

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS WELL LOG ELECTRIC LOGS FILE **X** WATER GAGES LOCATION INSPECTED SUB REPORT NO.

DATE 8-12-92
 LAND REFERENCE PUBLIC LANDS **ML-44443** PUBLIC LANDS STATE

DATE 8-18-92
 SPECIFIC

PROPERTY LOCATION

Completed

DATE 8-18-92
 WILDCAT

VA 2794

CARBON
STATE 11-16
1980' FSL **2137' FWL** **API NO. 43-007-30160**
NE SW **16**

W	N	SE	OPERATOR
12S	10E	16	PG & E RESOURCES COMPANY

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

(Other instructions on reverse side)

3 Lease Designation and Serial No
ML 44443

4 If Indian, Alutottee or Tribe Name
N/A

5 Unit Agreement Name
N/A

6 Farm or Lease Name
State

7 Well No
#11-16

8 Field and Pool or Wildcat
Wildcat

9 Sec T R N or Blk and Survey or Area
Sec. 16, T12S - R 10E

10 Type of Work
a) Type of Work
b) Type of Well
Oil Well Gas Well Other Coalbed Methane Surface Zone Multiple Zone DEEPEN PLUG BACK DRILL

11 Name of Operator
214/750-3800
PG & E Resources Company
Dallas, TX 75225

12 Address of Operator
13585 Jackson Drive
Denver, CO 80241

13 Location of Well (Report location clearly and in accordance with applicable state requirements)
At surface
1980' FSL and 2137' FWL
At proposed prod zone
Sec. 16 NESW

14 Distance in miles and direction from nearest town or post office
15 miles north of Price, Utah

15 Distance from proposed location to nearest property or lease line ft (Also to nearest title line if any)
1980'

16 No. of acres in lease
640

17 No. of acres assigned to this well
160

18 Distance from proposed location to nearest well drilling completed or applied for on this lease ft
2500'

19 Proposed depth
4700'

20 Rotary or cable tools
Rotary

21 Elevations (show whether DT RT GR etc.)
7817' GR

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	Casing Depth	Quantity of Cement
12-1/4"	8-5/8"	24#	500'	350 sx or suffic to circ to surf.
7-7/8"	5-1/2"	17#	4700'	465 sx, stage tool at 3200'

PG & E Resources Company proposes to drill a well to 4700' to test the Blackhawk and Star Point Coals for coalbed methane. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per State of Utah requirements.

See Drilling Program attached.

Bond coverage for this well is provided under Bond No 8063-38-07 and 8067-26-00.

Engr
Geol. *D. Smith 8/18/92*
Surface *8/14/92*
STATE OF UTAH
DIVISION OF OIL, GAS AND 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
PG & E Resources Company
Signed *D. Smith* Title Date 8/10/92

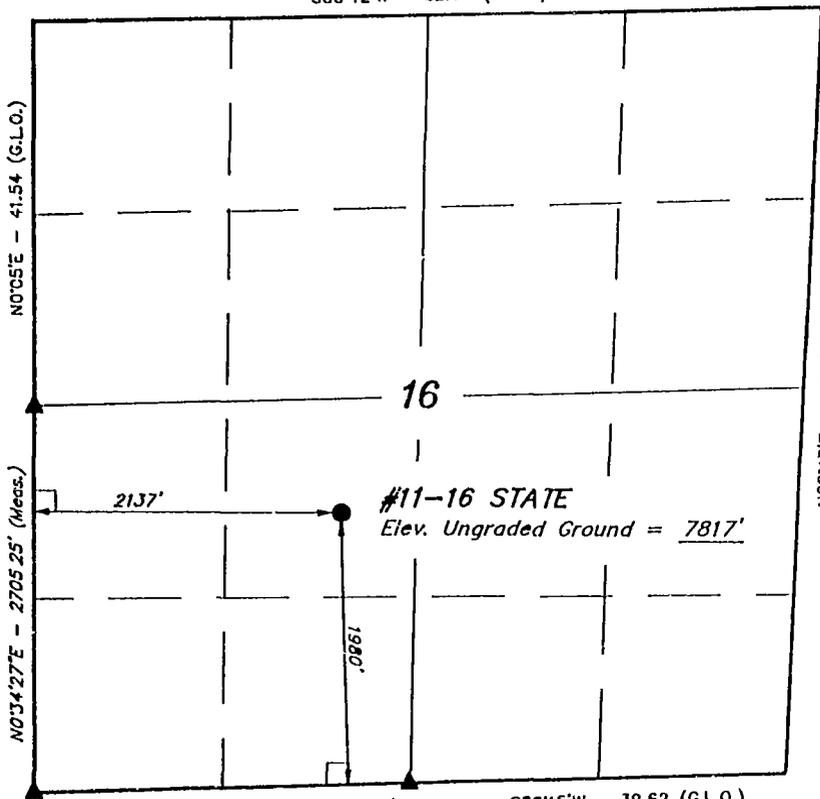
(This space for Federal or State office use)

Permit No _____ Approval Date _____

Approved by _____ Title _____ Date _____
Conditions of approval, if any _____

T12S, R10E, S.L.B.&M.

S88°42'W - 82.68 (G.L.O.)



N0°05'E - 41.54 (G.L.O.)

N0°34'27"E - 2705.25' (Meas.)

N02°43'E - 82.15 (G.L.O.)

16

#11-16 STATE
Elev. Ungraded Ground = 7817'

S88°15'W - G.L.O (Basis of Bearings)
2609.77' (Measured)

S88°15'W - 39.62 (G.L.O.)

LEGEND:

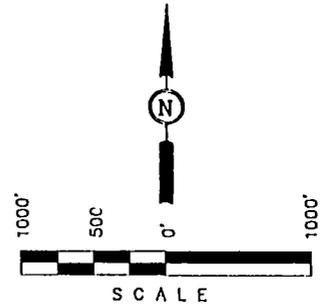
- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD
- ▲ = SECTION CORNERS LOCATED (1923 Brass Caps)

PG&E RESOURCES COMPANY

Well location, #11-16 STATE, located as shown in the NE 1/4 SW 1/4 of Section 16, T12S, R10E, S.L.B.&M. Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT A RIDGE TOP LOCATED IN THE N 1/2 OF SECTION 16, T12S, R10E, S.L.B.&M. TAKEN FROM THE MATTS SUMMIT QUADRANGLE, UTAH, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY SAID ELEVATION IS MARKED AS BEING 7843 FEET



CERTIFICATE AND SEAL

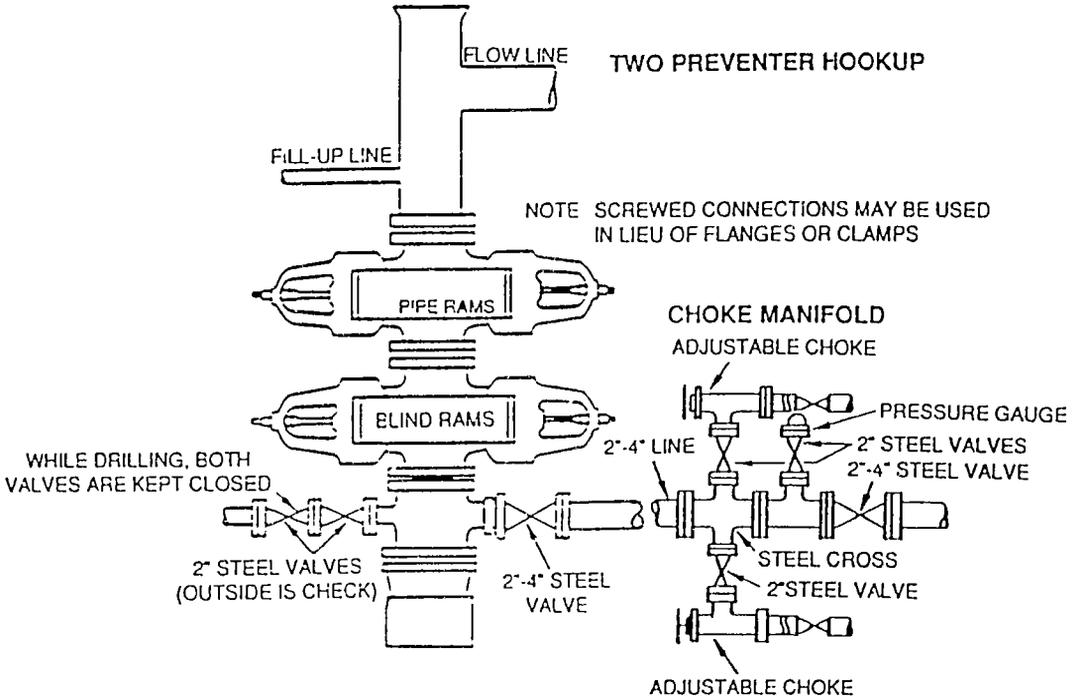
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

No. 5709
Robert L. Gray
 REGISTERED LAND SURVEYOR
 REGISTRATION NO. 5709
 STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED. 7-8-92	DATE DRAWN. 7-14-92
PARTY G.S. R.S. R.E.H.		REFERENCES G.L.O. PLAT
WEATHER COOL / RAINY		FILE PG&E RESOURCES

PG&E RESOURCES COMPANY

TYPICAL 2,000 PSI BLOWOUT PREVENTER SCHEMATIC



CONFIDENTIAL - TIGHT HOLE

#11-16 STATE
1980' FSL and 2137' FWL
NE SW Sec. 16, T12S - R10E
Carbon County, Utah

Prepared For:

PG & E RESOURCES COMPANY

By:

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

Copies Sent To:

- 3 - Division of Oil, Gas & Mining**
- 1 - PG & E Resources Co. - Vernal, Utah**
- 3 - PG & E Resources Co. - Dallas, TX**



Permitco Incorporated
A Pericorp Permitco Company

1. Formation Tops

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>
Flagstaff	Surface
Price River	2674'
Castlegate	3128'
Blackhawk	3482'
Aberdeen (S.P. II)	4400'
T.D.	4700'

2. Casing Program

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>
Surface	0-500'	12-1/4"	8-5/8"	24#	K-55
Produc.	0-4700'	7-7/8"	5-1/2"	17#	N-80

Casing design subject to revision based on geologic conditions encountered.

3. Cement Program

The cement program will be as follows:

<u>Surface</u>	<u>Type and Amount</u>
0-500'	Cement to surface with 350 sx Premium Cement + 2% CaCl ₂ + 0.25 #/sk Flocele (or equivalent). Centralizers will be run on bottom 3 joints plus every 4th joint to surface.



Production

Type and Amount

Two stage cement to surface w/stage tool at 3200'. First Stage: 265 sx 50/50 Pozmix + 2% Gel + .25% Flocele. Second Stage: 200 sx Silica Lite + 4% Gel + 4% CaCl₂.

4. Drilling Fluids

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>FL</u>	<u>PH</u>
0-500'	Air/Spud Mud	8.4-9.0	32-50	N/C	8.0-9.0
500-3500'	FW w/Gel Sweeps	8.4-8.8	28-32	N/C	8.0-9.0
3500-4700'	FW-LSND	8.6-9.0	34-45	10-15	8.0-9.0

5. Testing, Logging and Coring

The anticipated type and amount of testing, logging and coring are as follows:

- a. No drill stem tests are planned.
- b. The logging program will consist of a Cased Hole Dual Spaced Neutron w/Gamma Ray, 2" & 5" from T.D. to Base of Surface Casing and an Acoustic CBL/CCL, - 5" from T. D. to Base of Surface casing.
- c. Rotary Sidewall Cores are possible if needed after log evaluation.

6. Spud Date/Drilling Time

- a. Drilling is planned to commence upon approval of this application.



- b. It is anticipated that the drilling of this well will take approximately 16 days (4 days - Spudder rig; 12 days Drill rig).

7. Road Use/Water Source

- a. All access is located on State, Private or County Roads. The Carbon County Road Department has been contacted for use of County Roads. Surface use agreements will be reached with the other land owners for use of access roads. The use of the drillsite is covered under Lease No. ML-44/43.
- b. Produced water from five producing wells in the immediate area will be used for drilling. The location of the existing water pits are as follows:
- 1) N 540' E 1900' from SW cor., Sec. 11, T12S - R10E
 - 2) N 793' W 780' from SE cor., Sec. 11, T12S - R10E
 - 3) S 1980' E 1780' from NW cor., Sec. 14, T12S - R10E
 - 4) S 660' W 2340' from NE cor., Sec. 14, T12S - R10E
 - 5) S 1980' W 800' from NE cor., Sec. 14, T12S - R10E

The proposed water sources are located on private lands. A Temporary Change application has been filed with the Utah Division of Water Rights for use of these water sources. Permit #02-91-12.

8. BOP Requirements

PG & E's minimum specifications for pressure control equipment are as follows:
Ram Type: 10" Hydraulic double, 2000 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.

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.

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

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.

- a. The size and rating of the BOP stack is shown on the attached diagram.
- 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.

9. Anticipated Pressures

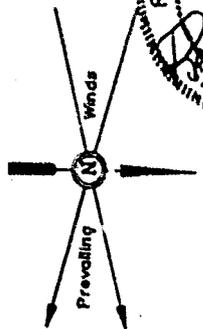
- a. The expected maximum bottom hole pressure is 2040 psi (.434 psi/ft). The maximum surface pressure is 1006 psi (based on partially evacuated hole at 0.22 psi/ft.)
- b. No hydrogen sulfide gas or abnormal pressures are anticipated.



P.G.&E. RESOURCES CO.

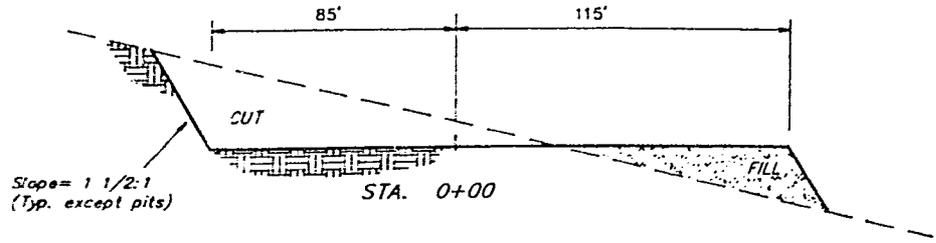
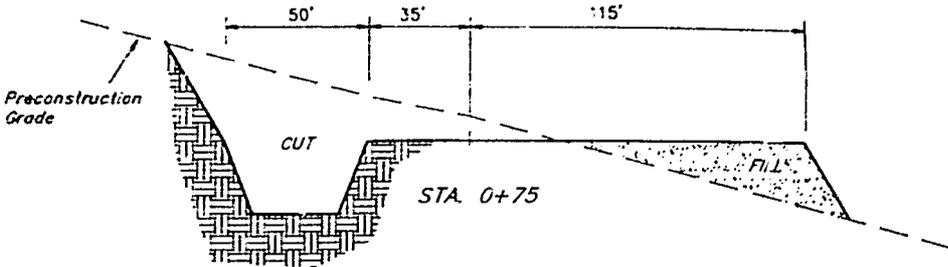
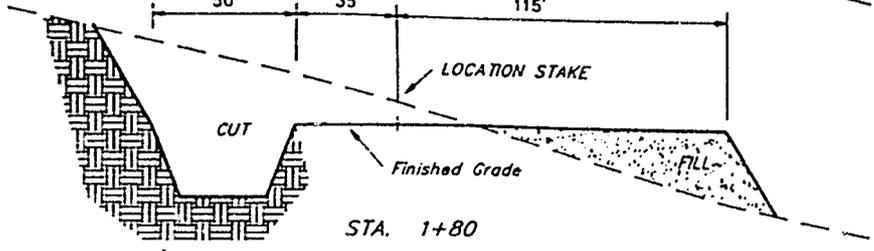
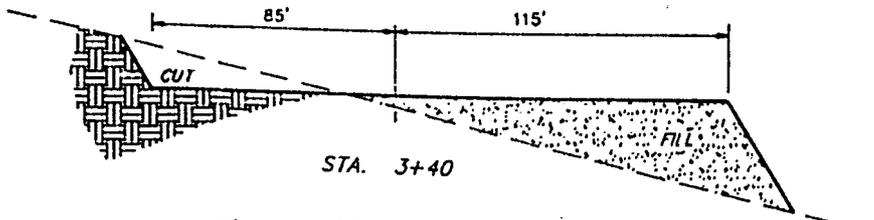
LOCATION LAYOUT FOR

#11-16 STATE
SECTION 16, T12S, R10E, S.L.B.&M.
1980' FSL 2137' FWL



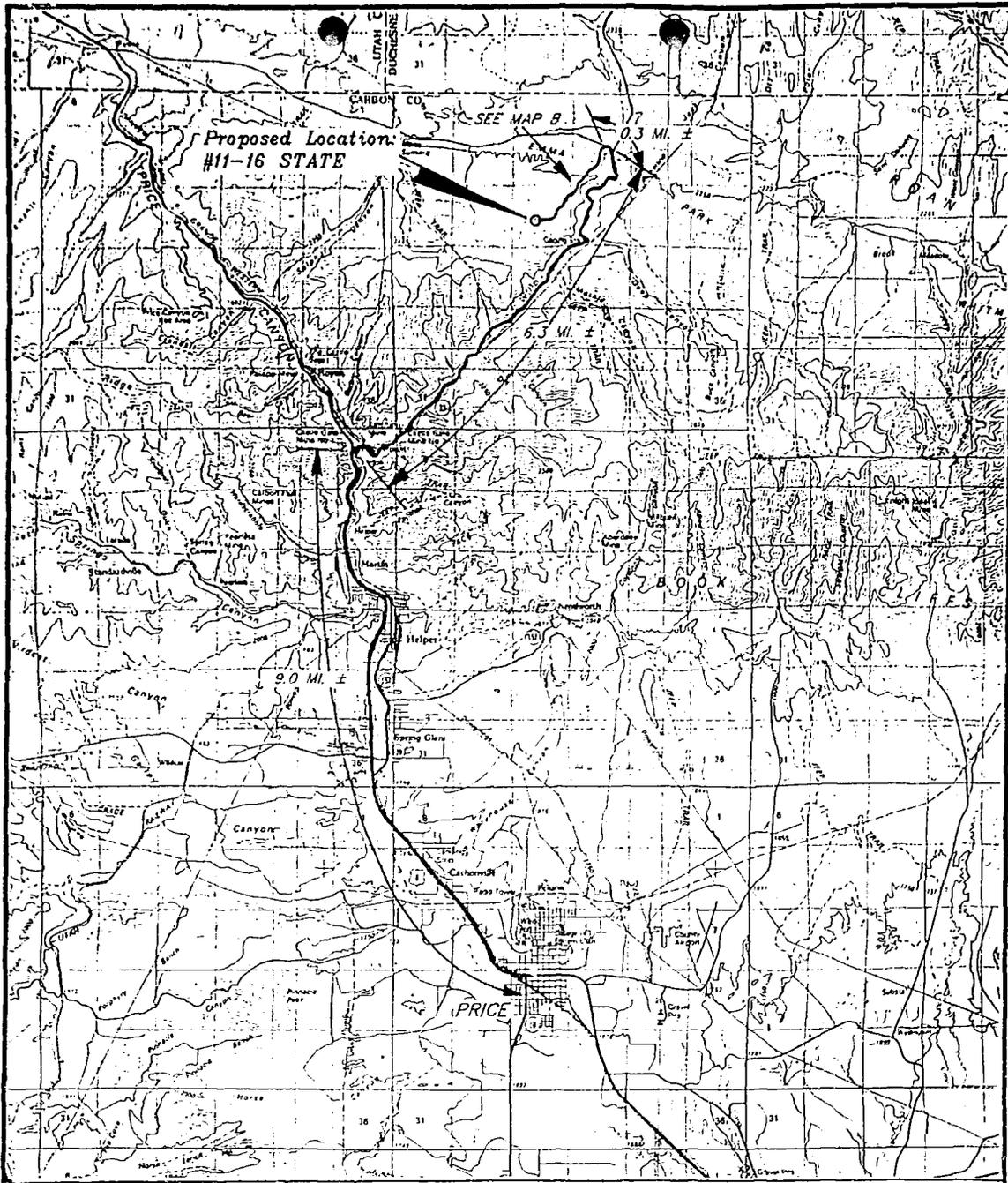
SCALE: 1" = 50'
 DATE: 7-13-92
 Drawn By: R.E.H.

X-Section Scale
 1" = 50'



TYP. CROSS SECTIONS
TYP. LOCATION LAYOUT

UNGRADED GROUND AT LOC. STAKE = 7817.5'
 GRADED GROUND AT LOC. STAKE = 7814.2'



Proposed Location:
#11-16 STATE

SEE MAP B

PRICE

TOPOGRAPHIC
MAP "A"

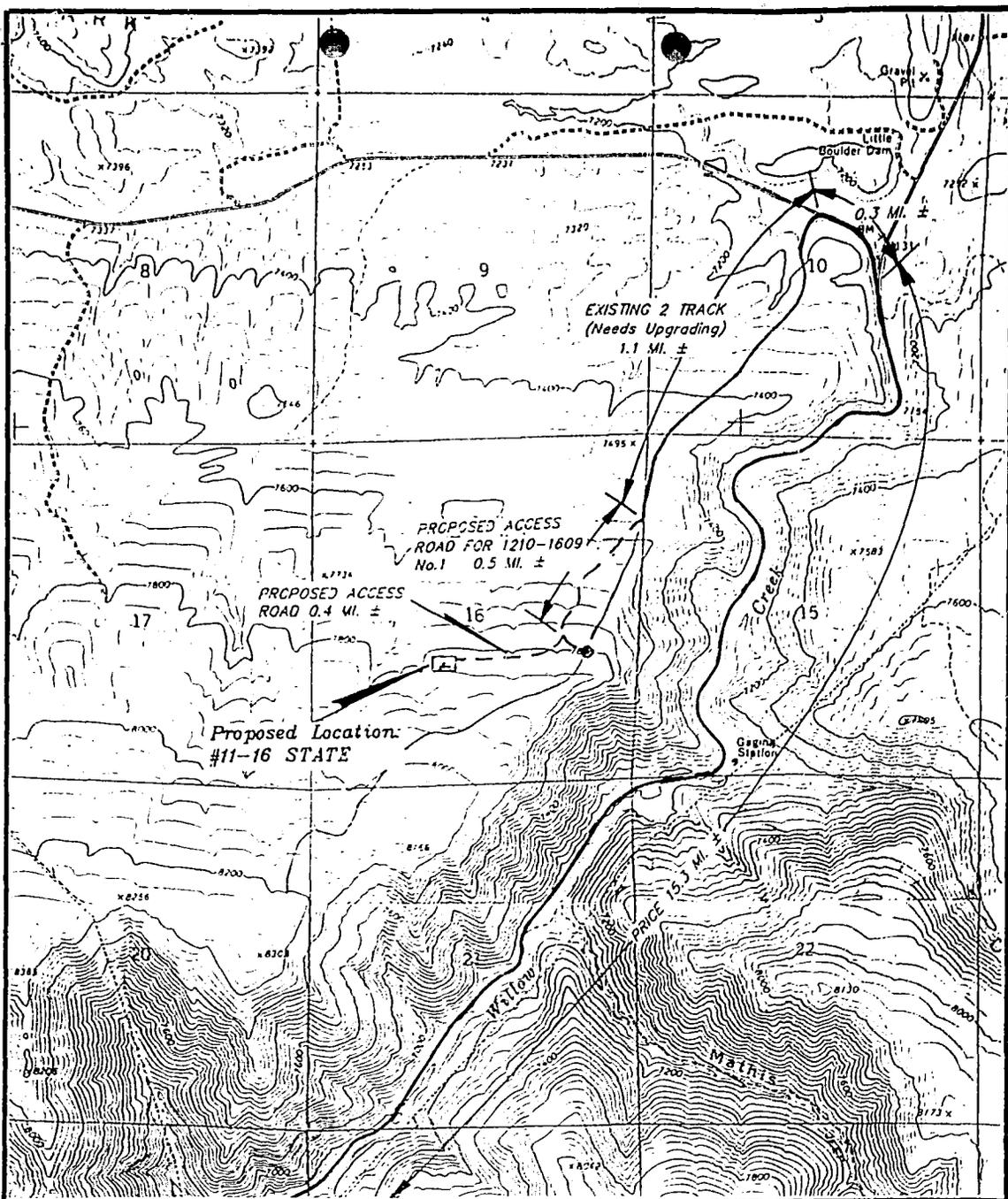
DATE 7-12-92 J.L.S.



PG&E RESOURCES COMPANY

#11-16 STATE
SECTION 16, T12S, R10E, S.L.B.&M.

1980 FSL 2:37 FEL



TOPOGRAPHIC
MAP "B"

SCALE 1" = 2000'
DATE 7-12-92 U.L.S.



PG&E RESOURCES COMPANY

#11-16 STATE
SECTION 16, T12S, R10E, S.L.B.&M.
1980 FSL 2137 FEL

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

OPERATOR: PG & E RESOURCES COMPANY
WELL NAME: STATE 11-16

OPERATOR ACCT NO: N-0595

CONFIDENTIAL

API NO. ASSIGNED: 13-007-30110

LEASE TYPE: STA LEASE NO: 111-11113
LOCATION: NESW 16 - T12S - R10E CARBON COUNTY
FIELD: WILDCAT FIELD CODE: 071

RECEIVED AND/OR REVIEWED:	LOCATION AND SITING:
<input checked="" type="checkbox"/> Plat	<input type="checkbox"/> R649-2-3. Unit:
<input checked="" type="checkbox"/> Bond (Number <u>3003</u>)	<input checked="" type="checkbox"/> R649-3-2. General.
<input checked="" type="checkbox"/> Potash (Y/N)	<input type="checkbox"/> R649-3-3. Exception.
<input checked="" type="checkbox"/> Oil shale (Y/N)	<input type="checkbox"/> Drilling Unit.
<input checked="" type="checkbox"/> Water permit (Number <u>111-11113</u>)	<input type="checkbox"/> Board Cause no: _____
<input checked="" type="checkbox"/> RDCC Review (Y/N)	<input type="checkbox"/> Date: _____
(Date: <u>3-12-92</u>)	

COMMENTS: has a water well within the 16
Public is to be drilled on the

STIPULATIONS: _____
on 4/1/92
1. Reserve pit to be evaluated for liner after construction
2. Downhill side of location is to be bermed to prevent run-off from location.
3. Well was sent to RDCC 8-14-92 if stipulations are ~~received~~ received they will be followed as part of the approval to drill.

DRILLING LOCATION ASSESSMENT

State of Utah
Division of Oil, Gas and Mining

OPERATOR: PG&E RESOURCES CO. WELL NAME: #11-16 STATE
SECTION: 16 TWP: 12S RNG: 10E LOC: 1980 FSL 2137 FWL
QTR/QTR NE/SW COUNTY: CARBON FIELD: COALBED METHANE
SURFACE OWNER: STATE OF UTAH
SPACING: 460 F SECTION LINE 460 F QTR/QTR LINE 920 F ANOTHER WELL
GEOLOGIST: BRAD HILL DATE AND TIME: 7/20/92 12:15

PARTICIPANTS: Lisa Smith-Permitco, Dean Shimmin-Landowner, Robert Kay-Uintah Engineering

REGIONAL SETTING/TOPOGRAPHY: The proposed location is on the western edge of the Book Cliffs physiographic province. It is located on the Flagstaff dip slope on a somewhat flat area near a ridge top.

LAND USE:

CURRENT SURFACE USE: Domestic grazing and wildlife habitat.

PROPOSED SURFACE DISTURBANCE: The proposed pad is rectangular in shape with approximate dimensions of 340' X 200' including a 130' X 50' reserve pit. Approximately .4 miles of new road will be constructed for access.

AFFECTED FLOODPLAINS AND/OR WETLANDS: None

FLORA/FAUNA: Sage, Oak, Scattered Grasses, Lupine, Snowberry /Cows, Deer, Elk, Rabbits, Rodents, Birds

ENVIRONMENTAL PARAMETERS

SURFACE GEOLOGY

SOIL TYPE AND CHARACTERISTICS: Clayey-silt with occasional limestone fragments.

SURFACE FORMATION & CHARACTERISTICS: Quaternary alluvium and Flagstaff Limestone.

EROSION/SEDIMENTATION/STABILITY: No active erosion or sedimentation at present. Location should be stable.

PALEONTOLOGICAL POTENTIAL: None observed.

SUBSURFACE GEOLOGY

OBJECTIVES/DEPTHS: Blackhawk-3482', Aberdeen-4400'

ABNORMAL PRESSURES-HIGH AND LOW: None anticipated.

CULTURAL RESOURCES/ARCHAEOLOGY: NA

CONSTRUCTION MATERIALS: Onsite materials will be used for construction.

SITE RECLAMATION: As per Division of State Lands instructions.

RESERVE PIT

CHARACTERISTICS: A rectangular reserve pit will be constructed with approximate dimensions of 130'X 50'X 10'.

LINING: The reserve pit is to be evaluated after construction to determine if a synthetic liner is required.

MUD PROGRAM: 0-500'-air/spud mud; 500'-3500'-FW w/Gel Sweeps; 3500'-4700'-FW-LSND

DRILLING WATER SUPPLY: Drilling water will be from the existing Shimmins Trust wells.

STIPULATIONS FOR APD APPROVAL

The reserve pit is to be evaluated after construction.
The down hill side of the location is to be bermed to prevent run off from the location.

ATTACHMENTS

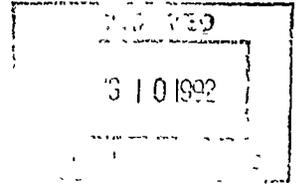
Photographs will be placed on file.

STATE ACTIONS

Mail to:
RDCC Coordinator
110 State Capitol
Salt Lake City, Utah 84114

<p>1 ADMINISTERING STATE AGENCY OIL, GAS AND MINING 333 West North Temple 3 Third Canon, Suite 350 Salt Lake City, Utah 84103-1203</p>	<p>2 STATE APPLICATION IDENTIFIER NUMBER: (assigned by State Clearinghouse)</p>
<p>3 APPROXIMATE DATE PROJECT WILL START: Upon approval</p>	
<p>4 AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS (to be sent out by agency in block 1) Southern Utah Association of Governments</p>	
<p>5 TYPE OF ACTION <input type="checkbox"/> Lease <input checked="" type="checkbox"/> Permit <input type="checkbox"/> License <input type="checkbox"/> Land Acquisition <input type="checkbox"/> Land Sale <input type="checkbox"/> Land Exchange <input type="checkbox"/> Other _____</p>	
<p>6 TITLE OF PROPOSED ACTION Application for Permit to Drill</p>	
<p>7 DESCRIPTION PG & E Resources Company proposes to drill the State #11-16 well (wildcat) on state lease ML 44443, Carbon County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.</p>	
<p>8 LAND AFFECTED (site location map required) (indicate county) NE/4, SW/4, Section 16, Township 12 South, Range 10 East, Carbon County, Utah</p>	
<p>9 HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?</p>	
<p>10 POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR Degree of impact is based on the discovery of oil or gas in commercial quantities.</p>	
<p>11 NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE</p>	
<p>12 FOR FURTHER INFORMATION CONTACT Frank R. Matthews PHONE 538 5340</p>	<p>13 SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL:  DATE 8 14 92 Petroleum Engineer</p>

W00107



August 6, 1992

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

Attn. Tammi Searing

Re: PG & E Resources Company
Castlegate Prospect
Application for Temporary Change
of Water
Carbon County, Utah

Dear Tammi,

Enclosed please find one copy of the Application for Temporary Change of Water for PG & E's Castlegate Prospect in Carbon County, Utah.

As you know, several Applications for Permit to Drill have already been submitted and several additional applications will be forthcoming

In future applications I will reference the Change Application Number (92-91-12 (91 Area), rather than send additional copies of this application.

If you should need additional information, please feel free to contact me.

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

Permitco Incorporated
A Petroleum Permitting Company

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



STATE OF UTAH
NATURAL RESOURCES
Water Rights

Norman H. Bangarter, Governor
Dae C. Hansen, Executive Director
Robert L. Morgan, State Engineer

Southeastern Area • 4535 Carbon Avenue • P.O. Box 718 • Price, UT 84501 • 801-637-1333

July 31, 1992

West Hazmat Oil Field Services Inc.
Attn. Dale Price
East Highway 40
Roosevelt, Utah 84066

Re: Temporary Change Application #t92-91-12
Expiration Date: November 30, 1992

Dear Mr. Price.

The above referenced Temporary Change Application is hereby approved, and a copy is enclosed for your information and records.

If you have any questions, please feel free to contact me.

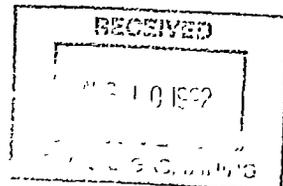
Sincerely,

William A. Whermack

W.A.W.
Mark P. Page
Regional Engineer

cc: Bob Davis - Price River Commissioner

Enclosures
MPP/mjk



10. NATURE AND PERIOD OF USE

Irrigation: From March 1 to November 30
Stockwatering: From _____ to _____
Domestic: From _____ to _____
Municipal: From _____ to _____
Mining: From _____ to _____
Power: From _____ to _____
Other: From _____ to _____

11. PURPOSE AND EXTENT OF USE

Irrigation: 12,576.07 acres Sole supply of 488.10 acres.
Stockwatering (number and kind) _____
Domestic: _____ Families and/or _____ Persons.
Municipal (name) _____
Mining: _____ Mining District in the _____ Mine
Ores mined _____
Power Plant name: _____ Type _____ Capacity _____
Other (describe) _____

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s) Carbon Canal Delivery System

13. STORAGE

Reservoir Name _____ Storage Period from _____ to _____
Capacity _____ ac ft Inundated Area _____ acres
Height of dam _____ feet
Legal description of inundated area by 40 tract(s) _____

THE FOLLOWING CHANGES ARE PROPOSED

14 QUANTITY OF WATER _____ cfs and/or 13.0 ac ft
15 SOURCE: 1) Willow Creek 2) Underground Exploratory Wells
Balance of the water will be abandoned, _____, or will be used as heretofore X
16 COUNTY: Carbon
17 POINT(S) OF DIVERSION: See Attached Sheet

(Description of Diverting Works 1) Portable pump to take water 2) Existing 51" casing.
'COMMON DESCRIPTION 10 miles NE of Helper 0025 to 0667 feet deep
Matts Summit Quad

18. POINT(S) OF REDIVERSION

The water will be rediverted from _____ at a point _____
Description of Diverting Works _____

19. POINT(S) OF RETURN

The amount of water to be consumed is _____ cfs or 13.0 ac ft
The amount of water to be returned is _____ cfs or _____ ac ft
The water will be returned to the natural stream/source at a point(s) _____

20. NATURE AND PERIOD OF USE

Irrigation: From ___/___/___ to ___/___/___
 Stockwatering: From ___/___/___ to ___/___/___
 Domestic: From ___/___/___ to ___/___/___
 Municipal: From ___/___/___ to ___/___/___
 Mining: From ___/___/___ to ___/___/___
 Power: From ___/___/___ to ___/___/___
 Other: From 7/31/92 to 11/30/92

21. PURPOSE AND EXTENT OF USE

Irrigation _____ acres Sole supply of _____ acres
 Stockwatering (number and kind): _____
 Domestic _____ Families and/or _____ Persons
 Municipal (name) _____
 Mining _____ Mining District at the _____ Mine.
 Ores mined _____
 Power Plant name _____ Type _____ Capacity _____
 Other (describe) Exploration drilling, road construction, dust suppression

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s) See Attached Sheet

23. STORAGE

Reservoir Name: _____ Storage Period: from _____ to _____
 Capacity _____ ac ft Inundated Area _____ acres
 Height of dam _____ feet
 Legal description of inundated area by 40 tract(s) _____

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose (Use additional pages of same size if necessary)
This Temporary Change Application is being filed to replace t91-91-09 & t92-91-10 to correct the points of diversion and place of use. To date approximately 0.77 AF has been utilized under t91-91-09

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 the information contained herein, at the time of filing, rests with the applicant(s)

Dale Price
 Signature of Applicant(s)

West Hazmat Oil Field Services Inc.
Temporary Change Application
#t92-91-12 (91 Area)
July 31, 1992

#17 Points of Diversion:

Willow Creek:

N. 320 ft. & W 290 ft from SE Cor. Sec. 3, T12S, R20E, SLB&M.

Shimmin Trust Wells:

Shimmin Trust #1: N. 793 ft. & W. 780 ft. from SE Cor. Sec. 11,
Shimmin Trust #2: S. 1980 ft. & W. 800 ft. from NE Cor. Sec. 14;
Shimmin Trust #3: S. 1980 ft. & E. 1780 ft. from NW Cor. Sec. 14;
Shimmin Trust #4: N. 540 ft. & E. 1900 ft. from SW Cor. Sec. 11,
Shimmin Trust #5 S. 660 ft. & W. 2340 ft. from NE Cor. Sec. 14;
all T12S, R10E, SLB&M

#22 Place of Use:

1210-0806, S. 2400 ft & E. 1769 ft. from NW Cor. Sec. 8 (SE4NW4)
#7-9 Federal, S. 2109 ft. & W. 2038 ft. from NE Cor. Sec. 9 (SW4NE4)
#4-15 Federal: S. 660 ft. & E. 450 ft. from NW Cor. Sec. 15 (NW4NW4)
#4-13 Federal: S. 1174 ft & E. 1168 ft from NW Cor. Sec. 13 (NW4NW4)
#9-10 Jensen: N. 2500 ft. & W. 1020 ft from SE Cor. Sec. 10 (NE4SE4)
#2-16 State: S. 780 ft. & W. 1971 ft. from NE Cor. Sec. 16 (NW4NE4)
#9-16 State: N. 1993 ft & W. 702 ft. from SE Cor. Sec. 16 (NE4SE4)
#11-10 Jensen: N. 1650 ft. & E. 1650 ft. from SW Cor. Sec. 10 (NE4SW4)
#5-10 Jensen: S. 1680 ft. & E. 660 ft. from NW Cor. Sec. 10 (SW4NW4)
#16-10 Jensen: N. 330 ft & W. 330 ft from SE Cor. Sec. 10 (SE4SE4)
#7-15 Jensen: S. 1650 ft. & W. 1650 ft. from NE Cor. Sec. 15 (SW4NE4)
#11-11 Shimmin Trust: N. 2350 ft & E. 1500 ft. from SW Cor. Sec. 11 (NE4SW4)
#10-11 Shimmin Trust: N. 2300 ft. & W. 1850 ft. from SE Cor. Sec. 11 (NW4SE4)
#12-12 Shimmin Trust: N. 2310 ft. & E. 990 ft. from SW Cor. Sec. 12 (NW4SW4)
#14-12 Shimmin Trust: N. 660 ft & E. 1980 ft. from SW Cor. Sec. 12 (SE4SW4)
#11-15 Jensen: N. 1850 ft. & E. 1650 ft. from SW Cor. Sec. 15 (NE4SW4)
#16-9 Jensen: N. 1150 ft. & W. 1150 ft. from SE Cor. Sec. 9 (SE4SE4)
#16-15 Federal: N. 990 ft. & W. 990 ft. from SE Cor. Sec. 15 (SE4SE4)
#14-14 Federal: N. 990 ft. & E. 1650 ft. from SW Cor. Sec. 14 (SE4SW4)
#14-16 Federal: N. 990 ft. & W. 990 ft. from SE Cor. Sec. 14 (SE4SE4)
#14-13 Federal: N. 990 ft. & E. 1650 ft. from SW Cor. Sec. 13 (SE4SW4)
All T12S, R10E, SLB&M

Alternate Wells:

#12-9 Jensen: N. 2054 ft. & E. 592 ft. from SW Cor. Sec. 9 (NW4SW4)
#14-9 Jensen: N. 675 ft. & E. 2170 ft from SW Cor. Sec. 9 (SE4SW4)
#4-16 State: S. 922 ft. & E. 750 ft. from NW Cor. Sec. 16 (NW4NW4)
#11-16 State: N. 1980 ft & E. 1980 ft from SW Cor. Sec. 16 (NE4SW4)
All T12S, R10E, SLB&M

STATE ENGINEER'S ENDORSEMENT

TEMPORARY CHANGE APPLICATION NUMBER: t92-91-12

- 1 July 31, 1992 Change Application received by BW.
- 2 July 31, 1992 Application designated for APPROVAL by MP.
- 3. Comments:

Conditions:

This application is hereby APPROVED, dated July 31, 1992, subject to prior rights and this application will expire on November 30, 1992.

William A. Morgan

for Mark Page, Area Engineer
for
Robert L. Morgan, State Engineer

CONFIDENTIAL - TIGHT HOLE
STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

(Other provisions on reverse side)

1. Lease Description and Serial No.
ML 44443
2. If Indian, Allottee or Tribe Name
N/A
3. U.S. Agreement Name
N/A
4. Name of Lessee Name
State
5. Acre No.
#11-16
6. Field and Pool, or Wildcat
Wildcat
7. Sec., T., R., M., or B.L., and Survey or Area
Sec. 16, T12S - R 10E

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Well
DRILL DEEPEN PLUG BACK
b. Type of Well
Oil Well Gas Well Coalbed Methane Heat-see
8. Name of Operator
2147750-3800 5950 Berkshire Lane, #600
PG & E Resources Company Dallas, TX 75225
9. Address of Operator
13585 Jackson Drive
Permitco Inc. - Agent Denver, CO 80241
10. Duration of Well (Minimum duration complete with a temporary well site requirements)
At surface
1980' FSL and 2137' FWL
As proposed well name
Sec. 16 NESH

11. Location & map the location from nearest town or post office
15 miles north of Price, Utah
12. County or Parish 13. State
Carbon Utah
14. Distance from property to nearest town, village, community, or settled fire, on this side, ft.
1980'
15. No. of acres in lease
640
16. Distance from proposed well to nearest town, village, community, or settled fire, on this side, ft.
2500'
17. Pressure regime
4700'
18. Rotary or other tool
Rotary
19. Approx. date work will start
Immediately upon approval of this application.

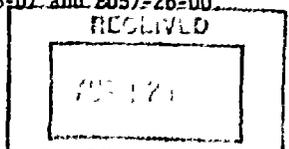
20. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quality of Cement
12-1/4"	8-5/8"	24#	500'	350 sx or suffic to circ to surf
7-7/8"	5-1/2"	17#	4700'	465 sx, stage top, at 3200'

PG & E Resources Company proposes to drill a well to 4700' to test the Blackhawk and Star Point Coals for coalbed methane. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per State of Utah requirements.

See Drilling Program attached.

Bond coverage for this well is provided under Bond No. 8063-38-07 and 2057-26-00.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM. If proposal is to deepen or plug back, give data on present well, top casing, depth, pressure, etc. If proposal is to drill or deepen a new well, give data on subsurface locations and reservoir and true vertical depths. Give present preventive measures, if any.

21. Consultant for
PG & E Resources Company
Signed: [Signature] Date: 8/10/92

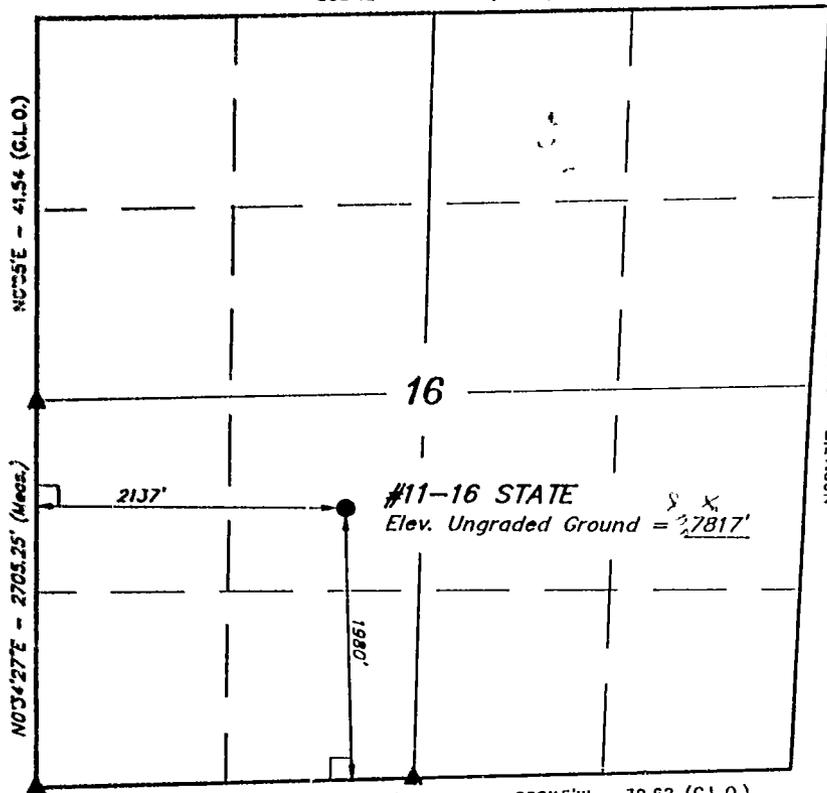
22. Permit No. 13-001 21160
Approval Date: OGC [Signature]

Approved by: [Signature]
DATE: 8-18-92
BY: [Signature]
WELL SPACING: 649-3-2

*See Instructions On Reverse Side

T12S, R10E, S.L.B.&M.

S88°42'W -- 82.68 (G.L.O.)



#11-16 STATE
Elev. Ungraded Ground = 7817'

S88°15'W - G.L.O. (Basis of Bearings)
2609.77' (Measured)

LEGEND:

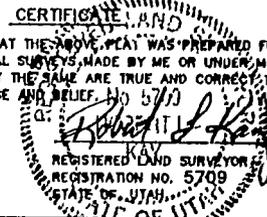
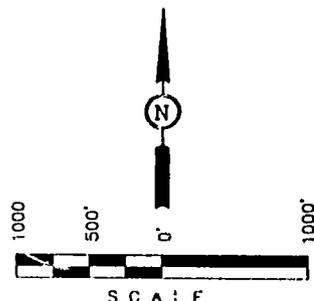
- └ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED (1925, ass Caps)

PG&E RESOURCES COMPANY

Well location, #11-16 STATE, located as shown in the NE 1/4 SW 1/4 of Section 16, T12S, R10E, S.L.B.&M. Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT A RIDGE TOP LOCATED IN THE N 1/2 OF SECTION 16, T12S, R10E, S.L.B.&M TAKEN FROM THE MATTS SUMMIT QUADRANGLE, UTAH, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7843 FEET



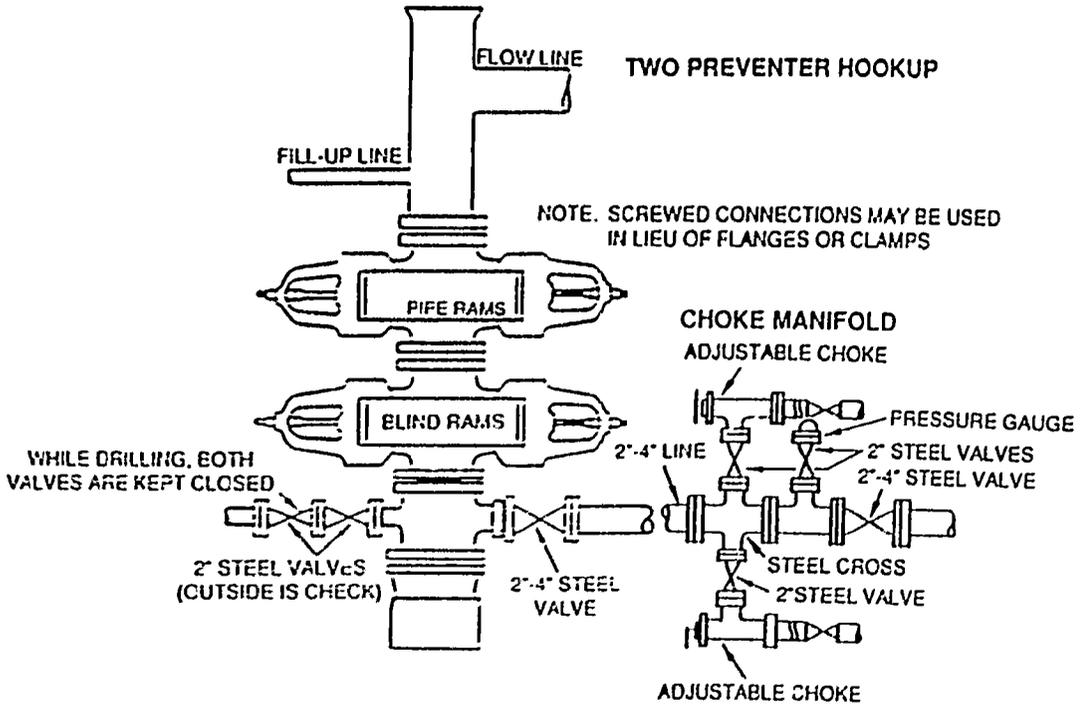
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. No 5709

UNTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(801) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 7-8-92	DATE DRAWN: 7-14-92
PARTY G.S. R.S. REH	REFERENCES G.L.O. PLAT	
WEATHER COOL / RAINY	FILE PG&E RESOURCES	

PG&E RESOURCES COMPANY

**TYPICAL 2,000 PSI
BLOWOUT PREVENTER SCHEMATIC**



CONFIDENTIAL - TIGHT HOLE

#11-16 STATE
1980' FSL and 2137' FWL
NE SW Sec. 16, T12S - R10E
Carbon County, Utah

Prepared For:

PG & E RESOURCES COMPANY

By:

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

Copies Sent To:

- 3 - Division of Oil, Gas & Mining**
- 1 - PG & E Resources Co. - Vernal, Utah**
- 3 - PG & E Resources Co. - Dallas, TX**



1. Formation Tops

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>
Flagstaff	Surface
Price River	2674'
Castlegate	3128'
Blackhawk	3482'
Aberdeen (S.P. II)	4400'
T.D.	4700'

2. Casing Program

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>
Surface	0-500'	12-1/4"	8-5/8"	24#	K-55
Produc.	0-4700'	7-7/8"	5-1/2"	17#	N-80

Casing design subject to revision based on geologic conditions encountered.

3. Cement Program

The cement program will be as follows:

<u>Surface</u>	<u>Type and Amount</u>
0-500'	Cement to surface with 350 sx Premium Cement + 2% CaCl ₂ + 0.25 #/sk Flocele (or equivalent) Centralizers will be run on bottom 3 joints plus every 4th joint to surface.

Production

Type and Amount

Two stage cement to surface w/stage tool at 3200'. First Stage: 265 sx 50/50 Pozmix + 2% Gel + .25% Flocele. Second Stage: 200 sx Silica Lite + 4% Gel + 4% CaCl2.

4. Drilling Fluids

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>FL</u>	<u>PH</u>
0-500'	Air/Spud Mud	8.4-9.0	32-50	N/C	8.0-9.0
500-3500'	FW w/Gel Sweeps	8.4-8.8	28-32	N/C	8.0-9.0
3500-4700'	FW-LSND	8.6-9.0	34-45	10-15	8.0-9.0

5. Testing, Logging and Coring

The anticipated type and amount of testing, logging and coring are as follows:

- a. No drill stem tests are planned.
- b. The logging program will consist of a Cased Hole Dual Spaced Neutron w/Gamma Ray, 2" & 5" from T.D. to Base of Surface Casing and an Acoustic CBL/CCL, - 5" from T. D. to Base of Surface casing.
- c. Rotary Sidewall Cores are possible if needed after log evaluation.

6. Spud Date/Drilling Time

- a. Drilling is planned to commence upon approval of this application.

- b. It is anticipated that the drilling of this well will take approximately 16 days (4 days - Spudder rig; 12 days Drill rig).

7. Road Use/Water Source

- a. All access is located on State, Private or County Roads. The Carbon County Road Department has been contacted for use of County Roads. Surface use agreements will be reached with the other land owners for use of access roads. The use of the drillsite is covered under Lease No. ML-44443.
- b. Produced water from five producing wells in the immediate area will be used for drilling. The location of the existing water pits are as follows:
- 1) N 540' E 1900' from SW cor., Sec. 11, T12S - R10E
 - 2) N 793' W 780' from SE cor., Sec. 11, T12S - R10E
 - 3) S 1980' E 1780' from NW cor., Sec. 14, T12S - R10E
 - 4) S 660' W 2340' from NE cor., Sec. 14, T12S - R10E
 - 5) S 1980' W 800' from NE cor., Sec. 14, T12S - R10E

The proposed water sources are located on private lands. A Temporary Change application has been filed with the Utah Division of Water Rights for use of these water sources. Permit #192-91-12.

8. BOP Requirements

PG & E's minimum specifications for pressure control equipment are as follows:
Ram Type: 10" Hydraulic double, 2000 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.

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.

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

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.

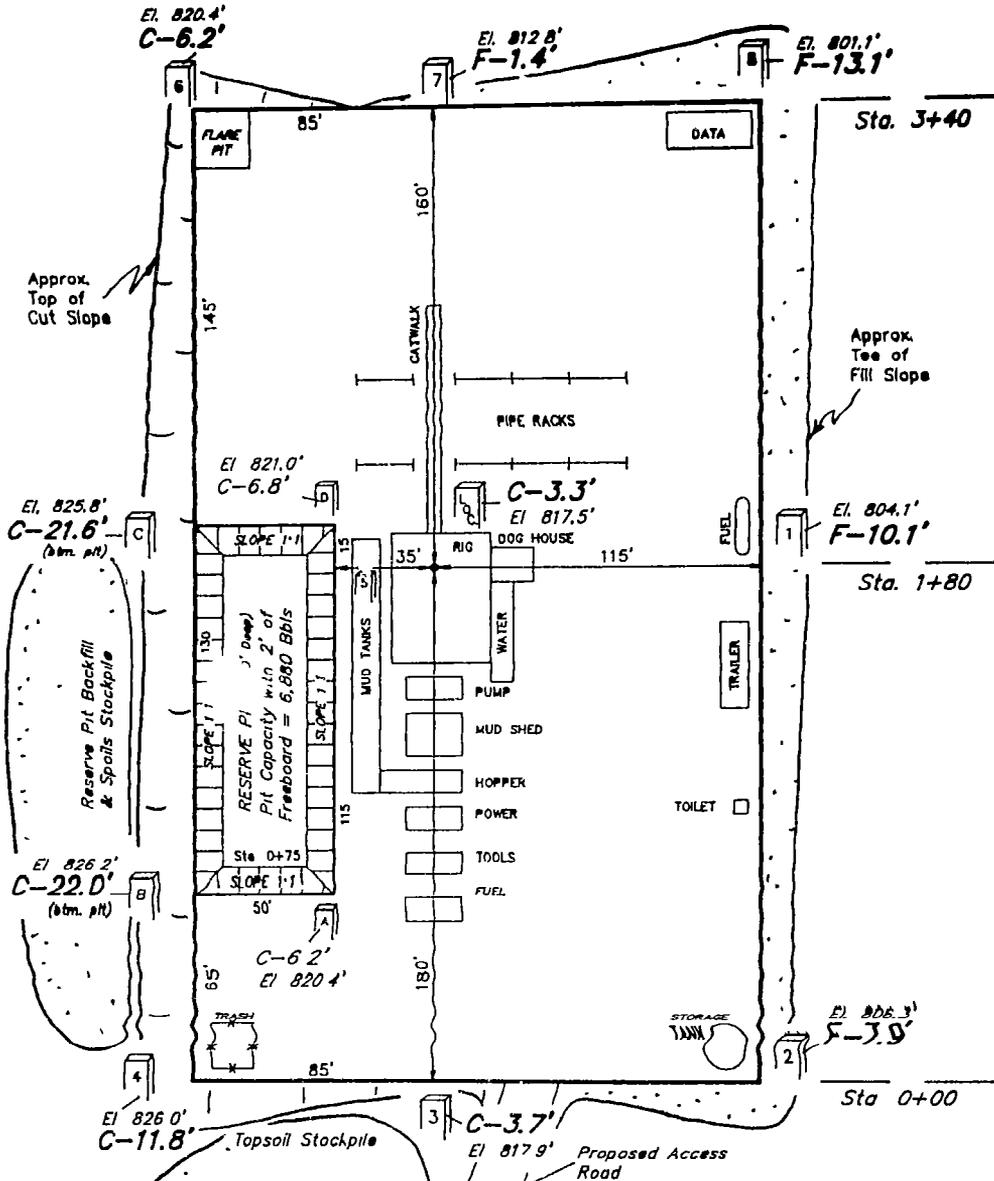
BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed 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.

- a. The size and rating of the BOP stack is shown on the attached diagram.
- 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.

9. Anticipated Pressures

- a. The expected maximum bottom hole pressure is 2040 psi (.434 psi/ft). The maximum surface pressure is 1006 psi (based on partially evacuated hole at 0.22 psi/ft.)
- b. No hydrogen sulfide gas or abnormal pressures are anticipated.



APPROXIMATE YARDAGES

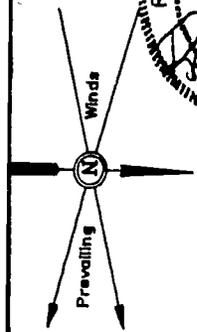
CUT		EXCESS MATERIAL AFTER		
(6") Topsoil Stripping	= 1,260 Cu rds	5% COMPACTION	= 2,150 Cu Yds	
Remaining Location	= 9,770 Cu Yds	Topsoil & Pit Backfill	= 2,150 Cu Yds.	
		(1/2 Pit Vol)		
TOTAL CUT	= 11,030 CU YDS.	EXCESS UNBALANCE	= 0 Cu. Yds.	ELEV.
FILL	= 8,440 CU YDS	(After Rehabilitation)		ELEV.



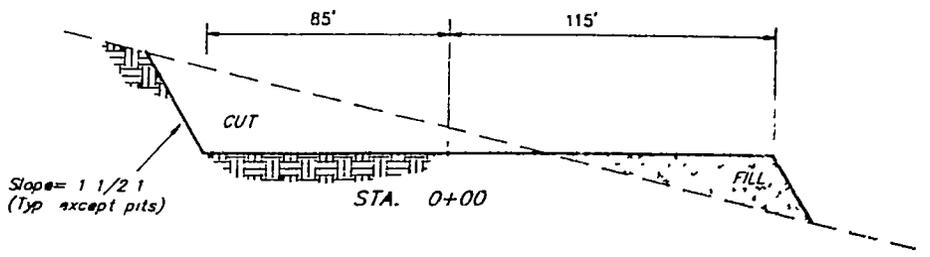
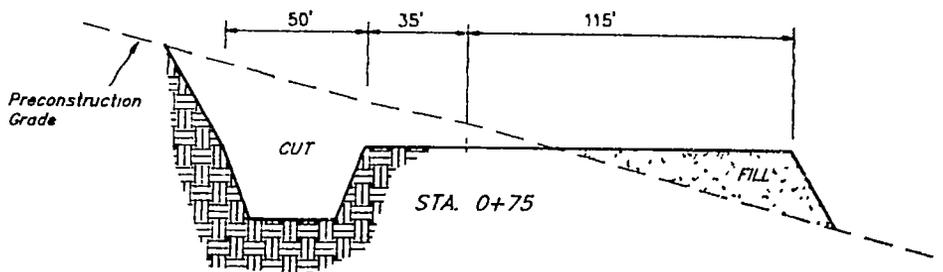
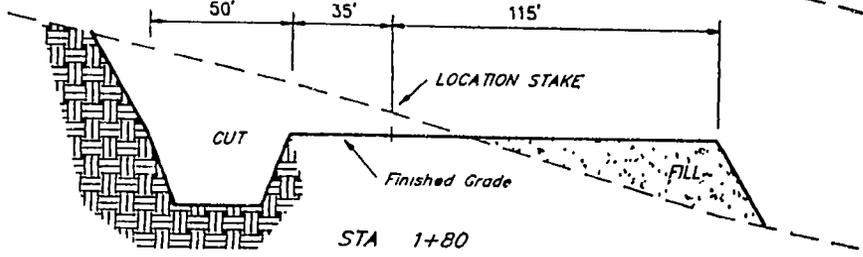
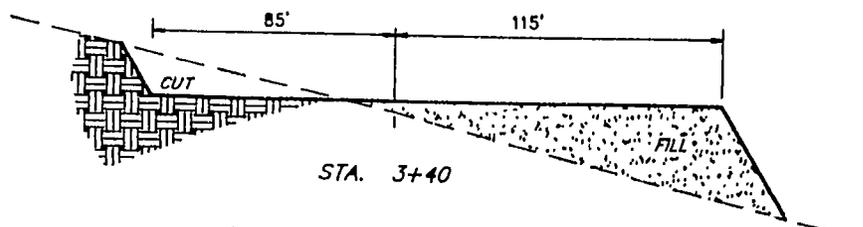
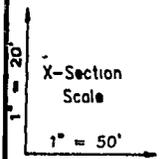
P.G.&E. RESOURCES CO.

LOCATION LAYOUT FOR

#11-16 STATE
SECTION 16, T12S, R10E, S.L.B.&M.
1980' FSL 2137' FWL



SCALE: 1" = 50'
DATE: 7-13-92
Drawn By REH.

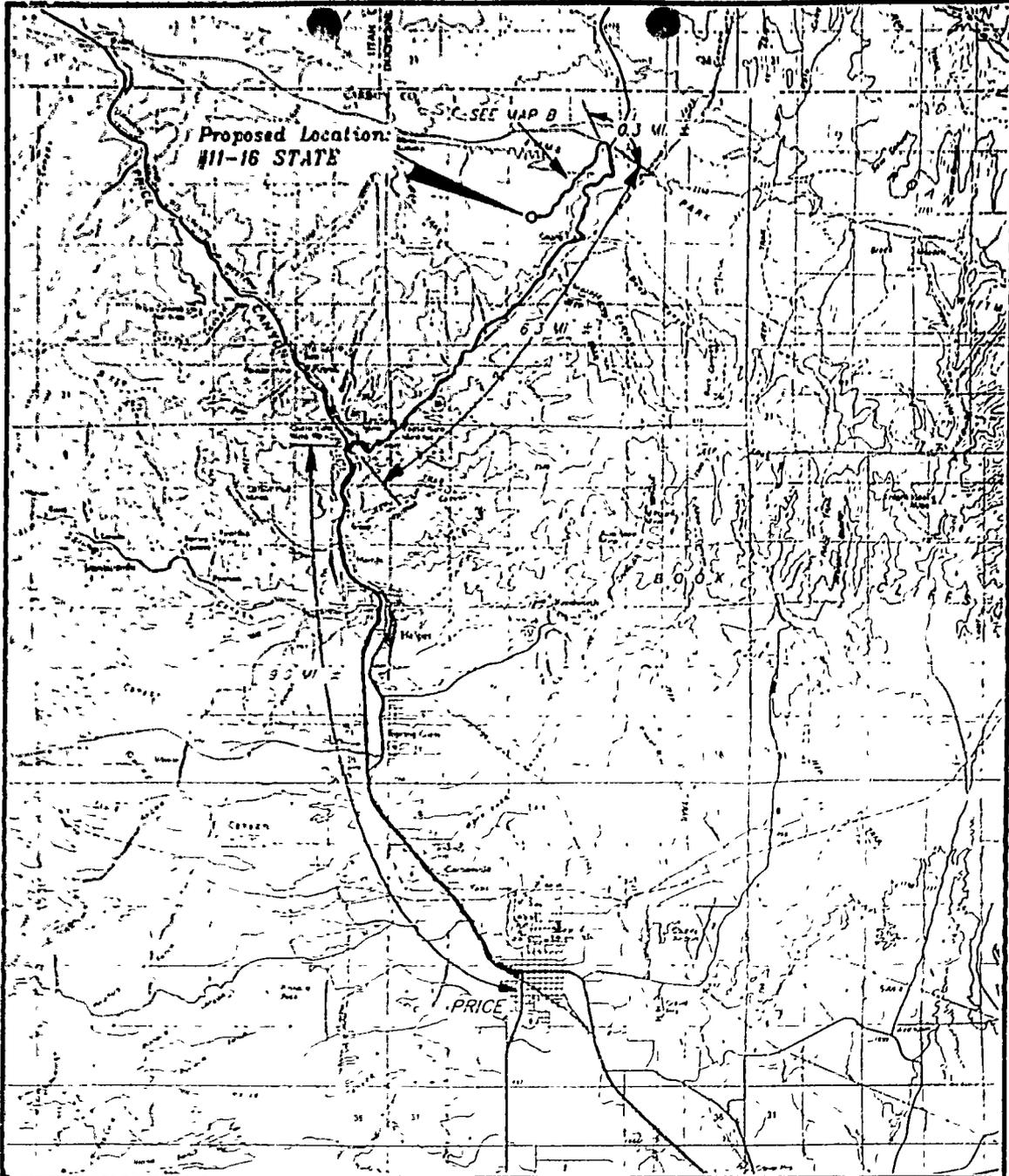


TYP. LOCATION LAYOUT

TYP. CROSS SECTIONS

INGRADED GROUND AT LOC. STAKE = 7817.5'

GRADED GROUND AT LOC. STAKE = 7814.2'

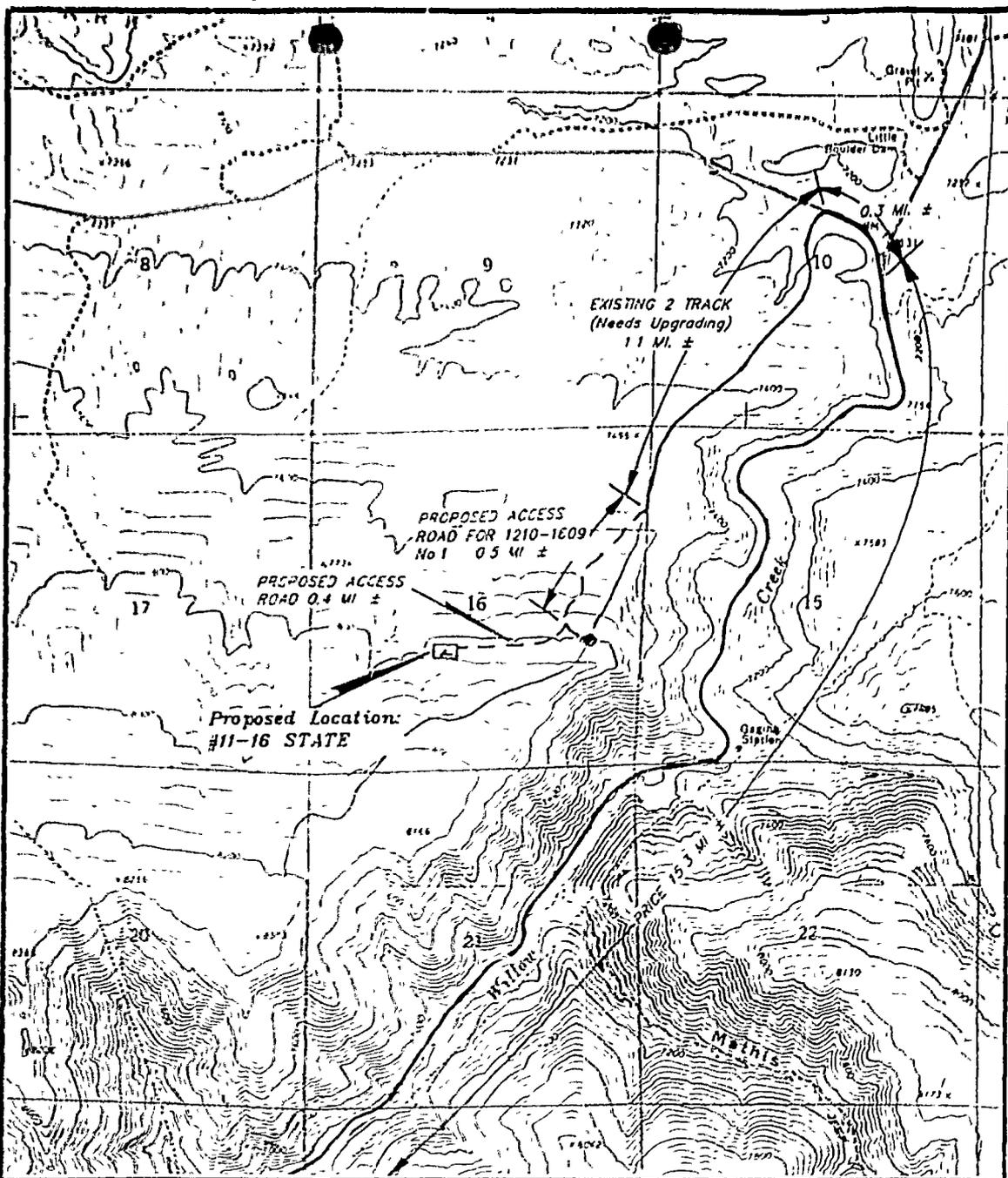


TOPOGRAPHIC
MAP "A"



PG&E RESOURCES COMPANY

#11-16 STATE
SECTION 16, T12S, R10E, S1B & M
1980 FSL 2'37 FE.

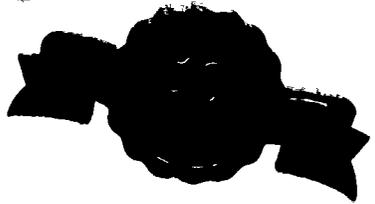
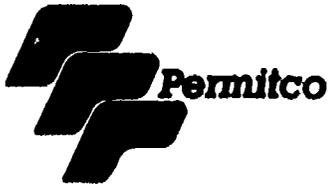


TOPOGRAPHIC
 MAP "B"
 SCALE 1" = 1000'
 DATE 7-10-90 J.L.G.



PG&E RESOURCES COMPANY

#11-16 STATE
 SECTION: 16, T12S, R10E, S1B & 2M
 1980 FSL 2'37 FEL



August 10, 1992

Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84100-1203
Attn: Tammi Searing

Re: PG & E Resources Company
#11-16 State
1980' FSL and 2137' FWL
NE SW Sec. 16, T12S - R10E
Carbon County, Utah

Dear Tammi,

Enclosed please find three copies of the A.P.D. on the above mentioned well along with three copies of the drilling program. A temporary change application is on file with the Division of Water Rights, Price, Utah for use of the proposed water sources.

Please forward approved copies of the A.P.D. to Jim LaFevers at the following address:

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

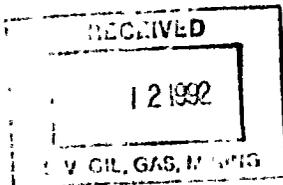
If you should need additional information, please feel free to contact me.

Sincerely,

PERMITCO INC.

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

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

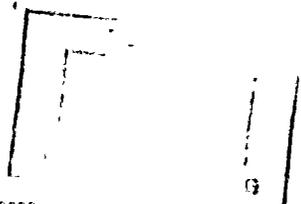


Enc.

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

Permitco Incorporated
A Petroleum Marketing Company

33565 Jackson Drive Denver Colorado 80241 (303) 452 8888





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

Norman H. Bangerter
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 84103 1203
801 538 5340

August 18, 1992

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

Gentlemen

Re: State #11-16 Well, 1980 feet from the south line, 2137 feet from the west line, NE 1/4 SW 1/4, Section 16, Township 12 South, Range 10 East, Carbon County, Utah

Pursuant to Utah Admin R 649-3-2, 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. Reserve pit should be evaluated after construction to determine the need for a synthetic liner
2. The downslope side of the location is to be bermed to prevent run-off from the location
3. The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. PG & E Resources Company will be required to comply with any applicable recommendations resulting from the review
4. Compliance with the requirements of Utah Admin R 649-1 et seq, Oil and Gas Conservation General Rules
5. Notification within 24 hours after drilling operations commence

Page 2
PG & E Resources Company
State #11-16 Well
August 18, 1992

- 6 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.
7. Submittal of the Report of Water Encountered During Drilling, Form 7.
- 8 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.
9. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

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 43-007-30160.

Sincerely,



R. J. Firth

Associate Director, Oil and Gas

ldc
Enclosures
cc: Bureau of Land Management
State Lands and Forestry
J.L. Thompson
WOI1



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
3rd Floor Corner Suite 350
Salt Lake City, Utah 84180-1203
801 538 5340
801 359 3940 (Fax)
801 538 5319 (TDD)

February 14, 1994

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

Re: Application for Permit to Drill
Well No. State #11-16
NESW, Sec. 16, T 12S, R 10E
Carbon County, Utah
API No 43-007-30160

Dear Sirs:

Your referenced application submitted for approval was approved January 31, 1990. In accordance with R 649-3-4-4, the Division rescinds its approval of the referenced application.

In order to drill this well in the future, a new application will have to be submitted.

Yours truly,

A handwritten signature in cursive script that reads "Frank Matthews".

Frank Matthews
Petroleum Engineer

cc R J Firth
State Lands and Forestry
Well file