

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. 71-039364	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME -----	
2. NAME OF OPERATOR WALTER D. BROADHEAD			7. UNIT AGREEMENT NAME -----	
3. ADDRESS OF OPERATOR 1645 North 7th, Grand Junction, CO 81501 (303/242-7717)			8. FARM OR LEASE NAME Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface 500' FNL & 500' FEL, in the NE $\frac{1}{4}$ NE $\frac{1}{4}$, of Section 7 At proposed prod. zone approximately same			9. WELL NO. Federal Bowers 1-A	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 9.2 miles Northerly of Cisco, Utah			10. FIELD AND POOL, OR WILDCAT Greater Cisco Area	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 500'			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 7, T20S, R24E, SLB&M	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 800			12. COUNTY OR PARISH 13. STATE Grand Utah	
16. NO. OF ACRES IN LEASE 320			17. NO. OF ACRES ASSIGNED TO THIS WELL	
19. PROPOSED DEPTH 1900'			20. ROTARY OR CABLE TOOLS rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 4658'			22. APPROX. DATE WORK WILL START* October 5, 1981	

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 5/8"	7"	17#	100'	circulate cement to surface
6 1/4"	4 1/2"	9.5#	RD	100 sx cement

EXHIBITS ATTACHED:

- "A" Location and Elevation Plat
- "B" Ten-Point Compliance Program
- "C" Blowout Preventer Diagram
- "D" Multi-Point Requirements for APD
- "E" Route & Distance Road Map
- "F" Access Road and Radius Map of Wells in Area
- "G" Drill Pad Layout
- "H" Drill Rig Layout
- "I" Production Facility Layout

**APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING**
DATE: 12/3/81
BY: [Signature]

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

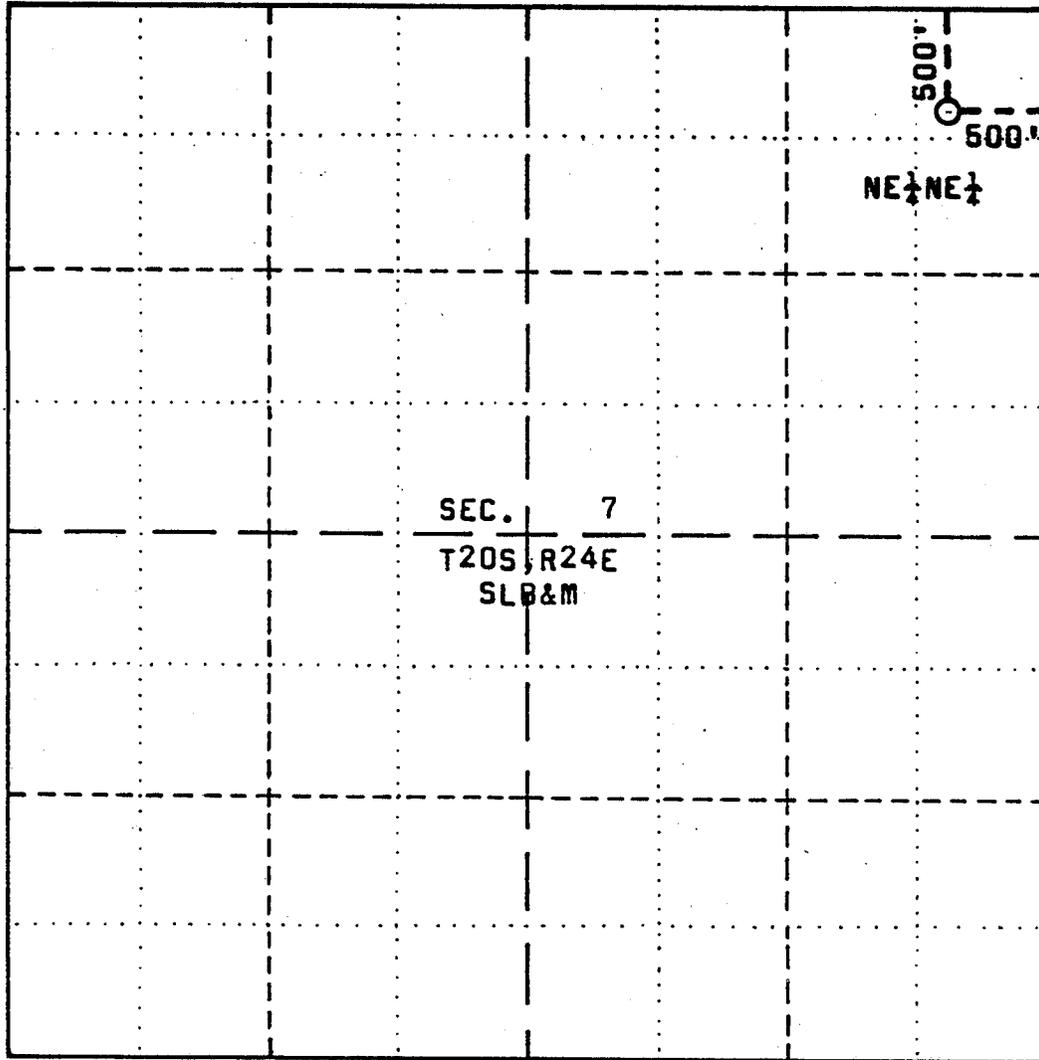
24. SIGNED [Signature] TITLE Operator DATE September 3, 1981

(This space for Federal or State office use)

PERMIT NO. 43-019-30889 APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



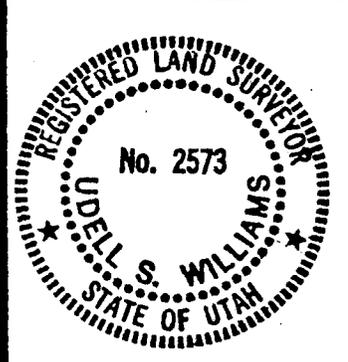
SCALE: 1" = 1000'

FEDERAL BOWERS #1-A

Located South 500 feet from the North boundary and West 500 feet from the East boundary of Section 7, T20S, R24E, SLB&M.

Elev. 4658

Grand County, Utah



SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

Udell S. Williams
UTAH R.L.S. NO. 2573



UDELL S. WILLIAMS

751 Rood Avenue
GRAND JUNCTION, COLORADO 81501

PLAT OF
PROPOSED LOCATION

FEDERAL BOWERS #1-A
NE 1/4 NE 1/4 SECTION 7
T20S, R24E, SLB&M

SURVEYED BY: USW DATE: 8/24/81

DRAWN BY: USW DATE: 8/24/81

EXHIBIT "B"

TEN-POINT COMPLIANCE PROGRAM OF NTL-6

APPROVAL OF OPERATIONS

WALTER D. BROADHEAD
Federal Bowers 1-A
NE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec 7, T20S, R24E, SLB&M
Grand County, Utah

1. Geologic Surface Formation

The surface formation is Mancos.

2. Important Geologic Markers

<u>Formation</u>	<u>Depth</u>
Brush Creek	1700

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

<u>Formation</u>	<u>Depth</u>	<u>Fluids</u>
Brush Creek	1750	Gas and/or Oil and/or Water

4. Proposed Casing Program

Surface Casing:

- (a) Drill 8 5/8" hole to 100' and set 7" 17-lb. cemented to surface.
- (b) Drill 6 1/4" hole to 1900' and set 4 1/2" 9.5-lb. with 100 sx cement.

5. Operator's Minimum Specifications for Pressure Control

Exhibit "C" is a schematic diagram of the blowout preventer equipment planned for use in this well. The BOP's will be hydraulically tested to 1000 psi after nipping up and after any use under pressure. Pipe rams will be operationally checked each trip. All tests will be recorded in the daily drilling report. Accessories to BOP's include Kelly Cock, safety valve, drill string BOP and choke with pressure rating equivalent to the BOP stack.

6. Type of Characteristics of Proposed Muds

The well will be drilled with air and air mist until water is encountered, then it will be completed with mud. One hundred barrels of 8.5 to 9-lb. mud will be mixed up for use in drilling or in the event it is needed to kill well or logging operations.

7. Auxiliary Equipment to be Used

- (a) Kelly Cock will be kept in the string.
- (b) A full opening stabbing valve will be on the floor for use, when the Kelly is not in the string.
- (c) A float will be run at the bit.
- (d) Monitoring equipment will be installed and used on the mud system.

8. The Testing, Logging and Coring Programs

- (a) Drill stem tests are not planned at this time.
- (b) The logging program will consist of Induction Electric & Compensated Nuclear Density.
- (c) No coring is planned.
- (d) Drilling samples will be caught at 30' intervals BSC to 1500'; from 1500' to TD samples at 5' intervals.

9. Any Anticipated Abnormal Pressures or Temperatures Expected

No abnormal gas pressures or temperatures are expected. No hydrogen sulfide or other hazardous gasses or fluids have been reported in the area.

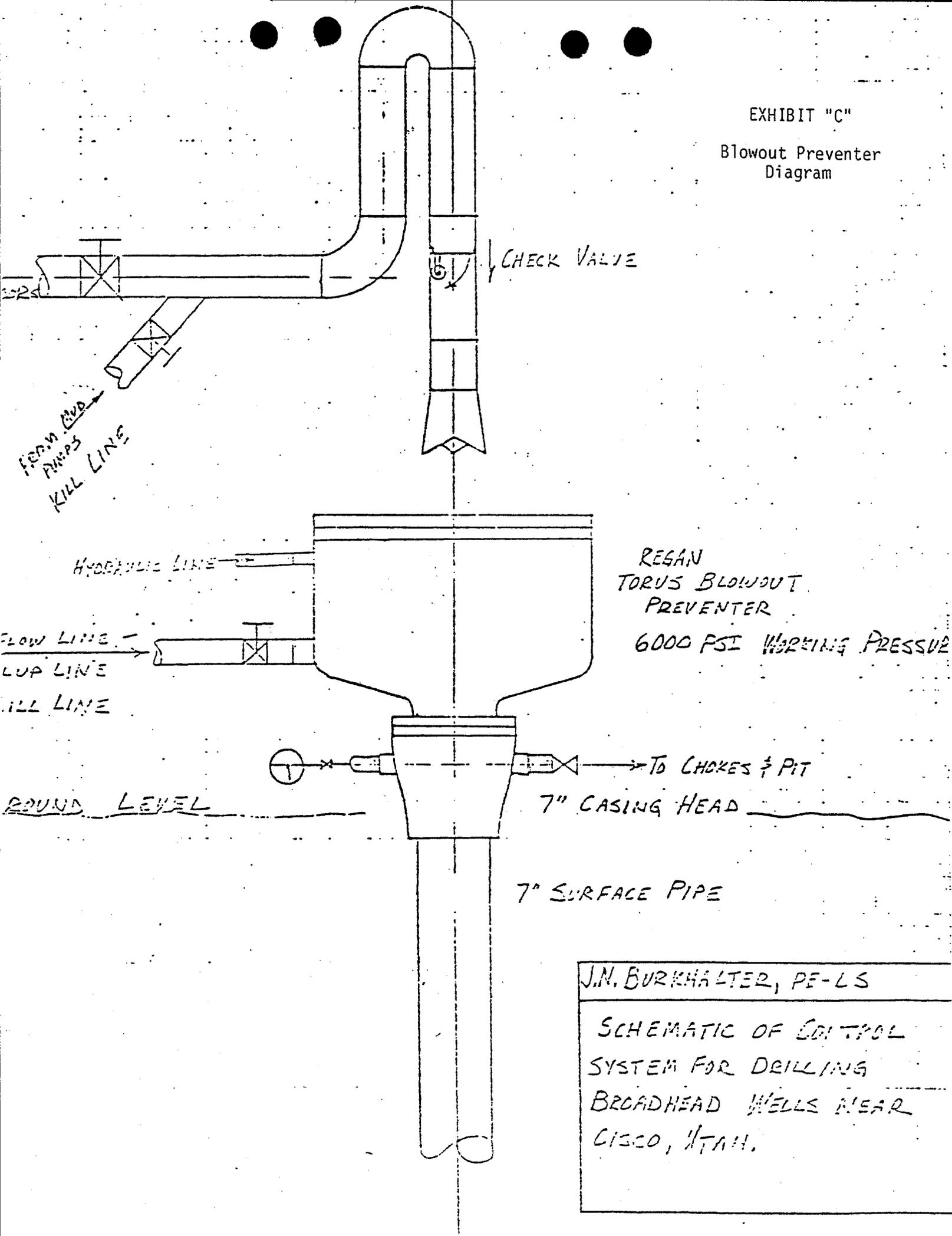
10. Anticipated Starting Date and Duration of Operations

The anticipated starting date is October 5, 1981, or as soon as possible after approval of all drilling requirements.

Drilling operations should be completed 7 to 10 days after spudding.

EXHIBIT "C"

Blowout Preventer
Diagram



J.N. BURKHALTER, PE-LS

SCHEMATIC OF CONTROL
SYSTEM FOR DRILLING
BROADHEAD WELLS NEAR
CISCO, UTAH.

EXHIBIT "D"

MULTI-POINT REQUIREMENTS TO ACCOMPANY APD

WALTER D. BROADHEAD
Federal Bowers 1-A
NE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec 7, T20S, R24E, SLB&M
Grand County, Utah

1. Existing Roads

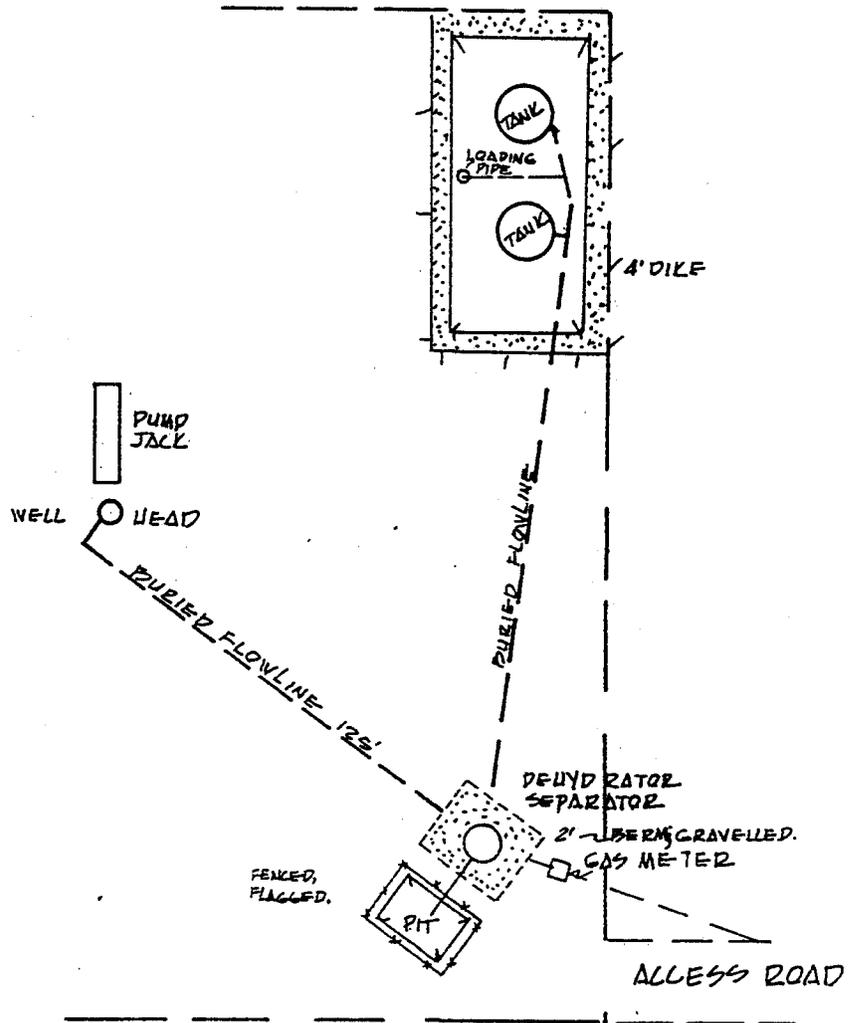
- A. Exhibit "A" is the proposed well site as staked by Udell S. Williams, and the ground elevation is shown thereon.
- B. Exhibit "E" is the route and distance road map. The location is a total of 9.2 miles Northerly from Cisco, Utah. To reach the location travel Northeasterly from Cisco 5.4 miles on old U.S. Highway 6 & 24; turn left and go under Interstate 70 and proceed Northerly on 30' Grand County gravelled road for a distance of 3.7 miles to the beginning of the flagged access road to be built to the location on the left; travel Westerly 0.1 mile to the location.
- C. Exhibit "F" is a print of a portion of the Danish Flat, Utah, Quadrangle and shows the access road into the location. The green color shows the existing road. The red color indicates new road construction required to reach the location.
- D. All known existing roads appear on Exhibits "E" and "F".
- E. This is considered a Development Well.
- F. All roads from Cisco to the beginning of the new access road are in good condition and will carry the necessary traffic to the location.

2. Planned Access Roads

The 0.1 mile of new access road will be of minimum disturbance. The brush will be bladed off and windrowed along the Northerly side of the road.

- (1) The typical section of the proposed access road will be 16' in width.
- (2) Maximum grade will be 2-4%.
- (3) No turnouts are required.
- (4) (5) No culverts are necessary.
- (6) Surface material will be that native to the area.
- (7) No gates or cattleguards are required.
- (8) The proposed access road has been flagged.

EXHIBIT I
PRODUCTION FACILITIES



FEDERAL BOWERS I-A
GRAND COUNTY, UTAH

3. Location of Existing Wells

For all existing wells within a one-mile radius of the development well, see Exhibit "F".

- (1) There are no water wells.
- (2) There are no abandoned wells.
- (3) There are no temporarily abandoned wells.
- (4) There are no disposal wells.
- (5) There are no drilling wells.
- (6) There are no producing wells.
- (7) There are no shut-in wells.
- (8) There are no injection wells.
- (9) There are no monitoring or observation wells for other resources.

4. Location of Existing and/or Proposed Facilities

- A. Within a one-mile radius of this location are existing facilities owned or controlled by lessee/operator as shown on Exhibit "F".
- B.
 - (1) Exhibit "I" shows all anticipated production facilities.
 - (2) The dimensions of production facilities shown on Exhibit "I" are drawn to a scale of 1" = 50'.
 - (3) The only construction materials needed from outside the location would be gravel for a pad under separator and/or dehydrator unit. Gravel would be trucked into the location over the access road by the dirt contractor from the nearest commercial pit in the Cisco area.
 - (4) If a small pit is required, it will be fenced and flagged.
- C. Rehabilitation, whether the well is productive or not, will be made on unused areas as soon as practical in accordance with the restoration plans presented in Item 10 following.

5. Location and Type of Water Supply

- A. Water will be trucked from Cisco Springs, 11.1 road miles Westerly of the location.
- B. Water will be trucked over the access roads by oilfield water trucks.
- C. No water well is planned.

6. Source of Construction Materials

A., B., C., D.

No construction materials are needed for drilling operations. In the event of production, the small amount of gravel needed for facilities will be hauled in by truck from local gravel pit in the Cisco area. No special access other than for the drilling operation is needed.

7. Methods for Handling Waste Disposal

- (1) Drill cuttings will be buried in the reserve pit when covered.
- (2) Drilling fluids will be contained in steel mud pits and the reserve pit. These fluids will be disposed of in the reserve pit.
- (3) Any hydrocarbon liquids produced while drill stem testing or production testing will be collected in a test tank set near the pipe baskets or near the wellhead. Any unavoidable spills of oil or other adverse substances or materials will be covered or removed immediately during drilling progress or during completion operations.
- (4) Chemical toilet facilities will be provided for human waste.
- (5) Garbage and trash will be collected in a trash cage and its contents hauled to the nearest designated landfill.
- (6) The reserve pits will be fenced or covered as soon as practical upon removal of the rig. Other pits will be covered as soon as possible after removal of the rig.

8. Ancillary Facilities

No air strips, camps or other living facilities will be built off the location. The normal trailers will be on the location as seen on Exhibit "H".

9. Well Site Layout

- (1) Exhibit "G" is the drill pad layout. Topsoil will be stockpiled to specifications determined at the pre-drill inspection.
- (2) (3) The mud tanks, reserve pit, trash cage, pipe racks, living facilities, and soil material stockpiles, rig orientation, parking areas and access road are all shown on Exhibit "H".
- (4) The reserve pits will not be lined. Steel mud tanks will be used, and are shown on Exhibit "H". If water is produced in production, an NTL-2b study will be initiated.

10. Plans for Restoration

- (1) Backfilling, leveling, and recontouring will be accomplished as soon as possible after plugging of the well, and on those unused areas if production is obtained. Waste disposal and spoils materials will be buried or hauled away.
- (2) Rehabilitation will be accomplished by recontouring as best practical back to blend with original contours. The stockpiled topsoil will be spread, along with ripping of the pad and road area (if so desired by surface owner). Revegetation will be accomplished using grasses chosen by B.L.M.

- (3) Three sides of the reserve pit will be fenced prior to drilling operations. Upon rig release, the reserve pit will be fenced on the fourth side and will remain until recontouring and cleanup operations are completed.
- (4) Any oil spills will be immediately reported, cleaned up, or flagged.
- (5) Rehabilitation operations will commence as soon as practical after rig moves off location. Earth work and seeding will be done during the Fall of 1981, if possible.

11. Other Information

As indicated on Exhibit "F", the topography of the location vicinity has very little relief. The location lies on a gentle plain which slopes Southerly 1-2%. This location lies Westerly of the existing Agate Oil Field.

The soil is a light tan to grey shallow soil, typical of Mancos formation.

The vegetation in the immediate area surrounding the location is sagebrush, Matt saltbush, shadscale, prickly pear cactus, Russian thistle, greasewood, and cheatgrass.

The fauna of the area consists of cattle, sheep, antelope, rabbits, lizards, ravens, meadow lark, killdeer, ground sparrows and martens.

The surface ownership is B.L.M. The surface use is grazing, petroleum production, and recreation.

The nearest live water is Cisco Springs, 4.5 air miles Westerly of the location.

The nearest occupied dwelling is in Cisco, Utah, 9.2 road miles Southwesterly of the location, as shown on Exhibit "E".

There are no visible archaeological, historical, or cultural sites within any reasonable proximity to the proposed location site.

There are no reported restrictions or reservations noted on the oil and gas lease.

12. Lessee's or Operator's Representative

Walter D. Broadhead
1645 North 7th Street
Grand Junction, Colorado 81501
Telephone 303/242-7717

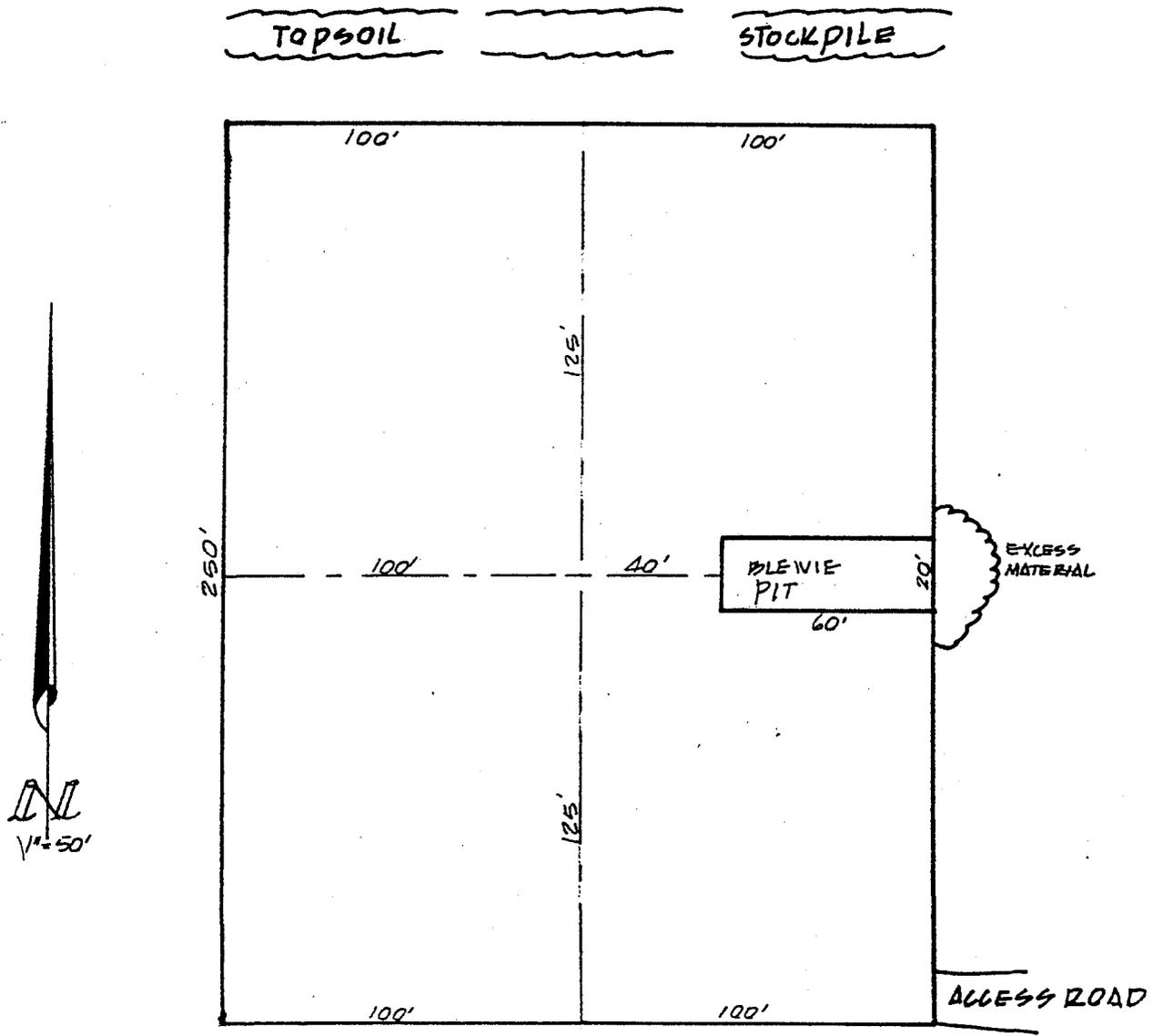
13. Certification

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 my contractors and subcontractors in conformity with this plan and terms and conditions under which it is approved.

September 3, 1981
Date

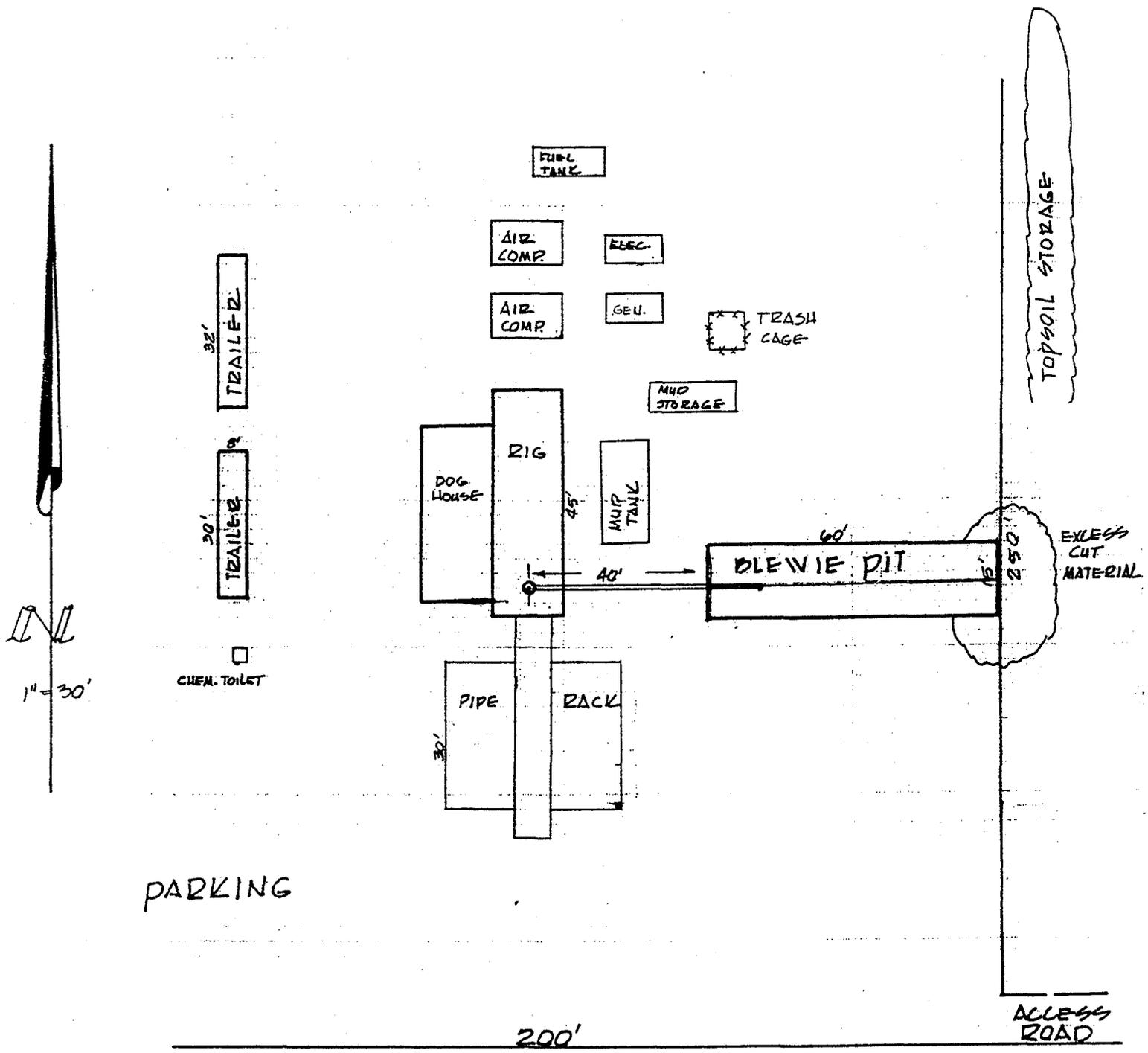
Walter D. Breakwell
Operator

EXHIBIT 'G'
DRILL PAD LAYOUT
FEDERAL BOWERS-1-A
GRAND CO., UTAH



FEDERAL BOWERS &
WALTER D BROADHEAD

EXHIBIT 'H' DRILL RIG LAYOUT



PARKING

FEDERAL DOWERS 1-A
GRAND COUNTY, UTAH

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

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator Walter D. Broadhead
Project Type Oil and Gas Well - Wildcat Stepout
Project Location 500' FNL & 500' FEL - Sec. 7, T. 20S, R. 24E
Well No. 1-A Lease No. U-38364
Date Project Submitted September 11, 1981

FIELD INSPECTION Date October 7, 1981

Field Inspection
Participants Craig Hansen - USGS, Vernal
Elmer Duncan - BLM, Moab
Kevin Cleary

Related Environmental Documents: _____

I have reviewed the proposal in accordance with the categorical exclusion review guidelines. This proposal would not involve any significant effects and, therefore, does not represent an exception to the categorical exclusions.

10-13-81
Date Prepared

[Signature]
Environmental Scientist

I concur
NOV 03 1981
Date

[Signature]
FOR E. W. GUYNN
DISTRICT OIL & GAS SUPERVISOR
District Supervisor

CATEGORICAL EXCLUSION REVIEW COMMON REFERENCE LEGEND

1. Surface Management Agency Input
2. Reviews Reports, or information received from Geological Survey
(Conservation Division, Geological Division, Water Resource Division,
Topographic Division)
3. Lease Stipulations/Terms
4. Application Permit to Drill
5. Operator Correspondence
6. Field Observation
7. Private Rehabilitation Agreement

RECOMMENDED STIPULATIONS FOR WALTER D. BROADHEAD WELL #1-A BOWERS:

1. Production facilities will be painted a tan color to blend in with the natural surroundings.
2. Blowout preventors will be used on a truck-mounted rig.
3. Six inches of topsoil will be placed on the north edge of the location. .



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Moab District
Grand Resource Area
P. O. Box M
Moab, Utah 84532

IN REPLY REFER TO

3109
(U-068)
U-38364

OCT 26 1981

Memorandum

To: Oil & Gas Office
USGS Conservation Division
P. O. Box 1037
Vernal, Utah 84078

From: Area Manager, Grand

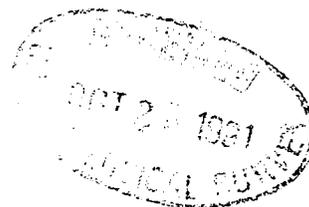
Subject: Walter D. Broadhead (APD)
Federal Bowers 1-A, Lease #U-38364
NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 7 T. 20 S., R. 24 E., SLB&M
Grand County, Utah

On October 7, 1981 a representative from this office met with Cody Hansen, USGS, and Walter Broadhead, agent of Walter D. Broadhead for an inspection of the above referenced location. Subject to the attached conditions and written approval from USGS, I am approving the surface management portion of the Application for Permit to Drill.

The archaeological requirement has been fulfilled on this location. No threatened or endangered flora or fauna are indicated in the area.

Please forward the enclosed information to Walter D. Broadhead.

Enclosures: (3)
1-Reclamation Procedures
2-Seed Mixture
3-Suggested Colors - Production Facilities



ADDITIONS TO THE MULTIPOINT
SURFACE USE PLAN
AND
RECLAMATION PROCEDURES

CONSTRUCTION:

1. The operator or his contractor will contact the Grand Resource Area Office in Moab, Utah phone (801 259-6111) 48 hours prior to beginning any work on public land.
2. The dirt contractor will be furnished with an approved copy of the surface use plan and any additional BLM stipulations prior to any work.
3. Use of water from sources such as wells, springs, streams or stock ponds for activities associated with this well will be approved, prior to use, by the agency or individual holding the water right.
4. If subsurface cultural material is exposed during construction, work in that spot will stop immediately and the Grand Resource Area Office will be contacted. All employees working in the area will be informed by the operator that they will be subject to prosecution if they are caught disturbing archaeological sites or picking up artifacts. Salvage or excavation of identified archaeological sites will only be done if damage occurs.
5. Improvement to the existing road will be necessary. The total disturbed width allowed will be 24 feet. The allowable travel surface will be 18 feet. The existing road borders the east side of Broadhead lease #U-38364, for approximately 0.5 miles. This portion of the road will be graded, berms pulled from each side toward the center, and low water crossing installed in each drainage that crosses this road.

New road construction will be limited to 0.1 miles on lease, with an allowable travel surface width of 18 feet. For construction design and survey refer to class 3 road standards. These standards are attached to other APD stipulations sent to you.

Topsoil and vegetation will be saved along the north side of the route.

Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

Surfacing material will not be placed on the access road or location without prior BLM approval.

6. Location: APD Layout, Exhibit "6" shows the pad to be 200 feet x 250 feet outside dimensions. Actual surface disturbance will be 150 feet x 150 feet leveled for the rig and steel mud tanks. The pit(s) will be on the east side 20 feet long x 20 feet wide x 5 feet deep. Rest of the area will be left as it is.
7. The top 6 inches of soil material will be removed from the location and stockpiled on the north side of the location.
8. The reserve pit will not be lined with commercial bentonite or plastic sufficient to prevent seepage. Keyway. The reserve pit banks will be 1.5 to 2.0 feet above pad and constructed in 8" lifts, machinery compacted, and sufficiently wide for equipment to pass over. An area 1.5 cat blades wide will be cleared to mineral soil behind the pit(s).
9. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying. The fence will be 48 inches high woven wire with one strand of barbed wire along the top for support.

PRODUCTION

1. The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed in the methods described in the rehabilitation section. All of the stockpiled topsoil will be used in reclaiming the unused areas.
2. All above-ground production facilities will be painted using the attached suggested colors.
3. The access will be to the design of a class 3 road.

REHABILITATION

1. Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris resulting from the operation. All trash will be disposed of in the trash pit/cage. Non-burnable debris will be hauled to a local town dump site.
2. The operator or his contractor will contact the Grand Resource Area BLM office in Moab, Utah, phone (801) 259-6111, 48 hours prior to starting rehabilitation work that involves earthmoving equipment and upon completion of restoration measures.
3. Before any dirt work to restore the location takes place, the reserve pit must be completely dry and any trash (barrels, metal etc.) it contains must be removed from public lands.
4. All disturbed areas will be recontoured to blend as nearly as possible with the surrounding area.
5. The stockpiled topsoil will be evenly distributed over the disturbed area.
6. All disturbed areas will be scarified with the contour to a depth of 6 inches. Do not smooth pads out, leave a roughened surface.
7. Seed will be (broadcast/~~XXXXXX~~) at a time to be specified by the BLM with the following seed prescription. When broadcast seeding, a harrow or some such implement will be dragged over the seeded area to assure seed cover. Broadcast seed will be applied at double the rate on the attached seed mixture list.
8. After seeding is complete the access will be blocked to prevent any use.
9. Waterbars will be used on all sloping surfaces as shown below:

<u>Grade</u>	<u>Spacing</u>
2%	200 ft. spacing
2-4%	100 ft. spacing
4-5%	75 ft. spacing
+5%	50 ft. spacing

SEED MIXTURE

Species		Rate
<u>Grasses</u>		<u>lbs/acre</u>
Oryzopsis hymenoides	Indian rice grass	1
Hilaria jamesii	Curley grass	1
<u>Forbs</u>		
Sphaeralcea coccinea	Globemallow	1
<u>Shrubs</u>		
Atriplex nuttallii	Nuttal Saltbush	1
Atriplex confertifolia	Shadscale	1
Ceretoides lanata	Winterfat	1

6

Double this amount if the seed will be broadcast.



United States Department of the Interior

IN REPLY REFER TO

BUREAU OF LAND MANAGEMENT

SUGGESTED COLORS TO PAINT OIL & GAS PRODUCTION FACILITIES

Cisco Desert and Flats below the Bookcliffs:

Dynasty Green	(Sears)
Tumbleweed	(Pratt & Lambert)
Desert Tan	-----
Sage Gray	(Pratt & Lambert)

Bookcliffs Region:

Sage Gray	(Pratt & Lambert)
Sea Life	(Pratt & Lambert)
Dynasty Green	(Sears)

Similar hues other than the ones mentioned above must be approved by the Grand Resource Area Manager.

** FILE NOTATIONS **

DATE: Dec. 4, 1980

OPERATOR: Walter D. Broadhead

WELL NO: Federal Bowers #1-A

Location: Sec. 7 T. 20S R. 24E County: Grand

File Prepared:

Entered on N.I.D:

Card Indexed:

Completion Sheet:

API Number 43-019-

CHECKED BY:

Petroleum Engineer: _____

Director: _____

Administrative Aide: As Per Order Below,

APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. 102-16B, 72767E

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

Plotted on Map

Approval Letter Written

Hot Line

P.I.

December 4, 1981

Walter D. Broadhead
1645 North 7th
Grand Junction, Colorado 81501

Re: Well No. Federal Bowers 1-A
Sec. 7, T20S, R24E
Grand County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with the Order issued in Cause No. 102-168, dated September 26, 1979.

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

Michael T. Minder - Petroleum Engineer
Office: 533-5771
Home: 876-3001

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 number assigned to this well is #8-019-30889.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Cleon B. Feight
Cleon B. Feight
Director

CBF/db
cc: USGS

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

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved,
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-03864

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

Fed Bowers 1-A

10. FIELD AND POOL, OR WILDCAT

Greater Cisco Area

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

Sec 7 T20S R24E

14. PERMIT NO.

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

4582

12. COUNTY OR PARISH

Grand

13. STATE

Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other)

(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.)*

Oral permission requested and approval granted
8 5/8 Surface casing 120' 10SX at surface with marker
1500' to 1300' with 27 SX
170' to 70' with 25SX
9.2 Gel Mud in hole

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

SIGNED Walter D Broadhead TITLE operator

DATE 12/11/81

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

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

SUBMIT IN TRIPlicate
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-03864

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

Fed Bowers 1-A

10. FIELD AND POOL, OR WILDCAT

Greater Cisco Area

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

Sec 7 T20S R24E

12. COUNTY OR PARISH

Grand

13. STATE

Utah

1. OIL WELL GAS WELL OTHER Dry Hole

2. NAME OF OPERATOR
Walter D. Broadhead

3. ADDRESS OF OPERATOR
1645 N 1st Grand Junction, Co 81501

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

500' FNL 500' FEL in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of
Section 7 T20S R24E.

14. PERMIT NO.

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

4582

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

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

SUBSEQUENT REPORT OF:

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

Proposed plugging program

Formation	Top	Shows	
Mancos	surface	none	170' to 70' 25SX
Dakota	1542'	none	1500' to 1300' 27SX
Morrison	1600'		

**APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING**

DATE: 12/13/81
BY: [Signature]

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

SIGNED Walter D. Broadhead

TITLE Operator

DATE 12/11/81

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

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

5. LEASE DESIGNATION AND SERIAL NO.

U-03864

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

Fed Bowers 1-A

10. FIELD AND POOL, OR WILDCAT

Greater Cisco Area

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

Sec 7 T20S R24E

12. COUNTY OR PARISH Grand

13. STATE Utah

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 Walter D. Broadhead

3. ADDRESS OF OPERATOR 1645 N 1st Grand Junction, Co 81501

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 500' FNL & 500' FEL Sec 7 T20S R24E

At top prod. interval reported below

At total depth

N/E

14. PERMIT NO. 43-019-30889 DATE ISSUED 12-10-81

15. DATE SPUNDED 12/5/81 16. DATE T.D. REACHED 12/10/81 17. DATE COMPL. (Ready to prod.)

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 4582 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 2226 21. PLUG, BACK T.D., MD & TVD to surface 22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY rotary 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE no

26. TYPE ELECTRIC AND OTHER LOGS RUN no log run 27. WAS WELL CORED no

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

Table with columns: CASING SIZE (8 5/8), WEIGHT, LB./FT., DEPTH SET (MD) (120'), HOLE SIZE (10"), CEMENTING RECORD (Circulated surface), AMOUNT PULLED

29. LINER RECORD 30. TUBING RECORD

Table with columns: 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.

Table with columns: 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)

Table with columns: 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 Walter D Broadhead TITLE Operator DATE 12/11/81

INSTRUCTIONS

INSTRUCTIONS

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

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

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

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

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

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

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Mancus	surface	1582'	Black to gray
Dakota	1580'	1600'	White sand gray shale
Morrison	1600'	2000'	green and red shale
Slatwash	2000'	2226'	red shale

38. GEOLOGIC MARKERS

NAME: _____

MEAS. DEPTH: _____

TOP: _____

TRUE VERT. DEPTH: _____

DATE: 12/28/81

WELL NO: _____

OPERATOR: _____

ADDRESS: _____

LOCATION: _____

INTERVAL: _____

DEPTH: _____

TYPE OF COMPLETION: _____

WELL TYPE: _____

DATE OF REPORT: _____

REPORT NO: _____