

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

FILE NO. _____
 DRAWING NO. 7416
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION U.S.G.S. BM DATUM
06-2092-1909
 ELEV. = 2022.00'

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) [Signature]
 R.P.E. _____ L.L.S. 798

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL & GAS

DATE OCTOBER, 1996
 OPERATOR'S WELL NO. 7416
 API WELL NO. 25325-1273
47 077 00107W
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1922' WATER SHED SALT LICK RUN
 DISTRICT PORTLAND COUNTY PRESTON
 QUADRANGLE TERRA ALTA COORDINATES LAT: 39° 25' 27" LONG: 79° 34' 42"

SURFACE OWNER STUART T. & SHIRLEY A. COOK DOLL ACREAGE 107 Ac.
 OIL & GAS ROYALTY OWNER L. PAUL MARTIN, et al LEASE ACREAGE 114 Ac.
 COAL OWNER MARY WUNSCHEL LEASE NO. 90373

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) RECONDITION FOR STORAGE
Well drilled in 1963 by Atlantic Seaboard, ID-5376

PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION Chert-Orepanny ESTIMATED DEPTH 5376'
 WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT RICHARD L. GOTY
 ADDRESS P.O. BOX 1273, CHALESTON W.V.A. ADDRESS P.O. BOX 1273, CHALESTON W.V.A.
25325-1273

DEC 6 1996

DEEP well

FORM W-6

PRESTON COUNTY NAME PERMIT 00107

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by Paragraph 2 of the rules and regulations of the Oil and Gas Section of the Mining Law of West Virginia.

Latitude **39° 30'** 7395

Longitude **79° 30'**

Sybert R. Gurell

D.F. CARLISS

B.&O.R.R.

J. PAUL MARTIN, ET UX.

J. PAUL MARTIN

Stone Pile 2 Maples & Hickory Wit.

JESSIE F. CALVERT

7396

CATHOLIC CEM.

I.A.C.

7416

7374 C.J. LEWIS

7388

New Location
 Drill Deeper
 Abandonment

Stake In Edge Of Road
 Power Pole MR # 5924
 Bears N 24° 45' W - 29'

1 SW (F-13)

Fence Post on Hillside
 Dwd. R.O. & Pop. Ptr.

SALT LICK CRK.

BM Description:
 U.S.G.U.E. Bench Mark Spike
 In Root of Double White Oak
 On North Side of Road About
 800' Below Kinsinger Run.
 Elev. 1676.70'

Degree Of Accuracy:
 One Part In 200
 5.47 S.
 4.24 W

Company **ATLANTIC SEABOARD CORP.**
 Address **CHARLESTON, W.VA.**
 Farm **J. PAUL MARTIN ET. UX.**
 Tract _____ Acres **114** Lease No. **AS-373**
 Well (Farm) No. _____ Serial No. **X76-7416**
 Elevation (Spirit Level) **1922.00'**
 Quadrangle **KINGWOOD - NE**
 County **PRESTON** District **PORTLAND**
 Engineer *Sybert R. Gurell*
 Engineer's Registration No. **2529**
 File No. **172-133** Drawing No. _____
 Date **MARCH 15, 1963** Scale **1" = 400'**

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

WELL LOCATION MAP
 FILE NO. **PRES-107**

+ 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.

K-E 156 IMPERIAL TRACING CLOTH T.M.

Samples 1100-1450' 4300-5300' Deep Well

WR-35

03-Dec-98

API # 47- 077-00107 W

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

JUL 22 1998

Well Operator's Report of Well Work

Farm name: MARTIN, HOMER PAUL Operator well No.: TERRA ALTA#7416

LOCATION: Elevation: 1,922.00 Quadrangle: TERRA ALTA

District: PORTLAND County: PRESTON
Latitude: 12,410 Feet South of 39 Deg. 27 Min. 30 Sec.
Longitude: 10,390 Feet West of 79 Deg. 32 Min. 30 Sec.

Compay: 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: 05-01-98

Well work Completed: 06-26-98

Verbal Plugging

Permission granted on: _____

Rotary _____ Cable _____ Rig

Total Depth (feet) _____

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 Left in Well	Cement Fill Up Cu. Ft.
13-3/8"	32'	(EXISTING)	20 SKS
9-5/8"	1,418'	(EXISTING)	246 FT ³ Litepoz 296 sks Class A
7"	5,080'	(EXISTING)	150 FT ³ Litepoz 150 sks neat, 170 gals cealment, 400 FT ³ Poz, 400 Reg
4-1/2"	5,350'	(NEW STRING)	133 FT ³ Std SEE OPPOSITE SIDE FOR DETAILS
STIMULATION: SEE OPPOSITE SIDE FORDETAILS			

OPEN FLOW DATA

Producing formation Huntersville Chert & Oriskany Pay zone depth (ft) 5029'-5264'; 5179'-5304'

Gas : Initial open flow 3549 MCF/d Oil : Initial open flow _____ Bbl/d

Final open flow N/A MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure 1806 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: W.H. Foraker

Date: 7/20/98

PRE 0107W

JUL 27 1998

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

Well Operator's Report of Well Work

- On 05-01-98 Halliburton ran a slickline to a depth of 5,276' setting on soft fill. The slickline weight dropped through the fill and set down @ 5,376'. The TD of the well was recorded as 5,376'.
- WellTech Service Rig #290 was moved on location 05-19-98.
- The well was "killed" on 05-21-98 with a dextrid, xanathan gum polymer mud system.
- 05-28-98 the well was cleaned out to a TD of 5,381'KB or 5,373'GL.
- Western Atlas was moved in and rigged up on 06-02-98. The well was logged with a Z-Den/Neu, Hex Dip, CBIL and Dir. Survey . The loggers' TD was 5,355' GL, 7" casing seat @ 5,046 GL.
- On 06-03-98 a string of 4-1/2"OD 11.6lb/ft N-80 ERW LT&C Range 3 casing was run to a depth of 5,349.88'. Halliburton cemented the casing in place with 133 cubic feet cement composed of: 125 sacks standard bulk cement with 10% salt, 6/10ths of 1% Halad 344, 4/10ths of 1% HR-5, and 1/4# D-Air I. The shoe was landed @ 5,348.38' KB. The latch down plug @ 5,342.40'KB. Ran 8 centralizers. The first centralizer on the latch down collar and then every other collar.
- The wellhead was modified with new 7" casing seals and 11" X 11" 3M casing spool to land the 4-1/2" casing.
- Western Atlas ran an API GR-NEU, SBT on 06-05-98 obtaining a cement top @ 4,818'.
- Western Atlas perforated the 4-1/2" casing on 06-16-98 as follows:

Run #1	5,307' - 5,312';		
Run #2	5,282' - 5,286';	gas	
Run #3	5,262' - 5,269' & 5,276' - 5,282';	gas	
Run #4,	5,212' - 5,219';	gas	
Run #5,	5,192' - 5,209';	gas	fluid @4,100'+/-
Run #6,	5,126' - 5,131';	gas	
Run # 7,	5,091' - 5,098';	gas	
Run # 8,	5,071' - 5,091';	gas	
Run #9,	5,051' - 5,054' & 5,057' - 5,071'	gas	

Perforations were performed w/ 3-3/4" EHC perforating guns w/6 SPF and 60 degree phasing

- Halliburton was moved in on 06-24-98 and the well was acidized utilizing Halliburton's coiled tubing and 15% FE acid across the perforated section using a selective injection packer (SIP) @ 5 foot intervals. Setting and releasing with 30 sets. A total of 236 bbls of 15% FE acid was used during the job. Additives: FE1-A, FE-5A, BA-2, HAI-81, SCA-130, PENN-88, and HC-2.
- AVERAGE RATE=1.5BPM AVERAGE TREATING PRESSURE=2,034 PSIG
- Recovered 80 bbls of 236 bbls total fluids on flowback, 06-25-98.
- Fluids removed from location and transported for disposal @ Liquid Asset Disposal, Inc. (LAD), Wheeling, WV on 07-08-98.
- Well Work Completed 06-26-98.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 16

Quadrangle Kingwood

Permit No. PRES-107

WELL RECORD

Oil or Gas Well Storage
(KIND)

Company Atlantic Seaboard Corporation
Address Terra Alta, West Virginia
Farm J. Paul Martin Acres 114
Location (waters) Salt Lick Creek
Well No. 7416 Elev 1922
District Portland County Preston
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by J. Paul Martin
98 South 33rd St. Address Newark, Ohio
Drilling commenced July 13, 1963
Drilling completed July 26, 1963
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume See reverse Cu. Ft.
Rock Pressure Storage lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED See reverse

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			<u>None</u>
13-3/8 <u>H-40</u>	<u>48'</u>	<u>32'</u>	Size of _____
<u>9-3/8 32#</u>	<u>1418'</u>	<u>1418'</u>	Depth set _____
<u>7" J-55 23#</u>	<u>5080'</u>	<u>5080'</u>	Perf. top _____
6 5/8			Perf. bottom _____
5 3/16			Perf. top _____
3 <u>J</u>			Perf. bottom _____
2-3/8 <u>4.60</u>	<u>5383'</u>	<u>5383'</u>	Perf. top _____
Liners Used			Perf. bottom _____

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

See reverse

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

WELL FRACTURED _____

RESULT AFTER TREATMENT See reverse

ROCK PRESSURE AFTER TREATMENT Storage

Fresh Water _____ Feet _____ Salt Water _____ Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Siltstone & Shale			0	4351			
Tully Lime			4351	4373	5019	5190	5316
Siltstone & Shale			4373	5019	1922	1922	1922
Onondaga Lime			5019	5041	3097	3268	3394
Chert			5041	5179			
Shale			5179	5190			
Oriskany Sand			5190	5316			
Helderberg Lime			5316				
Total Depth				5376			



Formation	Color	Hard or Soft	Top 16	Bottom	Oil, Gas or Water	Depth Found	Remarks
Logging:							
Gamma Ray:			4200' to	5367'	7-26-63	Basin Surveys, Inc.	
Temperature:			4600' to	5376'	7-26-63	Basin Surveys, Inc.	
Casing & Cement:							
13-3/8", 48#/ft. H-40 casing - 32' (threads on) cemented w/20 sacks cement 7-13-63.							
9-5/8", 32#/ft. H-40 casing - 1418' (threads on) set @1419' (KB). Cemented to surface 246 cu. ft. "Litepoz" and 246 sacks Class A Cement tailed w/50 sacks of neat cement, 3% Na Cl and 1% "Flac". - 7-18-63 - Dowell.							
7", 23#/ft. J-55 casing - 5080' (threads on) set @5056' (KB). Two stage cemented to surface. 1st stage - 150 cu. ft. "Litepoz" and 150 sacks Class A cement tailed w/170 gallons of "Cealment" (Latex Cement). 2nd Stage - 400 cu. ft. "Litepoz" and 400 sacks Class A cement tailed w/20 sacks regular cement and 2% Ca Cl. - 7-23-63 - Dowell.							
2-3/8", 4.6#/ft. J-55 tubing - 5383' (threads on) suspended from tubing hanger flange. Siphon string w/bottom joint slotted & end closed 7-27-63							
Stimulation:							
Chert & Oriskany: 500 gal. Super Mud Acid; 5000 gal. 15% Retarded HCl Acid; 5000 gal. 15% Regular HCl Acid; 5000 gal. water overflush and 92,000 scf of N ₂ . 7-31-63 - Dowell							
Production:							
During Drilling: Chert gas tested 377 Mcf 7-25-63							
Chert & Oriskany gas tested 1,876 Mcf 7-26-63							
Before Acid - Not tested							
After Acid - 7,600 Mcf @2350 psig (Back pressure test) 8-8-63							
Final Shut-in date - 8-8-63							

Date OCT 3 1963, 19

APPROVED ATLANTIC SEABOARD CORPORATION, Owner
 By *H. H. [Signature]* Sept
 (Title)

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

077 107 Frac

Hahn

1) Well Operator: COLUMBIA GAS TRANSMISSION CORPORATION 10450 (S) 637

2) Operator's Well Number: Terra Alta Stg # 7416 (API 47-077-00107) 3) Elevation: 1,922.00 feet

Well type: (a) Oil / or Gas X /
(b) If Gas: Production / Underground Storage X /
Deep X / Shallow /

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

Proposed Target Formation (s): Chert-Oriskany

Proposed Total Depth: 5376 feet

Approximate fresh water strata depths: NONE RECORDED

8) Approximate salt water strata depths: NONE RECORDED

9) Approximate coal seam depths: NONE RECORDED

10) Does land contain coal seams tributary to active mine? Yes / No X /

11) Proposed Well Work: Columbia proposes to kill the well with a fresh-water polymer based mud system, and reconfigure the wellhead. The well will be logged with cased and open hole logs. A 4-1/2" 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	13-3/8"	H-40	48#	32'	32'	20 sks cmt
Fresh Water	9-5/8"	K-55	36#	1,418'	1,418'	surf w/246 cu ft Litepoz 296 sks Class A1
Coal						
Intermediate						
Production	7"	J-55	23#	5,080' cmt to surf	150 cu ft litepoz/ 150 sks neat	170 gals cealmt 400 cu ft poz/ 400 reg
Tubing						
Liners	4-1/2"	N-80 (TO BE INSTALLED)		approx. 4,776' 600'	to approx. 5,376' 600'	150 cu ft.

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

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 Agent
 (Type)

NOV 18 1996

Date: 10/24/96
2) Operator's well number
TERRA ALTA WELL 7416
3) API Well No: 47 - 077 - 00107 - W
State - County - Permit

Permitting
Office of Oil & Gas
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 Homer Paul Martin
Address 276 Walnut Street
Morgantown, WV 26505
b) Name _____
Address _____
c) Name _____
Address _____
6) Inspector Phillip Tracy
Address Route 2, Box 37-A
Montrose, WV 26283
Telephone (304) - 636-8798

5) (a) Coal Operator:
Name _____
Address _____
(b) Coal Owner (s) with Declaration
Name Mary Wunschel - 1/2 Interest
Address Box - 13
Terra Alta, WV 26764
Name Denny F. Scott - 1/2 Interest
Address 12304 Lagoon Lane
St. Petersburg, FL 33706
(c) Coal Lessee with Declaration
Name _____
Address _____

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

Copies of lease in Col. Dist office in Kanawha 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)

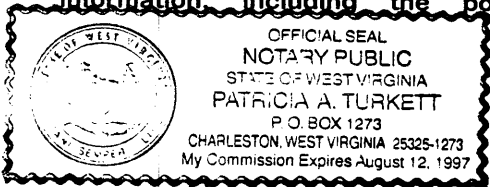
I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through on the above named parties, by:

- 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. Foraker
Its: Senior Storage Engineer / Well Services
Address Route 3, Box 216
Elkins, WV 26241
Telephone 304/636-8129

Subscribed and sworn before me this 14th day of November, 19 96

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