

UTAH OIL AND GAS CONSERVATION COMMISSION

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

980618 LAID!

DATE FILED **DECEMBER 29, 1995**  
 LAND: FEE & PATENTED \_\_\_\_\_ STATE LEASE NO. **ML-46732** PUBLIC LEASE NO. \_\_\_\_\_ INDIAN \_\_\_\_\_

DRILLING APPROVED: **MAY 13, 1996**

SPUDED IN: \_\_\_\_\_  
 COMPLETED: \_\_\_\_\_ PUT TO PRODUCING: \_\_\_\_\_

INITIAL PRODUCTION: \_\_\_\_\_  
 GRAVITY A.P.I. \_\_\_\_\_

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

TOTAL DEPTH: \_\_\_\_\_  
 WELL ELEVATION: \_\_\_\_\_

DATE ABANDONED: **6-18-97 LAID**  
 FIELD: **UNDESIGNATED**

UNIT: \_\_\_\_\_  
 COUNTY: **CARBON**

WELL NO **UTAH 04-130** API NO. **43-007-30310**  
 LOCATION **860 FSL** FT. FROM (N) (S) LINE. **2150 FEL** FT. FROM (E) (W) LINE. **SW SE** 1/4 - 1/4 SEC. **4**

TWP.	RGE	SEC	OPERATOR	TWP.	RGE	SEC	OPERATOR
				<b>15S</b>	<b>10E</b>	<b>4</b>	<b>RIVER GAS CORPORATION</b>

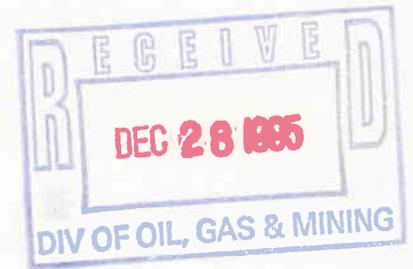


**RIVER GAS CORPORATION**

511 Energy Center Blvd.  
Northport, Alabama 35476  
Phone (205) 759-3282

Fax (205) 759-3188 (Accounting)  
Fax (205) 758-5309 (Corporate)

December 20, 1995



Mr. Michael Hebertson  
Utah Board of Oil, Gas, and Mining  
Suite 350, 3 Triad Center  
355 West North Temple  
Salt Lake City, Utah 84180-1203

RE: Application for Permit to Drill -  
Utah 04-130, SW 1/4 of SE 1/4 of Sec. 4, T15S, R10E  
S.L.B. & M., Carbon County, Utah

Dear Mr. Hebertson:

Enclosed is an original and one copy of an "Application for Permit to Drill" for the well named above. Attached to the APD is the following information, as prepared by Powers Elevation Co., Inc:

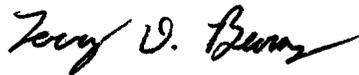
- Exhibit "A": - Copy of survey plat of proposed well site
- Exhibit "B": - Drilling Program
- Exhibit "C": - B.O.P. Diagram
- Exhibit "D": - Surface Use Plan
- Exhibit "E": - Proposed Location/Access
- Exhibit "F": - Typical Road X-Section
- Exhibit "G": - Location Layout
- Exhibit "H": - Well Site Layout
- Exhibit "I": - Evidence of Bond

It is my understanding that the archaeological survey has already been sent to you.

Please accept this letter as our request that all information regarding this permit be kept confidential, if said information is eligible for such consideration. This request is made in accordance with State of Utah Oil and Gas rule # R649-2-11.

Thank you for your assistance. Please feel free to contact me if you have questions.

Sincerely,



Terry D. Burns

Geologist

cc: Mr. Edward W. Bonner, Utah Department of Natural Resources  
Mr. Eric Jones, BLM in Moab, Utah  
Mr. Dean Nyffler, BLM in Price, Utah  
Mr. Robert A. Hendricks, BLM in Salt Lake City, Utah  
Mr. J.R. French, Texaco  
Mr. R.A. Lamarre, Texaco  
Mr. Gee Lake, Jr., Dominion Reserves

DEC 2 1995  
DIV OF OIL, GAS & MINING 6732

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1A. Type of Work: DRILL  DEEPEN

B. Type of Well: OIL  GAS  OTHER: SINGLE ZONE  MULTIPLE ZONE

2. Name of Operator:  
River Gas Corp.

3. Address and Telephone Number:  
511 Energy Center Blvd., Northport, AL 35476

4. Location of Well (Footages)  
At Surface: 860' FSL & 2150' FEL  
At Proposed Producing Zone: 262 655

5. Lease Designation and Serial Number:

6. If Indian, Allottee or Tribe Name:

7. Unit Agreement Name:

8. Farm or Lease Name:  
Utah

9. Well Number:  
04-130

10. Field and Pool, or Wildcat:  
Wildcat

11. Qtr/Qtr, Section, Township, Range, Meridian:  
SW/SE, Sec. 4,  
T15S, R10E

14. Distance in miles and direction from nearest town or post office:  
3.5 miles south of Price, UT

12. County:  
Carbon

13. State: UTAH

15. Distance to nearest property or lease line (feet): 460'

16. Number of acres in lease: 477.44

17. Number of acres assigned to this well: 40

18. Distance to nearest well, drilling, completed, or applied for, on this lease (feet): 2700

19. Proposed Depth: 1434'

20. Rotary or cable tools:  
Rotary

21. Elevations (show whether DF, RT, GR, etc.):  
5694' GR

22. Approximate date work will start:  
May 1996

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8 5/8"	24#	300'	110 sx Class G, 15.8 ppg
7 7/8"	5 1/2"	17#	1404'	50/50 Pozmix, tail REC
	SEE EXHIBIT "B"			

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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.

EXHIBITS ATTACHED:

- EXHIBIT "A" Location Plat
- EXHIBIT "B" Drilling Program
- EXHIBIT "C" BOPE Diagram
- EXHIBIT "D" Surface Use Plan
- EXHIBIT "E" Proposed Location/Access
- EXHIBIT "F" Typical Road X-section
- EXHIBIT "G" Location Layout
- EXHIBIT "H" Well Site Layout
- EXHIBIT "I" Evidence of Bond

24. Name & Signature: *Janet Watson*

Title: Agent for River Gas Corp.

Date: 12/26/95

(This space for State use only)

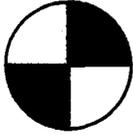
API Number Assigned: 43-007-30310

*[Signature]*

Approval:

*[Signature]*

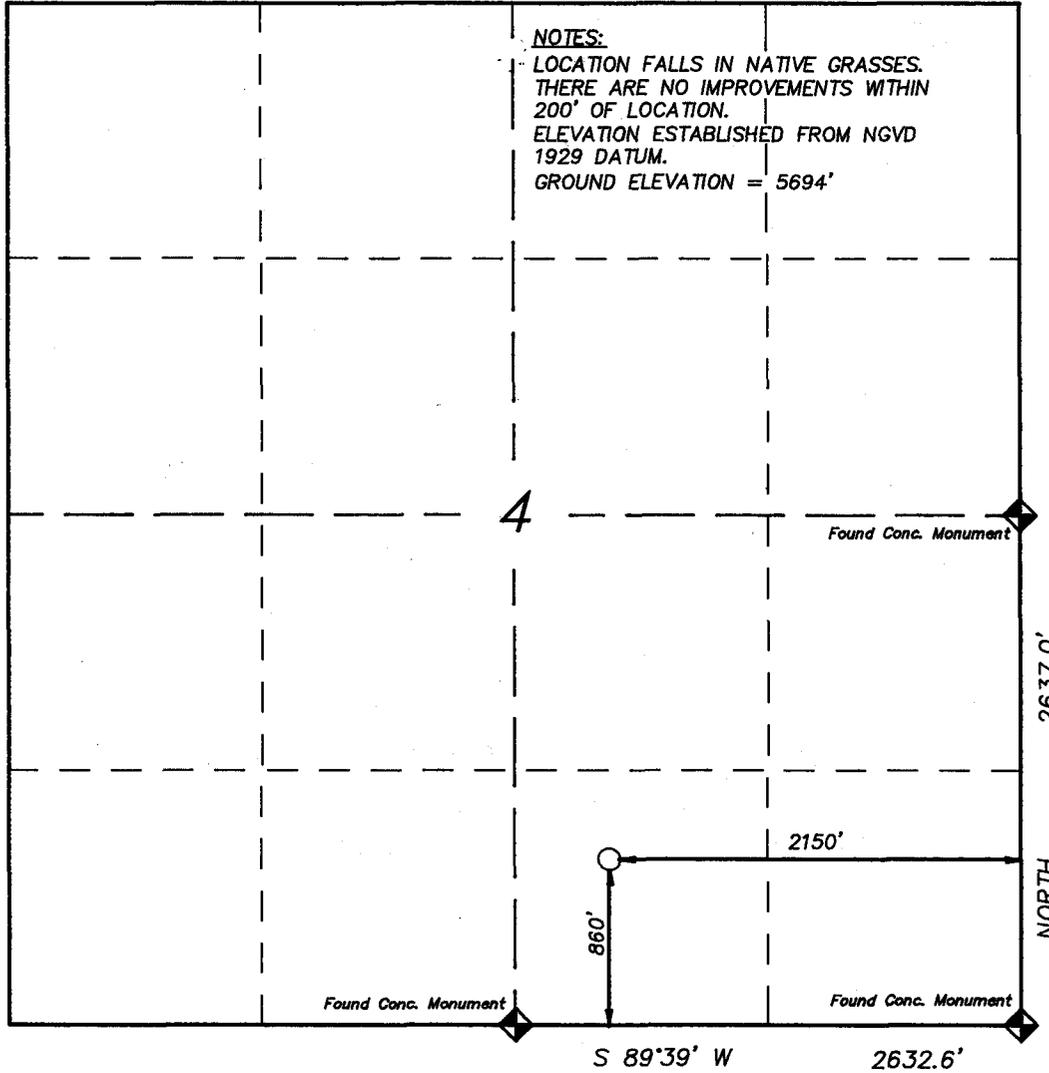
5/13/96



R10E

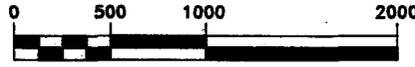


Basis of Bearing: East line of the SE 1/4 Section 4, T15S, R10E,  
assumed NORTH - SOUTH.



NOTES:  
 LOCATION FALLS IN NATIVE GRASSES.  
 THERE ARE NO IMPROVEMENTS WITHIN  
 200' OF LOCATION.  
 ELEVATION ESTABLISHED FROM NGVD  
 1929 DATUM.  
 GROUND ELEVATION = 5694'

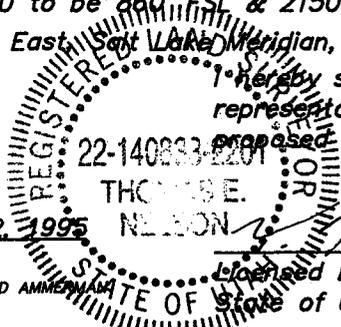
T  
15  
S



SCALE IN FEET

Powers Elevation Co., Inc. of Denver, Colorado has in accordance with a request from Charles Willis for River Gas Corporation determined the proposed location of UTAH #04-130 to be 860' FSL & 2150' FEL, Section 4, Township 15 South, Range 10 East, Salt Lake Meridian, Carbon County, Utah.

I hereby state that this plat is an accurate representation of a correct survey showing the proposed location of UTAH #04-130.



Date: October 12, 1995

Thomas Nelson  
 Licensed Land Surveyor No. 22-140833-2201  
 State of Utah

EXHIBIT "B"DRILLING PROGRAM

Attached to Form 3  
 River Gas Corp.  
 #04-130 Utah  
 SW/4 SE/4, Sec. 4, T15S, R10E  
 860' FSL & 2150' FEL  
 Carbon County, Utah

1. The Geologic Surface Formation

Mancos Shale

2. Estimated Tops of Important Geologic Markers.

Blue Gate/Ferron	1050'
Ferron/Tununk	1334'

3. Projected Gas & H2O zones (Ferron Formation)

Coal - 1064' to 1214'

No groundwater is expected to be encountered.

Casing & cementing will be done to protect potentially productive hydrocarbons, lost circulation zones, abnormal pressure zones, and prospectively valuable minerals deposits. All indications of usable water will be reported.

Surface casing will be tested to 1400 psi.

4. The Proposed Casing and Cementing Programs

<u>HOLE SIZE</u>	<u>SETTING DEPTH (INTERVAL)</u>	<u>SECTION LENGTH</u>	<u>SIZE (OD)</u>	<u>WEIGHT, GRADE &amp; JOINT</u>	<u>NEW, USED</u>
11	300'	300'	8 5/8	24#	new
7 7/8	1404'	1404'	5 1/2	17#	new

Cement Program

Surface Casing: 110 sx Class G, 15.8 ppg cement

Production Casing: 50/50 Pozmix and tail in with RFC. The 50/50 Pozmix accounts for 75% total cement, RFC 25%.

Total sx cement 165.  
Cement volumes will vary depending on formations encountered and hole conditions.

The following shall be entered in the driller's log:

- (1) Blowout preventer pressure tests, including test pressures and results;
- (2) Blowout preventer tests for proper functioning;
- (3) Blowout prevention drills conducted;
- (4) Casing run, including size, grade, weight, and depth set;
- (5) How the pipe was cemented, including amount of cement, type, whether cement circulated, location of the cementing tools, etc.;
- (6) Waiting on cement time for each casing string;
- (7) Casing pressure tests after cementing, including test pressures and results.

5. The Operator's Minimum Specifications for Pressure Control

EXHIBIT "C" is a schematic diagram of the blowout preventer equipment. A double gate 3000 psi BOPE will be used with a rotating head. This equipment will be tested to 1400 psi. All tests will be recorded in a Driller's Report Book. Physical operation of BOP's will be checked on each trip.

6. The Type and Characteristics of the Proposed Circulating Muds

0-300	11" hole	Drill with air, will mud-up if necessary
300-1434	7 7/8" hole	Drill with air. 400 psi @ 1500-1800 Scf.

7. The Testing, Logging and Coring Programs to be Followed

0-300	Gamma Ray			
300-TD	Gamma Ray,	Density,	Neutron Porosity,	
	Induction,	Caliper		

Any Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. Bottom hole pressure expected is 688 psi maximum.

No hydrogen sulfide or other hazardous gases or fluids have been found, reported or are known to exist at these depths in the area.

8. Anticipated Starting Date and Duration of the Operations.

The well will be drilled in May 1996.

Verbal and/or written notifications listed below shall be submitted in accordance with instructions from the Division of Oil, Gas & Mining:

- (a) prior to beginning construction;
- (b) prior to spudding;
- (c) prior to running any casing or BOP tests;
- (d) prior to plugging the well, for verbal plugging instructions.

Spills, blowouts, fires, leaks, accidents or other unusual occurrences shall be reported to the Division of Oil, Gas & Mining immediately.

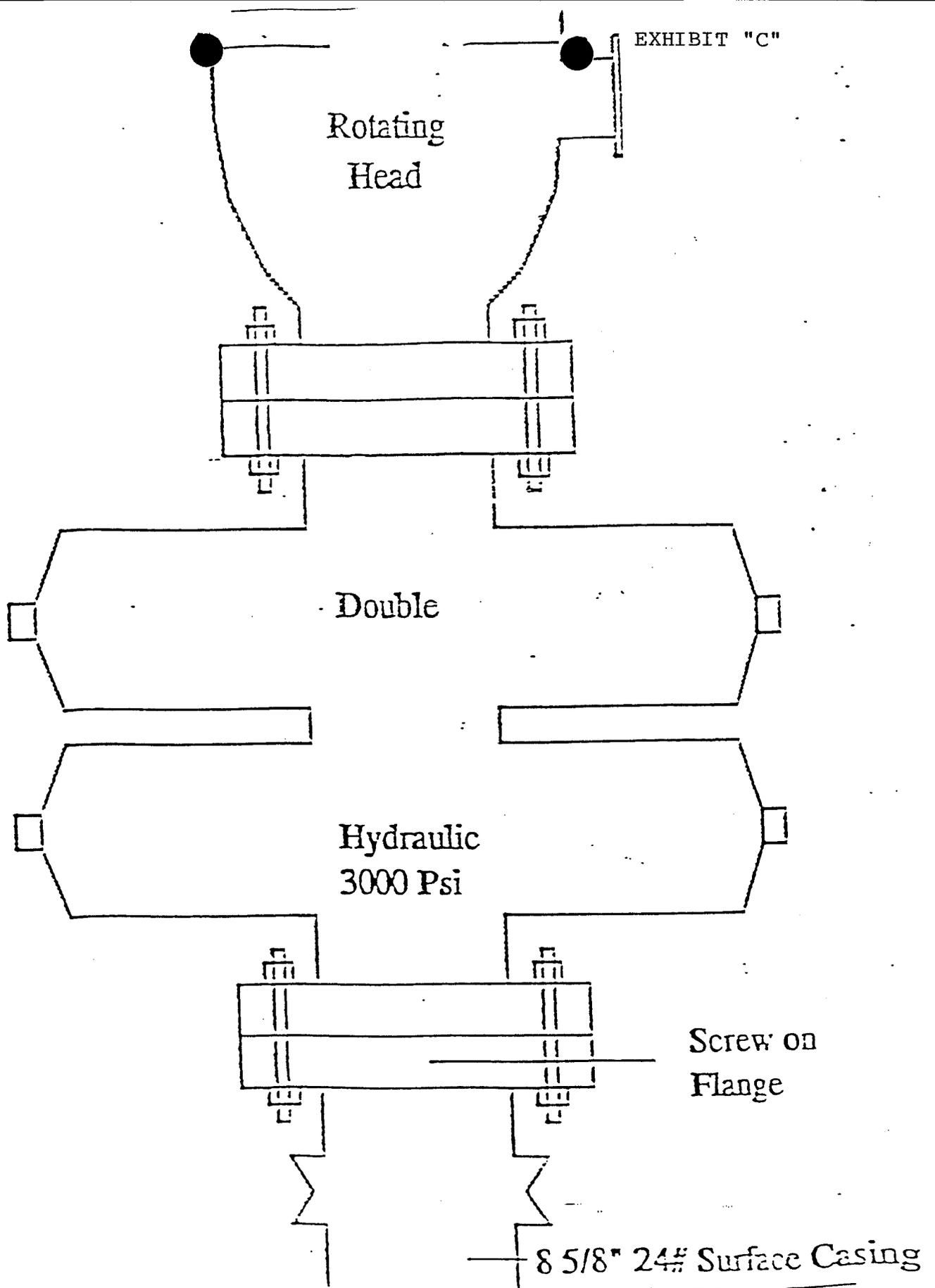


EXHIBIT "D"MULTIPOINT SURFACE USE PLAN

Attached to Form 3  
River Gas Corp.  
#04-130 Utah  
SW/4 SE/4, Sec. 4, T15S, R10E  
860' FSL & 2150' FEL  
Carbon County, Utah

## 1. EXISTING ROADS

- A. See Exhibit "E". We do not plan to change, alter or improve upon any existing state or county roads. Existing roads will be maintained in same or better condition.
- B. From intersection State Hwys. 6 & 10 in Price, travel south on Hwy. 10 2.8 miles (2-lane crowned) to County Road 3600 South (asphalt, 2-lane crowned) on left, then easterly 0.15 mile to access to #04-129, south 200' to #04-129 location, then easterly .4 mile to proposed location.

## 2. PLANNED ACCESS

See Exhibit "E". 0.4 mile of new access is required.

- A. Maximum Width: 14' travel surface with 27' base
- B. Maximum grade: 1%
- C. Turnouts: None
- D. Drainage design: Natural drainage will be retained. Water will be diverted around well pad as necessary.
- E. Cuts and fills: None
- F. Surfacing materials: 4" sand and gravel if necessary.
- G. Gates, cattleguards, fence cuts: None

If well is productive, road will be surfaced and maintained as necessary to prevent soil erosion and accommodate year-round traffic.

3. LOCATION OF EXISTING WELLS

- A. See Exhibit "E". There are no existing wells within one mile of the proposed location.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. If the well is a producer, installation of production facilities will be as shown on EXHIBIT "H". Buried powerlines run along access on the east or north, gathering lines on the south or west, unless otherwise indicated on EXHIBIT "E".
- B. Rehabilitation of all pad areas not used for production facilities will be made in accordance with landowner stipulations.

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Water to be used for drilling will be purchased from the Price River Water Improvement District (tel. 801-637-6350). This has been arranged by Mr. Michael J. Farrens, Vice President of River Gas Corp. - Utah Operations. He has been in contact with Mr. Phillip Palmer. Mr. Farrens has discussed this arrangement with Mark Page of the Division of Water Rights (tel. 801-637-1303) over the telephone. The Division of Water Rights is to furnish the Oil & Gas Division with a letter of approval concerning this matter.
- B. Water will be transported by truck over approved access roads.
- C. No water well is to be drilled for this location.

6. SOURCE OF CONSTRUCTION MATERIALS

- A. Any construction materials needed will be obtained locally and hauled to the location on existing roads.
- B. No construction or surfacing materials will be taken from Federal/Indian land.

7. METHODS FOR HANDLING WASTE DISPOSAL

- A. As the well will be air drilled, a small reserve pit will be constructed with a minimum of one-half the total depth below the original ground surface on the lowest point within the pit. The pit will not be lined unless conditions encountered during construction warrant it. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth

side within 24 hours after drilling operations cease with four strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four feet. The fence will be kept in good repair while the pit is drying.

- B. Following drilling, the liquid waste will be evaporated from the pit and the pit backfilled and returned to natural grade.

No liquid hydrocarbons will be discharged to the reserve pit or location.

- C. In the event fluids are produced, any oil will be retained in tankage until sold and any water produced will be retained until its quality can be determined. The quality and quantity of the water will determine the method of disposal.
- D. Trash will be contained in a portable metal container and will be hauled from location periodically and disposed of at an approved disposal site. Chemical toilets will be placed on location and sewage will be disposed of at an appropriate disposal site.

#### 8. ANCILLARY FACILITIES

- A. We anticipate no need for ancillary facilities with the exception of three trailers to be located on the drill site.

#### 9. WELLSITE LAYOUT

- A. Available topsoil will be removed from the location and stockpiled. If ground frost prevents the segregation and removal of the topsoil material from the less desirable subsoil material, cross-ripping to the depth of the topsoil material may be necessary. Location of mud tanks, reserve and burn pits, and soil stockpiles will be located as shown on the attachments.
- B. A blooie pit will be located 150' diagonally from the drill hole. A line will be placed on the surface from the center hole to the burn pit. Burn pit will not be lined, but will be fenced on four sides to protect livestock/wildlife.
- C. Access to the well pad will be as shown on Exhibit "G".
- D. Natural runoff will be diverted around the well pad.

## 10. PLANS FOR RESTORATION OF SURFACE

- A. All surface areas not required for producing operations will be graded to as near original condition as possible and contoured to maintain possible erosion to a minimum.
- B. Available topsoil will be stockpiled and will be evenly distributed over the disturbed areas and the area will be reseeded as prescribed by the landowner.
- C. Pits and any other area that would present a hazard to wildlife or livestock will be fenced off when the rig is released and removed.
- D. Any oil accumulation on the pit will be removed or overhead flagged as dictated by then existing conditions.
- E. Date of commencement will be May, 1996. Rehabilitation will commence following completion of the well. Rat and mouse holes will be filled immediately upon release of the drilling rig from the location. If the wellsite is to be abandoned, all disturbed areas will be recontoured to the natural contour as is possible.

## 11. SURFACE OWNERSHIP

- A. The wellsite and access road will be constructed on lands owned by SITLA, #3 Triad Center, Ste. 400, Salt Lake City, UT 84180-1204. The operator shall contact the landowner and the Division of Oil, Gas & Mining 48 hours prior to beginning construction activities.

## 12. OTHER INFORMATION

The surface is vacant land. The nearest dwelling is ±0.4 mile north/northwest of the location. Nearest live water 0.4 mile north (Carbon Canal).

If there is snow on the ground when construction begins, it will be removed before the soil is disturbed, and piled downhill from the topsoil stockpile location.

The backslope will be constructed no steeper than 4:1, the foreslope no steeper than 4:1.

All equipment and vehicles will be confined to the access road and well pad.

A complete copy of the approved Application for Permit to Drill (APD) including conditions and stipulations, shall be on the wellsite during construction and drilling operations.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the Division of Oil, Gas & Mining.

13. COMPANY REPRESENTATIVE

THROUGH A.P.D. APPROVAL

Janet Watson  
Agent/Consultant for  
River Gas Corp.  
P. O. Box 440889  
Aurora, Co. 80044  
(303) 321-2217

MAIL APPROVED A.P.D. TO

Terry Burns  
River Gas Corp.  
511 Energy Cntr. Blvd.  
Northport, AL 35476  
(205) 759-3282

FIELD REPRESENTATIVE

Steve Prince  
(801) 637-8876  
M-(801) 636-5256

DIRT CONTRACTOR

NELCO  
Larry Jensen  
(801) 637-3495  
M-(801) 636-5268

14. CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by River Gas Corp. and its subcontractors in conformity with this plan and the terms and conditions under which it is approved.

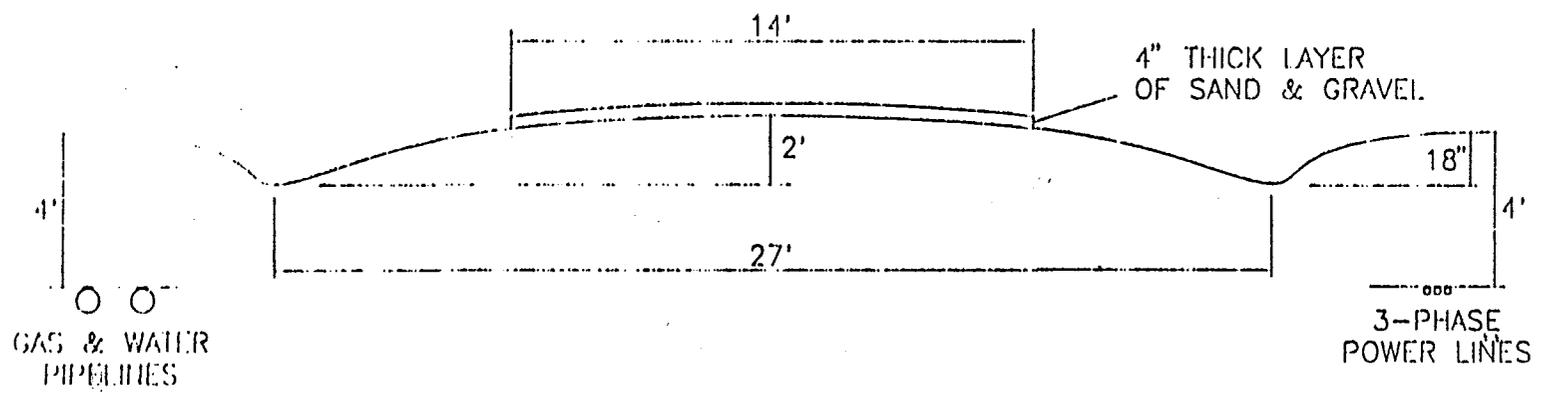
Date

12/26/95

Janet Watson  
Janet Watson  
Agent for River Gas Corp.



# RIVER GAS CORPORATION



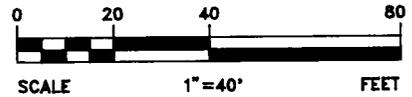
## TYPICAL ROAD CROSS-SECTION

NOT TO SCALE

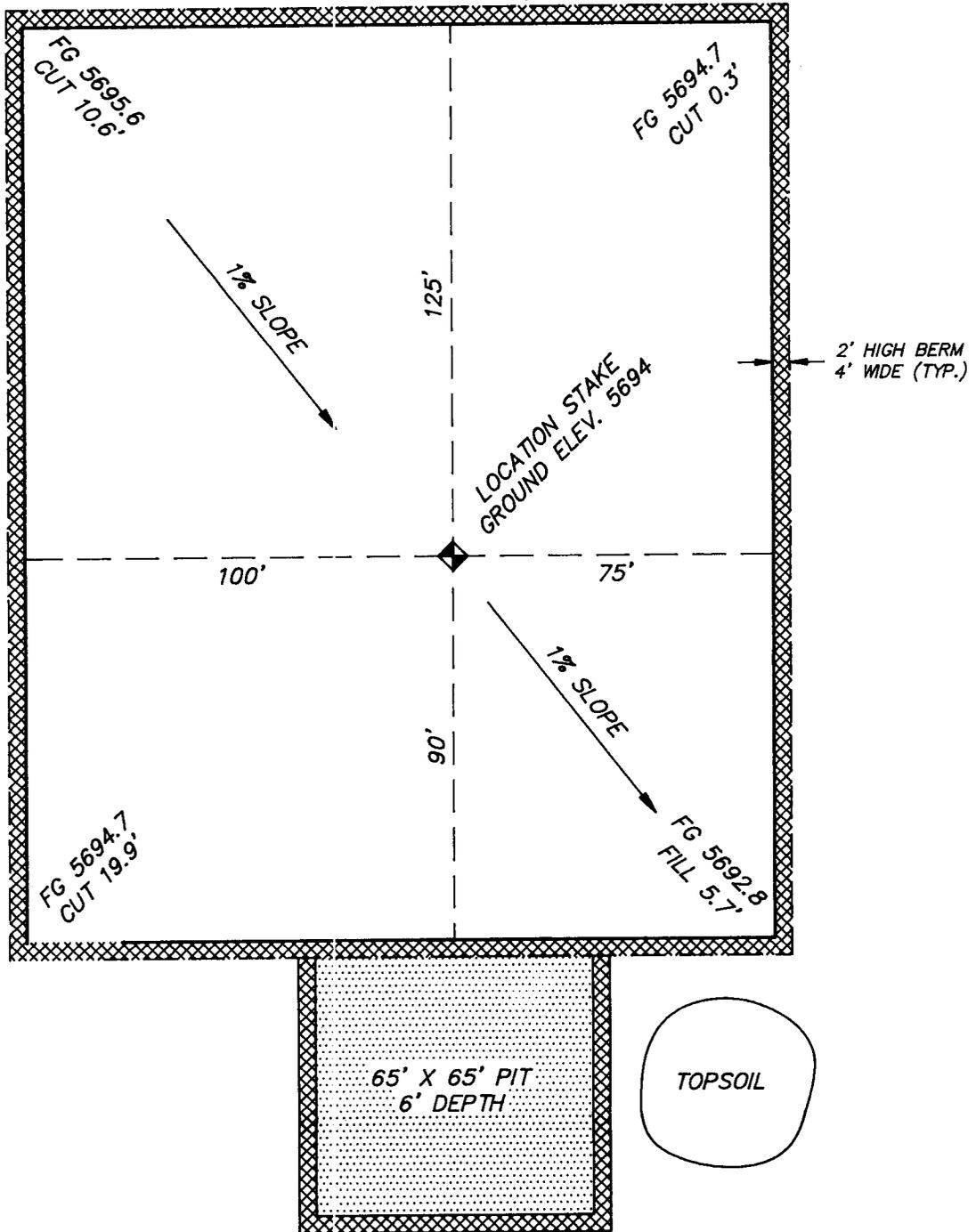
3/23/95

EXHIBIT "F"

# RIVER GAS CORPORATION UTAH #04-130 LOCATION PIT & PAD LAYOUT



Proposed  
Road



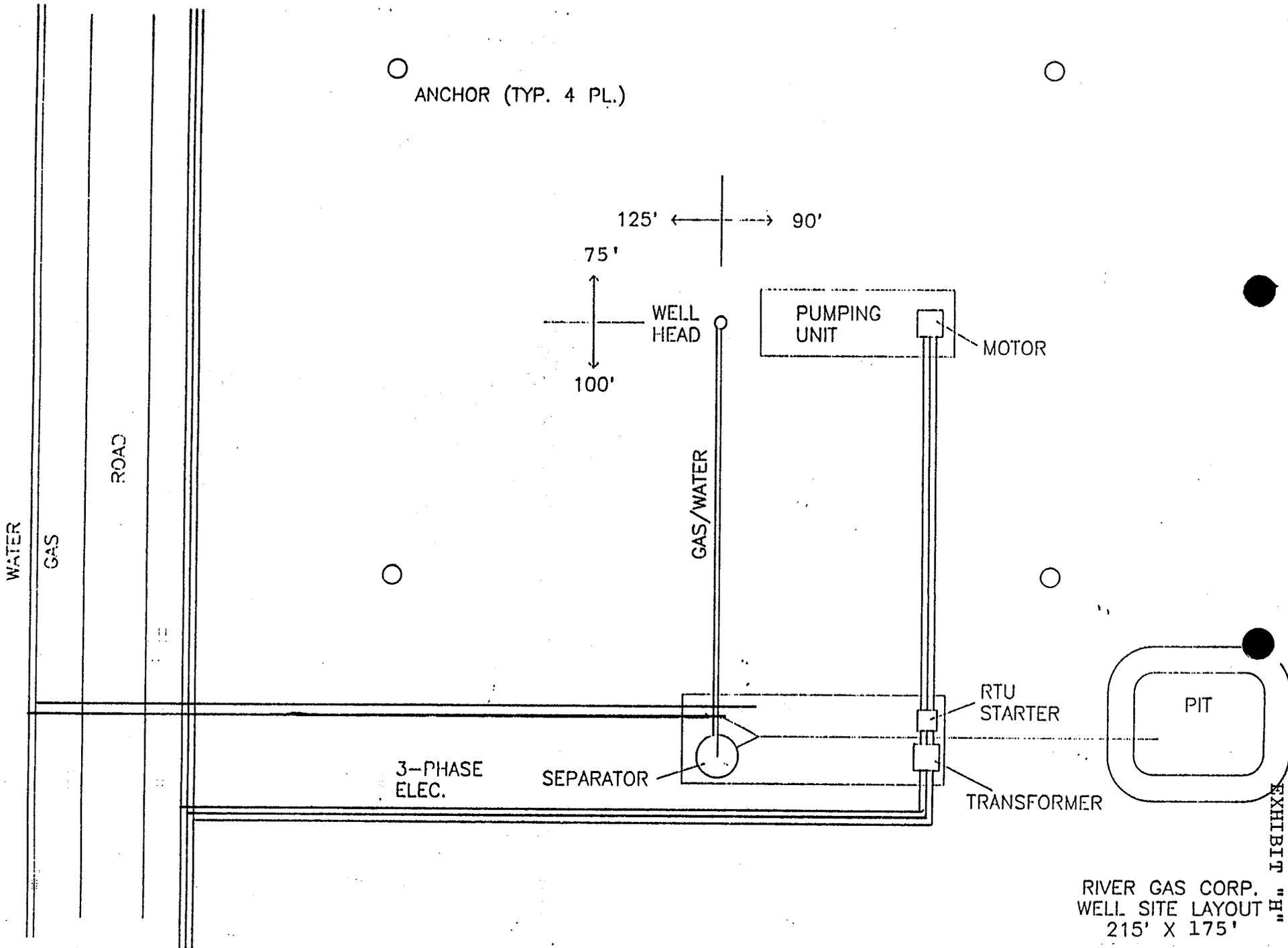
FG = FINISHED GRADE

	<b>Powers Elevation Co., Inc.</b>
	OIL FIELD ENGINEERS & SURVEYORS 13900 E. HARVARD AVE., SUITE 113 AURORA, CO. 80014 (303) 321-2217 FAX (303) 321-2218
Scale : 1"=40'	Date : 10-20-95
Surveyed & Drawn by: AMMERMAN	
Checked : AMMERMAN	
Dwg. File : \DWGR12\RGC\04-130P	

CLIENT:  
**RIVER GAS CORPORATION**  
 290 South Highway 55, Box 638  
 Price, Utah 84501-0638  
 (801) 637-8876/(801) 637-6835

PIT & PAD LAYOUT  
 UTAH #04-130 WELL LOCATION  
 SE 1/4 SECTION 4  
 T 15 S, R 10 E  
 SALT LAKE MERIDIAN  
 CARSON COUNTY, UTAH

SHEET  
 2  
 OF  
 2



AMSOUTH BANK OF ALABAMA  
1900 FIFTH AVENUE NORTH  
BIRMINGHAM, ALABAMA 35203 USA  
OUR REFERENCE NUMBER: S308586

International Services

Mobile:

TELEX: 6821116  
Cable: AMSOMBL  
S.W.I.F.T. AMSB US 44

AMENDMENT NUMBER: 002  
TO LETTER OF CREDIT NUMBER: S308586  
DATE: NOVEMBER 13, 1995

BENEFICIARY:  
STATE OF UTAH  
DEPT. OF NATURAL RESOURCES  
DIV. OF OIL, GAS AND MINING  
355 WEST TEMPLE 3 TRIAD CENTER  
SUITE 350  
SALT LAKE CITY, UTAH 84180-1203

AT THE REQUEST OF RIVER GAS CORPORATION 3600 WATERMELON ROAD  
SUITE 204 NORTHPORT, ALABAMA 35476 AND FOR THE ACCOUNT OF SAME

WE HEREBY AMEND OUR LETTER OF CREDIT NUMBER S308586 DATED  
DECEMBER 3, 1993 OPENED IN YOUR FAVOR AS FOLLOWS:

-ACCOUNT PARTY'S ADDRESS IS CHANGED  
TO: 511 ENERGY CENTER BLVD  
NORTHPORT, ALABAMA 35476

\*\*REFERENCES HEREIN TO AMSOUTH BANK N.A. SHALL BE DEEMED TO REFER  
TO AMSOUTH BANK OF ALABAMA.\*\*

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.  
THIS AMENDMENT BECOMES AN INTEGRAL PART OF THE ORIGINAL LETTER OF  
CREDIT AND IS TO BE ATTACHED THERETO.

  
\_\_\_\_\_  
AUTHORIZED SIGNATURE

# AmSouth Bank

EXHIBIT "I"

Birmingham:

AMSOUTH BANK OF ALABAMA  
1900 FIFTH AVENUE NORTH  
BIRMINGHAM, ALABAMA 35203 USA  
OUR REFERENCE NUMBER: S304606

International Services

TELEX: 6827189  
Cable: AMSOUBKBHM  
S.W.I.F.T. AMSB US 44

Mobile:

TELEX: 6821116  
Cable: AMSOMBL  
S.W.I.F.T. AMSB US 44

AMENDMENT NUMBER: 005  
TO LETTER OF CREDIT NUMBER: S304606  
DATE: NOVEMBER 13, 1995

**BENEFICIARY:**

STATE OF UTAH, DEPARTMENT OF  
NATURAL RESOURCES, DIVISION OF  
STATE LANDS AND FORESTRY  
#3 TRIAD CENTER SUITE 400  
355 WEST TEMPLE  
SALT LAKE CITY, UTAH 84180-1204

AT THE REQUEST OF RIVER GAS CORPORATION 511 ENERGY CENTER BLVD  
NORTHPORT, ALABAMA 35476

WE HEREBY AMEND OUR LETTER OF CREDIT NUMBER S304606 DATED  
DECEMBER 14, 1990 OPENED IN YOUR FAVOR AS FOLLOWS:

-ACCOUNT PARTY'S ADDRESS IS CHANGES TO:  
511 ENERGY CENTER BLVD.  
NORTHPORT, ALABAMA 35476

\*\*REFERENCES HEREIN TO AMSOUTH BANK N.A. SHALL BE DEEMED TO REFER  
TO AMSOUTH BANK OF ALABAMA.\*\*

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.  
THIS AMENDMENT BECOMES AN INTEGRAL PART OF THE ORIGINAL LETTER OF  
CREDIT AND IS TO BE ATTACHED THERETO.

  
AUTHORIZED SIGNATURE

DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL  
STATEMENT OF BASIS

Operator: River Gas Corporation \_\_\_\_\_

Well Name & Number: 4-130 \_\_\_\_\_

API Number: 4300730310 \_\_\_\_\_

Location: 1/4, 1/4 sw se Sec. 4 T. 15s R. 10e

**Geology/Ground Water:**

There are no aquifers with high quality ground water expected to be encountered. The proposed casing and cement program will adequately isolate any zones of water penetrated.

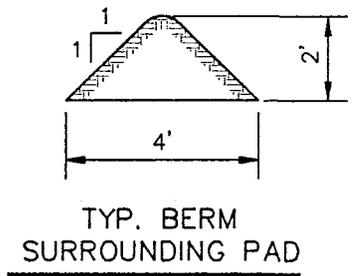
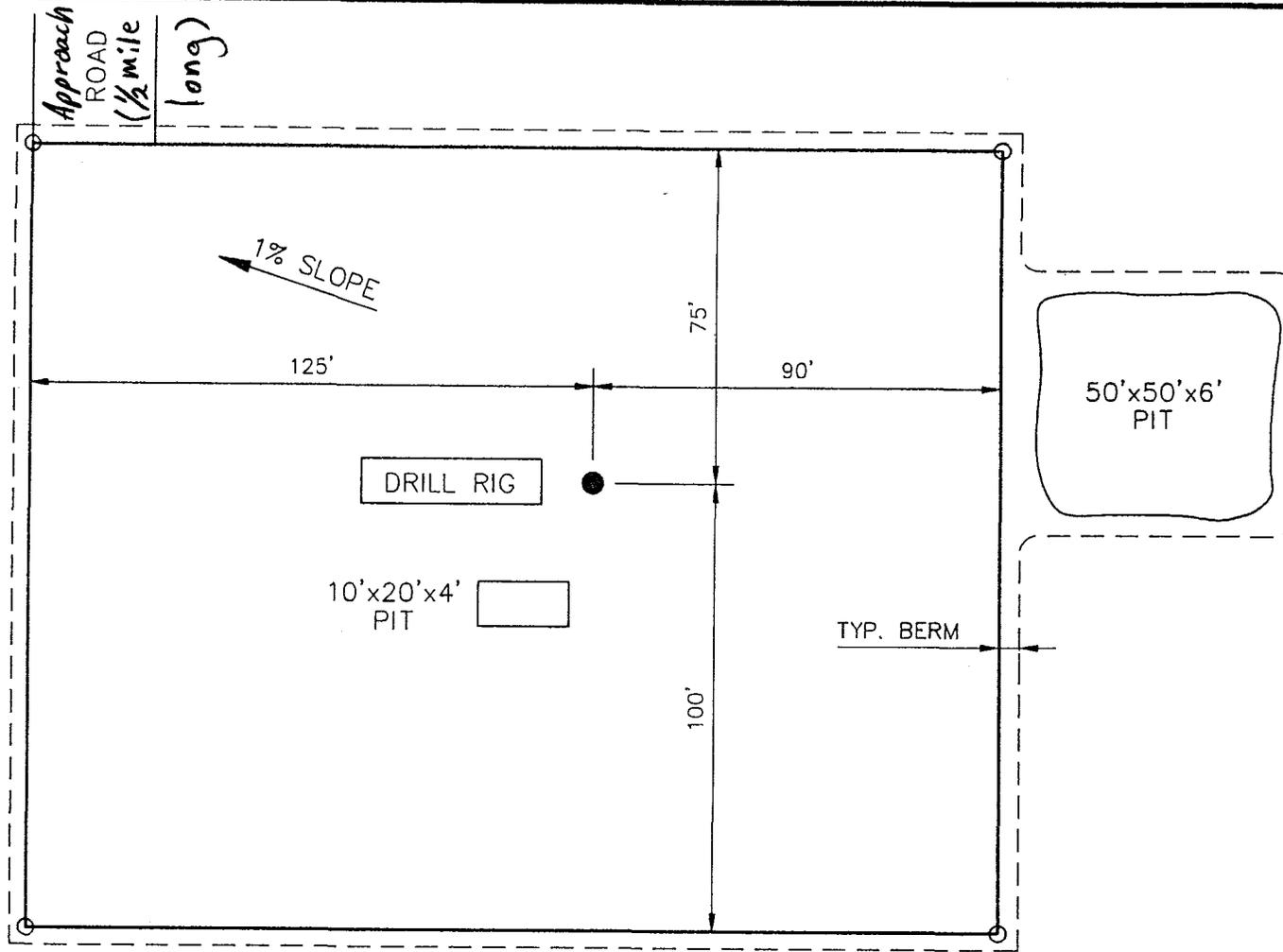
Reviewer: D. Jarvis Date: 5/9/96

**Surface:**

The Mancos Shale soil is relatively impermeable, stable and not incised or undermined on or beside the disturbed area. The nearest moving surface waters are the Carbon Canal (1/4 mile away) and the Price River (1 2/3 mile away). No significant drainage basin is focused on the location so cloudburst/flash-flooding is no problem. Precipitation will be deflected around the location with berms and culverts. There are no significant dry washes nearby. There are no nearby culinary or irrigation water supply wells. The site was photographed and characterized on 4/29/96. A layout plat was provided and modified. Provision was made to ensure site rehabilitation, litter and waste control, preservation of drainage patterns and the integrity of local infrastructure, groundwater and other resources. The well utilities system will follow the approach roadway. The gas gathering system will follow the proposed approach road toward the proposed 4-129 location until it is at the foot of the low bluff several hundred feet to the south, whereupon the pipeline leaves the road and, continuing south, runs up and over the bluff, following the blufftop road after they intersect.

Reviewer: Chris Kierst Date: 5/9/96

**Conditions of Approval/Application for Permit to Drill:** 1) 18" culvert under approach road and outside pad berm to deflect water down roadway bar ditch. 5-18" culverts placed in minor dry washes along 1/2 mile long approach road from proposed 4-129 well. 2) Berm location and pit. 3) Site infrastructure as per modified drilling location plat. 4) Native clay pit liner.



Drainage Direction

○ INDICATES 1"x2"x24" WOOD STAKE

SW1/4 SEC. 31, T 15 S, R 10 E, S.L.B. & M.		
<b>Empire Engineering</b>		
1665 E. Sagewood Rd. Price, Utah 84501		
RIVER GAS CORPORATION WELL # UTAH 4-130		
Drawn By: THK	Approved By: EEH	Drawing No.
Date: 4-20-95	Scale: 1" = 40'	EEOG-96-30 Sheet: 2 of 2

**ON-SITE PREDRILL EVALUATION**

**Division of Oil, Gas and Mining**

OPERATOR: River Gas Corporation

WELL NAME & NUMBER: 4-130

API NUMBER: 4300730310

LEASE: ML-46732 FIELD/UNIT: Drunkard's Wash

LOCATION: 1/4, 1/4 sw se Sec: 4 TWP: 15s RNG: 10e 860 FSL 2150 FwL

LEGAL WELL SITING: 460 F SEC. LINE; 460 F 1/4, 1/4 LINE; 920 F ANOTHER WELL.

GPS COORD (UTM): 516,860; 4,377,042

SURFACE OWNER: SITLA

**PARTICIPANTS**

Chris Kierst-DOGM  
Steve Prince-River Gas  
Larry Jensen-Nelco

**REGIONAL/LOCAL SETTING & TOPOGRAPHY**

Western margin of Colorado Plateau / Mancos Shale lowlands below Wasatch Plateau. Gently rolling range w/ weakly incised dry wash. Erosional remnants of alluvial fan deposits south, east and west of location (within 500' on south and east).

**SURFACE USE PLAN**

CURRENT SURFACE USE: Rangeland (unused commercially).

PROPOSED SURFACE DISTURBANCE: 50' X 50' pit, 215' X 175' pad, and proposed 1/2 mile long approach road from proposed 4-130 well.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: 1 proposed well (4-129).

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: proposed gathering pipeline 3/8 mile west of location w/ spurs from this well and the proposed 4-129.

SOURCE OF CONSTRUCTION MATERIAL: native soil

ANCILLARY FACILITIES: none

WASTE MANAGEMENT PLAN:

portable toilets and trash barrels; to be removed to a central  
dumpster and dumped at the East Carbon disposal facility.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: None on pad. Carbon Canal is  
about 1/4 mile to the northeast and the Price River is 1 and 2/3 miles  
to the northeast.

FLORA/FAUNA: Badgers, coyotes, rabbits, ground squirrels, raptors,  
reptiles /sagebrush, rabbitbrush, 4 wing saltbrush, cactus

SOIL TYPE AND CHARACTERISTICS: Mancos Shale alluvium soil w\ low  
permeability. Minor fine sand content.

SURFACE FORMATION & CHARACTERISTICS: Mancos Shale - grey, bentonitic.  
Wasatch Plateau alluvium just off pad on hills. Conglomeratic on  
hilltops.

EROSION/SEDIMENTATION/STABILITY: Stable ground with no sloughing of  
slumping. No dry washes on gentle slope where pad will be. No  
unstable banks or deep washes on or beside location.

PALEONTOLOGICAL POTENTIAL: poor

RESERVE PIT

CHARACTERISTICS: Mancos soil pit. 50' X 50' X6'

LINER REQUIREMENTS (Site Ranking Form attached): Level 3 - native clay  
liner.

SURFACE RESTORATION/RECLAMATION PLAN  
as per SITLA surface agreement.

SURFACE AGREEMENT: SITLA agreement

CULTURAL RESOURCES/ARCHAEOLOGY: none

OTHER OBSERVATIONS/COMMENTS

No 404 dredge and fill situations evident.

ATTACHMENTS 3-4 photographs and modified location plat.

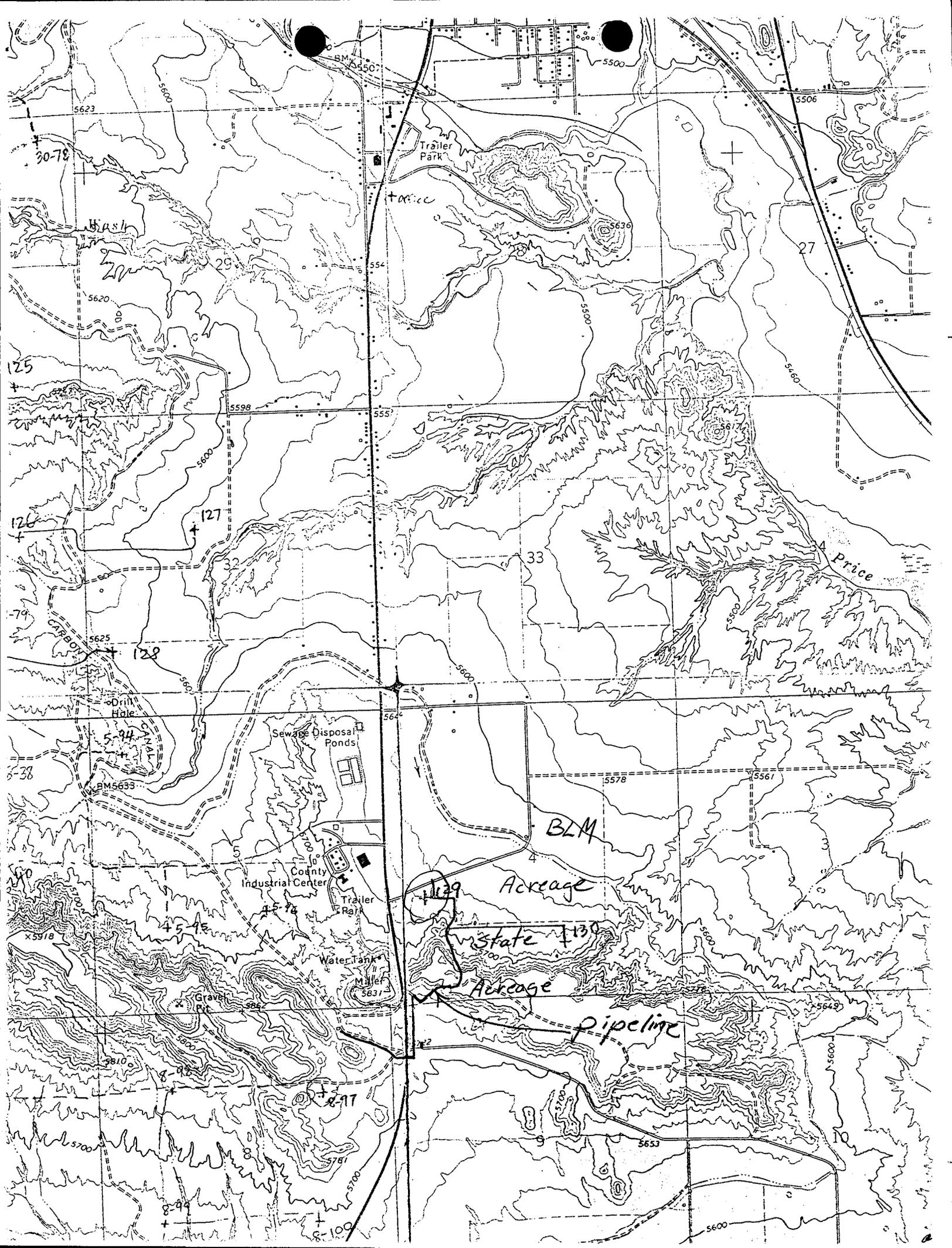
Christopher Kierst  
DOGM REPRESENTATIVE

4/29/96 / 6:00PM  
DATE/TIME

**Evaluation Ranking Criteria and Ranking Score  
For Reserve and Onsite Pit Liner Requirements**

<u>Site-Specific Factors</u>	<u>Ranking</u>	<u>Site Ranking</u>
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	<u>0</u>
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	<u>0</u>
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	<u>0</u>
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	<u>0</u>
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	<u>0</u>
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid containing significant levels of hazardous constituents	15	
	20	<u>0</u>
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	<u>0</u>
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	<u>5</u>
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	<u>8</u>
Presence of Nearby Utility Conduits		
Not Present	0	
Unknown	10	
Present	15	<u>0</u>

**Final Score 13 level 3**



BLM Acreage

State Acreage

Pipeline

Price

Blash

CABOT

Drill Hole

BM 5635

BM 5636

BM 5637

BM 5638

BM 5639

BM 5640

BM 5641

BM 5642

BM 5643

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**State of Utah  
Division of Oil, Gas & Mining (OGM)**

***ON-SITE PREDRILL EVALUATION AND REVIEW  
FOR  
APPLICATION FOR PERMIT TO DRILL (APD)***

**OPERATOR:**

River Gas Corporation

**WELL NO:**

Utah 4-130

**LEASE NO:**

State ML - 46732

**API No:**

43-007-30310

**LEASE TYPE:**

State

Fee

**PROPOSED LOCATION**

$\frac{1}{4}/\frac{1}{4}$ :

SW SE

**SECTION:**

4

**TOWNSHIP:**

15 S

**RANGE:**

10 E

**COUNTY:**

Carbon

**FIELD:**

Undesignated (002)

**SURFACE:**

860 FSL 2150 FEL

**BOTTOM HOLE:**

Same as the surface location

**GPS COORDINATES:**

\_\_\_\_\_ E \_\_\_\_\_ N

**SURFACE OWNER:**

State of Utah

**SURFACE AGREEMENT:**

Yes  No

**CONFIDENTIAL:**

Yes  No

**LOCATING AND SITING:**

UAC R649-2-3. Unit

UAC R649-3-2. General

UAC R649-3-3. Exception

UCA 40-6-6. Drilling Unit -- Cause No.

**DRILLING PROGRAM:**

The following information is included in the Application for Permit to Drill submitted.

1. Surface Formation and Estimated Tops/Geologic Markers
2. Estimated Depths and Names of Anticipated Water, Oil, Gas or other Mineral Bearing Formations  
  
(All fresh water sands encountered during drilling shall be recorded and reported to the Division on Form 7.)
3. Well Control Equipment & Testing Procedures
4. Proposed Casing and Cementing Program
5. Mud Program, Circulating Medium, and Monitoring equipment
6. Coring, Testing, and Logging Program
7. Expected Bottom Hole Pressures and any anticipated Abnormal Pressures, Temperatures or Potential Hazards such as hydrogen sulfide, expectations and contingency plans for mitigating identified hazards
8. Any other information relative to the proposed operation.



stake

4-130 location View to south

4/29/96 Sect. 4, T. 15 S., R. 10 E.



stake



4-130 well Sect. 4, T. 155., R. 10E.  
4/29/96 View to northeast



stake

Sect. 4, T. 15 S., R. 10 E.

4-130 location

4/29/96

View to northwest



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 13, 1996

River Gas Corporation  
511 Energy Center Blvd.  
Northport, Alabama 35476

Re: Utah 04-130 Well, 860' FSL, 2150' FEL, SW SE, Sec. 4,  
T. 15 S., R. 10 E., Carbon County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-007-30310.

Sincerely,

A handwritten signature in black ink, appearing to read "R. G. Firth".

R. G. Firth  
Associate Director

lwp

Enclosures

cc: Carbon County Assessor  
Bureau of Land Management, Moab District Office

WAPD



Operator:                                 River Gas Corporation                                  
Well Name & Number:                                 Utah 04-130                                  
API Number:                                 43-007-30310                                  
Lease:                                 ML-46732                                  
Location:       SW SE       Sec.       4       T.       15 S.       R.       10 E.      

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5340.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Frank Matthews or Mike Hebertson at (801)538-5340.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis dated May 9, 1996 (copy attached).

**STATE OF UTAH, DIV OF OIL, GAS & MINERALS**

<b>Operator: RIVER GAS CORPORATION</b>	<b>Well Name: UTAH 04-130</b>
<b>Project ID: 43-007-30310</b>	<b>Location: SEC. 04 - T158 - R10E</b>

Design Parameters:

Mud weight ( 9.63 ppg) : 0.500 psi/ft  
 Shut in surface pressure : 1382 psi  
 Internal gradient (burst) : 0.036 psi/ft  
 Annular gradient (burst) : 0.000 psi/ft  
 Tensile load is determined using air weight  
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125  
 Burst : 1.00  
 8 Round : 1.80 (J)  
 Buttress : 1.60 (J)  
 Other : 1.50 (J)  
 Body Yield : 1.50 (B)

Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost		
1	1,434	5.500	17.00	K-55	ST&C	1,434	4.767		
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension Load (kips)	Strgth (kips)	S.F.
1	717	4910	6.848	1434	5320	3.71	24.38	252	10.34 J

Prepared by : MATTHEWS, Salt Lake City, Utah  
 Date : 05-10-1996  
 Remarks :

Minimum segment length for the 1,434 foot well is 100 feet.  
 SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 84°F (Surface 74°F , BHT 94°F & temp. gradient 1.400°/100 ft.)  
 String type: Production - Frac  
 The frac gradient of 1.000 psi/ft results in an injection pressure of 1,434 psi.  
 The mud gradient and bottom hole pressures (for burst) are 0.500 psi/ft and 1,434 psi, respectively.

**NOTE:** The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - collapse (with evacuated casing), 1.0 - (uniaxial) burst, 1.8 - API 8rd tension, 1.6 - buttress tension, 1.5 - body yield tension, and 1.6 - EUE 8rd tension. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.  
 Costs for this design are based on a 1987 pricing model. (Version 1.07)

6/18/97



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

Michael O. Leavitt  
Governor  
Ted Stewart  
Executive Director  
James W. Carter  
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1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

June 18, 1997

DOGIM  
'LA'  
DATE

River Gas Corporation  
511 Energy Center Blvd.  
Northport, Alabama 35476

Re: Utah 4-130 Well, Sec. 4, T. 15S, R. 10E, Carbon County, Utah,  
API No. 43-007-30310

Gentlemen:

Due to excessive time delay in commencing drilling operations, approval to drill the subject well is hereby rescinded, effective immediately.

Please note that 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

cc: J.R. Baza  
K.M. Hebertson  
Well File

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
**DRILLING INSPECTION FORM**

Operator: River Gas Corporation Company Rep: none

Well Name: Utah 4-130 API Number: 4300730310

Qtr/Qtr: SWSE Section: 4 Township: 15S Range: 10E

Contractor: - Rig Number: -

Inspector: Chris Kierst Time: ? Date: 4/27/98

Spud Date: Dry: - Rotary: - Projected T.D.: ?

Operations At Time Of Visit: Location prepped for drilling-deadmen in place, small pit dug.

Depth at time of visit: 0' Survey: -

Well Sign: Yes Circulating Method: - Lbs/Gal BOPE: -

Blooi Line: No Flare Pit: ? H2S Potential: low

ENVIRONMENTAL:

Reserve Pit: ? Fenced: No Lined: No

BOPE Test recorded in the Rig Daily Tour Book: N.A.

REMARKS:

Has the APD for this well timed out?