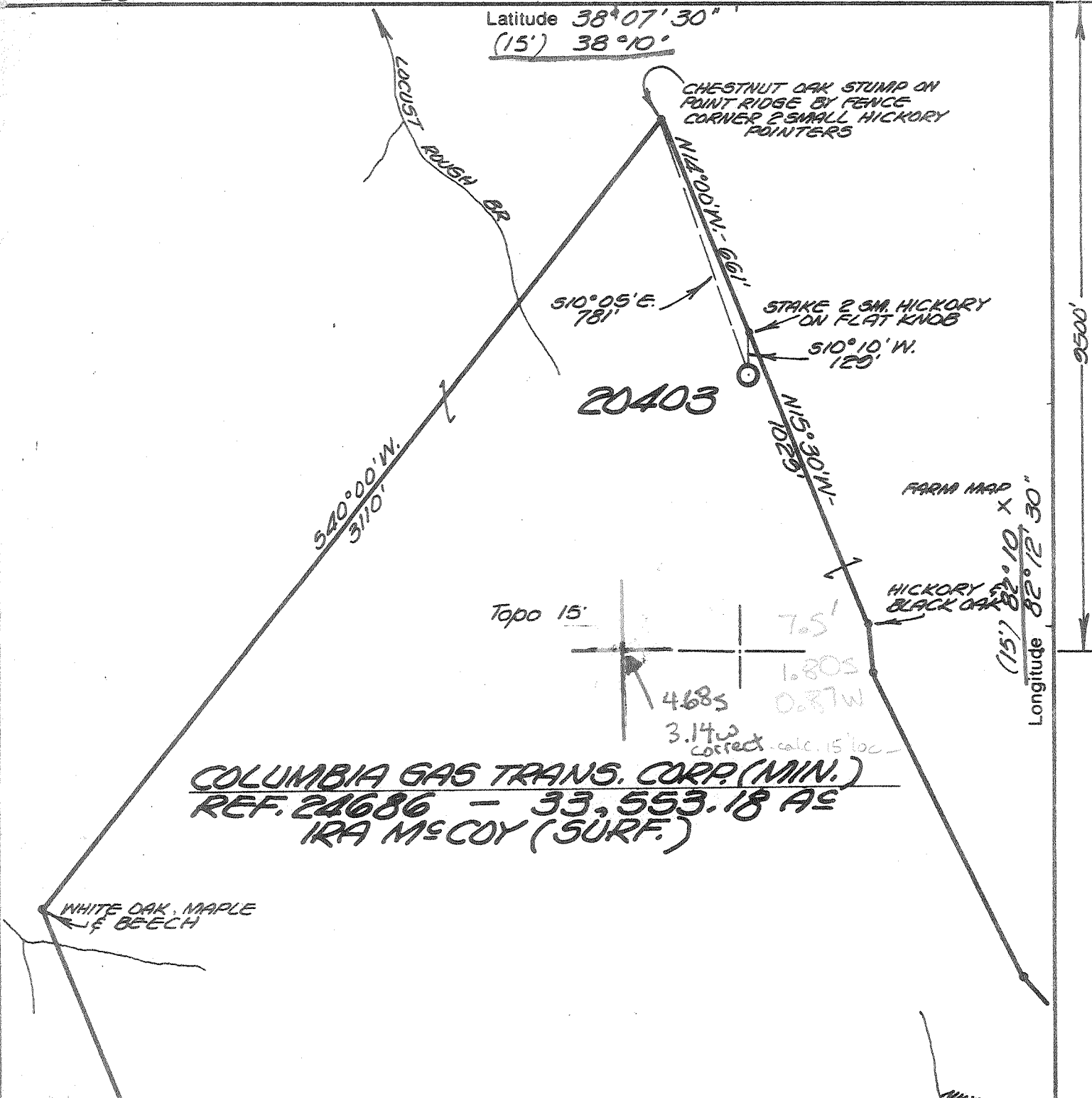


Latitude $38^{\circ}07'30''$
(15') $38^{\circ}10'$



COLUMBIA GAS TRANS. CORP. (MIN.)
REF. 24686 - 33,553.18 AC
IRA MCGOY (SURF.)

BENCH MARK DESCRIPTION

STANDARD DISK IN ROCK NORTHEAST OF WEST VIRGINIA ROUTE NO 37 0.65 MILES EAST FROM JUNCTION AT CREEK 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
BOX 1273 CHARLESTON, W. VA.

Signed *Adrian E. Chapman*

Company COLUMBIA GAS TRANS. CORP.
Address BOX 1273 CHARLESTON, W. VA.
Farm COLUMBIA GAS TRANS. CORP. (MIN.)
Lease REF. 24686 Acres 33,553.18
Well Farm No. _____ Ser. No. 20403
Elevation - Spirit Level 1100.48' WC
Quadrangle RANGER, MIDKIFFIS'
Township or District LAUREL HILL
County LINCOLN
Sec., Lot, Qr. _____ T _____ R _____
Coordinates LAT. 38°05'56" LONG. 82°13'27"
File No. 28-41 Dwg. No. _____
Date 8-22-75 Scale 1" = 400'

WELL LOCATION MAP
STATE OF WEST VIRGINIA

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

LIN - 1637

Scale 15' 7 1/2'

47-043

OCT 28 1975



RECORDED

JUL 7 1980

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD

Rotary X Oil _____
Cable _____ Gas X _____
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ ERDA - MHF
(Kind)

Quadrangle Ranger
43
Permit No. Lin-1637

Company Columbia Gas Transmission Corp.
Address P. O. Box 1273, Charleston, WV
Farm Ira McCoy Acres 33.553.18
Location (waters) Fourteen Mile Creek 1202 E
Well No. 20403 Elev. 1190.48
District Laurel Hill County Lincoln
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling Commenced 1-5-76
Drilling Completed 2-14-76
Initial open flow 14,900 cu. ft. --- bbls.
Final production 627,000 cu. ft. per day --- bbls.
Well open 6 hrs. Before test 190 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			13 3/8 - 30 sks
Cond. 13-10" 13 3/8	77.05	77.05	+100# CaCl ₂ - by hand
9 5/8	2637.63	2637.63	9 5/8 - 1st Stage 125 ft ³ RFC
8 5/8			2nd Stage, 500 s. Litepoz+100 sks Neat
7	4057.17	4057.17	
5 1/2			
4 1/2			7 - 1st Stage, 96 sks RFC
3			2nd Stage, 160 ft 3% Neat
2	4004.08	4004.08	3rd Stage, 130 ft 3% Neat
Liners Used			

Well treatment details:

See Attached Sheet

Attach copy of cementing record.

Coal was encountered at --- Feet --- Inches
Fresh water --- Feet Salt Water --- Feet
Producing Sand Devonian Shale Depth 2762' to 4031'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			0'	76' G.L.		
Slate & Sand			76'	190'		
Sand			190'	435'		
Slate & Sand			435'	580'		
Sand			580'	1015'		
Salt Sand			1015'	1434'		
Slate			1434'	1496'		
Salt Sand			1496'	1616'		
Slate			1616'	1690'		
Big Lime			1690'	1936'		
Slate & Shells			1936'	2520'		
Coffee Shale			2520'	2536'		
Berea			2536'	2607'		
Upper Gray Shale & Siltstone			2607'	2634'		*
Upper Brown Shale			2634'	2992'		*
Middle Gray Shale			2992'	3394'		* Show @ 3273'
Middle Brown Shale			3394'	3649'		* Show @ 3548', 3556', 3570'
Lower Gray Shale (White Slate)			3649'	3930'		* Show @ 3870'
Lower Brown Shale			3930'	4032'		*
(Marcellus Shale)			(4010')	(4032')		*
Corniferous Lime			4032'	4068'		*
T.D.				4068'		* L.T.D. G.L.

JUL 28 1980



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
OCT 15 1975
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 33,553.18
Location (waters) Fourteen Mile Creek
Well No. 20403 Elevation 1190.48'
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 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,
COLUMBIA GAS TRANSMISSION CORPORATION
(Sign Name) [Signature]
Director, Exploration & Development
Post Office Box 1273
Street
Charleston
City or Town
West Virginia 25325
State

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.

BLANKET BOND

Lin-1637 PERMIT NUMBER

47-043

Survey

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: 4050' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Brown 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 - 1 1/2			
13 - RR 3/8	90'		
9 - 5/8	2600'		
8 - 5/8			
7	4050'		
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 427 FEET 602 SALT WATER 1127 FEET
 APPROXIMATE COAL DEPTHS 532' - 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