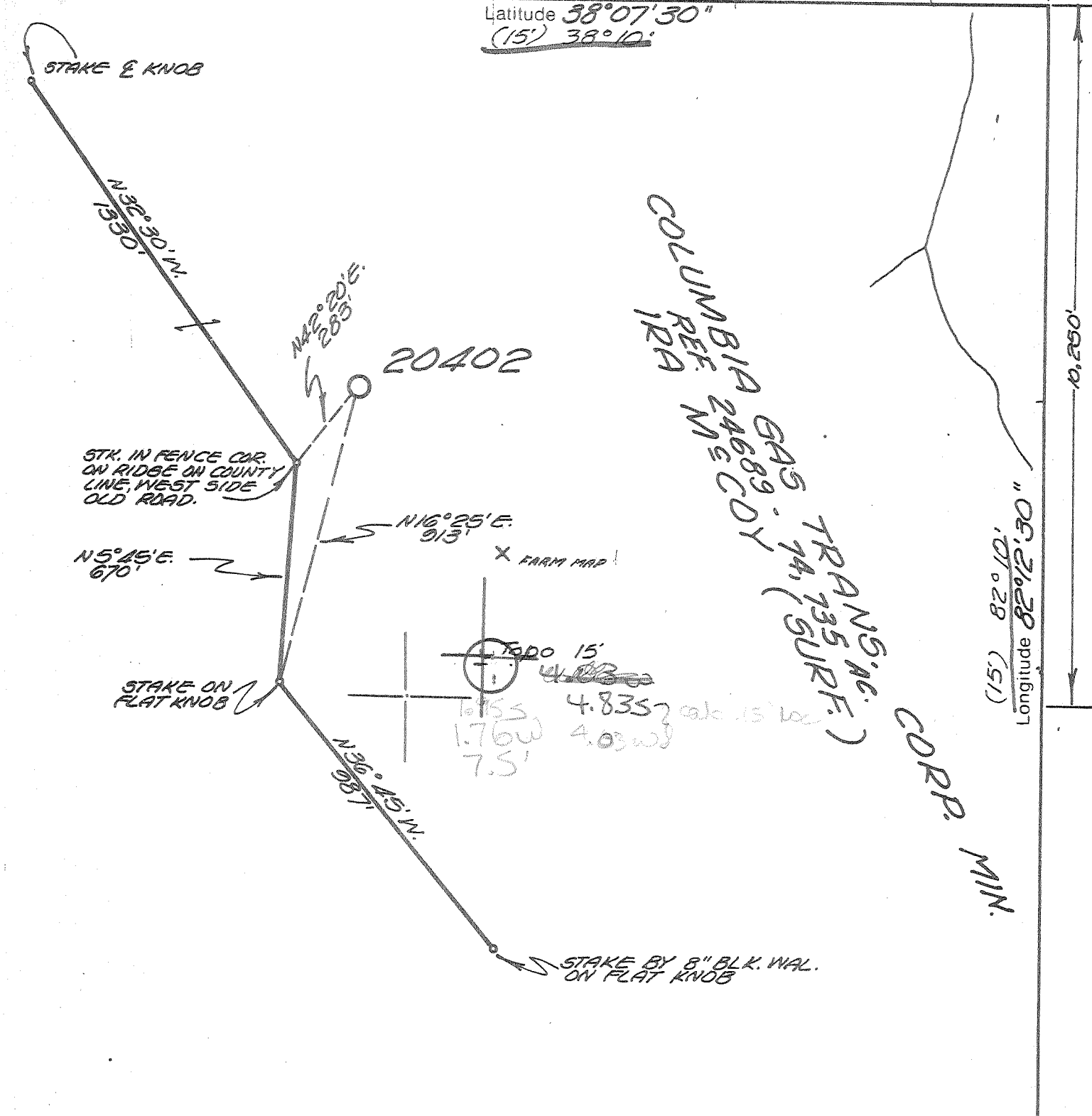


28

9250'

11, 15, 75 E

Latitude $38^{\circ}07'30''$
(15') $38^{\circ}10'$



Longitude $82^{\circ}10'30''$
(15') $82^{\circ}10'$

BENCH MARK DESCRIPTION

STANDARD DISK IN ROCK N.E. OF
W.VA. ROUTE No 37 0.65 MILE
EAST FROM JUNCTION OF COVE GAP
STAMPED U-147
ELEV. 923.719'

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

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

ENGR. REG. No 2330 Signed Adrian F. Childers
BOX 1273 CHARLESTON, W.VA

Company COLUMBIA GAS TRANS. CORP.
Address BOX 1273 CHARLESTON, W.VA.
Farm COLUMBIA GAS TRANS. CORP. (MIN.)
REF. Ira McCoy - surf.
Lease 24689 Acres 74,735
Well Farm No. _____ Ser. No. 20402
Elevation - Spirit Level 1153.41' WC
Quadrangle RANGER 11 1/2; Midkiff 15'
Township or District LAUREL HILL
County LINCOLN
Sec., Lot, Qr. _____ T _____ R _____
Coordinates LAT. 38°05'40" LONG. 82°14'26"
File No. 28-41 Dwg. No. _____
Date 8-20-75 Scale 1" = 400'

WELL LOCATION MAP
STATE OF WEST VIRGINIA

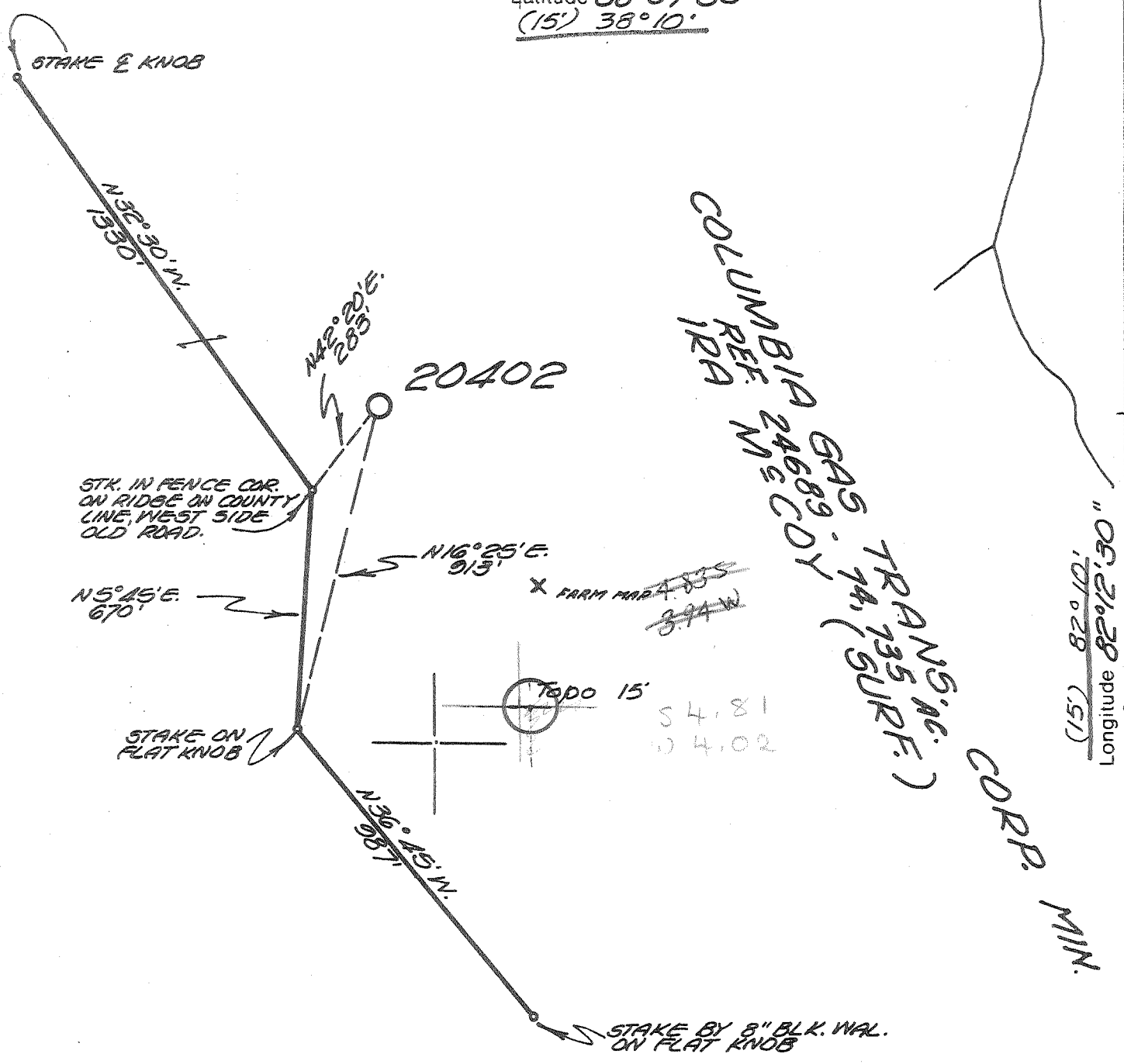
(+) Denotes Values Of Well On United States Topographic Maps

LIN - 1656
FORMERLY LIN - 1636
Scale 15' 7 1/2'

47-043 MAR 1 1976

Deep well - Corniferous -

Latitude $38^{\circ}07'30''$
(15') $38^{\circ}10'$



BENCH MARK DESCRIPTION
STANDARD DISK IN ROCK N.E. OF
W. VA. ROUTE NO 37 0.65 MILE
EAST FROM JUNCTION OF COVE GAP
STAMPED U-147
ELEV. 923.719'

- New Location
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Company COLUMBIA GAS TRANS. CORP.
Address BOX 1273 CHARLESTON, W. VA.
Farm COLUMBIA GAS TRANS CORP (MIN.)
REF Lease 24689 Acres 74.735
Well Farm No. _____ Ser. No. 20402
Elevation - Spirit Level 1153.41' WC
Quadrangle 71 RANGER; midkiff 15'
Township or District LAUREL HILL
County LINCOLN
Sec., Lot, Qr. _____ T _____ R _____
Coordinates LAT. 38°05'40" LONG. 82°14'26"
File No. 28-41 Dwg. No. _____
Date 8-20-75 Scale 1" = 400'

WELL LOCATION MAP
STATE OF WEST VIRGINIA

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

WSP: LIN - 1636

Scale 15' 7 1/2'

Now: LIN-1656

Deep Well

47-043



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Rotary
Spudder
Cable Tools
Storage

Quadrangle Ranger
Permit No. Lin. 1656-47-043

WELL RECORD

Oil or Gas Well Gas

Company Columbia Gas Transmission Corporation
Address Box 528, Hamlin, WV 25523
Farm Col. Gas Trans. Corp. Lease 24689 Acres 74,735
Location (waters) Ten Mile Creek
Well No. 20402 Elev. 1153.41
District Laurel Hill County Lincoln

The surface of tract is owned in fee by Ira McCoy
Address Wayne, WV

Mineral rights are owned by Columbia Gas Trans. Corp.
Address P.O. Box 1273
Charleston, WV 25325

Drilling commenced 03-06-76
Drilling completed 03-22-76

Date Shot From _____ To _____
With _____

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

Volume 133 Mcf _____ Cu. Ft.

Block Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.

WELL ACIDIZED _____
WELL FRACTURED Shale Foam Frac 7-31-78, 168,000 lbs. 80/100 sand, 118,000 lbs. 20/40 sand,
852 bbls. water, 8-21-78 Foam Frac Shale, 120,000 lbs. 80/100 sand, 170,000 lbs. 20/40 sand,
1040 bbls. water

RESULT AFTER TREATMENT 3/10 w/2"-5 1/2" Casing, 2/10 w/2"-2-3/8" Tubing -Casing 73 Mcf, Tubing 60 Mcf

ROCK PRESSURE AFTER TREATMENT _____
Fresh Water _____ Feet 5 1/2" 224# 2-3/8" 184# Salt Water _____ Feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer <u>Upside</u>
13 <u>3/8"</u>	<u>68</u>		<u>Down Tension Packer</u>
10 <u>9-5/8"</u>	<u>2530</u>		Size of <u>2-3/8</u>
8 1/4			
6 1/4			Depth set <u>3281</u>
5 3/16 <u>5 1/2"</u>	<u>4045</u>		
3			Perf. top <u>2816</u>
2			Perf. bottom <u>3232</u>
Liners Used			Perf. top <u>3386</u>
			Perf. bottom <u>3966</u>

CASING CEMENTED 9-5/8 SIZE 2530 No. Ft. 03-11-76 Date
5-1/2 4045 03-29-76

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
_____ FEET _____ INCHES
_____ FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Remarks
Sand			0	67		
Slate			67	175		
Sand & Slate			175	322		
Sand			322	393		
Slate			393	433		
Sand & Slate			433	994		
Salt Sand			994	1385		
Slate			1385	1472		
Salt Sand			1472	1613		
Slate			1613	1662		
Big Lime			1662	1900		
Slate			1900	1953		
Injun Sand			1953	1968		
Slate & Shells			1968	2486		
Coffee Shale			2486	2509		
Berea Sand			2509	2548		
Siltstone			2548	2595		
Shale			2595	3350		
Brown Shale			3350	3600		
Shale			3600	3977		
Corn. Lime			3977	4062	Show of Gas	

RECEIVED
JUL 14 1980
OIL & GAS DIVISION
DEPT. OF MINES

(over)

AUG 1 1980



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE October 13, 1975

Surface Owner Ira McCoy
Address Ranger, West Virginia 25557
Mineral Owner Columbia Gas Transmission Corp.
Address P.O. Box 1273, Charleston, WV 25325
Coal Owner Same as above
Address _____
Coal Operator Not Operated
Address _____

Company Columbia Gas Transmission Corporation
Address P.O. Box 1273, Charleston, WV 25325
Farm Columbia Gas Trans. Corp. Mineral Acres 74,735
Location (waters) Ten Mile Creek
Well No. 20402 Elevation 1153.41'
District Laurel Hill County Lincoln
Quadrangle Ranger

~~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 2-16-76

[Signature]
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Kenneth Butcher
PH: 736-4885 ADDRESS Balboonville
W.Va.

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 June 30 1971 by United Fuel Gas Co. made to Columbia Gas Trans. Corp. and recorded on the 7th day of July 1971 in Lincoln County, Book 182 Page 73

NEW WELL DRILL DEPPER 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.

Very truly yours, COLUMBIA GAS TRANSMISSION CORP.

(Sign Name) [Signature]
Director of Exploration & Development
Post Office Box 1273
Street
Charleston
City or Town
West Virginia 25325
State

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

West Virginia Geological and Economic Survey
Address
P. O. Box 579
Martinsburg, W. Va. 26505
Phone 304-276-4467
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.

1656
Lin-1636 PERMIT NUMBER

BLANKET BOND

47-043

[Signature]

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 Mr. E. G. Foster
 ADDRESS _____ ADDRESS P.O. Box 528, Hamlin, WV 25523
 TELEPHONE _____ TELEPHONE (304) 824-5131
 ESTIMATED DEPTH OF COMPLETED WELL: 4,000' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Shale
 TYPE OF WELL: OIL _____ GAS X COMB. _____ STORAGE _____ 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 - 16			
13 - X 3/8	90'		
9 - 5/8	2550'		
8 - 5/8			
7	4000'		
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 390 FEET 515 SALT WATER 1080 FEET
 APPROXIMATE COAL DEPTHS 485' - 60"
 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



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

FEB 24 1976
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE February 19, 1976

Surface Owner Ira McCoy

Company COLUMBIA GAS TRANSMISSION CORPORATION

Address Ranger, West Virginia 25557

Address P.O. Box 1273, Charleston, WV 25325

Mineral Owner Columbia Gas Transmission Corp.

Farm Columbia Gas Trans. Corp. Mineral Acres 74,735

Address P.O. Box 1273, Charleston, WV 25325

Location (waters) Ten Mile Creek

Coal Owner Same as above

Well No. 20402 Elevation 1153.41'

Address _____

District Laurel Hill County Lincoln

Coal Operator Not Operated

Quadrangle Ranger

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 6-24-76.

Robert L. Howard
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Kenneth Butcher
PH: 736-4885 ADDRESS Barboursville, W.Va.

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 June 30 1971 by United Fuel Gas Co. made to Columbia Gas Trans. Corp. and recorded on the 7th day of July 1971, in Lincoln County, Book 182 Page 73

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:
West Virginia Geological and Economic Survey
P. O. Box 879
Morgantown, W. Va. 26505
AC 304-296-4461

Very truly yours
(Sign Name) [Signature]
Well Operator
Director, Exploration & Development
Post Office Box 1273
Street
Charleston
City or Town
West Virginia 25325
State

*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.

(Formerly: Lin-1036)

Lin-1056 PERMIT NUMBER
47-043

BLANKET BAND

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 NAME _____ NAME Mr. E. G. Foster
 ADDRESS _____ ADDRESS P.O. Box 528, Hamlin, WV 25523
 TELEPHONE _____ TELEPHONE (304) 824-5131
 ESTIMATED DEPTH OF COMPLETED WELL: 4000' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Shale
 TYPE OF WELL: OIL _____ GAS X COMB. _____ STORAGE _____ 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 - 16			
13 - 10 3/8	90'		Cement to Surface
9 - 5/8	2550'		Cement to Surface
8 - 5/8			
7	4000'		
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 390 FEET 515 SALT WATER 1080 FEET
 APPROXIMATE COAL DEPTHS 485' - 60''
 IS COAL BEING MINED IN THE AREA? _____ BY WHOM? _____

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For Coal Company

Official Title