

UTAH OIL AND GAS CONSERVATION COMMISSION

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

DATE FILED **4-10-92**

LAND: FEE & PATENTED \_\_\_\_\_ STATE LEASE NO. \_\_\_\_\_ PUBLIC LEASE NO. **UTU-65218** INDIAN \_\_\_\_\_

DRILLING APPROVED: **4-16-92**

SPUDED IN: \_\_\_\_\_

COMPLETED: **5-25-93** PUT TO PRODUCING: \_\_\_\_\_

INITIAL PRODUCTION: ~~Confidential~~

GRAVITY A.P.I. \_\_\_\_\_

GOR: \_\_\_\_\_

PRODUCING ZONES: \_\_\_\_\_

TOTAL DEPTH: \_\_\_\_\_

WELL ELEVATION: \_\_\_\_\_

DATE ABANDONED: **LAD PER BLM EFF. 5-25-93**

FIELD: **PARIETTE BENCH**

UNIT: \_\_\_\_\_

COUNTY: **UINTAH**

WELL NO. **FEDERAL #7-19B** API NO. **43-047-32226**

LOCATION **1980' FNL** FT. FROM (N) (S) LINE, **1980' FEL** FT. FROM (E) (W) LINE, **SW NE** 1/4 - 1/4 SEC. **19**

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
------	------	------	----------	------	------	------	----------

				<b>9S</b>	<b>19E</b>	<b>19</b>	<b>PG &amp; E RESOURCES CORP.</b>
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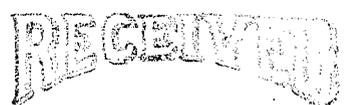
NOTICE OF STAKING Not to be used in place of Application for Permit to Drill (Form 3160-3)		6. Lease Number UTU-65218	
1. Oil Well _____ Gas Well <u>X</u> Other (Specify)		7. If Indian, Allottee or Tribe Name	
2. Name of Operator: PG&E Resources Company		8. Unit Agreement Name	
3. Name of Specific Contact Person: Randy Miller (801)789-4573		9. Farm or Lease Name Federal	
4. Address & Phone No. of Operator or Agent 5950 Berkshire Lane, Suite 600 Dallas, Texas 75225 (214)750-3800		10. Well No. 7-19B <u>43-047-30004</u>	
5. Surface Location of Well 1980'FNL & 1980'FEL of SW/NE Sec.19-T9S-R19E		11. Field or Wildcat Name Riverbend	
Attach: a) Sketch showing road entry onto pad, pad dimensions, and reserve pit. b) Topographical or other acceptable map showing location, access road, and lease boundaries.		12. Sec., T., R., M., or Blk and Survey or Area  Sec. 19, T9S, R19E	
15. Formation Objective(s) Wasatch and Lower Green River	16. Estimated Well Depth 8450'	13. County, Parish, or Borough Uintah	14. State Utah
17. Additional Information (as appropriate; shall include surface owner's name, address and, if known, telephone number)			

18. Signed *Gary Whetstine* Title Drilling Engr. Date 2/7/92  
*Gary Whetstine*

Note: Upon receipt of this Notice, the Bureau of Land Management (BLM) will schedule the date of the onsite predrill inspection and notify you accordingly. The location must be staked and access road must be flagged prior to the onsite.

- Operators must consider the following prior to the onsite:
- a) H<sub>2</sub>S Potential
  - b) Cultural Resources (Archeology)
  - c) Federal Right of Way or Special Use Permit

Orig. & 2 copies: BLM/Vernal  
 1 copy: Div. of Oil, Gas and Mining  
 1 copy: Gary Whetstine  
 1 copy: Central Files/Dallas  
 1 copy: Vernal Office

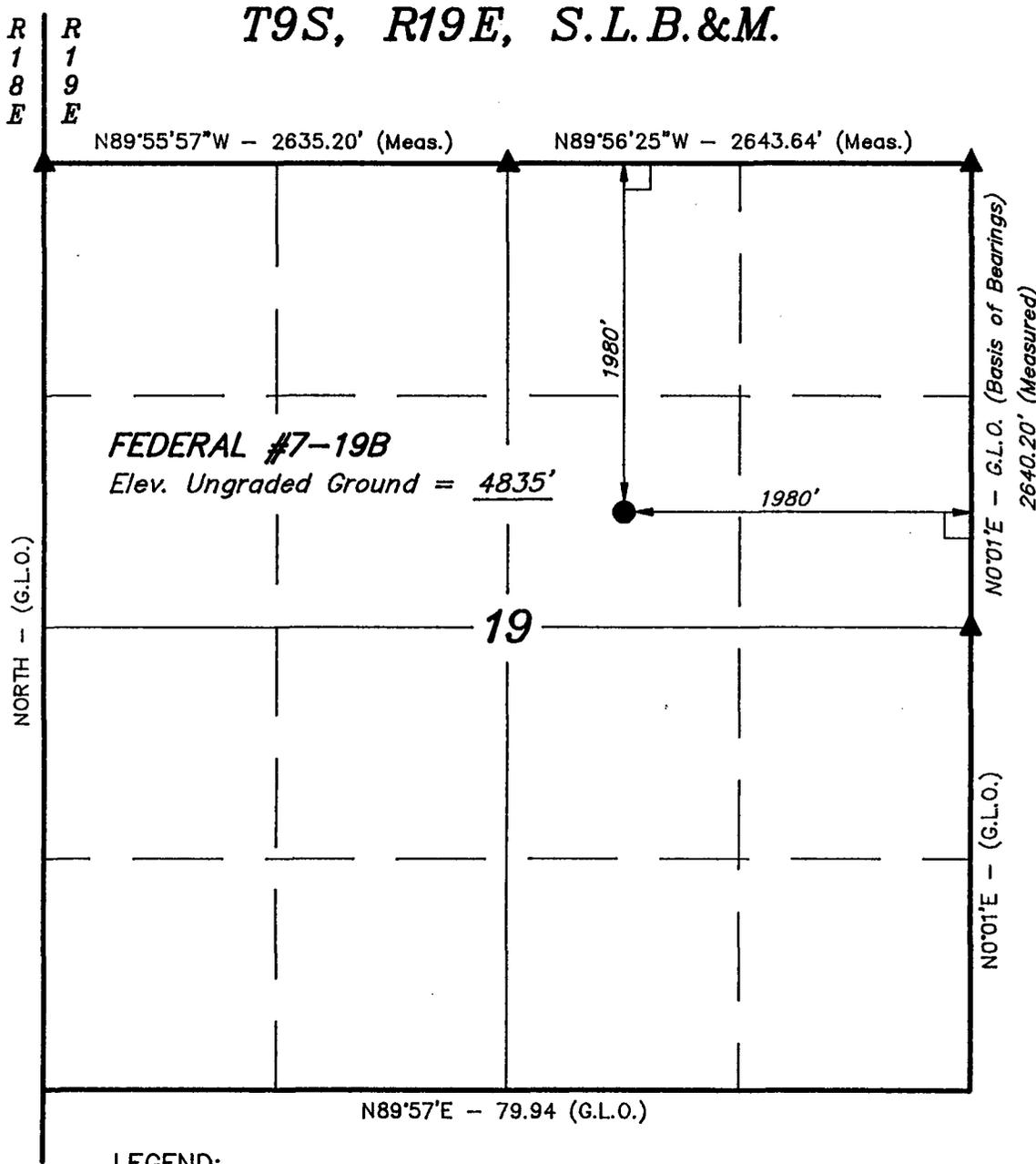


FEB 24 1992

DIVISION OF OIL GAS & MINING

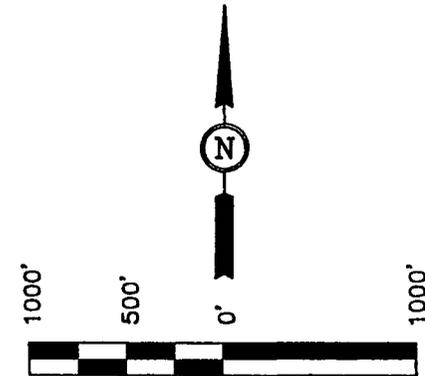
**PG&E RESOURCES COMPANY**

Well location, FEDERAL #7-19B, located as shown in the SW 1/4 NE 1/4 of Section 19, T9S, R19E, S.L.B.&M. Uintah County, Utah.



**BASIS OF ELEVATION**

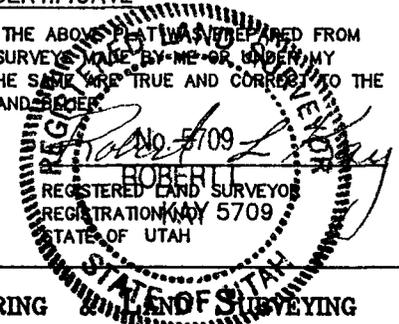
SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 19, T9S, R19E, S.L.B.&M. TAKEN FROM THE UTELAND BUTTE QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4891 FEET.



**SCALE**

**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.

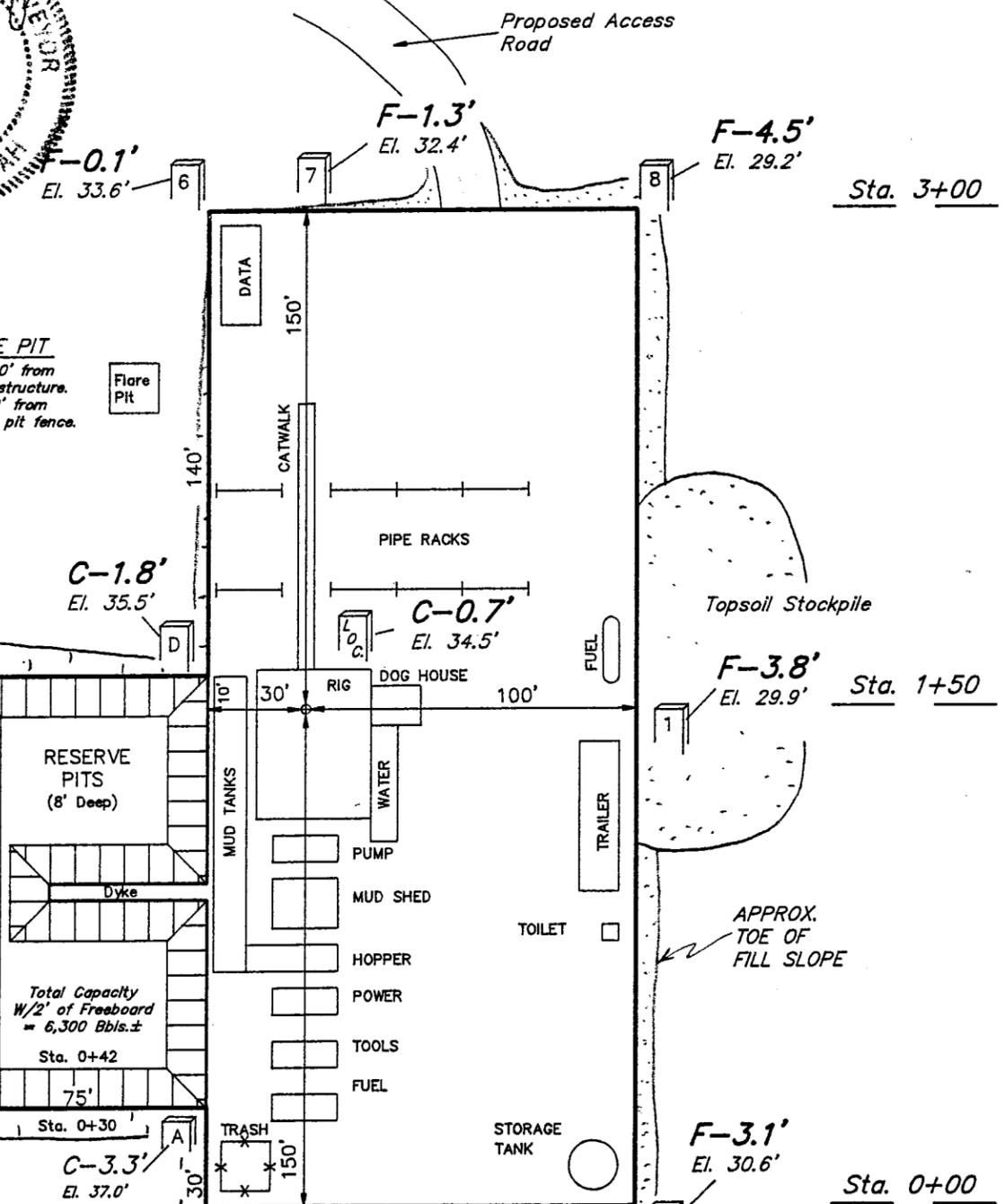
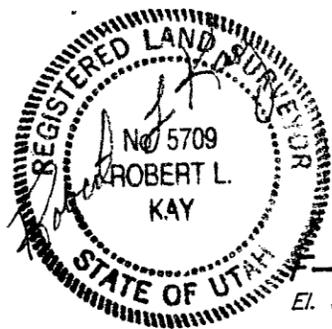


**UINTAH ENGINEERING AND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (801) 789-1017

**LEGEND:**

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

SCALE 1" = 1000'	DATE SURVEYED: 2-13-92	DATE DRAWN: 2-14-92
PARTY L.D.T. D.A. R.E.H.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE PG&E RESOURCES CO.	



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

**C-13.5'**  
El. 39.2'  
(Btm. Pit)

**C-1.8'**  
El. 35.5'

**C-0.7'**  
El. 34.5'

**C-14.3'**  
El. 40.0'  
(Btm. Pit)

**C-3.3'**  
El. 37.0'

**C-2.9'**  
El. 36.6'

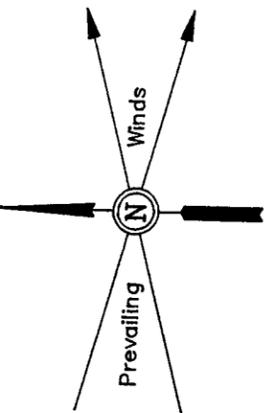
**C-1.7'**  
El. 35.4'

**F-3.1'**  
El. 30.6'

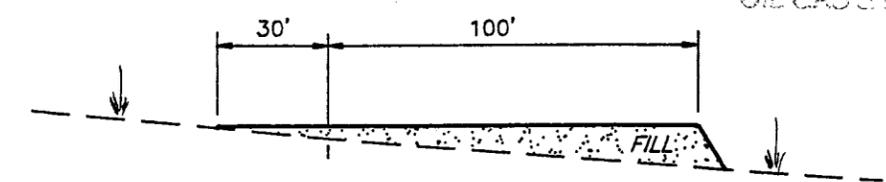
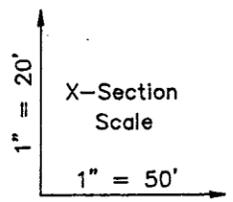
**F-3.8'**  
El. 29.9'

**F-1.3'**  
El. 32.4'

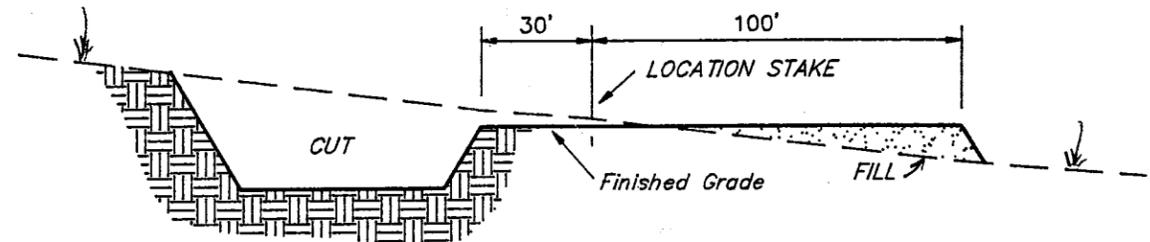
**F-4.5'**  
El. 29.2'



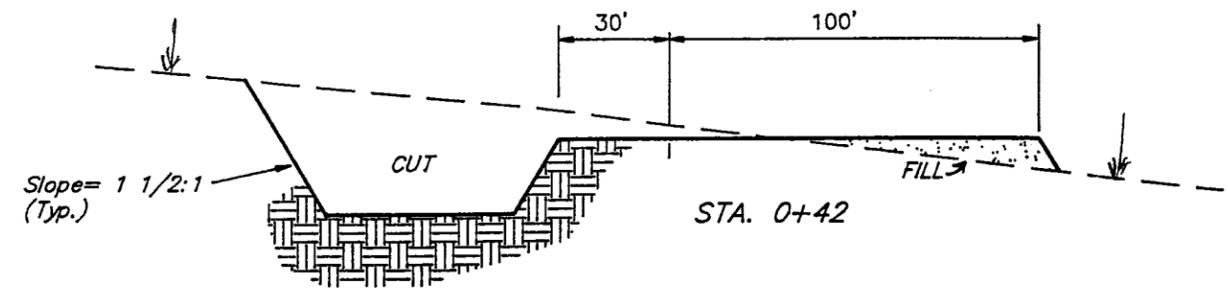
SCALE: 1" = 50'  
DATE: 2-14-92  
Drawn By: R.E.H.



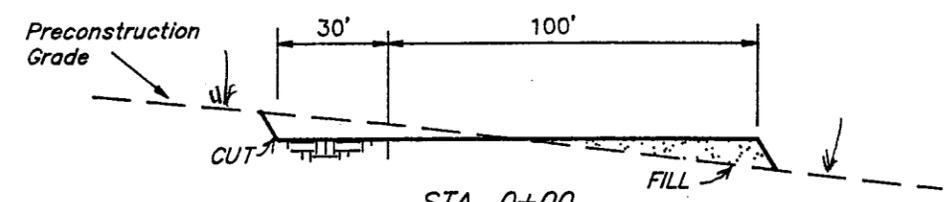
STA. 3+00



STA. 1+50



STA. 0+42



STA. 0+00

TYP. LOCATION LAYOUT

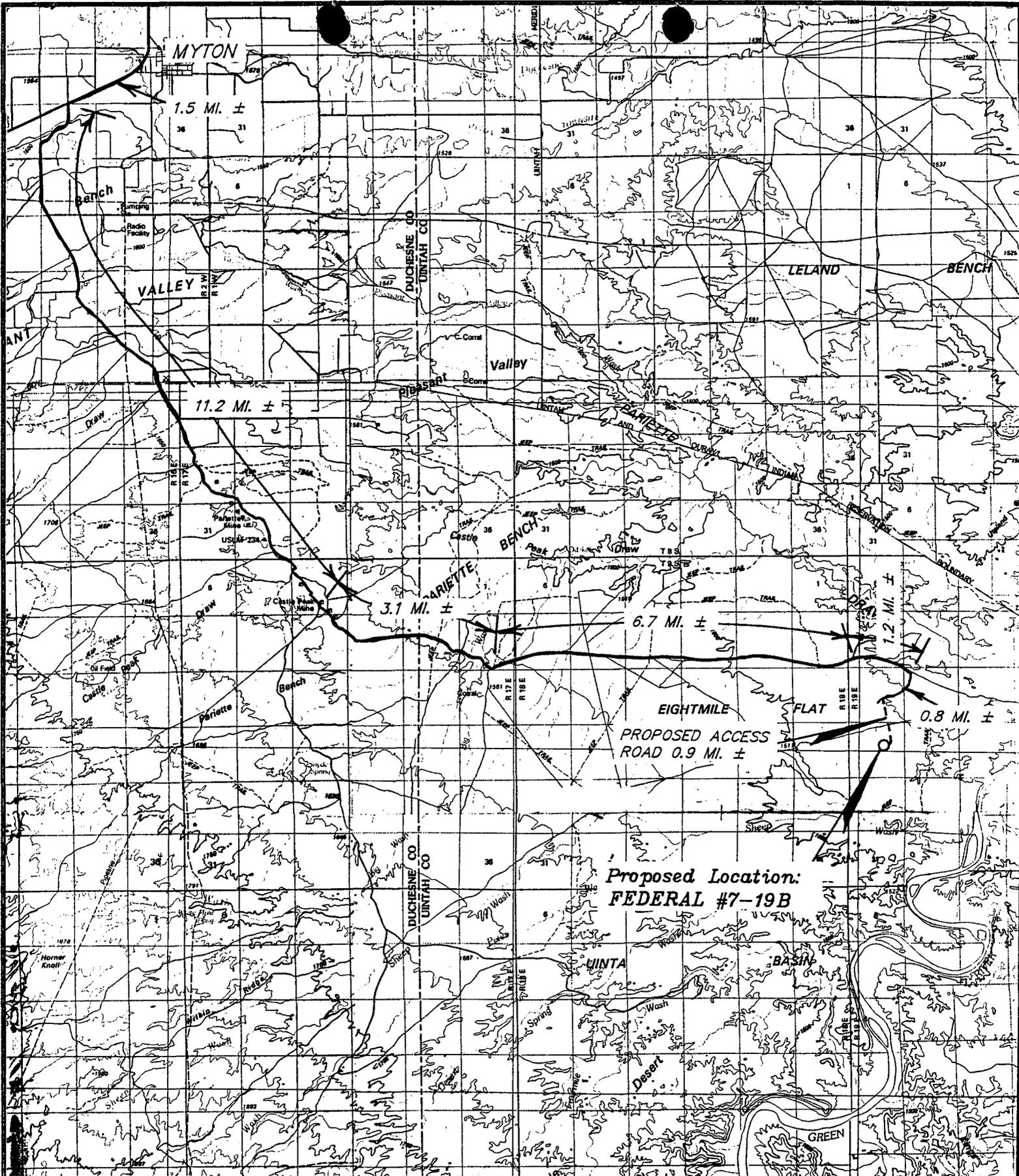
TYP. CROSS SECTIONS

Elev. Ungraded Ground at Location Stake = 4834.6'

Elev. Graded Ground at Location Stake = 4833.7'

**APPROXIMATE YARDAGES**

CUT (6") Topsoil Stripping	=	900 Cu. Yds.	EXCESS MATERIAL AFTER 5% COMPACTION	=	1,890 Cu. Yds.
Remaining Location	=	3,850 Cu. Yds.	Topsoil & Pit Backfill (1/2 Pit Vol.)	=	1,880 Cu. Yds.
<b>TOTAL CUT</b>	=	<b>4,750 CU.YDS.</b>	EXCESS UNBALANCE (After Rehabilitation)	=	10 Cu. Yds.
<b>FILL</b>	=	<b>2,720 CU.YDS.</b>			



TOPOGRAPHIC  
MAP "A"

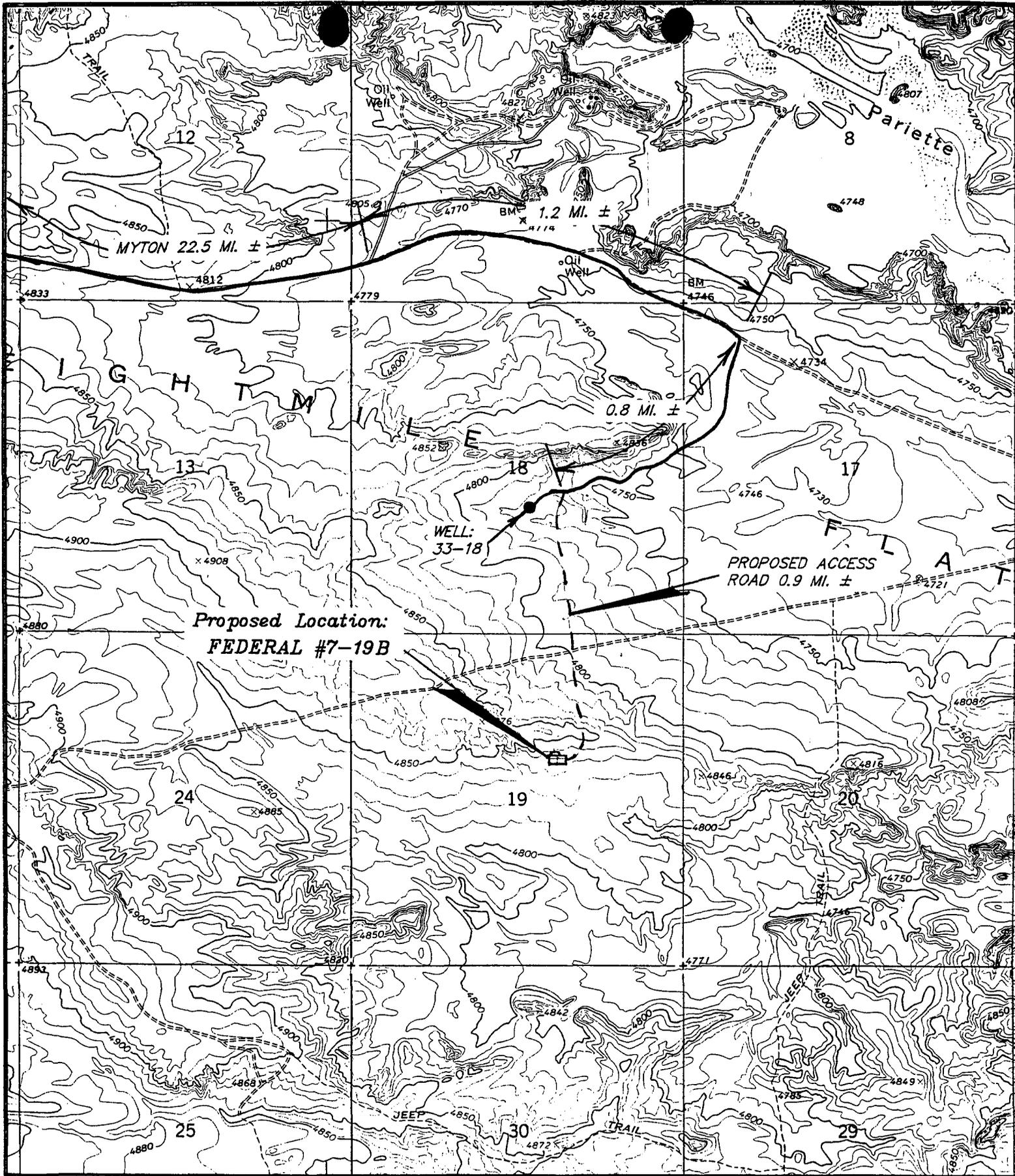
DATE 2-14-92 R.E.H.



**PG&E RESOURCES COMPANY**

FEDERAL #7-19B

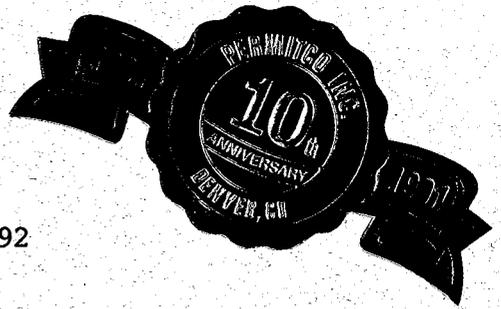
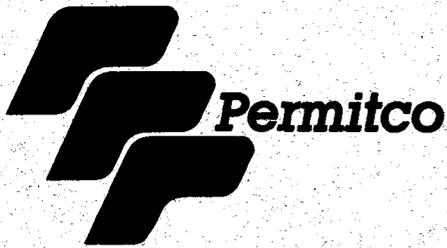
SECTION 19, T9S, R19E, S.L.B.&M.



TOPOGRAPHIC  
 MAP "B"  
 SCALE: 1" = 2000'  
 DATE 2-14-92 R.E.H.



PG&E RESOURCES COMPANY  
 FEDERAL #7-19B  
 SECTION 19, T9S, R19E, S.L.B.&M.



April 8, 1992

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  
#7-19B Federal  
SW NE Sec. 19, 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 one copy of Onshore Order No. 1 which was filed with the Bureau of Land Management in Vernal, Utah.

Please note that a copy of the water permit is included with the federal permit. Please contact me at your earliest convenience if you should require additional information.

Upon approval of the enclosed application, please forward the approved copies to Permitco Inc. - Agent for PG & E Resources Company at the address shown below. I will then forward copies to PG & E for their files. Your assistance in this matter would be greatly appreciated.

Sincerely,

PERMITCO INC.

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

Enc.

cc: PG & E Resources Company - Dallas, TX  
PG & E Resources Company - Vernal, UT  
PIC Technologies, Inc. - Denver, CO

APR 10 1992

DIVISION OF  
OIL GAS & MINING

**Permitco Incorporated**  
A Petroleum Permitting Company

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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 5950 Berkshire Lane, #600  
 PG & E Resources Company Dallas, TX 75225

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 1980' FNL and 1980' FEL  
 At proposed prod. zone SW NE Sec. 19

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 24.5 miles southeast of Myton, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
 1980'

18. NO. OF ACRES IN LEASE 600

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

15. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 none

19. PROPOSED DEPTH 8450' WSTC

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 4835' GE

22. APPROX. DATE WORK WILL START\*  
 Immediately 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"	17#	8450'	600 sx or suffic to cover zones of interest.

PG & E Resources Company proposes to drill a well to 8450' to test the Wasatch 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 conditions of the lease for the operations conducted upon the leased 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 31.41.

**CONFIDENTIAL**

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

SIGNED [Signature] TITLE Consultant for PG & E Resources Company DATE 4/8/92

(This space for Federal or State office use)

PERMIT NO. 43-047-30006

APPROVAL DATE

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

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

DATE: 4-16-92

BY: [Signature]

WELL SPACING: 649-3-2

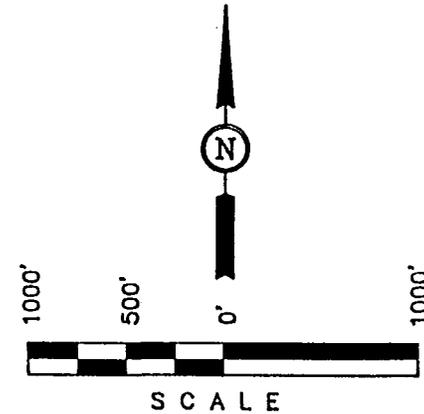
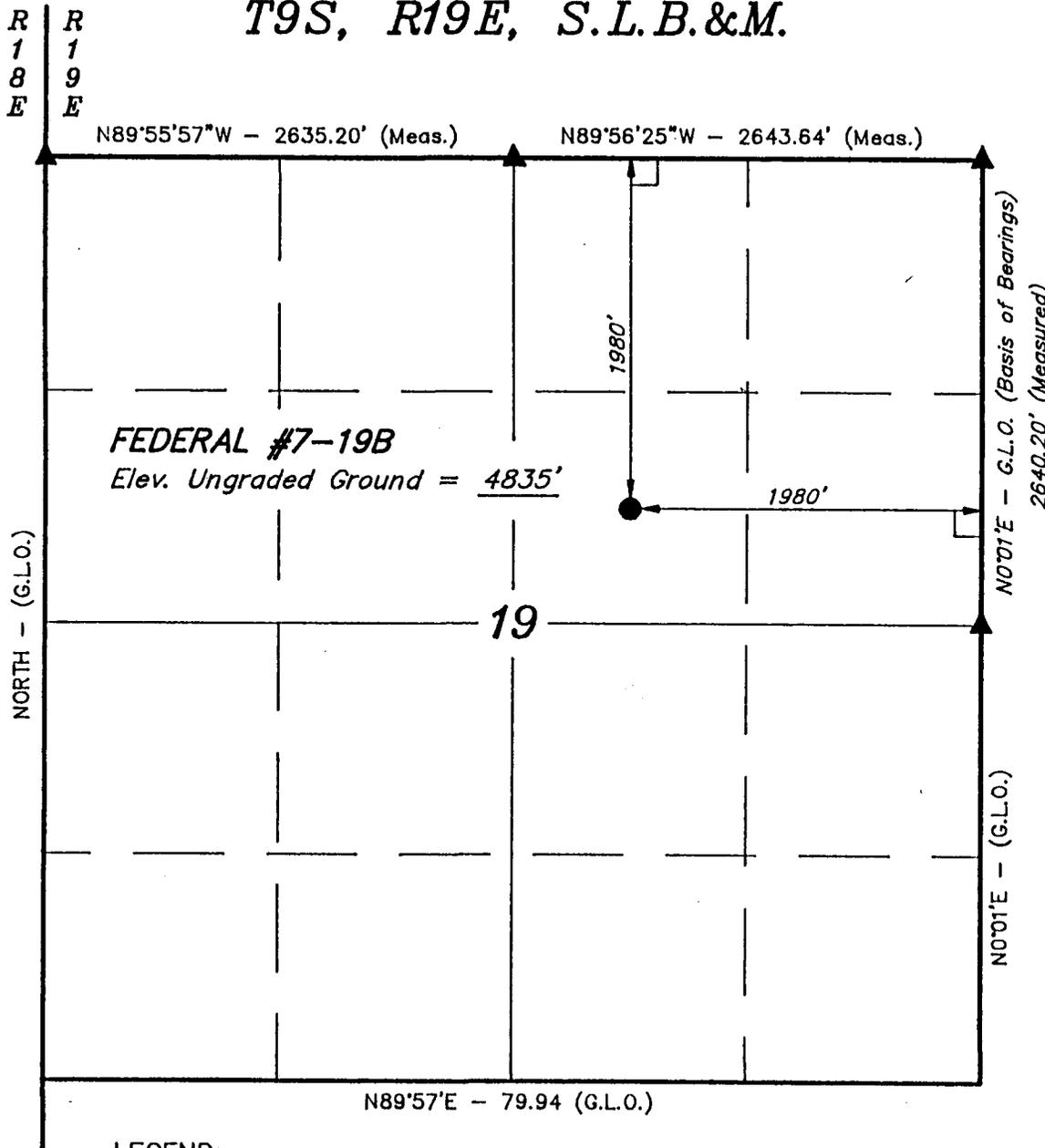
\*See Instructions On Reverse Side

**PG&E RESOURCES COMPANY**

Well location, FEDERAL #7-19B, located as shown in the SW 1/4 NE 1/4 of Section 19, T9S, R19E, S.L.B.&M. Uintah County, Utah.

**BASIS OF ELEVATION**

SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 19, T9S, R19E, S.L.B.&M. TAKEN FROM THE UTELAND BUTTE 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 4891 FEET.



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY 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. Eddy  
 No. 5709  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 5709  
 STATE OF UTAH

**LEGEND:**

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

<b>UINTAH ENGINEERING &amp; LAND SURVEYING</b> 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 2-13-92	DATE DRAWN: 2-14-92
PARTY L.D.T. D.A. R.E.H.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE PG&E RESOURCES CO.	

CONFIDENTIAL - TIGHT HOLE

ONSHORE OIL & GAS ORDER NO. 1

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

#7-19B  
1980' FNL and 1980' FEL  
SW NE Sec. 19, T9S - R19E  
Uintah County, Utah

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



March 2, 1992



Bureau of Land Management

RE: 11-24B NESW Sec. 24-T9S-R19E  
1980' FSL & 1980' FWL

5-1D NESW Sec. 1-T10S-R18E  
1980' FNL & 660 FWL

7-31B SWNE Sec. 31-T9S-R19E  
1980' FNL & 1980' FEL

11-31C SWSE Sec 31-T9S-R20E  
1980' FSL & 1980' FWL

7-19B SWNW Sec. 19-T9S-R19E  
1980' FNL & 1980' FEL

7-30C SWNE Sec. 30-T9S-R20E  
1980' FNL & 1980' FEL'

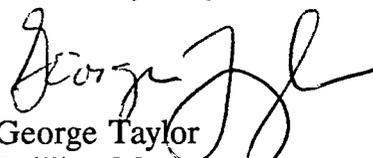
Gentlemen:

This letter is to inform you that Permitco is authorized to act as Agent and to sign documents on behalf of PG&E Resources Company when necessary for filing county, state and federal permits including Onshore Order No. 1, Right-of-Way applications, etc., for the above mentioned wells.

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations.

PG&E Resources Company agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above mentioned wells.

Yours very truly,

  
George Taylor  
Drilling Manager

GET/cs

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ONSHORE ORDER NO. 1  
PG & E Resources Company  
#7-19B Federal  
1980' FNL and 1980' FEL  
Sec. 19, T9S - R19E  
Uintah County, Utah

CONFIDENTIAL - TIGHT HOLE

DRILLING PROGRAM  
Page 1

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	1148'	+3072'
Basal Limestone	5350'	+ 500'
Wasatch	5517'	- 667'
Chapita Wells 1	6225'	-1375'
Chapita Wells 2	6373'	-1523'
Chapita Wells 3	6590'	-1740'
Chapita Wells 4	6907'	-2057'
Uteland Buttes	7221'	-2371'
T.D.	8450'	

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	N/A	
Gas	Wasatch	5517'
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</u>
							<u>or</u>
							<u>Used</u>
Surface	0-400'	12-1/4"	9-5/8"	36#	K-55	ST&C	New
Produc.	0-8450'	7-7/8"	5-1/2"	17#	J-55	LT&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. 600 sx Class "H" with 8% salt, 15.6 ppg, 1.2 yield or sufficient to cover zones of interest (from approx. 4800' to T.D.

- 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>
0-8450'	Water/Gel-KHO	8.4-8.6	N/C	N/	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. One straddle test is possible in the Green River formation.

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 and an FDC-CNL-GR from T.D. to base of surface casing.
- c. No cores are anticipated, however, sidewall cores will be run 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 and casing water frac potential hydrocarbon bearing zones.
7.
    - a. The expected bottom hole pressure is 3600 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 18-20 days.
    - c. The BLM in Vernal, Utah shall be notified of anticipated date of location construction commencement and of anticipated spud date.
    - e. 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.
    - f. 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.
    - g. 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 BIM District Office, 170 South 500 East, Vernal, UT 84078.

- h. 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.
- i. 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.
- j. 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.
- k. 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.
- l. 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.
- m. 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.
- n. A first production conference will be scheduled within 15 days after receipt of the first production notice.



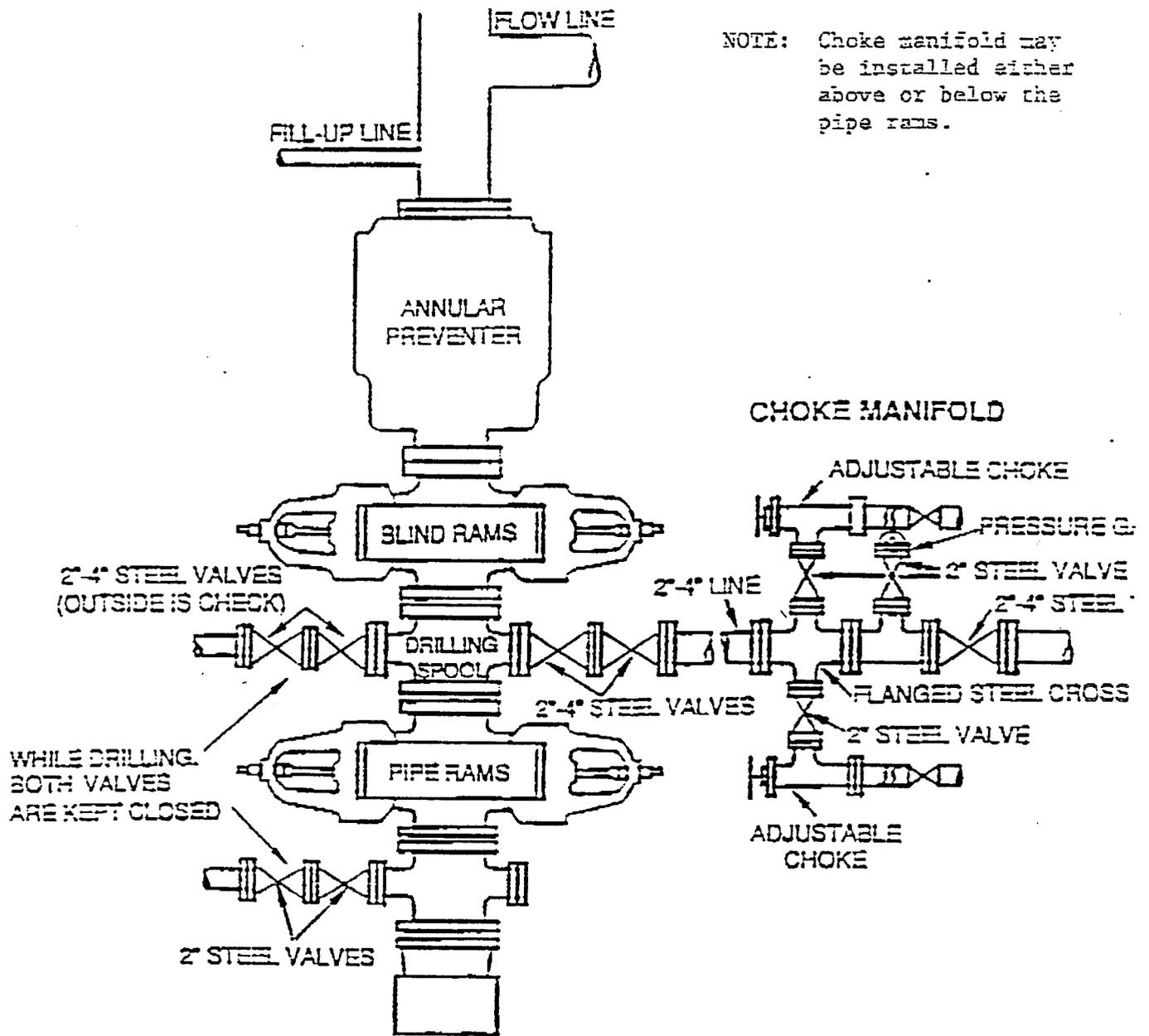
ONSHORE ORDER NO. 1  
PG & E Resources Company  
#7-19B Federal  
1980' FNL and 1980' FEL  
Sec. 19, T9S - R19E  
Uintah County, Utah

CONFIDENTIAL - TIGHT HOLE

DRILLING PROGRAM  
Page 10

- o. 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.
  
- p. 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.

**FIGURE NO. 7**  
**THREE PREVENTER HOOKUP**  
**CLASS III**  
**(MEETS 43 CFR, PART 3160, 3M SPECIFICA**



ONSHORE OIL & GAS ORDER NO. 1

Thirteen Point Surface Use Plan

1. Existing Roads

- a. The proposed well site is located approximately 24.5 miles southeast of Myton, Utah.
- b. Directions to the location from Myton, Utah are as follows:  
  
From Myton proceed southwesterly on Highway 40 for 1.5 miles. Turn left onto County Road #53 and #216 and proceed southeasterly for 11.2 miles to the Castle Peak Mine. Stay left and proceed an additional 3.1 miles in a southeasterly direction. Proceed east for 6.7 miles to a fork in the road. Stay right and proceed 1.2 miles. Turn right and proceed southwest for 0.8 miles to the #33-18J well. Turn south and follow an existing jeep trail and new construction flagging for 0.9 miles to the proposed drillsite.
- 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. Approximately 0.5 mile of jeep trail will be upgraded. The remaining 0.4 mile will be new construction and was flagged at the time of staking.
- 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. The new and upgraded access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. The total length of access road to be constructed or upgraded will be approximately 0.9 mile. Appropriate water



- control will be installed to control erosion.
- b. The maximum grade will be approximately 8%.
  - c. No turnouts are planned.
  - d. Low water crossings will be installed as needed. There are no major cuts and fills. No culverts and/or bridges will be required.
  - 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 has been submitted for use of

roads outside the lease boundary.

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 - one
- d. Drilling wells - none
- e. Shut-in wells - none
- f. Temporarily abandoned wells - none
- g. Disposal wells -none
- h. Abandoned wells - one
- i. Dry Holes - one

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 Brown (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 Babcock Draw, which is located in Section 34, T3S - R2W, Uintah County, Utah.
- b. Water will be hauled to location over the roads marked on Maps A and B.
- c. No water well is to be drilled on this lease.
- d. A copy of the approved water permit is 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. The need for a reserve pit liner will be determined during construction. Inspection will be made by the authorized officer.
- b. If a plastic nylon reinforced liner is used, it will be a minimum of 12 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 north side of the location.
- b. The flare pit will be located downwind of the prevailing wind direction on the northeast 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 on the south side of the location at point 1.
- d. Access to the wellpad will be from the east between points 7 and 8.
- 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. Reclamation of unused disturbed areas on the well pad/access road no longer needed for operations, such as cut slopes, and fill areas will be accomplished by grading, leveling and seeding as recommended by the Authorized Officer. The following seed mixture will be used.

<u>Seed Mixture</u>	<u>Pounds/Acres*</u> <u>Pure Live Seed</u>
Forage Kochia (Kochia prostrata)	1
Ephriam Crested Wheatgrass (Agropyron cristatum Ephriam)	5
Russian Wildrye (Elymus junceus)	4
Fourwing Saltbush (Atriplex canescens)	2

\*Rate if drilled. If broadcast, mixture will be doubled.

A harrow will be drug over the location to assure seed cover.

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 attach the appropriate surface rehabilitation conditions of approval.

11. Surface Ownership

Access Roads - All roads are County maintained or managed by the Bureau of Land Management.

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

12. Other Information

- a. A Class III archeological survey was conducted by Sagebrush Archeological Consultants. A copy of this report has been submitted to the appropriate agencies by Sagebrush Archeological Consultants.
- 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.
- e. A silt catchment dam and basin will be constructed according to BLM specifications approximately 300 feet south of the location.



A copy of the BLM specifications, "Minimum Standards for Dams Impounding Under 10 Acre Feet" is attached hereto. A BLM representative will be present at the start of construction.

- 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 and ROW grant, if applicable 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  
5950 Berkshire Lane  
Suite 600  
Dallas, TX 75225  
Gary Whetstine - 214/750-3800  
Mike McMican - 801/789-4573

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



ONSHORE ORDER NO. 1  
PG & E Resources Company  
#7-19B Federal  
1976' FNL and 1980' FEL  
SW NE Sec. 19, T9S - R19E  
Uintah County, Utah

CONFIDENTIAL - TIGHT HOLE

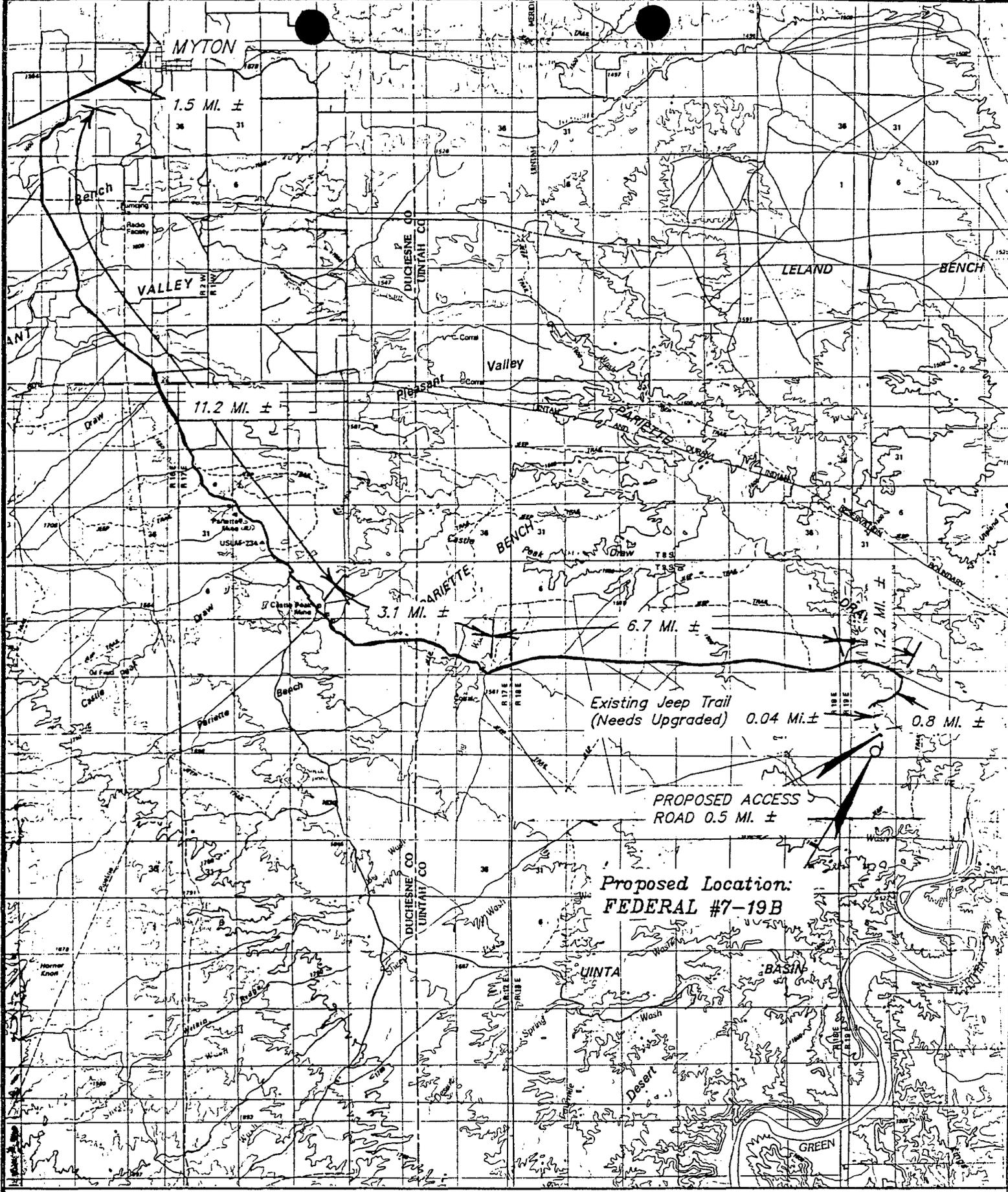
SURFACE USE PLAN  
Page 11

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.

April 8, 1992  
Date:

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



TOPOGRAPHIC  
MAP "A"

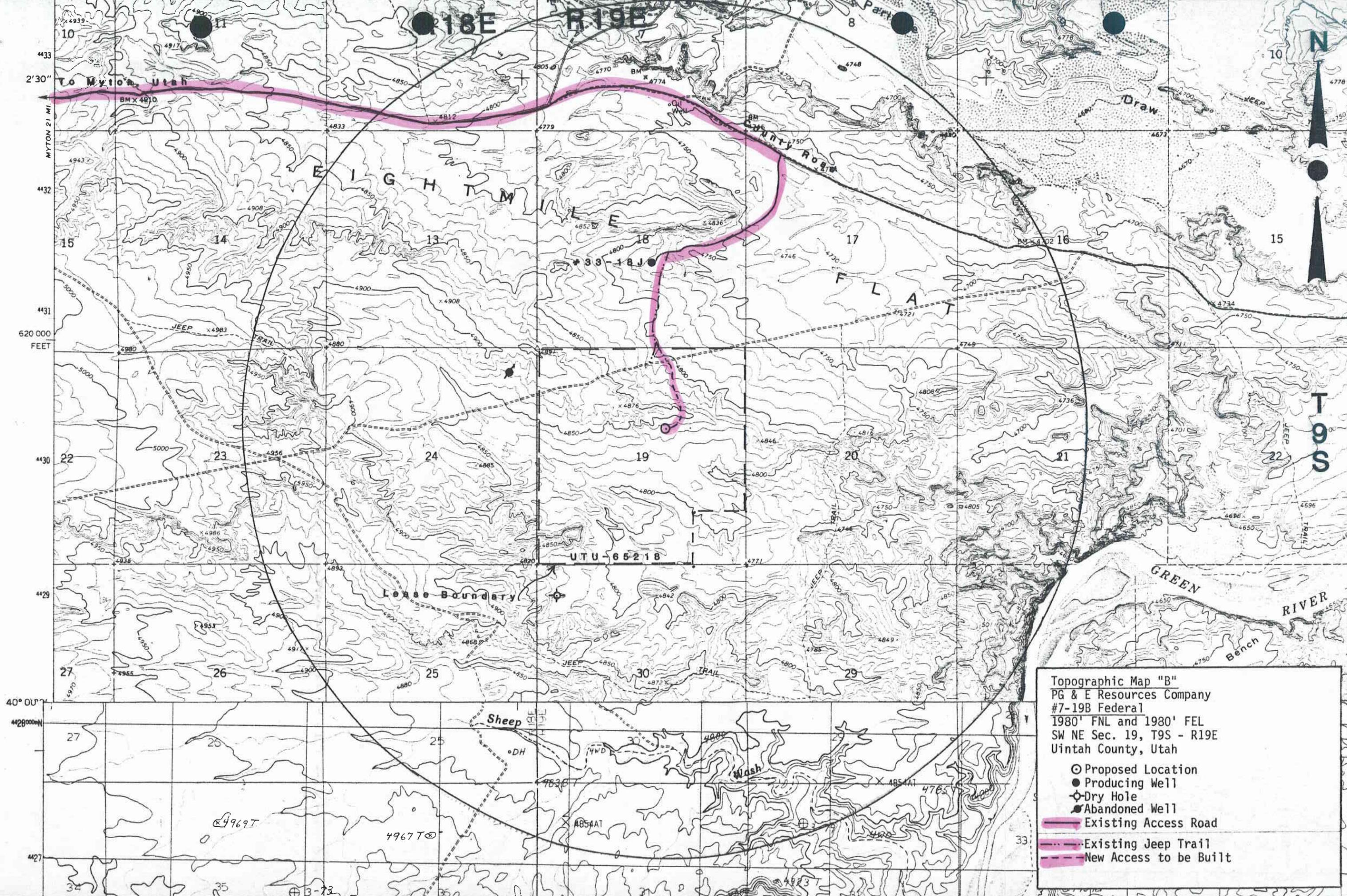
DATE 2-14-92 R.E.H.



**PG&E RESOURCES COMPANY**

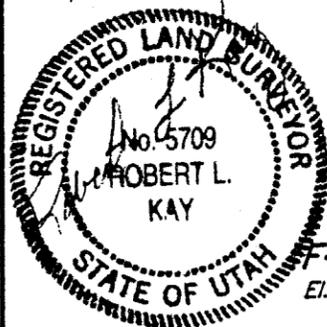
FEDERAL #7-19B  
SECTION 19, T9S, R19E, S.L.B.&M.

REVISED: 3-9-92 R.E.H.

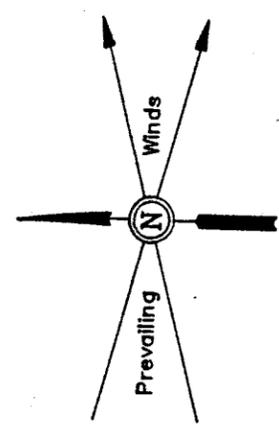
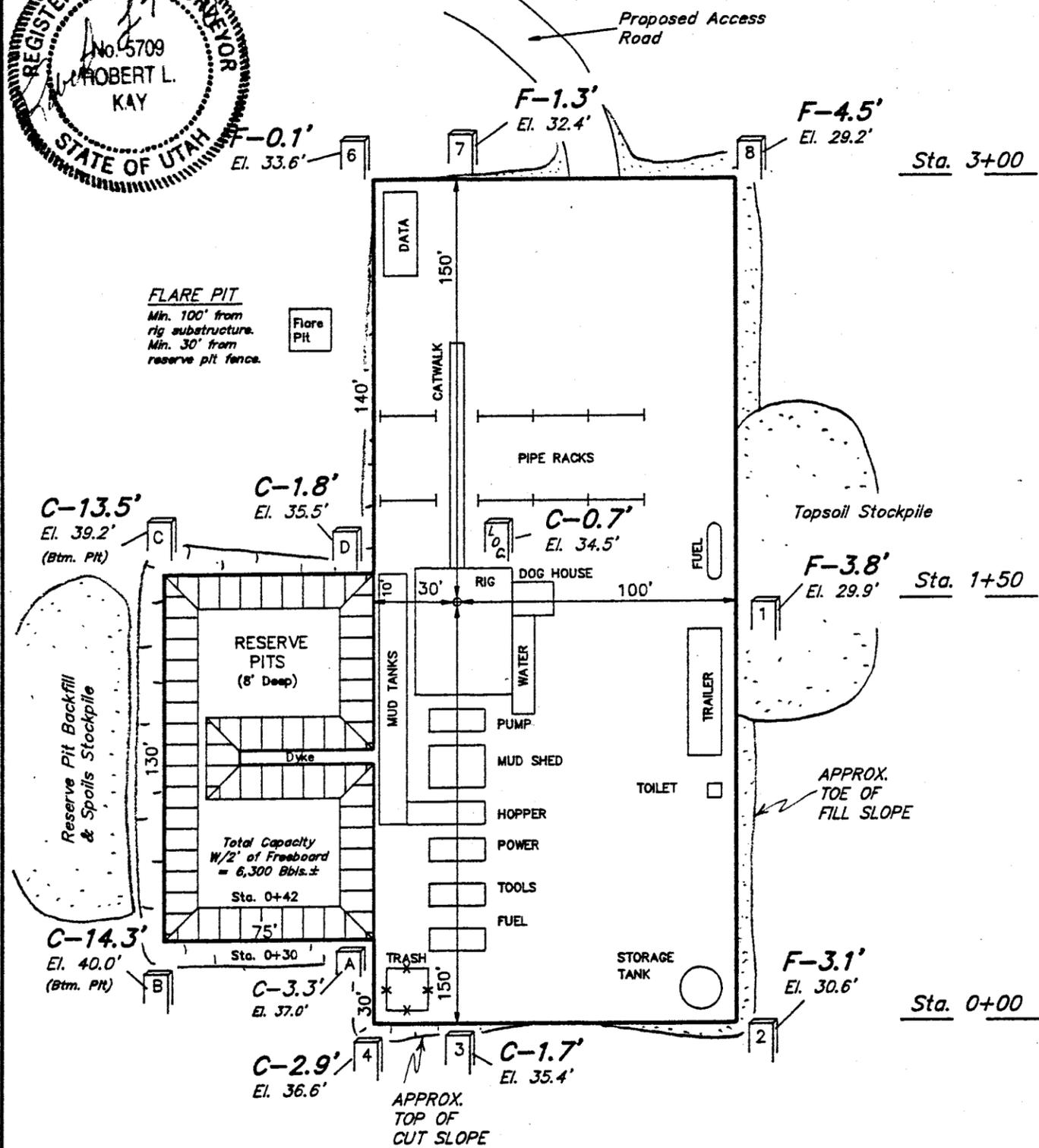


**Topographic Map "B"**  
 PG & E Resources Company  
 #7-19B Federal  
 1980' FNL and 1980' FEL  
 SW NE Sec. 19, T9S - R19E  
 Uintah County, Utah

- ⊙ Proposed Location
- Producing Well
- Dry Hole
- ⊙ Abandoned Well
- Existing Access Road
- - - Existing Jeep Trail
- - - New Access to be Built



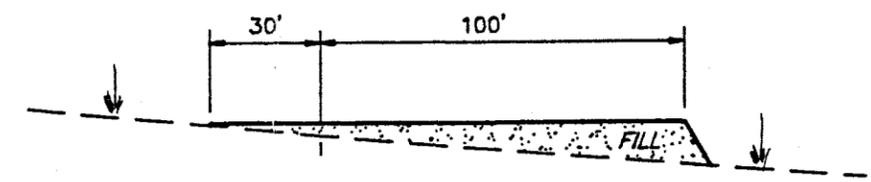
PG&E RESOURCES COMPANY  
 LOCATION LAYOUT FOR  
 FEDERAL #7-19B  
 SECTION 19, T9S, R19E, S.L.B.&M.



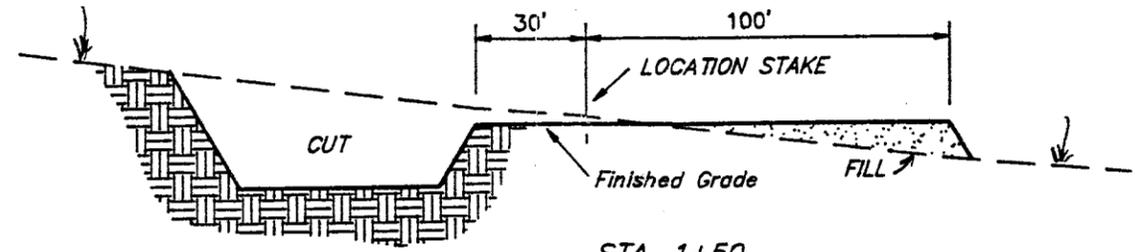
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 DATE: 2-14-92  
 Drawn By: R.E.H.

X-Section Scale  
 1" = 20'

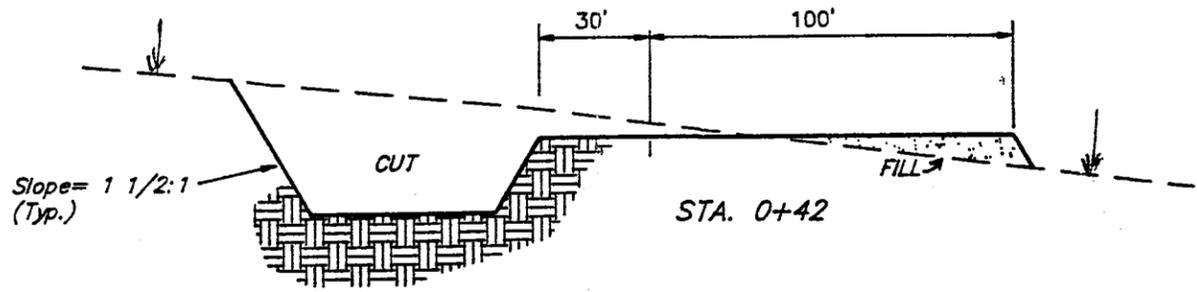
TYP. LOCATION LAYOUT  
 TYP. CROSS SECTIONS



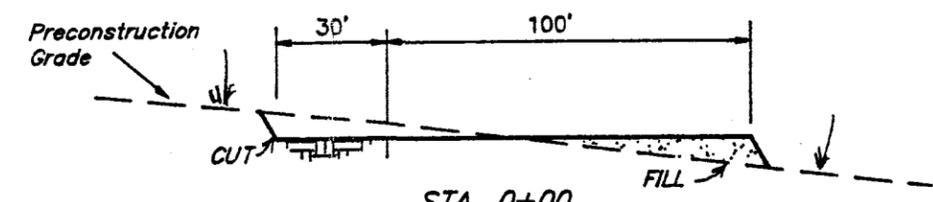
STA. 3+00



STA. 1+50



STA. 0+42



STA. 0+00

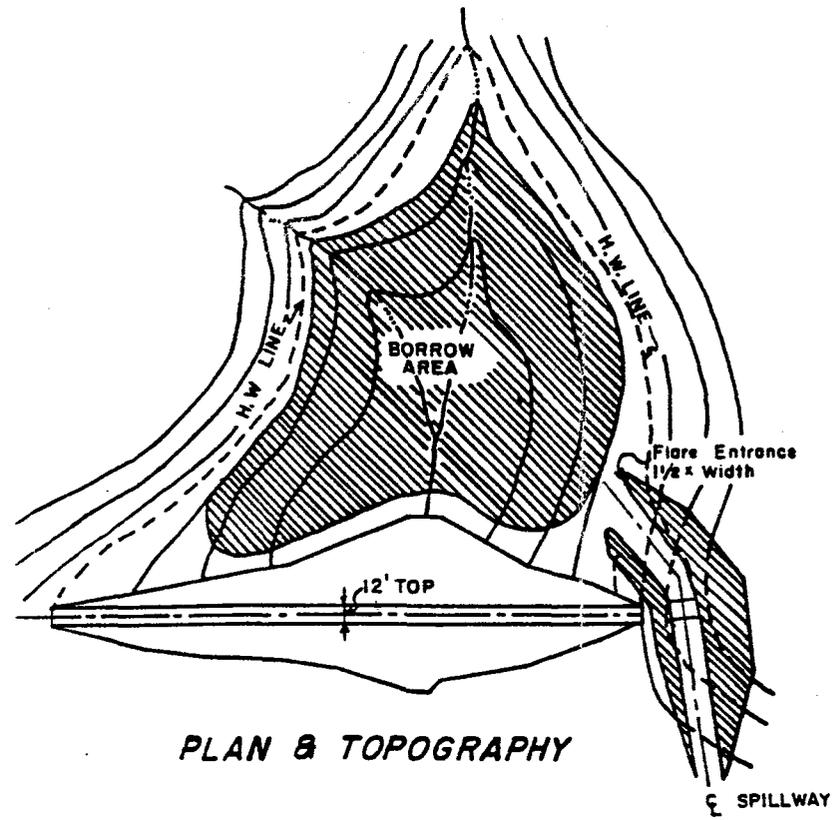
APPROXIMATE YARDAGES

CUT (6") Topsoil Stripping	= 900 Cu. Yds.	EXCESS MATERIAL AFTER 5% COMPACTION	= 1,890 Cu. Yds.
Remaining Location	= 3,850 Cu. Yds.	Topsoil & Pit Backfill (1/2 Pit Vol.)	= 1,880 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 4,750 CU.YDS.</b>	EXCESS UNBALANCE (After Rehabilitation)	= 10 Cu. Yds.
<b>FILL</b>	<b>= 2,720 CU.YDS.</b>		

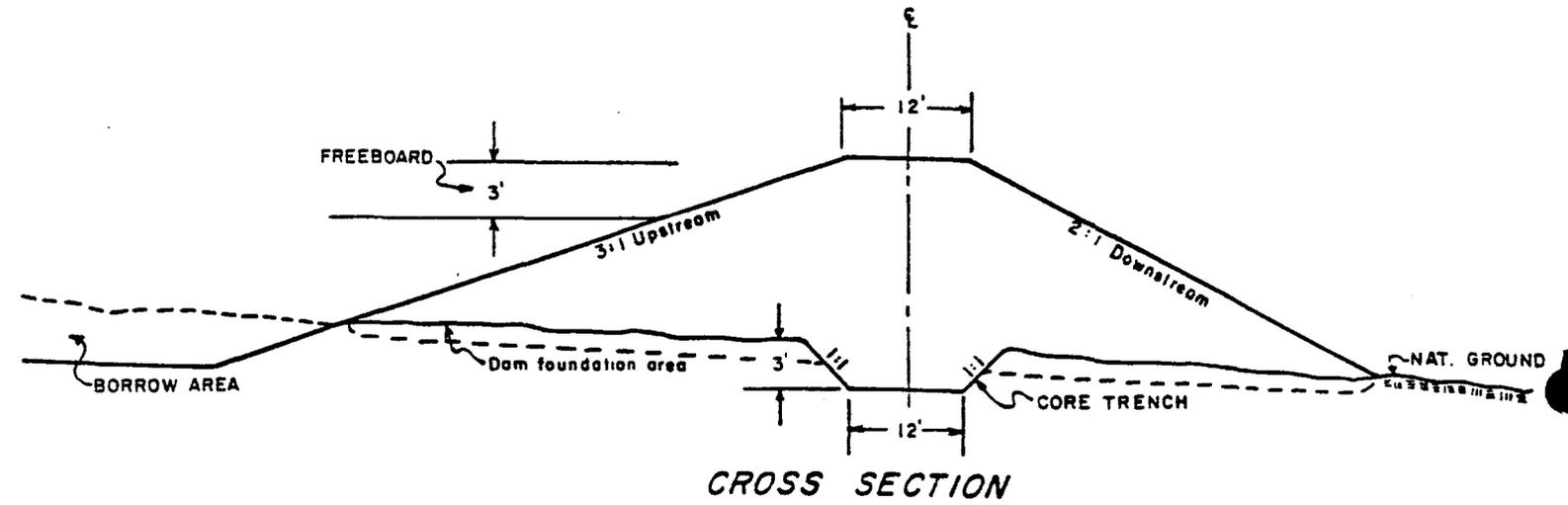
Elev. Ungraded Ground at Location Stake = 4834.6'  
 Elev. Graded Ground at Location Stake = 4833.7'

MINIMUM STANDARDS FOR DAMS IMPOUNDING UNDER 10 AC. FT.

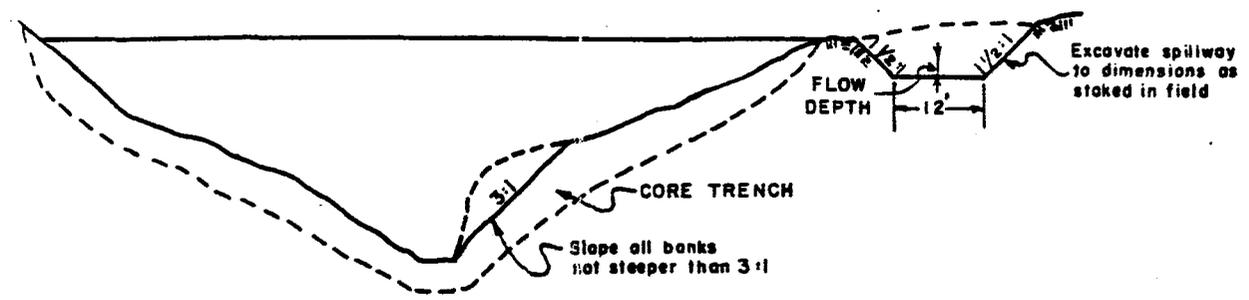
- I. Site Location and Design
  - A. Authorized BLM personnel shall approve site location, fill material, foundation material, and spillway size and location.
  - B. Construction shall be per attached diagram.
- II. Borrow Areas
  - A. Borrow material shall be taken from within the reservoir basin below high water line whenever possible.
  - B. Vegetation, debris and topsoil shall be removed to a depth of 12 inches below natural ground line and deposited as directed.
  - C. Vegetation, debris and topsoil shall be stockpiled to be used as cover for borrow areas above the high water line or spread on downstream side of dam.
  - D. Borrow areas above the high water line shall be contoured to blend into natural ground lines.
- III. Core Trench and Dam Foundation
  - A. A core trench shall be constructed 12 feet wide along the full length of the dam center line to a minimum depth of 3 feet or bedrock.
  - B. Sides of the core trench shall be no steeper than 1:1 slope.
- IV. Dam and Core Fill
  - A. Fill shall be homogeneous material, preferably of high impervious, compactable soils (such as high clay content soil free of organic material, sand or rock).
  - B. Lifts of fill shall not exceed 6 inches when compacted.
  - C. Fill shall be built up at a consistent rate the full length of the dam.
  - D. Lifts shall be compacted by at least one pass of the crawler tractor over the entire width of the lift.
  - E. Downstream side of the dam shall be no steeper than 2:1 slope. Upstream side of the dam shall be no steeper than 3:1 slope.
  - F. Top of the dam shall be a minimum of 12 feet wide.
  - G. Maximum water depth against the dam shall be 10 feet when constructed with a crawler tractor.
- V. Spillway
  - A. Spillway shall be constructed through natural material.
  - B. Spillway shall be constructed to divert overflow away from fill material or natural material that is an integral part of the dam.
  - C. Incorporate in-place rock or hauled-in rock in spillway and at discharge point below spillway to prevent "down cutting" and "blowout" holes, when possible.
  - D. Construct spillway so there is a minimum of 3 feet of freeboard on the dam.



PLAN & TOPOGRAPHY



CROSS SECTION



PROFILE

U. S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	
<b>RETENTION DAM TYPICAL PLAN &amp; SECTION</b>	
DESIGNED _____	RECOMM. _____
DRAWN _____	RECOMM. _____ CHIEF, DIV. OF ENG.
CHECKED _____	APPROVED _____
SCALE NOT TO SCALE	
DATE _____	SHEET <u>1</u> OF <u>1</u>
DRAWING NO. _____	

A Class III Archeological Survey has been conducted by Sagebrush Archeological Consultants. A copy of this report has been submitted to the appropriate agencies by Sagebrush Archeological Consultants.



**Permitco Incorporated**  
A Petroleum Permitting Company



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER RIGHTS

Norman H. Bangert  
Governor

Dee C. Hansen  
Executive Director

Robert L. Morgan  
State Engineer

Eastern Area  
State/County Building  
152 East 100 North  
Vernal, Utah 84078-2110  
801-781-0770 x 327

March 13, 1992

Kenneth V. and Barbara U. Richens  
c/o West Hazmat Trucking Corp  
P. O. Box 1667  
Vernal, UT 84078

RE: Temporary Change t92-43-05  
Water Right No. 43-1723

Dear Mr. Price:

The above numbered Temporary Change Application has been approved subject to prior rights. The water is supplied by irrigation water owned by Kenneth and Barbara Richens.

A copy is herewith returned to you for your records and future reference.

Sincerely,

A handwritten signature in cursive script that reads "Robert W. Leake".

Robert W. Leake, P.E.  
Regional Engineer  
For Robert L. Morgan, P.E.  
State Engineer

RWL/bmw

Enclosure

Copy to: Kenneth and Barbara Richens

# APPLICATION FOR TEMPORARY CHANGE OF WATER

## STATE OF UTAH

Rec. by \_\_\_\_\_

Fee Paid \$ \_\_\_\_\_

Receipt # \_\_\_\_\_

Microfilmed \_\_\_\_\_

Roll # \_\_\_\_\_

For the purpose of obtaining permission to make a temporary change of water in 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 Section 73-3-3 Utah Code Annotated 1953, as amended.

CHANGE APPLICATION NUMBER: t92-43-05

WATER RIGHT NUMBER: 43 - 1721

\*\*\*\*\*

This Change Application proposes to change the PLACE OF USE and NATURE OF USE.

\*\*\*\*\*

### 1. OWNERSHIP INFORMATION.

A. NAME: West Hazmat Trucking Corp. INTEREST: 100%  
c/o Kenneth and Barbara Richens  
ADDRESS: P. O. Box 1667, Vernal, UT 84078

B. PRIORITY OF CHANGE: March 13, 1992 FILING DATE: March 13, 1992

### C. RIGHT EVIDENCED BY:

\*-----\*  
\* DESCRIPTION OF CURRENT WATER RIGHT: \*  
\*-----\*

### 2. SOURCE INFORMATION.

A. QUANTITY OF WATER: 1.12 cfs  
B. DIRECT SOURCE: Babcock Draw COUNTY: Duchesne  
C. POINT OF DIVERSION -- SURFACE:  
(1) N 1500 feet E 1487 feet from SW corner, Section 34, T 3S, R 2W, USBM  
DIVERT WORKS: concrete diversion box

### 3. WATER USE INFORMATION.

IRRIGATION: from Mar 1 to Nov 1. IRRIGATING: 68.30 acres.  
STOCKWATERING: from Jan 1 to Dec 31. EQUIVALENT LIVESTOCK UNITS: 42.

\*-----\*



KENNETH VEE RICHENS

MARCH 13, 1992

I Kenneth Vee Richens agree to sell water out of my irrigation ditch, to West Hazmat Trucking.

Signature of agreement.



---

OPERATOR PG E Resources Co 1-05-95 DATE 4-15-90

WELL NAME Actual 7-19B

SEC SW 1/4 T 9S R 19E COUNTY Mintah

43-047-30006  
API NUMBER

Actual (1)  
TYPE OF LEASE

**CONFIDENTIAL**

CHECK OFF:

PLAT.

BOND

NEAREST WELL

LEASE

FIELD SLBM

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No producing well within Sec 19.  
Water permit no proof of permit

APPROVAL LETTER:

SPACING:

R615-2-3

N/A  
UNIT

R615-3-2

N/A  
CAUSE NO. & DATE

R615-3-3

STIPULATIONS:

~~Water permit~~



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter  
Governor  
Dee C. Hansen  
Executive Director  
Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

April 16, 1992

PG & E Resources Company  
5950 Berkshire Lane #600  
Dallas, Texas 75225

Gentlemen:

Re: Federal #7-19B Well, 1980 feet from the north line, 1980 feet from the east line, SW 1/4 NE 1/4, Section 19, Township 9 South, Range 19 East, Uintah County, Utah

Pursuant to Utah Admin. R. 649-3-2 (formerly R. 615-3-2) and Utah Admin. R. 649-3-4 (formerly R. 615-3-4), 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. (formerly R. 615-1 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.

Page 2  
PG & E Resources Company  
Federal #7-19B Well  
April 16, 1992

6. Compliance with the requirements of Utah Admin. R. 649-3-20 (formerly R. 615-3-20), Gas Flaring or Venting, if the well is completed for production.

Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site should be submitted to the local health department. These drilling operations and any subsequent well operations should be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Department of Environmental Quality, Division of Drinking Water/Sanitation, telephone (801)538-6159.

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 43-047-32226.

Sincerely,



R.J. Fifth  
Associate Director, Oil and Gas

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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 5950 Berkshire Lane, #600  
PG & E Resources Company Dallas, TX 75225

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 1980' FNL and 1980' FEL

At proposed prod. zone SW NE Sec. 19  
43-047-322261-29-1982

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
24.5 miles southeast of Myton, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
1980'

16. NO. OF ACRES IN LEASE OF 600 GAS & MINING

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 8450'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
4835' GE

22. APPROX. DATE WORK WILL START\*  
Immediately upon approval of this application.

23. PROPOSED CASING AND CEMENTING PROGRAM

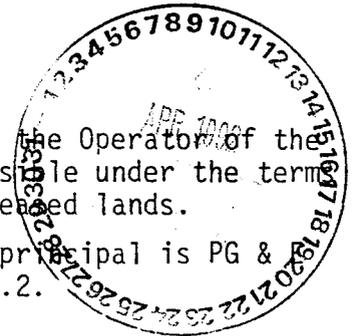
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	400'	170 sx or suffic to circ to surf
7-7/8"	5-1/2"	17#	8450'	600 sx or suffic to cover zones of interest.

PG & E Resources Company proposes to drill a well to 8450' to test the Wasatch 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 conditions of the lease for the operations conducted upon the leased 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] TITLE Consultant for PG & E Resources Company DATE 4/8/92

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY [Signature] TITLE Acting ADM-Minerals DATE 4/29/92

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

UT080-8M-125

\*See Instructions On Reverse Side

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Company PG&E Resources Well No. Federal 7-19B

Location SWNE Section 19, T9S, R19E Lease No. U - 65218

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 aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to Tim Ingwell of this office. Copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

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

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

The Vernal District Office shall be notified, at least 24 hours prior to initiating the pressure tests, in order to have a BLM representative on location during pressure testing.

3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the base of the usable water zone, identified at + 1,140 ft. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

The Vernal District Office shall be notified at least 24 hours prior to the running and cementing of all casing strings, in order to have a BLM representative on location while running and cementing all casing strings.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

A cement bond log (CBL) shall be utilized to determine the top of cement (TOC) and bond quality for the production casing.

6. Notifications of Operations

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours prior to spudding the well.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to.

7. Other Information

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

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

Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried or anchored down from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. 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 months on new meter installations and at least quarterly thereafter. The AO 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 Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. 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.

"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 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, please contact one of the following individuals:

Gerald E. Kenczka (801) 781-1190  
Petroleum Engineer

Ed Forsman (801) 789-7077  
Petroleum Engineer

BLM FAX Machine (801) 789-3634

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.

CONDITIONS OF APPROVAL FOR THE  
APPLICATION FOR PERMIT TO DRILL

Company/Operator PG&E Resources Company

Well Name & Number 7-19B

Lease Number U-65218

Location SWNE Sec. 19 T.9 S. R.19 E.

Surface Ownership Federal

NOTIFICATION REQUIREMENTS

- Location Construction - at least 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 - at least twenty-four (24) hours prior to running casing and cementing all casing strings.
- BOP and Related Equipment Tests - at least 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.

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

## SURFACE USE PROGRAM

### Multipoint Requirements to Accompany APD

1. Planned Access Roads

The operator/lessee or his/her successor shall be responsible for all maintenance on cattleguards or gates associated with this oil and/or gas operation.

2. Methods for Handling Waste Disposal

After first production, produced waste water will be confined to a lined 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 required water analysis, shall be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.

The operator or his/her contractor shall contact Ralph Brown at the BLM Office at (801) 789-1362 forty-eight (48) hours prior to construction activities.



# 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) 789-3634

3162.35  
U-08438

MAY 5 1993

PG&E Resources Company  
Attn: Jim LaFevers  
5950 Berkshire Lane, Suite 600  
Dallas, TX 75225

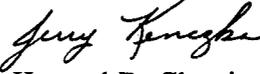
Re: Notification of Expiration  
Well No. 7-19B 43-047-32226  
Section 19, T9S, R19E  
Uintah County, Utah  
Lease No. U-65218

Dear Mr. LaFevers:

The Application for Permit to Drill the above-referenced well was approved on April 28, 1992. Since that date, no known activity has transpired at the approved location. Applications for Permit to Drill are effective for a period of one year. In view of the foregoing, this office is notifying you the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

*for*   
Howard B. Cleavinger II  
Assistant District Manager  
for Minerals

cc: State Division Oil, Gas & Mining



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)

May 25, 1993

Mr. Jim LaFevers  
PG & E Resources Company  
5950 Berkshire Lane, Suite 600  
Dallas, Texas 75225

Dear Mr. LaFevers:

Re: Well No. Federal 7-19B, Sec. 19, T. 9S, R. 19E, Uintah County, Utah  
API No. 43-047-32226

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

WOI196

