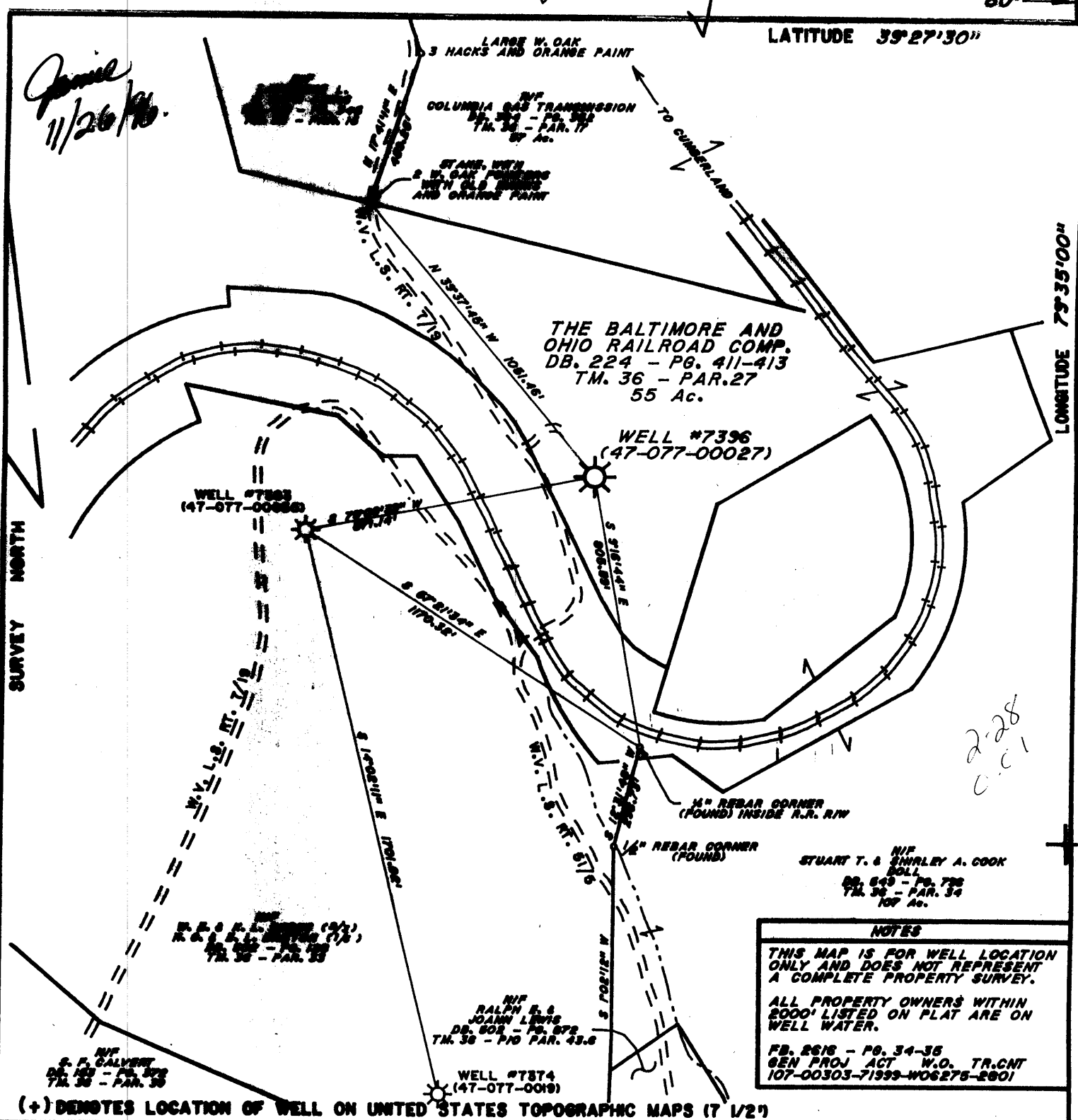


80'

LATITUDE 39°27'30"

LONGITUDE 79°35'00"

Janice
11/26/86



NIP
STUART T. & SHIRLEY A. COOK
ROLL
DB. 649 - PG. 798
TM. 36 - PAR. 34
107 Ac.

NOTES
THIS MAP IS FOR WELL LOCATION ONLY AND DOES NOT REPRESENT A COMPLETE PROPERTY SURVEY.
ALL PROPERTY OWNERS WITHIN 2000' LISTED ON PLAT ARE ON WELL WATER.
FB. 2618 - PG. 34-35
GEN PROJ ACT W.O. TR.CNT
107-00303-71999-W06275-2801

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

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 400'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION U.S.G.S. BM DATUM
DB-2032-1909
ELEV. = 2032.00'

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) Charles Douglas Davidson
R.P.E. _____ L.L.S. 819

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE MARCH 14, 1986
OPERATOR'S WELL NO. 7396
API WELL NO. _____

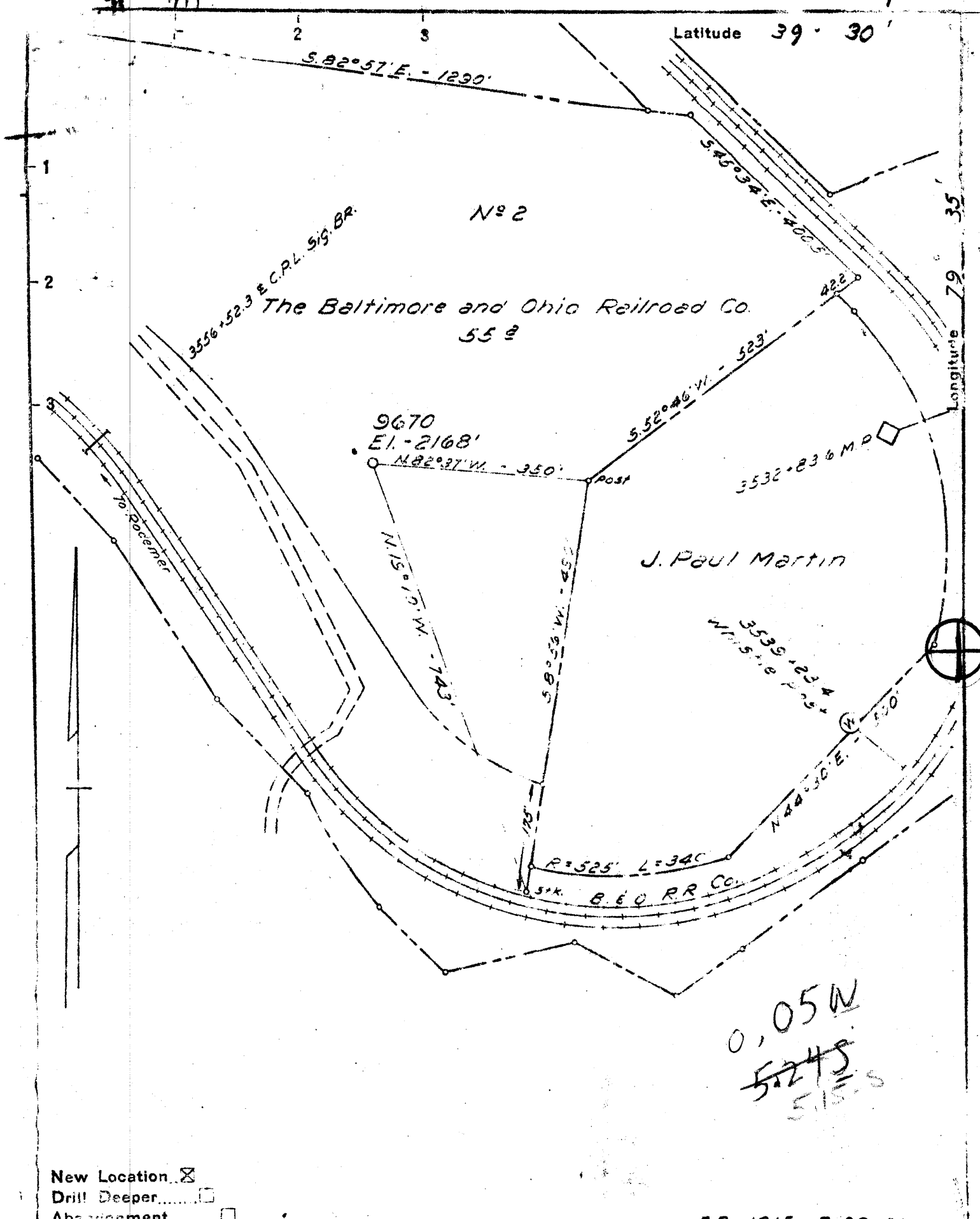
WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS,") PRODUCTION _____ STORAGE X DEEP _____ SHALLOW _____
LOCATION: ELEVATION 2170.74 WATER SHED SALTICK RUN
DISTRICT PORTLAND COUNTY PRESTON
QUADRANGLE TERRA ALTA COORDINATES LAT. 39°25'30" LONG. 79°35'01"
SURFACE OWNER THE BALTIMORE & OHIO RAILROAD COMPANY ACREAGE 55
OIL & GAS ROYALTY OWNERS SAME AS ABOVE LEASE ACREAGE 55
COAL OWNER _____ LEASE NO. 62530

PROPOSED WORK: DRILL _____ CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUS OFF OLD FORMATION _____ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) RECONDITION FOR STORAGE Well drilled by Hope Inc in 1952 TD-5262
PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION Coal - Onisburg ESTIMATED DEPTH 5262' Re-work existing well.
WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT RICHARD L. GOTT DEC 1 1986
ADDRESS P.O. BOX 1273, CHALESTON W.VA. ADDRESS P.O. BOX 1273, CHALESTON W.VA.
25325-1273 25325-1273

DEEP WELL

PRESTON COUNTY NAME PERMIT 0027

9-11A FORM



New Location
 Drill Deeper
 Abandonment

F.B.-1015 P. 28-31

Company Hope Natural Gas Co.
 Address Clarksburg, W. Va.
 Farm The Baltimore & Ohio Railroad Co.
 Tract _____ Acres 55 Lease No. 62530
 Well (Farm) No. _____ Serial No. 9670
 Elevation (Spirit Level) 2168'
 Quadrangle Kingwood-N C
 County Preston District Portland
 Engineer W. M. Bowers
 Engineer's Registration No. 900
 File No. _____ Drawing No. _____
 Date July 21, 1951 Scale 1" = 200'

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

WELL LOCATION MAP
 FILE NO. PRES-27

+ 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.

IMPERVIOUS TRACING CLOTH
 K & E CO., N. Y.

6-6280

Deep Well

3405

WR-35

03-Dec-96

API # 47-077-00027-W

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

Reviewed AS

Well Operator's Report of Well Work

Farm name: BALTIMORE & OHIO RAILROAD Operator Well No.: TERRA ALTA#7396

LOCATION: Elevation: 2,170.74 Quadrangle: TERRA ALTA

District: PORTLAND County: PRESTON
Latitude: 12090 Feet South of 39 Deg. 27 Min. 30 Sec.
Longitude: 80 Feet West of 79 Deg. 35 Min. 0 Sec.

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

Agent: RICHARD L. COTY
Inspector: PHILLIP TRACY
Permit Issued: 12/04/96
Well work Commenced: 06-03-98
Well work Completed: 07-29-98
Verbal Plugging
Permission granted on: _____
Rotary _____ Cable _____ Rig
Total Depth (feet) 5,503' (cleaned out to 5,485')
Fresh water depths (ft) See Original Records
Salt water depths (ft) See Previous

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
	ATTEMPTED TO FISH OUT SL BAILER CLEANED OUT WELL TO 5,485'		
	PARTIAL WELLHEAD CHG NO ADDTNL CSG OR LINER INSTALLED STIMULATION; SEE BACK FOR DETAILS		

OPEN FLOW DATA

Producing formation CHERT Pay zone depth (ft) 5352' - 5491'
Gas : Initial open flow 110,000 MCF/d Oil : Initial open flow _____ Bbl/d
Final open flow 94,700 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests (39 Years) Hours
Static rock Pressure 2,201 psig (surface pressure) after (30 Days) 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: W.H. Fraker
Date: 3/3/99

MAR 29 1999

PRE 0027 W

WR-35

03-Dec-96

API # 47- 077-00027-W

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

Well Operator's Report of Well Work

WORKOVER

- Fished for slickline bailer/ bailer not recovered.
- The well was cleaned out to an effective TD of 5,485'.
- The wellhead was partially replaced.

STIMULATION

- Acidized on 09-08-98.
- Additives: FE1A; HAI-81; SCA-130; FE5A; Penn-88M; HC2;BA-2.
- Total acid 1,000 gallons 15% FE acid, 1,000 gallons 20% FE acid, 2,660 gallons of 28% FE acid
- Total water 9,193 gallons
- Total nitrogen 569,000 scf.
- Acidized on 09-09-98.
- Additives: FE1A; HAI-81; SCA-130; FE5A; Penn-88M; HC2;BA-2.
- Total acid 2,000 gallons 20% FE acid, 2,000 gallons 28% FE acid
- Total water 11,592 gallons
- Total nitrogen 695,000 scf.
- The waste fluids were hauled to LAD in Wheeling, WV for disposal



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 DRILL DEEFER
 WELL RECORD

Quadrangle Kingwood
 Permit No. PRES-27-D

Oil or Gas Well Gas
 (KIND)

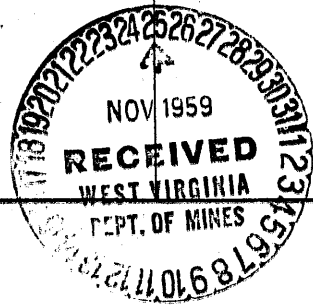
Company Atlantic Seaboard Corp.
 Address P.O. Box 1273; Charleston 25, W. Va.
 Farm Baltimore & Ohio R.R. Co. Acres 55
 Location (waters) Saltlick Creek
 Well No. X-76-7396 Elev. 2170.74
 District Portland County Preston
 The surface of tract is owned in fee by _____
 Address _____
 Mineral rights are owned by Baltimore & Ohio Railroad Co
1213 B & O Building Address Baltimore 1, Maryland
 Drilling commenced October 23, 1959
 Drilling completed October 25, 1959
 Date Shot NO From _____ To _____
 With _____
 Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
 Volume _____ Cu. Ft.
 Rock Pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 WELL ACIDIZED _____
 WELL FRACTURED _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer _____
16			None
13			Size of _____
10			Depth set _____
8 1/4			Perf. top _____
3 5 1/2		5350	Perf. bottom _____
2			Perf. top _____
Liners Used			Perf. bottom _____

CASING CEMENTED Yes SIZE 5 1/2" No. Ft. To Surface _____
Oct. 28, 1959
 COAL WAS ENCOUNTERED AT - FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES

RESULT AFTER TREATMENT Storage Well
 ROCK PRESSURE AFTER TREATMENT _____
 Fresh Water _____ Feet _____ Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Drill Deeper Record from 5368				5368			
Chert				5491	5503		
Shale - <u>Malmar</u>			5491	5500	5362		
Oriskany			5500	-	141		
Total Depth				5503			
				(475)			
Well Surveys Run							
Gamma Ray							



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

Permit No. Pres 27
Kingwood Quad.

Gas Well
CASING & TUBING

Company	Hope Natural Gas Company				
Address	445 West Main St., Clarksburg, W.Va.		13	32	32
Farm	B. and O.R.R. Co. Acres 55		10	485	485
Location			8 1/2	2017	2017
Well No.	9670	Elev. 2168	6 5/8	5342	5342
District	Portland	Preston County			
Surface					
Mineral					
Commenced	May 29, 1952				
Completed	Sept. 16, 1952				
Not shot					
Volume	12,300,000 C.F.				
Rock Pressure	1310#				
Fresh Water	20°; 580'				
Salt Water	1875' 2 1/2 blrs. per hr.; 22 blrs. W in 3 1/2 hrs. 1978				
	1 3/4 blrs. W over Sun. 2028				

Casing cemented:
8" and 7" casing set
in cement.

No coal recorded

Surface	-	30
Lime	30	110
Slate	110	225
Lime	225	450
Sand	450	475
Slate	475	500
Lime	500	715
Dark Sand	715	790
Slate	790	795
Lime	795	900
Slate	900	930
Lime	930	1020
Slate	1020	1040
Lime	1040	1090
Slate Shell	1090	1328
Hard Lime	1628	1640
Slate Shell	1640	1857
Benon Sand	1857	1915
Broken Sand	1915	2002
Slate	2002	2852
Dark Slate	2852	2963
Light Slate	2963	3650
Dark Slate	3650	3745
Dark Gray Slate	3745	3830
Dark Slate	3830	3845
Gray Slate	3845	3910
Brown Shale	3910	3950
Gray Slate	3950	4220
Brown Shale	4220	4567
Dark Shale	4567	4789
Tally Lime	4789	4814
Shale	4814	5050
Dark Lime	5050	5068
Black Slate	5068	5238
Dark Lime	5238	5270
Black Shale	5270	5307
Onodago Lime	5307	5340
Chert	5340	

T.D.
Gas pocket 4315
Brown Break 5307
Gas 5344-46-48-53-57-59-62

~~5282~~
5362
463

0- 5307
2168

- 3139

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

077 27 Free.

Handwritten initials

22933

- 1) Well Operator: COLUMBIA GAS TRANSMISSION CORPORATION ¹⁷⁵ 10450 5 637
- 2) Operator's Well Number : Terra Alta Stg # 7396 (API 47-077-00027) 3) Elevation : 2170.74 feet
- 4) Well type : (a) Oil / or Gas X /
(b) If Gas : Production / Underground Storage X /
Deep X / Shallow /
- 5) Proposed Target Formation (s) : Chert-Oriskany 475
- 6) Proposed Total Depth : Deepen to 5675' (drill deeper 172 feet) feet
- 7) Approximate fresh water strata depths ; 80', 580', 1875', 1978'
- 8) Approximate salt water strata depths : 2028'
- 9) Approximate coal seam depths : NONE REPORTED
- 10) Does land contain coal seams tributary to active mine ? Yes / No X /

Issued 12/04/96
Expires 12/04/98
RECEIVED
WV Division of
Environmental Protection
NOV 18 1996
Permitting
Office of Oil & Gas

11) Proposed Well Work : Columbia proposes to log the well with cased hole logs set a plug and and reconfigure the wellhead. The well will be drilled deeper through the Oriskany as needed to facilitate open hole logging and installation of a casing liner. A 3-1/2" or 4" FJ liner will be installed across the open hole, into the casing, & cemented in place. The liner is intended to isolate the caving Needmore shale section. The liner will be perforated and acidized across the Oriskany and Chert sections as determined by the well logs. Clean up, flow test & place back in service.

12) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS	FOOTAGE INTERVALS	CEMENT			
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill - up (cu. ft.)
conductor	13"	not recorded	54.5#	32'	32'	
Fresh Water	10-3/4" 8-5/8"	not recorded	32.75# 24#	485'3" 2,021'1"		45 sks cmt/ 12 gel
Coal						
Intermediate	7"	J-55	20# & 23#	5,338'6"	5,342'	(squeezed in 1959 @ 3770' w/ 650 sks cmt) 50 sks cmt/ 26 gel
Production	5-1/2"	J-55	17#	5,373'	5,373'	125 sks latex cmt
Tubing						
Liners	4" FJ OR 3-1/2" (TO BE INSTALLED)	N-80		approx. 5,075' to approx. 5,675' 600'	600'	150 cu ft.

Handwritten notes:
Expanding from well records
38CSR1011.1

PACKERS : Kind None
Sizes _____
Depths set _____

00162125
38

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)

NOV 18 1996
Permitting
Office of Oil & Gas

1) Date: 10/24/96
2) Operator's well number
TERRA ALTA WELL 7396
3) API Well No: 47 - 077 - 00027 - w
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 Baltimore and Ohio Railroad
Address % Transportation Inc., 500 Water Street,
Jacksonville, FL 32202
 - b) Name _____
Address _____
 - c) Name _____
Address _____
- 5) (a) Coal Operator:
Name _____
Address _____
- (b) Coal Owner (s) with Declaration
Name SAME
Address _____
- Name _____
Address _____
- (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Phillip Tracy
Address Route 2, Box 37-A
Montrose, WV 26283
Telephone (304) - 636-8798

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

*copy of lease
in Col. D. T. A.
Office in
Kan City*

_____ 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)

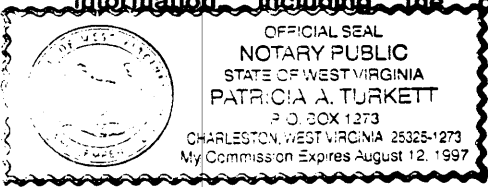
I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

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: W. H. Forder
Its: Senior Storage Engineer / Well Services
Address Route 3, Box 216
Elkins, WV 26241

Telephone 304/636-8129
Subscribed and sworn before me this 4th day of November, 19 96



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