



POWERS ELEVATION

OIL WELL ELEVATIONS AND LOCATIONS  
CHERRY CREEK PLAZA, SUITE 1201  
600 SOUTH CHERRY STREET  
DENVER, COLORADO 80222  
PHONE NO. 303/321-2217

May 29, 1980

U.S. Geological Survey  
E. W. Guynn, District Engineer  
1745 West 1700 South  
2000 Administration Building  
Salt Lake City, Utah 84138

RE: Filing NTL-6 and A.P.D. Form 9-331C  
William C. Kirkwood  
#21-15 Winfield  
481' FNL & 2222' FWL  
Sec. 15 T 31S R15E  
Garfield County, Utah

Dear Mr. Guynn:

Enclosed are three copies of the NTL-6 program and A.P.D. Form 9-331C for the above-referenced well location.

Please notify us when you have arranged a time with the B.L.M. to inspect the site, in order that Larry Becker, our surveyor who did the ground work for this application may be present during the inspection.

The archaeological report is not included with the NTL-6 but will be forwarded to your office, and to the B.L.M. office, from our Archaeological Division.

Sincerely yours,

POWERS ELEVATION

*Connie L. Frailey*  
Connie L. Frailey

CLF:ss  
Enclosure

cc: William Vandeventer, William C. Kirkwood, Casper, Wyo.  
Larry Becker, Powers Elevation, Grand Junction, Colo.  
Dirt Contractor

Powers Elevation  
Suite 1201 Cherry Creek Plaza  
600 So. Cherry Street  
Denver, Colorado 80222

RE: Filing NTL-6 and A.P.D. Form 9-331C  
William C. Kirkwood  
#21-15 Winfield  
481' FNL & 2222' FWL  
Sec. 15 T31S R15E  
Garfield County, Utah

Gentlemen:

This is to confirm our understanding with you that Powers Elevation is authorized to act as our agent in the following capacities:

- A. In surveying, staking, and preparing and filing necessary applications, permits and compliance programs, including complete NTL-6 reports, for the above-referenced project.
- B. In accepting on our behalf any changes to location, proposed facilities and/or surface use plan and compliance program requested at on-site inspections, when we are unable to have a Company representative present. Such changes will then be binding upon us or designated Operator.

POWERS' responsibilities do not include construction of location or supervision of drilling, completion or rehabilitation operations.

W C Kirkwood Oil & Gas  
Company

by: Steven C. Kirkwood

Title: Geologist

Date: 5/2/80



POWERS ELEVATION

OIL WELL ELEVATIONS AND LOCATIONS  
CHERRY CREEK PLAZA, SUITE 1201  
600 SOUTH CHERRY STREET  
DENVER, COLORADO 80222  
PHONE NO. 303/321-2217

July 7, 1980

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

RE: Filing A.P.D. with State of Utah  
William C. Kirkwood

14-15 Remington  
Sec. 15 T31S R15E

44-15 Garfield  
Sec. 15 T31S R15E

22-20 Monroe  
Sec. 20 T31S R15E

14-20 Eastex  
Sec. 20 T31S R15E

33-29 Cromwell  
Sec. 29 T31S R15E

23-8 Magnum  
Sec. 8 T31S R15E

21-15 Winfield  
Sec. 15 T31S R15E

44-4 White Rim  
Sec. 4 T31S R15E

Garfield County, Utah

Dear Mr. Feight:

Enclosed is one copy of the Federal A.P.D. & NTL-6 report for each of the above-captioned well locations.

We would appreciate an early approval, because a rig is available for the drilling of these locations.

If further information is needed, please call.

Thank you.

Sincerely,

POWERS ELEVATION

  
Darryl Cooper

Enclosures

cc: William Vandeventer, William C. Kirkwood, Casper, Wyoming

DC/cd

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.  
U-21037

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

7. UNIT AGREEMENT NAME  
N/A Hatch Canyon

8. FARM OR LEASE NAME  
Winfield

9. WELL NO.  
#21-15

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
Sec. 15 T31S R15E

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

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  
William C. Kirkwood

3. ADDRESS OF OPERATOR  
P. O. Drawer 3439, Casper, Wyoming 82601

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface  
481' FNL & 2222' FWL (NE NW)  
At proposed prod. zone  
same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
51 Miles East of Hanksville, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
481'

16. NO. OF ACRES IN LEASE  
2560

17. NO. OF ACRES ASSIGNED TO THIS WELL  
40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
2640' +

19. PROPOSED DEPTH  
1430'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
6127' GR

22. APPROX. DATE WORK WILL START\*  
June 15, 1980

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 1/2"	6 5/8" New	24# K-55 8Rd.	20'	10 sxs cement, Class "G" 2% Ca
5 5/8"	4 1/2" New	9.5 K-55 8Rd.	1430'	50 sxs cement, Class "G" 2% Ca

1. Drill 8 1/2" hole and set 6 5/8" surface casing to 20' with good returns.
2. Log B.O.P. checks in daily drill reports and drill 5 5/8" hole to 1430'
3. Run tests if warranted and run 4 1/2" casing if productive.
4. Run logs, as needed, and perforate and stimulate as needed.

EXHIBITS ATTACHED:

- "A" Location and Elevation Plat
- "B" The Ten-Point Compliance Program
- "D" The Multi-Point Requirements for A.P.D.
- "E" Access Road Maps to Location
- "F" Radius Map of Field

**RECEIVED**  
JUL 08 1980

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING  
DATE: 7-9-80  
BY: M.J. Minder

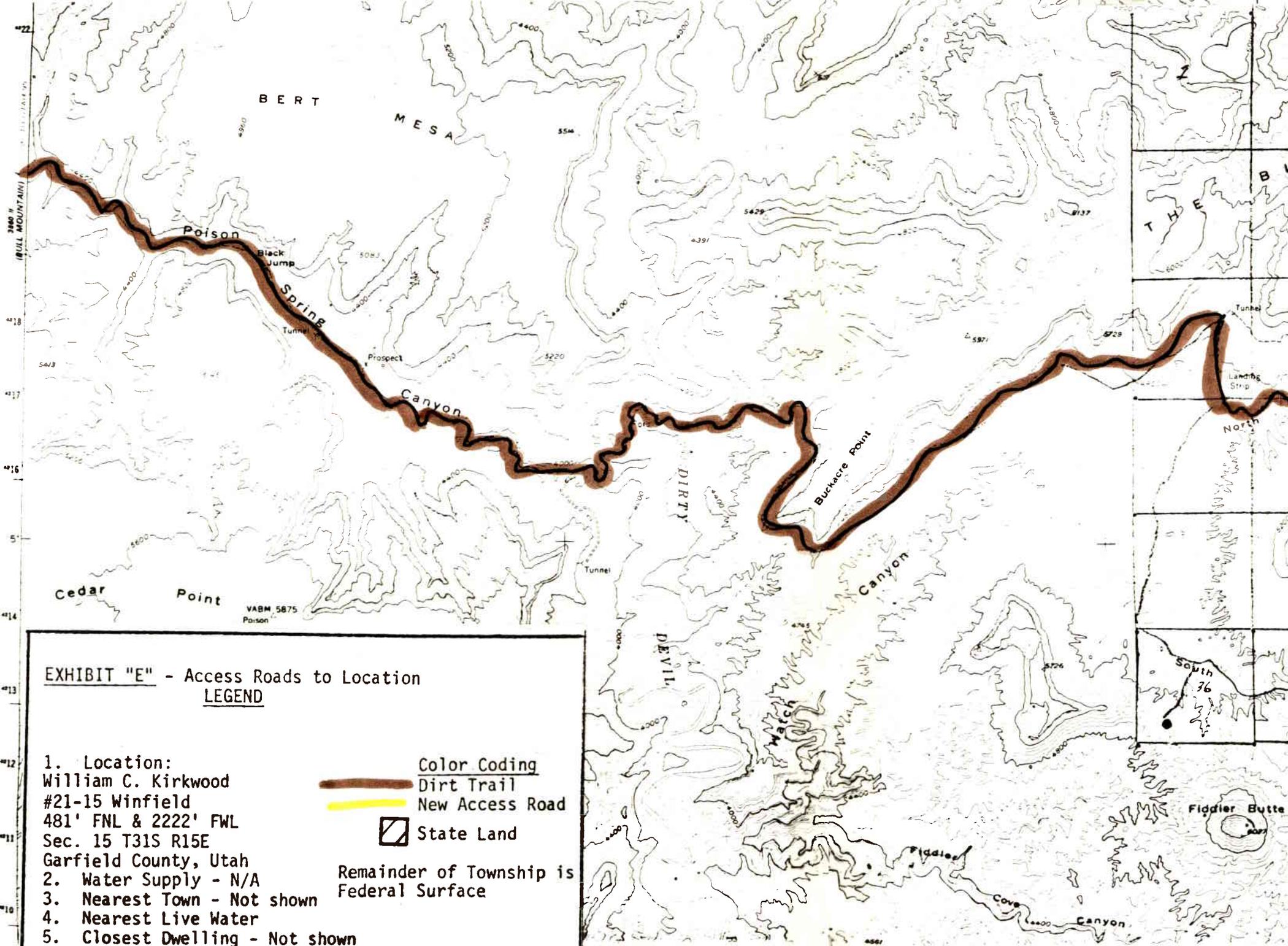
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Wm. C. Vandewater TITLE Petr. Engr. DATE 2-14-80

(This space for Federal or State office use)

PERMIT NO. 43-017-30087 APPROVAL DATE 7/9/80

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

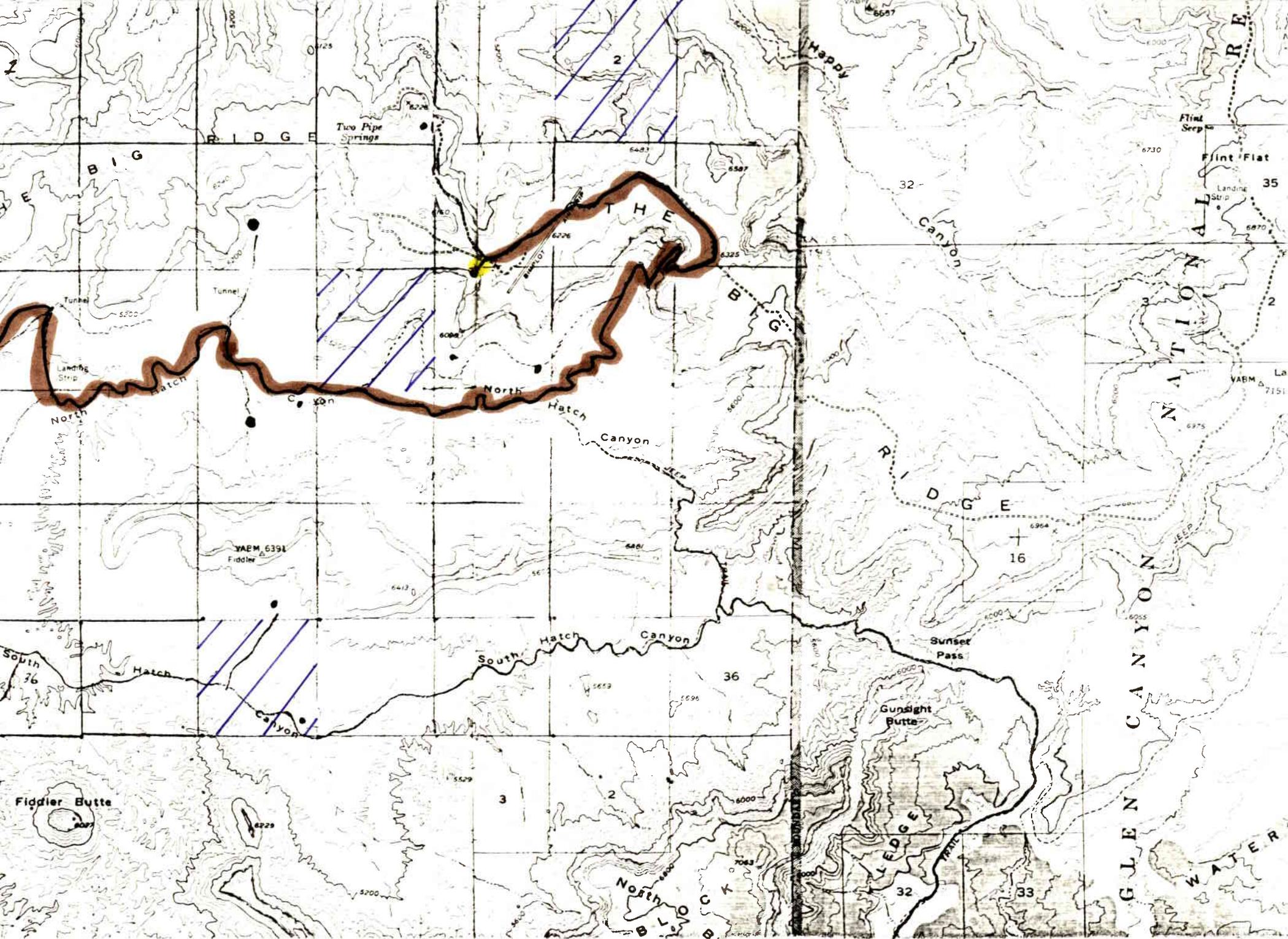


**EXHIBIT "E" - Access Roads to Location**  
**LEGEND**

1. Location:  
 William C. Kirkwood  
 #21-15 Winfield  
 481' FNL & 2222' FWL  
 Sec. 15 T31S R15E  
 Garfield County, Utah
2. Water Supply - N/A
3. Nearest Town - Not shown
4. Nearest Live Water
5. Closest Dwelling - Not shown

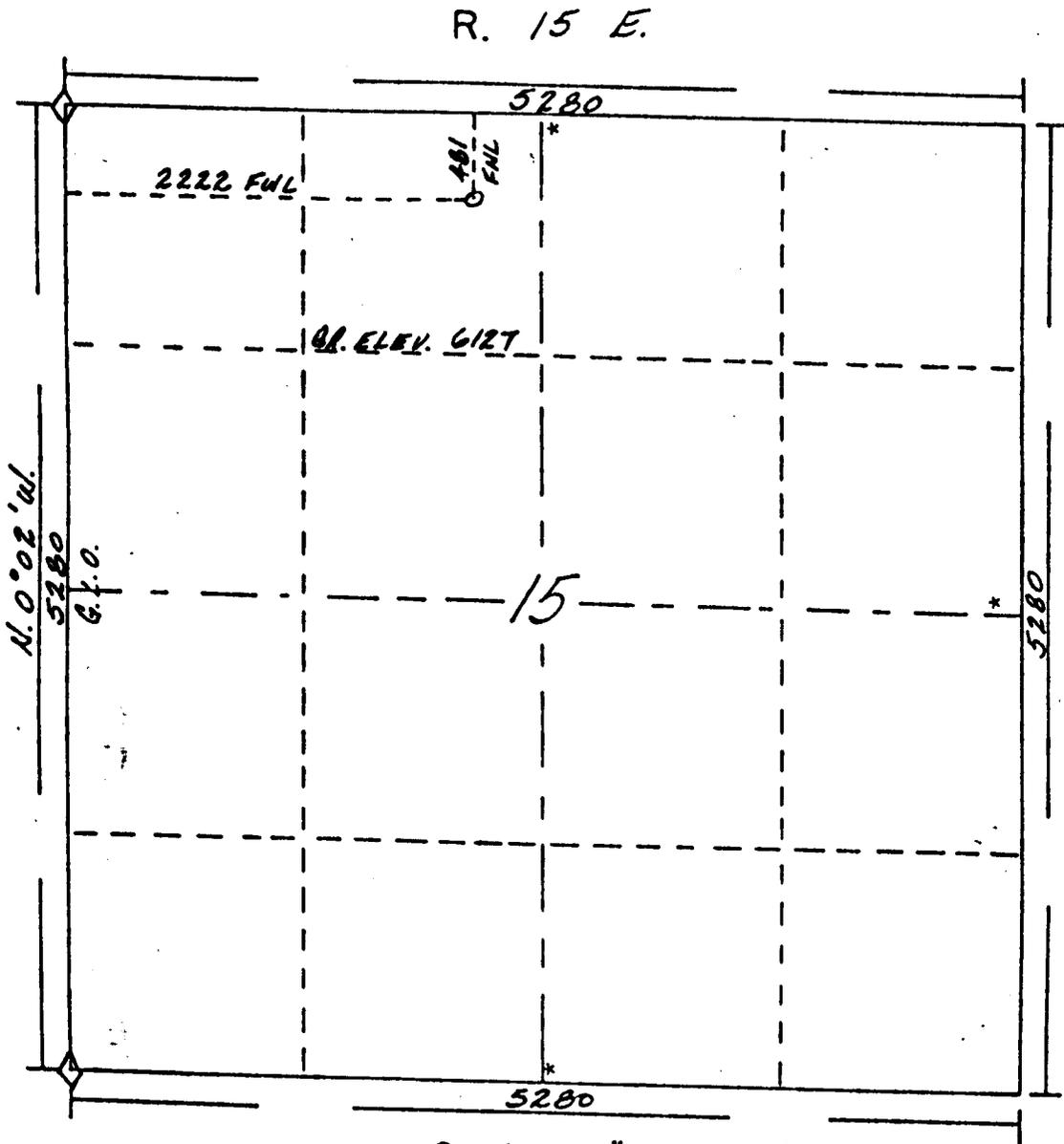
- Color Coding**
-  Dirt Trail
  -  New Access Road
  -  State Land

Remainder of Township is  
 Federal Surface





Protraction Diagram No. 3  
BLM Area 2  
March 7, 1961



T.  
31  
S.

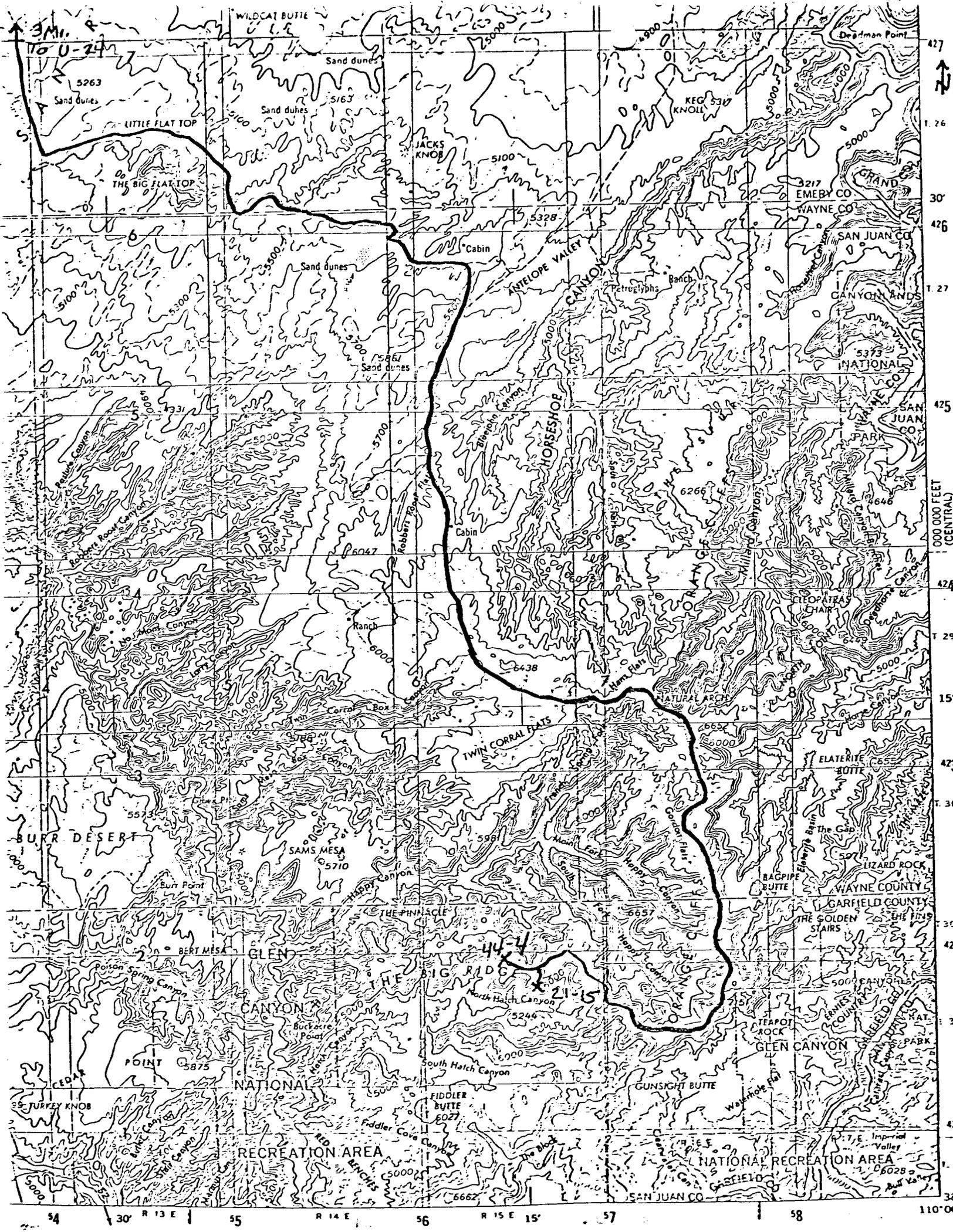
Scale... 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado  
 has in accordance with a request from *Tim Schowalter*  
 for *WILLIAM O. KIRKWOOD*  
 determined the location of *# 21-15 WINFIELD*  
 to be *481 FNL & 2222 FWL* of Section 15 Township 31 S.  
 Range 15 E. of the Salt Lake Base and Meridian  
 Garfield County, Utah.

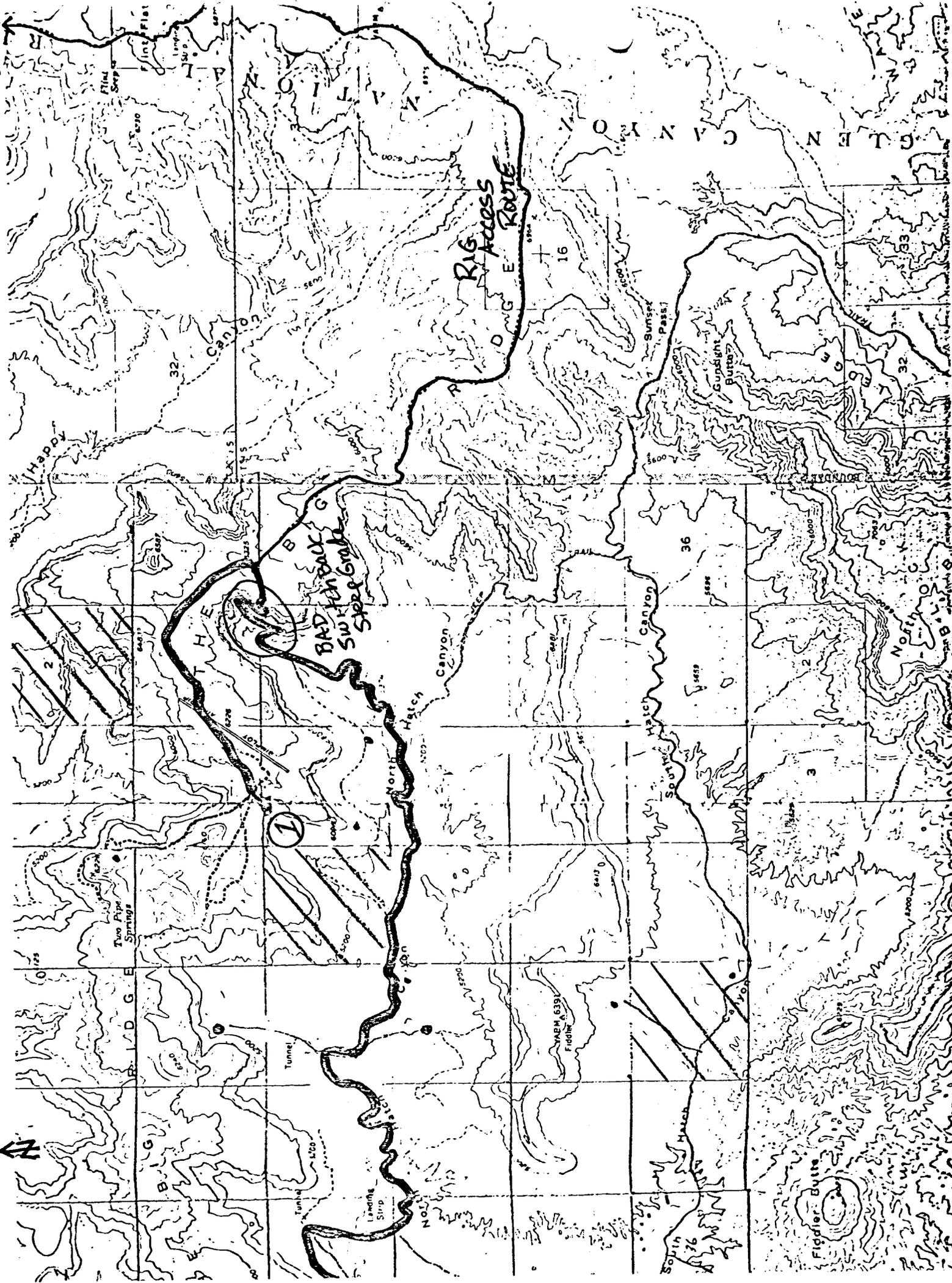
I hereby certify that this plat is an  
 accurate representation of a correct  
 survey showing the location of  
*# 21-15 WINFIELD*

Date: 5-10-80

*David D. Beckel*  
 Licensed Land Surveyor No. 4189  
 State of Utah



See Map 2



17

BAD BACK SWATH GRAB

RIG Access Route

1

THE

16

36

32

36

36

EXHIBIT "B"  
TEN-POINT COMPLIANCE PROGRAM  
OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C  
 William C. Kirkwood  
 Winfield 21-15  
 Sec. 15, T31S R15E  
 481' FNL & 2222' FWL  
 Garfield County, Utah

1. The Geologic Surface Formation

The surface formation is the Chinle.

2. Estimated Tops of Important Geologic Markers

White Rim	1160'
Organ Rock	1410'
Total Depth	1430'

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

No water zones are anticipated  
 White Rim 1160' Oil

4. The Proposed Casing Program

<u>HOLD SIZE</u>	<u>INTERVAL</u>	<u>SECTION LENGTH</u>	<u>SIZE (OD)</u>	<u>WEIGHT, GRADE &amp; JOINT</u>	<u>NEW OR USED</u>
8½"	0-20'	20'	6 5/8"	24#, K-55, 8 Rd.	New
5 5/8"	0-1430'	1430'	4½"	9.5#, K-55, 8Rd.	New

Cement Program

- A. Surface casing - 10 sxs. cement, Class "G", 2% CaCl.
- B. Production casing - 50 sxs. cement, Class "G" 2% CaCl.

5. The Operator's Minimum Specifications for Pressure Control

Not Applicable

6. The Type and Characteristics of the Proposed Circulating Muds

Not Applicable - Air Drilled.

7. The Auxiliary Equipment to be Used

Not Applicable

8. The Testing, Logging and Coring Programs to be Followed

- (a) No DST'S are anticipated.
- (b) An IES Log and a Density log will be run from surface to 1410 feet.
- (c) Coring is anticipated from the top of the White Rim to top of the Organ Rock, a total of 250 feet.
- (d) Stimulation procedures will be determined after evaluation of logs. If treatment is indicated, appropriate Sundry Notice will be submitted.

9. Any Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well.

No hydrogen sulfide or other hazardous fluids or gases have been found, reported or known to exist at these depths in the area.

10. Anticipated Starting Date and Duration of the Operations

The anticipated starting date is set for June 15, 1980, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 8 days after spudding the well and drilling to casing point.

EXHIBIT "D"

MULTI-POINT REQUIREMENTS TO ACCOMPANY A.P.D.

Attached to Form 9-331C  
William C. Kirkwood  
#21-15 Winfield  
NENW Sec. 15-T31S-R15E  
481' FNL & 2222' FWL  
Garfield County, Utah

1. Existing Roads

- A. The proposed well site and elevation plat is shown as EXHIBIT "A". Staking included two 200' directional reference stakes, also shown on EXHIBIT "A".
- B. From Hanksville Post Office go Easterly 18.2 miles on Highway #95; turn left on BLM dirt road to Poison Spring Canyon; go 16.4 miles to Dirty Devil River. Ford river and take road around Buckacre Point and into North Hatch Canyon. Continue up North Hatch Canyon; turn left on to Road up to Big Ridge, on top turn left and follow road approximately two miles to the start of the flagged access road 0.2 mile from the location.
- C. All roads to location are color-coded on EXHIBIT "E". A new access road from the existing road will be used as shown on EXHIBIT "E".
- D. This is an exploratory well. All existing roads within a three-mile radius are shown on EXHIBIT "E".
- E. N/A
- F. The existing roads need no improvement except to clear off rocks and repair winter damage.

2. Planned Access Roads

Map showing all necessary access roads to be constructed or reconstructed is shown as EXHIBIT "E" for the following:

A. Drilling Operations

1. If rocks are removed, the 0.2 mile of new access road can be used without blading. No surfacing is planned. The truck-mounted rig used for drilling weighs approximately 8 tons.

2. The grade will be 2-3%.
3. No turnouts are planned.
4. No drainage design is planned.
5. No culverts are needed.
6. No gates or fence cuts and cattleguards will be required.
7. The new access road to be used was center line flagged. This road does cross B.L.M. lands, as shown on EXHIBIT "E".

B. Production

1. The grade on the existing roads ranges from 0-15%; most areas are 3-4%. No road construction or upgrading is planned if well is productive.

3. Location of Existing Wells

For all existing wells within two mile radius of Exploratory well, see EXHIBIT "F".

- (1) There are 0 water wells within a two mile radius of this location.
- (2) There are 0 abandoned wells in this two mile radius.
- (3) There are 0 temporarily abandoned wells.
- (4) There are 0 disposal wells.
- (5) There are 0 wells presently being drilled.
- (6) There are 0 producing wells within this two mile radius.
- (7) There are 0 shut-in wells.
- (8) There are 0 injection wells.
- (9) There are 0 monitoring or observation wells for other uses.
- (10) There are several core holes for prospecting located throughout the canyon lands.

4. Location of Existing and/or Proposed Facilities

A. Within one-mile radius of location, the following existing facilities are owned or controlled by lessee/operator:

- (1) Tank Batteries: None

(2) Production Facilities: None

(3) Oil Gathering Lines: None

(4) Gas Gathering Lines: None

(5) Injection Lines: None

(6) Disposal Lines: None

B. If production is obtained, there will be no production facilities installed at this time.

5. Location and Type of Water Source

No water will be required. This well is to be air-drilled.

6. Construction Materials

No construction materials are needed for any phase of the proposed operations.

7. Handling of Waste Materials and Disposal

(1) There will be no drill cuttings. This well is to be air-drilled and exhaust will be dispersed into the atmosphere.

(2) There will be no drill fluids and no pits will be dug. If any water is encountered during drilling, a surface tank will be set.

(3) Garbage and trash will be collected in containers and hauled away to approved sanitary landfill. Human waste will be collected in chemical facility and hauled away.

(4) All materials used during drilling will be removed from the drillsite within 30 days after completion of drilling.

8. Ancillary Facilities

No air strip, camp or other facilities will be built during drilling of this well.

9. Well Site Layout

(1) No drill pad will be constructed for drilling this well.

(2) A truck-mounted rig will be used. The truck is approximately 30' long and weighs approximately 8 tons.

- (3) No pits will be dug. There will be no living facilities or trailers on site.

#### 10. Plans for Restoration

- (1) Such disturbance as will be created by this drilling operation can be easily repaired should this area be finalized as a Wilderness and Recreation Area.
- (2) After drilling operations cease, revegetation and restoration will be performed in accordance with B.L.M. recommendations. This will be undertaken within whatever time frame the B.L.M. deems advisable.

#### 11. Other Information

- (1) The soil is a reddish sandy loam. No distinguishing geological features are present. The area is covered with Pinon and Cedar trees, Mormon Tea, varieties of cactus and shadscale. There are livestock, deer, coyotes, rabbits, lizards and chubars. The location sits on top of the Big Ridge at the South End approximately 100' from the Cliffs.
- (2) The primary surface use is for grazing and recreation. The surface is owned by the U.S. Government.
- (3) The closest live water is in South Hatch Canyon, 3½ miles South of the location.

The closest dwelling is Hite Marina, 20 miles - to the South.

There are no known archaeological, historical, or cultural heritages that will be disturbed by this drilling.

- (4) There are no reported restrictions or reservations noted on the oil and gas lease.
- (5) Drilling is planned for on or about June 15, 1980. It is anticipated that the casing point will be reached within 8 days after commencement of drilling.

12. Lessee's or Operator's Representative

George Lapaseotes  
Agent Consultant for  
William C. Kirkwood  
600 South Cherry Street  
Suite 1201  
Denver, Colorado 80222  
Phone (303) 321-2217

William C. Vandeventer  
William C. Kirkwood  
Drawer 3439  
Casper, Wyoming 82601  
(307) 265-5178

13. Certification

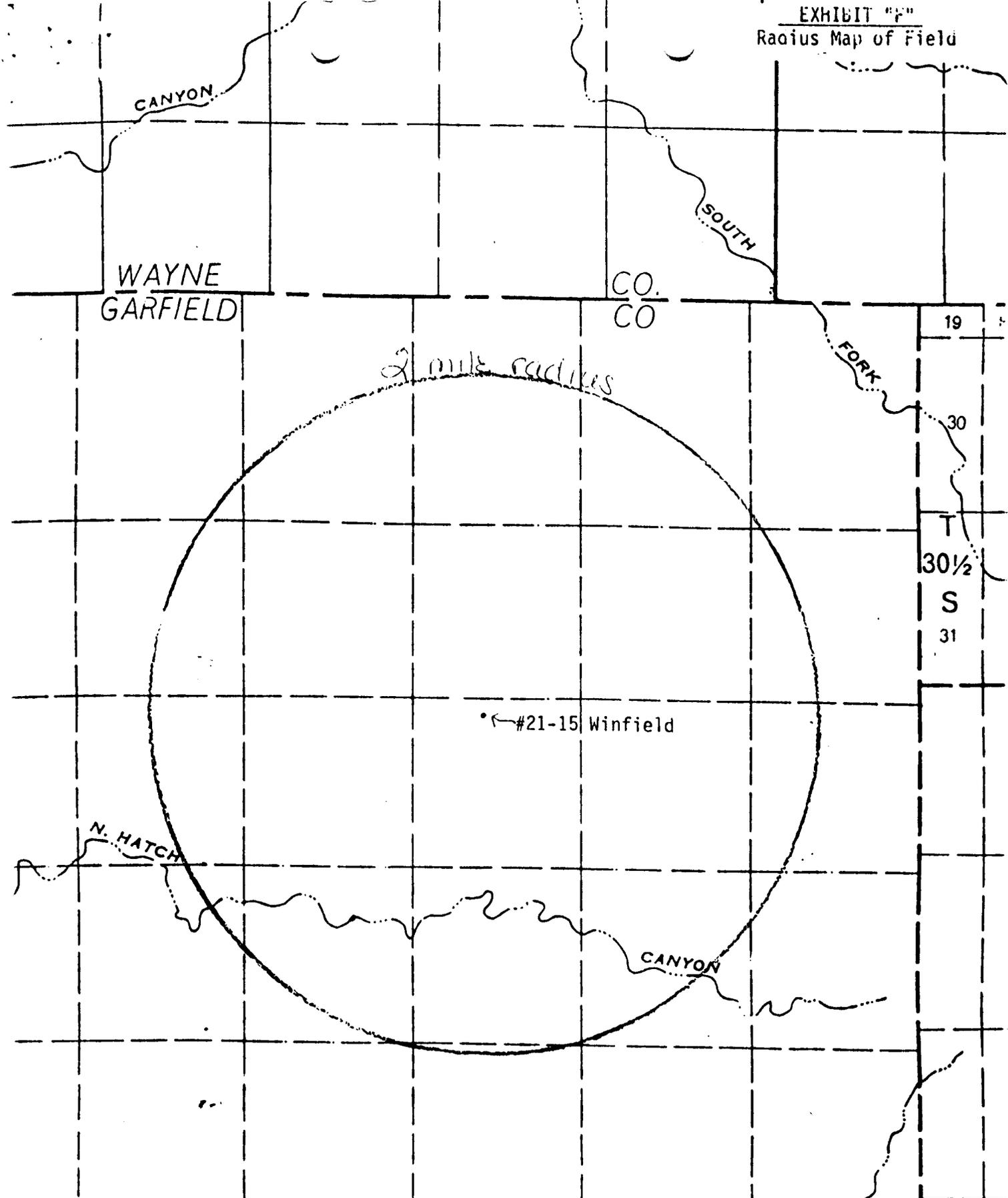
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated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

Date

5-29-80



George Lapaseotes  
Agent Consultant for  
William C. Kirkwood



LEGEND

- |                       |                            |
|-----------------------|----------------------------|
| ○ LOCATION            | ● OIL & GAS WELL           |
| ◆ DRY HOLE            | ✱ ABANDONED OIL & GAS WELL |
| ● OIL WELL            | ⊙ GAS WELL                 |
| ◆ ABANDONED OIL WELL  | ⊙ ABANDONED GAS WELL       |
| △ TRIANGULATION POINT | □ WATER WELL               |

Oil and Gas Drilling

EA # 482-80

United States Department of the Interior  
Geological Survey  
2000 Administration Bldg.  
1745 West 1700 South  
Salt Lake City, Utah 84104

Usual Environmental Analysis

Date: June 26, 1980

Operator: William C. Kirkwood      Project or Well Name and No.: 21-15  
Location: 481' FNL & 2222' FWL      Sec. 15      T. 31 S      R. 15 E  
County: Garfield      State: Utah      Field/Unit: Wildcat  
Lease No.: U-21037      Permit No.:

Joint Field Inspection Date: June 26, 1980

Prepared By: George Diwachak

Field Inspection Participants, Titles and Organizations:

George Diwachak	Environmental Scientist	USGS
Larry Gearhart	Surface protection	BLM
Lynn Jackson	Geologist	BLM
Wallace J. Averett	Engineer	Wm. C. Kirkwood
Larry Becker	Surveyor	Powers Elevation

Related Environmental Analyses and References:

1. Final Environmental Statement-Proposed General Management Plan,  
Wilderness Recommendation, Road Study Alternatives, Glenn Canyon National  
Recreation Area, National Park Service, Page Arizona, July 1979.

sk 8-19-80

*Drill site 50' x 100' - no blading  
Pecore pit 10' x 10'  
Pit toilet  
Conditions of approval p. 7(1-4)  
Administratively complete?*

DISCRIPTION OF PROPOSED ACTION

Proposed Action:

1. Location                    State: Utah  
                                  County: Garfield

481' FNL, 2222' FWL, NE 1/4 NW 1/4

Section 15 T 31S R 15E    S L M.

2. Surface Ownership            Location: Public  
                                  Access Road: Public

Status of Reclamation Agreements:  
NA

3. Dates                    APD Filed: June 4, 1980  
                                  APD Technically Complete: June 23, 1980  
                                  APD Administratively Complete: Aug. 4, 1980

4. Project Time Frame

Starting Date: Upon approval

Duration of Drilling activities: 2-3 days.

A period of 30 to 60 days is normally necessary to complete a well for production if hydrocarbons are discovered. If a dry hole is drilled, recontouring and reseeding would normally occur within one year; revegetation or restoration may take several years. If the well is a producer, an indefinite period of time would occur between completion and rehabilitation.

5. Related actions of other federal or state agencies and Indian tribes:  
The Location falls within a BLM Wilderness Study Area with no exceptional wilderness characteristics and as a result of a BLM inventory, the Unit has been recommended to be dropped from further study (See attached BLM Memo.)

6. Nearby pending actions which may affect or be affected by the proposed action:

None known

7. Status of variance requests:

None known

The following elements of the proposed action would/could result in environmental impacts:

1. The drill site would not be bladed. A truck mounted, air drilling rig would be employed utilizing an area 50 ft. wide by 100 ft. long. A small 10'x10' reserve pit would be constructed to hold cuttings. A pit toilet would also be constructed for human sewage.  
Surface disturbances would be kept to a minimum.  
This well is part of an eight well program within T 31S R 15E.
2. Drilling-techniques would employ a small truck mounted, air rig.
3. Waste disposal-All trash would be confined to containers and disposed of in a BLM approved location.
4. Traffic-Would be minimal and should be confined to existing roadways.
5. Water requirements-None Needed
6. Completion-None Anticipated.
7. Production-No production facilities are anticipated at this time.
8. Transportation of hydrocarbons-Not requested in APD
9. Other.

Details of the proposed action are described in the Application for Permit to Drill. ND!

The location was moved to (avoid a drainage/reduce cuts and fills/other, explain).

The access road was changed per the attached maps to reduce grade. A special Use Permit has been issued by the National Park Service, Glen Canyon National Recreation Area (pers. comm. Wm. Supernaugh, Director, 8-4-80) to allow access through the recreation area for the drilling rig only. (See maps) the permit authorizes one rig trip in and one trip out for drilling two wells. The steep switchbacks along the proposed route would not facilitate rig traffic without major upgrading. Crews and support vehicles would use the proposed route. A helicopter may also be used if access is impaired by weather conditions.

#### Environmental Considerations of the Proposed Action:

Regional Setting/Topography: Regional topography consists of Canyonlands terrain steep, rock walled canyons and mesas with relatively flat valleys, within the Dirty Devil River Basin. The location is situated on a flat area on the Big Ridge, rim of North Hatch Canyon.

#### PARAMETER

##### A. Geology

1. Other Local Mineral Resources to be Protected: None  
Information Source: MER APD, Mining report

2. Hazards:

a. Land Stability: None expected, wellsite terrain is basically flat. A truck mounted rig with hydraulically controlled leveling devices would be used. Some instability could be encountered on the steep switchbacks (see map) during wet weather.

Information Source: APD F.O. Operator

b. Subsidence: None expected

Information Source: APD F.O.

c. Seismicity: The wellsite is in an area of minor seismic risk.

Information Source: "Rocky Mountain Association of Geologists."

d. High Pressure Zones/Blowout Prevention: No high pressure anticipated or found during drilling of nearby State wells in Sec. 32 T 3S R 15E and Sec 36 T 31S R 15E. No BOP equipment planned for this shallow test.

Information Source: APD, Operator.

B. Soils:

1. Soil Character: Soils in the area are a sandy clay with occasional sandy areas. Soil disturbance would be minimal and confined to Pit and road construction.

Information Source: F.O., APD, BLM.

2. Erosion/Sedimentation: Minimal as surface disturbances would be limited.

Information Source: F.O., APD, BLM.

C. Air Quality: The wellsite is in a class II attainment area. Air quality would decrease slightly from equipment and vehicle emissions and fugitive dust.

Information Source: BLM, F.O.

D. Noise Levels: Noise levels would increase temporarily from rig and vehicle operations affection wildlife in a distributional sense.

Information Source: Field Observation

E. Water Resources1. Hydrologic Character

a. Surface Waters: No perennial drainages in area. Well site is in Dirty Devil River Basin which flows to Lake Powell. Some siltation to Lake Powell could occur but would be minimal. No water is needed for drilling.

Information Source: APD, F.O.

b. Ground Waters: No fresh water expected to be encountered during drilling. Commingling of any aquifers in area is possible.

Water wells drilled into the White Rim Formation 30 miles to the north-northeast have yielded sufficient quantities of useable, though highly mineralized water. However, the two wells drilled on nearby state locations did not discover any water in significant quantities. Cementing the entire hole upon abandonment as proposed would eliminate potential impacts to groundwater.

Information Source: Mineral Evaluation Report

2. Water Quality

a. Surface Waters: Spill to live surface waters is minimal.

Information Source: F.O.

b. Ground Waters: Insignificant impacts expected since air drilling techniques would be employed.

Information Source. F.O. APD

F. Flora and Fauna1. Endangered and Threatened Species Determination

Based on the formal comments received from BLM on July 1, 1980, we determine that there would be no effect on endangered and threatened species and their critical habitat.

2. Flora: Vegetation in area is sparse due to limited water. Plants are of a Pinyon-juniper-blackbush community.

Information Source: BLM F.O.

3. Fauna: Wildlife in area is sparse due to limited food source and consists predominantly of rodents, coyotes, reptiles, chukars, songbirds and few raptors.

Information Source: BLM APD F.O.

G. Land Uses

1. General: The general area is used for grazing, minimal mineral exploration/extraction and recreation.

Information Source: BLM F.O.

2. Affected Floodplains and/or Wetlands: None.

Information Source: F.O.

3. Roadless/Wilderness Area: The wellsite falls within BLM wilderness Inventory Unit #241, Fiddler Butte. The area's wilderness characteristics are not exceptional and as a result, a BLM inventory has been recommended that the unit be dropped from any further wilderness study, however, under BLM's Interim Management Policy of Lands under Wilderness Review (IMP), it is mandated that the area be protected from any further undue or unnecessary degradation until October 1, 1980, at which time the area will officially fall out of further wilderness consideration. This allows for public comment on the BLM's decision. Any comments or protests to turn this area back into wilderness study status will require the BLM to assess the comments and decide if they are worthy of consideration. Therefore, the area could return into wilderness Study Status in October.

The BLM has determined that impacts from this project would not impair the wilderness characteristics of the area. This fact is supported by the operating plan presented in the APD. Furthermore, if recommended mitigative measures are followed, any impacts could be returned to a substantially un-noticed condition.

Information Source: BLM

H. Aesthetics: The operation does not blend in with the natural surroundings. However, considering the short duration of drilling the proposed 8 well program and the minimal surface disturbances proposed, this action would pose little impact to area aesthetics.

Information Source: F.O. APD

I. Socioeconomics: The remoteness of the area limits socioeconomics impacts in Garfield County, Utah-Most services and personell would emanate from Moab, Utah, utilizing company camp facilities on State Lands. Some economic increases could be expxed in Hanksville, Utah, the nearest town.

Information Source: F.O.

J. Cultural Resources Determination: Based on the Formal comments received from BLM, on 7-1-80 we determine that there will be no effect on cultural resources.

Information Source: BLM

K. Other: Glen Canyon National Recreation Area is located about 5 miles south-east of the project area. No impacts to the recreation area are expected. Rig access in and out of the location through the recreation area has been authorized by a special use permit.

Information Source: F.O. W. Supemaugh (pers. comm.)

L. Adequacy of Restoration Plans: The restoration plan meets the minimum requirements of NTL-6. Restoration recommendations have been supplied by the BLM.

Information Source: APD, BLM F.O.

Alternatives to the Proposed Action:

1. Disapproving the proposed action or no action - If the proposed action is denied, no action would occur, the existing environment would remain in its present state, the lessee/operator would not realize any return on investments and the public would be denied a potential energy source.

2. Approving the project with the recommended stipulations - Under federal oil and gas leasing provisions, the Geological Survey has a responsibility to approve mineral development if the environmental consequences are not too severe or irreversible. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and Surface Management Agency supervision. Environmental impacts would be significantly mitigated.

Adverse Environmental Effects:

1. If approved as proposed:

- a. A minimal amount of vegetation would be removed, slightly increasing and accelerating erosion potential.
- b. Minor air pollution would be induced on a temporary basis due to exhaust emissions from rig engines and support traffic.
- c. The potential for fires, leaks, spills of gas and oil or water exists, but is minimal
- d. During construction and drilling phases of the operation, noise and dust levels would increase.
- e. Distractions from aesthetics during the lifetime of the project would exist.
- f. Erosion from the site would eventually be carried as sediment in Lake Powell.
- g. If hydrocarbons would be discovered and produced, further development of the area could be expected to occur, which would result in the extraction of irreplaceable resource, and further negative environmental impacts. These impacts include the cumulative loss of wildlife habitat due to the areas necessary for roads, pipelines, drillsites, and transmission lines. These actions may disrupt wildlife social behavior and force habitat relocation over an extended period of time. In addition, the cumulative effects of non-point erosion become substantial in a developing field, primarily those located near perennial streams where siltation and sedimentation are critical to aquatic life cycles.

2. Conditional Approval:

All adverse impacts described in section one above would occur, except.

a. Constructing a reserve pit would provide for adequate disposal of cuttings and any encountered ground water.

b. Keeping dirt work to a minimum would preserve the remote, pristine characteristics of the area.

Recommended Approval Conditions:

Drilling should be allowed, provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator:

1. See attached BLM Stipulations.
2. The drillsite will not be bladed; however a small 10'x10' reserve pit and a pit toilet would be constructed.
3. All trash and debris will be removed from the site.
4. Rig access must use roads through Glen Canyon National Recreation Area as authorized by the National Park Service Special Use Permit.

Controversial Issues and Conservation Division Response:

None

We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

Determination:

I determine that the proposed action (as modified by the recommended approval conditions) does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, Section 102 (2)(C).

*W.P. Martin*

FOR E. W. GUYNN  
DISTRICT ENGINEER

Signature & Title of Approving Official

SEP 16 1980

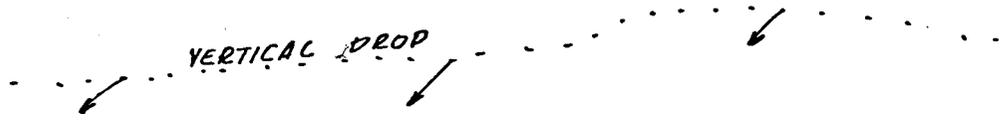
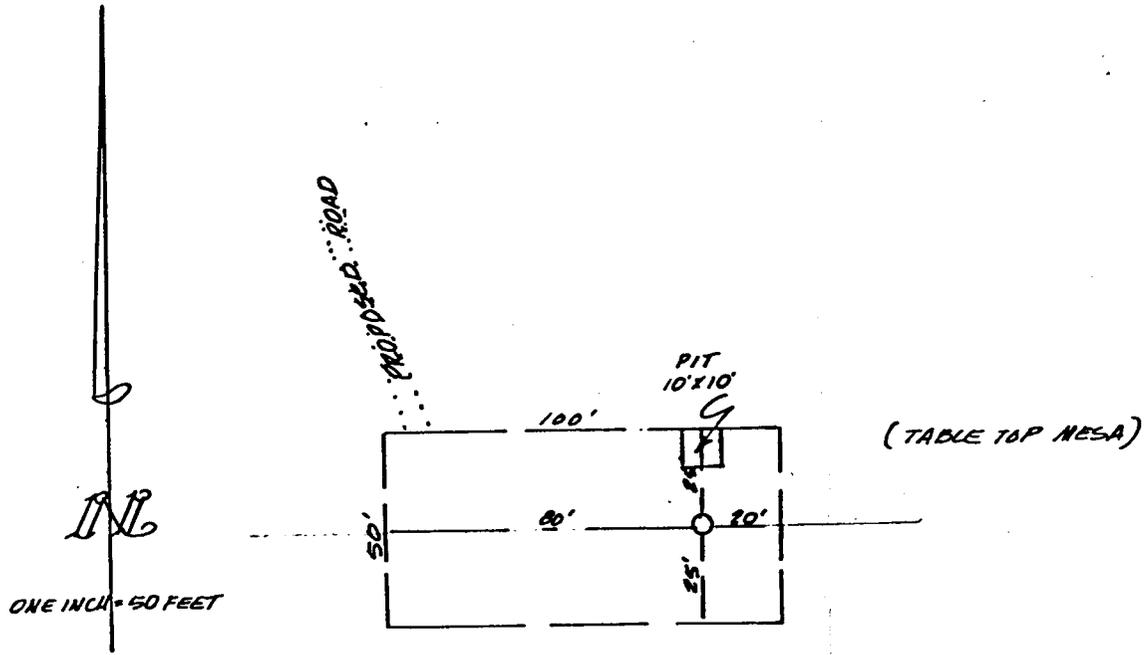
Date



KIRKWOOD  
21-15 -

↑  
S

PIT & PAD LAYOUT  
#21-15 WINFIELD  
WILLIAM C. KIRKWOOD  
SEC. 15, T. 31S., R. 15E.



POWERS ELEV  
GRAND JCT., U  
BY  
LARRY D. PEE  
6-28-80

FROM: : DISTRICT GEOLOGICAL ENGINEER, SALT LAKE CITY, UTAH

TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-21037

OPERATOR: William C. Kirkwood

WELL NO. 21-15

LOCATION: NE $\frac{1}{2}$  NE $\frac{1}{2}$  NW $\frac{1}{2}$  sec. 15, T. 31S., R. 15E., SLM  
Garfield County, Utah

1. Stratigraphy: Operator tops appear reasonable

Chinle	surface
White Rim	1160'
Organ Rock	1410'
<u>TD</u>	<u>1430'</u>

2. Fresh Water:

None probable

3. Leasable Minerals:

4. Additional Logs Needed: Adequate

5. Potential Geologic Hazards: None anticipated

6. References and Remarks:

Heavy oil. - might require Tertiary extraction methods

Signature: Gregory W. Wood

Date: 6 - 24 - 80

\*\* FILE NOTATIONS \*\*

DATE: July 8, 1980  
OPERATOR: William C. Kirkwood  
WELL NO: Hatch Canyon Unit # 21-15 (Winfield)  
Location: Sec. 15 T. 31S R. 15E County: Garfield

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

API Number 43-017-30087

CHECKED BY:

Petroleum Engineer: M. J. Minder 7-9-80

Director: \_\_\_\_\_

Administrative Aide: OK on Unit boundary spacing

APPROVAL LETTER:

Bond Required:  Survey Plat Required:

Order No. \_\_\_\_\_ O.K. Rule C-3

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

Lease Designation 2d Unit Plotted on Map

Approval Letter Written  ltn

Hot Line  P.I.

*Unit approval*

July 9, 1980

William C. Kirkwood  
P.O. Drawer 3439  
Casper, Wyoming 82601

RE: HCU #14-15 (Remington), Sec. 15, T. 31S, R. 15E., Garfield County, Utah  
HCU #21-15 (Winfield), Sec. 15, T. 31S, R. 15E., Garfield County, Utah  
HCU #22-20 (Monroe), Sec. 20, T. 31S, R. 15E., Garfield County, Utah  
HCU #23-8 (Magnum), Sec. 8, T. 31S, R. 15E., Garfield County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil wells is hereby granted in accordance with Section 40-6-11, Utah Code Annotated 1953; and predicated on Rule A-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:

MICHAEL T. MINDER - Petroleum Engineer  
Office: 533-5771  
Home: 876-5001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

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 numbers assigned to these wells are #14-15: 43-017-30086;  
#21-15: 43-017-30087; #22-20: 43-017-30088; #23-8: 43-017-30089.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder  
Petroleum Engineer

/btm

cc: USGS

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

DUPLICATE

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

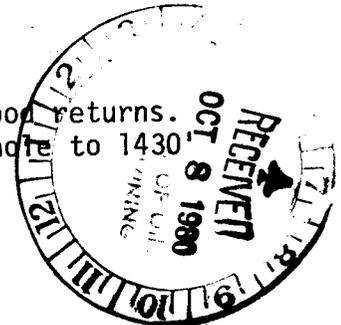
1a. TYPE OF WORK: DRILL [X], DEEPEN [ ], PLUG BACK [ ]
b. TYPE OF WELL: OIL WELL [X], GAS WELL [ ], OTHER [ ]
2. NAME OF OPERATOR: William C. Kirkwood
3. ADDRESS OF OPERATOR: P. O. Drawer 3439, Casper, Wyoming 82601
4. LOCATION OF WELL: At surface 481' FNL & 2222' FWL (NE NW)
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 51 Miles East of Hanksville, Utah
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.: 481'
16. NO. OF ACRES IN LEASE: 2560
17. NO. OF ACRES ASSIGNED TO THIS WELL: 40
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 2640' +
19. PROPOSED DEPTH: 1430'
20. ROTARY OR CABLE TOOLS: Rotary
21. ELEVATIONS: 6127' GR
22. APPROX. DATE WORK WILL START: June 15, 1980

5. LEASE DESIGNATION AND SERIAL NO.: U-21037
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
7. UNIT AGREEMENT NAME: N/A
8. FARM OR LEASE NAME: Winfield
9. WELL NO.: #21-15
10. FIELD AND POOL, OR WILDCAT: Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 15 T31S R15E
12. COUNTY OR PARISH: Garfield
13. STATE: Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Includes rows for 8 1/2" and 5 5/8" hole sizes.

- 1. Drill 8 1/2" hole and set 6 5/8" surface casing to 20' with good returns.
2. Log B.O.P. checks in daily drill reports and drill 5 5/8" hole to 1430'
3. Run tests if warranted and run 4 1/2" casing if productive.
4. Run logs, as needed, and perforate and stimulate as needed.



EXHIBITS ATTACHED:

- "A" Location and Elevation Plat
"B" The Ten-Point Compliance Program
"D" The Multi-Point Requirements for A.P.D.
"E" Access Road Maps to Location
"F" Radius Map of Field

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: W. C. Vandevort TITLE: Petr. Engr. DATE: 2-14-80

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE
(Orig. Sgd.) A. M. RAFFOUL FOR E. W. GUYNN DISTRICT ENGINEER DATE OCT 6 1980

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

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

NOTICE OF APPROVAL Ut. State O & G

SELECTED REFERENCES

- ① Anderson, B.A. 1979, Desert Plants of Utah: Cooperative Extension Service, Utah State University, Logan, Utah. 146 p.
- ~~Bureau of Land Management, 1976, Proposed Kaiporowits Project, Utah, Arizona, Nevada and California, Final Environmental Statement: U.S. Government Printing Office, Washington, D.C., 3514 p.~~
- ② Bureau of Land Management, 1979, Final Initial Wilderness Inventory, Utah: U.S. Department of the Interior, BLM, Salt Lake City, Ut., 50 p.
- ③ Bureau of Land Management, 1979, Intermin Management Policy and Guidelines for Lands Under Wilderness Review: U.S. Department of the Interior, BLM, Washington, D.C., 32 p.
- ④ Keller, E.A., 1976, Environmental Geology: C.E. Merril Publishing Company, Columbus, Ohio. 488 p.
- ⑦ Rocky Mountain Association of Geologists, 1972, Geologic Atlas of the Rocky Mountain Region: Denver, Colorado. 331 p.
- ~~U.S. Geological Survey, 1979, Development of Coal Resources in Southern Utah, Final Environmental Statement. Department of the Interior, U.S. Geological Survey, Washing, D.C. 611 p.~~
- ⑨ Wilson, LeMoyné, et.al, 1975, Soils of Utah: Agricultural experiment Station, Bulletin 492, Utah State University, Logan, Utah. 94 p.
- ⑩ Zarn, Mark, 1977, Ecological Characteristics of Pinyon-Juniper Woodlands on the Colorado Plateau: U.S. Dept. of Interior, Bureau of Land Management, Technical Note 310, Denver, Colorado 183 p.

⑥ NATIONAL PARK SERVICE, 1979, Proposed General Management Plan, Wilderness Recommendation, Road Study Alternatives, Final Environmental Statement, Glen Canyon National Recreation Area / ARIZONA - Utah: USDI-NPS  
Page Az. 347 p.

⑤ National Park Service, 1979, Draft Mineral Management Plan:  
USDI / NPS, Page Az. 56 p.

⑧ Summsion, C.T. and E.L. Bolke, 1972, Water Resources of Part of Canyonland National Park, Southeastern Utah: U.S. Dept. Interior, Geological Survey, Salt Lake City, UT. OPEN FILE REPORT. 75 p.

*William Ferguson*

Memorandum

To: District Oil and Gas Engineer, Mr. Edward Guynn

From: Mining, Supervisor, Mr. Jackson W. Moffitt

Subject: Application for Permit to Drill (form 9-331c) Federal oil and gas lease No. U-21037 Well No. 21-15

1. The location appears potentially valuable for:

- strip mining\*
- underground mining\*\*
- has no known potential.

2. The proposed area is

- under a Federal lease for \_\_\_\_\_ under the jurisdiction of this office.
- not under a Federal lease under the jurisdiction of this office.
- Please request the operator to furnish resistivity, density, Gamma-Ray, or other appropriate electric logs covering all formations containing potentially valuable minerals subject to the Mineral Leasing Act of 1920.

\*If location has strip mining potential:

Surface casing should be set to at least 50 feet below the lowest strip minable zone at \_\_\_\_\_ and cemented to surface. Upon abandonment, a 300-foot cement plug should be set immediately below the base of the minable zone.

\*\*If location has underground mining potential:

The minable zones should be isolated with cement from a point 100 feet below the formation to 100 feet above the formation. Water-bearing horizons should be cemented in like manner. Except for salines or water-bearing horizons with potential for mixing aquifers, a depth of 4,000 feet has been deemed the lowest limit for cementing.

Signed *Allen J. Davis*



# United States Department of the Interior

IN REPLY REFER

3100(U-50)

BUREAU OF LAND MANAGEMENT

Henry Mountain Resource Area  
P.O. Box 99  
Hanksville, UT. 84734

June 30, 1980

George Diwachak  
USGS Conservation Division  
2000 Administration Building  
1745 W. 1700 S.  
Salt Lake City, UT. 84104

Re: Kirkwood Oil  
Proposed Drilling Project  
T. 31 S., R. 14 E. and T. 31 S., R. 15 E.

Dear Mr. Diwachak:

The following information concerns surface protection stipulations to be incorporated into the APD's for the above referenced drilling project.

Site specific stipulations for each of the eight locations include the following:

<u>WELL NAME</u>	<u>LOCATION</u>	<u>LEASE NUMBER</u>
1- Magnum 23-8	NE $\frac{1}{4}$ SW $\frac{1}{4}$ 8 T. 31 S., R. 15 E.	U-21478

- The site will be moved roughly 400 ft. to the east to a point where it's coordinates in section 8 are 1900' FEL and 1790' FSL.
- The drill site will not be bladed.
- A small reserve pit will be constructed to hold cuttings.
- Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

<u>SPECIES</u>	<u>LBS/ACRE</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2



Save Energy and You Serve America!

See PAGE 3 for SHPS - PAGE 5 for Clearances

- e - All trash and debris will be carried off site and disposed of in a BLM approved location.
- f - Access to the site will be on an existing road. Blading will be kept to a minimum, old rocks and debris will be removed and no new cuts will be authorized.

2 - White Rim 44-4 SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  4, T. 31 S., R. 15 E. U-21083

- a - The site will be moved from the SESESE, to the NESESE of section 4.
- b - The drill site will not be bladed.
- c - A small reserve pit will be cut to hold cuttings.
- d - Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

<u>SPECIES</u>	<u>LB/ACRE</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- e - All trash and debris will be carried off site and disposed of in a BLM approved location.
- f - Access to the site will be on an existing road. Blading will be kept to a minimum.

3 - Garfield 44-15 SE $\frac{1}{4}$ SE $\frac{1}{4}$  15, T. 31 S., R. 15 E. U-21037

- a - The drill site will not be bladed.
- b - A small reserve pit will be constructed to hold cuttings.
- c - Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

<u>SPECIES</u>	<u>LB/ACRE</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- d - All trash and debris will be carried off-site and disposed of in a BLM approved site.
- e - Access to the site will be confined to the existing road. Blading will be kept to a minimum by simply removing any rocks and debris

blocking the road and by filling in any washed out areas.

**4 - Winfield 21-15 NE 1/4 15, T. 31 S., R. 15 E. U-21037**

- a - The drill site will not be bladed.
- b - A small reserve pit will be constructed to hold cuttings.
- c - Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

<u>SPECIES</u>	<u>LB/ACRE</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- d - All trash and debris will be carried off-site and disposed of in a BLM approved site.
- e - Access to the site will be confined to the existing road. Blading will be kept to a minimum by removing only those rocks and debris blocking the road and by filling in any washed out areas.

**5 - Remington 14-15 SW 1/4 SW 1/4 15, T. 31 S., R. 15 E. U-21037**

- a - The drill site will not be bladed.
- b - The two rock cairns on the access road will be left intact.
- c - A small reserve pit will be constructed to hold cuttings.
- d - Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

<u>SPECIES</u>	<u>LB/ACRE</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- e - All trash and debris will be carried off-site and disposed of in a BLM approved site.
- f - Access to the site will be confined to the existing road. Blading will be kept to a minimum by removing only those rocks and debris blocking the road and by filling in any washed out areas.

6 - Monroe 22-20 SE $\frac{1}{4}$ NW $\frac{1}{4}$  20, T. 31 S., R. 15 E. U-21477

- a - The drill site will be moved 75 feet to the west in order to drill on a level spot on the old existing road.
- b - The drill site will not be bladed.
- c - A small reserve pit will be constructed to hold cuttings.
- d - Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

<u>SPECIES</u>	<u>LB/ACRES</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- e - All trash and debris will be carried off-site and disposed of in a BLM approved site.
- f - Access to the site will be confined to the existing road. Blading will be kept to a minimum by removing only those rocks and debris blocking the road and by filling in any washed out areas.

7 - Eastex 41-20 NE $\frac{1}{4}$ NE $\frac{1}{4}$  20, T. 31 S., R. 15 E. U-21477

- a - The drill site will not be bladed and will be located directly adjacent to main access road in North Hatch Canyon.
- b - A small reserve pit will be constructed to hold cuttings.
- c - Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

<u>SPECIES</u>	<u>LB/ACRE</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- d - All trash and debris will be carried off-site and disposed of in a BLM approved site.

8 - Cromwell 33-29 SW $\frac{1}{4}$ SE $\frac{1}{4}$  29, T. 31 S., R. 15 E. U-21476

- a - The drill site will not be bladed.
- b - A small reserve pit will be constructed to hold cuttings. --

- c - Access to the site will involve blading roughly 3/4 mile of new road from the existing road in South Hatch Canyon. This road will be constructed with a minimum amount of blading and will be reclaimed from the site all the way back to the South Hatch Canyon road. All cuts will be recontoured, the road disked and revegetated by hand broadcasting the following species.

<u>SPECIES</u>	<u>LB/ACRE</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- d - Upon completion of the well the pit will be covered, the site will be disked and the above listed species will be hand broadcasted over the site.
- e - All trash and debris will be carried off and disposed of in a BLM approved site.

In addition to the above mentioned site specific stipulations the entire project should be covered by two more protective measures.

- 1) No unnecessary off-road driving will be authorized. Four-wheel drives will be restricted to existing roads.
- 2) No uranium claim markers, or cairns, will be destroyed or damaged.

The majority of the project takes place in BLM Wilderness Inventory Unit # 241, Fiddler Butte. The areas wilderness characteristics are not exceptional and as a result the BLM's inventory has recommended that the unit be dropped from any further wilderness study. However, under BLM's Interim Management Policy of Lands Under Wilderness Review (IMP), we are mandated to protect the area from any further undue or unnecessary degradation until October 1, 1980, at which time the area will officially fall out of further wilderness consideration. This time frame allows the public to comment on our decision. If there are any comments or protests to put this area back into wilderness study status, then the Bureau will have to assess the comments and decide if they are worthy of consideration. Therefore, the area could go back into wilderness study status in October and as a result we must protect the area.

The BLM's IMP Guidelines mandate that these wilderness guidelines be addressed in an Environmental Assessment (EA).

Therefore, since the GS is preparing the EA for this project, we would request that this information be included in the document. You can also include the statement that the Bureau has determined that impacts from this project will not impair the wilderness characteristics of the area and that if the mitigating measures are followed, the impacts can be returned to a substantially unnoticeable condition.

The BLM has also conducted surveys for Threatened and Endangered Plants and Animals in the project area and as a result of these surveys T & E clearances

are granted as no T & E plants or animals were found. The BLM can also grant Archaeological clearance at this time based on an archaeological survey conducted of the area by Powers Elevation Company.

If you have any questions concerning the foregoing discussion, or if you need any additional information, please feel free to contact our office.

Sincerely,



Area Manager

CC; Chuck Horsburgh  
Richfield BLM

W.J. Averett, Consulting Petroleum Engineer  
1682 Woodland Dr.  
Provo, Utah 84601

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See construction on reverse side)

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

3

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  
*William C. Kirkwood*

3. ADDRESS OF OPERATOR  
*P.O. Box 3439, Casper, Wyoming 82602*

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
 At surface *2222' FWL, 481" FNL*  
 At top prod. interval reported below *same*  
 At total depth *same*  
*NENW*

14. PERMIT NO. *43-017 200-11* DATE ISSUED *7-9-80*

5. LEASE DESIGNATION, AND SERIAL NO.  
*U-21037*  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
*N/A*  
 7. UNIT AGREEMENT NAME  
*Hatch Canyon*  
 8. FARM OR LEASE NAME  
*Winfield*  
 9. WELL NO.  
*21-15*  
 10. FIELD AND POOL, OR WILDCAT  
*Wildcat*  
 11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
*Section 15, T31S, R15E*

12. COUNTY OR PARISH  
*Garfield* 13. STATE  
*Utah*

15. DATE SPUDDED *8/12/80* 16. DATE T.D. REACHED *8/14/80* 17. DATE COMPL. (Ready to prod.) *9-80* 18. ELEVATIONS (DF, RSB, RT, GR, ETC.)\* *6127' GL* 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD *1800'* 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY *all* ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
*1350'-1576' White Rim* 25. WAS DIRECTIONAL SURVEY MADE  
*NO*

26. TYPE ELECTRIC AND OTHER LOGS RUN  
*Gamma Ray Caliper* *Density-Resistance* 27. WAS WELL CORED  
*yes*

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
<i>6 5/8"</i>	<i>20#</i>	<i>20'</i>	<i>7 7/8"</i>	<i>5 sacks</i>	
<i>4 1/2"</i>	<i>9.5#</i>	<i>1641.79'</i>	<i>6"</i>	<i>165 sacks</i>	

29. LINER RECORD 30. TUBING RECORD

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

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.\* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
		<i>SI</i>

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

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

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
 SIGNED *William C. Kirkwood* TITLE *Pete. Eng.* DATE *10-28-80*

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

William C. Kirkwood  
 21-15 Winfield  
 Ground Level 6127'

DEPTH	FORMATION	LITHOLOGY	THICKNESS DRILLED
0- 450'	Wingate	Orange Sandstone	450'
450-1020'	Chinle	Variegated siltstone & Tan to Grey Sandstone at bottom	570'
1020-1352'	Moenkopi	Red & White Siltstone	332'
1352-1424'	Upper White Rim	Sandstone & Dolomite interlayered	72'
1424- ?	White Rim	White Sandstone	376'
? -1800'	Cedar Mesa	Tan to White Sandstone	

T.D. at 1800' 8/15/80

Saturation:

Upper White Rim- Moderate to heavy saturation in Sandstone  
 with thin ( 1/2" ) Dolomite layers, 38' none,  
 or light to moderate saturation in thin ( 3" )  
 Sandstone layers

White Rim- 152' moderate to heavy saturation throughout  
 core with some bleeding tar when exposed to  
 surface temperatures

Total good saturation 186' Moderate to Heavy Saturation



SCOTT M. MATHESON  
Governor

GORDON E. HARMSTON  
Executive Director,  
NATURAL RESOURCES

CLEON B. FEIGHT  
Director

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON  
Chairman

JOHN L. BELL  
C. RAY JUVELIN  
THADIS W. BOX  
MAXILIAN A. FARBMAN  
EDWARD T. BECK  
E. STEELE McINTYRE

May 21, 1981

William C. Kirkwood  
P.O. Box Drawer 3439  
Casper, Wyoming 82601

Re: SEE ATTACHED SHEET ON WELL DUE

Gentlemen:

In reference to above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not recieved any notification of spudding. If you do not intend to drill these wells, please notify th~~e~~ Division. If spudding or any other activity has taken place, please send necessary forms. (If we do not hear from your company within fifteen (15) days, we will assume you do not intend to drill these wells and action will be taken to terminate the application.) If you plan on drilling these location at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

  
SANDY BATES  
CLERK-TYPIST

ATTACHED SHEET ON WELLS DUE

1. Well No. White Rim #44-4  
Sec. 4, T. 31S. R. 15E.  
Garfield County, Utah
2. Well No. Magnum #23-8  
Sec. 8, T. 31S. R. 15E.  
Garfield County, Utah
3. Well No. Remington #14-15  
Sec. 15, T. 31S. R. 15E.  
Garfield County, Utah
4. Well No. Winfield #21-15  
Sec. 15, T. 31S. R. 15E.  
Garfield County, Utah
5. Well No. Garfield #44-15  
Sec. 15, T. 31S. R. 15E.  
Garfield County, Utah
6. Well No. Hatch Canyon Unit #34-16A  
Sec. 16, T. 31S. R. 15E.  
Garfield County, Utah
7. Well No. Monroe #22-20  
Sec. 20, T. 31S. R. 15E.  
Garfield County, Utah
8. Well No. Eastex #41-20  
Sec. 20, T. 31S. R. 15E.  
Garfield County, Utah
9. Well No. State #11-2  
Sec. 2, T. 32S. R. 15E.  
Garfield County, Utah
10. Well No. State #31-16  
Sec. 16, T. 32S. R. 15E.  
Garfield County, Utah
11. Well No. State #34-16  
Sec. 16, T. 31S. R. 15E.  
Garfield County, Utah

HOLE # 21-15 WINFIELD  
 SPOT NO. 15 NW 1/4 SEC 15 T31S R15E

FM TOPS	NOTES	DEPTH	PORO	GRADE	ROUNDING	SORTING	% OF FWK	GRAIN SIZE	LITHOLOGY DISCRIPTION	DIAGENESIS	SATURATION- OIL
	WHITE RIM UPPER SECT CORRE AT 1360' LOST CORRE 1360'-1371'	1350'-1377'							DOL W/ THIN (>1") SS LAYERS	Calc cmt (SS)	LIGHT TO MOD IN SS
1382		1371'-1380'			R	M	6		DOL W/ THIN (>1") SS LAYERS	MOD Calc cmt (SS)	LIGHT TO MOD IN SS
1382		1380'-1387'			R	M	6		SS & DOL INTERLAYERED	MOD Calc cmt (SS)	MOD SAT IN SS
1382		1387'-1396'			R	M	6		SS w/ THIN DOL LAYERS (1/4-3") WELL	Calc cmt (SS)	NONE TO LIGHT SAT SS
1382		1396'-1415'			R	M	7		SS w/ THIN DOL LAYERS (<1") MOD	Calc cmt (SS)	MOD SAT IN SS
1382		1415'-1417'			R	M	7		" " " " " " " "	" " " "	HVY SAT IN SS
1382		1417'-1418'							DOL w/ LITTLE SS INTERMIXED		
1382		1418'-1424'			R	M	7		SS w/ THIN DOL LAYERS (<2") MOD	Calc cmt	MOD TO HVY SAT IN SS
1382	WHITE RIM	1424'-1460'			R	M	9		SS, WT, FRIABLE, BED 0°-30°	ALIGHT CMT	MOD SAT THROUGHOUT
1382		1460'-1481'			R	M	9		" " " " " " " "	MOD CMT & THIN LYS	MOD-HVY SAT THROUGHOUT
1382		1481'-1485'			R	M	9		" " " " " " " "	" " " "	HVY SAT THROUGHOUT
1382		1485'-1498'			R	M	9		" " " " " " " "	" " " "	MOD-HVY SAT THROUGHOUT
1382		1498'-1510'			R	M	9		SS, WT, BED 0°-20°	MOD CMT	MOD-HVY SAT
1382		1510'-1518'			R	M	9		" " " " " " " "	" " " "	MOD-HVY SAT
1382		1518'-1527'			R	M	9		" " " " " " " "	" " " "	HVY SAT
1382		1527'-1540'			R	M	9		" " " " " " " "	" " " "	HVY SAT BLEEDING TAR
1382		1540'-1544'			R	M	9		SS, WT, BED 10°-35°	" " " "	HVY SAT
1382		1544'-1562'			R	M	9		" " " " " " " "	" " " "	HVY SAT BLEEDING & GAS
1382		1562'-1576'			R	M	9		" " " " " " " "	MOD CMT	MOD-HVY SAT THROUGHOUT
1382		1576'-			R	M	9		SS, WT, BED 0°-15°	WELL CMT	NONE

1382  
 1384  
 1400  
 1405  
 1412  
 1415  
 1424  
 1578  
 DEN at  
 1456  
 MHA  
 at  
 1545

**WILLIAM C. KIRKWOOD**



*Suite 300 Market Square Building — 307/265-5178*

*P. O. Drawer 3439 — Casper, Wyoming 82602*

**OIL & GAS EXPLORATION & PRODUCTION**

January 29, 1982

State of Utah  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, UT 84116

RE: Filing Additions to USGS Form  
9-330 or OGCC-3

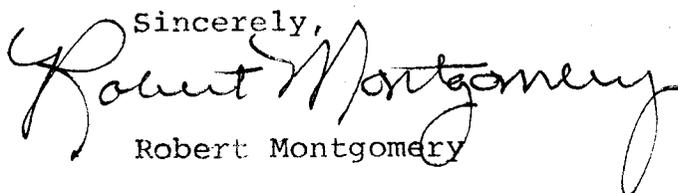
William C. Kirkwood  
#21-15 Winfield  
2222' FWL 481' FNL  
Sec. 15, T31S, R15E  
Garfield County, Utah

Gentlemen:

Enclosed is a copy of the logs (where run), sample and core descriptions, geologic summaries and other data obtained during drilling and completion operations to date.

Our delay in the further completion of this well, is due to testing presently being done to determine the best method of completion to be used to produce oil from this reservoir. Testing is being done by the University of Utah Fuels Engineering Department on core samples and oil from this reservoir. Additional wells have been cored to obtain samples for analysis of reservoir characteristics and to further delineate oil reserves in the Hatch Canyon Unit. In addition several wells of a pilot test pattern have been drilled.

If you require further information or have any questions please contact me.

Sincerely,  
  
Robert Montgomery

RM:bal

Enclosures

William C. Kirkwood  
#14-36 Technology  
2076' FWL 746' FSL  
Sec 36 Twp 31S R 14E  
Garfield County, Utah  
G.L. 4823'

Spudded 6/23/80  
T.D. 6/25/80 462'  
  
Deepened 7/1/80  
T.D. 7/12/80 1000'

---

William C. Kirkwood  
#33-29 Cromwell  
2023' FEL 741' FSL  
Sec 29 Twp 31S R 15E  
Garfield County, Utah  
G.L. 5120

Spudded 7/5/80  
T.D. 7/8/80 700'

---

William C. Kirkwood  
#23-8 Magnum  
1934' FEL 1667' FSL  
Sec 8 Twp 31S R 15E  
Garfield County, Utah  
G.L. 5084

Spudded 7/17/80  
T.D. 7/22/80 1100'

---

William C. Kirkwood  
#22-20 Monroe  
2962' FEL 1790' FNL  
Sec 20 Twp 31S R 15E  
Garfield County, Utah  
G.L. 4988

Spudded 7/9/80  
T.D. 7/15/80 800'

---

William C. Kirkwood  
#14-15 Remington  
554' FWL 697' FSL  
Sec 15 Twp 31S R 15E  
Garfield County, Utah  
G.L. 5307'

Spudded 8/1/80  
T.D. 8/3/80 1540'

William C. Kirkwood  
#14-15 Garfield  
4497' FWL 599' FSL  
Sec 15 Twp 31S R 15E  
Garfield County, Utah  
G.L. 5321'

Spudded 8/4/80  
T.D. 8/6/80 1000'

---

William C. Kirkwood  
#21-15 Winfield  
2222' FWL 481' FNL  
Sec 15 Twp 31S R 15E  
Garfield County, Utah  
G.L. 6127'

Spudded 8/12/80  
T.D. 8/14/80 1800'

---

William C. Kirkwood  
#44-4 White Rim  
401' FEL 1498' FSL  
Sec 4 Twp 31S R 15E  
Garfield County, Utah  
G.L. 6005'

Spudded 8/14/80  
T.D. 8/16/80 1640'

---

William C. Kirkwood  
#34-16 State  
699' FSL 1842' FEL  
Sec 16 Twp 31S R 15E  
Garfield County, Utah  
G.L. 5058'

Spudded 8/22/80  
T.D. 8/24/80 620'

---

William C. Kirkwood  
#34-16 Hatch Canyon Unit  
SWSE 16-31S-15E  
699' FSL 1842' FEL  
Spudded 8/22/80  
T.D. 620'  
G.L. 5058'

---

William C. Kirkwood  
34-16A Hatch Canyon Unit  
SWSE 16-31S-15E  
752 FSL 1789 FEL

Spudded 10/6/80  
T.D. 440'  
G.L. 5058'

---

William C. Kirkwood  
34-16B Hatch Canyon Unit  
SWSE 16-31S-15E  
805' FSL 1736' FEL

Spudded 6/21/81  
T.D. 800'  
G.L. 5058'

---

William C. Kirkwood  
34-16C Hatch Canyon Unit  
SWSE 16-31S-15E  
699' FSL 1736' FEL

Spudded 12/19/81  
T.D. 500'  
G.L. 5058'

---

William C. Kirkwood  
34-16C Hatch Canyon Unit  
SWSE 16-31S-15E  
805' FSL 1842' FEL

Spudded 6/12/82  
T.D. 510'  
G.L. 5058'

William C. Kirkwood  
#21-15 Winfield  
2222' FWL 481' FNL  
Sec. 15 Twp 31S R 15E  
Garfield Co., Utah  
G.L. 6127'

Spudded	8/12/80	
T.D.	8/14/80	1800'

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**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 checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO.
2. NAME OF OPERATOR W. C. Kirkwood Oil and Gas		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P. O. Drawer 3439 Casper, WY 82602		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 Wells located in Townships 31 and 32 South Ranges 14 & 15 East		8. FARM OR LEASE NAME
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, OR, etc.)	9. WELL NO.
		10. FIELD AND POOL, OR WILDCAT
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
		12. COUNTY OR PARISH
		13. STATE

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) <u>Well Status</u>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The wells described on the enclosed list are located within the Hatch Canyon Federal Oil and Gas Unit. This unit is located within the Tar Sand Triangle Special Tar Sand Area. All operations within the Hatch Canyon Unit have been suspended pending conversion of the federal leases within the unit to Combined Hydrocarbon Leases. Thus all operations on these wells have been suspended until conversion has taken place. At that time an additional Sundry Notice will be submitted outlining future activities involving these wells.

MAR 26 1984

DIVISION OF  
OIL, GAS & MINING

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

SIGNED Robert M. Halgerson TITLE Geologist DATE March 22, 1984

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> <small>(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.)</small>		5. LEASE DESIGNATION AND SERIAL NO. U-21037
1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
2. NAME OF OPERATOR William C. Kirkwood		7. UNIT AGREEMENT NAME Hatch Canyon
3. ADDRESS OF OPERATOR P.O.Box 3439, Casper, WY 82602		8. FARM OR LEASE NAME Winfield
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  2222' FWL 481' FNL		9. WELL NO. 21-15
14. PERMIT NO. 43-017-30087		10. FIELD AND POOL, OR WILDCAT Wildcat
15. ELEVATIONS (Show whether DF, RT, OR, etc.) 6127' GL		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 15, T31S, R15E
		12. COUNTY OR PARISH Garfield
		13. STATE UT

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

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

This well is located in the Hatch Canyon Unit. All operations in this Unit have been suspended pending the conversion of Federal Oil and Gas leases within this Unit to Combined Hydrocarbon leases. Once these leases are converted a new Combined Hydrocarbon Unit will be formed and operations resumed. Until that time this well has been shut in and temporarily abandoned.

RECEIVED

JAN 17 1985

DIVISION OF  
OIL, GAS & MINING

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

SIGNED *Robert M. Halpern* TITLE Geologist DATE 1-4-85

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Ut  
84180-1203. (801-538-5340)

# MONTHLY OIL AND GAS PRODUCTION REPORT

Operator name and address:

**HATCH CYN UNIT**

• KIRKWOOD, WILLIAM C.  
P O BOX 3439  
CASPER WY 82602  
ATTN: AUDREY FISHER

\* Combined Hydrocarbon  
\* Oper. Filed Bankruptcy

Utah Account No. N3260  
Report Period (Month/Year) 1 / 89  
Amended Report

Well Name	Producing	Days	Production Volume		
API Number Entity Location	Zone	Oper	Oil (BBL)	Gas (MSCF)	Water (BBL)
REMINGTON 14-15 <i>Comp. 7-30-80</i> 4301730086 09645 31S 15E 15	SWSW WHRM	—	SOW U-21037		
WINFIELD 21-15 <i>Comp. 7-30-80</i> 4301730087 09645 31S 15E 15	NENW WHRM	11015	SOW U-21037		
MONROE 22-20 <i>Comp. 7-30-80</i> 4301730088 09645 31S 15E 20	SENEW WHRM	11016	SOW U-21477	9-29-89 per Theresa/BTM	
MAGNUM 23-8 <i>Comp. 7-30-80</i> 4301730089 09645 31S 15E 8	NESW WHRM	11017	SOW U-21478	Oper. has a bond, they can	
GRMWELL 33-29 <i>Comp. 7-30-80</i> 4301730090 09645 31S 15E 29	SWSE WHRM	11018	SOW U-21476	use to PA 4, Fed. Lease	
WHITE RIM 44-4 <i>Comp. 7-30-80</i> 4301730091 09645 31S 15E 4	SESE WHRM	11019	SOW U-21083	well. Will probably never	
WINFIELD 44-15 <i>Comp. 7-30-80</i> 4301730092 09645 31S 15E 15	SESE WHRM	11020	SOW U-21037	produce.	
STATE 34-16 <i>Comp. 7-30-80</i> 4301730096 09645 31S 15E 16	SWSE WHRM	11021	SOW ML-27138		
STATE 34-16A <i>Comp. 7-30-80</i> 4301730098 09645 31S 15E 16	SWSE WHRM	11022	SOW ML-27138	St. Leases	
HATCH CANYON U 34-16B <i>Comp. 6-27-88</i> 4301730107 09645 31S 15E 16	SWSE WHRM	11023	SOW ML-27138		
TECHNOLOGY 14-36 4301730085 10929 31S 14E 36	WHRM	—	SOW (not in unit)		
TOTAL					

Comments (attach separate sheet if necessary) Entity 9645 ok. No P.A.'s in Unit!  
9-25-89 All wells currently "SOW" status's - for  
43-017-30086 is the only well that will retain entity 9645.

I have reviewed this report and certify the information to be accurate and complete. Date \_\_\_\_\_  
Authorized signature \_\_\_\_\_ Telephone \_\_\_\_\_



Bureau of Land Management  
Branch of Fluid Minerals (U-922)  
324 South State Street  
Salt Lake City, Utah 84111-2303

2170  
(11-972)

September 20, 1980

CERTIFIED MAIL - Return Receipt Requested

William C. Kirkwood  
P.O. Drawer 3439  
Casper, Wyoming 82402

Gentlemen:

Pursuant to our letter of August 8, 1980, the indefinite suspension of Section 2 drilling obligations within the Hatch Canyon Unit Area was lifted September 11, 1980. A copy of our August 8, 1980, correspondence and the Certified Return Receipt is enclosed for your records.

As a result of the indefinite suspension being lifted, the Hatch Canyon Unit Agreement, Garfield County, Utah, automatically terminated, effective September 16, 1980, pursuant to the last paragraph of Section 2 of the Unit Agreement.

Copies of this letter are being distributed to the appropriate Federal agencies. It is requested that you furnish notice of this termination to each working interest owner, lessee, and lessor.

In accordance with 43 CFR 3105.1, you may request a State Director Review of this decision. Any party adversely affected by a State Director Review may appeal to the Interior Board of Land Appraisals as stated in 43 CFR 3105.4.

Sincerely,

Orig. Sgd: J.A. Fouts

ACTING

Robert A. Henricks  
Chief, Branch of Fluid Minerals

bcc: DM Cedar City  
Hatch Canyon Unit File  
Agr. Sec. Chron  
Fluid Chron  
U-942  
Utah State Land Board  
NMS-RMP  
DOEN

MCoulthard: June 19/89  
0128V



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
RICHFIELD DISTRICT OFFICE  
150 EAST 900 NORTH  
RICHFIELD, UTAH 84701



IN REPLY REFER TO:

3162.3-4  
(U-052)

March 25, 1991

CERTIFIED MAIL No. P437 740 244  
Return Receipt Requested

Mr. William C. Kirkwood (N32607)  
Drawer 3439  
Casper, Wyoming 82602

Dear Mr. Kirkwood:

**RECEIVED**

MAR 27 1991

DIVISION OF  
OIL GAS & MINING

Lease U-21307 automatically terminated on September 1, 1990 due to failure to make timely payments as required in 43 CFR 3103.2-2. The records in this office indicate that the following wells on this lease are unplugged:

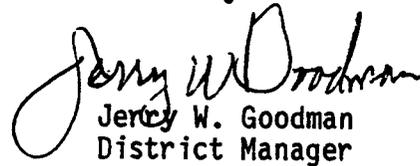
Well No. 14-15, SW1/4SW1/4	43-017-30086	-	E1S 15E #15	SOW
Well No. 21-15, NE1/4NW1/4	43-017-30087	-	E1S 15E #15	SOW
Well No. 44-15, SE1/4SE1/4	43-017-30092	-	E1S 15E #15	SOW

These wells are located in T. 31 S., R. 15 E., Section 15 in Garfield County, Utah. A notification that this office has received from the State of Utah indicates that four (4) shallow, unplugged holes are associated with Well No. 14-15.

If you have records indicating the status of these wells is other than unplugged, please notify this office immediately. Otherwise, as the recognized operator and responsible party, you shall prepare a proposal as a Sundry Notice to permanently plug and abandon all the referenced wells in a timely manner. These Sundry Notices shall be submitted to this office within thirty (30) days from receipt of this letter.

Depending on your response, you may want to jointly inspect these wells with my staff. If you have any questions in this matter, please contact Michael Jackson at (801) 896-8221.

Sincerely

  
Jerry W. Goodman  
District Manager

Enclosure:  
Form 3160-5

cc: LORT--Raymond Joeckel  
200 16th Street  
Denver, CO 80202  
U-922  
HMRA  
DOGM



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
RICHFIELD DISTRICT OFFICE  
150 EAST 900 NORTH  
RICHFIELD, UTAH 84701



IN REPLY REFER TO:

3162.3-4  
(U-052)

March 25, 1991

CERTIFIED MAIL No. P437 740 244  
Return Receipt Requested

Mr. William C. Kirkwood (N32607)  
Drawer 3439  
Casper, Wyoming 82602

Dear Mr. Kirkwood:

**RECEIVED**

MAR 27 1991

DIVISION OF  
OIL GAS & MINING

Lease U-21307 automatically terminated on September 1, 1990 due to failure to make timely payments as required in 43 CFR 3103.2-2. The records in this office indicate that the following wells on this lease are unplugged:

Well No. 14-15, SW1/4SW1/4 43-017-30086

Well No. 21-15, NE1/4NW1/4 43-017-30087

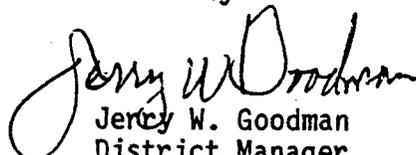
Well No. 44-15, SE1/4SE1/4 43-017-30092

These wells are located in T. 31 S., R. 15 E., Section 15 in Garfield County, Utah. A notification that this office has received from the State of Utah indicates that four (4) shallow, unplugged holes are associated with Well No. 14-15.

If you have records indicating the status of these wells is other than unplugged, please notify this office immediately. Otherwise, as the recognized operator and responsible party, you shall prepare a proposal as a Sundry Notice to permanently plug and abandon all the referenced wells in a timely manner. These Sundry Notices shall be submitted to this office within thirty (30) days from receipt of this letter.

Depending on your response, you may want to jointly inspect these wells with my staff. If you have any questions in this matter, please contact Michael Jackson at (801) 896-8221.

Sincerely

  
Jerry W. Goodman  
District Manager

Enclosure:  
Form 3160-5

cc: LORT--Raymond Joeckel  
200 16th Street  
Denver, CO 80202  
U-922  
HMRA  
DOGM

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator

3. Address and Telephone No.

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

9. API Well No.

10. Field and Pool, or Exploratory Area

11. County or Parish, State

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

TYPE OF ACTION

- Abandonment
- Recompletion
- Plugging Back
- Casing Repair
- Altering Casing
- Other \_\_\_\_\_
- Change of Plans
- New Construction
- Non-Routine Fracturing
- Water Shut-Off
- Conversion to Injection
- Dispose Water

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

13. 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.)\*

**RECEIVED**

MAR 27 1991

DIVISION OF  
OIL GAS & MINING

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

Signed \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

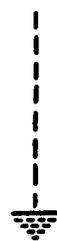
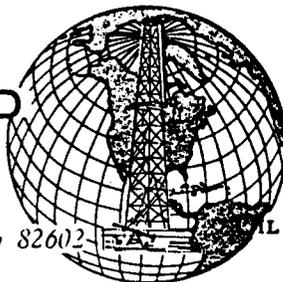
(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

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

\*See Instruction on Reverse Side

WILLIAM C. KIRKWOOD



120 South Durbin — 307/265-5178  
P. O. Drawer 3439 — Casper, Wyoming 82602

DIVISION OF OIL & GAS EXPLORATION & PRODUCTION

June 3, 1991

RECEIVED

AUG 26 1991

DIVISION OF  
OIL GAS & MINING

Handwritten initials 'SRK' and checkmarks on a routing slip.

JUN 5 1991

Empty routing slip grid.

Bureau of Land Management  
Richfield District Office  
150 East 900 North  
Richfield, UT 84701

Attention: Michael Jackson

Re: Hatch Canyon Unit  
Well # 14-15, 21-15, 44-15  
Sec. 15, T31S, R15E  
Garfield County, UT

Gentlemen:

Enclosed please find Sundry Notices for plugging three wells in the Hatch Canyon Unit located in Section 15.

With regard to your concern of the four shallowed unplugged holes associated with the #14-15 well: Kirkwood has no record of any such wells, however, we do have a five spot pattern located in Section 16 (copies of location plot and completion reports enclosed). This pattern could possibly be what they are talking about.

If I can be of further assistance, please advise.

Sincerely,

Robert Kirkwood  
Engineer

RK/mm

Enclosures

RECEIVED

AUG 26 1991

DIVISION OF  
OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

**SUBMIT IN TRIPLICATE**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. U-21037
2. Name of Operator William C. Kirkwood	6. If Indian, Allottee or Tribe Name NA
3. Address and Telephone No. P. O. Box 3439 Casper, WY 82602 (307)265-5178	7. If Unit or CA, Agreement Designation Hatch Canyon Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2222' FWL, 481" FNL Sec. 15, T31S, R15E	8. Well Name and No. #21-15
	9. API Well No. 43-017-30087
	10. Field and Pool, or Exploratory Area Wildcat
	11. County or Parish, State Garfield, UT

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input checked="" type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
<i>Changed to NOI, 8/23/91 M. [Signature], BLM</i>	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

13. 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.)\*

Kirkwood proposes to abandon the 21-15 well as follows:

1. Pressure test casing to 200 PSI for 15 minutes.
2. Mix and set 20' surface plug.
3. Screw 4½" dry hole marker into 4½" production casing.
4. Reseed location as necessary.

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

**RECEIVED**

AUG 26 1991

DATE: 8-28-91

BY: [Signature]

DIVISION OF  
OIL, GAS & MINING

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

Signed: [Signature] Title: Engineer Date: 6/3/91

(This space for Federal or State office use)

Approved by: [Signature] Title: Acting District Manager Date: 8/23/91

Conditions of approval, if any:

SEE ATTACHED

CONDITIONS OF APPROVAL  
SUNDRY NOTICE (DATED 6/3/91)

Company: William C. Kirkwood  
Well No.: 21-15  
Location: Section 15, T. 31 S., R. 15 E., SLM  
Lease No.: U-21037

General Conditions:

1. All lease operations shall be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100 and 3160, Onshore Oil and Gas Orders, the approved application for permit to drill, and this Sundry Notice.
2. The operator is fully responsible for the actions of its subcontractors.
3. A copy of this approved Sundry Notice shall be available at the well site for the operator and/or subcontractors.
4. The operator or contractor shall contact the Henry Mountains Resource Area, BLM, at least forty eight (48) hours prior to access, plugging and/or reclamation activities. Contact Francis Rakow, Area Geologist, at (801) 542-3461.
5. You are requested to plug the well within 60 days of receipt of this approval or notify this office for reason of delay.
6. Within thirty (30) days following completion of well abandonment, the lessee or operator shall file a Subsequent Report of Abandonment on Form 3160-5 in accordance with 43 CFR 3160. Upon completion of reclamation operations, the lessee or operator shall notify the authorized officer when the location is ready for inspection via a Final Abandonment Notice on Form 3160-5. Final abandonment shall not be approved until the surface reclamation required by the approved drilling permit has been approved by the BLM. Please file these forms with the District Manager, Richfield District Office, BLM.

Subsurface Conditions:

1. Spacer fluid shall be a minimum 9.0 ppg (pounds per gallon) fresh water and bentonite.
2. Surface plug shall be a minimum of 50 feet in length.

**RECEIVED**

AUG 26 1991

DIVISION OF  
OIL, GAS & MINING

# RECEIVED

AUG 26 1991

## DIVISION OF OIL, GAS & MINING

William C. Kirkwood  
Well 21-15, U-21037

3. The operator shall contact the Petroleum Engineering Technician, Cedar City District Office, at least forty-eight (48) hours prior to pressure testing of any casing string and mixing and setting the spacer fluid and surface plug. Contact Theron Mitchell, PET, at:

(801) 586-2401 Cedar City District Office  
(801) 586-2719 Home

If cannot reach at above, call:

(801) 826-4291 Escalante Resource Area  
(801) 826-4347 After work hours

### Surface Conditions:

1. The drill site shall not be bladed.
2. Rock cairns on the access road shall be left intact, if present.
3. Upon completion of plugging and abandonment operations, the reserve pit shall be covered, the site shall be disked, and the following seed mixture shall be hand broadcasted over the site:

<u>Species</u>	<u>lbs/acre</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2
4. All trash and debris shall be carried off-site and disposed in a landfill approved by the BLM.
5. Access to the site shall be confined to the existing road. Blading, only if necessary, shall be kept to a minimum by removing only those rocks and debris blocking the road and by filling any washed out areas. Blading, if necessary, shall not exceed the width of the existing road berm and road surface. The road shall not be widened.
6. The entire project shall be covered by the following protective measures:
  - a. No off-road driving shall be authorized. Four-wheel drive vehicles shall be restricted to existing roads.
  - b. No uranium mining claim markers, or cairns, shall be destroyed nor damaged.
7. As required in 43 CFR 3162.6(d), the well shall be marked with a permanent monument with the following information: well number, name of the operator, lease serial number, and surveyed location (quarter-quarter section, section, township and range).
8. If access requires use of roads through Glen Canyon National Recreation Area, authorization, if necessary, must be obtained with a Special Use Permit from the National Park Service.

**ROUTING AND TRANSMITTAL SLIP**

Date 8/23/91

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. <u>Frank Mathews</u>		
2. <u>DOGMA</u>		
3. <u>STATE OF UTAH, Division of Oil, Gas &amp; Mining</u>		
4. <u>3Tried Center, Sec 350</u>		
5. <u>SLC, DA129-1203</u>		

Action	File	Note and Return
Approval	For Clearance	For Clearance
As Requested	For Correction	Prepare Report
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

**RECEIVED**  
AUG 26 1991

**REMARKS**

*Approval for*  
**DIVISION OF OIL, GAS & MINING**  
*included are the reports for*  
*PEA of 3 wells on BLM lands.*

*Also, enclosed are reports related to wells on Sec. 16, which I'd talked to you about.*

*Give me a call if questions.*

**DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions**

<b>FROM: (Name, org. symbol, Agency/Post)</b> <u>Michael Jackson</u>	Room No.—Bldg. <u>BLM-Richfield</u>
	Phone No. <u>801 896-8221</u>

5041-102

**OPTIONAL FORM 41 (Rev. 7-76)**  
Prescribed by GSA  
FPMR (41 CFR) 101-11.206

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

**SUBMIT IN TRIPLICATE**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. U-21037
2. Name of Operator William C. Kirkwood	6. If Indian, Allottee or Tribe Name NA
3. Address and Telephone No. P. O. Box 3439 Casper, WY 82602 (307)265-5178	7. If Unit or CA, Agreement Designation Hatch Canyon Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2222' FWL, 481" FNL Sec. 15, T31S, R15E	8. Well Name and No. #21-15
	9. API Well No. 93-017-30087
	10. Field and Pool, or Exploratory Area Wildcat
	11. County or Parish, State Garfield, UT

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input checked="" type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
<i>Changed to NOI, 8/23/91 M. Jackson, BLM</i>	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water
	<small>(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</small>

13. 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.)\*

Kirkwood proposes to abandon the 21-15 well as follows:

1. Pressure test casing to 200 PSI for 15 minutes.
2. Mix and set 20' surface plug.
3. Screw 4½" dry hole marker into 4½" production casing.
4. Reseed location as necessary.

**RECEIVED**  
NOV 27 1991  
DIVISION OF  
OIL GAS & MINING

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

Signed *John White* Title Engineer Date 6/3/91

(This space for Federal or State office use)

Approved by *Alan Hantke* Title Acting District Manager Date 8/23/91

Conditions of approval, if any:

SEE ATTACHED

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

CONDITIONS OF APPROVAL  
SUNDRY NOTICE (DATED 6/3/91)

Company: William C. Kirkwood  
Well No.: 21-15  
Location: Section 15, T. 31 S., R. 15 E., SLM  
Lease No.: U-21037

General Conditions:

1. All lease operations shall be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100 and 3160, Onshore Oil and Gas Orders, the approved application for permit to drill, and this Sundry Notice.
2. The operator is fully responsible for the actions of its subcontractors.
3. A copy of this approved Sundry Notice shall be available at the well site for the operator and/or subcontractors.
4. The operator or contractor shall contact the Henry Mountains Resource Area, BLM, at least forty eight (48) hours prior to access, plugging and/or reclamation activities. Contact Francis Rakow, Area Geologist, at (801) 542-3461.
5. You are requested to plug the well within 60 days of receipt of this approval or notify this office for reason of delay.
6. Within thirty (30) days following completion of well abandonment, the lessee or operator shall file a Subsequent Report of Abandonment on Form 3160-5 in accordance with 43 CFR 3160. Upon completion of reclamation operations, the lessee or operator shall notify the authorized officer when the location is ready for inspection via a Final Abandonment Notice on Form 3160-5. Final abandonment shall not be approved until the surface reclamation required by the approved drilling permit has been approved by the BLM. Please file these forms with the District Manager, Richfield District Office, BLM.

Subsurface Conditions:

1. Spacer fluid shall be a minimum 9.0 ppg (pounds per gallon) fresh water and bentonite.
2. Surface plug shall be a minimum of 50 feet in length.

William C. Kirkwood  
Well 21-15, U-21037

3. The operator shall contact the Petroleum Engineering Technician, Cedar City District Office, at least forty-eight (48) hours prior to pressure testing of any casing string and mixing and setting the spacer fluid and surface plug. Contact Theron Mitchell, PET, at:

(801) 586-2401 Cedar City District Office  
(801) 586-2719 Home

If cannot reach at above, call:

(801) 826-4291 Escalante Resource Area  
(801) 826-4347 After work hours

Surface Conditions:

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2. Rock cairns on the access road shall be left intact, if present.
3. Upon completion of plugging and abandonment operations, the reserve pit shall be covered, the site shall be disked, and the following seed mixture shall be hand broadcasted over the site:

<u>Species</u>	<u>lbs/acre</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

4. All trash and debris shall be carried off-site and disposed in a landfill approved by the BLM.
5. Access to the site shall be confined to the existing road. Blading, only if necessary, shall be kept to a minimum by removing only those rocks and debris blocking the road and by filling any washed out areas. Blading, if necessary, shall not exceed the width of the existing road berm and road surface. The road shall not be widened.
6. The entire project shall be covered by the following protective measures:
  - a. No off-road driving shall be authorized. Four-wheel drive vehicles shall be restricted to existing roads.
  - b. No uranium mining claim markers, or cairns, shall be destroyed nor damaged.
7. As required in 43 CFR 3162.6(d), the well shall be marked with a permanent monument with the following information: well number, name of the operator, lease serial number, and surveyed location (quarter-quarter section, section, township and range).
8. If access requires use of roads through Glen Canyon National Recreation Area, authorization, if necessary, must be obtained with a Special Use Permit from the National Park Service.

STATE OF UTAH  
DIVISION OIL, GAS AND MINING

5. Lease Designation and Serial Number:

U-21037

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. If Indian, Allottee or Tribe Name:

7. Unit Agreement Name:

Hatch Canyon Unit

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

1. Type of Well: OIL  GAS  OTHER:

8. Well Name and Number:

Winfield 21-15

2. Name of Operator:

WILLIAM C. KIRKWOOD

9. API Well Number:

4301730088

3. Address and Telephone Number:

P. O. BOX 3439 CASPER, WY 82602-3439

10. Field and Pool, or Wildcat:

4. Location of Well

Footages: 2222' FWL, 481' FNL

QQ, Sec., T., R., M.: Sec 15, T31S, R15E

County: Garfield

State: Utah

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

**NOTICE OF INTENT**  
(Submit in Duplicate)

- |  |   |
|--|---|
| <input type="checkbox"/> Abandonment             | <input type="checkbox"/> New Construction     |
| <input type="checkbox"/> Casing Repair           | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans         | <input type="checkbox"/> Recompletion         |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Shoot or Acidize     |
| <input type="checkbox"/> Fracture Treat          | <input type="checkbox"/> Vent or Flare        |
| <input type="checkbox"/> Multiple Completion     | <input type="checkbox"/> Water Shut-Off       |
| <input type="checkbox"/> Other _____             |   |

Approximate date work will start \_\_\_\_\_

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

- |  |   |
|--|---|
| <input type="checkbox"/> Abandonment*            | <input type="checkbox"/> New Construction     |
| <input type="checkbox"/> Casing Repair           | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans         | <input type="checkbox"/> Shoot or Acidize     |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Vent or Flare        |
| <input type="checkbox"/> Fracture Treat          | <input type="checkbox"/> Water Shut-Off       |
| <input type="checkbox"/> Other _____             |   |

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

\* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

The above referenced well was plugged and abandoned at the request of the BLM in August, 1992.



DEC 21 1992

DIVISION OF  
OIL, GAS & MINING

13.

Name & Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Engineer

Date: \_\_\_\_\_

12/18/92

(This space for State use only)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Designation and Serial No.

U-21037

6. If Indian, Allottee or Tribe Name

NA

7. If Unit or CA, Agreement Designation

Hatch Canyon Unit

8. Well Name and No.

#21-15

9. API Well No.

43-017-30087

10. Field and Pool, or Exploratory Area

Wildcat

11. County or Parish, State

Garfield, UT

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

William C. Kirkwood

3. Address and Telephone No.

P.O. Box 3439, Casper, WY 82602, 307 265-5178

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2222' FWL, 481' FNL  
Sec. 15, T31S, R15E

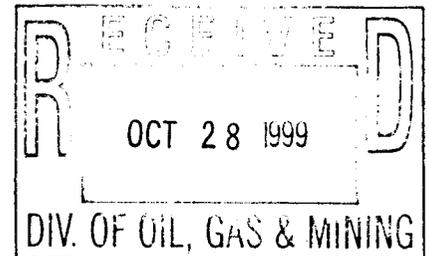
12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input checked="" type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

13. 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.)\*

Please be advised that the above referenced well has been plugged in accordance with the approved plan and is ready for final inspection.



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

Signed *[Signature]*

Title Engineer

Date 10/25/99

(This space for Federal or State office use)

Approved by \_\_\_\_\_  
Conditions of approval, if any:

Title \_\_\_\_\_

Date \_\_\_\_\_

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

\*See Instruction on Reverse Side

KIRKWOOD OIL & GAS

**Fax Cover** This is a confidential message, intended solely for the person to whom it is addressed. If you receive this message in error, please forward it to the correct person, or mail it back to us. Thank you.

**To** Carol Daniels  
**Fax No.** 801-359-3940  
**From** Robert Kirkwood  
**Date/Time** 11/4/1999 at 9:22AM  
**Subject** Utah well P & A dates  
**Pages** 1, including this one

Carol:

The P&A dates you requested are as follows:

Monroe 22-20	10/7/99
Magnum 23-8	10/8/99
Cromwell 33-29	10/9/99
White Rim 44-31	10/5/99
Technology 14-36	10/8/99
Garfield 44-15	8/19/92
Remington 14-15	8/19/92
Winfield 21-15	8/18/92

If you need more information please let me know.

**307 265-5178**

**Fax 307 265-1791**