

WALTER BROADHEAD - WELL NO. BROADHEAD FEDERAL 6-4

API NO. 43-019-31336

Sec. 6, T. 21S, R. 24E GRAND COUNTY, UTAH

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

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

2. NAME OF OPERATOR
 Walter D. Broadhead

3. ADDRESS OF OPERATOR
 1645 North 7th St. Grand Junction, Colo. 81501

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface 1263 FNL 1779 FWL
 At proposed prod. zone NE 1/4 NW 1/4

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 3 miles North of Cisco, Utah

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

16. NO. OF ACRES IN LEASE
 1,975.40

17. NO. OF ACRES ASSIGNED TO THIS WELL

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

19. PROPOSED DEPTH
 1,300 ft.

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 4429 gr.

22. APPROX. DATE WORK WILL START*
 June 1, 1993

5. LEASE DESIGNATION AND SERIAL NO.
 U. 26421

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Broadhead

9. WELL NO.
 Fed. 6-4

10. FIELD AND POOL, OR WILDCAT
 Greater Cisco Area

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 6 T21S. R24E.

12. COUNTY OR PARISH
 Grand

13. STATE
 Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9-3/4" surf.	7-5/8"	20 lb	150'	circulate to surface
6-1/4" surf.	4 1/2"	10.5 lb.		35 SX

RECEIVED

APR 26 1993

DIVISION OF
OIL GAS & MINING

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.

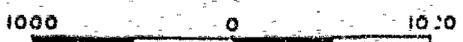
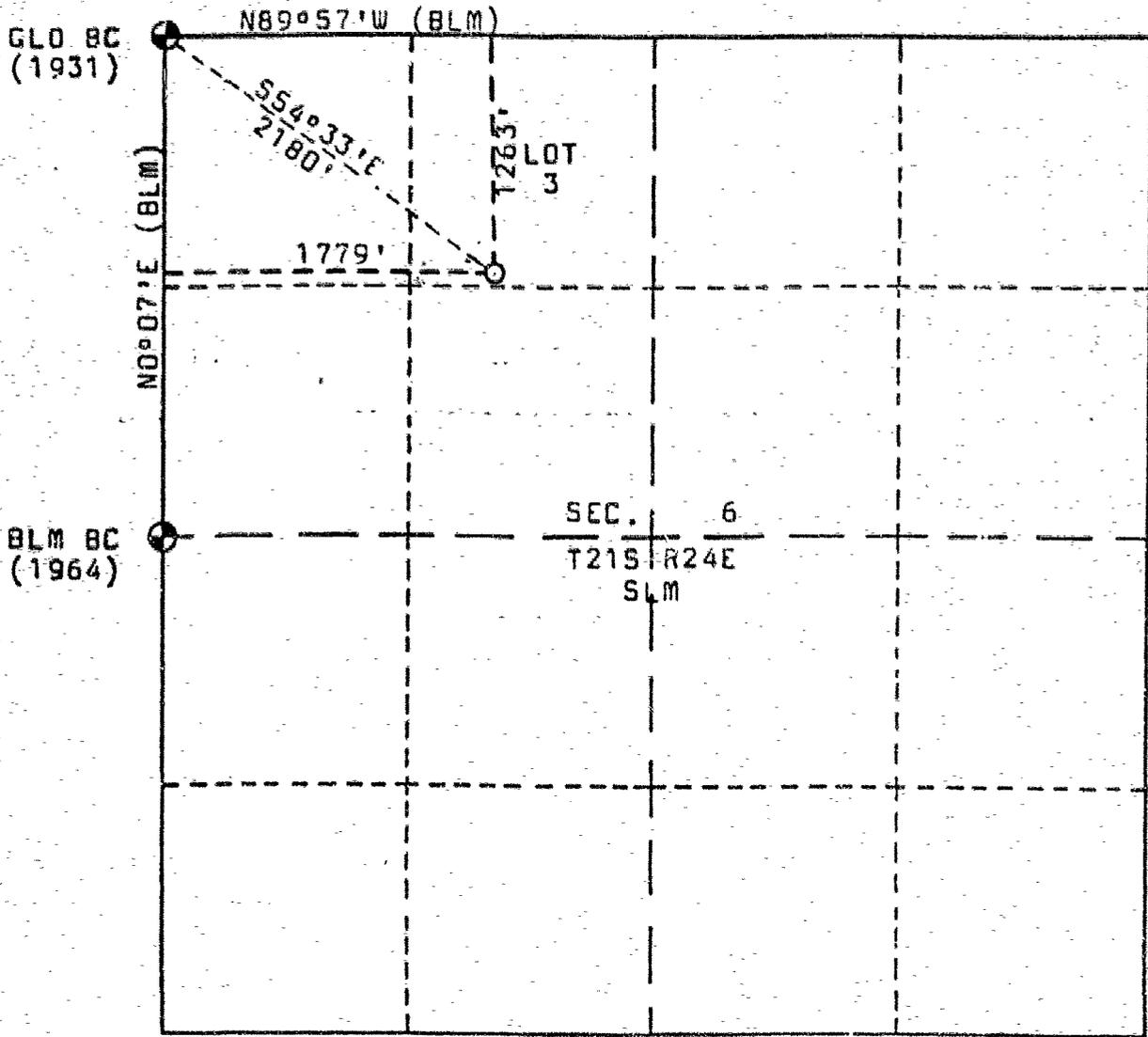
24. SIGNED Walter D. Broadhead TITLE Operator APPROVED BY APPELS PAT 1993 DATE 6/15/93
 OF UTAH DIVISION OF OIL, GAS, AND MINING

(This space for Federal or State office use)

PERMIT NO. 43-119-3133L APPROVAL DATE 102-168

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



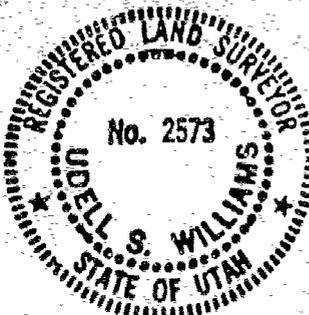
SCALE: 1" = 1000'

FEDERAL NO. 6-4

Located 1263 feet from the North line and 1779 feet from the West line of Section 6, T21S, R24E, SLM.

Elev. 4429

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 RLS No. 2573



UDELL S. WILLIAMS
751 Rood Avenue
Grand Junction, Colorado 81501

PLAT OF
PROPOSED LOCATION
FEDERAL NO. 6-4
LOT 3 SECTION 6
T21S, R24E, SLM

SURVEYED BY: U.S.W. DATE: 11/1/90
DRAWN BY: U.S.W. DATE: 4/6/90

BUREAU OF LAND MANAGEMENT
MOAB DISTRICT
CONDITIONS OF APPROVAL FOR PERMIT TO DRILL

Company Walter D. Broadhead Well No. Fed. 6-4
Location: Sec. 6 T. 21.S R. 24.E Lease No. U-26421
Onsite Inspection Date: _____

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

A. DRILLING PROGRAM

1. Surface Formation and Estimated Formation Tops:

<u>Mancos</u>	<u>0 to 810</u>	_____
<u>Dakota</u>	<u>to 875</u>	_____
<u>Bushy Basin</u>	<u>TO 1175</u>	_____
<u>Salt Wash</u>	<u>to 1280</u>	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

2. Estimated Depth at Which Oil, Gas, Water, or Mineral-Bearing Zones Are Expected to Be Encountered:

	<u>Formation</u>	<u>Depth</u>
Expected oil zones:	<u>Salt Wash</u>	_____
Expected gas zones:	_____	_____
Expected water zones:	_____	_____
Expected mineral zones:	<u>None</u>	_____
_____	_____	_____

All fresh water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth, cased and cemented. All oil and gas shows will be tested to determine commercial potential.

3. Pressure Control Equipment: See Figure 1

BCP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventors will be pressure-tested before drilling casing cement plugs. ~~The Resource Area will be notified _____ days in advance when pressure tests are to be conducted.~~

4. Casing Program and Auxiliary Equipment:

Surface 9-3/4" hole

Casing 7" to 150 ft.

Cement to surface

Drill 6-1/4" hole to T.D. Air Drill

Anticipated cements tops will be reported as to depth, not the expected number of sacks. The Resource Area (will ~~be~~) be notified _____ days in advance when running casing strings and cement.

5. Mud Program and Circulating Medium:

Gel mud with K CL. will be used to kill well
or drill if necessary

Bloocie line will be misted to reduce fugitive dust when air drilling.

6. Coring, Logging, and Testing Program:

Drill with air and if any shows of oil or gas
is encountered will log

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Moab District Manager.

7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards:

Past drilling in area does not show any abnormal
condition. No hydrogen sulfide gas expected.

8. Anticipated Starting Dates and Notification of Operations:

The operator will contact the Resource Area at 801-259-8197, ~~48 hours~~ prior to beginning any dirt work on this location. 48 hours

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.

The spud date (will/~~will not~~) be reported orally to the Area Manager within a minimum of twenty-four (24) hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within twenty-four (24) hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

In accordance with Onshore Oil and Gas Order No. 1, ~~this well will be reported on Form 3160-6, "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed directly with the BLM District Office, P.O. Box 970, Moab, Utah 84532.~~

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.

If the replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed for prior approval of the District Manager, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergency situations, verbal approval to bring on a replacement rig will be approved by the District Petroleum Engineer.

Should the well be successfully completed for production, the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) business days following the date on which the well is placed on production.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

No well abandonment operations will be commenced without the prior approval of the District Manager. In the case of newly-drilled dry holes or failures, and in emergency situations, oral approval will be

obtained from the District Petroleum Engineer. A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Manager within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The marker will be constructed as follows: _____

The top of the marker will be closed or capped.

The following minimum information will be permanently placed on the marker plate, cap or beaded-on with a welding torch:

"Fed" or "Ind", as applicable, "Well Number, location by 1/4 1/4 section, township and range". "Lease Number".

Other: _____

B. THIRTEEN-POINT SURFACE USE PLAN

1. Existing Roads:

a. Location of proposed well in relation to town or other reference point: three miles north of Cisco, Utah

See Plat 1

b. Proposed route to location:

The road going southwest from north side of the last Cisco exit in sec. 29. T20S. R24E.

c. Plans for improvement and/or maintenance of existing roads:

will use existing road as is while drilling this well. If should be a producer the existing road and new access will be constructed to the Bureau's Class III standard.

d. Other: _____

BUREAU OF LAND MANAGEMENT
MOAB DISTRICT
CONDITIONS OF APPROVAL FOR PERMIT TO DRILL

Company Walter D. Broadhead Well No. Fed 6-4

Location: Sec. 6 T. 21S R. 24E Lease No U-26421

Onsite Inspection Date _____

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B. THIRTEEN-POINT SURFACE USE PLAN

1. Existing Roads:

- a. Location of proposed well in relation to town or other reference point:
Three miles North of Cisco
- b. Proposed route to location:
The road going southwest from the north side of the last Cisco exit in sec. 29, T20S, R24E.
- c. Plans for improvement and/or maintenance of existing roads:
None prior th drilling, if producer, maintained to Resource road specifications.

2. Planned Access Roads:

- a. The maximum total disturbed width will be 18 feet.
- b. Maximum grades:
0 to 6 percent
- g. Other: New construction will be about 1/4 mile.

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

The access road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of dismantling of the drilling rig. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage control can be installed along the access road.

3. Location of Existing Wells:

Broadhead 6-1

Broadhead 6-3

4. Location of Tank Batteries and Production Facilities:

All permanent (onsite for six (6) months or longer) structures constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective, earth tone color to match the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six (6) months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded. Colors will be as follows:

Desert Brown (10YR)

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the battery.

All loading lines and valves will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43 CFR 3162.7 regulations and OUGO 3 will be adhered to.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the wellhead to the meter along with any other sections occurring on the pad. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three (3) months on new meter installations and at least quarterly thereafter. The Area Manager will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration reports will be submitted to the Resource Area Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

5. Location and Type of Water Supply:

All water needed for drilling purposes will be obtained from:
Colorado River

Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of the land.

6. Source of Construction Material:

Pad construction material will be obtained onsite.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3. Source of construction material will be located on lease.

7. Methods of Handling Water Disposal:

The reserve pit will not be lined.

Three sides of the reserve pit will be fenced with three strand Barbed wire 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.

All trash must be contained and disposed of by: trash cage.

Produced waste water will be confined to a unlined pit for a period not to exceed ninety (90) days after initial production. During the ninety (90) day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

8. Ancillary Facilities:

Camp facilities will not be required.

9. Well Site Layout:

The reserve pit will be located on the northwest edge. The top six inches of soil material will be removed from the location and windrowed separately.

10. Plans for Restoration of Surface:

Immediately upon completion of drilling, the location, and surrounding areas will be cleared of all remaining debris, materials, trash, and junk not required for production.

Before any dirt work to restore the location and surrounding area will be cleared of all remaining debris, materials, trash and junk not required for production.

The operator or his contractor will notify the Grand Resource Area at 801-259-8193 forty-eight (48) hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.

All disturbed areas will be recontoured to the approximate natural contours.

The stockpiled topsoil will be evenly distributed over the disturbed areas.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

The surface will be roughened by use of a disc plow or other piece of equipment that will leave rills and valleys or pits.

Seed will be broadcast or drilled at a time specified by the BLM. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage.

The following seed mixture will be used:

Indian ricegrass
Western Wheatgrass
Streambank wheatgrass or thickspike wheatgrass
Barley (local)
Mat saltbush
Snagscale

Note: This is subject to change depending upon the circumstances.

The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed.

11. Surface and Mineral Ownership:
Federal surface and minerals

12. Other Information:

Vegetation is sparse and includes mat saltbush, Nuttall saltbush, and Indian ricegrass; sheep, cattle, and antelope use the area.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.2.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.

The dirt contractor will be provided with an approved copy of the surface use plan.

A cultural resource clearance will not be required before any construction begins. If any cultural resources area found during construction, all work will stop and the Area Manager will be notified.

This permit will be valid for a period of one (1) year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

13. Leessee's Operator's Representative and Certification

Representative:

Name: Walter D. Broadhead

Address: 1645 N. 7th Grand Junction Co. 81501

Phone No: 303-243-7717

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently 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: _____ and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

April 21, 1993
Date

Walter D. Broadhead, Operator
Name & Title
Walter D. Broadhead

RAM BLOWOUT PREVENTERS FOR EVERY APPLICATION

There are four basic models of Shaffer ram blowout preventers:

SL Models. These Shaffer state-of-the-art ram preventers are designed for high pressure, critical service operations, deep land drilling and subsea service.

Sentinel Models. These lightweight, compact preventers are designed specifically for well servicing,

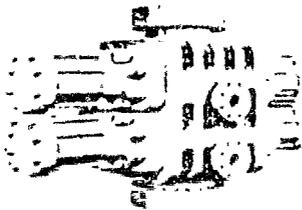
workover and low pressure drilling.

LWS Models. Perhaps the best known Shaffer ram preventers, these are ideal for smaller bore, lower working pressure applications.

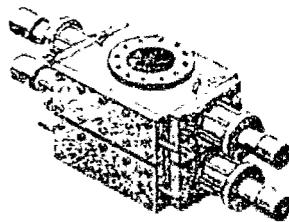
LWP Models. Also with a long standing reputation, these are designed for a number of low pressure operations in specific geographic areas.

Working Pressure (psi)	Bore (in.)							
	4 1/2"	7 1/2"	9"	11"	13 1/2"	16 1/2"	18 1/2"	21"
15,000								
10,000								
5,000								
3,000								
2,000								

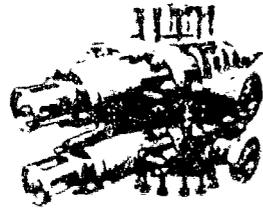
*1 1/16" - 3000 #
WP*



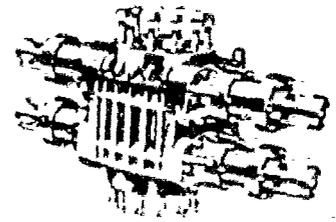
□ Model SL BOP



■ Sentinel BOP



▣ Model LWS BOP



▨ Model LWP BOP

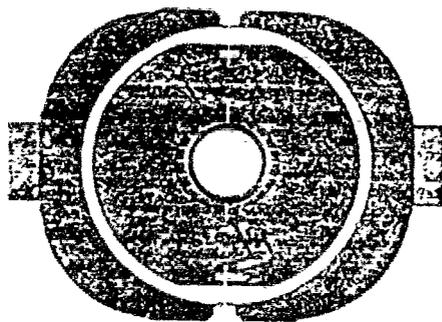
NEW SHAFFER MULTI-RAMS CAN REDUCE STACK HEIGHT

One set of *Multi-Ram* blocks closes to seal on pipe sizes ranging from 3 1/2" to 5" O.D. Rams need not be changed, then, when running a tapered drill string within this range. In many cases, it also is not necessary to add another ram BOP to the stack to accommodate drill string O.D. changes.

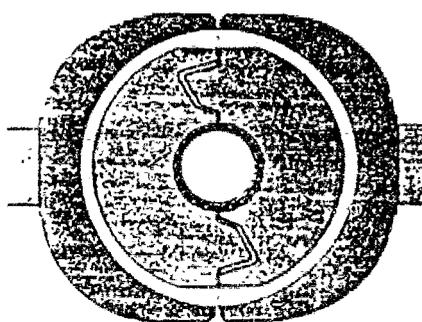
The Shaffer *Multi-Ram*, can replace one of the larger pipe rams and the small pipe ram — thus reducing the stack to three ram BOPs and one annular BOP. The

major advantages are cost savings and the reduction of stack height — especially important in view of height limitations on offshore structures.

The *Multi-Ram* meets the USGS requirements for sealing capabilities around tapered drill string. A Shaffer ram BOP equipped with *Multi-Ram* blocks counts as two ram BOPs — even though it is only one. The *Multi-Ram* can seal off on both the larger and the smaller drill strings. U.S. patents numbers 4,332,367 and 4,770,387



Closed on 5-Inch Pipe



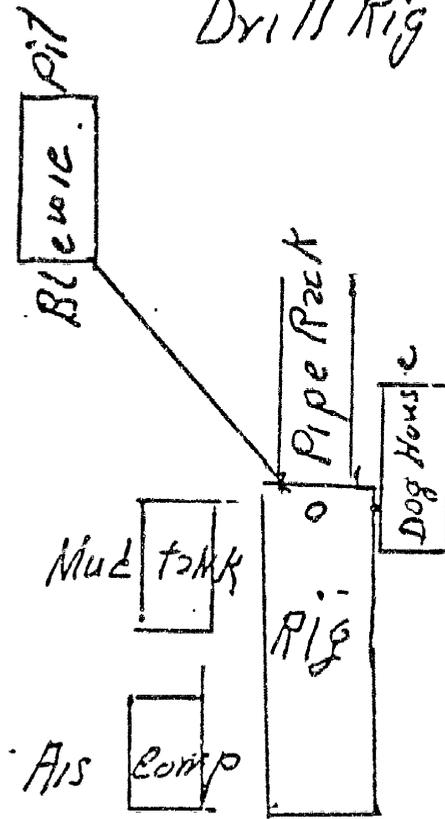
Closed on 3 1/2-Inch Pipe

East

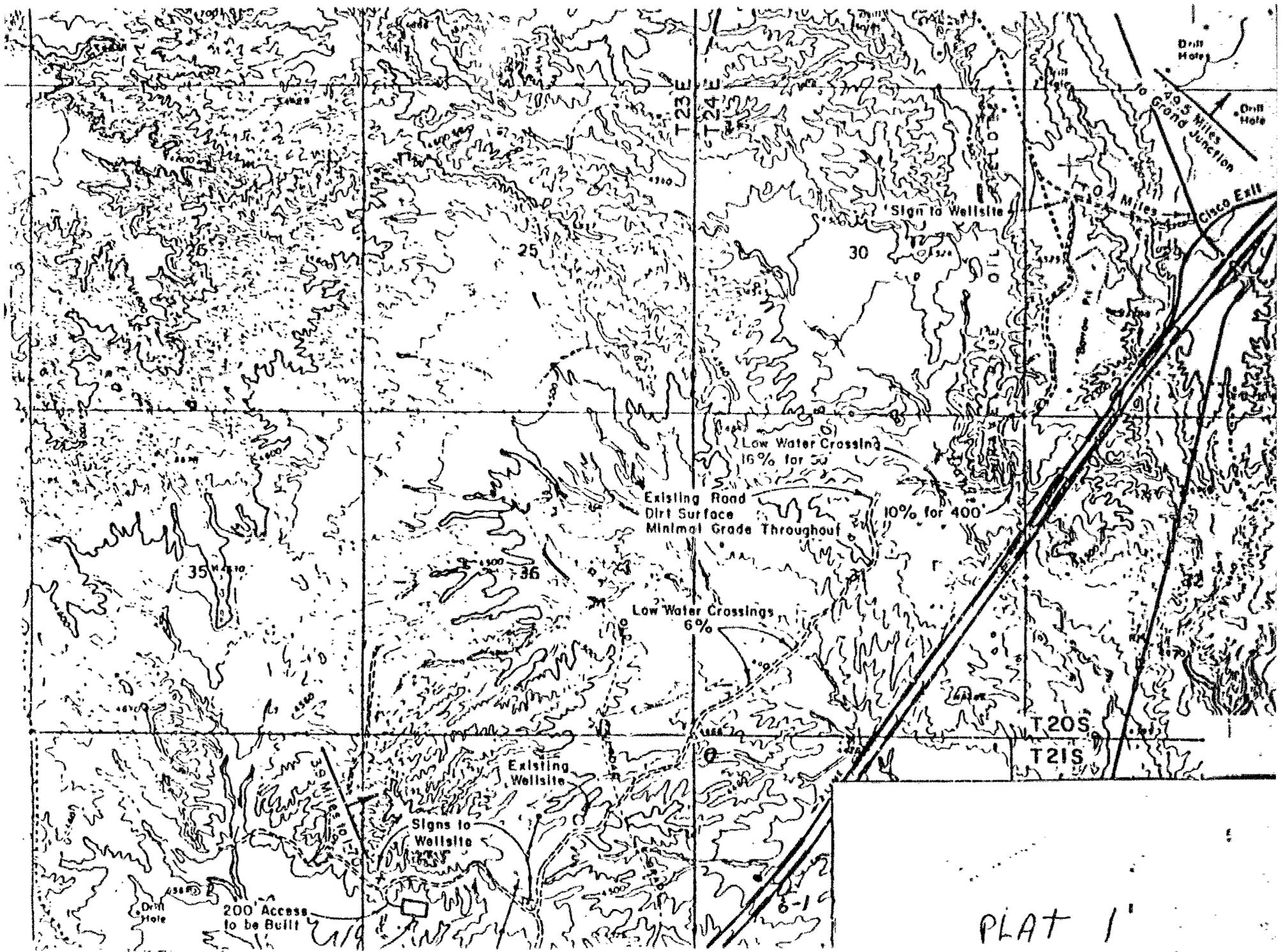


Drill Rig Layout

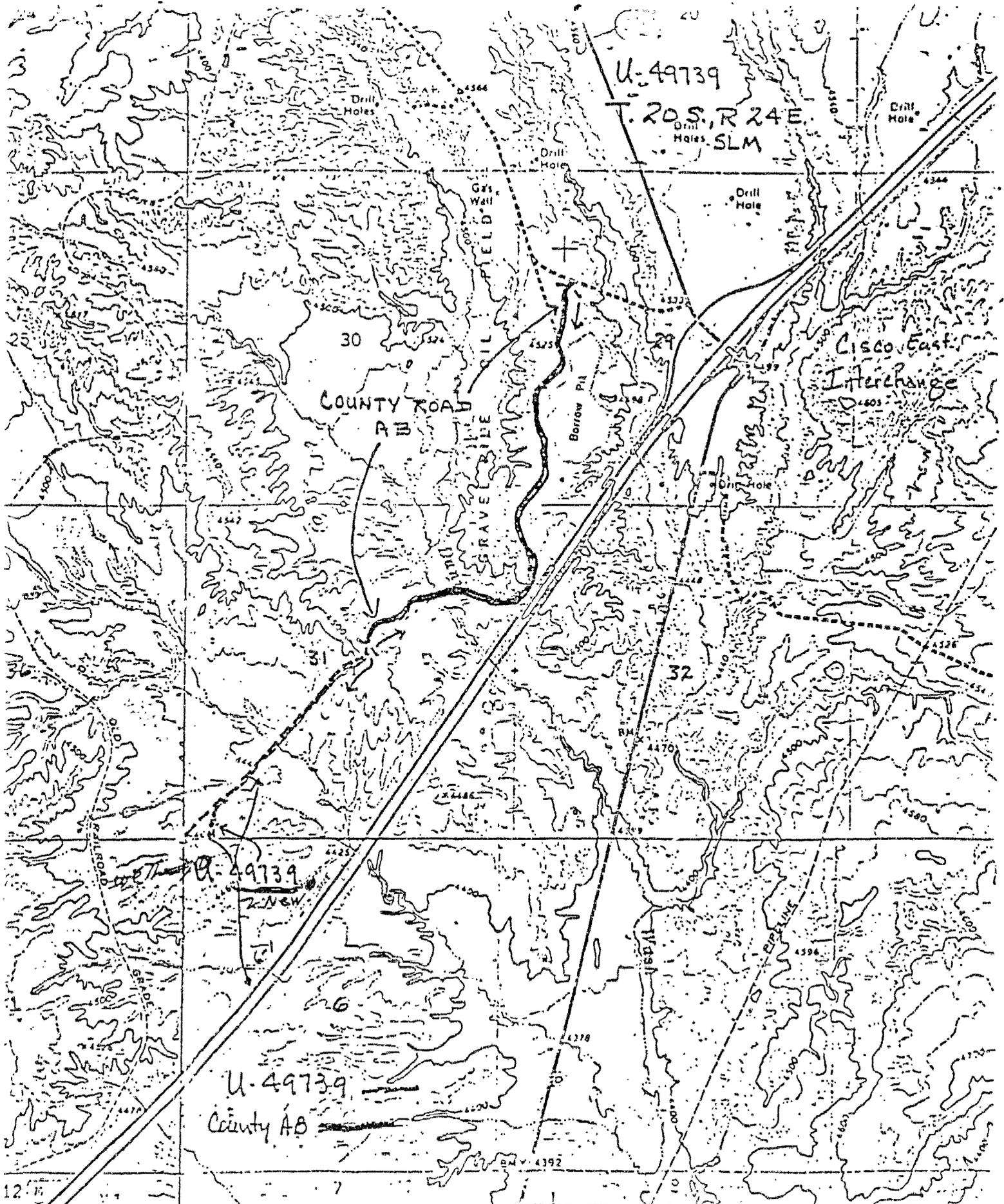
North

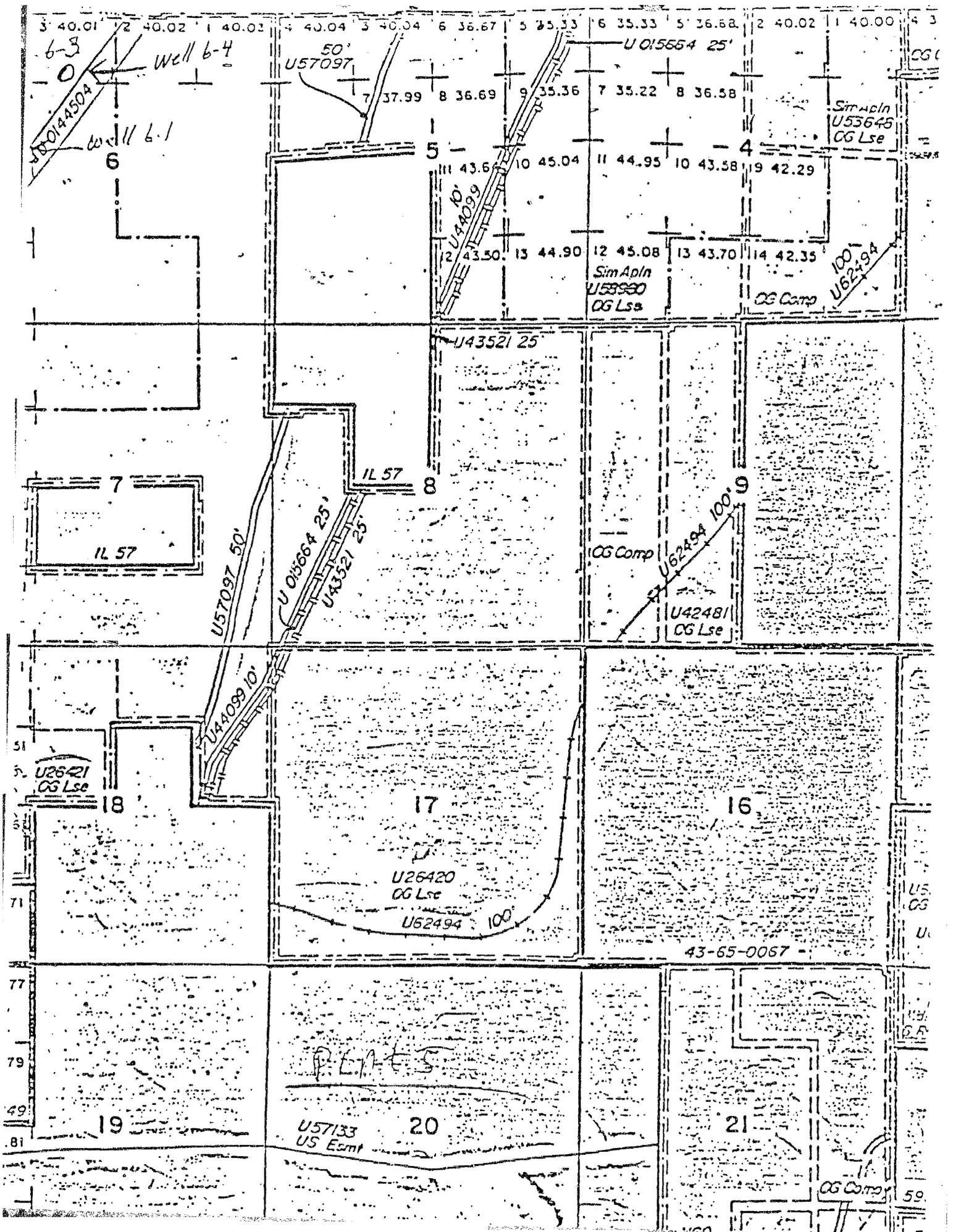


Fed 6-4



PLAT 1'





3 40.01 2 40.02 1 40.02 4 40.04 3 40.04 6 36.67 5 35.33 6 35.33 5 36.68 2 40.02 1 40.00 4 3

6-8
Well 6-4
Well 6-1
U0144504

50'
U57097

U015664 25'

Sim Apln
U53648
CG Lse

U44099 10'

Sim Apln
U53660
CG Lse

CG Comp

100'
U62494

U43521 25'

IL 57

IL 57

CG Comp

100'
U62494

U42481
CG Lse

U57097 50'

U015664 25'
U43521 25'

U26421
CG Lse

17

U26420
CG Lse

U62494 100'

16

43-65-0067

PLATS

U57133
US Esmt

20

21

CG Comp

59

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

DATE RECEIVED: 04/26/93

OPERATOR: BROADHEAD, WALTER D.
WELL NAME: BROADHEAD FEDERAL 6-4

OPERATOR ACCT NO: N- 1130

API NO. ASSIGNED: 43-019-31336

LEASE TYPE: FED LEASE NO: U-06401
LOCATION: NENW 06 - T21S - R24E GRAND COUNTY
FIELD: GREATER CISCO (205) FIELD CODE: 005

RECEIVED AND/OR REVIEWED:

- Plat
- Bond
(Number judicial)
- Potash (Y/N)
- Oil shale (Y/N)
- Water permit
(Number no permit #)
- RDCC Review (Y/N)
(Date: _____)

LOCATION AND SITING:

- R649-2-3. Unit: _____
- R649-3-2. General.
- R649-3-3. Exception.
- Drilling Unit.
- Board Cause no: 100-16B
- Date: 11-15-79

COMMENTS: takes within cause guidelines
BYM approval received 6-11-93

STIPULATIONS:

1 water permit

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.
U 26421

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Greater Cisco Area

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12. COUNTY OR PARISH
Grand

13. STATE
Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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b. TYPE OF WELL
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SINGLE ZONE MULTIPLE ZONE

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1645 North 7th St. Grand Junction, Colo. 81501

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June 1, 1993

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RECEIVED
JUN 1 1993
DIVISION OF
OIL GAS & MINING

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 Walter D. Broadhead TITLE Operator DATE April 21, 1993

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL NAME: Assistant District Manager
for Minerals DATE 21 9 1993

APPROVED BY: /s/ WILLIAM C. STRINGER TITLE _____ DATE _____

SUBJECT TO NTL 4-A

GLO BC
(1931)

N89°57'W (BLM)

N0°07'E (BLM)

S54°33'E
2180'

1263'

LOT
3

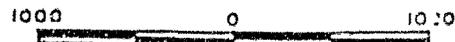
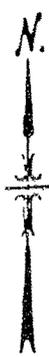
1779'

BLM BC
(1964)

SEC. 6

T21S R24E

SLM



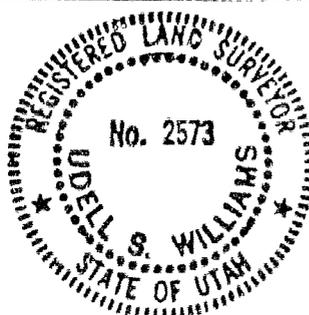
SCALE: 1" = 1000'

FEDERAL NO. 6-4

Located 1263 feet from the North line and 1779 feet from the west line of Section 6, T21S, R24E, SLM.

Elev. 4429

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



UDELL S. WILLIAMS
751 Road Avenue
Grand Junction, Colorado 81501

PLAT OF
PROPOSED LOCATION
FEDERAL NO. 6-4
LOT 3 SECTION 6
T21S, R24E, SLM

CONVEYED BY: SLM DATE: 6/1/64

Walter D. Broadhead
Federal No. 6-4
Lease U-26421
NENW Section 6, T21S, R24E
Grand County, Utah

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Walter D. Broadhead is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT0647 (Principal - Joanne Reed, Co-principal - Walter D. Broadhead) via surety consent as provided for in 43 CFR § 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR § 3106.7-2 continuing responsibility are met.

This permit will be valid through September 30, 1993. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR § 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

A. DRILLING PROGRAM

1. The BOP system must be designed for 2000 psi (2M) or greater and must be consistent with API RP 53 and Onshore Oil and Gas Order No. 2. Although a 3M system was proposed in the APD, appropriate testing for a 2M system is acceptable. Pressure tests of the surface casing and all BOP equipment potentially subject to pressure will be conducted before drilling the surface casing shoe. Blowout preventer controls will be installed prior to drilling the surface casing shoe and will remain in use until the well is completed or abandoned. Ram preventers shall be inspected and operated each trip (no more than once a day is necessary). These inspections shall be recorded on the daily drilling report.
2. The surface casing shall be equipped with a centralizer on each of the bottom three joints, and shall be cemented to the surface.
3. Cement behind the production casing must be brought up to at least 100 feet above the top of the highest zone with hydrocarbon shows.
4. No trivalent or hexavalent chromate additives shall be used in the mud system. Due to Potential for contamination of usable quality water aquifers, chromates are banned from Federal leases.

B. SURFACE USE PLAN

1. The well site will be reclaimed if the well is not drilled by September 30, 1993.
2. All remaining pits, berms and cuts will be recontoured. Prior to seeding, the well pad and access road will be ripped or scarified at least 4 inches deep. The entire soil surface will be scarified with a 6 inch or less distance between the ripped surfaces. The scarified area will be left in a rough condition to retain moisture.
3. The area will be broadcast seeded between October 1 and November 30 with the following mixture of pure live seed:

Galleta grass	2 pounds/acre
Indian ricegrass	4 pounds/acre
Yellow sweetclover	1 pounds/acre
Shadscale or Fourwing saltbush	<u>2 pounds/acre</u>
	9 pounds/acre

4. The well, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.6.
5. At the end of drilling operations and prior to reclamation of the reserve pit, the fourth side of the pit will be fenced and the top of the pit will be covered with netting of one inch or less to prevent access by birds.

C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Contact the Resource Area, Natural Resource Protection Specialist at least 48 hours prior to commencing construction of location.

Spud- The spud date will be reported to the Resource Area Office 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the District Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR § 3162.3-2. Safe drilling and operating practices must be observed.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval from the District Office. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

Undesirable Events- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the Resource Area in accordance with requirements of NTL-3A.

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

First Production- Should the well be successfully completed for production, the District Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Resource Area Office. The Resource Area Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR § 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the District Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

Produced Water- Produced waste water may be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted to the District Office for approval pursuant to NTL-2B.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the District Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the District Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Office within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR § 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

TABLE 1

NOTIFICATIONS

Notify Jack Johnson, Rich McClure or Lynn Jackson of the Grand Resource Area in Moab, Utah, at (801) 259-8193 for the following:

2 days prior to commencement of dirt work, construction and reclamation;

1 day prior to spudding;

50 feet prior to reaching surface casing depth;

3 hours prior to testing BOPE

If the person at the above number cannot be reached, notify the Moab District Office at (801) 259-6111. If unsuccessful, please contact the person listed below.

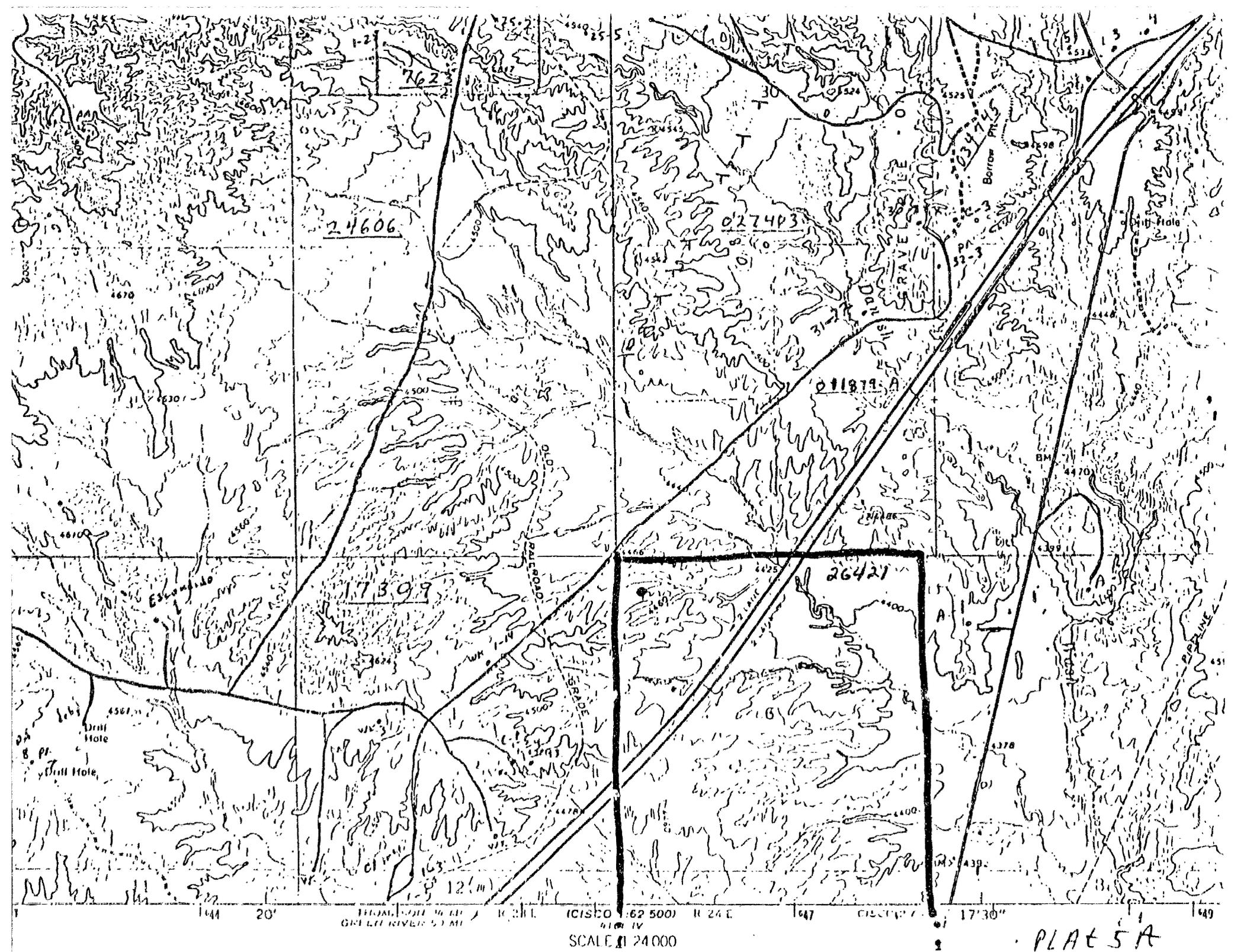
Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab District Office, Branch of Fluid Minerals at (801) 259-6111. If approval is needed after work hours, you may contact the following:

Eric Jones, Petroleum Engineer Office: (801) 259-6111
Home: (801) 259-2214

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions that currently exist; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Walter D. Broadhead contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application, with bond coverage being provided under BLM Bond # 117, 8147. This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

Name and Title: operator - Walter D. Broadhead

Telephone Number: 303-242-7717 Date: April 21, 1993



24606

17309

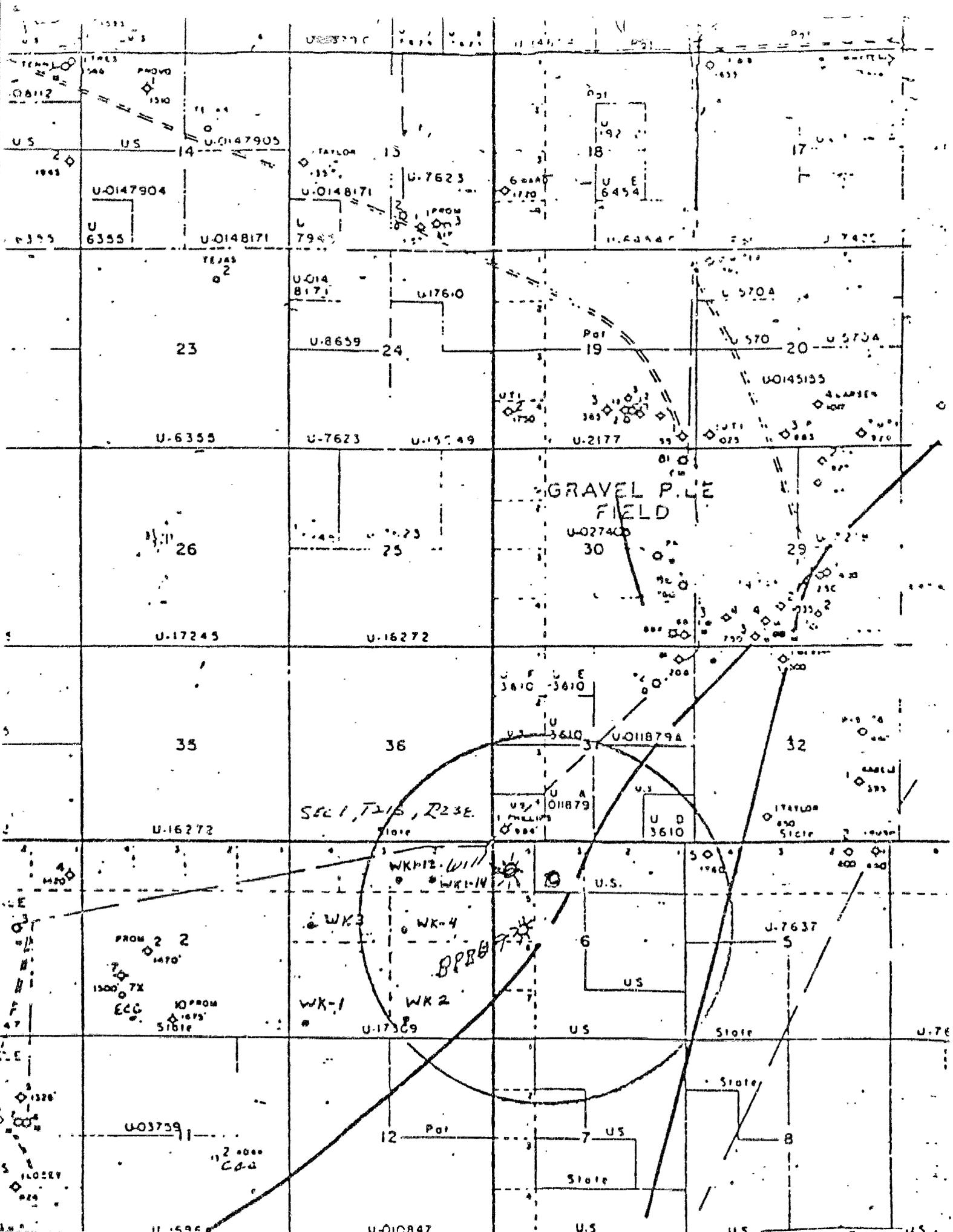
011879 A

26421

027423

SCALE 1:24,000

PLATE 5A



U-0147905
U-0147904
U-0148171
U-6355

TAYLOR
U-7623
U-0148171
U-7943

U-6454

U-6355
U-8659
U-7623
U-17610
U-15249

U-570A
U-570
U-0145155
U-2177
U-027400

GRAVEL PILE FIELD

U-17245
U-16272

U-3610
U-011879A
U-011879
U D 3610
U-7637

SEC 1, T21S, R23E

WK-1
WK-2
WK-3
WK-4
WK-12
WK-14
BPRB

FROM 2 2
INTO
1500' 7X
ECC
10' FROM
1675'
SIBIE

U-03739
112' 0000
C.A.

U-010847

Moab District
P. O. Box 970
Moab, Utah 84532

3162
(U-26421)
(UT-065)

OCT 24

OCT 19 1994

LA

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

Re: Rescinding Application for Permit to Drill
Well No. Broadhead Federal 6-4
NENW Sec. 6, T. 21 S., R. 24 E.
Grand County, Utah
Lease U-26421

43-019-31336

Dear Mr. Broadhead:

The Application for Permit to Drill the referenced well was approved on June 8, 1993.

Applications for permit to drill are effective for a period of one year. In view of the foregoing, this office is rescinding the approval of the referenced application.

Should you intend to drill at this location at a future date, a new application for permit to drill must be submitted.

If you have any questions, please contact Verlene Butts, Branch of Fluid Minerals at (801) 259-6111.

Sincerely,

/S/ WILLIAM C. STRINGER
Associate District Manager

Enclosure

Application for Permit to Drill (19pp)

cc: UT-068, Grand Resource Area (wo/Enclosure)
State of Utah
Division of Oil, Gas, and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203 (wo/Enclosure) ✓

VButts:vb:10/18/94

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS WELL LOG ELECTRIC LOGS FILE WATER SANDS LOCATION INSPECTED SUB REPORT/abd

DATE FILED **4-26-93**

LAND FEE & PATENTED STATE LEASE NO PUBLIC LEASE NO **U-26421** INDIAN

DRILLING APPROVED **6-15-93 (CAUSE NO. 102-16B)**

SPUDDED IN

COMPLETED PUT TO PRODUCING

INITIAL PRODUCTION

GRAVITY API

GOR

PRODUCING ZONES

TOTAL DEPTH

WELL ELEVATION

DATE ABANDONED **LAD 10-19-94 per BLM**

FIELD **GREATER CISCO**

UNIT

COUNTY **GRAND**

WELL NO **BROADHEAD FEDERAL 6-4** API NO. **43-019-31336**

LOCATION **1263' FNL** FT FROM (N) (S) LINE. **1779' FWL** FT FROM (E) (W) LINE. **NE NW** 1/4 - 1/4 SEC. **6**

TWP.	RGE	SEC	OPERATOR	TWP.	RGE	SEC.	OPERATOR
				21S	24E	6	WALTER BROADHEAD



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

June 15, 1993

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

Gentlemen:

Re: Federal 6-4 Well, 1263' FNL and 1779' FWL, NE NW, Sec. 6, T. 21 S., R. 24 E., Grand County, Utah

Pursuant to Utah Code Ann. § 40-6-6, (1953, as amended) and the order issued by the Board of Oil, Gas and Mining in Cause No. 102-16B dated November 15, 1979, approval to drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

1. Compliance with the requirements of Utah Admin. R. 649-1 et seq., Oil and Gas Conservation General Rules.
2. Notification within 24 hours after drilling operations commence.
3. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
4. Submittal of the Report of Water Encountered During Drilling, Form 7.
5. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or R.J. Firth, Associate Director, (Home) (801)571-6068.
6. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.



Page 2
Walter D. Broadhead
Federal 6-4 Well
June 15, 1993

Trash and sanitary waste should be properly contained and transported to approved disposal locations, not retained in or disposed of in pits on location or downhole. Prior to the commencement of drilling operations, the operator should consult the local/county sanitarian and/or the Department of Environmental Quality, Division of Drinking Water/Sanitation, regarding appropriate disposal of sanitary waste.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-019-31336.

Sincerely,



R.J. Firth
Associate Director, Oil and Gas

ldc
Enclosures
cc: Bureau of Land Management
Grand County Assessor
J.L. Thompson
WO11