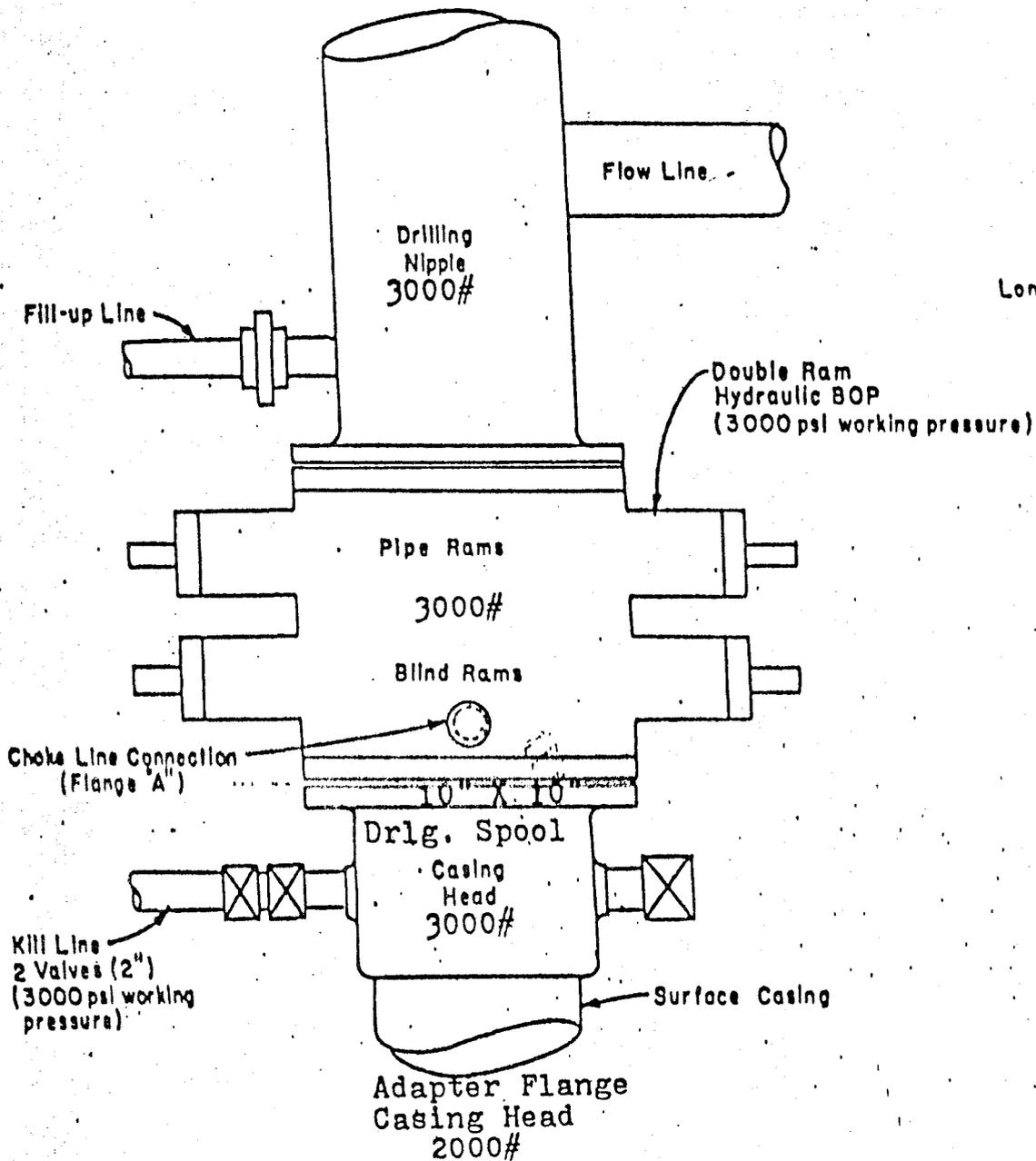
No abnormal pressures or temperatures have been noted or reported in the wells drilled in this area to these depths. No hydrogen sulphide or other hazardous gases or fluids have been found reported or known to exist at these depths in this area.

Exhibit "B"
Ten Point Compliance
Page 4

10. The Anticipated Starting Date and Duration of Operations

The anticipated starting date is set for August 15, 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.



PLAN VIEW - CHOKE MANIFOLD

Blowout Preventer Diagram
 Anschutz Corporation
 #1 - Federal 675
 #2 - Federal 675
 #1 - Federal 104

EXHIBIT "D"
Multipoint Requirements to Accompany APD

Attached to Form 9-331C
The Anschutz Corporation
#1 Federal 675
660' FNL, 2104' FWL
Sec. 10, T 20 S - R 21 E
#2 Federal 675
1000' FNL, 1000' FWL
Sec. 9, T 20 S, R 21 E
All in Grand County, Utah

#1 Federal 104
500' FNL, 1400' FEL
Sec. 4, T 20 S, R 21 E

1. Existing Roads

- A. EXHIBIT "A", 1 and 2 Federal 675 and 1 Federal 104 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. One travels 18 miles on I-70 from Thompson, Utah, east to the Cisco exit. It is approximately 11 miles northwest on gravel and dirt road to the three locations. The red color in Exhibit "E" indicates good, passable road, and green represents access road which must be constructed.
- C. EXHIBIT "F" is prepared from 7½' U.S.G.S. Se-go Canyon Topographic Quadrangle. The red color shows the existing, usable road. The green color indicates the roads which must be built to provide access to each location.
- D. All known existing roads within the required 3 mile radius are shown in Exhibits "E" and "F".
- E. These are not development wells.

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 grades will be steep at places and there will be no need for turnouts or culverts. The roads have been flagged and cut-fill and drainage design will be accomplished as the roads are constructed.

- (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) Exhibit "F" shows all the dry holes within the required two mile radius.
- (3), (4), (5). There are no known temporarily abandoned wells, disposal wells, or drilling wells in the area.
- (6) All known producing wells are indicated in Exhibit "F" with the appropriate symbol.
- (7), (8), (9). There are no known shut-in, injection, or observation wells in this area.

4. Location of Existing and/or Proposed Facilities

- A. There are no existing facilities owned or controlled by operator within a 1 mile radius of the location.
- B.
 - (1) Exhibit "H" shows all anticipated drilling and production facilities.
 - (2) The dimensions of the facilities shown on Exhibit "H" are roughly drawn to scale of 1 inch = 50 feet.

- (3) No materials other than that available on location are anticipated to be needed for construction.
- (4) Rehabilitation, whether the well is productive or dry, will be made on unused areas as soon as possible in accordance with plans drafted in Item 10 following. No water production is anticipated which would require flagging.

5. Location and Type of Water Supply

Water, if needed, will be obtained from the perennial stream in Nash Wash.

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

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

Exhibit "D"
Multipoint Requirements
Page 4

- (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 if 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 and 2 Federal 675 and #1 Federal 104, 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 3 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 for #2-675 and #1-104. #1-675 will be lined. Steel mud pits, if used, will be 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.
- (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

- (1) All three wells are located at the southern edge of the Book Cliffs. The area consists of steep bare shale hills and ridges of badlands-type topography. #1-675 is

Exhibit "D"
Multipoint Requirements
Page 6

situated on a terrace below one of the pediment surfaces extending from the base of the cliffs. The site of #2-675 originally fell on a steep talus slope halfway to the top of the cliffs. This site was moved 480' to the southwest to the bottom of the slope. #1-104 is situated on a pediment bench approximately 1 mile north of #2-675.

The soil at #1-675 is a sandy silty clay, derived from the Mancos Shale. It supports a sparse flora consisting of Juniper, Sage, Snakeweed, Cactus, Shadscale and some grasses.

The sites of #2-675 and #1-104 are composed almost entirely of talus rubble and as such has very little soil. The only vegetation here is Shadscale, Snakeweed and sparse grass. Juniper is present on some of the hill slopes. Both sites are highly erodible.

The observed animal population is rabbit and lizards, with evidence of domestic sheep and cattle. Other wild-life indigenous to the semiarid environment is presumed to exist.

- (2) Grazing is the only observed current surface use in this area. The ownership of the surface is Federal. Private land is crossed only on existing roads.
- (3) #1-675 is on a terrace 50 feet above a dry stream bed. This stream should not be impacted as the reserve pit will be lined and no oil or chemical runoff will be permitted. (Refer to Item 7 above). #2-675 and #1-104 are not near any water.

All the sites have been surveyed for evidence of cultural resources of both historic and prehistoric origin. All the sites have been cleared and approved. The access roads will be surveyed before construction begins. Reference is made to the archaeological report of the Agency of Conservation Archaeology of the San Juan County Museum dated 6 June, 1977, prepared by Pat Zarnowski. Copies of this report have been distributed to all concerned agencies.

Exhibit "D"
Multipoint Requirements
Page 7

The commencement dates for all three wells is scheduled for approximately 5 August, 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

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

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

13. Certification

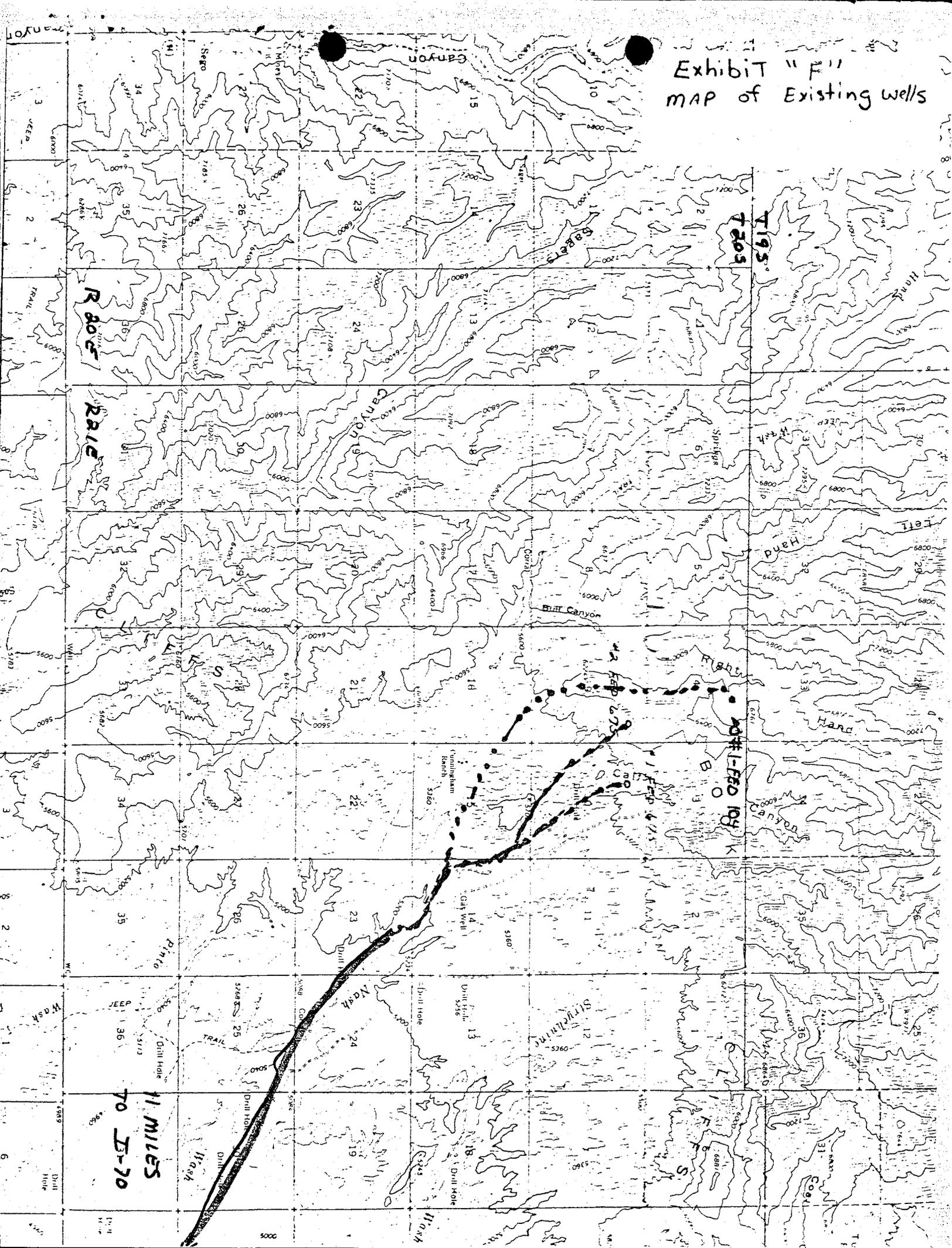
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated 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 25, 1977



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

Exhibit "F"
MAP of Existing wells





1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303-573-5665

October 5, 1977



Mr. Patrick L. Driscoll
Chief Petroleum Engineer
Division of Oil, Gas & Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: Federal 104-1
Section 4, NW NE, T20S-R21E
Grand County, Utah

Dear Mr. Driscoll:

We respectfully request permission to move the drill site location of the subject well from 500' FNL and 1400' FEL of Section 4-T20S-R21E to 768' FNL and 1520' FEL of Section 4. This move is due to topographical and geological conditions, and will place the drill site no closer than 200' from any lease line or quarter-quarter section line. We hope this meets with your approval.

Sincerely,

W. Lee Kuhre
Operations Coordinator

WLK:ch

Enclosures

*Ok.
Within Willow
Creek East Unit
Joe O'waver -
Cunningham.*

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

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. U-15104																				
2. NAME OF OPERATOR The Anschutz Corporation		6. IF INDIAN, ALLOTTEE OR TRIBE NAME																				
3. ADDRESS OF OPERATOR 1110 Denver Club Building, Denver, Colorado		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 500' FNL, 1400' FEL		8. FARM OR LEASE NAME Federal 104																				
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6195'	9. WELL NO. 1																				
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT Wildcat																				
<table border="0"> <tr> <td colspan="2">NOTICE OF INTENTION TO:</td> <td colspan="2">SUBSEQUENT REPORT OF:</td> </tr> <tr> <td>TEST WATER SHUT-OFF <input type="checkbox"/></td> <td>PULL OR ALTER CASING <input type="checkbox"/></td> <td>WATER SHUT-OFF <input type="checkbox"/></td> <td>REPAIRING WELL <input type="checkbox"/></td> </tr> <tr> <td>FRACTURE TREAT <input type="checkbox"/></td> <td>MULTIPLE COMPLETE <input type="checkbox"/></td> <td>FRACTURE TREATMENT <input type="checkbox"/></td> <td>ALTERING CASING <input type="checkbox"/></td> </tr> <tr> <td>SHOOT OR ACIDIZE <input type="checkbox"/></td> <td>ABANDON* <input type="checkbox"/></td> <td>SHOOTING OR ACIDIZING <input type="checkbox"/></td> <td>ABANDONMENT* <input type="checkbox"/></td> </tr> <tr> <td>REPAIR WELL <input type="checkbox"/></td> <td>CHANGE PLANS <input type="checkbox"/></td> <td>(Other) _____</td> <td>(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</td> </tr> </table>		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) _____	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 4-T20S-R21E
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) _____	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)																			
		12. COUNTY OR PARISH Grand																				
		13. STATE Utah																				

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.)*

We respectfully request permission to move the drill site location of the subject well from 500' FNL and 1400' FEL of Sec. 4-T20S-R21E to 768' FNL and 1520' FEL of Section 4. This move is due to topographical and geological conditions, and will place the drill site no closer than 200' from any lease line or quarter-quarter section line. We hope this meets with your approval.

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING

DATE: Oct. 12, 1977

BY: Ph Driscoll



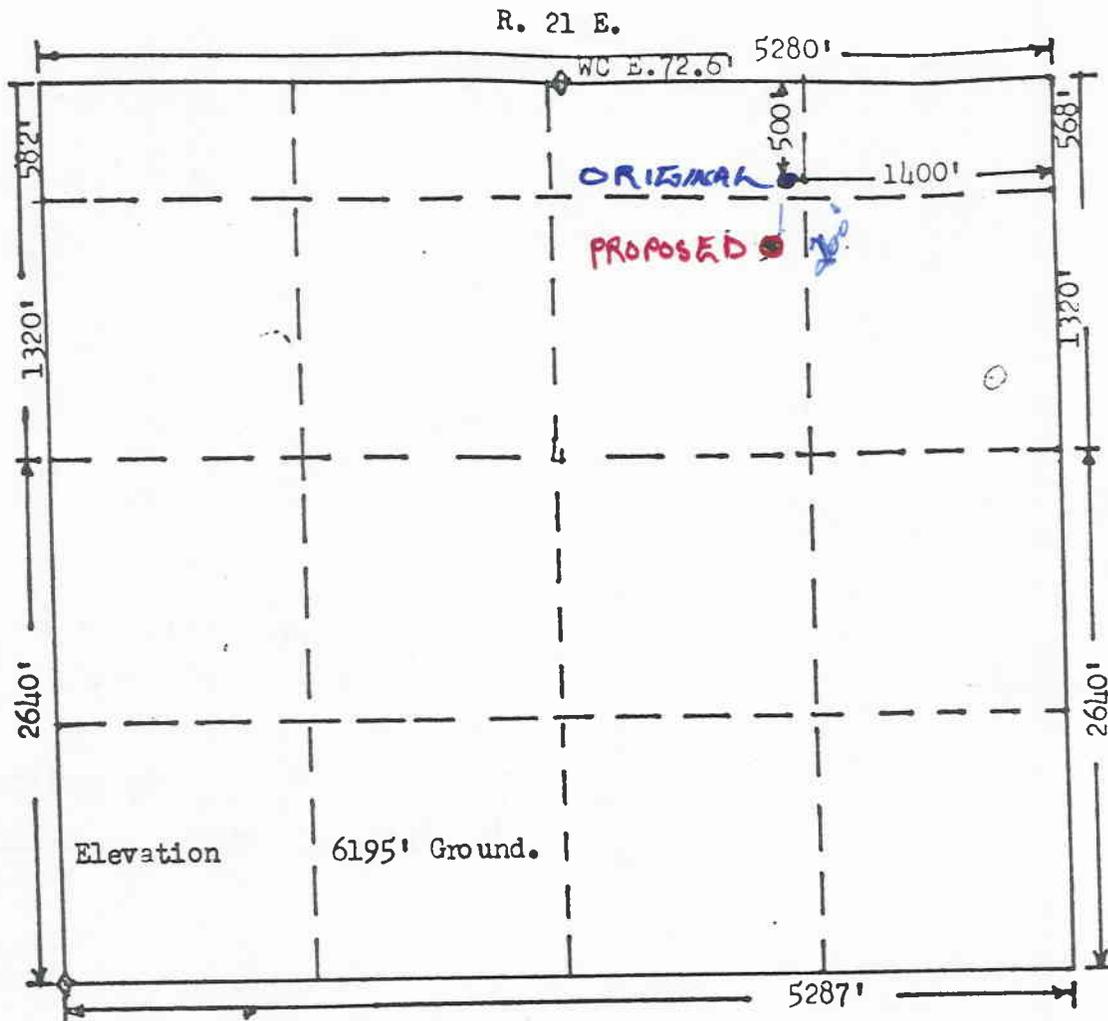
18. I hereby certify that the foregoing is true and correct

SIGNED W. Lee Kuhre TITLE Operations Coordinator DATE October 5, 1977

(This space for Federal or State office use)

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

(REVISED)



T.
20
S.

Scale 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado
 has in accordance with a request from George Fentress
 for The Anschutz Corporation
 determined the location of #1 Federal-104
 to be 500' FN & 1400' FE Section 4 Township 20 S.
 Range 21 E. of the Salt Lake Base and Meridian
 Grand County, Utah

I hereby certify that this plat is an
 accurate representation of a correct
 survey showing the location of
 #1 Federal-104

Date: 6-20-77

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

ATTACHMENT 2-A

SUMMARY OF ENVIRONMENTAL IMPACT EVALUATION EIA NO. 612
DATE 8-25-77

OPERATOR Amochutz
LEASE # U-15104
WELL NO. 1 Fed 104
LOC. 1/4 NW 1/4 NE SEC. 4
T. 20S R. 21E
COUNTY Grand STATE Ut
FIELD Wildcat
USGS Cook
BLM Cynut
REP: Kehue
DIRT
 ENHANCES
 NO IMPACT
 MINOR IMPACT
 MAJOR IMPACT

	Construction				Pollution			Drilling Production			Transport Operations			Accidents		Others	
	Roads, bridges, airports	Transmission lines, pipelines	Dams & impoundments	Others (pump stations, compressor stations, etc.)	Burning, noise, junk disposal	Liquid effluent discharge	Subsurface disposal	Others (toxic gases, noxious gas, etc.)	Well drilling	Fluid removal (Prod. wells, facilities)	Secondary Recovery	Mineral processing (ext. facilities)	Others	Trucks	Pipelines	Others	Spills and leaks

Land Use																								
	Forestry	Grazing	Wilderness	Agriculture	Residential-Commercial	Mineral Extraction	Recreation	Scenic Views	Parks, Reserves, Monuments	Historical Sites	Unique Physical Features	Birds	Land Animals	Fish	Endangered Species	Trees, Grass, Etc.	Surface Water	Underground Water	Air Quality	Erosion	Other	Effect On Local Economy	Safety & Health	Others
	NR	/	NR	NR	NR	NR	/	/	NR	now known	NR	/	/	NR	/	/	NR	?	/	/		0		
	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Revised access etc.
CC: Reg - Jule
Reg - Denver
BLM - Wash w/o material
Blue Oil and

LEASE U-15104

DATE 8-25-77

WELL NO. 1 Federal 104

LOCATION: NW 1/4 NE 1/4, SEC. 11, T. 20S, R. 21E

FIELD Wildcat COUNTY Grand STATE Utah

ENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-B

I. PROPOSED ACTION

Anschutz Corporation (COMPANY) PROPOSES TO DRILL AN OIL AND GAS TEST WELL WITH ROTARY TOOLS TO ABOUT 3910 FT. TD. 2) TO CONSTRUCT A

DRILL PAD 125 FT. X 200 FT. AND A RESERVE PIT 50 FT. X 50 FT.

3) TO CONSTRUCT 18 FT. WIDE X 3/8 MILES ACCESS ROAD AND UPGRADE 18

FT. WIDE X 2.3 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

(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 *EAR. Land Resources Act*
~~OTHER ENVIRONMENTAL ANALYSIS~~ *Aug. 13, 1975*

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) *Possible heavy accelerated erosion due to cuts on steep side hills if proposed access is used*

RECEIVED
OIL AND GAS OPERATIONS
U.S. GEOLOGICAL SURVEY
2
AUG 31 1977
SALT LAKE CITY

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) ^{Access} LOCATION WAS MOVED as shown on attached ~~TO AVOID~~

LARGE SIDEHILL CUTS NATURAL DRAINAGE OTHER

Map to avoid large sidehill cuts that could possibly cause heavy erosion

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 8-25-77

INSPECTOR G. H. Cook

E. L. ...

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

April 29, 1978

MEMO TO FILE:

Re: Anschutz Corp.
Well No. Federal 104 #1
Sec. 4, T. 20S., R. 21E.
Grand County, Utah

Mr. Lee Kuhne called to report the spudding of the above named well on the above date. The well was spudded-in at 3:30 p.m. April 29, 1978.



PATRICK L. DRISCOLL
CHIEF PETROLEUM ENGINEER
DIVISION OF OIL, GAS, & MINING

PLD/ksw

THE ANSCHUTZ CORPORATION

FEDERAL 104 No. 1

SECTION 4 - RANGE 20 SOUTH - TOWNSHIP 21 EAST

GRAND COUNTY, UTAH

GEOLOGIC REPORT

BY

WAYNE POWELL

DENVER, COLORADO

JULY, 1978

INDEX

	PAGE
Geologic Summary	1 a.
Summary of Well Data	1
Formation Tops	3
Electric Logging Program	3
Log Analysis	4
Oil and Gas Shows	5
Completion Tests	11
Summary of Daily Operations	12
Hole Deviation Record	13
Bit Record	13
Sample Log	Pocket

GEOLOGIC SUMMARY

The Anschutz Federal 104 No. 1 spudded in the Buck Tongue shale member and was drilled to total depth of 4329 feet in the Entrada sandstone. It evaluated potential sandstones in the Dakota, Cedar Mountain, Salt Wash and Entrada formations, and was completed for appx. 5300 MCFGPD from the upper Dakota. Nearest previous production was about one-half mile west in the Toledo Mining No. 1 Bull Canyon. It was completed in the Salt Wash for 150 BO & 750 MCFGPD but is now P & A. The closest indicated Dakota production is one mile southeast in the Pease No. 1 Calf Canyon (SW SE 3 - 20S - 21E) which flowed an estimated 1800 MCFD from the Dakota. It was completed in March, 1977 pumping 110 BOPD from Cedar Mountain. A dry hole was drilled one-half mile to the east of the current test by Willard Pease in 1977 into the Entrada sandstone. No test information is available on this well.

The subject well is located about one-half mile southwest of the Cisco Dome anticlinal axis which plunges toward the northwest for several miles beyond this location. This well proved to be in a low structural position, at least 100 feet lower than was anticipated. It is 50 feet lower than the No. 1 Bull Canyon to the west and 120 feet lower than the dry hole, one-half mile east. An obvious explanation for this low structural position is not apparent. The stratigraphic interval from the base of the Dakota silt to the Entrada seems to be of normal thickness so channel erosion at the base of the Cedar Mountain has not caused the lower structure. From log correlation a fault plane was not penetrated in this well. However because of configuration of the Cisco Dome nose in this area a fault near this well, trending in a north or northeastward direction is certainly indicated. Some faulting is associated with the old Uncompahgre Uplift which underlies this area. These faults have small displacements and may die out in the Mancos shale before reaching the surface rocks. The small displacements of these faults may prevent their detection and mapping by geophysical methods.

Hydrocarbon shows were found in the Dakota, Cedar Mountain and Salt Wash sandstones in this well. The well was drilled with air 30 feet into the Dakota formation where it had to be mudded up because of the large flow of gas from the Dakota sands at 3550 feet. Since casing was to be run in the well, it was then drilled to total depth without further testing. Scattered sample shows consisting of fluorescence and weak cut were found in the Cedar Mountain sandstone and conglomerate. However these shows could not be readily evaluated in samples because of the very poor sample quality through most of the Cedar Mountain zone. (See shows 3 & 4). Log analysis was generally unfavorable through the Cedar Mountain formation from 3624 to 3706 feet. The best zone at 3662 - 68 feet had 13% porosity and water saturation of 65%, thus the Cedar Mountain is believed to be non-productive. Two of the Salt Wash sandstones had sample shows and indicated gas from log analysis so casing was run through these sands for testing. The upper sand at 3942 - 54 had the better

sample show consisting of good fluorescence, a definite cut and some weak oily odor. Log analysis indicated possible hydrocarbons in this interval with 6 feet of 13% porosity and a calculated water saturation at 40%. (Show No. 5). It was perforated and gauged 117 MCFGPD. The other Salt Wash show was in the sandstone at 4008 - 20 feet. It had poor sample shows and was generally tight from log analysis. (See Show No. 6). It was perforated and swabbed dry with only a weak show of gas, TSTM. These two tests have adequately evaluated the Salt Wash which appears capable of some gas production.

The large gas potential from the Dakota is attributed to the zone of good porosity at 3550 - 54 feet. However, unless this thin unit is connected to a thicker sandstone, the gas reserves will be rather small. However, this well certainly enhances the Dakota potential of this area. Offset possibilities appear to be good in several directions. These include offsets to the south, northeast and possibly to the east in the northwest quarter of Section 3 where a previous dry hole was drilled. The Anschutz Federal 769 No. 2 has been drilled to the north and gauged 200 MCFGPD from the upper Dakota after perforating. It was fraced and currently is being flowed to clean up. Future tests should penetrate into the lower Salt Wash to evaluate the zones which had shows in this well.

SUMMARY OF WELL DATA

OPERATOR: The Anschutz Corporation

PARTNERS: NARMCO *NICOR*

WELL: Federal 104 No. 1

LOCATION: *768 520*
500 FNL, 1400 FEL, NW NE Sec. 4, T. 20 S.,
R. 21 E., Grand County, Utah.

ELEVATIONS: KB: 6169 feet
GL: 6159 feet

FIELD: Wildcat, Cisco Dome area.

DRILLING SUPERVISOR: Turnkey Well; Newton Burkhalter at end of well.

CONTRACTOR: Pease Drilling Co., Rig No. 1
Toolpusher - Bill Truell
Type Rig - Failing Stratmaster
Power - Twin 671 GMC's.
Pump - Emsco D-175 with twin 671 GMC's.
Derrick - L. C. Moore, telescope, 87 foot.

SPUD DATE: April 29, 1978

REACHED T. D. : May 12, 1978

COMPLETION DATE: To run four point test at a later date.

TOTAL DEPTH: 4320 feet in Entrada
4329 feet -- Log T. D.

STATUS: Gas Well.

INITIAL POTENTIAL: Dakota appx. 5300 MCFGPD, waiting on final test.
(July 12, 1978)

HOLE SIZE & CASING:

Hole	Casing
12 1/4" 0 to 322 feet	8 5/8" at 319 feet with 235 sx.
7 7/8" 322 to 4320 feet	4 1/2" at 4119 feet with 300 sx.

CORES: None

TESTS: 3539 feet (Dakota), Open hole flow test, gauged 3244 MCFD.
3550 feet (Dakota), Open hole flow test, gauged appx. 7000 MCFD.
3526-55 feet (Dakota) completion zone.
3946-52 feet (Salt Wash) completion test, gauged 117 MCFD.
4010-20 feet (Salt Wash) completion test, swab dry, gas TSTM.

LOGGING PROGRAM: Sample Log 3000 to 4320 feet by Wayne Powell.
E - Logs 50 to 4323 feet by Schlumberger.

SAMPLE INTERVAL: 30 foot 2000 to 3000 feet.
10 foot 3000 to 4320 feet.

CIRCULATE SAMPLES: None, caught extra samples from several of the drilling breaks.

SAMPLE CUTS & STORAGE: Cloth bags stored at Am. Strat., Denver.

MUD PROGRAM: Air Drilled. 0 to 3550 feet.
Mud Drilled 3550 to 4320 feet.
Note: Convert to mud at 3550 to kill gas flow.
Mud by Northern Drilling Fluids, Andy Sandberg, Engr.

WATER ZONES: None encountered above 3550 feet where hole was converted to mud.

LOST CIRCULATION: 3550 feet - lost apx. 700 barrels while mudding up to kill well.

COMPLETION DATA: Set 4 1/2 inch casing at 4119 feet.
Perf. Salt Wash 4010-20, swabbed dry with show of gas, TSTM.
Perf. Salt Wash 3946-52, gauged 117 MCFD.
Set bridge plug above perfs.
Perf. Dakota 3526-30 & 3549-55, gauged 5300 MCFGPD, no fluids.

FORMATION TOPS

<u>Age</u>	<u>Formation</u>	<u>Depth</u>	<u>Datum</u>	<u>Interval Thickness</u>
Cretaceous	Buck Tongue	Surface	+6169	74
	Castlegate	74 ?	+6095	72
	Mancos	146	+6023	3326
	B/Dakota Silt	3472	+2697	50
	Dakota	3522	+2647	102
	Cedar Mountain	3624	+2545	82
Jurassic	Morrison	3706	+2463	183
	Salt Wash	3889	+2280	315
	Summerville	4204	+1965	60
	Entrada	4264	+1905	65
	Log Total Depth	4329	+1840	

ELECTRIC LOG PROGRAM

<u>Company</u>	<u>Type Log</u>	<u>From</u>	<u>To</u>
Schlumberger	Dual Induction - Laterolog	322	4323'
Schlumberger	G. R. - Density - CNL	50	323
		3000	4327

OIL AND GAS SHOWS

Show & Fm: No. 1 Dakota

Depth: 3539 feet.

Type Show: Gas.

Lithology: Sandstone, no sample because of large gas volume.

Porosity: Log porosity 15%.

Gas Flow: Gauged 3244 MCFD, FP 75 psi on 1 1/4 inch choke; 30 minute test. Gas flare 30 to 40 feet from blooie line.

Drilling Time: 0.7 min. per foot.

Evaluation: Good gas show while drilling with air, no indication of oil or water.

OIL AND GAS SHOWS

Show & Fm: No. 2 Dakota

Depth: 3550 feet.

Type Show Gas

Lithology: Sandstone, no samples because of large gas flow.

Porosity: Log calculated porosity 18%.

Gas Flow: Gas increased & gauged apx. 7000 MCFD,
FP 130 psi on 1 1/4 inch choke; 20 min.
test. Gas flare from blooie line 50 to
70 feet.

Drilling Time 2 min. per foot.

Evaluation: Excellent show of gas, no indication of oil or
water. Log calculated Sw was 35%.

OIL AND GAS SHOWS

Show & Fm: No. 3 Cedar Mountain.

Depth: 3630 - 3660 feet.

Type Show: Sample show after mudding up.

Lithology: Very poor samples after trip at 3636 feet. Trace sandstone, lt. gray, soft, fine grained, ang to sub-ang, fair sorting, mod. clay-fill, calcareous, tr. white chert pebbles.

Porosity: Poor porosity in samples, log calculated porosity 8 to 13%.

Sample Shows: Fair yellow-white fluor, fair cut, possible trace of dark oil stain.

Drilling Time: 3630 - 45 feet, 4 min. per foot.
3645 - 55 feet, 9 min. per foot.
3655 - 60 feet, 3 min. per foot.
3660 - 65 feet, 2 min. per foot.

Evaluation: Questionable to poor show because of very poor sample quality. Log calculated Sw was 90% from 3633-40 and 65% from 3662-68 feet. This zone appears to be non-productive.

OIL AND GAS SHOWS

Show & Fm: No. 4 Cedar Mountain.

Depth: 3680 - 3700 feet.

Type Show: Sample show.

Lithology: Conglomerate, white, large angular frags of chert & quartz, white, lt. gray, tr. tan with matrix of siltstone, white, hard, siliceous and grading to vfg, silty sandstone. Some fg to mg sandstone.

Porosity: Very poor porosity in samples. Log porosity 10 to 12%.

Sample Shows: No stain, bright yellow-white fluor -- part mineral fluor, v. weak cut. Trace dead oil stain.

Drilling Time: 3670 - 80 feet, 4 min. per foot.
3680 - 3700 feet, 4.5 min. per foot.
3700 - 10 feet, 6 min. per foot.

Evaluation: Very poor sample show, log calculated Sw is 85%.
Appears non-productive.

OIL AND GAS SHOWS

Show & Fm: No. 5 Salt Wash

Depth: 3940 - 3960 feet.

Type Show: Sample show.

Lithology: Sandstone, white - lt. gray, mod. soft, abund. loose grains, fine & medium grained, ang to sub-ang, part calcareous, sl. clay-filled.

Porosity: Poor to fair in samples. Log porosity 13%.

Sample Shows: No stain, very weak oily odor, good yellow-white fluor, weak cut; trace dead oil stain.

Drilling Time: 3925 - 35 feet, 11 min. per foot.
3935 - 45 feet, 4.5 min. per foot.
3945 - 55 feet, 12 min. per foot.
3955 - 70 feet, 10 min. per foot.

Evaluation: Fair show in samples. Log calculated Sw was 40%. Potential gas - condensate zone.
(Tested 117 MCFD, SIP 800 psi, plugged off for Dakota completion)

OIL AND GAS SHOWS

Show & Fm: No. 6 Salt Wash.

Depth: 4005 - 4015 feet.

Type Show: Sample show.

Lithology: Sandstone, white - lt. gray, mod. hard, fg & vfg, sub-ang, calcareous, sl. argillaceous.

Porosity: Poor porosity in samples, log porosity 9%.

Sample Shows: No stain, fair yellow-white fluor in 20% of sandstone, very weak cut. Show was in the fg sand, no show in vfg sandstone.

Drilling Time: 4000 - 05 feet, 8 min. per foot.
4005 - 20 feet, 5 min. per foot.
4020 - 30 feet, 11 min. per foot.

Evaluation: Poor sample show. Log analysis gives Sw of 60%.
Probably non-productive.
(Perfed & swabbed dry, gas TSTM)

COMPLETION TESTS

Test No. 1 Salt Wash Fm.

Perfs: 4010 - 4020 (10 feet)

Recovery: Swabbed dry with show of gas, TSTM.

Test No. 2 Salt Wash Fm.

Perfs: 3946 - 3952 (6 feet)

Recovery: Good blow to surface after perforating.
 Gauged 117 MCFGPD, no fluid (?)

SIP: 800 psi.

Frac: None, decided to set retrievable plug above
 perfs and test the Dakota gas zone.

Test No. 3 Dakota Fm.

Perfs: 3526 - 3530 & 3549 - 3555 (10 feet)

Recovery: Gauged 5300 MCFGPD natural, dry gas,
 no fluids.

Frac: None.

Initial Potential: Dakota 3526 - 3555, to run completion test
 at later date.

SUMMARY DAILY OPERATIONS

<u>DATE</u>	<u>DEPTH</u>	<u>OPERATION</u>
APRIL, 1978		
29	0 feet	- Spud well, drilling 12 1/4 inch hole.
30	139 feet	- Repairing rig.
MAY, 1978		
1	322 feet	- WOC & nipple up; 8 5/8 inch at 319 feet with 235 sacks.
2	1420 feet	- Drilling with air.
3	3229 feet	- Drilling with air.
4	3590 feet	- Drilling with mud; mud up at 3550 feet to kill strong flow of gas. Lost 700 barrels of mud at 3550 feet.
5	3720 feet	- Drilling with mud.
6	3870 feet	- Drilling with mud.
7	3940 feet	- Drilling with mud, lost 12 Hrs. replacing pump motor.
8	4080 feet	- Drilling with mud.
9	4200 feet	- Drilling with mud.
10	4320 feet	- Logging, going in hole with induction tool.
11	4320 feet	- Finished logging and preparing to run casing. Set 4 1/2 inch at 4119 feet with 300 sacks, released rig this date.
12	4320 feet	- Waiting on completion.

HOLE DEVIATION RECORD

<u>DEPTH</u>	<u>DEGREES</u>
500	3
700	3 3/4
900	1 1/2
1400	2
1697	1 1/2
2150	1 1/2
2700	1 3/4
3323	1 1/2

BIT RECORD

<u>No.</u>	<u>Company</u>	<u>Size</u>	<u>Type</u>	<u>In</u>	<u>Out</u>	<u>Footage</u>	<u>Hours</u>
1	Security	12 1/4"	S 4 J	0	322	322	17
2	Reed	7 7/8"	FP-54 J	322	791	469	8
3	Reed	7 7/8"	Y-13 TJ	791	3323	2532	30
4	Reed	7 7/8"	FP-54 J (RR)	3323	3636	313	20
5	Reed	7 7/8"	FP-51 J	3636	4320	684	105

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

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

2

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

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

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

2. NAME OF OPERATOR
The Anschutz Corporation

3. ADDRESS OF OPERATOR
2400 Anaconda Tower, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 768' FNL, 1520' FEL
At top prod. interval reported below
At total depth

14. PERMIT NO. _____ DATE ISSUED _____

15. DATE SPUDDED 4-29-78 16. DATE T.D. REACHED 5-10-78 17. DATE COMPL. (Ready to prod.) 6-22-78

18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 6159 GR 6205 KB 19. ELEV. CASINGHEAD 6195

20. TOTAL DEPTH, MD & TVD 4300' 21. PLUG, BACK T.D., MD & TVD 3920' 22. IF MULTIPLE COMPL., HOW MANY* _____ 23. INTERVALS DRILLED BY _____ ROTARY TOOLS _____ CABLE TOOLS _____

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Dakota 3520'-3526' MD
3549'-3555' MD

26. TYPE ELECTRIC AND OTHER LOGS RUN
DILL-GR, FDC-CNL-GR, Geologic Report, Geologic Well Log

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	319	12 1/4"	230 sx	None
4 1/2"	10.5#	4119'	7-7/8"	300 sx	None

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2.375	3565'	

31. PERFORATION RECORD (Interval, size and number)
3520-26 3/8" holes 2 SPF
3549-55 3/8" holes 2 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION
DATE FIRST PRODUCTION _____ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) S.I. GW

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
<u>7/20/78</u>	<u>18</u>	<u>28/64</u>	<u>→</u>	<u>0</u>	<u>3600</u>	<u>0</u>	<u>-----</u>
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
<u>343</u>	<u>600</u>	<u>→</u>	<u>0</u>	<u>4800</u>	<u>0</u>	<u>-----</u>	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
Flared

35. LIST OF ATTACHMENTS _____ TEST WITNESSED BY J. N. Burkhalter

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED R.B.R. TITLE Production Coordinator DATE 12-4-78

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

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

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

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

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

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

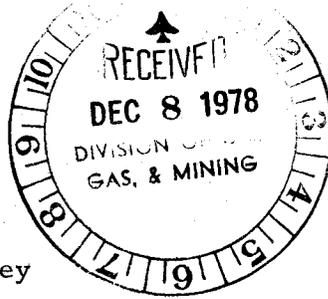
FORMATION	TOP		BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH				MEAS. DEPTH	TRUE VERT. DEPTH
Dakota	3522'		3706'	Sandstone - Gas	Dakota	3522'	3522'
Morrison	3706'		3889'	Wet - Tite	Morrison	3706'	3706'
Salt Wash	3889'		4266'	Wet - Tite	Salt Wash	3889'	3889'
Entrada	4266'		Not Reached	Wet - Tite	Entrada	4266'	4266'

38. GEOLOGIC MARKERS

NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Dakota	3522'	3522'
Morrison	3706'	3706'
Salt Wash	3889'	3889'
Entrada	4266'	4266'



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



December 6, 1978

Mr. Edgar Guynn
District Engineer
U. S. Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Re: Federal 104 No. 1
Sec. 4, T.20S-R.21E
Grand County, Utah

Dear Mr. Guynn:

Enclosed, submitted in duplicate are the Well Completion or Recompletion Report and Log, and the Geological Report for the referenced location. Photocopies of the Electric and Geological logs are also enclosed.

It is our understanding that copies of these logs have already been forwarded to you. Please contact us if your records are not current and we will make every effort to bring you up to date.

Thank you.

Cordially,

Peter B. Doty
Operations Coordinator

PBD/mle
Enclosures:



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



May 18, 1979

Mr. Ed Guynn, District Engineer
U. S. Geological Survey
8426 Federal Building
125 S. State Street
Salt Lake City, Utah 84138

Re: Federal 104 No. 1
Sec. 4, T20S, R24E
Grand County, Utah

Dear Mr. Guynn:

Enclosed please find three copies of a Sundry Report on the subject well correcting the improperly reported perforation intervals reported upon our Completion report Form 9-330.

Sincerely,


Peter B. Doty
Operations Coordinator

PBD:jp

cc: ✓ Cleon Feight

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.
U-15104

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal 104

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., E., M., OR BLEK. AND SURVEY OR AREA
Sec. 4, T20S, R21E

12. COUNTY OR PARISH | 13. STATE
Grand | Utah

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
The Anschutz Corporation

3. ADDRESS OF OPERATOR
2400 Anaconda Tower, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
768' FNL 1520' FEL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
6159 Gr. 6205 K 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 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"/>	
(Other) Corrections to Form 9-330 <input checked="" 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.)*

On Form 9-330 Well Completin and Report on Wells submitted 12-4-78, the perforation intervals were incorrectly reported. The correct intervals are:

3526-3530 (4') 2 JPF 3/8" holes
3549-3555 (6') 2 JPF 3/8" holes

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

SIGNED PETER B. DOTY TITLE Operations Coordinator DATE 5-3-79

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



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

August 3, 1979

9/1/79

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

Dear Jack,

This is to inform you that we have recently sold all of our interests in the South Flank of the Unita Basin and have turned operations of the following producing properties in Grand County to Narmco, Inc.:

<u>Lease</u>	<u>Well</u>	<u>Location</u>
Federal 258	1-A	Sec. 5 T18S, R24E
Federal 258	2	Sec. 5 T18S, R24E
Federal 258	6	Sec. 5 T18S, R24E
Federal 675	1	Sec. 10 T20S, R21E
<u>Federal 104</u>	<u>1</u>	Sec. 4 T20S, R21E <i>30375</i>
Federal 769	2	Sec. 33 T19S, R21E
USA 4970	1	Sec. 4 T20S, R21E

Should any information be required on the above wells or any others which we operated in Grand County, I suggest you contact:

Narmco, Inc. Attn: Paul Hughes
P.O. Box 283
Houston, Texas 77001

If I can be of any further assistance please give me a call.

Sincerely,

Peter B. Doty
Operations Coordinator

PBD/bv

cc: Ed Guynn, USGS, SLC
Jean Laws, USGS, Casper
Jane Henry, USGS, Casper
Mr. Gail Prince, Utah Division of Lands

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Lease No. 71-0104

Form 9-329 Rev. Feb 76
OMB 42-RO356

Communitization Agreement No. N/A
Field Name N/A
Unit Name N/A
Participating Area N/A
County Grand State Utah
Operator TEKOMA PRODUCTION COMPANY
(FORMERLY NARMCO, INC (DEL.))
 Amended Report

MONTHLY REPORT
OF
OPERATIONS

Operator name change

The following is a correct report of operations and production (including status of all unplugged wells) for the month of
OCTOBER, 19 79

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 259, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the leases. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (5)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

Well No.	Sec & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod	Barrels of Oil	MCF of Gas	Barrels of Water	Remarks
1	4	20S	21E	S.I. Fed 104-#1					WO Pipeline Connection

*If none, so state.

Disposition of production (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
On hand, Start of Month	-0-	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Produced	-0-	-0-	-0-
Sold	-0-	-0-	-0-
Willed or Lost	-0-	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Flared or Vented	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Used on Lease	-0-	-0-	XXXXXXXXXXXXXXXXXXXX
Injected	-0-	-0-	XXXXXXXXXXXXXXXXXXXX
Surface Pits	-0-	-0-	-0-
Other (Identify)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	-0-
On hand, End of Month	-0-	-0-	-0-
API Gravity/BTU Content	-0-	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX

Authorized Signature: Sharon H. Foudella

Address: P.O. Box 283 Houston, Tx. 77001

Production Coordinator

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other

2. NAME OF OPERATOR
Texoma Production Co.

3. ADDRESS OF OPERATOR
P.O. Box 90996, Houston, TX 77090

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE:
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

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

5. LEASE
71-015104-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
n/a

7. UNIT AGREEMENT NAME
n/a

8. FARM OR LEASE NAME
Federal

9. WELL NO.
104-1

10. FIELD OR WILDCAT NAME
Bull Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 4 20S, 21E

12. COUNTY OR PARISH | 13. STATE
Grand | Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)

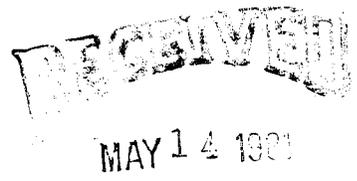
REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	<input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	<input type="checkbox"/>
(other) <u>Change of operator</u>		

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

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.)*

New operator effective 4/1/81:

Buckhorn Petroleum Co.
P. O. Box 5928 T.A.
1625 Broadway, Ste. 1200
Denver, Colo. 80217



Subsurface Safety Valve: Manu. and Type _____ DIVISION S&F @ _____ Ft.

18. I hereby certify that the foregoing is true and correct
SIGNED Cindy J. Drexler TITLE Chief Prod. Stat. DATE May 12, 1981

(This space for Federal or State office use)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other

2. NAME OF OPERATOR
BUCKHORN PETROLEUM CO.

3. ADDRESS OF OPERATOR
P.O. Box 5928 T.A.; Denver, CO 80217

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) 768' FNL & 1520' FEL(NW NE) 4-20S-21E
AT SURFACE: Grand County, Utah
AT TOP PROD. INTERVAL: Approx. Same
AT TOTAL DEPTH: Approx. Same

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other) <u>Change of Operator</u>			

5. LEASE
U-15104

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Willow Creek East

8. FARM OR LEASE NAME
FEDERAL 104

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Bull Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA NW $\frac{1}{4}$ NE $\frac{1}{4}$
Sec. 4-T20S-R21E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.
43-019-30375

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6195' GL; 6205' KB

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

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.)*

Effective 7:00 a.m. 11-1-82 Buckhorn Petroleum Co. has sold its interest in the subject well and lease, and relinquished operations thereof to:

MR. J. C. THOMPSON
c/o National Fuel Corp.
1700 Broadway, Suite 1219
Denver, CO 80290
Phone: 303/839-5748

By copy of this notice, we are hereby advising Mr. Thompson of his responsibility to post the appropriate bond and to fulfill all obligations of Operator in accordance with the rules and regulations of the local, state, and federal governing bodies.

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

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

SIGNED Mark E. Weems TITLE Production Engr. DATE December 2, 1982

(This space for Federal or State office use)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

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
J. C. Thompson

3. ADDRESS OF OPERATOR
1700 Broadway; Denver, Colorado 80290

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
768' FNL, 1520' FEL
(NE-SW-NE)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
6195 GR

5. LEASE DESIGNATION AND SERIAL NO.
U-15104

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
#1 Federal 104

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA
Sec. 4-T20S-R21E

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 :

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

SUBSEQUENT REPORT OF :

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

New operator. (Formerly Buckhorn Petroleum Co.)

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

SIGNED J. C. Thompson TITLE Operator DATE Dec. 3, 1982

(This space for Federal or State office use)

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

Westwater #3
Sec 13, T17S-R23E, NENW
Grand County, UT

Moon Ridge #31-15
Sec. 15, T17S-R21E NWNE
Grand County, UT

Segundo Canyon 2
Sec 33, T16S-R21E SWSE
Grand County, UT

Segundo Canyon 23-4
Sec. 4, T17S-R21E NESW
Grand County, UT

Westwater M-15
Sec. 2, T17S-R23E NESE
Grand County, UT

Bull Canyon #1 4970
Sec. 4, T20S-R21E SWSE
Grand County, UT

Westwater Federal C#1
Sec. 12, T17S-R23E NENW
Grand County, UT

Westwater Federal D#1
Sec. 11, T17S-R23E SESE
Grand County, UT

Westwater Federal B#1
NWSE Sec. 17-T17S-R24E
Grand County, UT

Westwater #5
NESW Sec. 18-T17S-R24E
Grand County, UT

Bull Canyon #1 104
NWNE Sec. 4, T20S-R21E
Grand County, UT

Federal #1
SWSW Sec. 8-T17S-R24E
Grand County, UT

Castlegate C-2
SWNW Sec. 18-T17S-R24E
Grand County, UT

Castlegate C-4
NENW Sec. 13-T17S-R23E
Grand County, UT

M-3 Horse Point
NWNW Sec. 7-T17S-R24E
Grand County, UT

M-4
SENE Sec. 6-T17S-R24E
Grand County, UT

M-6 Horse Point
NESE Sec. 32-T17S-R24E
Grand County, UT

E-2
SWSE Sec. 7-T17S-R24E
Grand County, UT

E-3
NENW Sec. 17-T17S-R24E
Grand County, UT

E-5
NWNE Sec. 18-T17S-R24E
Grand County, UT

Dakota M-1
SESW Sec. 1-T17S-R23E
Grand County, UT

Horse Point M-7
SWNW Sec 6-T17S-R24E
Grand County, UT

#1 Fed 675
NENW Sec 10-T20S-R21E
Grand County, UT

Castlegate C-5 (SI)
NWSE Sec. 12-T17S-R23E
Grand County, UT

Castlegate C-6
SENE Sec. 18-T17S-R24E
Grand County, UT

Castlegate C-7
NESE Sec. 7-T17S-R24E
Grand County, UT

Castlegate D-2
NWNE Sec. 18-T17S-R24E
Grand County, UT

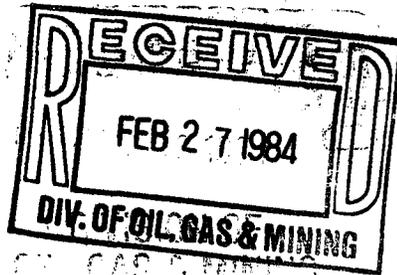
Castlegate C-10
NWNE Sec. 13-T17S-R23E
Grand County, UT

J. C. THOMPSON
INDEPENDENT OIL OPERATOR
410 - 17TH STREET, SUITE 1305
DENVER, COLORADO 80202

February 14, 1984

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining
4241 State Office Bldg.
Salt Lake City, UT 84114

Attn: Claudia Jones
Well Records Specialist



RE: Utah Operated Wells

Dear Claudia,

Pursuant to your request, attached is a list of all producing wells which are operated by J. C. Thompson in the state of Utah.

Very truly yours,

A handwritten signature in cursive script that reads "Sandra S. Brown".

Sandra S. Brown

Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

RECEIVED
SEP 26 1988

1. oil gas other
well well

2. NAME OF OPERATOR

J.C. THOMPSON

3. ADDRESS OF OPERATOR

410-17th St., Ste. 1305; Denver, CO

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: 768' FNL, 1520' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

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

REQUEST FOR APPROVAL TO:

- TEST WATER SHUT-OFF
 - FRACTURE TREAT
 - SHOOT OR ACIDIZE
 - REPAIR WELL
 - PULL OR ALTER CASING
 - MULTIPLE COMPLETE
 - CHANGE ZONES
 - ABANDON*
- (other) _____

SUBSEQUENT REPORT OF:

-
-
-
-
-
-
-
-

5. LEASE	U-15104
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME	Federal 104
9. WELL NO.	1
10. FIELD OR WILDCAT NAME	Calf Canyon
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	4 - 20S - 21E
12. COUNTY OR PARISH	Grand
13. STATE	Utah
14. API NO.	43-019-30375
15. ELEVATIONS (SHOW DF, KDB, AND WD)	

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

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.)*

- Propose to:
1. Set 35 sx cement plug @ 3,700 - 3,477'. (4 1/2" casing set @ 4,119', B.P. set @ 3,700'.) Fill hole with mud to surface.
 2. Set 10 sx cement plug at surface, fill 4 1/2" / 8 5/8" annulus with cement.
 3. Erect surface marker showing well no., location, lease name.
 4. Proposed starting date 10-20-88.

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

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

SIGNED J.C. Thompson TITLE Operator DATE 9-22-88

(This space for Federal or State office use)

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

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

DATE: 9-29-88

BY John R. Bays

*See Instructions on Reverse Side

Federal approval of this action is required before commencing operations.

THE FOLLOWING METERS WILL HAVE CALIBRATION / SETTLEMENT TESTS RUN ON THE DATES INDICATED. STARTING TIME WILL BE 0800 OR AS SPECIFIED BELOW AND AT THE OFFICE OF THE NORTHWEST PIPELINE GRAND JUNCTION DISTRICT YOU WILL BE NOTIFIED SHOULD ANY CHANGES OCCUR IN THIS SCHEDULE. IF YOU HAVE ANY QUESTIONS ABOUT THE SCHEDULE, CONTACT OR WRITE THE DISTRICT OFFICE.

METER CODE	WELL NAME	LOC	RUN	DAY	MO/YR	STARTING TIME
92300013	FEDERAL B #1 175.24E.17	06	07	11	12/85	0900
92123014	FEDERAL 104 #1 205.21E.10 ?	06	13	6	11/85	0900
92127010	USA 4970 #1 205.21E.4	06	13	6	11/85	1100
94057019	FEDERAL 675 PURCHASE 205.21E.10	06	13	6	11/85	1300

Division of Oil, Gas and Mining
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

Well File Suberal 104
(Location) Sec 4 Twp 20S Rng 21E
(API No.) 43-019-30375

Suspense
(Return Date) 9/1/89
(To - Initials) AW/S

Other

1. Date of Phone Call: 8/17/89 Time: 9 AM

2. DOGM Employee (name) Arlene Soltis (Initiated Call
Talked to:
Name Brenda (Initiated Call - Phone No. (303) 573-6021
of (Company/Organization) J C Thompson

3. Topic of Conversation: Re: P & A report

4. Highlights of Conversation: She will send Sunday showing
well in P & A's.

J. C. THOMPSON
INDEPENDENT OIL OPERATOR
410 - 17TH STREET, SUITE 1305
DENVER, COLORADO 80202

RECEIVED
SEP 11 1989

DIVISION OF
OIL, GAS & MINING

September 8, 1989

Bureau of Land Management
Grand Resource Area Office
P.O. Box M
Moab, UT 84532

Re: Federal 769 #2 Well (Lease U-0149769)
Federal 104 #1 Well (Lease U-15104)
Grand County, Utah

Gentlemen:

Enclosed, in triplicate, are Sundry Notices for the captioned wells. These are subsequent reports describing the procedure used to plug and abandon the wells.

Please contact Mr. Thompson or myself if there are any questions. Send one approved copy of each notice to us.

Sincerely,

Brenda K. Fuechsel

Brenda K. Fuechsel

/bkf

Enclosures

✓ cc: State of Utah Division of Oil, Gas & Mining
355 W. N. Temple; 3 Triad Center; Suite 350
Salt Lake City, UT 84180-1203

OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
1-AWS	
2-TAS	
MICROFILM	
FILE	

Arlene, as per your request of August 17, 1989.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

2

SUNDRY NOTICES AND REPORTS

(Do not use this form for proposals to drill or to complete a well or to complete a reservoir. Use Form 9-331-C for such proposals.)

RECEIVED
SEP 11 1989
DIVISION OF
OIL, GAS & MINING

1. oil well gas well other
2. NAME OF OPERATOR
J.C. THOMPSON
3. ADDRESS OF OPERATOR
410-17th St.; #1305; Denver, CO
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 768' FNL, 1520' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-15104
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME
Federal 104
9. WELL NO.
1
10. FIELD OR WILDCAT NAME
Calf Canyon
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
4 - T20S - R21E
12. COUNTY OR PARISH
Grand
13. STATE
UTAH
14. API NO.
43-019-30375
15. ELEVATIONS (SHOW DF, KDB; AND WD)

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input checked="" type="checkbox"/>
(other)	<input type="checkbox"/>		<input type="checkbox"/>

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

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.)*

- Set 35 sx cement plug @ 3,700 - 3,477'. (4½ casing set @ 4,119', B.P. set @ 3,700'). Filled hole with mud to surface.
- Set 10 sx cement plug at surface, filled 4½"/8 5/8" annulus with cement.
- Erected surface marker showing well no., location, lease name.

Plugging completed November 7, 1988.

OIL AND GAS	
DRN	RJF
JRS	GLH
DTS	SLS
1-AWS 2-TAS	
0 - MICROFILM ✓	
3 - FILE	

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

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

SIGNED J.C. Thompson TITLE Operator DATE 9/8/89

(This space for Federal or State office use)

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