

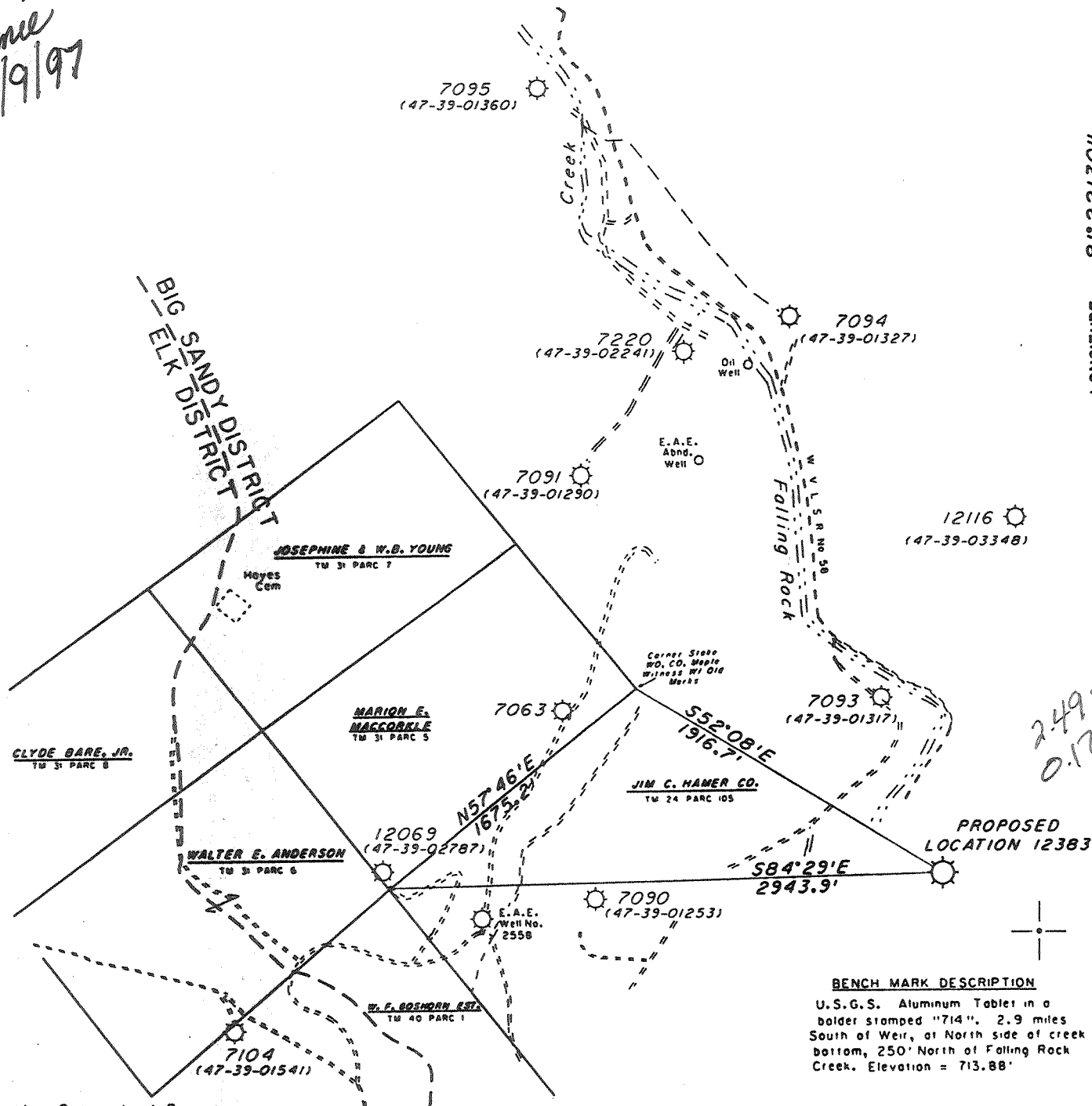
*Jamie*  
1/9/97

LATITUDE 38°27'30"

LONGITUDE 81°22'30"

13,200

NORTH



2495  
0.17

**BENCH MARK DESCRIPTION**

U.S.G.S. Aluminum Tablet in a bolder stamped "714". 2.9 miles South of Weir, at North side of creek bottom, 250' North of Falling Rock Creek. Elevation = 713.88'

Location Determined By Differential GPS

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

(7 1/2")

FILE NO. \_\_\_\_\_  
DRAWING NO. 12383  
SCALE 1" = 800'  
MINIMUM DEGREE OF ACCURACY 1:200  
PROVEN SOURCE OF ELEVATION U.S.G.S. TABLET STAMPED "714"

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 Nicholson  
R.P.E. \_\_\_\_\_ L.L.S. 789

PLACE SEAL HERE

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



DATE OCTOBER 23, 19 96  
OPERATOR'S WELL NO. 12383  
API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS,") PRODUCTION \_\_\_ STORAGE X DEEP \_\_\_ SHALLOW \_\_\_  
LOCATION: ELEVATION 810.1 WATER SHED FALLING ROCK CREEK OF ELK RIVER  
DISTRICT BIG SANDY COUNTY KANAWHA  
QUADRANGLE BLUE CREEK, WV COORDINATES LAT: 38°25'20" LONG: 81°22'42"  
SURFACE OWNER JIM C HAMER COMPANY ACREAGE 3,240  
OIL & GAS ROYALTY OWNER JIM C HAMER COMPANY LEASE ACREAGE 3,240  
COAL OWNER JIM C HAMER COMPANY LEASE NO. 48144

PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) STORAGE New drill

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
TARGET FORMATION Oriskany ESTIMATED DEPTH 5290'  
WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT Richard L. Coly  
ADDRESS PO Box 1273, Charleston, WV 25325-1273 ADDRESS PO Box 1273, Charleston, WV 25325-1273

KANAWHA COUNTY NAME PERMIT

DEED WC 11

9-0-11R

JAN 23 1997

JAN 21 1997

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

Permitting  
Office of Oil & Gas Well Operator's Report of Well Work

Farm name: HAMER, JIM C. COMPANY Operator Well No.: 12383

LOCATION: Elevation: 810.10 Quadrangle: BLUE CREEK

District: BIG SANDY County: KANAWHA  
Latitude: 13200 Feet South of 38 Deg. 27Min. 30 Sec.  
Longitude 1100 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: 01/13/97  
Well work Commenced: 07/18/97  
Well work Completed: 10/08/97

Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary  Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 5320'  
Fresh water depths (ft) \_\_\_\_\_

Salt water depths (ft) 819'

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): \_\_\_\_\_

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13 3/8"	48 lb, H-40	411'	335SX
9 5/8"	36 lb., H-40	2030'	550SX
7"	23 lb, N-80	5174'	355SX
2 3/8"	4.7 lbs., J-55	5187'	

OPEN FLOW DATA

Producing formation ORISKANY STORAGE 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

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

Stimulated ORISKANY with N<sup>2</sup>-Assist Deltafrac using 501 bbls water, 169 MSCF N<sup>2</sup>, and 28,200 lbs 20/40 sand.

FORMATIONS:

BIG LIME	1386' - 1539'
SALT SANDS	660' - 1150'
MAXTON	1284' - 1302'
LITTLE LIME	1324' - 1378'
WEIR	1572' - 1784'
SUNBURY	1959' - 1969'
ONONDAGA	5063' - 5191'
ORISKANY	5191' - 5236'
HELDERBERG	5236'

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> <sup>1045°</sup> (1) 258
- 2) Operator's Well Number: 12383 3) Elevation: 790'
- 4) Well type: (a) Oil    / or Gas X / *Issued 01/13/97*  
*Expired 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: 5290 feet
- Approximate fresh water strata depths: N/A
- Approximate salt water depths: N/A
- 9) Approximate coal seam depths: N/A
- 10) Does land contain coal seams tributary to active mine? Yes    / No X /
- 11) Proposed Well Work: Drill, complete, and stimulate a new storage well
- 12) In the Oriskany Sandstone with the casing program listed below

**RECEIVED**  
 WV Division of  
 Environmental Protection  
 DEC 27 1996  
 Permitting  
 Office of Oil & Gas

**CASING AND TUBING PROGRAM**

TYPE                                      SPECIFICATIONS                                      FOOTAGE INTERVALS                                      CEMENT

	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						38 CSR 11.3
Fresh Water	13 3/8"	H-40	48	400'	(400')	Circ. to Surface
Coal						38 CSR 11.22
Intermediate	9 5/8"	K-55	36	2200'	(2200')	Circ. to Surface
Production	7"	N-80	23	5170'	5170' A	325 sls
Tubing	2 3/8"	J-55	4.6	5170'	5170' C	38 CSR 11.1
Liners		C. H. 18-23-96				

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 Blanket  Agent  
 (Type)

23038

00171760  
 42

RECEIVED  
WV Division of  
Environmental Protection

DEC 27 1996

Permitting  
Office of Oil & Gas

- 1) Date: 10/29/96
- 2) Operator's well number  
COCO-A WELL # 12383
- 3) API Well No: 47 - 039 - 5118-T  
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 Jim C. Hamer Co.  
Address P. O. Box 418  
Kenova, WV 25530
  - b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Carlos W. Hiviely  
Address 223 Pinch Ridge Road  
Elkview, WV 25071  
Telephone (304) - 965-6069

- 5) (a) Coal Operator:
  - Name \_\_\_\_\_
  - Address \_\_\_\_\_
- (b) Coal Owner (s) with Declaration
  - Name Jim C. Hamer Co.
  - Address P. O. 418  
Kenova, WV 25530
- (c) Coal Lessee with Declaration
  - Name \_\_\_\_\_
  - Address \_\_\_\_\_

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 22, Article 6, Section 8 (d) of the Code of West Virginia (see page 2)

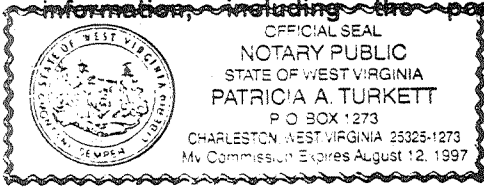
I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through        on the above named parties, by:

- 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 10th day of November, 1996  
Patricia A. Turkett Notary Public  
 My commission expires August 12, 1997