

UTAH OIL AND GAS CONSERVATION COMMISSION

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

DATE FILED **7-21-93**

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. **UTU-68631** INDIAN

DRILLING APPROVED **8-10-93 (EXCEPTION LOCATION)**

SPUDDED IN:
COMPLETED: PUT TO PRODUCING:

~~Confidential~~

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED: **LAD 9-9-93**

FIELD: **NATURAL BUTTES**

UNIT:

COUNTY: **UINTAH**

WELL NO. **FEDERAL #5-30C** API NO. **43-047-32440**

LOCATION **1663' FNL** FT. FROM (N) (S) LINE. **1431' FWL** FT. FROM (E) (W) LINE. **SW NW** 1/4 - 1/4 SEC. **30**

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
9S	20E	30	PG & E RESOURCES CO				

June 1, 1992

Bureau of Land Management

RE: Designation of Agent Authority

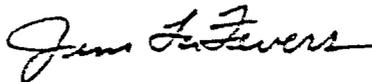
 Gentlemen:

Please be advised that Permitco, Inc. is hereby delegated authority to act as Agent on behalf of PG&E Resources Company and is authorized to execute any County, State and Federal permit applications and other related regulatory documents.

This authority is to remain in effect until further notification.

Should you have any questions regarding this issue, please contact the undersigned.

Sincerely,



Jim LaFevers
Regulatory Affairs Supervisor

JL\ap

wp51\jl\design.agt



July 19, 1993

RECEIVED

JUL 29 1993

DIVISION OF
OIL GAS & MINING

Utah Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Attn: Tammi Searing

Re: PG & E Resources Company
#5-30C Federal
1663' FNL and 1431' FWL
(Lot 2), Sec. 30, T9S - R19E
Uintah County, Utah

Dear Tammi,

Enclosed please find three copies of the Application for Permit to Drill on the above mentioned well, along with the required drilling program and the surface use plan which was filed with the Bureau of Land Management in Vernal, Utah.

Please note that a copy of the Application to Appropriate Water is attached to the back of the federal permit.

Please forward the approved copies to Jim LaFevers, PG & E Resources Company at the address shown on the A.P.D. Thanks for your assistance in this matter.

Sincerely,

PERMITCO INC.

A handwritten signature in cursive script that reads "Lisa L. Smith".

Lisa L. Smith
Consultant for:
PG & E Resources Company

Enc.

cc: PG & E Resources Company - Dallas, TX
PG & E Resources Company - Vernal, UT

Permitco Incorporated
A Petroleum Permitting Company

13585 Jackson Drive Denver, Colorado 80241 (303) 452-8888

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

CONFIDENTIAL - TIGHT HOLE

5. Lease Designation and Serial No.
UTU-68631

6. If Indian, Allottee or Tribe Name
N/A

7. Unit Agreement Name
N/A

8. Farm or Lease Name
Federal

9. Well No.
#5-30C

10. Field and Pool, or Wildcat
Natural Buttes 630

11. Sec., T., R., M., OR Bk.
and Survey or Area

Sec. 30, T9S - R20E

12. County or Parrish
Uintah

13. State
Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL DEEPEN PLUG BACK

b. Type of Well
Oil Well Gas Well Other Single Zone Multiple Zone

2. Name of Operator
**214/750-3800 6688 N. Central Expressway, Suite 1000
PG & E Resources Company Dallas, TX 75206**

3. Address of Operator
**303/452-8888 13585 Jackson Drive
Permitco Inc. - Agent Denver, CO 80241**

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
At surface

1663' FNL and 1431' FWL

At proposed prod. zone
SW NW (Lot 2) Sec. 30

14. Distance in miles and direction from nearest town or post office*
7.1 miles southwest of Ouray, UT

15. Distance from proposed* location to nearest property or lease line, ft.
(Also to nearest drlg. line, if any)
1431'

16. No. of acres in lease
1340.05

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.
None

19. Proposed depth
5200'

20. Rotary or cable tools
Rotary

21. Elevations (Show whether DF, RT, GR, etc.)
4680' GR

22. Approx. date work will start*
Upon approval of this application

23. **PROPOSED CASING AND CEMENTING PROGRAM**

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	9-5/8"	36#	400'	170 sx or suffic to circ to surf.
7-7/8"	5-1/2"	14#	5200'	500 cubic feet or suffic to cover zones of interest.

PG & E Resources Company proposes to drill a well to 5200' to test the Green River formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

Bond coverage for this well is provided under Bond No. 8063-38-07 and 8057-26-00.

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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. Consultant for:
Signed *[Signature]* Title **PG & E Resources Co.** Date **07/19/93**

(This space for Federal or State office use)

Permit No. _____ Approval Date _____

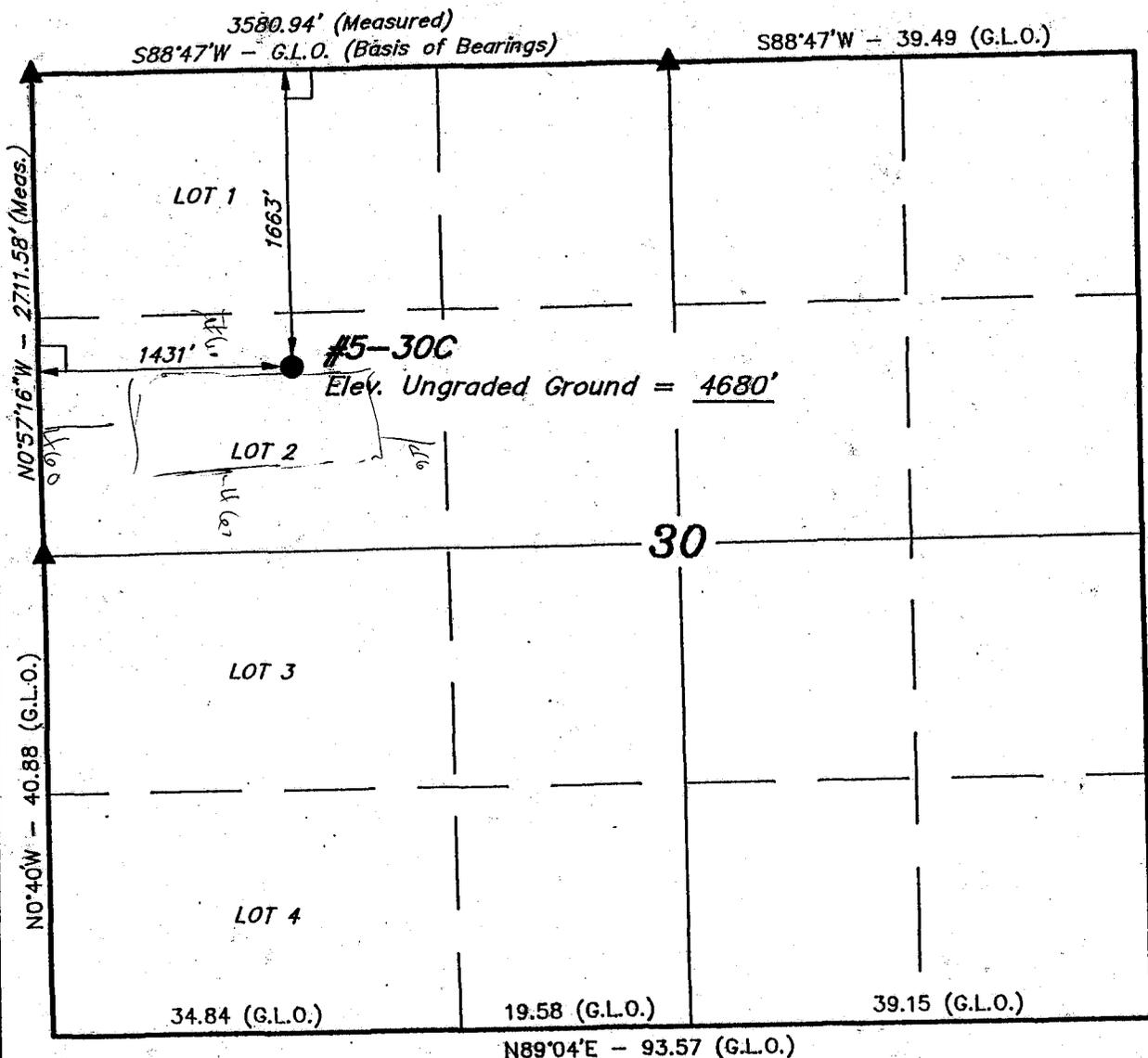
Approved by _____ Title _____ Date _____

Conditions of approval, if any: _____

T9S, R20E, S.L.B.&M.

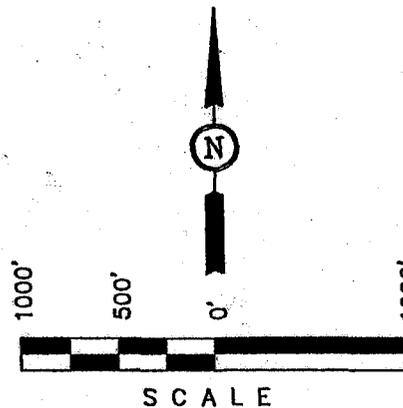
PG&E RESOURCES COMPANY

Well location, #5-30C, located as shown in Lot 2, of Section 30, T9S, R20E, S.L.B.&M. Uintah County, Utah.



BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 30, T9S, R20E, S.L.B.&M. TAKEN FROM THE OURAY QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4703 FEET.



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.

Robert L. Kay
REGISTERED LAND SURVEYOR
REGISTRATION NO. 5799
STATE OF UTAH

LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- = SECTION CORNERS LOCATED. (Brass Caps).

UINTAH ENGINEERING & LAND SURVEYING		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 6-18-93	DATE DRAWN: 6-22-93
PARTY D.A. D.R. J.D.G.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE PG&E RESOURCES COMPANY	

CONFIDENTIAL - TIGHT HOLE

ONSHORE OIL & GAS ORDER NO. 1

**Approval of Operations on Onshore
Federal and Indian Oil & Gas Leases**

**#5-30C FEDERAL
1663' FNL and 1431' FWL
Lot 2, Sec. 30, T9S - R20E
Uintah County, Utah**

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JUL 21 1993

DIVISION OF
OIL GAS & MINING

Prepared For:

P G & E RESOURCES COMPANY

By:

**PERMITCO INC.
13585 Jackson Drive
Denver, Colorado 80241
303/452-8888**

Copies Sent To:

- 3 - BLM - Vernal, Utah**
- 1 - Utah Division of Oil, Gas & Mining - SLC, UT**
- 3 - PG & E Resources - Dallas, TX**
- 1 - PG & E Resources - Vernal, Utah**



Permitco Incorporated
A Petroleum Permitting Company

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#5-30C Federal

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ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

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 the field representative to insure compliance.

1. The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Uinta	Surface	
Green River	939'	+3756'
Douglas Creek Marker	4011'	+ 684'
E ₂ Carbonate Marker	4549'	+ 146'
F Marker	4755'	- 65'
Basal Ls.	5035'	- 340'
Wasatch	5135'	- 440'
T.D.	5200'	- 505'

2. The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Oil	E ₂ Marker	- 4549'
Oil	F Marker	4755'
Water	N/A	
Other Mineral Zones	N/A	

All fresh water prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

3. PG & E's minimum specifications for pressure control equipment are as follows:

Ram Type: 10" Hydraulic double with annular, 3000 psi w.p.

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;**
- b. whenever any seal subject to test pressure is broken**
- c. following related repairs; and**
- d. at 30-day intervals**

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log.

BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been 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. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The District Office should be notified, with sufficient lead time, in order to have the BLM representative on location during pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment for this depth of hole in the area use a 10", 3000 psi working pressure blowout preventor.
 - b. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
 - c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
 - d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.
4. a. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the



maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including; presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.

- b. Casing design shall assume formation pressure gradients of 0.44 to 0.50 psi per foot for exploratory wells (lacking better data).
- c. Casing design shall assume fracture gradients from 0.70 to 1.00 psi per foot for exploratory wells (lacking better data)
- d. Casing collars shall have a minimum clearance of 0.422 inches of all sides in the hole/casing annulus, with recognition that variances can be granted for justified exceptions.
- e. All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.
- f. All casing except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
- i. Surface casing shall have centralizers on every fourth joint of casing starting with the shoe joint and up to the bottom of the cellar.
- j. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc. shall be utilized to help isolate



the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- l. On all exploratory wells, and on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

m. The proposed casing program will be as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>New or Used</u>
Surface	0-400'	12-1/4"	9-5/8"	36#	K-55	ST&C	New
Produc.	0-5200'	7-7/8"	5-1/2"	14#	J-55	ST&C	New

n. Casing design subject to revision based on geologic conditions encountered.

o. The cement program will be as follows:

Surface
 0-400'

Type and Amount

± 170 sx Class "A" Cement or sufficient volume to circulate to surface.

Production

Type and Amount

Approx. 500 cubic feet of 50/50 Poz Mix, 14.1 ppg, 1.26 yield or sufficient to cover zones of interest (from T.D. to approx. 2200').



- p. Anticipated cement tops will be reported as to depth; not the expected number of sacks of cement to be used. The District Office should be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.**
- q. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.**
- r. The following reports shall be filed with the District Manager within 30 days after the work is completed.**

 - 1. Progress reports, Form 3160-5 (formerly 9-331) "Sundry Notices and Reports on Wells", must include complete information concerning:**

 - a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.**
 - b. Temperature or bond logs must be submitted for each well where the casing cement was not circulated to the surface.**
- s. Auxiliary equipment to be used is as follows:**

 - 1. Kelly cock**
 - 2. No bit float is deemed necessary.**
 - 3. A sub with a full opening valve.**

5. a. The proposed circulating mediums to be employed in drilling are as follows:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>F/L</u>	<u>PH</u>
0-5200'	Water/Gel-Lime	8.4-8.6	27-36	N/C	N/C

There will be sufficient mud on location to control a blowout should one occur.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, static filtration loss, and Ph.

- b. Mud monitoring equipment to be used is as follows:
1. Periodic checks will be made each tour of the mud system. The mud level will be checked visually.
- c. No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.
6. The anticipated type and amount of testing, logging and coring are as follows:
- a. Drill stem tests will be run as warranted after log evaluation. (Straddle test).

If DST's are run, the following requirements will be adhered to:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained

from the authorized officer. Closed chamber DSTs may be accomplished day or night.

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions. This would involve provided some means for reverse circulation.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- b. The logging program will consist of a Dual Laterolog (2" and 5") from T.D. to base of surface casing. A Spectral Density Dual Spaced Neutron Log (5") will be run from T.D. to base of surface casing.
 - c. No cores are anticipated. Sidewall cores if warranted.
 - d. 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 not later than 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 authorized officer (AO).
 - e. The anticipated completion program is as follows:
Perforate zones of interest and frac hydrocarbon bearing zones. Flow to tanks.
7. a. The expected bottom hole pressure is 2500 psi.

- b. No hydrogen sulfide gas is anticipated.
- 8.
- a. Drilling will commence immediately upon approval of this application.
 - b. It is anticipated that the drilling of this well will take approximately 7 days.
 - c. The BLM in Vernal, Utah shall be notified of anticipated date of location construction commencement and of anticipated spud date.
 - d. 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 AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.
 - e. The spud date will be reported orally to the AO within 48 hours after spudding. If the spudding occurs on a weekend or holiday, the report will be submitted on the following regular work day. The oral report will be followed up with a Sundry Notice.
 - f. 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 with the Vernal BLM District Office, 170 South 500 East, Vernal, UT 84078.
 - g. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.
 - h. If a replacement rig is contemplated for completion operations, a "Sundry Notice" Form 3160-5 to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.



- i. Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communications, not later than 5 days following the date on which the well is placed on production.
- j. Pursuant to NTL-2B, with the approval of the District Engineer, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the District Engineer.
- k. Pursuant to NTL-4A, lessees or operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the District Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day or authorized test period.
- l. A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3 and 3162.7-4 shall be submitted to the appropriate District Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in 43 CFR 3162.7 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.
- m. A first production conference will be scheduled within 15 days after receipt of the first production notice.
- n. No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the SO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within 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 AO or his representative,



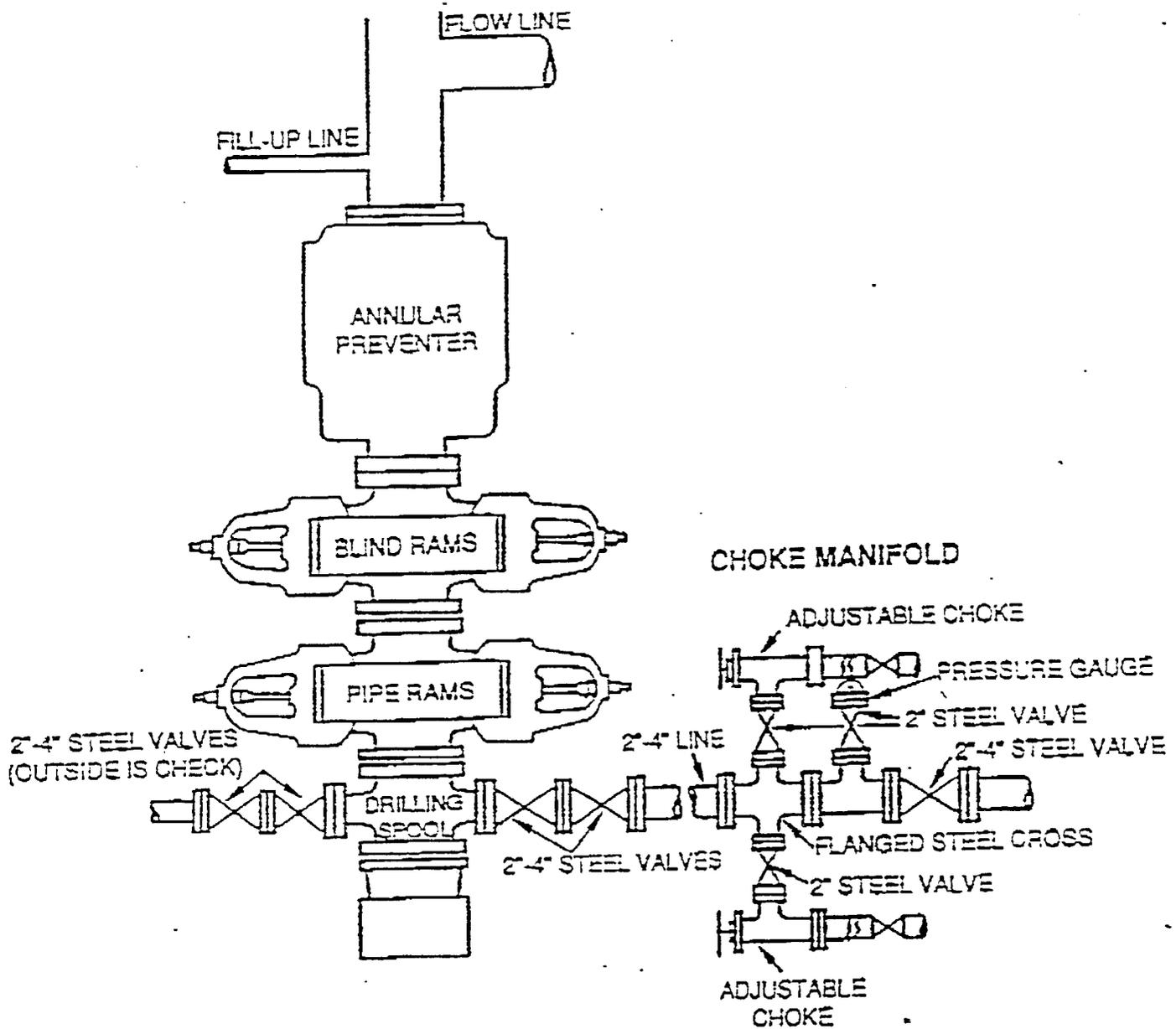
or the appropriate Surface Managing Agency.

- o. Pursuant to Onshore Oil and Gas Order No. 1, lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which conforms with applicable Federal laws and regulations and with State and local laws and regulations to the extent that such State and local laws are applicable to operations on Federal or Indian lands.

NOTIFICATION REQUIREMENTS

- | | | |
|--|---|---|
| Location Construction | - | forty-eight (48) hours prior to construction of location and access roads. |
| Location Completion | - | prior to moving on the drilling rig. |
| Spud Notice | - | at least twenty-four (24) hours prior to spudding the well. |
| Casing String and Cementing | - | twenty-four (24) hours prior to initiating pressure tests. |
| BOP and Related Equipment Tests | - | twenty-four (24) hours prior to initiating pressure tests. |
| First Production Notice | - | within five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days. |

FIGURE NO. 3-A
 THREE PREVENTER HOOKUP
 CLASS III
 (MEETS 43 CFR, PART 3160, 3M SPECIFICATIONS)



ONSHORE OIL & GAS ORDER NO. 1

Thirteen Point Surface Use Plan

The onsite inspection for the above mentioned well was conducted on Wednesday, June 23, 1993. Weather conditions were warm and breezy. Present at the onsite inspection were the following individuals:

Byron Tolman	Natural Resource Protection	BLM
Jean Sinclair	T & E Specialist	BLM
Robert Kay	Surveyor	UELS
Lisa Smith	Permitting Consultant	Permitco Inc.

1. Existing Roads

a. The proposed well site is located approximately 7.1 miles southwest of Ouray, Utah.

b. Directions to the location from Ouray, Utah are as follows:

From Ouray proceed south on the Seep Ridge Road (County Road) for approximately 4.4 miles. Turn right onto an existing oilfield road and proceed southwesterly on an existing oilfield road for 1.6 miles. Turn right onto an existing two-track road (flagged) and proceed 0.8 miles to a fork in the road. Turn left and proceed south for 0.3 miles to the location.

c. For location of access roads within a 2-Mile radius, see Maps A & B.

d. Improvement to the existing access will not be necessary.

e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

f. Existing roads and newly constructed roads on surface under the jurisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.



2. Planned Access Roads

- a. There will be approximately 1.1 miles of two-track road to be upgraded. The new road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.
- b. The maximum grade will be 10% or less.
- c. No turnouts are planned.
- d. No culverts and/or bridges will be required, however, appropriate drain dips or water turnouts will be installed as necessary to control erosion.
- e. The access road was centerline flagged at the time of staking.
- f. Surfacing material may be necessary depending on weather conditions.
- g. No cattleguards will be necessary.
- h. 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.
- i. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, (1989).
- j. The road will be constructed/upgraded to meet the standards of the anticipated traffic flow and all weather road requirements. Construction/upgrading shall include ditching, draining, graveling, crowing and capping the roadbed as necessary to provide a well constructed safe road. Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot right-of-way will not be allowed. Road drainage crossings shall be of the typical dry creek



drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.

- k. A road right of way application will be required for approximately 5500 feet of access located outside the lease boundaries in the S/2 S/2 Sec. 19, and the NE NE Sec. 30, T9S - R20E. (See Map "C" for right of way requested.)

3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location.
(See Map #B).

- a. Water wells -none
- b. Injection wells -none
- c. Producing wells - three
- d. Drilling wells - none
- e. Shut-in wells - none
- f. Temporarily abandoned wells - none
- g. Disposal wells - none

4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted Desert Tan (10YR6/3). All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act

(OSHA) will be excluded. The required paint color is Desert Brown.

- b. If storage facilities/tank batteries are constructed on this lease, the facility/battery or the wellpad shall be surrounded by a containment dike of sufficient capacity to contain at a minimum, the entire content of the largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.
- c. A Sundry Notice will be submitted showing placement of all production facilities prior to construction.
- d. If at any time the facilities located on public land and authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change), BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental or other financial obligation as determined by the authorized officer.
- e. Any necessary pits will be properly fenced to prevent any wildlife entry.
- f. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- g. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- h. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic.
- i. The road will be maintained in a safe useable condition.

5. Location and Type of Water Supply

- a. All water needed for drilling purposes will be obtained from Willow Creek. The point of diversion will be S 239 feet W 2866 feet from the NE Corner of Section 24, T9S - R19E. Water Right No. 49-1536, Temporary

Application Number T67027, as approved by the State of Utah, Division of Water Resources.

- b. Cementing water will be obtained from an underground water well located East 400 feet, North 200 feet from S/4 Corner of Section 32, T4S - R3E in Ouray. Application #43-8496 as approved by the State of Utah, Division of Water Resources.
- c. Approximately 2 acre feet (14,000 Bbls.) will be utilized. If necessary, PG & E Resources will contribute to the Recovery Implementation Program for Endangered Fishes in the Colorado River Basin.
- d. Water will be hauled to location over the roads marked on Maps A and B.
- e. No water well is to be drilled on this lease.
- f. A copy of the approved water permits are attached.

6. Source of Construction Material

- a. Surface and subsoil materials in the immediate area will be utilized.
- b. Any gravel used will be obtained from a commercial source.
- c. The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2.3. Construction material will not be located on lease.
- d. No construction materials will be removed from Federal land.

7. Methods of Handling Waste Disposal

- a. The reserve pit will be constructed so as not to leak, break, or allow discharge.
- b. A reserve pit liner has been required by the Bureau of Land Management. If a plastic liner is used, it will be a minimum of 10 mil thickness with



sufficient bedding (either straw or dirt) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. More stringent protective requirements may be deemed necessary by the A.O.

- c. Burning will not be allowed. All trash will be contained in a trash cage and its contents removed at the end of drilling operations and hauled to an approved disposal sight.
- d. After first production, produced waste water will be confined to a unlined pit or storage tank for a period not to exceed ninety (90) days. During the 90-day period, in accordance with NTL-2B, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.
- e. Drill cuttings are to be contained and buried in the reserve pit.
- f. Any salts and/or chemicals which are an integral part of the drilling system will be disposed of in the same manner as the drilling fluid.
- g. A chemical porta-toilet will be furnished with the drilling rig.
- h. The produced fluids will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas salt water or other produced fluids will be cleaned up and removed.

8. Ancillary Facilities

There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.



9. Well Site Layout

- a. The reserve pit will be located on the west side of the location.
- b. The flare pit will be located downwind of the prevailing wind direction on the west side, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.
- c. The stockpiled topsoil (first six inches) will be stored along the north and west sides of the reserve pit and the northeast end of the location as shown on the attached rig layout.
- d. Access to the wellpad will be from the east as shown on the attached rig layout.
- e. See Location Layout for orientation of rig, cross section of drill pad and cuts and fills.
- f. The location of mud tanks; reserve pit, trash cage; pipe racks; living facilities and soil stockpiles will be shown on the Location Layout.
- g. During construction, all brush will be removed from the wellpad and access road and stockpiled separately from the topsoil.
- h. All pits will be fenced according to the following minimum standards:
 1. 39 inch net wire shall be used with at least one strand or barbed wire on top of the net wire (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
 2. The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of the fence shall be at least 42-inches.
 3. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
5. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.
 - i. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until cleanup.

10. Plans for Restoration of Surface

Producing Location

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash and junk not required for production.
- b. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.
- c. If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.
- d. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed and all cans, barrels, pipe, etc., will be removed.
- e. The appropriate surface management agency should be contact for required seed mixture.

Dry Hole

- f. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and BLM will attached the appropriate surface rehabilitation conditions of approval.

11. Surface Ownership

Access Roads - All roads are County maintained or are on Indian or BLM lands.

Wellpad - The well pad is located on lands managed by the BLM.

12. Other Information

- a. A Class III archeological survey was conducted by Sagebrush Archeological Consultants. A copy of this report is attached.
- b. The operator is responsible for informing all persons in the areas who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places;

-the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and

-a time frame for the AO to complete and expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will



assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.

- c. The operator will control noxious weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds may be obtained from the BLM, or the appropriate County Extension Office. On BLM administered land it is required that a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.
- d. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure to allow time to make arrangement for permanent storage on commercial facilities. (The BLM does not seek to compete with private industry. There are commercial facilities available for stacking and storing drilling rigs.)
- e. A silt catchment dam and basin will be installed as shown on Map "B".
- f. All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.
- g. A complete copy of the approved APD shall be on location during construction of the location and drilling activities.
- h. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.



- i. The operator or his contractor shall contact the BLM Offices at 801/789-1362 48 hours prior to construction activities.
- j. The BLM Office shall be notified upon site completion prior to moving on the drilling rig.

13. Lessee's or Operator's Representative and Certification

Permit Matters

PERMITCO INC.
Lisa L. Smith
13585 Jackson Drive
Denver, CO 80241
303/452-8888

Drilling & Completion Matters

PG & E Resources Company
6688 N. Central Expressway
Suite 1000
Dallas, TX 75206
Gary Whetstine - 214/750-3800
Jim LaFevers - 214/750-3800

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 PG & E Resources Company and its contractors and subcontractors in conformity with the 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.

July 19, 1993
Date:



Lisa L. Smith - PERMITCO INC.
Authorized Agent for:
PG & E Resources Company

RECEIVED

JUL 21 1993

DIVISION OF
OIL, GAS & MINING

There are no federal stipulations at this time.



Permitco Incorporated
A Petroleum Permitting Company

**A CULTURAL RESOURCES SURVEY OF
PG&E WELLS #13-19C FEDERAL AND 5-30C FEDERAL AND ACCESS ROADS,
UINTAH COUNTY, UTAH**

by

Michael R. Polk
Principal Investigator

and

Heather M. Weymouth
Archaeologist

Prepared for:

PG&E Resources Company
P.O. Box 25655
Dallas, Texas 75206-3922

Prepared by:

Sagebrush Archaeological Consultants
3670 Quincy Avenue, Suite 203
Ogden, Utah 84403

Under Authority of Cultural Resources Use Permit No. 92-UT-54630

and

Utah State Antiquities Permit No. U-93-SJ-289b

Archaeological Report No. 601

June 26, 1993

INTRODUCTION

In June 1993, PG&E Resources Company (PG&E) requested that Sagebrush Archaeological Consultants (Sagebrush) conduct a cultural resources inventory of two well pads and access roads for #13-19C Federal and #5-30C Federal. The project area is located in T. 9S., R. 20E., S. 19 and 30 on the USGS 7.5' Ouray, Utah Quadrangle (1964)(Figure 1). Well #13-19C Federal lies in S. 19 SW $\frac{1}{4}$ SW $\frac{1}{4}$ (663' FSL, 790' FWL). Well 5-30C Federal lies in S. 30 NW $\frac{1}{4}$ (1663' FNL, 1431' FWL). The access road for both of the wells is approximately 6000 feet long, and begins at a graded oil field road in S. 30 and courses west to well #13-19C and then south to #5-30C. Both of the well pads and the access road lie on land controlled by the Bureau of Land Management (BLM). The project was carried out by the author and Heather M. Weymouth on June 18, 1993 under authority of Cultural Resources Use Permit No. 92-UT-54630 and Utah State Antiquities Permit No. U-93-SJ-289b.

A file search was carried out by Heather Weymouth at the State Historic Preservation Office in Salt Lake City on June 11, 1993 to determine if any cultural resources projects had been conducted or sites recorded and whether paleontological localities have been identified in the project area. In addition, a file search was done by Michael R. Polk and Heather M. Weymouth on June 18, 1993 at the Bureau of Land Management, Vernal District Office prior to conducting the fieldwork.

Nine previous cultural resources projects and a number of paleontological localities have been previously recorded in the vicinity of the current project area. Following is a brief description of each of those projects and localities.

In 1979 two cultural resources surveys were completed near the current project area. The University of Utah inventoried areas for the Riverbend Gathering System (Simms 1979) and Archeological Environmental Research Corporation (AERC) surveyed two nearby pipeline routes (Hauck 1979). There were no cultural resources found in the vicinity of the current project area on either survey.

In 1979 and 1980 AERC inventoried a number of rectangular sample survey units for Mapco (Hauck and Norman 1980). Many of these units were located in S. 30 and adjacent sections. Seven sites were located in and near the project area during this survey including; 42Un828 - 42Un836 and 42Un846. Following is a brief description of each of these sites:

Site 42Un828 is a small non-diagnostic prehistoric lithic scatter and surface quarry.

Site 42Un829 is a small prehistoric lithic scatter located on a point of a hill near Willow Creek. Only non-diagnostic lithics were found on the site.

Site 42Un830 is a small limited activity lithic scatter east of Willow Creek. Only non-diagnostic lithics were found on the site.

Site 42Un831 is a small ethnohistoric and historic petroglyph site located near Willow Creek.

Site 42Un832 is a small limited activity campsite east of Willow Creek. Only non-diagnostic lithics were found on the site.

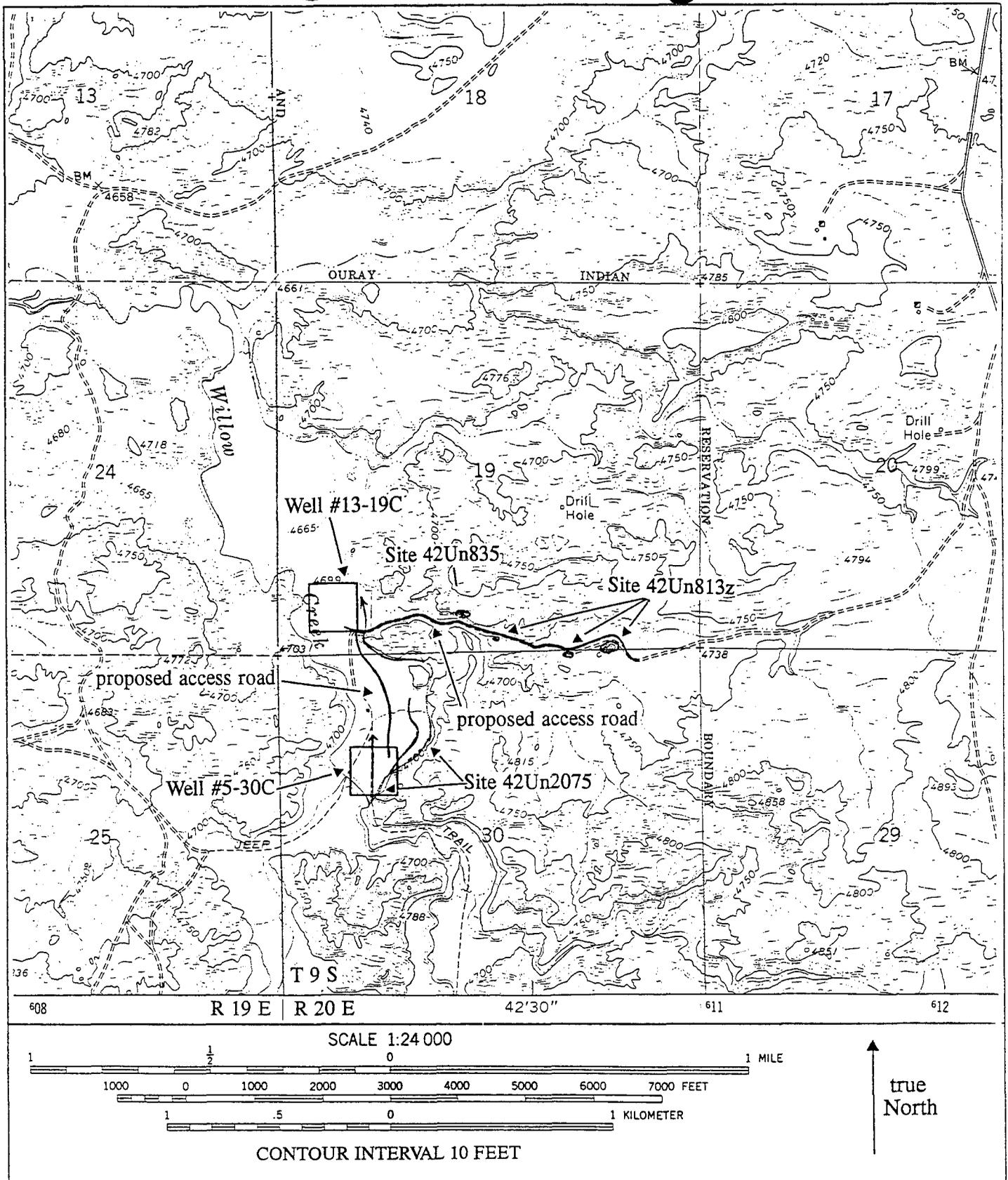


Figure 1. Location of area surveyed for wells 13-19C and 5-30C and access roads. Also shown are sites 4sUn835 and 42Un2075 and paleontological locality 42Un803z. Taken from: USGS 7.5' Quadrangle Ouray, Utah (1964).

Site 42Un833 is a small surface quarry with limited activity use located east of Willow Creek. Only non-diagnostic lithics were found on the site.

Site 42Un834 is a small Fremont or Ute petroglyph located on a cliff face.

Site 42Un835 is a small petroglyph panel located on a cliff near Willow Creek.

Site 42Un836 is a small lithic scatter on a ridge with quartzite knife blade or lance point biface chopper-cobblestone, biface scraper of mudstone, primary flakes, pounding and grinding stone.

Site 42Un846 is a historic site with three intact log structures and corral, probably representing a former homestead. Historic artifacts present suggest occupation from late nineteenth century to 1920 or 1930.

In 1980 Utah Archaeological Research Corporation (UTARC) conducted a survey of a Northwest Pipeline route (Christensen 1980). During this survey site 42Un966 was found in nearby S. 24. It consists of a small lithic scatter of primary and secondary flakes of chalcedony and quartzite, a chert core and a quartzite chopper. There were no associated diagnostic artifacts or features found at the site.

In 1988 AERC inventoried a well pad and access road in S. 19 near Willow Creek. There were no cultural resources found during this survey.

In 1992, Sagebrush surveyed six separate PG&E well pad locations and their access roads near the current project area (M. Polk 1992a, 1992b, 1992c; A. Polk 1992a, 1992b, 1992c). One prehistoric cultural resources site (42Un1975), two paleontological localities and one isolated artifact were found during these surveys. Site 42Un1975, a historic period dump site, was located in the area surveyed for PG&E well #13-30C east of Willow Creek. Paleontological localities consisted of possible mammal bones and scattered turtle shell fragments. A single isolated artifact, a small trough metate, was located in the area surveyed for PG&E well #3-25B Federal.

During 1993, Sagebrush has completed three projects near the current project area consisting of well pad and access road clearances (Weymouth 1993a, 1993b, 1993c). Four isolated artifacts (IF 1-4) and two paleontological localities, consisting of mammal bones and scattered turtle shell fragments, were located during these surveys. Isolated artifacts IF 1-3 were located in the area surveyed for PG&E well #13-24B, IF-1 is a white quartzite biface tip fragment; IF-2 is a white quartzite lithic core fragment; IF-3 is a large yellow-brown quartzite secondary flake. IF-4 is a brownish-red siltstone cobble which shows evidence of bifacial working. It was located in the area surveyed for PG&E well #15-24B.

The National Register of Historic Places (NRHP) was consulted prior to the commencement of fieldwork for the present project. No NRHP sites were found located in the vicinity of the current project area.

ENVIRONMENT

The project area lies in dissected tablelands south of Ouray along Willow Creek. The well pads and much of the access road lay within the narrow sandy floodplain of Willow Creek. The remainder of the access road is located in a narrow canyon bottom which opens to the east into an area of low eroding hills and shallow washes. The elevation of the area ranges from approximately 4680 to 4730 feet a.s.l. Sediments consist of sandy silts and silty clays with little or no gravel content. Vegetation in the survey area consists of shadscale community species and covers about 20 percent of the area. Noted species include tall sagebrush, shadscale, four-wing saltbush, greasewood, rabbitbrush, bunchgrass, prickly pear cactus, and buckwheat.

The nearest permanent water source is Willow Creek which is adjacent to the east side of the areas surveyed. Natural disturbance in the area is primarily from water erosion and includes much sheetwash and some arroyo cutting. Cultural disturbance includes agricultural use, grazing of livestock, and a number of two track roads which wind through the area.

METHODOLOGY

The survey area covered during this project consists of two 10 acre parcels of land centered on the well heads and 1.2 miles of proposed access road. The well pad area was inventoried by the Michael R. Polk and Heather M. Weymouth in parallel transects spaced 15 meters apart. Two transects spaced 10 meters apart were walked along the proposed access roads to check for evidence of cultural or paleontological activity on or near the proposed road. A total width of 100 feet was inventoried for the proposed road. The area surveyed on this project totals 34.5 acres.

RESULTS

One cultural resources site (site 42Un2075) a number of Eocene age turtle shell fossils and two articulating fragments of fossil mammal bone (locality 42Un813z) were recorded during this survey (Figure 1). In addition, one previously recorded site (42Un835) was updated on a current Intermountain Antiquities Computer System form (IMACS) (Figure 1).

Site 42Un2075

Site 42Un2075 represents the remaining portion of a historic irrigation system which was once used to convey water from Willow Creek to fields under cultivation along the east side of Willow Creek in T. 9S., R. 20E. S. 19 and 30.

This site consists of three shallow north-south trending troughs which appear to have conveyed water from Willow Creek to a series of historically cultivated fields which lie in the floodplain just above the Creek. Two of these shallow troughs roughly parallel the bottom of a high ridge on the east side of the floodplain and end where the ridge curves to the west. The third runs northerly through what appears to be the center of the old field and ends at the

western point of the same ridge. The easternmost ditch consists of two adjacent troughs, the first is approximately five feet wide and one-and-one-half feet deep and the second (adjacent to the ridge bottom) is approximately seven feet wide and two feet deep. The remaining two troughs are approximately three feet wide and one-and-one-half feet deep. The three troughs appear to have merged into a single trough at the south end of the site where Willow Creek curves to the east. The exact beginning of this single waterway is unknown due to the erosion and collapse of portions of the creek bank into which it was dug.

This irrigation system appears to be linked to an abandoned homestead which lies outside of the current survey area. According to land records available at the Bureau of Land Management, Utah State Office in Salt Lake City, an attempt to patent this property was pursued under the Desert Land Entry system in November 1911. The claim was relinquished by the applicant in March 1915. A second attempt to patent the same parcel was pursued under the Homestead system in July 1916. The claim was relinquished in November of the same year. Information is not readily available as to the identity of the particular applicants involved in these two early attempts to place patent upon this particular parcel of land, however, this does appear to be the approximate time period in which at least some of the structures present at the abandoned homestead site were built. With this in mind, the site appears to date from as early as 1910-1915. It is likely that the irrigation system was associated with these events, and dates to the same period of time as the structural remains still extant at the nearby homestead site. This may represent one time period during a longer occupation of the nearby homestead or, perhaps, represents the entire occupation period. Further investigation of the homestead property would be necessary to establish this relationship.

Site 42Un835

Site 42Un835 is a previously recorded petroglyph site which lies in a small narrow canyon east of Willow Creek. This site was recorded in 1979 by Garth Norman for AERC during a sample survey of units for MAPCO. The site consists of four petroglyph panels pecked into a south facing sandstone cliff face and a large boulder. Both historic Ute figures and prehistoric Fremont anthropomorphic figures are represented in these panels.

Locality 42Un813z

Paleontological locality 42Un813z represents three separate areas where exposed scatters of Eocene turtle shell fossils and two articulating fragments of fossil mammal bone were located along the proposed access road entering from the east. The turtle shell fossils at this location are generally weathered and, for the most part, appear to lack context. Two articulating pieces of fossil mammal bone were found lying on a low rise above and to the south of the existing two-track road along the proposed access route. These mammal bone fragments are out of the proposed construction zone for the access road through this particular area.

RECOMMENDATIONS

One new historic site, 42Un2075, was recorded and one previously recorded site, 42Un835, was updated during this inventory of PG&E wells #13-19C Federal and #5-30C Federal and their access road. In addition, paleontological locality #42Un813z was assigned to paleontological remains located during this survey.

The one new site, 42Un2075, a historic irrigation system, is considered eligible to the NRHP. This irrigation system represents the remains of one aspect of early homesteading, farming and ranching activity. The canal segments represent a good example of a marginal irrigation system which probably utilized the heavier seasonal flows of Willow Creek in the most efficient way possible for the era in which they were built. The currently proposed access road to the two well locations will have a minor impact upon a very small portion of one branch of this irrigation system. The access road, which follows an already existing two-track road, will cross one of the trough segments. Since the pre-existing two-track road has already compromised this portion of the segment, use of this road as access will not have a major effect upon the physical integrity of the site. However, well pad location #5-30C will adversely impact another undisturbed portion of the system. Since this is a recommended eligible property, avoidance of the resource is recommended.

Previously recorded site 42Un835 was recorded as non-significant in 1979, however upon reevaluation by Sagebrush during the present project it is recommended eligible to the NRHP.

Paleontological materials were found along the easternmost portion of the main access road only. The access road has been moved so as to avoid adversely affecting these paleontological localities.

There is one other issue of concern on this project which is particularly applicable to well #5-30C. According to Blaine Phillips, Archaeologist for the BLM in Vernal, this proposed well is located in the vicinity of a very important religious site for the Ute Indians. Because the BLM is very sensitive to Ute Indian concerns, formal contact with the tribe will be made regarding this area to determine whether clearance can be granted for this project.

This investigation was conducted with techniques which are considered to be adequate for evaluating cultural and paleontological resources which could be adversely affected by the project. However, should such resources be discovered during construction, a report should be made immediately to the BLM District Archaeologist, Vernal District Office, Vernal, Utah.

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1980 *Archaeological Reconnaissance of Pipelines near Willow Creek, Central Uintah County, Utah*. Utah Archaeological Resources Corporation (UTARC). Spanish Fork, Utah.

Hauck, F. R.

1979 *Archaeological Survey of Two Proposed Routes in the Willow Creek and Sheep Wash Localities*. Archaeological Environmental Research Corporation (AERC). Bountiful, Utah.

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Polk, Ann S.

1992a A Cultural Resources Survey of PG&E Well #3-25B Federal and Access Road, Uintah County, Utah. Sagebrush Archaeological Consultants, *Archaeological Report No. 572*. Ogden, Utah.

1992b A Cultural Resources Survey of PG&E Well #11-24B Federal and Access Road, Uintah County, Utah. Sagebrush Archaeological Consultants, *Archaeological Report No. 514*. Ogden, Utah.

1992c A Cultural Resources Survey of PG&E Well #2-32B State and Access Road, Uintah County, Utah. Sagebrush Archaeological Consultants, *Archaeological Report No. 512*. Ogden, Utah.

Polk, Michael R.

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Simms, Steven R.

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Weymouth, Heather M.

1993a A Cultural Resources Survey of a Second Alternate Location for PG&E Well #15-24B Federal and its Access Road, Uintah County, Utah. Sagebrush Archaeological Consultants, *Archaeological Report No. 595*. Ogden, Utah.

1993b A Cultural Resources Survey of an Alternate Location for PG&E Well #15-24B Federal and its Access Road, Uintah County, Utah. Sagebrush Archaeological Consultants, *Archaeological Report No. 589*. Ogden, Utah.

1993c A Cultural Resources Survey of PG&E Wells #13-24B Federal and #15-24B Federal and their Access Roads, Uintah County, Utah. Sagebrush Archaeological Consultants, *Archaeological Report No. 585*. Ogden, Utah.

A Wastewater Permit Application will be filed with the Uintah Basin District Health Department in Vernal once the drilling contractor has been determined.



Permitco Incorporated
A Petroleum Permitting Company

FILING FOR WATER IN THE STATE OF UTAH

Rec. by _____

Fee Rec. _____

Receipt # _____

Microfilmed _____

Roll # _____

APPLICATION TO APPROPRIATE WATER

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Title 73, Chapter 3 of the Utah Code Annotated 1953, as amended.

WATER RIGHT NUMBER: 49 - 1536

TEMPORARY APPLICATION NUMBER: T67027

1. OWNERSHIP INFORMATION:

LAND OWNED? No

A. NAME: Dalbo Inc.
ADDRESS: P. O. Box 1167, Vernal, UT 84078

B. PRIORITY DATE: July 13, 1993

FILING DATE: July 13, 1993

2. SOURCE INFORMATION:

A. QUANTITY OF WATER: 10.0 acre-feet

B. DIRECT SOURCE: Willow Creek

COUNTY: Uintah

C. POINT OF DIVERSION -- SURFACE:

(1) S 239 feet W 2866 feet from NE corner, Section 24, T 9S, R 19E, SLBM
DIVERT WORKS: Pump into tank trucks
SOURCE: Willow Creek

3. WATER USE INFORMATION:

OIL EXPLORATION: from Jul 15 to Jul 14. Drilling and completion of wells in the Ouray area.

4. PLACE OF USE: (which includes all or part of the following legal subdivisions:)

BASE TOWN	RANG	SEC	NORTH-EAST†				NORTH-WEST†				SOUTH-WEST†				SOUTH-EAST†							
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE				
SL	9S	20E	19	X	X	X	X	###	X	X	X	X	###	X	X	X	X	###	X	X	X	X
			30	X	X	X	X	###	X	X	X	X	###	X	X	X	X	###	X	X	X	X

5. EXPLANATORY:

Water is pumped into tank trucks at the edge of the main road on Willow Creek.

TEMPORARY APPLICATION for Water Right: 49 - 1836 continued***

Page: 2

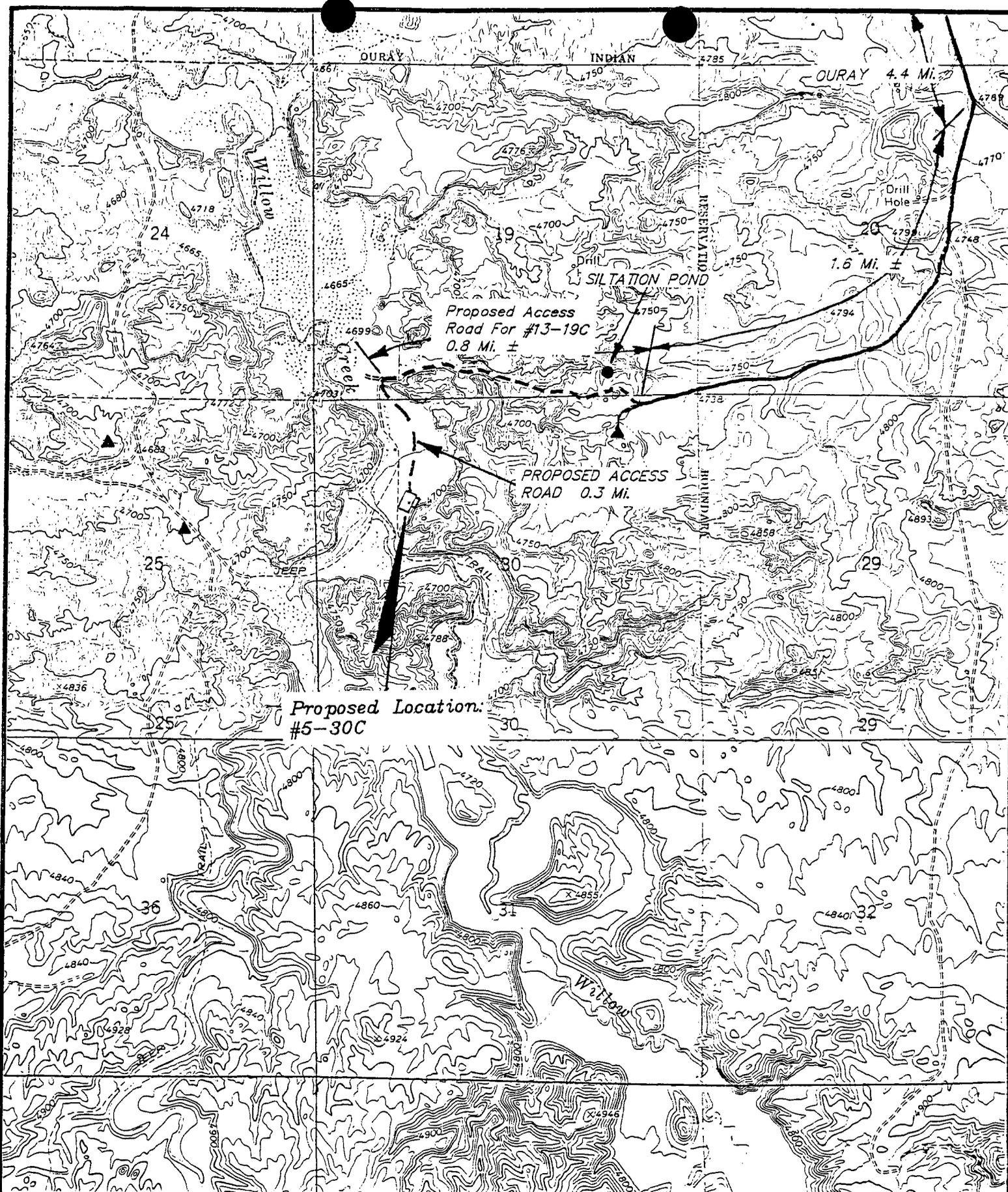
6. SIGNATURE OF APPLICANT(S):

The applicant(s) hereby acknowledge(s) that he/she/they are citizen(s) of the United States of America or intend(s) to become such a citizen(s). The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described. The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of information contained herein, at the time of filing, rests with the applicant(s).

[Handwritten Signature]

Signature of Applicant(s)

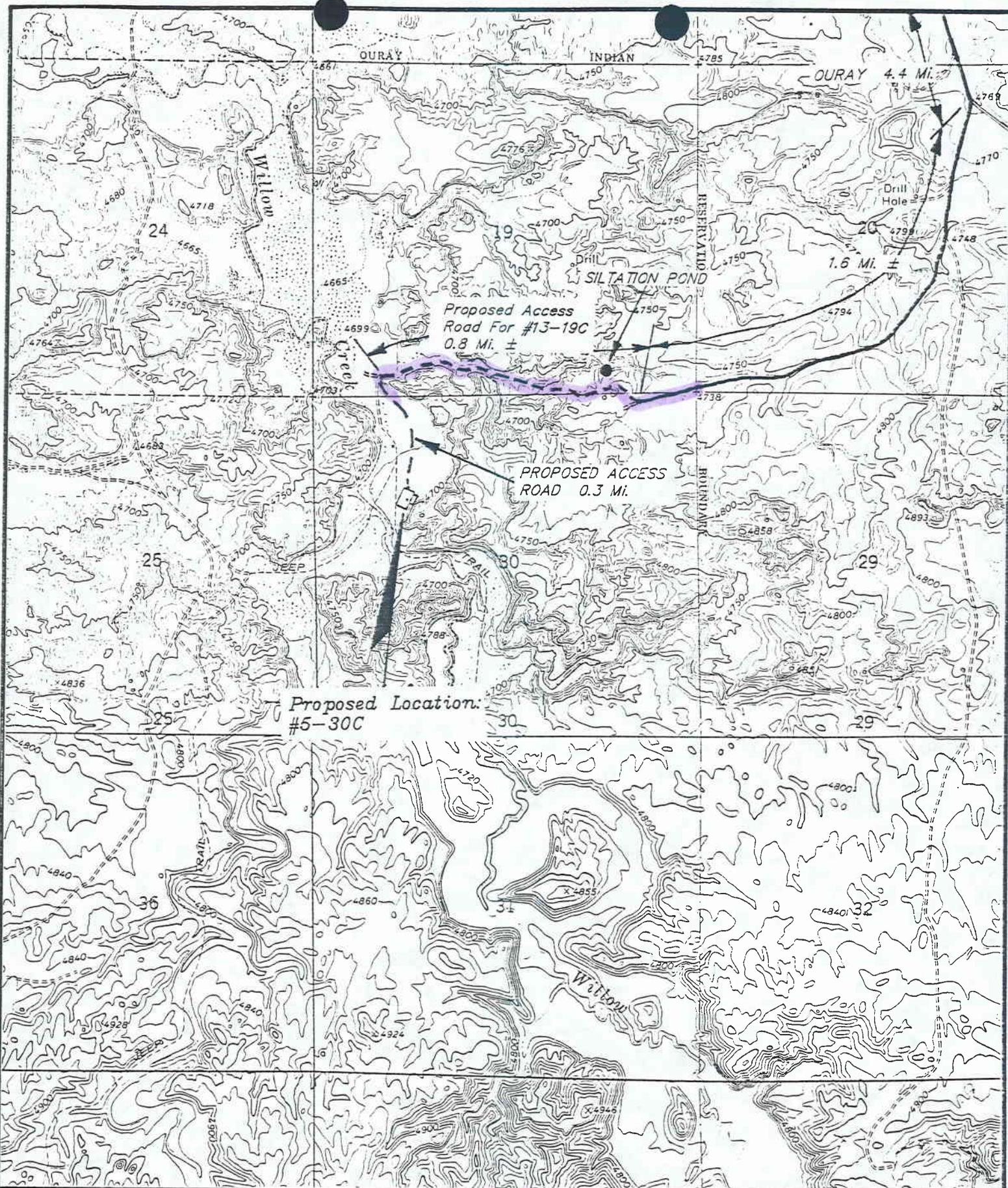
		DALBO, INC. OIL AND WATER SERVICE P.O. BOX 1168 PHONE 789-0743 VERNAL, UTAH 84078		No. 032167	
FIRST SECURITY BANK OF UTAH NATIONAL ASSOCIATION VERNAL, UTAH 31-1/1240					
PAY <u>SEVENTY-FIVE AND 00/100 DOLLARS ***</u>					
		DATE		AMOUNT	
TO		7/13/93		\$*75.00*	
THE		DIVISION OF WATER RIGHTS			
ORDER					
OF		DALBO, INC. <i>[Handwritten Signature]</i>			
032167 1212400001212 62 000?? 16"					



REVISED: 6-23-93 J.L.G.
 TOPOGRAPHIC
 MAP "B"
 SCALE: 1" = 2000'
 DATE: 6-22-93 J.D.G.



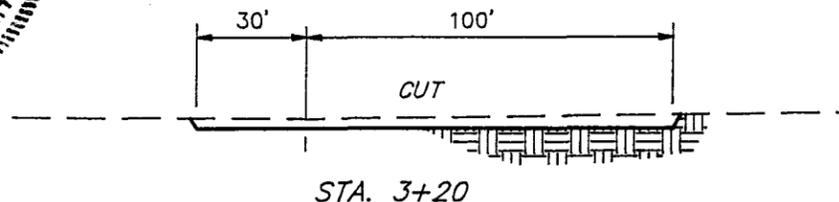
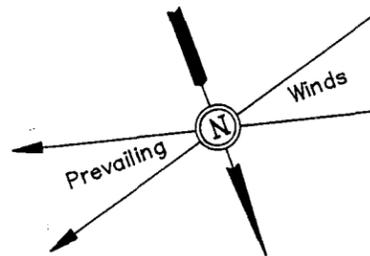
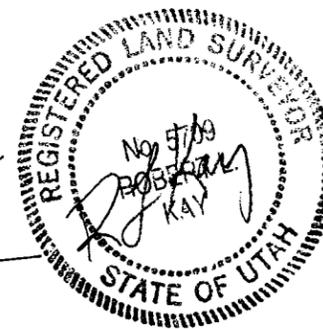
▲ Producing Wells
 PG&E RESOURCES COMPANY
 #5-30C
 SECTION 30, T9S, R20E, S.L.B.&M.
 1663' FNL 1431' FWL



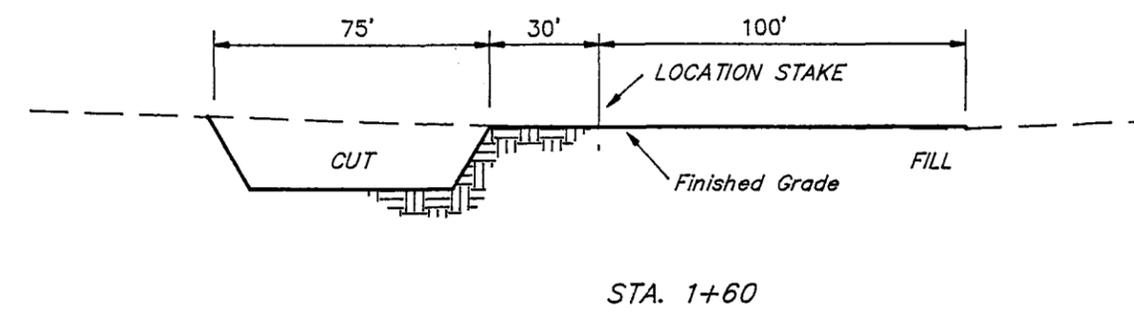
REVISED: 6-23-93 J.L.G.
 TOPOGRAPHIC
 MAP "C"
 SCALE: 1" = 2000'
 DATE: 6-22-93 J.D.G.



BLM Right of Way Requested
 PG&E RESOURCES COMPANY
 #5-30C
 SECTION 30, T9S, R20E, S.L.B.&M.
 1663' FNL 1431' FWL

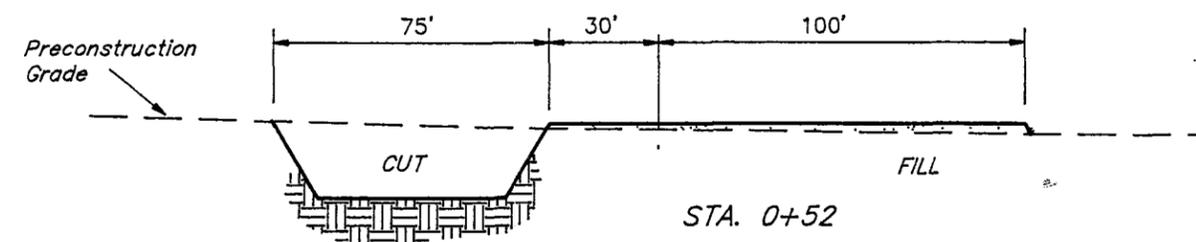


SCALE: 1" = 50'
DATE: 6-22-93
Drawn By: J.R.S.

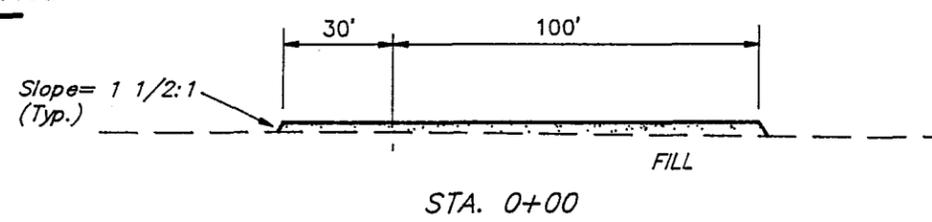


X-Section Scale
1" = 20'
1" = 50'

TYP. LOCATION LAYOUT
TYP. CROSS SECTIONS

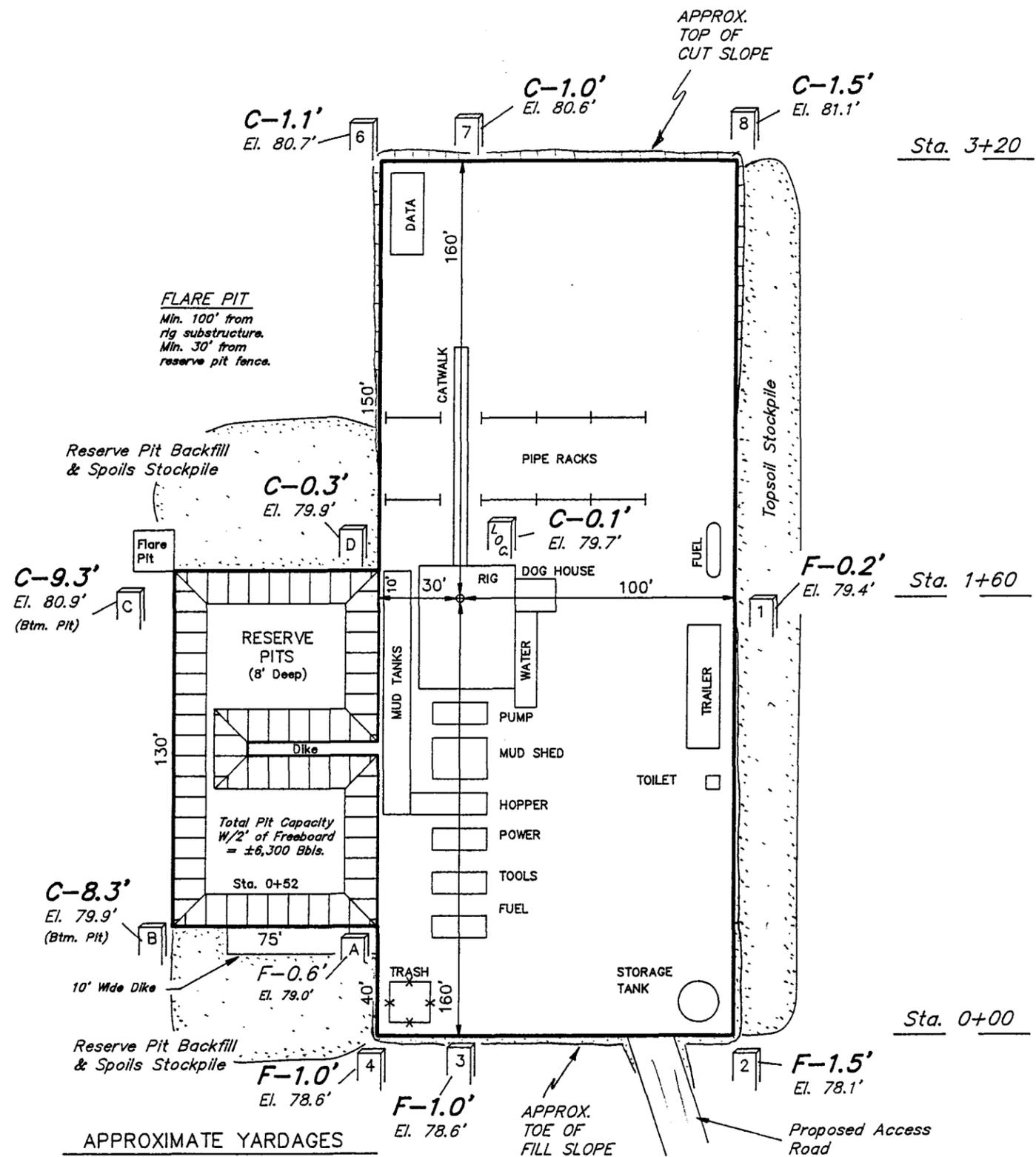


NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.



Elev. Ungraded Ground at Location Stake = 4679.7'

Elev. Graded Ground at Location Stake = 4679.6'



CUT (6") Topsoil Stripping = 950 Cu. Yds.	EXCESS MATERIAL AFTER 5% COMPACTION = 2,020 Cu. Yds.
Remaining Location = 2,180 Cu. Yds.	Topsoil & Pit Backfill (1/2 Pit Vol.) = 1,930 Cu. Yds.
TOTAL CUT = 3,130 CU.YDS.	EXCESS UNBALANCE (After Rehabilitation) = 90 Cu. Yds.
FILL = 1,050 CU.YDS.	

APPROXIMATE YARDAGES

APPROX. TOE OF FILL SLOPE

Proposed Access Road

FLARE PIT
Min. 100' from rig substructure.
Min. 30' from reserve pit fence.

Reserve Pit Backfill & Spoils Stockpile

Total Pit Capacity W/2' of Freeboard = ±6,300 Bbls.

Reserve Pit Backfill & Spoils Stockpile

Slope = 1 1/2:1 (Typ.)

CONFIDENTIAL - TIGHT HOLE

SUBMIT IN TRIPLICATE
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

5. LEASE DESIGNATION AND SERIAL NO.
UTU-68631

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

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

7. UNIT AGREEMENT NAME
N/A

1b. TYPE OF WELL
OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

8. FARM OR LEASE NAME
Federal

2. NAME OF OPERATOR **214/750-3800 PG & E Resources Company** **6688 N. Central Expressway, Suite 1000 Dallas, TX 75206**

9. WELL NO.
#5-30C

3. ADDRESS OF OPERATOR **303/452-8888 PERMITCO INC. - Agent** **13585 Jackson Drive Denver, CO 80241**

10. LAND AND POOL OR WILDCAT
Natural Buttes 630

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. *)
At Surface **1663' FNL and 1431' FWL**
At proposed Prod. Zone **SW NW (Lot 2) Sec. 30**

11. SECTION, R. M., OR BLK.
AND SURVEY OR AREA
Sec. 30, T9S - R20E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
7.1 miles southwest of Ouray, UT

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
1431'

16. NO. OF ACRES IN LEASE
1340.05

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.
None

19. PROPOSED DEPTH
5200'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
4680' GR

22. APPROX. DATE WORK WILL START*
Upon approval of this application

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	400'	170 sx or suffic to circ to surf.
7-7/8"	5-1/2"	14#	5200'	500 cubic feet or sufficient to cover zones of interest.

PG & E Resources Company proposes to drill a well to 5200' to test the Green River formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

Please be advised that PG & E Resources Company is considered to be the Operator of the above mentioned well. PG & E Resources Company agrees to be responsible under the terms and conditons of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No. U-187011. The principal is PG & E Resources Company via surety consent as provided for in 43 CFR 3104.2.

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]*
(This space for Federal or State office use)

Consultant for:
TITLE **PG & E Resources Co.** DATE **07/19/93**

PERMIT NO. **43-047-30440**

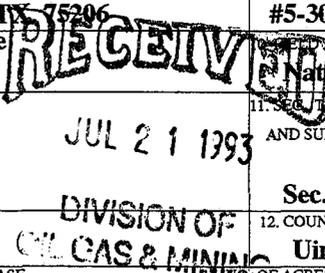
APPROVAL DATE

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE

**APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING**
DATE: **8/10/93**

*See Instructions On Reverse Side



WELL SPACING **49-3-3**

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

DATE RECEIVED: 07/21/93

OPERATOR: PG & E RESOURCES COMPANY
WELL NAME: FEDERAL 5-30C

OPERATOR ACCT NO: N-0595

API NO. ASSIGNED: 43-047-30440

LEASE TYPE: FED LEASE NO: UTD-68631
LOCATION: SWNW 30 - T09S - R20E UINTAH COUNTY
FIELD: NATURAL BUTTES (630) FIELD CODE: 630

RECEIVED AND/OR REVIEWED:

Plat
 Bond
(Number federal)
 Potash (Y/N)
 Oil shale (Y/N)
 Water permit
(Number 4-15316 T16T027)
 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: _____
Date: _____

COMMENTS: Exception location requested
Oil shale area

STIPULATIONS:

cc: Uintah assessor



July 27, 1993

RECEIVED

JUL 29 1993

DIVISION OF
OIL GAS & MINING

Utah Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Attn: Tammi Searing

Re: PG & E Resources Company
#5-30C Federal
1663' FNL and 1431' FWL
(Lot 2), Sec. 30, T9S - R19E
Uintah County, Utah

Dear Tammi,

As per our recent telephone conversation, this letter is to serve as PG & E's request for an exception to spacing on the above mentioned well.

This location was staked based on topography (keeping sufficient distance from Willow Creek as requested by the BLM). Please be advised that PG & E is the operator of all lands within a 460 foot radius of the proposed location. Therefore, we request that you grant administrative approval for an exception to spacing.

Your cooperation would be greatly appreciated. If you should have any questions, please don't hesitate to contact me.

Sincerely,

PERMITCO INC.

A handwritten signature in black ink, appearing to read "Lisa L. Smith".

Lisa L. Smith
Consultant for:
PG & E Resources

Enc.

cc: PG & E Resources - Dallas, TX
PG & E Resources - Vernal, UT

Permitco Incorporated
A Petroleum Permitting Company



July 19, 1993

Utah Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Attn: Tammi Searing

Re: PG & E Resources Company
#5-30C Federal
1663' FNL and 1431' FWL
(Lot 2), Sec. 30, T9S - R20E
Uintah County, Utah

Dear Tammi,

Enclosed please find three copies of the Application for Permit to Drill on the above mentioned well, along with the required drilling program and the surface use plan which was filed with the Bureau of Land Management in Vernal, Utah.

Please note that a copy of the Application to Appropriate Water is attached to the back of the federal permit.

Please forward the approved copies to Jim LaFevers, PG & E Resources Company at the address shown on the A.P.D. Thanks for your assistance in this matter.

Sincerely,

PERMITCO INC.

A handwritten signature in cursive script, appearing to read "Lisa L. Smith".

Lisa L. Smith
Consultant for:
PG & E Resources Company

Enc.

cc: PG & E Resources Company - Dallas, TX
PG & E Resources Company - Vernal, UT

RECEIVED
AUG 02 1993
RECEIVED

DIVISION OF
OIL GAS & MINING

AUG 02 1993
DIVISION OF
OIL GAS & MINING

Permitco Incorporated
A Petroleum Permitting Company



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)

August 10, 1993

PG & E Resources Company
6688 N. Central Expressway, Suite 1000
Dallas, Texas 75206

Gentlemen:

Re: Federal #5-30C Well, 1663' FNL, 1431' FWL, SW NW, Sec. 30, T. 9 S., R. 20 E., Uintah County, Utah

Pursuant to Utah Admin. R. 649-3-3, Exception to Location and Siting of Wells and Utah Admin. R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, 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 commencing drilling operations.
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
PG & E Resources Company
Federal #5-30C Well
August 10, 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 43-047-32440.

Sincerely,



for R.J. Firth
Associate Director, Oil and Gas

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



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Vernal District Office
170 South 500 East
Vernal, Utah 84078

IN REPLY REFER TO:

Phone (801) 789-1362

FAX (801) 781-4410

3162
UT08438

September 1, 1993

RECEIVED

SEP 03 1993

DIVISION OF
OIL, GAS & MINING

PG & E Resources Company
Attn: Jim LaFevers
6688 N Central Expressway, Suite 1000
Dallas, TX 75206-3800

Re: Well No. 13-19C 43-047-32437
Lease No. U-0141644 NBU.
Lot 4, Section 19, T9S, R20E
Federal Well No. 5-30C 43-047-32440
Lease No. U-68631
SWNW, Section 30, T9S, R20E

Dear Mr. LaFevers:

The Applications for Permit to Drill the above-referenced wells are being returned unapproved as per your request. If you intend to drill at these locations at a future date, new Applications for Permit to Drill must be submitted.

If you have any questions, please contact me at (801) 789-1362.

Sincerely,

Margie Herrmann

Margie Herrmann
Legal Instruments Examiner

cc: State Div. OG&M



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)

September 9, 1993

Mr. Jim LaFevers
PG & E Resources Company
6688 N. Central Expressway, Suite 1000
Dallas, Texas 75206

Re: Well No. Federal 5-30C, Sec. 30, T. 9 S., R. 20 E., Uintah County, Utah
API No. 43-047-32440

Dear Mr. LaFevers:

In concert with action taken by the U.S. Bureau of Land Management, approval to drill the above referenced well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

Don Staley
Administrative Manager
Oil and Gas

DME/lcd

cc: Bureau of Land Management - Vernal
R.J. Firth
Well file

WOI196