

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No 96X208  
 DRAWING No. W-7047  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 : 200  
 PROVEN SOURCE OF ELEVATION EXISTING WELL \_\_\_\_\_

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 MINES

(SIGNED) Mark C. Shamblyn



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



DATE NOVEMBER 19, 19 96  
 OPERATOR'S WELL No. W-7047  
 API WELL No. \_\_\_\_\_

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  STATE 47 COUNTY 039 PERMIT 01229

LOCATION: ELEVATION 641.59 WATER SHED BLUE CREEK  
 DISTRICT ELK COUNTY KANAWHA  
 QUADRANGLE BLUE CREEK, 7.5' COORDINATES Lat: 38°-24'-43" Long: 81°-25'-22"

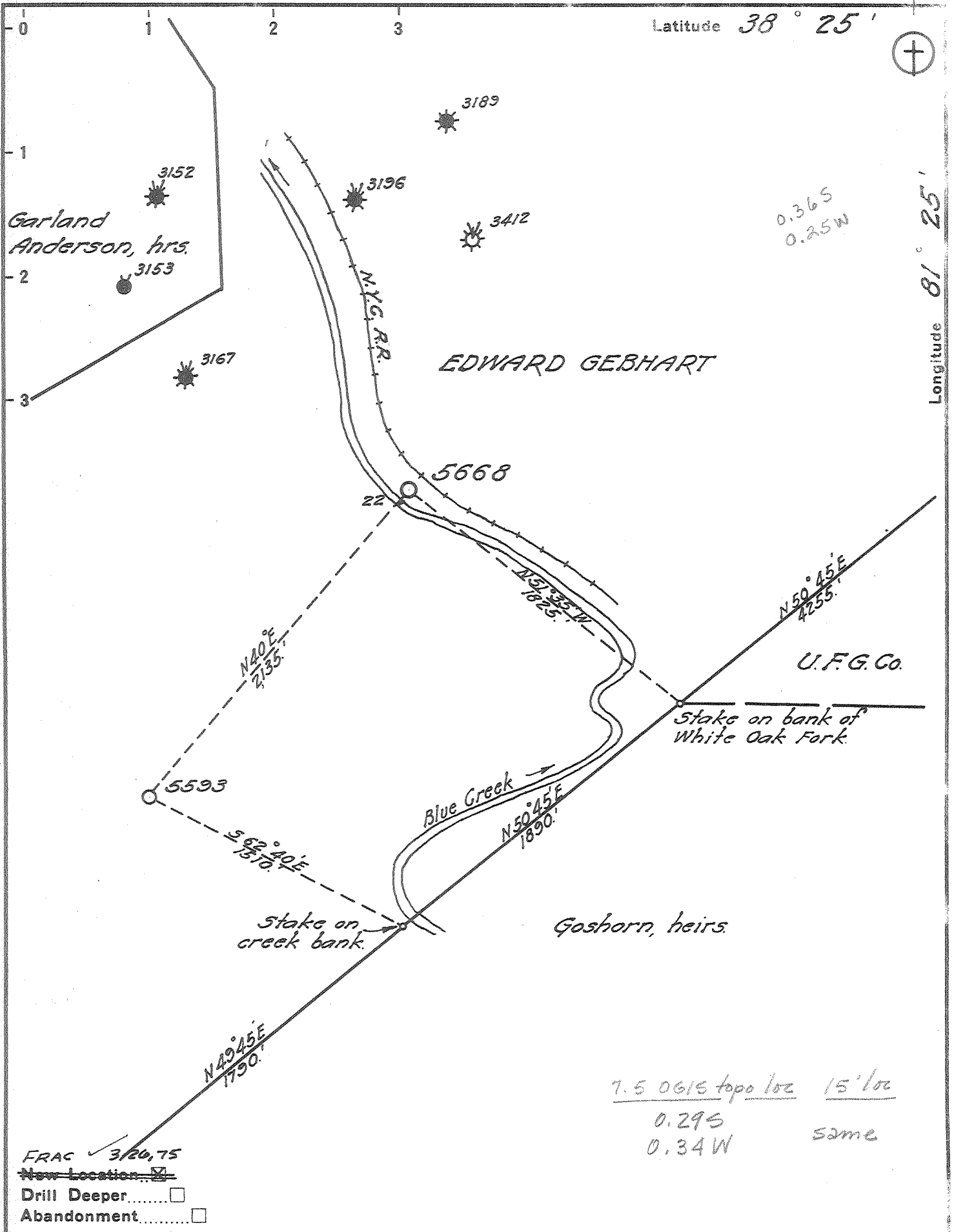
SURFACE OWNER ROBERT EVANS ACREAGE 429 AC  
 OIL & GAS ROYALTY OWNER EDWARD GEBHART LEASE ACREAGE 914 AC  
 LEASE No. 881

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) drilled 1975  
drill existing storage well deeper and rework. STORAGE RECONDITION

PLUG AND ABANDON  CLEAN OUT AND REPLUG  TARGET FORMATION Quaternary ESTIMATED DEPTH 5000'  
 WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP. DESIGNATED AGENT RICHARD L. COTY  
 ADDRESS P.O. 1273 CHARLESTON, WV 25325 ADDRESS P.O. BOX 1723 CHARLESTON, WV 25325

FORM IV-6 (8-78)

DEEP 11911



Company COLUMBIA GAS TRANSMISSION CORP  
UNITED FULL GAS CO

Address CHARLESTON W. VA.

Farm EDWARD GEBHART

Tract 900 Acres Lease No. 881

Well (Farm) No. 22 Serial No. (2) 5668

Elevation (Spirit Level) 641.59

Quadrangle GLENDENIN WC

County KANAWHA District ELK

Engineer G.A. Cunningham

Engineer's Registration No. 659

File No. 72-63 Drawing No. \_\_\_\_\_

Date May 4, 1945 Scale 1" = 660'

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

WELL LOCATION MAP

FILE NO. KAN-1229-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.

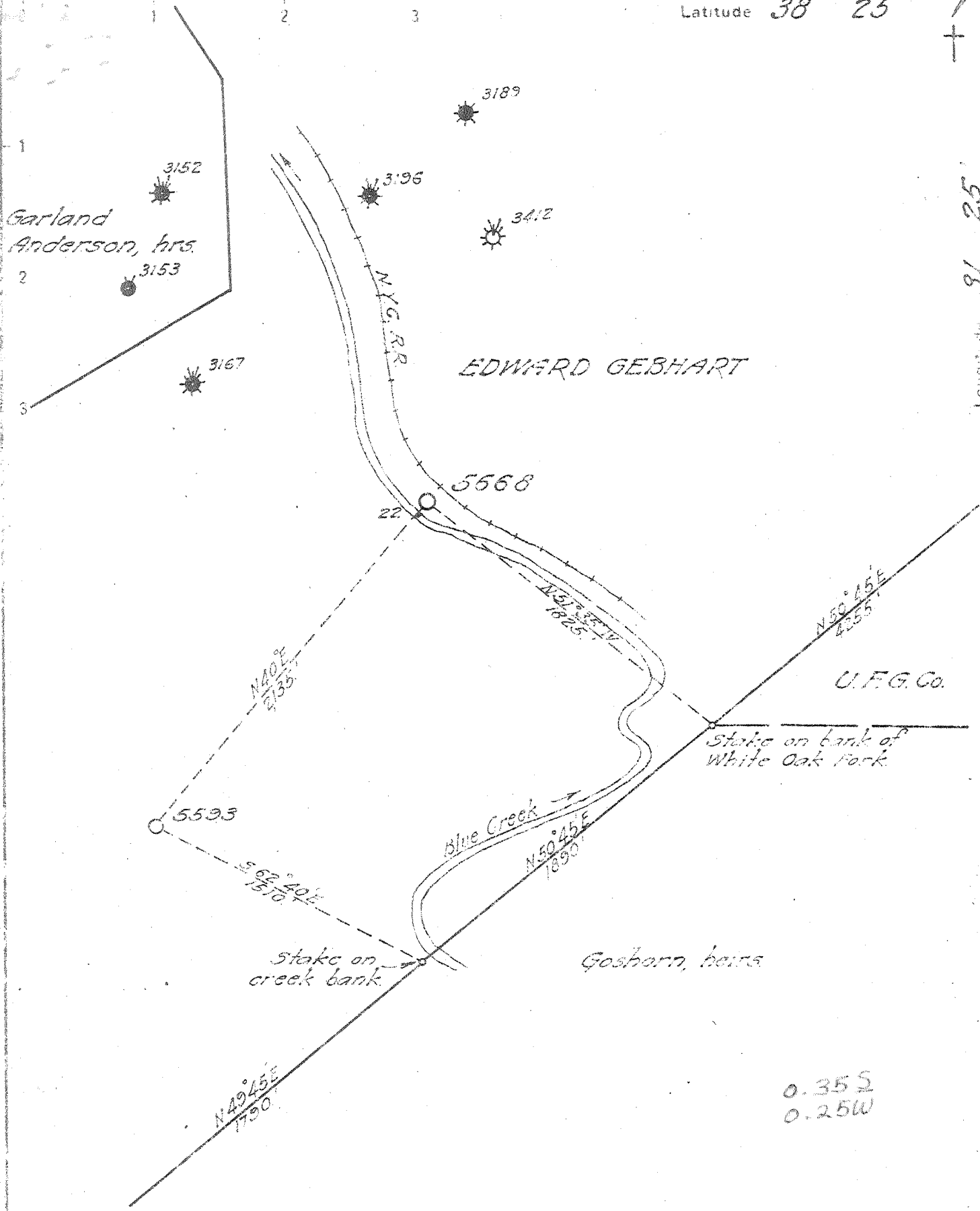
47 039

Deep well

APR 17 1975

Latitude 38 25

Longitude 91 25



New Location 22  
 Drill Deeper  
 Abandonment

W NE (J-6)

0.35 S  
 0.25 W

Company UNITED FUEL GAS CO

Address CHARLESTON W.VA.

Farm EDWARD GEBHART

Tract \_\_\_\_\_ Acres 900 Lease No. 881

Well (Farm) No. 22 Serial No. 5568

Elevation (Spirit Level) 641.59

Quadrangle GLENDENIN - WC

County KANAWHA District ELK

Engineer L.A. Cunningham

Engineer's Registration No. 659

File No. 72-63 Drawing No. \_\_\_\_\_

Date May 4, 1945 Scale 1" = 660'

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

WELL LOCATION MAP  
 FILE NO. KAN-1229

+ 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

6-6-215

Deep Well IV

WEST VIRGINIA DEPARTMENT OF MINES  
OIL & GAS DIVISION  
W E L L R E C O R D

Permit No. Kan. 1229			Gas Well
Clendenin Quad.			CASING & TUBING
Company	United Fuel Gas Company		
Address	Box 1273, Charleston 25, W. Va.	15	49
Farm	Edward Gebhart Acres 900	13 3/8	304
Location	Blue Creek	10 1/2	1246
Well No.	5668 Elev. 641.59	8 5/8	1694
District	Elk Kanawha County	7	4830
Surface		2	4955
Mineral	Kanawha Crude Oil Company		
	Charleston, W. Va.		
Commenced	7-9-45		
Completed	10-11-45		
Not shot			

Coal at 80' 24"; 310' 48"

Surface	0	49	
Sand	49	80	
-Coal	80	82 -	
Slate	82	100	
Sand	100	310	
-Coal	310	314 -	
Slate	314	500	
-Sand	500	1038	
Red Rock	1038	1060	
Slate & Shells	1060	1140	
-Maxon Sand	1140	1162	
Slate	1162	1172	
-Lime	1172	1195	
-Pencil Cave	1195	1201	
Lime	1201	1221	
Slate	1221	1227	
Lime	1227	1395	Gas 1293'
-Injun Sand	1395	1420	
-Weir Sand	1420	1645	Gas 1475-1477
Slate & Shells	1645	4500	Gas 1520-1524
Brown Shale	4500	4677	and 1630-1635
White Slate	4677	4727	Gas 3865
-Black Shale	4727	4817	
-Corniferous Lime	4817	4928	
-Oriskany Sand	4928	4955	Gas 4941-4945
TOTAL DEPTH		4955	

RECEIVED  
WV Division of  
Environmental Protection

WR-35

JAN 2 1998

07-Jan-97  
API # 47- 39-01229 D

Permitting  
Office of Oil & Gas

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

Well Operator's Report of Well Work

Farm name: EVANS, ROBERT S. ET AL. Operator Well No.: 7047

LOCATION: Elevation: 641.59 Quadrangle: BLUE CREEK

District: ELK County: KANAWHA  
Latitude: 1500 Feet South of 38 Deg. 25Min. 0 Sec.  
Longitude 1850 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: 01/13/97  
Well work Commenced: 10/15/97  
Well work Completed: 10/25/97  
Verbal Plugging \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary Cable Rig \_\_\_\_\_  
Total Depth (feet) 4955'  
Fresh water depths (ft) \_\_\_\_\_  
Not Reported  
Salt water depths (ft) \_\_\_\_\_  
Not Reported  
Is coal being mined in area (Y/N)? N  
Coal Depths (ft): Not Reported

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
15"		49'	
10 3/4"		1246'	
8 5/8"		1694'	
7"		4830'	
4 1/2"	11.6 lb, N-80	4888'	100SX

OPEN FLOW DATA

Producing formation ORISKANY STORAGE Pay zone depth (ft) 4928'-4955'  
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

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: *[Signature]*  
Date: 1-15-98

JAN 23 1998

Replaced top joint of 4 1/2" casing and installed new  
7" X 4 1/2" API 3000 Wellhead. Stimulated ORISKANY with  
N<sup>2</sup>-Assist Deltafrac using 422 bbls water, 130 MSCF N<sup>2</sup>,  
and 26,700 lbs, 20/40 sand.

STIMULATION REPORT

Well Name: ORISKANY  
Location: [illegible]  
Operator: [illegible]

Item	Quantity	Notes
Water	422 bbls	
N <sup>2</sup>	130 MSCF	
Sand	26,700 lbs	20/40
Proppant		
Fluid Loss Additive		
Surfactant		
Other		
<b>Total</b>		

Production started on [illegible] at [illegible] bbls per day. Initial flow rate was [illegible].

Wellhead pressure maintained at [illegible] psi. Bottom hole pressure [illegible].

Stimulation completed on [illegible]. Total volume pumped [illegible].

Operator: [illegible]  
Date: [illegible]

*[Handwritten Signature]*

SHIRLEY DANIELS

COCOA

April 27, 1984

Date

In Re: Complete Information requested below:

RECEIVED  
MAY 8 - 1984  
OIL & GAS DIVISION  
DEPT. OF MINES

FRACTURE RECORD


Well Name and No: Edward Gerhart #X-52-A-7047 (Storage Well)

District: Elk County: Kanawha

Permit No: 039-1229-FRAC Completion Date: 12/13/74

Formation Fractured: Material:  
Top 4928 1,000 gal. 15% acid; 20,000#, 20/40  
Bottom 4955 sand; 600 bbls. water

Rock Pressure: Test after Fracture:  
Before Fracture NA Oil NA  
After Fracture 1630 psig Gas 11,600 Mcf

  
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



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 Co.  
Emmons Graham, Treas.,  
Address P.O. Box 47, Charleston, W. Va.

Farm Edward Gerhart Acres 914  
Location (waters) Blue Creek

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

Well No. X-52A-7047 Elevation 641.59  
District Elk County Kanawha

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

Quadrangle Blue Creek

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 fracturing. This permit shall expire if  
operations have not commenced by 7-27-75.

*Robert S. Bell*  
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 April 6 19 09 by Edward Gebhart made to Columbia Gas Transmission Corp. and recorded on the 22nd day of May 19 09, in Kanawha County, Book 17 Page 131

NEW WELL DRILL DEEPER REDRILL X 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

Address  
of  
Well Operator

Very truly yours,  
COLUMBIA GAS TRANSMISSION CORPORATION  
(Sign Name) [Signature]  
Well Operator  
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.

W  
KAN - 1229 - ~~1229~~ PERMIT NUMBER

47 039

BLANKET BOND



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

PROPOSED WORK ORDER TO DRILL ~~DEEPEN~~  ~~FRACTURE-STIMULATE~~

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: 4955 ROTARY \_\_\_\_\_ CABLE TOOLS   
 PROPOSED GEOLOGICAL FORMATION: Oriskany  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ 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 15		49.5'	
13 - 10 5/8		307'	
9 - 5/8 10-3/4		1237'	
8 - 5/8		1708'	
7		4862'	
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS - \_\_\_\_\_ FEET - SALT WATER - \_\_\_\_\_ FEET -  
 APPROXIMATE COAL DEPTHS 80' - 82' , 310' - 3'4'  
 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  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

1) Well Operator: Columbia Gas Transmission Corp. <sup>175</sup> 10450 (4) 258

2) Operator's Well Number: 7047 3) Elevation: 641

Well type: (a) Oil \_\_\_ / or Gas X / Issued 01/13/97  
Expires 01/13/99  
(b) If Gas: Production \_\_\_ / Underground Storage X /  
Deep X / Shallow \_\_\_

Proposed Target Formation(s): Oriskany Sandstone <sup>475</sup>

Proposed Total Depth: 5060 feet

Approximate fresh water strata depths: N/A

8) Approximate salt water depths: N/A

9) Approximate coal seam depths: 80'-82', 310'-314'

10) Does land contain coal seams tributary to active mine? Yes \_\_\_ / No X /

11) Proposed Well Work: Install API 3000 wellhead. Drill well  
100' deeper. Log. Stimulate Oriskany. Install tubing if needed.

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	15"			49'	49'	
Fresh Water	13 3/8"		48	304'	-0-	
Coal	10 3/4"		32.75	1246'	1246'	
Intermediate	8 5/8"		28		1094' ? filled?	
Int. Production	7"		24	4830'	4830'	
Production Tubing	4 1/2"		11.6	4888'	4888'	100 sks.
Liners				C.H. 10-52-96		

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DEC 27 1996  
Permitting  
Office of Oil & Gas  
Environmental Protection

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Office of Oil and Gas Use Only  
Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond  Agent  
(Type)

23040

00171760  
42

RECEIVED  
WV Division of  
Environmental Protection

DEC 27 1996

Permitting  
Office of Oil & Gas

- 1) Date: 10/25/96
- 2) Operator's well number  
COCO-A WELL #07047
- 3) API Well No: 47 - 039 - 01229 -DD  
State - County - Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
  - a) Name Robert S. Evans, et. al.  
Address # 8 Seneca Drive  
Elkview, WV 25071
  - b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (b) Coal Owner (s) with Declaration  
Name Robert S. Evans, et. al.  
Address # 8 Seneca Drive  
Elkview, WV 25071
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Carlos W. Hiviely  
Address 223 Pinch Ridge Road  
Elkview, WV 25071  
Telephone (304) - 965-6069

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

*Copy of lease  
in Karlo's office*

     Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR X Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through      on the above named parties, by:

- Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator COLUMBIA GAS TRANSMISSION CORP.  
 By: [Signature]  
 Its: Storage Engineer / Well Services  
 Address P. O. Box 1808  
St. Albans, WV 25177-1808  
 Telephone (304) 722-8612

Subscribed and sworn before me this 4th day of November, 19 96

Patricia A. Turkett Notary Public  
My commission expires August 12, 1997

