

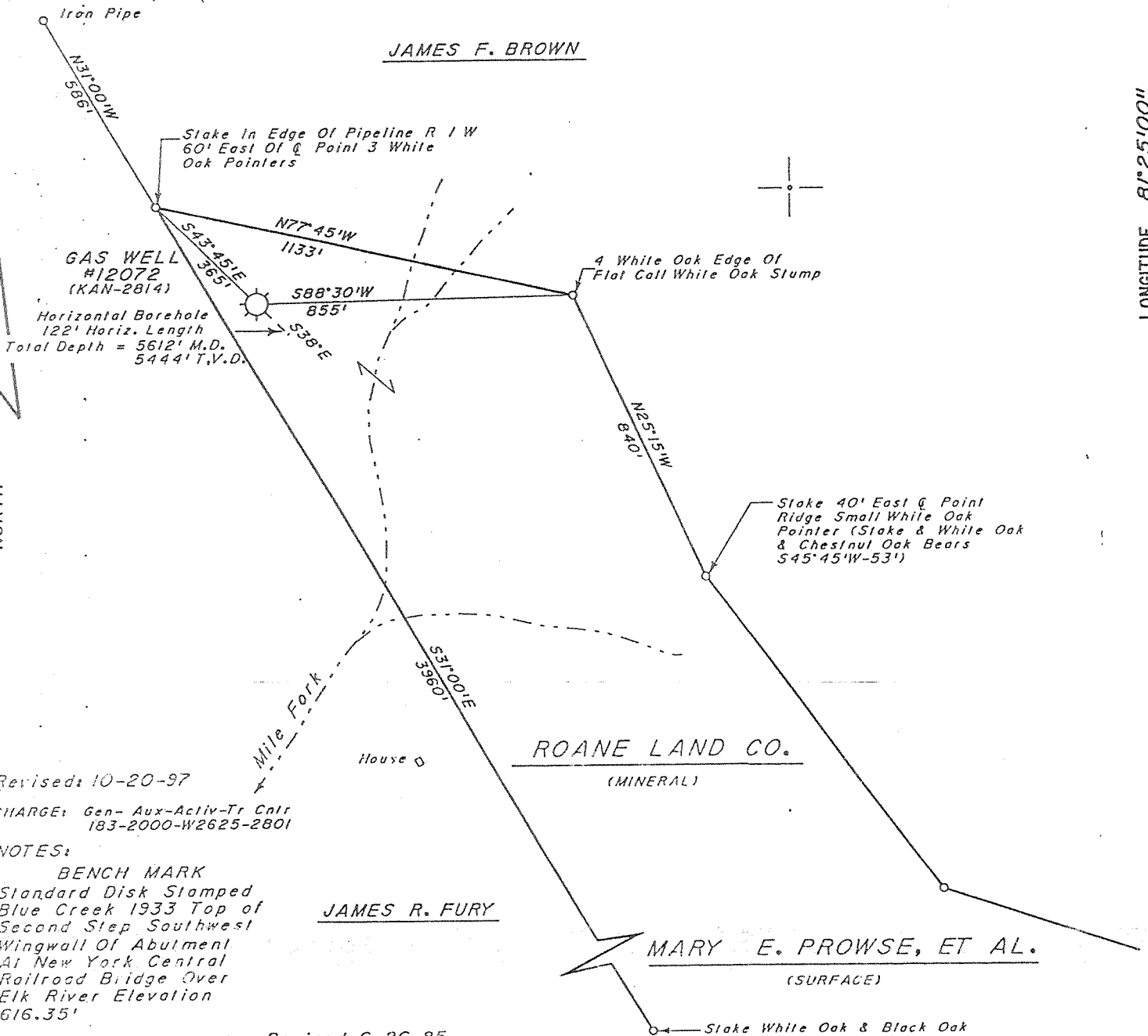
LATITUDE 38°27'30"

4700'

LONGITUDE 81°25'19.00"

4200'

JAMES F. BROWN



GAS WELL #12072 (KAN-2814)

Horizontal Borehole 122' Horiz. Length Total Depth = 5612' M.D. 5444' T.V.D.

ROANE LAND CO. (MINERAL)

JAMES R. FURY

MARY E. PROWSE, ET AL. (SURFACE)

Revised: 10-20-97

CHARGE: Gen-Aux-Activ-Tr Cntr 183-2000-W2625-2801

NOTES:

BENCH MARK Standard Disk Stamped Blue Creek 1933 Top of Second Step Southwest Wingwall of Abutment At New York Central Railroad Bridge Over Elk River Elevation 616.35'

Farm map # 48 SQ 72-65 Revised 6-26-95

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS (7 1/2')

FILE NO. 72-65 DRAWING NO. SCALE 1" = 400' MINIMUM DEGREE OF ACCURACY 1/200 PROVEN SOURCE OF ELEVATION "BM" See Note

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY. (SIGNED) [Signature]

R.P.E. 9936 L.L.S. 798



DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL & GAS #10 McJUNKIN ROAD NITRO, WEST VIRGINIA 25143-2506



DATE May 2, 1994 OPERATOR'S WELL NO. 12072 API WELL NO.

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL STATE 47 COUNTY 039 PERMIT 02814-P LOCATION: ELEVATION 1027.60' WATER SHED Mile Fork DISTRICT Elk COUNTY Kanawha QUADRANGLE Blue Creek COORDINATES LAT: 38°26'49" LONG: 81°25'59" SURFACE OWNER Mary E. Prowse, et al. ACREAGE 71.70 OIL & GAS ROYALTY OWNER Roane Land Co. LEASE ACREAGE COAL OWNER Roane Land Co. LEASE NO. 32595 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Storage Recondition PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION Oriskany ESTIMATED DEPTH 5611' WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT RICHARD L. COTY ADDRESS PO Box 1273, Charleston, WV 25325-1273 ADDRESS PO Box 1273, Charleston, WV 25325-1273

KANAWHA COUNTY NAME 2814-P PERMIT

JUN 01 1999

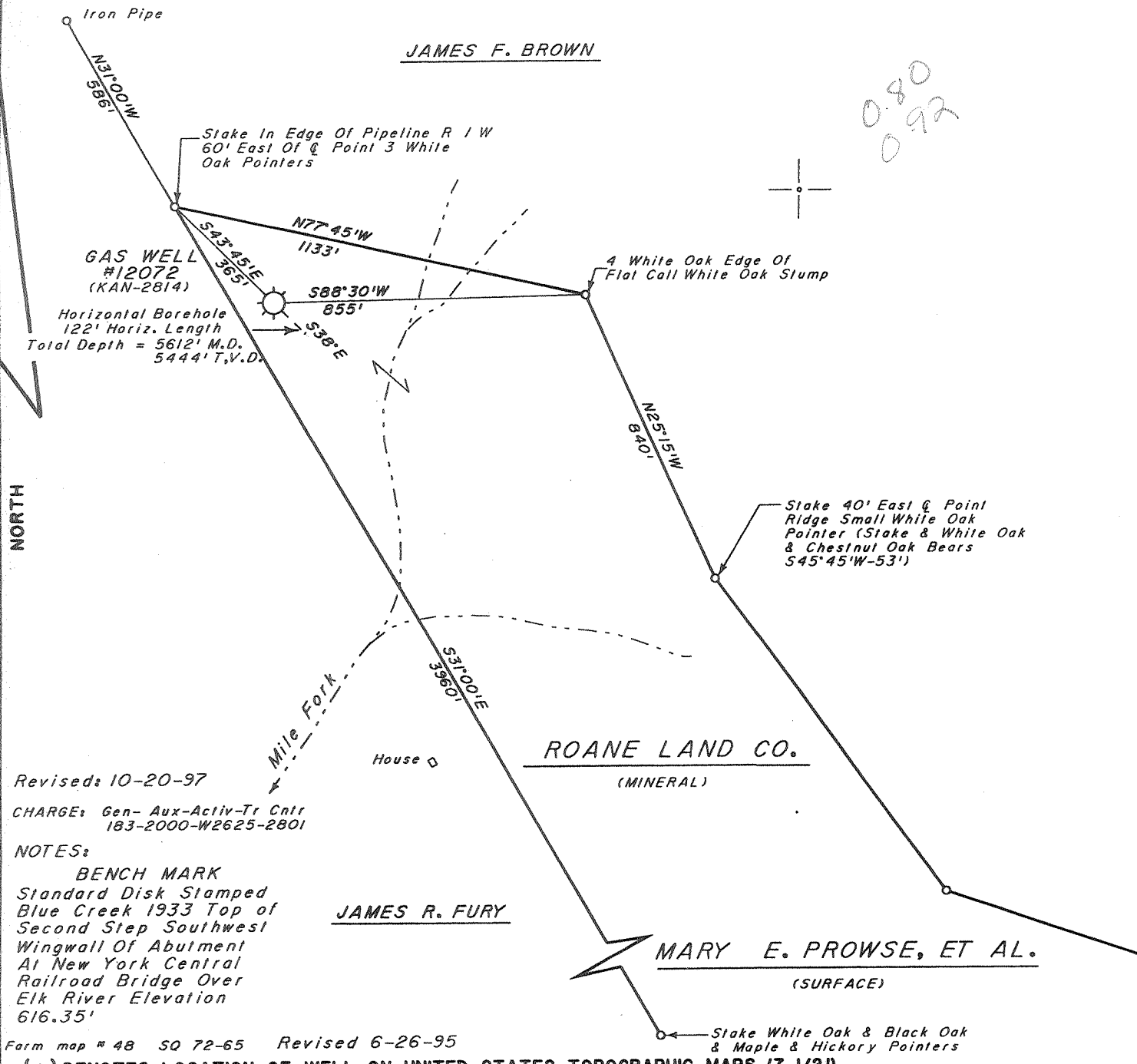
LATITUDE 38°27'30"

LONGITUDE 81°52'18"

4200'

JAMES F. BROWN

0.80
0.92



Revised: 10-20-97

CHARGE: Gen-Aux-Activ-Tr Cntr 183-2000-W2625-2801

NOTES:
 BENCH MARK
 Standard Disk Stamped
 Blue Creek 1933 Top of
 Second Step Southwest
 Wingwall Of Abutment
 At New York Central
 Railroad Bridge Over
 Elk River Elevation
 616.35'

Farm map # 48 SO 72-65 Revised 6-26-95

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS (7 1/2')

FILE NO. 72-65
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION "BM" See Note Above

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.
 (SIGNED) [Signature]
 R.P.E. 9936 L.L.S. 798

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE May 2, 1994
 OPERATOR'S WELL NO. 12072
 API WELL NO. _____

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE X DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1027.60' WATER SHED Mile Fork
 DISTRICT Elk COUNTY Kanawha
 QUADRANGLE Blue Creek COORDINATES LAT: 38°26'49" LONG: 81°25'59"
 SURFACE OWNER Mary E. Prowse, et al. ACREAGE 71.70
 OIL & GAS ROYALTY OWNER Roane Land Co. LEASE ACREAGE _____
 COAL OWNER Roane Land Co. LEASE NO. 32595
 PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
 STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW
 FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Storage Recondition

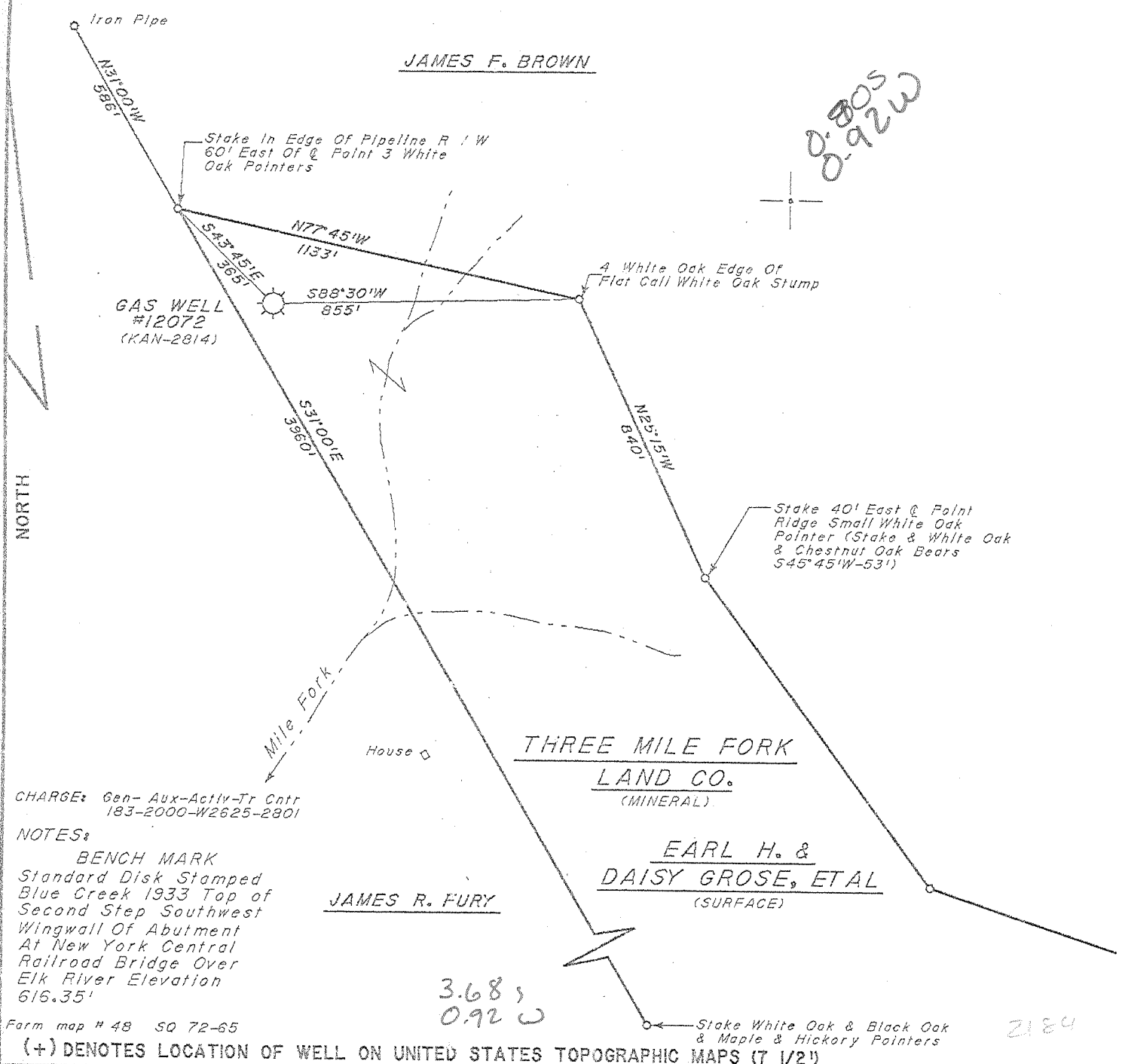
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Oriskany ESTIMATED DEPTH 5611'
 WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT RICHARD L COTY
 ADDRESS PO Box 1273, Charleston, WV 25325-1273 ADDRESS PO Box 1273, Charleston, WV 25325-1273

KANAWHA COUNTY NAME
 2814 PERMIT

FEB 20 1998

4700'
LATITUDE 38°27'30"

LONGITUDE 81°25'18"



CHARGE: Gen-Aux-Activ-Tr Cntr
183-2000-W2625-2801

NOTES:
BENCH MARK
Standard Disk Stamped
Blue Creek 1933 Top of
Second Step Southwest
Wingwall Of Abutment
At New York Central
Railroad Bridge Over
Elk River Elevation
616.35'

Form map # 48 SO 72-65

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS (7 1/2")

FILE NO. 72-65
DRAWING NO. _____
SCALE 1" = 400'
MINIMUM DEGREE OF
ACCURACY 1/200
PROVEN SOURCE OF
ELEVATION "BM" See Note
Above

I THE UNDERSIGNED, HEREBY CERTIFY THAT
THIS PLAT IS CORRECT TO THE BEST OF MY
KNOWLEDGE AND BELIEF AND SHOWS ALL THE
INFORMATION REQUIRED BY LAW AND THE REGU-
LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
MENT OF ENERGY.
(SIGNED) [Signature]
R.P.E. 9276 L.L.S. 798

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

DATE May 2, 1994
OPERATOR'S WELL NO. 12072
API WELL NO. _____

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS,") PRODUCTION _____ STORAGE X DEEP _____ SHALLOW _____

LOCATION: ELEVATION 1027.60' WATER SHED Mile Fork
DISTRICT Elk COUNTY Kanawha
QUADRANGLE Blue Creek Clendenin NW COORDINATES LAT: 38°26'49" LONG: 81°25'59"

SURFACE OWNER Earl H. & Daisy Grose etal ACREAGE 71.70
OIL & GAS ROYALTY OWNER Three Mile Fork Land Co. LEASE ACREAGE _____
COAL OWNER _____ LEASE NO. 32595

PROPOSED WORK: DRILL _____ CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR
STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW
FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Storage Recondition

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____

TARGET FORMATION _____ ESTIMATED DEPTH _____

WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT ROBERT C WEIDNER
ADDRESS PO Box 1273, Charleston, WV ADDRESS PO Box 1273, Charleston, WV
25325-1273 25325-1273

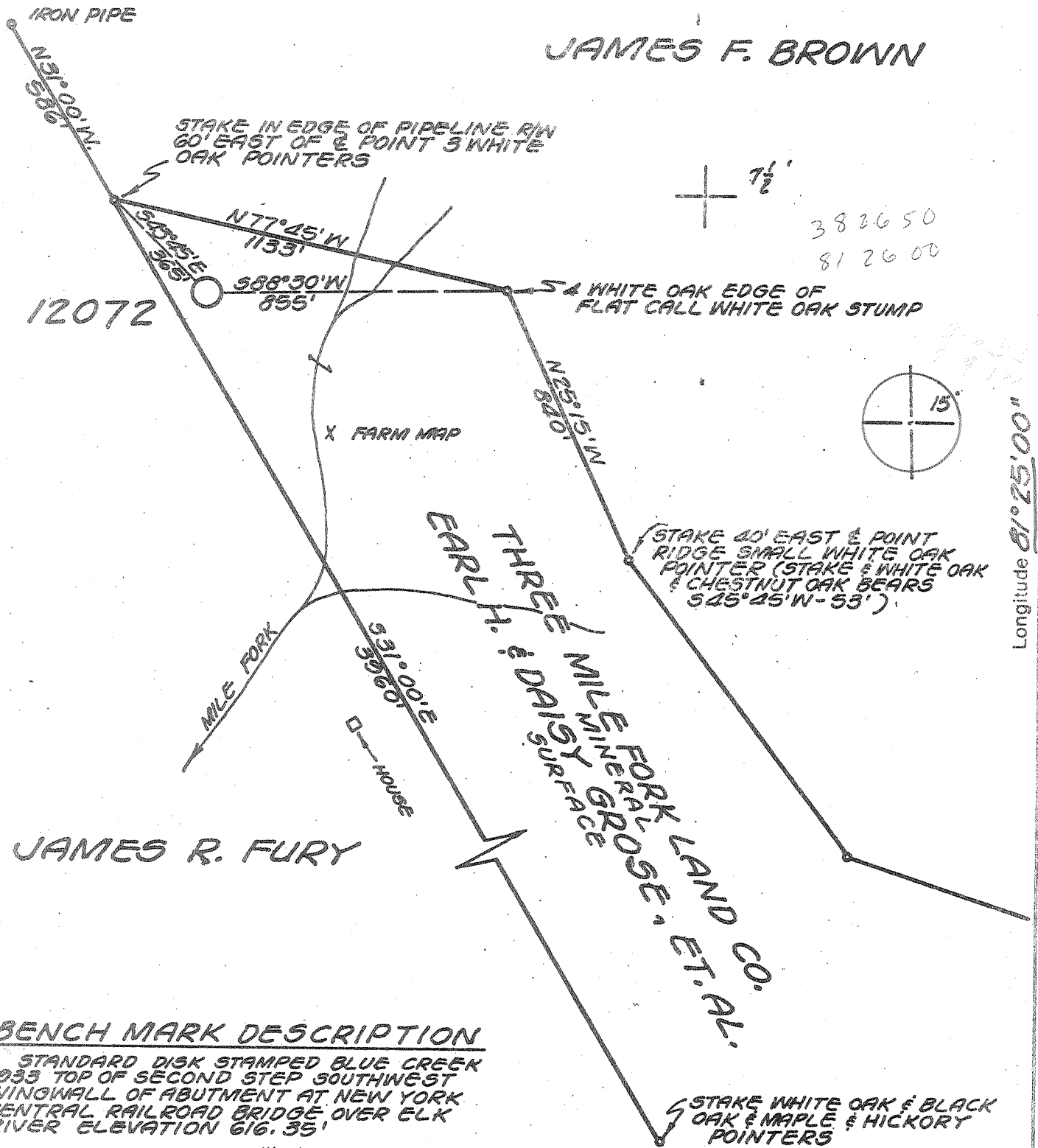
KANAWHA
COUNTY NAME
2814
PERMIT

SEP 17 1994

DEEP WELL

Latitude $38^{\circ}27'30''$
(15') $38^{\circ}30'$

JAMES F. BROWN



JAMES R. FURY

BENCH MARK DESCRIPTION

STANDARD DISK STAMPED BLUE CREEK 1933 TOP OF SECOND STEP SOUTHWEST WINGWALL OF ABUTMENT AT NEW YORK CENTRAL RAILROAD BRIDGE OVER ELK RIVER ELEVATION 616.35'

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by the rules and regulations of the oil and gas section of the mining laws of WEST VIRGINIA. Minimum degree of accuracy is one part in 200

- New Location
- Storage
- Drill Deeper
- Abandonment
- Re-Drill/Fracture

ENGR. REG. NO 2330
BOX 1273 CHARLESTON, W.VA.

Signed *[Signature]*

Company COLUMBIA GAS TRANS. CORP.
 Address BOX 1273 CHARLESTON, W.VA.
 Farm THREE MILE FORK LAND, CO.
 Lease EARL H. & DAISY GRASS ET AL. Acres 71.70
 Well Farm No. _____ Ser. No. 12072
 Elevation - Spirit Level 1027.60' NW
 Quadrangle BLUE CREEK, CLENDENIN 15'
 Township or District ELK
 County KANAWHA
 Sec., Lot, Qr. _____ T _____ R _____
 Coordinates LONG. 81°25'59" LAT. 38°26'49"
 File No. 72-65 Dwg. No. _____
 Date 10-13-77 Scale 1" = 400'

FORM 1495 CE 4 CSD

COLUMBIA GAS SYSTEM
COLUMBIA GAS TRANSMISSION CORPORATION
WELL LOCATION MAP

STATE OF WEST VIRGINIA

(+) Denotes Values Of Well On United States Topographic Maps

KAN-2814

Scale 15' 7 1/2'

47-039 FEB 3 1978

5550 Ciskany P.O Blue Creek (217)

Deep Well

RECEIVED

FEB 9 1979

OIL & GAS DIVISION
DEPT. OF MINES



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Rotary
Spudder
Cable Tools
Storage

Oil or Gas Well Storage Gas
(KIND)

WELL RECORD

Form OG-10

Quadrangle Blue Creek
Permit No. Kan. 2814

Company Columbia Gas Transmission Corp.
Address P.O.Box 1273 Charleston, W. Va.
Farm Three Mile Fork Land Co. Acres 71.7
Location (waters) Blue Creek
Well No. 12072 Elev 1027.60
District Elk County Kanawha
The surface of tract is owned in fee by Earl H. & Daisy Grose

Address Elkview, W. Va.
Mineral rights are owned by Three Mile Fork Land Co.
Address Elkview, W. Va.

Drilling commenced 4-25-78
Drilling completed 5-7-78
Date Shot From To

With Open Flow /10ths Water in Inch
/10ths Merc. in Inch

Volume Cu. Ft.
Rock Pressure 1410 lbs. 24 hrs.

Oil bbls., 1st 24 hrs.
WELL ACIDIZED (DETAILS) 1000 gal.
MCA 15%

WELL FRACTURED (DETAILS) 824 BBLs with 30,000# 20-40 mesh sand treating at 3000# pressure.
RESULT AFTER TREATMENT (Initial open Flow or bbls.) 4.8 million

ROCK PRESSURE AFTER TREATMENT 1410 HOURS 24
Fresh Water Feet Salt Water Salt Sand Feet 1103
Producing Sand Oriskany Depth 5424'-5468'

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13 3/8"	89'	89'	Size of
9-5/8"	2203'	2203'	
8 1/4			Depth set
7"	5413'	5413'	
5 3/16			Perf. top
4 1/2			Perf. bottom
3			Perf. top
2 3/8"	5401'	5401'	Perf. bottom
Liners Used			

Attach copy of cementing record.
CASING CEMENTED 13-3/8" SIZE 89' No. Ft. 4-26-78 Date
Amount of cement used (bags) 150 sacks
Name of Service Co. Halliburton
COAL WAS ENCOUNTERED AT FEET INCHES
FEET INCHES FEET INCHES
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sand			0	175			
Shale&Sand			175	940			
Salt Sand			940	1515	Water	1103'	
Sand&Shale			1515	1710			
Lime			1710	1915			
Shale&Injun			1915	2015			
Weir			2015	2055			
Shale			2055	2141			
Weir			2141	2205			
Shale			2205	5307			
Lime			5307	5424			
Oriskany			5424	5468			

DRILL TO on log 5530

FEB 20 1979



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

JAN 27 1978

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE January 19, 1978
Company Columbia Gas Transmission Corporation
Address P.O. Box 1273, Charleston, W. Va. 25325
Farm Three Mile Fork Land Co Acres 71.70
Location (waters) Mile Fork
Well No. 12072 Elevation 1027.60'
District Elk County Kanawha
Quadrangle Blue Creek

Surface Owner Earl H. & Daisy Grose Et. Al.
Address Elkview, West Virginia
Mineral Owner Three Mile Fork Land Company
Address Elkview, West Virginia
Coal Owner Same As Above
Address _____
Coal Operator Not Operated
Address _____

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 5-31-78.

INSPECTOR
TO BE NOTIFIED Mr. Martin Nichols
ADDRESS P. O. Box 554, Clendenin, W. Va.
PHONE 548-6993

[Signature]
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated October 18 1977 by Earl H. Grose made to Columbia Gas Trans. Corp. and recorded on the _____ day of _____ 1977, in Kanawha County, Book 136 Page 123
 NEW WELL _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE
_____ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

Very truly yours,
(Sign Name) [Signature]
Director Well Operator
Exploration and Development
P. O. Box 1273
Street
Charleston,
City or Town
West Virginia 25325
State

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address
of
Well Operator

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BUCKET BOARD

KAN-2814

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

47-039

Signed by [Signature]
Director, Exploration and Development

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME _____ NAME Larry Friend
 ADDRESS _____ ADDRESS P. O. Box 610, Clendenin, W. Va.
 TELEPHONE _____ TELEPHONE (304) 965-3317
 ESTIMATED DEPTH OF COMPLETED WELL: 5550 ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 TYPE OF WELL: OIL _____ GAS _____ COMB. _____ STORAGE X DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 1 1/2	30'		To Surface
13 - 1 1/2 3/8"	200'		To Surface
9 - 5/8	2250'		To Surface
8 - 5/8			
7	5450'		
5 1/2			
4 1/2			
3			Perf. Top
2 - 3/8	5470'		Perf. Bottom
Lines			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS _____
 IS COAL BEING MINED IN THE AREA? No BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title

RECEIVED
WV Division of
Environmental Protection

039-2814-F
Issued 9/12/94

FORM WW-2B AUG 25 1994

Page of

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
Permitting
Office of Oil & Gas
WELL WORK PERMIT APPLICATION

Expires 9/12/96

19666

- 1) Well Operator: COLUMBIA GAS TRANSMISSION CORP. 10450 (4) 258
- 2) Operator's Well Number: COCO C #12072 3) Elevation: 1027.6
- 4) Well type: (a) Oil / or Gas X /
(b) If Gas: Production / Underground Storage X /
Deep X / Shallow /
- 5) Proposed Target Formation(s): ORISKANY SAND (5424'-5468')
- 6) Proposed Total Depth: +/- 5470' feet + N 160 DEGREES AZIMUTH. PROPOSED TARGET: 5428'-5438' WITH A
- 7) Approximate fresh water strata depths: EST. +/- 175' TO 940' (WATER @190')
- 8) Approximate salt water depths: EST. +/- 940' - 1515' (WATER @1103')
- 9) Approximate coal seam depths: EST. 70' (120") 605' (120") 660' (60")
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
PLUG BACK THE EXISTING VERTICAL WELL TO +/- 5350' AND
- 11) Proposed Well Work: SIDETRACK OUT OF THE 7" CSG. & DRILL A SHORT RADIUS HORIZONTAL HOLE W/A 6" DIAMETER THROUGH THE PROPOSED TARGET BETWEEN 5428'-5438' W/A LENGTH OF
- 12) UP TO +/- 800' (IF POSSIBLE). WILL CONDUCT WELL TEST & STIMULATE AS NECESSARY.

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water	13-3/8"	H-40	#48	89'	89'	150 SKS. TO SURFACE
Coal						
Intermediate	9-5/8"	H-40	#32	2203'	2203'	750 SKS. TO SURFACE
Production	7"	N-80	#23	5413'	5413'	150 SKS. TO +/- 4500'
Tubing						
Liners						

CURRENTLY COMPLETED AS AN OPEN HOLE COMPLETION WITH A T.D. OF 5530'.

PACKERS : Kind THE HORIZONTAL WELL DRILLED OUT OF THE 7" CASING WILL BE LEFT AS AN OPEN HOLE COMPLETION.
Sizes _____
Depths set _____

00403869
78

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond _____ Agent
(Type)

Coco # 12072 Kanawha Co WV

Lease # 32595

Permit # KAN 2814

RECEIVED
WV Division of
Environmental Protection

AUG 25 1994

Permitting
Office of Oil & Gas

13 3/8" 48 # H-40 89'
cemented w/ 150 sk neat

9 5/8" 32 # H-40 2203'
cemented w/ 600 sk pot
150 sk neat

Marcellus Shale

5307' Top of Onondaga Lime

7" float collar 5370'

Onondaga Lime
5307'-5424'

7" 23 # N 80
cemented w/ 150 sk
Neat Cement

5413'

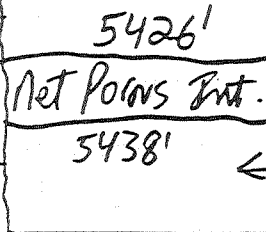
Drift 6.241"
Burst 6,340 psi
collapse 3,830 psi

5424'

Oriskany

5468'

TD 5530'



9 7/8" x 7" x 2 3/5" casing head

AOK 1978

4.8 m mcf/d @ 1410 psi

φ 1978

Rework 1984

Frac 6/21/78

824 bbl water frac

30,000 # 20/40 sand

1000 gal. 15% mca

Break 1100 #

Treating 3003 #

ISIP 2700 #

T.O.C.
± 4500'

Marcellus shale

5307' Top of Onondaga lime

Proposed Horizontal

Target

5428' - 5438' G.L.

State of West Virginia
 Division of Environmental Protection
 Section of Oil and Gas

JUN 22 1995

Permitting
 Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: PROWSE, MARY E. ETAL. Operator Well No.: COCO C #12072

LOCATION: Elevation: 1,027.60 Quadrangle: CHAPMANVILLE

District: ELK County: KANAWHA
 Latitude: 4200 Feet South of 38 Deg. 27Min. 30 Sec.
 Longitude 4700 Feet West of 81 Deg. 25 Min. 0 Sec.

NOTE: NO NEW CASING WAS USED ON HORIZONTAL

Company: COLUMBIA GAS TRANSMISSION
 P.O. BOX 1273
 CHARLESTON, WV 25325-1273

Agent: RICHARD L. COTY

Inspector: CARLOS HIVELEY
 Permit Issued: 09/12/94
 Well work Commenced: 10/9/94
 Well work Completed: 11/14/94

Verbal Plugging
 Permission granted on: _____
 Rotary Cable _____ Rig
 Total Depth (feet) _____
 Fresh water depths (ft) +/- 175' TO
 940' (WATER @190')
 Salt water depths (ft) +/- 940' TO
 1515' (WATER @1103')

Is coal being mined in area (Y/N)? N
 Coal Depths (ft): 70', 605', 660'

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
13-3/8" H-40 #48	NONE	89'	150 SKS.
9-5/8" H-40 #32	NONE	2203'	750 SKS.
7" N-80 #23	NONE	5413'	150 SKS. TO 4500'
6" OPEN HOLE	HORIZONTAL OPEN HOLE	LEFT AS COMPLETION	NONE

NOTE: THE HORIZONTAL WELL IS CURRENTLY

NOT ABLE TO FLOW. WELL TESTS INDICATE THE WELLBORE MAY BE ACROSS A
 OPEN FLOW DATA STRUCTURAL/STRATIGRAPHIC BARRIER.

Producing formation ORISKANY Pay zone depth (ft) 5428'-38'
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 (STORAGE ZONE) Final open flow _____ MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow _____ MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE. SEE ATTACHMENT.

For: COLUMBIA GAS TRANSMISSION CORP.

By: R. L. COTY
 Date: 5/18/95

R L Coty

JUN 23 1995

WR-35

12-Feb-98

API # ~~47~~ 39-02814 F
Reviewed

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

RECEIVED
Office of Oil & Gas
Office of Chief
MAY 13 1999
WV Division of
Environmental Protection

Farm name: PROWSE, MARY E.

Operator Well No.: 12072

LOCATION: Elevation: 1,027.60 Quadrangle: BLUE CREEK

District: ELK County: KANAWHA
Latitude: 4200 Feet South of 38 Deg. 27Min. 30 Sec.
Longitude 4700 Feet West of 81 Deg. 25 Min. 0 Sec.

Company: COLUMBIA GAS TRANSMISSION
P. O. BOX 1273
CHARLESTON, WV 25325-1273

Agent: RICHARD L. COTY

Inspector: CARLOS HIVELY
Permit Issued: 02/16/98
Well work Commenced: 06/17/98
Well work Completed: 08/26/98
Verbal Plugging
Permission granted on: 08/10/98
Rotary Cable Rig
Total Depth (feet) 5610'
Fresh water depths (ft) N/A

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13-3/8", 48lb	89'	89'	To surface 150 sx
9-5/8", 32lb	2203'	2203'	To surface 750 sx
7", 23lb	5413'	2513'-5413'	150 sx

Salt water depths (ft)

Is coal being mined in area (Y/N)? No
Coal Depths (ft): N/A

OPEN FLOW DATA

Producing formation Oriskany Storage Pay zone depth (ft) 5424'-5611' (MD)
 Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
 Final open flow N/A MCF/d Final open flow N/A Bbl/d
 Time of open flow between initial and final tests N/A Hours
 Static rock Pressure N/A psig (surface pressure) after N/A Hours

Second producing formation _____ Pay zone depth (ft) _____
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow _____ MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

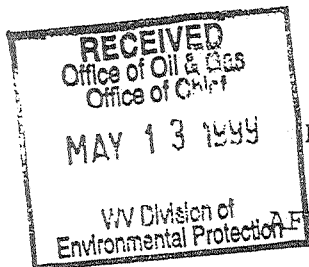
For: COLUMBIA GAS TRANSMISSION CORP.
By: Paul C. Amick, Sr. Paul C. Amick, Sr. Storage Eng
Date: May 10, 1999

JUN 22 1999

KAN 2814 F

Pulled 5458' of 1-3/4" CT, set 25 sx CMT plug 5509' - 5105', freepointed 7" @ 2600', set Baker "NC-1" CIBP at 2605', cut 7" @ 2513' and pulled, set 140 sx CMT plug 2314' - 2605', and attempted to unload well - could not dry well up. Spotted 100 sx CMT plug 2105' - 2295' and aborted reconditioning efforts. Spotted 30 sx CMT plug 1998' - 2295' and 50 sx CMT plug @ 121' to surface. Installed 7" casing monument. See WR-38 for detail.

NR-38
14-Nov-96



API # 47-039-2814

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: Mary E. Prowse Operator Well No.: 12072

LOCATION: Elevation: 1027.60 Quadrangle: Blue Creek
District: Elk County: Kanawha
Latitude: 4200 Feet South of 38 Deg. 27 Min. 30 Sec.
Longitude 4700 Feet West of 81 Deg. 25 Min. 0 Sec.

Well Type: OIL _____ GAS X

Company: Columbia Gas Transmission Corp. Coal Operator Roane Land Co.
P. O. Box 1273 or Owner P. O. Box 393
Charleston, WV 25325 Charleston, WV 25322

Agent: Richard L. Coty Coal Operator _____
or Owner _____

Permit Issued: 2-16-98
Verbal Plugging: 8-10-98

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Kanawha ss:

Doug Moss and Paul Amick being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Carlos Hively Oil and Gas Inspector representing the Director, say that said work was commenced on the 13th day of July, 1998, and that the well was plugged and filled in the following manner:

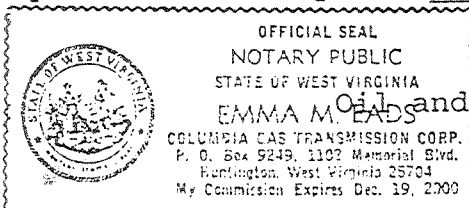
TYPE	FROM	TO	PIPE REMOVED	LEFT
Class "A" Cement	5105'	5509'	1-3/4" CT-5458'	0'
6% Gel	2606'	5105'	7" 231b- 2513'	2900'
Baker "NC-1" CIBP	2605'	2606'	9-5/8", 361b - 0'	2203'
Class "A" Cement	2413'	2605'	13-3/8", 481b - 0'	89'
6% Gel	2295'	2413'		
Class "A" Cement	1998'	2295'		
6% Gel	121'	1998'		
Class "A" Cement	Surface	121'		

Description of monument: 7" casing set 30" above GL and inscribed "T60 12072" and that the work of plugging and filling said well was completed on the 26th day of August, 1998

And further deponents saith not.

Sworn and subscribe before me this 11th day of May, 1999
My commission expires: Dec. 19, 2000

[Signature]
Notary Public



EMMA M. LADS
COLUMBIA GAS TRANSMISSION CORP.
P. O. Box 9249, 1102 Memorial Blvd.
Huntington, West Virginia 25704
My Commission Expires Dec. 19, 2000

Gas Inspector: Carlos W. Hively

JUL 12 1999

KAN 2814