

8600'

LATITUDE 38° 25' 00"

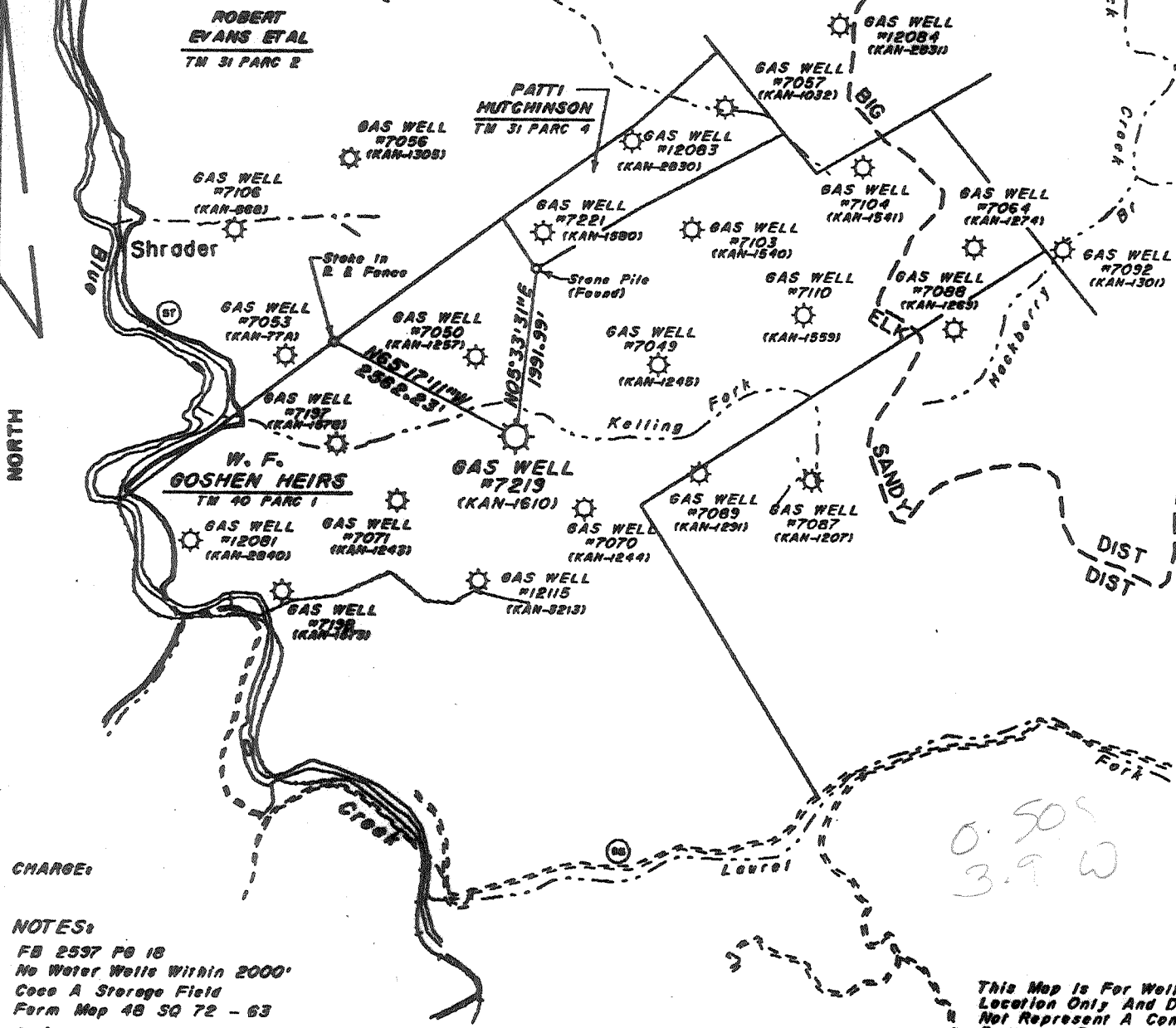
2700'

LONGITUDE 81° 22' 30"

Janice
8/2/95

0.50 S
1.65 W

0.50 S
3.9 W



CHARGE:

NOTES:
 FB 2597 PG 18
 No Water Wells Within 2000'
 Cose A Storage Field
 Form Map 48 SQ 72 - 63

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

This Map is For Well Location Only And Does Not Represent A Complete Property Survey

FILE NO. _____
 DRAWING NO. 7219
 SCALE 1"=2000'
 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) Edward J. Nichol
 R.P.E. 9236 L.L.S. 798

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE November 23, 1994
 OPERATOR'S WELL NO. 7219
 API WELL NO. 47 039 01610-W

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1035.68 WATER SHED Blue Creek
 DISTRICT EA COUNTY Kanawha
 QUADRANGLE Blue Creek, WV COORDINATES LAT: 38° 24' 35" LONG: 81° 24' 30"
 SURFACE OWNER W. F. Goshorn Heirs ACREAGE 1661
 OIL & GAS ROYALTY OWNER Robert A. Marshall, Et al LEASE ACREAGE 787
 COAL OWNER _____ LEASE NO. 1048180 & 1048341
 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

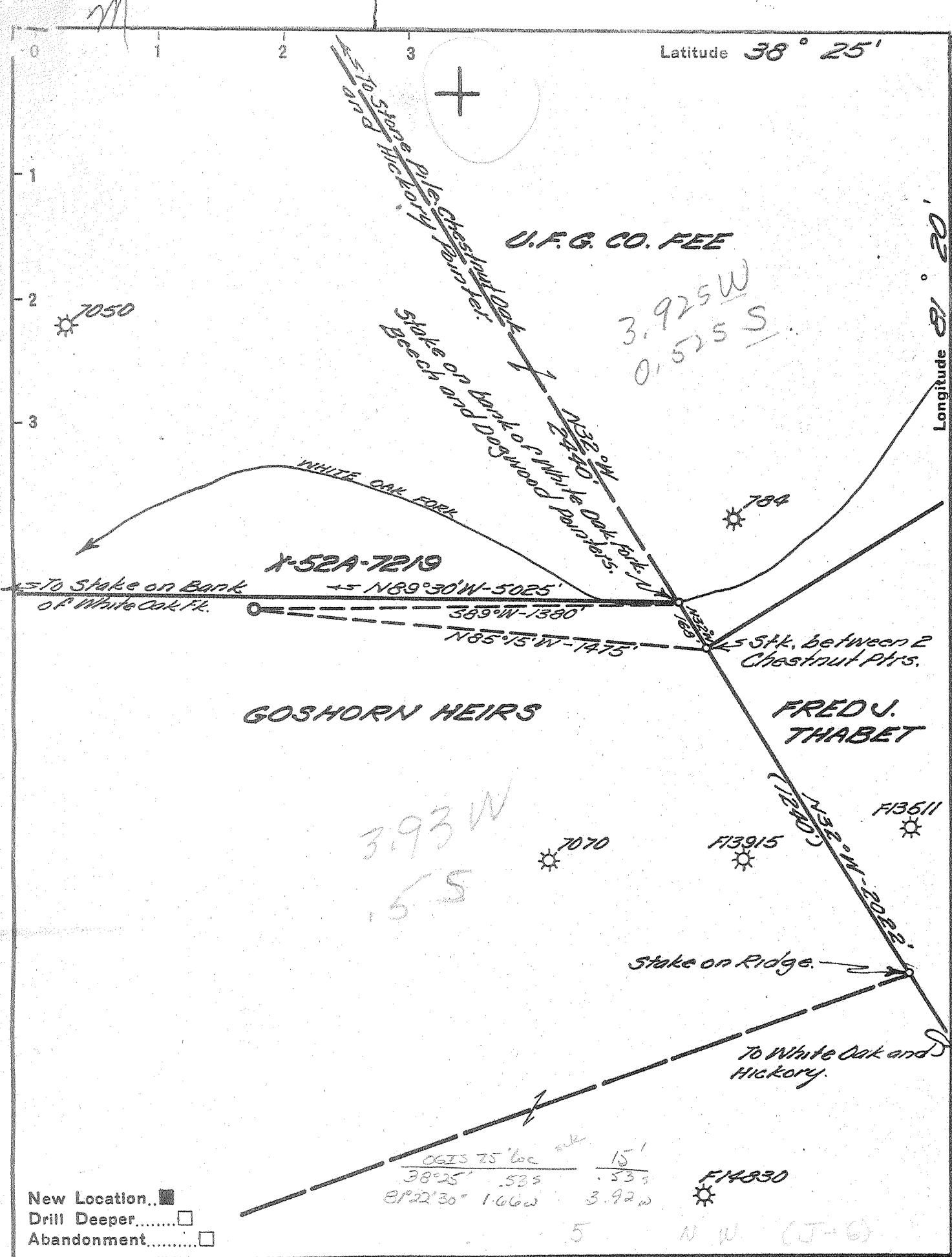
PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION Onshong ESTIMATED DEPTH 5350'
 WELL OPERATOR COLUMBIA GAS TRANS CORP DESIGNATED ADDRESS PO BOX 1273, CHARLESTON, WV
25325 - 1273

Richard L. Caty
 Same Address
 PH: 304-357-3034

AUG 1 - 1995

DEEP WELL

KANAWHA COUNTY NAME PERMIT 1610



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

Company UNITED FUEL GAS CO.
 Address CHARLESTON, W. VA.
 Farm GOSHORN HEIRS
 Tract 787 Acres 48180 Lease No. 48341
 Well (Farm) No. _____ Serial No. 7219
 Elevation (Spirit Level) 1035.68'
 Quadrangle CLENDENIN - C
 County KANAWHA District ELK
 Engineer Paul J. [Signature]
 Engineer's Registration No. 669
 File No. 74-63 Drawing No. _____
 Date 7-3-59 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. KAN-1610

+ 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

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Quadrangle Clendenin

Permit No. KAN-1610

Oil or Gas Well Gas
(KIND)

Company UNITED FUEL GAS CO.
Address P.O. Box 1273, Charleston 25, W.Va.
Farm Goshorn Heirs Acres 837'
Location (waters) White Oak Fork
Well No. X-52-A-7219 Elev. 1035.68
District Elk County Kanawha
The surface of tract is owned in fee by _____
Address _____

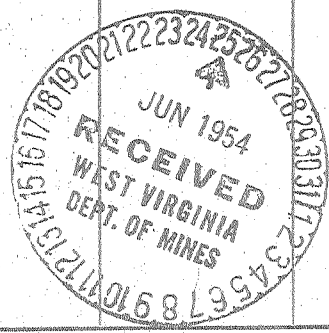
Mineral rights are owned by Goshorn and Goshorn, Agts.
for E.H. & F.W. Goshorn Address Terminal Bldg.
Chas. W. Va.
Drilling commenced 8-27-53
Drilling completed 3-18-54
Date Shot 3-22-54 From 5330 To 5350
With 40 cts. Glys.
Open Flow 80 /10ths Water in 7 Inch
/10ths Merc. in _____ Inch
Volume 3,858,000 Cu. Ft.
Rock Pressure 800 lbs. 72 hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water 155' feet _____ feet
Salt water 1040' feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
18			
10 <u>-3/4"</u>	<u>1544'</u>		Size of
<u>8 1/2 - 5/8"</u>		<u>2018'</u>	Depth set
6 1/2		<u>5249'</u>	Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

COAL WAS ENCOUNTERED AT 200 FEET 48 INCHES
340 FEET 72 INCHES FEET INCHES
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Soil			0	5	Water 155'		
Clay			5	15			
Sand			15	95	Hole full water 1040'		
Slate			95	120			
Sand			120	160	Show gas 1670'		
Slate			160	200			
Coal			200	204 ✓	Show gas 1810'		
Sand			204	258			
Slate			258	283	Show gas 2700'		
Lime			283	313			
Slate			313	340	Gas 5331-5338' 50/10 W 2" 298 M		
Coal			340	346 ✓			
Sand			346	415	Gas 5338-5345' 20/10 W 7" 22# 1,929 M		
Slate & Shells			415	670			
Sand			670	780	Test before shot 20/10 W 7" 22# 1,929 M		
Slate			780	815	Shot 3-22-54 with 40 qts. Glys. from		
Salt Sand			815	1140	5330-5350'		
Slate & Shells			1140	1175	Test 1 hr. after shot 8 1/2 /10 W 7" 22# 1,929		
Sand			1175	1380	3,953 M		
Lime			1380	1385			
Red Rock			1385	1388			
Lime			1388	1465	FINAL OPEN FLOW - 3,858 M - Oriskany		
Slate			1465	1474	72 Hr. R.P. 800#		
Maxon Sand			1474	1505			
Slate & Shells			1505	1580			
Big Lime			1580	1750	Shut in 3-22-54 in 5 1/2" Casing.		
Slate			1750	1760			
Injun Sand			1760	1780			
Weir Sand			1780	2000			
Slate & Shells			2000	2310			
Brown Shale			2310	2350			
Slate & Shells			2350	4000			
Brown Shale			4000	4155			
White Slate			4155	4660			
Brown Shale			4660	5040			
White Slate			5040	5130			
Black Shale			5130	5211			
Ironiferous Lime			5211	5323			
Oriskany			5323	5350			



Total depth 5350' (Over)

5211 5323
1036 1036
4175 4287

RECEIVED

WV Division of Environmental Protection

FORM WW-2B

JUN 22 1995

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

WELL WORK PERMIT APPLICATION

Permitting Office of Oil & Gas

039 1610W Issued 07/19/95

Expires 07/19/97 Page of

- 1) Well Operator: Columbia Gas Transmission Corporation 10450 (4) 258
- 2) Operator's Well Number: 7219 3) Elevation: 1035.68
- 4) Well type: (a) Oil / or Gas X/
(b) If Gas: Production / Underground Storage X/
Deep X/ Shallow /
- 5) Proposed Target Formation(s): Oriskany Sandstone ⁴⁷⁵
- 6) Proposed Total Depth: 5350 feet
- 7) Approximate fresh water strata depths: 155'
- 8) Approximate salt water depths: 1040' (hole full)
- 9) Approximate coal seam depths: 200-204', 340-346'
- 10) Does land contain coal seams tributary to active mine? Yes / No X/
- 11) Proposed Well Work: Install new wellhead, cleanout to TD and stimulate.
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	
Conductor	13-3/8"		48#/Ft.		7'
Fresh Water	8-5/8"		32#/Ft.		2029'
Coal					
Intermediate					
Production	5-1/2"		15.5#/Ft.		5249'?
Tubing					
Liners					

PACKERS : Kind _____ Sizes _____ Depths set _____

For Division of Oil and Gas Use Only

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

RECEIVED
WV Division of
Environmental Protection
JUN 22 1995

Page 1 of
Form WW2-A
(09/87)
File Copy

- 1) Date: May 26, 1995
- 2) Operator's well number 7219
- 3) API Well No: 47 - 039 - 1610
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
 - (a) Name James E. Brown, III, Trustee
Address One Valley Square
Charleston, WV 25324
 - (b) Name Bank One, Trustee
Address P. O. Box 1113
Charleston, WV 25324
 - (c) Name (NOTE: Last will and
Address testament of Ettie D.
Goshorn, deceased)
- 5) (a) Coal Operator:
 - Name _____
Address _____
 - (b) Coal Owner(s) with Declaration
Name James E. Brown, III, Trustee
Address One Valley Square
Charleston, WV 25324
 - Name Bank One, Trustee
Address P. O. Box 1113
Charleston, WV 25324
 - (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Carlos W. Hively
Address 223 Pinch Ridge Road
Elkview, WV 25071
Telephone (304)- 965-6069

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

_____ 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 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B 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 22B 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 Corporation
 By: _____
 Its: Manager - Well Services
 Address P. O. Box 1273
Charleston, WV 25325-1273
 Telephone 304-357-3034

OFFICIAL SEAL
 NOTARY PUBLIC
 PHYLLIS M.
 COLUMBIA GAS TRANSMISSION CORP.
 P. O. BOX 1273 - CHARLESTON, WV 25325
 MY COMMISSION EXPIRES 11-20-2001

Subscribed and sworn before me this 6th day of June, 1995

Phyllis M. Swinton Notary Public

My commission expires November 20, 2001

RECEIVED

WV Division of Environmental Protection

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

MAR 27 1996

Well Operator's Report of Well Work

Permitting

Farm name: Office of Gas JAMES E. III

Operator Well No.: 7219

LOCATION: Elevation: 1,035.68 Quadrangle: BLUE CREEK

District: ELK County: KANAWHA
Latitude: 2700 Feet South of 38 Deg. 25Min. Sec.
Longitude 8600 Feet West of 81 Deg. 22 Min. 30 Sec.

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

Agent: RICHARD L. COTY

Inspector: CARLOS HIVELY
Permit Issued: 07/19/95
Well work Commenced: 9-20-95
Well work Completed: 2-2-96
Verbal Plugging
Permission granted on: _____
Rotary _____ Cable _____ Rig Workover
Total Depth (feet) 5398'
Fresh water depths (ft) 155'
Salt water depths (ft) 1040'

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
13 3/8"	7'	7'	
8 5/8"	2029'	2029'	
5 1/2"	5249'	5249'	T.O.C. FROM C. IS AT 1360' IS SPOT AT 140' IS CEMENTED

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 200'-204'

OPEN FLOW DATA

Producing formation ORISKANY SANDSTONE Pay zone depth (ft) 5323-5350
 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 650 psig (surface pressure) after 24 Hours
 * STORAGE WELL - NO OPEN FLOW AVAILABLE
 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: 3-26-96

APR 1 1996

PHYSICAL CHANGE:

NO CASING PULLED DUE TO 5 1/2" CASING
BEING CEMENTED AT 160'.

INSTALLED NEW WELLHEAD.

DRILLED NEW 4 3/4" HOLE FROM 5350' TO 5398' (ALL LIME)

2-2-96

FRACTURED ORISKANY SANDSTONE w/

25,600 # 20/40 SAND

475 bbls BORAGEL FRAC FLUID

BREAKDOWN PRESSURE 1480 PSIG

AVG PRESSURE 1750 PSIG

ISIP 3119 PSIG

5 MIN SIP 1922 PSIG

10 MIN SIP 1640 PSIG

15 MIN SIP 1403 PSIG