Jerry 12/4/96

LATITUDE 38°27'30"

LONGITUDE 81°22'30"

12,200'

1350'

NORTH

BIG SANDY DISTRICT
ELK DISTRICT

7095 (47-39-01360)

Falling Rock Creek

7094 (47-39-01327)

7220 (47-39-02241)

Oil Well

E.A.E. Abnd. Well

7091 (47-39-01290)

W V L S R No 58

12116 (47-39-03348)

JOSEPHINE & W.B. YOUNG
TM 31 PARC 7

Hayes Cem

Corner Stake WO, CO. Maple Witness WI Old Marks

N80°16'E 1312.7'

GAS WELL 7093 (47-39-01317)

MARION E. MACCORKLE
TM 31 PARC 5

7063

CLYDE BARE, JR.
TM 31 PARC 8

N57°46'E 1675.2'

N76°01'E 2794.4'

231
024

12069 (47-39-02787)

JIM C. HAMER CO.
TM 24 PARC 105

WALTER E. ANDERSON
TM 31 PARC 6

E.A.E. Well No. 2558

7090 (47-39-01253)

W. F. BOSWORTH EST.
TM 40 PARC 1

7104 (47-39-01541)

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'

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

FILE NO. _____
DRAWING NO. 7093
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) Gary H. Amos, J.
R.P.E. _____ L.L.S. 499

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

DATE September 25, 19 96
OPERATOR'S WELL NO. 7093
API WELL NO. 47 039 01317 D
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION ___ STORAGE X DEEP ___ SHALLOW ___
LOCATION: ELEVATION 691.1 WATER SHED Falling Rock Creek of Elk River
DISTRICT Big Sandy COUNTY Kanawha
QUADRANGLE Blue Creek, WV COORDINATES LAT: 38°25'30" LONG: 81°22'46"
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) Drill existing well 100' deeper Run 3½" Cement
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION Oriskany ESTIMATED DEPTH 5225' Well drilled in 1925 Drilled deeper in 1947
WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT Richard L. Coty
ADDRESS PO Box 1273, Charleston, WV 25325-1273 ADDRESS PO Box 1273, Charleston, WV 25325-1273

DEC 6 1996

FORM WW-6

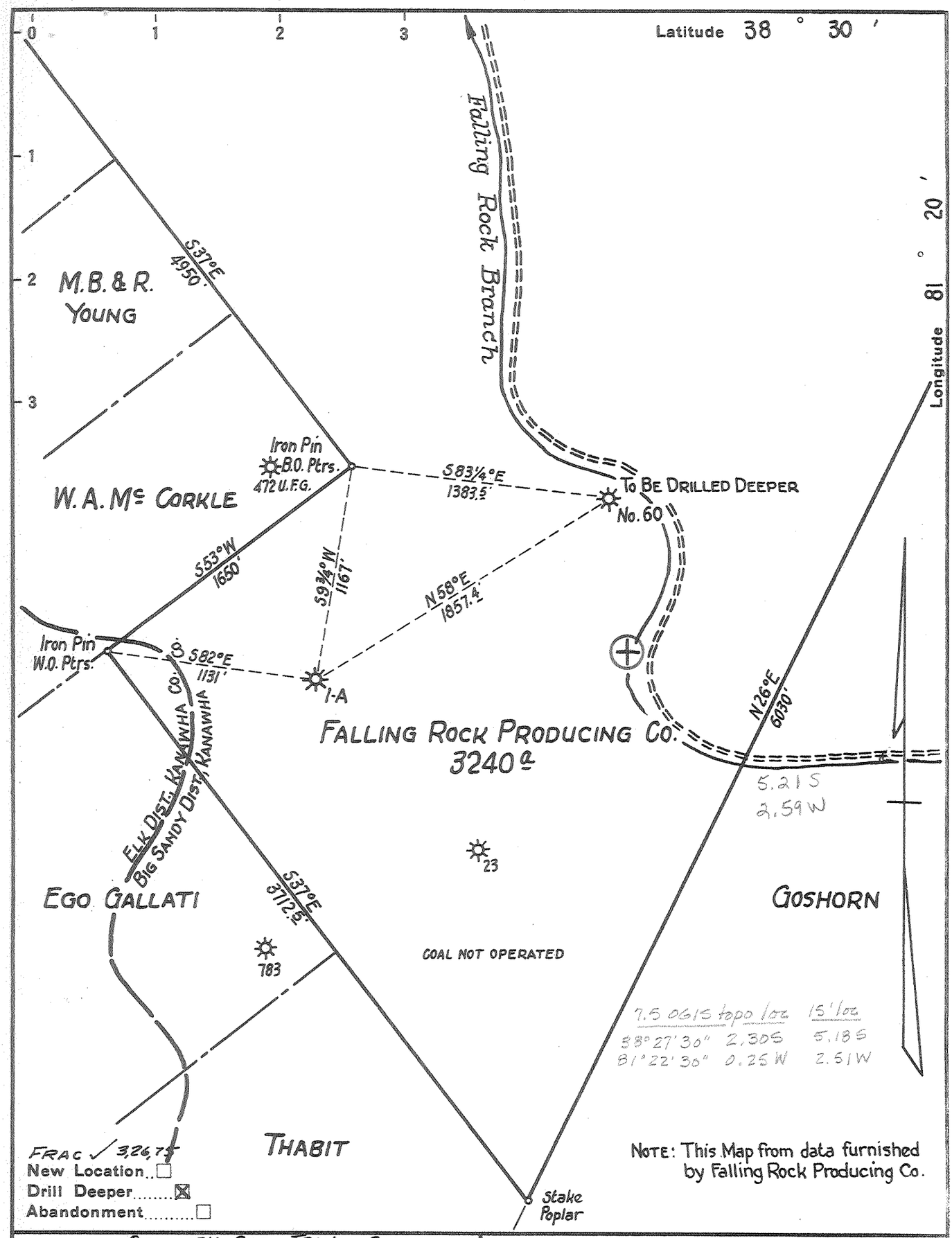
KANAWHA COUNTY NAME

01317 PERMIT

125

11317 D 350

Plot ✓ Log ✓ Card ✓ CSD___ Mflm___



FRAC ✓ 3,26,7

New Location ☐
Drill Deeper ☒
Abandonment ☐

NOTE: This Map from data furnished by Falling Rock Producing Co.

Company ~~FALLING ROCK PRODUCING CO.~~ COLUMBIA GAS TRANS. CORP.
Address ~~40 PEOPLES BANK BLDG., MARIETTA, O.~~ CHARLESTON W.V.
Farm FALLING ROCK PRODUCING CO.
Tract ____ Acres 3240 Lease No. ____
Well (Farm) No. ~~60~~ X-52-7093 Serial No. ____
Elevation (Spirit Level) 708.16 RIG FLOOR
Quadrangle CLENDENIN ~~N.W.~~ NC
County KANAWHA District BIG SANDY
Engineer W.S. GRAVELY
Engineer's Registration No. ____
File No. ____ Drawing No. ____
Date OCT. 22, 1946. Scale 1" = 660'

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

WELL LOCATION MAP

FILE NO. KAN-1317-D-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.

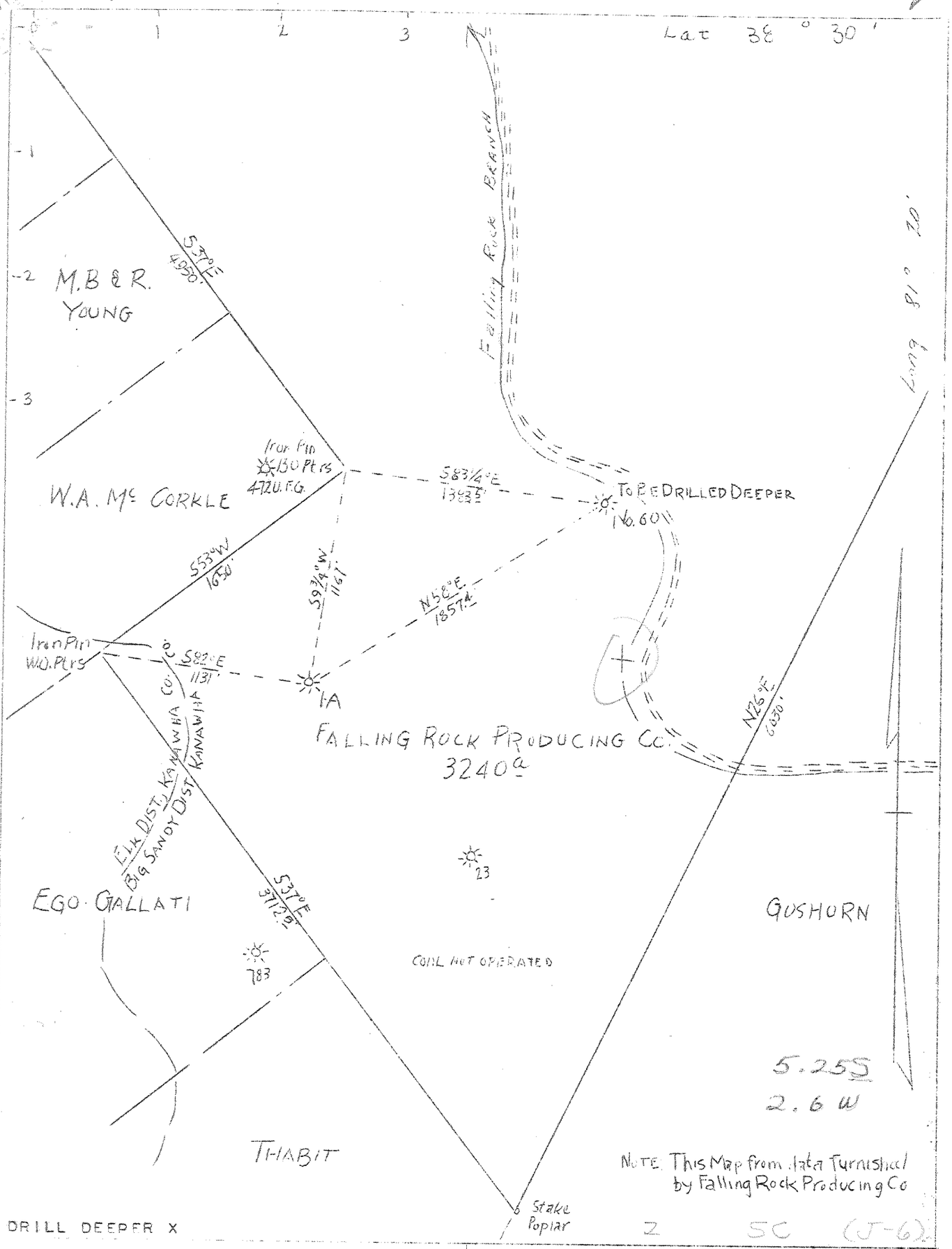
— Denotes one inch spaces on border line of original tracing.

47 039

"IMPERIAL" TRACING CLOTH K & E CO., N.Y.

Deep Well

APR 17 1975



NOTE This Map from data Furnished by Falling Rock Producing Co

DRILL DEEPER X

Z 5C (J-6)

COMPANY FALLING ROCK PRODUCING CO.
ADDRESS 40 PEOPLES BANK BLDG., MARIETTA, O.
FARM FALLING ROCK PRODUCING CO.
TRACT ACRES 3240 LEASE NO.
WELL (FARM) NO. 60 SERIAL NO.
ELEVATION (S.L.) 708.16 RIG FLOOR
QUADRANGLE CLENDENIN N. C.
COUNTY KANAWHA DISTRICT BIG SANDY
ENGINEER W. S. GRAVELY
ENGINEER'S REG. NO.
FILE NO. DRAWING NO.
DATE 10/22/46 SCALE 1"-660'

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

WELL LOCATION MAP
FILE NO. KAN 1317D

+ DENOTES LOCATION OF WELL ON U.S. 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.

Deep Well

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

Permit No. Kan 1317-D
Clendenin Quad.

Gas Well
CASING & TUBING

Company	Falling Rock Producing Co.			
Address	411 Peoples Bank Bldg., Marietta, Ohio			
Farm	Falling Rock Acres 3240	8½	1075	1075
Location	Falling Rock Creek	6 5/8	1325	1325
Well No.	60 Elev. 708	5 3/16	4993	4993
District	Big Sandy Kanawha County			
Surface	Falling Rock Producing Co. Marietta, Ohio			
Mineral	Same			
Commenced	See below Completed Jan. 16, 1947			
Volume	5,000,000 C.F.			

NOTE: Original well drilled by Falling Rock Cannel Coal Co. Commenced Aug. 24,1915 completed Sept. 26,1915

Conductor		20	
Slate, Sand, Lime, Slate, Shells	20	585	
Sand	585	628	
Slate, Sand, Shells	628	1077	
Red Rock	1077	1205	
Maxon Sand	1205	1228	
Slate	1228	1235	
Little Lime	1235	1270	
Shells	1270	1292	
Pencil Cave	1292	1295	Gas in lime 1355' Red Sand Gas
Big Lime	1295	1460	1435
Shells	1460	1495	
Weir Sand	1495	1706	Gas in Weir Sand 1694-1698
Slate	1706	1719	Show oil 1706

Drilled deeper by Falling Rock Producing Co. Commenced Oct. 1,1946, Completed Jan. 16,1947

Slate and Shells	1719	1778	
Black Shale	1778	1885	
BereaShells	1885	1895	
Slate & Shells	1895	3085	
Brown Shale	3085	3093	
Slate & Shells	3093	3740	
Brown Shale	3740	3850	
Slate Shells	3850	4420	
Brown Shale	4420	4450	
Slate	4450	4610	
Brown Shale	4610	4619	
Slate-White	4619	4705	
Brown Shale	4705	4775	
Slate & Shells	4775	4920	
Brown Shale	4920	4974	
Corniferous Lime	4974	5100	
Oriskany	5100	5125	
Total Depth		5125	Gas 5106

1460
1295
165

1460
708
752

OG-1

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

RECEIVED
MAR 26 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.

DATE March 24, 1975

Surface Owner Kanawha Banking & Trust Co. Trustee for C. E. Krebs
Address P.O. Box 393, Charleston, W.Va.25322
Mineral Owner Same as above
Address
Coal Owner No coal on premises
Address
Coal Operator None
Address

Company Columbia Gas Transmission Corporation
Address P.O.Box 1273, Charleston, W.Va.25325
Farm Falling Rock Prod.Co. Acres 3240
Location (waters) Falling Rock Creek
Well No. X-52-7093 Elevation 708.16'
District Big Sandy County Kanawha
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

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 March 31, 1950 by SEATEX OIL CO., INC. made to Columbia Gas Trans. Corp. and recorded on the 27th day of May 1950 in Kanawha County, Book 915 Page 402

____ NEW WELL ____ DRILL DEEPER ____ REDRILL X FRACTURE ~~XXXXXXXXXXXX~~

____ 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

Very truly yours,
COLUMBIA GAS TRANSMISSION CORPORATION
(Sign Name) ____
Well Operator
Director, Exploration & Development
P. O. Box 1273
Street
Address of Well Operator
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.

KAN-1317-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)
NAME _____
ADDRESS _____
TELEPHONE _____

RESPONSIBLE AGENT:
NAME W. H. Chapman
ADDRESS P.O. Box 610,Clendenin, W.Va.25045
TELEPHONE (304) 965-3317

ESTIMATED DEPTH OF COMPLETED WELL: 5125' 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			
9 - 5/8			
~~XXXX~~ 8-1/4		1075'	
~~X~~ 6-5/8		1325'	
~~5x~~ 5-3/16		4993'	
4 ½			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS - FEET - SALT WATER - FEET -
APPROXIMATE COAL DEPTHS -, -.
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

RECEIVED
WR-35 WV Division of Environmental Protection

JAN 2 1 1998

Permitting
Office of Oil & Gas

04-Dec-96
API # 47- 39-01317 D

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

Well Operator's Report of Well Work

Farm name: HAMER, JIM C. COMPANY Operator Well No.: COCO 7093

LOCATION: Elevation: 691.10 Quadrangle: BLUE CREEK

District: BIG SANDY County: KANAWHA
Latitude: 12200 Feet South of 38 Deg. 27Min. 30 Sec.
Longitude 1350 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: 12/04/96
Well work Commenced: 09/18/97
Well work Completed: 10/07/97
Verbal Plugging
Permission granted on: _____
Rotary _____ Cable _____ Rig
Total Depth (feet) 5125'
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	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 8 5/8"		1075'	
7"		1325'	
5 1/2"		4993'	
3 1/2"		5053'	60SX

OPEN FLOW DATA

Producing formation ORISKANY STORAGE Pay zone depth (ft) 5100'-5125'
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 2 3 1998

Replaced top joint of 3 1/2" casing and installed new 7" X 5 1/2" X 3 1/2" API 3000 wellhead. Stimulated ORISKANY with N^2-Assist Deltafrac using 471 bbls water, 101 MSCF N^2, and 22, 800 lbs. of 20/40 sand.

FORM WW-2B 039-1317 DD Page___of_____

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

10450 ① 288

1) Well Operator: Columbia 175 Gas Transmission Corp.

Operator's Well Number: 7093 3) Elevation: 708

22921

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 475 Sandstone

Proposed Total Depth: 5225 feet

7) Approximate fresh water strata depths: N/A

8) Approximate salt water depths: N/A

9) Approximate coal seam depths: N/A

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

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.

12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS Size	Grade	Weight per ft.	FOOTAGE INTERVALS For drilling	Left in well	CEMENT Fill-up (cu. ft.)
Conductor						
Fresh Water	8 5/8"			1075'	1075'	Existing from Well Record
Coal	7"			1325'	1325'	
Intermediate	5 1/2"			4993'	4993'	
Production	3 1/2"	J-55	9.2	5053'	5053'	60 sks
Tubing						38CSR18.11.1
Liners			C. H. 10-22-96			

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 (Type) |__| Agent

Page 1 of__
Form WW2 - A
(6/94)
File Copy

RECEIVED
NOV 18 1996
Office of Oil & Gas
Permitting

1) Date: 10/29/96
2) Operator's well number
COCO- WELL # 7093
3) API Well No: 47 - 039 - 1317 - 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

(c) Coal Lessee with Declaration
Name
Address

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

Copy of lease in Kanawha City Office

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.

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
PATRICIA A. TURKETT
P O. BOX 1273
CHARLESTON, WEST VIRGINIA 25325-1273
My Commission Expires August 12, 1997

Well Operator COLUMBIA GAS TRANSMISSION CORP.
By: John V. McElhatt
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