

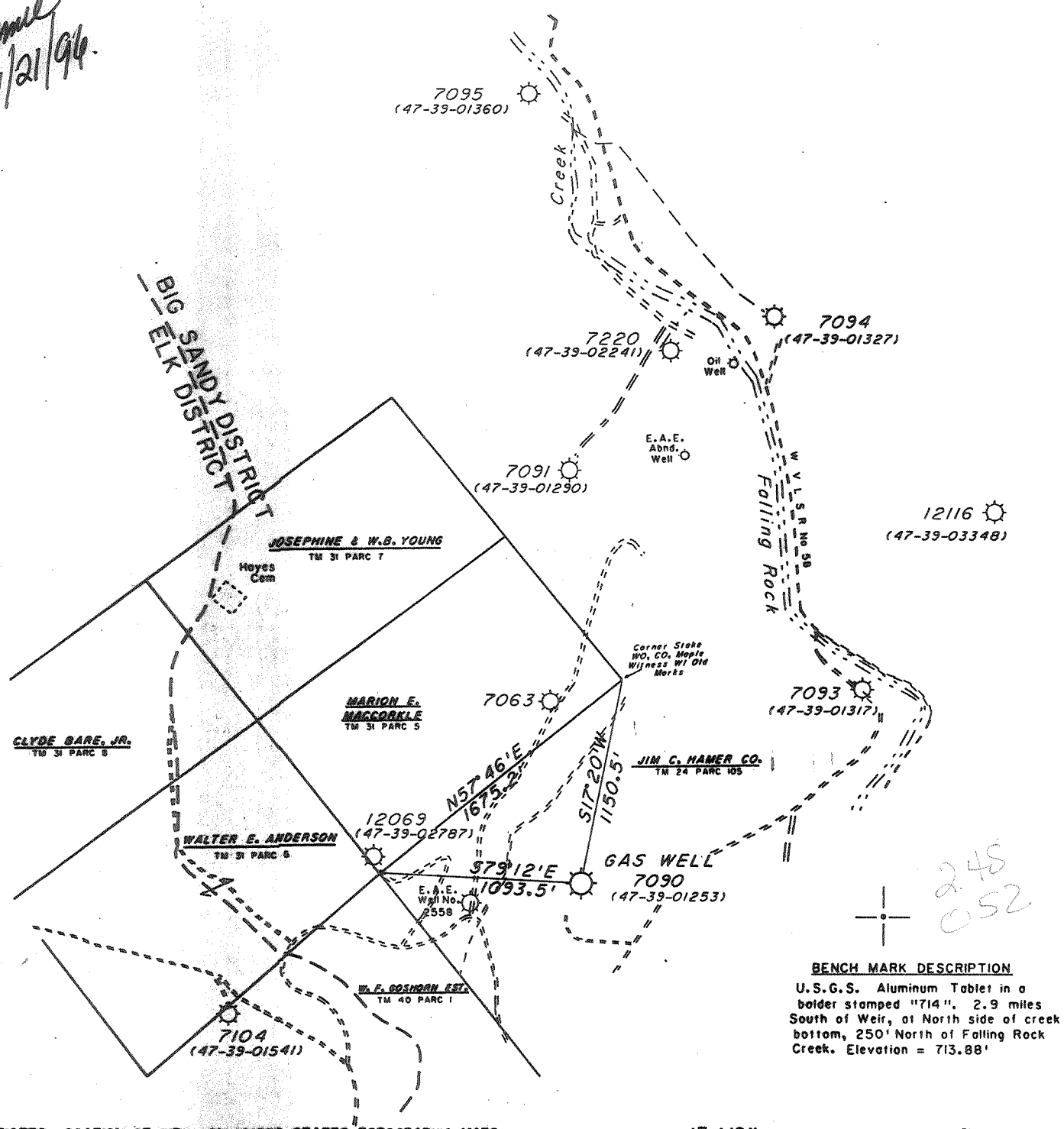
LATITUDE 38°27'30"

LONGITUDE 81°22'30"

13,180'

*Janice*  
11/21/96

NORTH



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

FILE NO. \_\_\_\_\_  
 DRAWING NO. 7090  
 SCALE 1" = 800'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION U.S.G.S. BENCH MARK "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) *Walter A. Smith*  
 R.P.E. \_\_\_\_\_ L.L.S. 499

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL & GAS  
 NITRO, WEST VIRGINIA 25143



DATE September 25, 1996  
 OPERATOR'S WELL NO. 7090  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_\_\_ GAS X LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS," ) PRODUCTION \_\_\_\_\_ STORAGE X DEEP \_\_\_\_\_ SHALLOW \_\_\_\_\_  
 LOCATION: ELEVATION 1011.3' WATER SHED Falling Rock Creek of Elk River  
 DISTRICT Big Sandy COUNTY Kanawha  
 QUADRANGLE Blue Creek, WV COORDINATES LAT: 38°25'19" LONG: 81°23'05"  
 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

KANAWHA COUNTY NAME

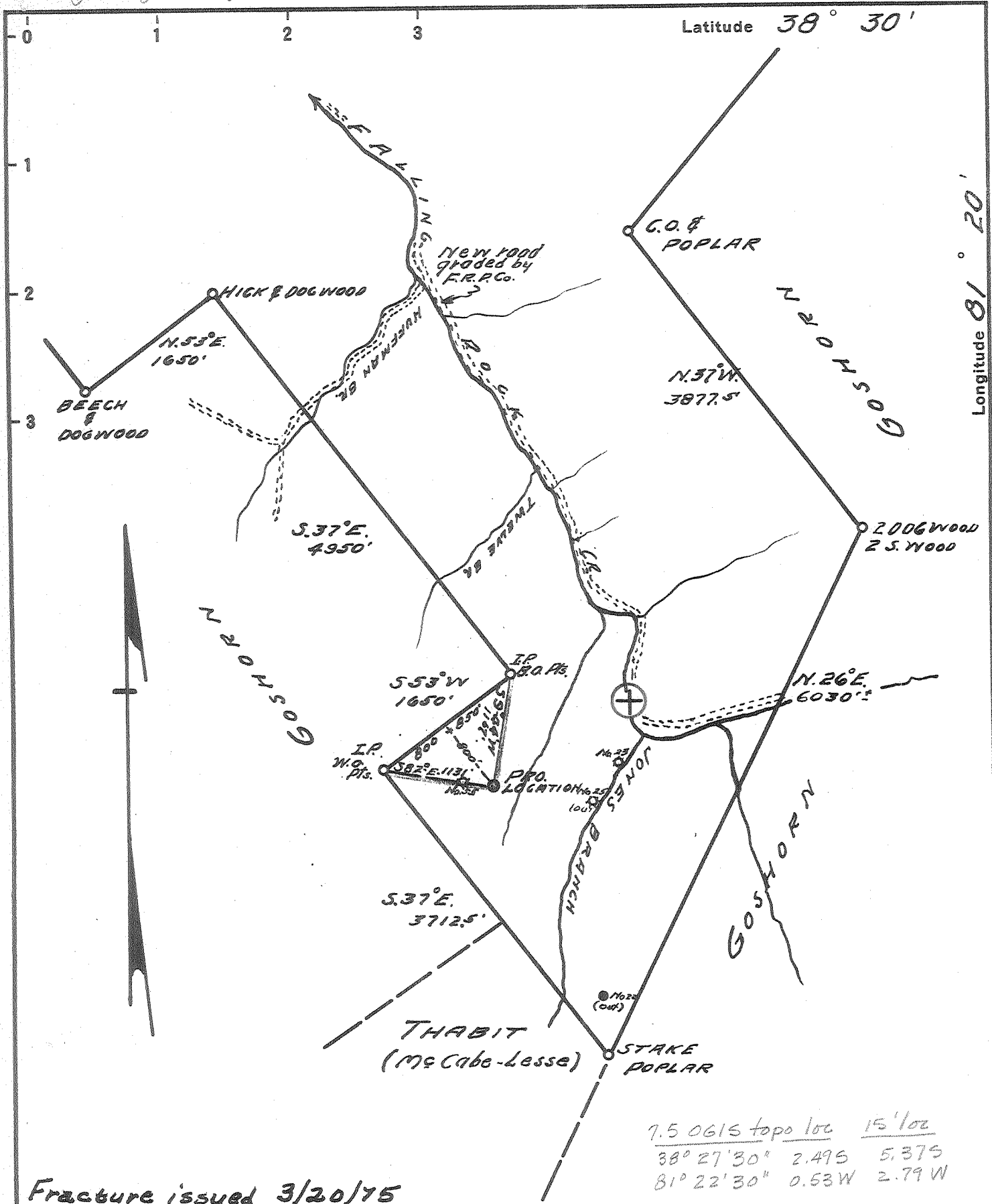
PROPOSED WORK: DRILL \_\_\_\_\_ CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Existing well drilled in 1946. Drill deeper by tol. Gas Trans.

PERMIT 01253

PLUG AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION Oriskany ESTIMATED DEPTH 5500'  
 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

DEC 6 1996

DEC 10 1996



Fracture issued 3/20/75

- New Location
- Drill Deeper
- Abandonment

7.5 0615 topo loc 15' loc  
 38° 27' 30" 2.495 5.375  
 81° 22' 30" 0.53W 2.79W

Company Columbia Gas Transmission Corp.  
FALLING ROCK PRODUCING CO.  
 Address P.O. BOX 1213, CHARLOTTE, N.C. 28215  
40 Peoples ONE Bld. MARTIN, OHIO.

Farm FALLING ROCK PRODUCING CO.

Tract \_\_\_\_\_ Acres 3240 Lease No. \_\_\_\_\_

Well (Farm) No. 1A Serial No. X-52-7090

Elevation (Spirit Level) 961'

Quadrangle Clendenin NC

County Kanawha District Big Sandy

Engineer W.C. Sharpe

Engineer's Registration No. \_\_\_\_\_

File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_

Date Nov. 12, 1945 Scale 1" = 1320'

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

WELL LOCATION MAP  
 FILE NO. KAN-1253-Frac.

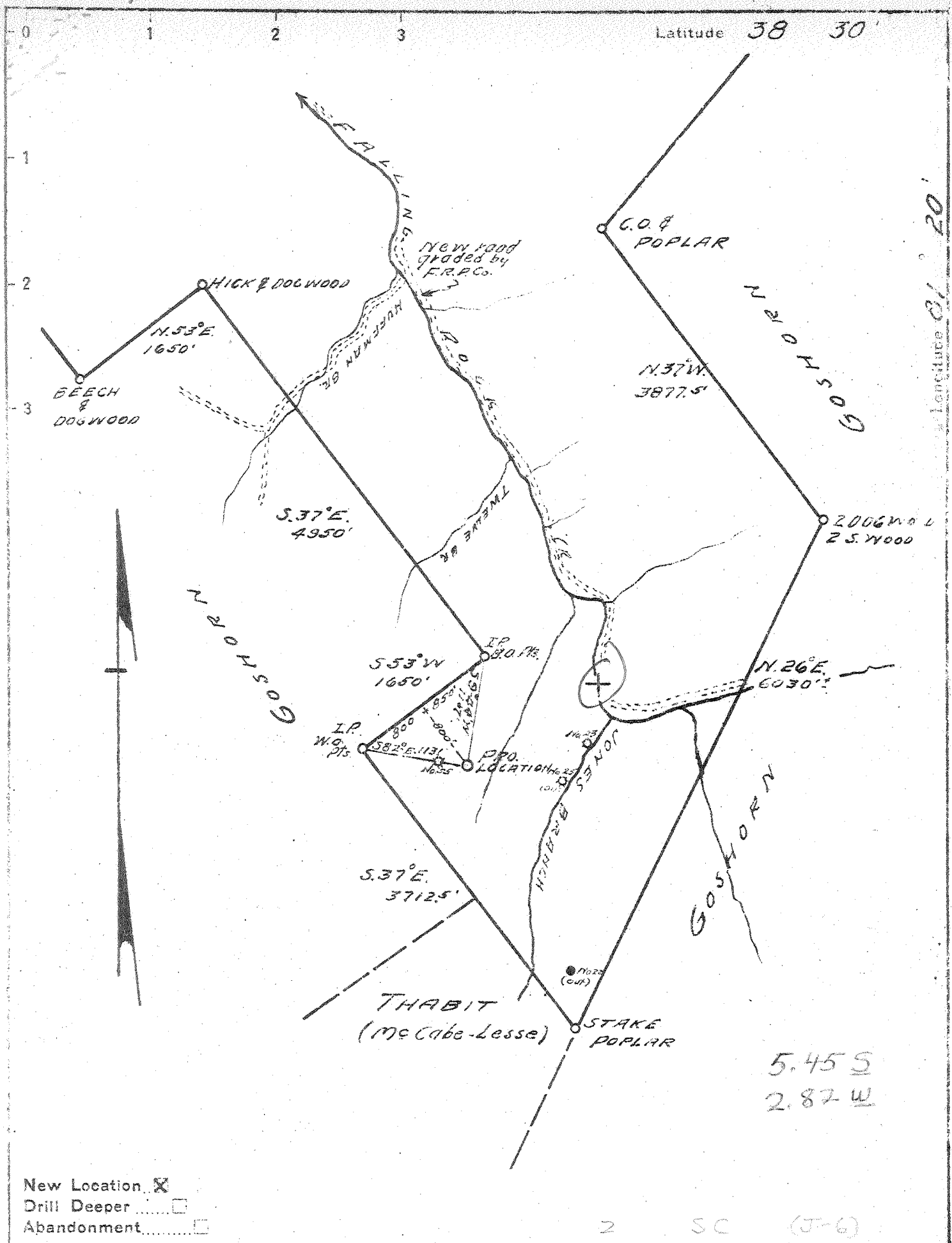
+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

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

47-039

Deep well

APR 7 1975



Company FALLING ROCK PRODUCING CO.  
 Address 40 PEOPLES BANK Bld. Marietta, Ohio.  
 Farm FALLING ROCK PRODUCING CO.  
 Tract \_\_\_\_\_ Acres 3240 Lease No. \_\_\_\_\_  
 Well (Farm) No. 1-A Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 961'  
 Quadrangle Clendenix - NC  
 County Kanawha Distric. Big Sandy  
 Engineer W.L. Sharpe  
 Engineer's Registration No. \_\_\_\_\_  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date NOV 12 1945 Scale 1" = 1320'

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

WELL LOCATION MAP  
 FILE NO. KAN-1253

+ 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.

Samples 20-E (5332-5373)

Deep Well

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

Permit No. Kan 1259		Gas Well
Clendenin Quad.		CASING & TUBING
Company	Falling Rock Producing Co.	
Address	Marietta, Ohio	10      230      230
Farm	Falling Rock Producing Co. A 3240	8 1/2      1500      1600
Location	Falling Rock Creek	6 5/8      5319      5319
Well No.	1-A      Elev. 961	
District	Big Sandy      Kanawha County	
Surface	Falling Rock Producing Co., Marietta, Ohio	
Mineral		
Commenced	Nov. 12, 1945	
Completed	Mar. 9, 1946	
Volume	10,000,000 C.F.	
Rock Pressure	750 lbs. --- hrs.	

Clay Sand & Slate		200
-Cannel Coal	200	210
Slate & Sand	210	370
Lime	370	405
Slate & Sand	405	470
Slate Shells	470	850
Sand	850	880
Slate	880	882
-Salt Sand	882	1125
-Coal	1125	1130
Sand & Slate	1130	1360
Slate & Red Rock	1360	1390
Slate Shells	1390	1482
-Maxon Sand	1482	1515
Slate	1515	1530
-Little Lime	1530	1560
Slate & Shells	1560	1595
-Big Lime	1595	1740
Slate Shells	1740	1765
-Injun Sand	1765	1845
-Red Injun <small>micaceous</small>	1845	1860
-Weir Sand	1860	1990
Slate Shells	1990	2165
Shale	2165	2173
-Berea Shells	2173	2450
Gordon Shells	2450	2465
Slate & Shells	2465	3350
Brown Lime	3350	3400
Slate & Shells	3400	3830
Brown Shale	3830	3870
Slate	3870	3915
Brown Shale	3915	4005
Slate Shells	4005	4340
Brown Shale	4340	4375
Slate	4375	4725
Brown Shale	4725	4770
Slate	4770	4810
Brown Shale	4810	5065
White Shale	5065	5150
Brown Shale	5150	5244
-Corniferous Lime	5244	5373
-Oriskany	5373	5391
TOTAL DEPTH		5391

1740  
1595  
1482  
1390  
1360  
1130  
1125  
882  
880  
850  
470  
405  
370  
210  
200  
1740  
961  
779

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: Falling Rock Prod. Co. #X-52-7090 (Storage Well)

District: Big Sandy County: Kanawha

Permit No: 039-1253-FRAC Completion Date: 3/26/75

Formation Fractured: Top 5373 Material: 1,000 gal. 15% acid; 30,000#, 20/40  
Bottom 5394 sand; 682 bbls. water

Rock Pressure: Before Fracture NA Test after Fracture: Oil NA  
After Fracture 1110 psig Gas 5,500 Mcf

*R. ...*  
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

COLUMBIA GAS TRANSMISSION CORPORATION



March 24, 1975

**RECEIVED**

MAR 26 1975

Mr. Robert L. Dodd, Deputy Director  
 W. Va. Department of Mines, Oil & Gas Division  
 1204 Kanawha Blvd., East  
 Charleston, W. Va. 25301

Dear Mr. Dodd:

Enclosed, please find a copy of assignment from Seatex Oil Co., Inc. to United Fuel Gas Co., dated March 31, 1950, which assigns certain oil and gas leases and certain Oriskany gas wells which are mentioned on Page 4, Paragraph 4. The aforementioned wells are listed below:

<u>WELL NO.</u>	<u>PERMIT NO.</u>	<u>NAME OF TRACT</u>
X - 52 - 7087	KAN - 1207	Thabet
X - 52 - 7088	KAN - 1269	Thabet
X - 52 - 7089	KAN - 1291	Thabet
X - 52 - 7090	✓ KAN - 1253	Weir
X - 52 - 7091	KAN - 1290	Weir
X - 52 - 7092	KAN - 1301	Weir
X - 52 - 7093	KAN - 1317	Weir
X - 52 - 7094	KAN - 1327	Weir
X - 52 - 7095	KAN - 1360	Weir

I believe this information will complete your files. If any additional information is needed, please advise.

Very truly yours,

*R. M. Hubbard*

R. M. Hubbard

Enclosures  
 RMH/mv

ASSIGNMENT IN BLANKET BOND FOLDER



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

MAR 20 1975

OIL & GAS DIVISION  
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,

Charleston, W. Va.  
Kanawha Banking & Trust Co.

Surface Owner Trustee for C.E. Krebs

Address P.O. Box 393, Charleston, W. Va. 25322

Mineral Owner Same as above

Address \_\_\_\_\_

Coal Owner Same as above

Address \_\_\_\_\_

Coal Operator Not Operated

Address \_\_\_\_\_

DATE March 19, 1975

Company Columbia Gas Transmission Corp.

Address P.O. Box 1273, Charleston, W. Va. 25325

Farm Falling Rock Prod. Co. Acres 3240

Location (waters) Hackberry Run of Falling Rock Ck.

Well No. X-52-7090 Elevation 961'

District Big Sandy County Kanawha

Quadrangle Blue Creek

INSPECTOR TO BE NOTIFIED Martin Nichols  
Clendenin, W. Va. PH: 548-6993

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 7-20-75.

[Signature]  
Deputy Director - Oil & Gas Division

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 March 31, 1950 by Seatex Oil Co. made to Columbia Gas Trans. Corp. and recorded on the \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_, in Kanawha County, Book 915 Page 402

NEW WELL DRILL DEEPER REDRILL X FRACTURE ~~EXISTING~~  
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.

COLUMBIA GAS TRANSMISSION-CORPORATION  
Very truly yours,

(Sign Name) [Signature]  
Director, Exploration & Dev. Well Operator

P.O. Box 1273

Street

Charleston

City or Town

West Virginia 25325

State

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:  
West Virginia Geological and Economic Survey  
P. O. Box 879  
Martinsburg, W. Va. 26505  
Tel. 304-296-4461

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.

KAN-1253-FRAC. PERMIT NUMBER

BLANKET BOND

47-039

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

PROPOSED WORK ORDER TO \_\_\_\_\_ DRILL \_\_\_\_\_ DEEPEN X 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: 5394' 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 - 16			
13 - 10		230'	
9 - 5/8			
8 - <del>5/8</del>		1600'	
7		5266'	
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 1125' - 1130'  
 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

10450 (11) 258

1) Well Operator: Columbia Gas<sup>175</sup> Transmission Corp.

Operator's Well Number: 7090 3) Elevation: 1005

Well type: (a) Oil \_\_\_ / or Gas X /

Issued 12/04/96  
Expires 12/04/98

(b) If Gas: Production \_\_\_ / Underground Storage X /  
Deep X / Shallow \_\_\_ /

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

Proposed Total Depth: 5500 feet

Approximate fresh water strata depths: N/A

Approximate salt water depths: N/A

Approximate coal seam depths: 200'-210', 1125'-1130'

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

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
Conductor	10 3/4"		32.75	230'	230'	
Fresh Water	8 5/8"		28	1600'	1600'	
Coal						
Intermediate	7"		24	5266'	5266'	
Production	4 1/2"	J, K	11.6	5350'	5350'	60 yds
Tubing						3005B/141.1
Liners						

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)

RECEIVED  
Office of Oil & Gas  
Permitting  
NOV 18 1996  
Environmental Protection  
W. Division of

22917

2/12/96

RECEIVED  
Division of Environmental Protection  
NOV 18 1996  
Permitting  
Office of Oil & Gas

- 1) Date: 10/29/96
- 2) Operator's well number  
COCO- WELL # 7090
- 3) API Well No: 47 - 039 - 01253 -D  
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 \_\_\_\_\_

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

- 6) Inspector Carlos W. Hiviely  
Address 223 Pinch Ridge Road  
Elkview, WV 25071  
Telephone (304) - 965-6069

- (c) Coal Lessee with Declaration
  - Name \_\_\_\_\_  
Address \_\_\_\_\_

*Copy of Storage Lease in Col. G. F. S. Office in Kan City*

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:

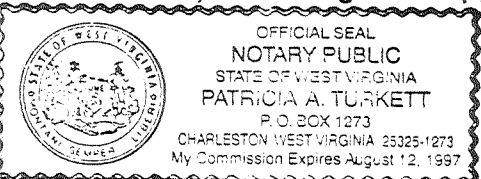
- \_\_\_\_ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- \_\_\_\_ Publication (Notice of Publication attached)

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 4th day of November, 19 96

Patricia A. Turkett Notary Public  
August 12, 1997

My commission expires \_\_\_\_\_

RECEIVED  
WV Division of  
Environmental Protection  
JAN 21 1998

State of West Virginia  
Permitting Division of Environmental Protection  
Section of Oil and Gas  
Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: HAMER, JIM C. COMPANY Operator Well No.: COCO 7090

LOCATION: Elevation: 1,011.30 Quadrangle: BLUE CREEK

District: BIG SANDY County: KANAWHA  
Latitude: 13180 Feet South of 38 Deg. 27Min. 30 Sec.  
Longitude 2700 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 HIVELEY  
Permit Issued: 12/04/96  
Well work Commenced: 07/31/97  
Well work Completed: 08/24/97  
Verbal Plugging  
Permission granted on:  
Rotary Cable Rig  
Total Depth (feet) 5394'  
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.
10 3/4"		230'	
8 5/8"		1600'	
7"		5266'	
4 1/2"		5360'	60SX

OPEN FLOW DATA

Producing formation ORISKANY STORAGE Pay zone depth (ft) 5373'-5394'  
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: \_\_\_\_\_  
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<sub>2</sub>-assist Deltafrac treatment using 388 bbls of water, 151 MSCF N<sub>2</sub>, and 26,500 lbs. 20/40 sand/

Time	Pressure (psi)	Flow Rate (bbl/hr)	Notes
0:00	1000	0.0	Start of test
0:15	1000	0.0	Flow stop
0:30	1000	0.0	Flow stop
0:45	1000	0.0	Flow stop
1:00	1000	0.0	Flow stop
1:15	1000	0.0	Flow stop
1:30	1000	0.0	Flow stop
1:45	1000	0.0	Flow stop
2:00	1000	0.0	Flow stop
2:15	1000	0.0	Flow stop
2:30	1000	0.0	Flow stop
2:45	1000	0.0	Flow stop
3:00	1000	0.0	Flow stop
3:15	1000	0.0	Flow stop
3:30	1000	0.0	Flow stop
3:45	1000	0.0	Flow stop
4:00	1000	0.0	Flow stop
4:15	1000	0.0	Flow stop
4:30	1000	0.0	Flow stop
4:45	1000	0.0	Flow stop
5:00	1000	0.0	Flow stop
5:15	1000	0.0	Flow stop
5:30	1000	0.0	Flow stop
5:45	1000	0.0	Flow stop
6:00	1000	0.0	Flow stop
6:15	1000	0.0	Flow stop
6:30	1000	0.0	Flow stop
6:45	1000	0.0	Flow stop
7:00	1000	0.0	Flow stop
7:15	1000	0.0	Flow stop
7:30	1000	0.0	Flow stop
7:45	1000	0.0	Flow stop
8:00	1000	0.0	Flow stop
8:15	1000	0.0	Flow stop
8:30	1000	0.0	Flow stop
8:45	1000	0.0	Flow stop
9:00	1000	0.0	Flow stop
9:15	1000	0.0	Flow stop
9:30	1000	0.0	Flow stop
9:45	1000	0.0	Flow stop
10:00	1000	0.0	Flow stop
10:15	1000	0.0	Flow stop
10:30	1000	0.0	Flow stop
10:45	1000	0.0	Flow stop
11:00	1000	0.0	Flow stop
11:15	1000	0.0	Flow stop
11:30	1000	0.0	Flow stop
11:45	1000	0.0	Flow stop
12:00	1000	0.0	Flow stop

J. D. D.