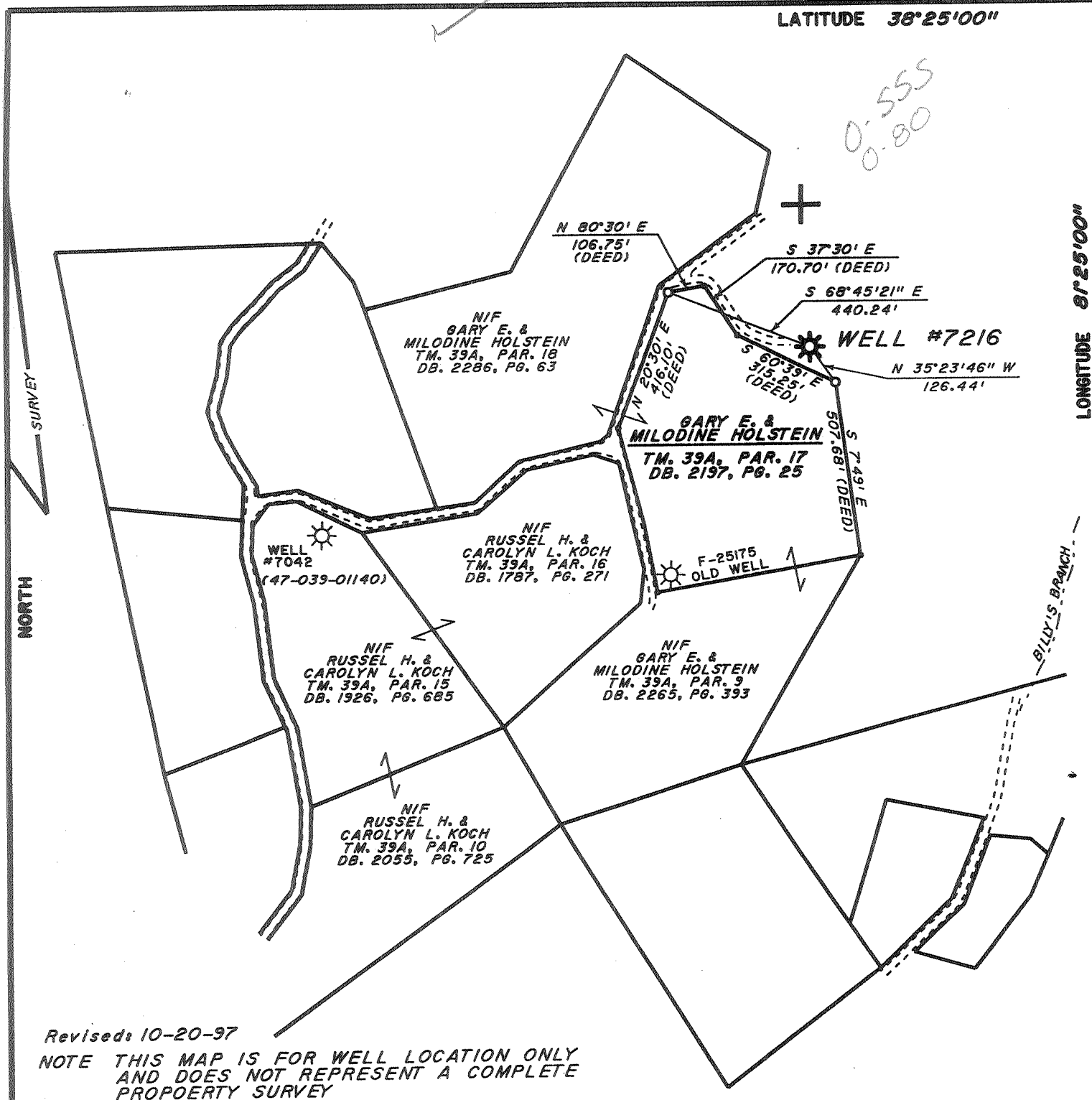


LATITUDE 38°25'00"

0.555  
0.80



Revised: 10-20-97

NOTE THIS MAP IS FOR WELL LOCATION ONLY AND DOES NOT REPRESENT A COMPLETE PROPERTY SURVEY

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. 7216  
 SCALE 1" = 400'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION \_\_\_\_\_

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) Edud Nichols  
 R.P.E. 9236 L.L.S. 798

PLACE SEAL HERE

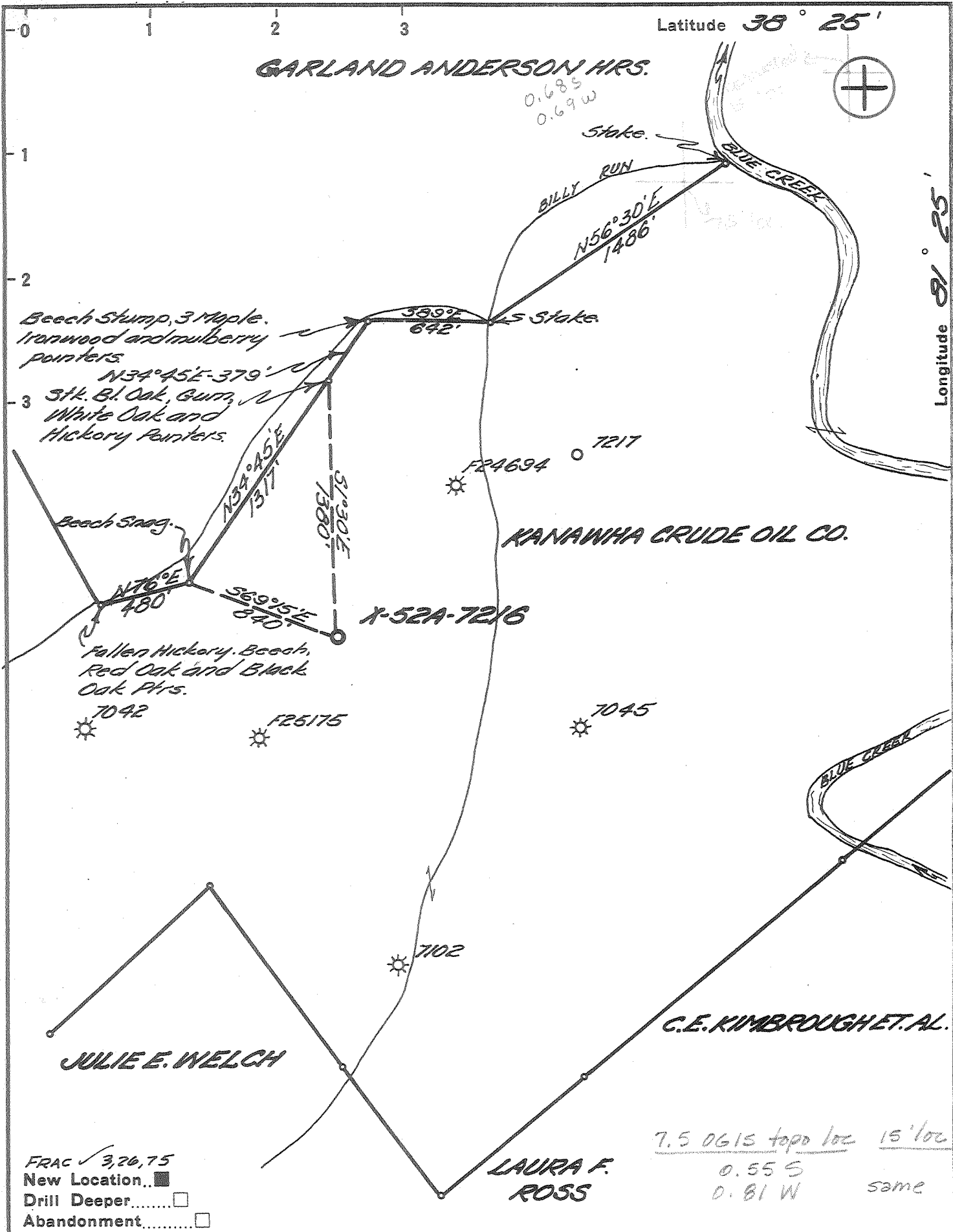
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL & GAS  
 #10 McJUNKIN ROAD  
 NITRO, WEST VIRGINIA 25143-2506



DATE JANUARY 26, 1996  
 OPERATOR'S WELL NO. 7216  
 API WELL NO. 47 039-016147  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS," ) PRODUCTION \_\_\_ STORAGE X DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 766.14' WATER SHED BILLY'S BRANCH OF BLUE CREEK  
 DISTRICT ELK COUNTY KANAWHA  
 QUADRANGLE BLUE CREEK COORDINATES LAT: 38°24'30" LONG: 81°25'54"  
 SURFACE OWNER BURKE - PARSONS - BOWLEY CORP. ACREAGE PT. OF 186.9  
 OIL & GAS ROYALTY OWNER KANAWHA CRUDE OIL LEASE ACREAGE 9/4  
 COAL OWNER ROBERT EVANS, ET AL. LEASE NO. 881  
 PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR  
 STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW  
 FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) STORAGE RECONDITION  
Well drilled in 1954 by United Fuel.  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 5260' FEB 20 1998  
 WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP. DESIGNATED AGENT RICHARD COTY  
 ADDRESS PO BOX 1273, CHARLESTON, WV ADDRESS PO BOX 1273, CHARLESTON, WV  
25325-1273 25325-1273

DEEP WELL



FRAC  3,26,75  
 New Location...   
 Drill Deeper.....   
 Abandonment.....

7.5 0615 topo loc 15' loc  
 0.55 S  
 0.81 W same

COLUMBIA GAS TRANSMISSION CORP.  
 Company UNITED FUEL GAS CO.  
 Address CHARLESTON, W.VA.  
 Farm KANAWHA CRUDE OIL CO.  
 Tract \_\_\_\_\_ Acres 9/4 Lease No. 881  
 Well (Farm) No. X-52 Serial No. 7216  
 Elevation (Spirit Level) 1103.24' (966.14)  
 Quadrangle CLENDENIN WC  
 County KANAWHA District ELK  
 Engineer Seybert A. Howell  
 Engineer's Registration No. 2529  
 File No. 72-63 Drawing No. \_\_\_\_\_  
 Date 6-30-53 Scale 1" = 660'

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

WELL LOCATION MAP  
 FILE NO. KAN-1614-FRAC

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

47 039

Deep Well APR 17 1975

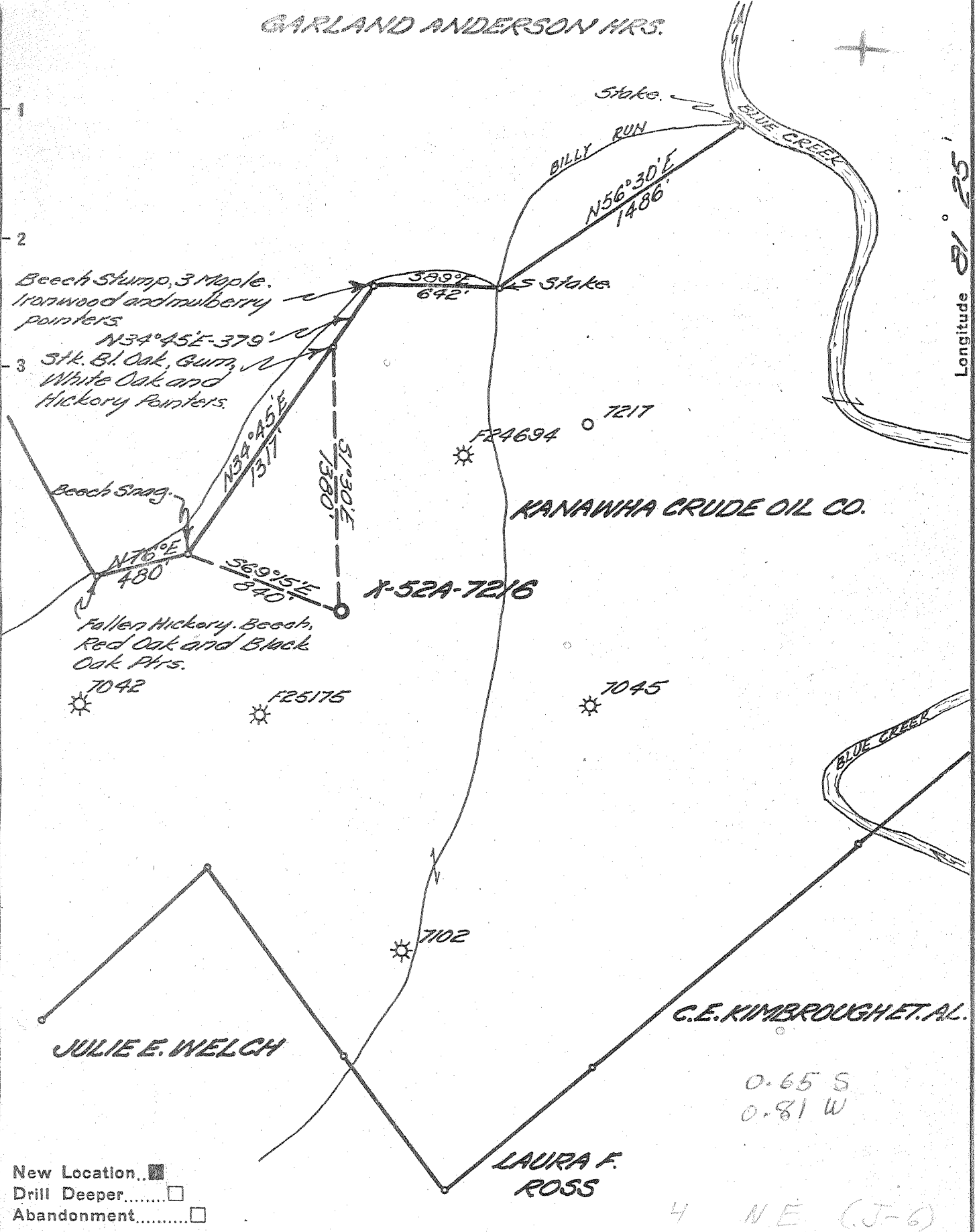
Latitude 38 25'

1 2 3

GARLAND ANDERSON MRS.



Longitude 81 25'



- New Location...
- Drill Deeper.....
- Abandonment.....

C.E. KIMBROUGH ET AL.

0.65 S  
0.81 W

4 NE (J-6)

Company UNITED FUEL GAS CO.  
 Address CHARLESTON, W. VA.  
 Farm KANAWHA CRUDE OIL CO.  
 Tract \_\_\_\_\_ Acres 9/4 Lease No. 881  
 Well (Farm) No. \_\_\_\_\_ Serial No. 7216  
 Elevation (Spirit Level) 1103.24'  
 Quadrangle CLENDENIN - WC  
 County KANAWHA District ELK  
 Engineer Seybert R. Ferrell  
 Engineer's Registration No. 2529  
 File No. 72-63 Drawing No. \_\_\_\_\_  
 Date 6-30-53 Scale 1" = 660'

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

WELL LOCATION MAP  
 FILE NO. KAN-1614

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

6-30-53

Deep Well



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 2

Quadrangle Clendenin

WELL RECORD

Permit No. KAN-1614

Oil or Gas Well Gas  
(KIND)

Company UNITED FUEL GAS COMPANY  
Address P.O. Box 1273, Charleston 25, W. Va.  
Farm Kanawha Crude Oil Co. Acres 914  
Location (waters) Billy Run  
Well No. X-52-A-7216 Elev. 1103.24'  
District Elk County Kanawha  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_

Mineral rights are owned by Kanawha Crude Oil Co. %  
Charleston National Bank Address Box 1113, Charleston 25, W. Va.  
Drilling commenced 9-12-53  
Drilling completed 2-23-54  
Date Shot Not shot From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_

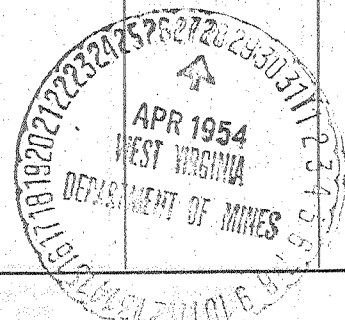
Open Flow 22 /10ths Water in \_\_\_\_\_ Inch  
7 /10ths Merc. in \_\_\_\_\_ Inch  
Volume 7,465,000 Cu. Ft.  
Rock Pressure 885 lbs. 24 hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water \_\_\_\_\_ feet  
Salt water 960 feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13	794'		
10 -3/4"	980'		Size of
8 -5/8"		2157'	
6"		5152'	Depth set
5 1/2"			
3		5277'	Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_

COAL WAS ENCOUNTERED AT 195 FEET 60 INCHES  
263 FEET 36 INCHES FEET INCHES  
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Yellow Clay			0	40			
Sand			40	100			
Black Slate			100	110			
White Slate			110	140			
Hard Lime			140	150			
Sand			150	165			
Slate			165	190			
Lime			190	195	Gas 820-825'		
Coal			195	200			
Sand			200	235	Oil 840-845'		
Slate & Shells			235	263			
Coal			263	266	Water 960'		
Hard Lime			266	275			
White Slate			275	325	Gas 1780-1785'		
Lime			325	360			
Slate & Shells			360	540	Show oil 1975'		
Lime			540	565			
Slate			565	665	Gas 5262-5276'	22/10 Merc. 7"22# 7,465 M	
Sand			665	730			
Slate			730	750			
Lime			750	770	Not shot		
Slate			770	810			
Sand			810	840			
Slate			840	875	FINAL OPEN FLOW - 7,465 M - Oriskany		
Sand Sand			875	1095	24 Hr. R.P. 885#		
Slate			1095	1100			
Sand			1100	1365			
Slate			1365	1370	Shut in 2-23-54 in 2" tubing.		
Lime			1370	1380			
Slate			1380	1390			
Red Rock			1390	1400			
Lime			1400	1405			
Red Rock			1405	1410			
Slate & Shells			1410	1500			
Little Lime			1500	1540			
Slate & Shells			1540	1565			
Big Lime			1565	1720			
Injun Sand			1720	1775			
Weir Sand			1775	1985			



Formation	Color	Hard or Soft	Top <sup>2</sup>	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate & Shells			1985	3400			
Brown Shale			3400	3445			
Lime			3445	3700			
Slate & Shells			3700	3900			
Shale			3900	4050			
Slate & Shells			4050	4665			
Brown Shale			4665	4765			
Slate			4765	4800			
Brown Shale			4800	5005			
Slate			5005	5060			
Brown Shale			5060	5112			
Corniferous			5112	5250			
Oriskany			5250	5277			
Total depth			5277'				

Date April 27, 1954

APPROVED UNITED FUEL GAS CO. Owner

By \_\_\_\_\_

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED  
MAR 26 1975

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE March 24, 1975

Surface Owner Mr. Greely Boyce, Et Al  
Address Box 8314, So. Charleston, W. Va.

Company Columbia Gas Transmission Corporation  
Address P.O. Box 1273, Charleston, W. Va. 25325

Mineral Owner Kanawha Crude Oil Company  
& Enmons, Graham, Treas.  
Address P.O. Box 47, Charleston, W. Va.

Farm Kanawha Crude Oil Co. Acres 914

Coal Owner Mr. Greely Boyce, Et Al  
Address Box 8314, So. Charleston, W. Va.

Location (waters) Billy Run of Blue Creek  
Well No. X-52-7216 Elevation 966.14

Coal Operator None  
Address \_\_\_\_\_

District Elk County Kanawha

Quadrangle Blue Creek

Under the provisions of Section 22, Chapter 24, of the W. Va. Code, the location is hereby approved for fracturing. This permit shall expire if operations have not commenced by 7-27-75

[Signature]  
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Martin Nichols  
P. O. Box 554 PH: 548-6993  
Clendenin, WV.

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 May 4 1950 by Kanawha Crude Oil Co. made to Columbia Gas Trans. Corp. and recorded on the 8th day of June 1950, in Kanawha County, Book 123 Page 196

NEW WELL DRILL DEEPER REDRILL X FRACTURE ~~OR REFRILL~~  
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

Address  
of  
Well Operator

Very truly yours,  
[Signature]  
(Sign Name) COLUMBIA GAS TRANSMISSION CORPORATION  
Director, Exploration & Development  
P. O. 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.

BLANKET BOND

YAN-1614-11rac PERMIT NUMBER

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

PROPOSED WORK ORDER TO \_\_\_\_\_ DRILL \_\_\_\_\_ DEEPEN X Fracture  
~~REPAIR/REWORK/RETEST~~  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME \_\_\_\_\_ NAME W. H. Chapman  
 ADDRESS \_\_\_\_\_ ADDRESS P.O. Box 610 Clendenin, W.Va. 25045  
 TELEPHONE \_\_\_\_\_ TELEPHONE (304) 965-3317  
 ESTIMATED DEPTH OF COMPLETED WELL: 5277 ROTARY \_\_\_\_\_ 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			
13 - 10			
9 - 5/8			
8 - 5/8		2157'	
7			
5 1/2		5152'	Surface
4 1/2			
3			Perf. Top
2 Tubing		5277'	Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS X FEET 960' SALT WATER - FEET -  
 APPROXIMATE COAL DEPTHS 195' - 200' 263' - 266'  
 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

April 27, 1984

Date

RECEIVED

MAY 2 - 1984

OIL & GAS DIVISION

DEPT. OF MINES

In Re: Complete Information requested below:

FRACTURE RECORD

Well Name and No: Kanawha Crude Oil Co. #X-52-7216 (Storage Well)

District: Elk County: Kanawha

Permit No: 039-1614-FRAC Completion Date: 4/21/75

Formation Fractured: Top 5250 Material: 100 gal. 15% acid; 27,000#, 20/40  
Bottom 5277 sand; 653 bbls. water

Rock Pressure: Before Fracture NA Test after Fracture: Oil NA  
After Fracture 1045 psig Gas 13,800 Mcf

*R. [Signature]*  
Signature

May 7, 1984  
Date

COMPANY Columbia Gas Transmission Corp.  
P. O. Box 1273  
Charleston, West Virginia 25325

RETURN TO: Dept. Mines-Office of Oil & Gas  
1615 Washington Street, East  
Charleston, W.Va. 25311-2192

DEEP well



WR-35

12-Feb-98  
API # 47- 39-01614 F

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

Well Operator's Report of Well Work

Farm name: PARSONS, BURKE-BOWLBY CO. Operator Well No.: 7216

LOCATION: Elevation: 766.14 Quadrangle: BLUE CREEK

District: ELK County: KANAWHA  
Latitude: 2900 Feet South of 38 Deg. 25Min. 0 Sec.  
Longitude 4275 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: 07/13/98  
Well work Completed: 07/25/98  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary Cable Rig  
Total Depth (feet) \_\_\_\_\_  
Fresh water depths (ft) N/A  
Salt water depths (ft) 960'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"		2175'	105 sx
5-1/2"		5152'	75 sx
3-1/2"		5210'	60 sx

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 195'-200', 265'-266'

OPEN FLOW DATA

Producing formation Oriskany Storage Pay zone depth (ft) 5262' - 5676'

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.

RECEIVED  
Office of Oil & Gas  
Permitting  
MAR 01 1999  
WV Division of  
Environmental Protection

For: COLUMBIA GAS TRANSMISSION CORP.  
By: [Signature]  
Date: 2/22/99

MAR 16 1999

KAN 1614 F

7/13/98 Replaced top joint of 3-1/2" tubing. Installed new API wellhead.

7/24/98 Fractured Oriskany with N2 Assist DeltaFrac using 455 bbls of H2O, 99 mscf N2, 23,200# of 20/40 sand at 1 - 3 ppg.