

NOTES
 THIS MAP IS FOR WELL LOCATION ONLY AND DOES NOT REPRESENT A COMPLETE PROPERTY SURVEY.
 ALL PROPERTY OWNERS WITH IN 2000' LISTED ON PLAT ARE ON WELL WATER.
 F.B. 2633 - PG. 61-64
 GEN PROJ ACT W.O. TR.CNT 107-00315-6B1PM-W10736-2801

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

FILE NO. _____
 DRAWING NO. 7520
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION USGS Standard disc. stamped
42 VEA set in conc. ment. by SEC. RI. 82
about 1.3 mi. N. west of RI. 80. Elev. 2398.70'

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) Steve Nicholson
 R.P.E. _____ L.L.S. 798

PLACE SEAL HERE

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

DATE OCTOBER, 1996
 OPERATOR'S WELL NO. 7520
 API WELL NO. 47 077 000147W

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 2402.60' WATER SHED GARLIC RUN OF SALT LICK
 DISTRICT UNION COUNTY PRESTON
 QUADRANGLE AURORA, WV COORDINATES LAT. 39°21'39" LONG. 79°36'02"

SURFACE OWNER LAWRENCE HALL NICE, HRS ACREAGE 53 Ac.
 OIL & GAS ROYALTY OWNER LINDSLEY NICE LEASE ACREAGE 53 Ac.
 COAL OWNER LINDSLEY NICE LEASE NO. 1097

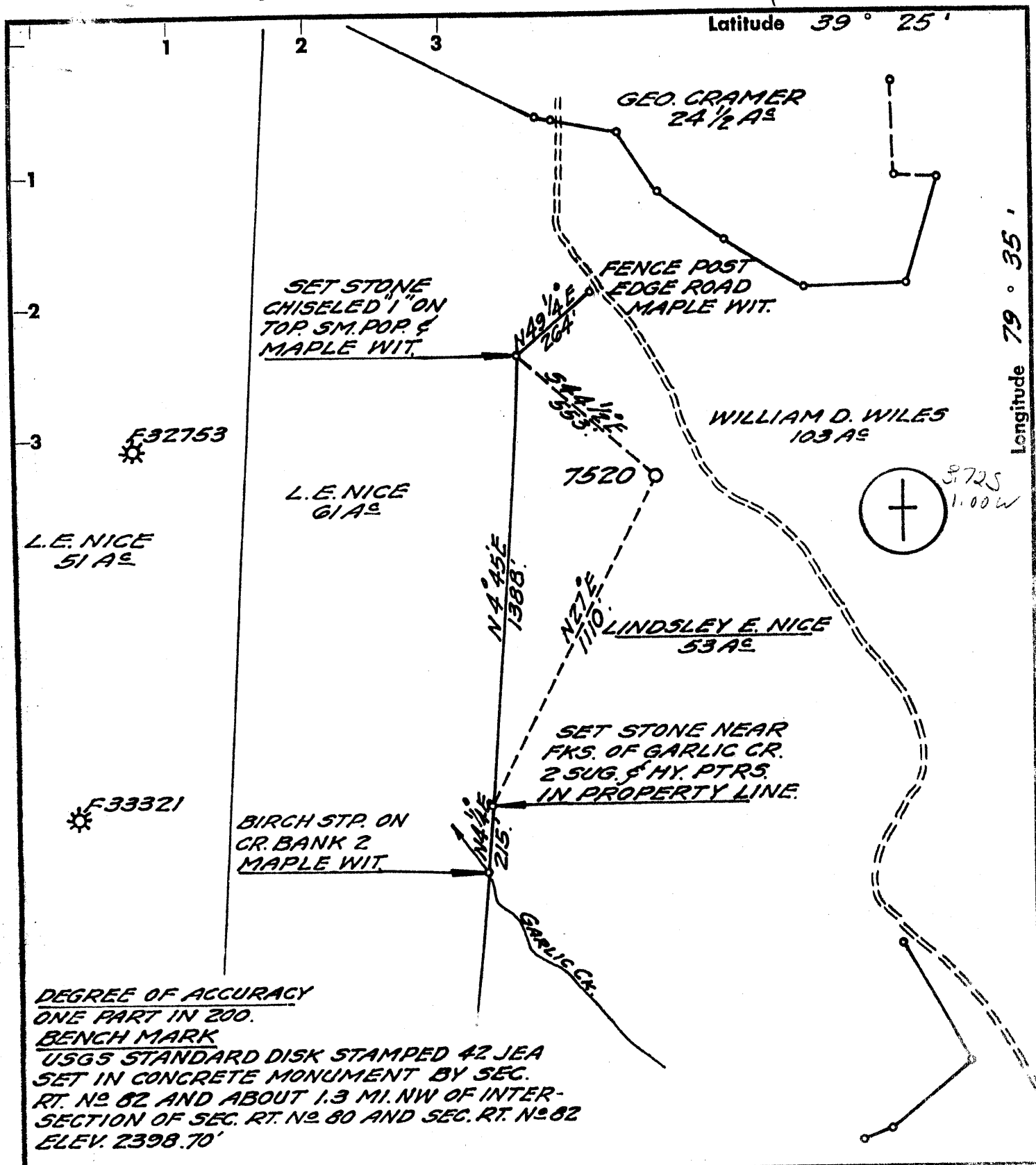
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR new permitted well
 STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) STORAGE RECONDITION
Well drilled in 1970 by Atlantic Seaboard FD-6147

PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION Chart - Chesapeake ESTIMATED DEPTH 6147'
 WELL OPERATOR COLUMBIA GAS TRANS. CORP. DESIGNATED AGENT RICHARD L. COTY
 ADDRESS P.O. BOX 1273, CHARLESTON, WV ADDRESS P.O. BOX 1273, CHARLESTON, WV
25325-1273 25325-1273

9-AM FORM

PRESTON COUNTY NAME PERMIT 00147

DEEP WELL



DEGREE OF ACCURACY
 ONE PART IN 200.
BENCH MARK
 USGS STANDARD DISK STAMPED 42 JEA
 SET IN CONCRETE MONUMENT BY SEC.
 RT. NO 82 AND ABOUT 1.3 MI. NW OF INTER-
 SECTION OF SEC. RT. NO 80 AND SEC. RT. NO 82
 ELEV. 2398.70'

- Fracture Before 6/5/29
- New Location
- Drill Deeper
- Redrill
- Abandonment

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 5 of the Rules and Regulations of the Oil and Gas Section of the Mining Laws of West Virginia.
 The accuracy of this survey is within the limits and as prescribed in Paragraph 5 by the Oil and Gas Division of the Department of Mines Regulations.

Company ATLANTIC SEABOARD CORP.
 Address CHARLESTON W.VA.
 Farm LINDSLEY E. NICE
 Tract _____ Acres 53 Lease No. AS-1097
 Well (Farm) No. _____ Serial No. 7520
 Elevation (Spirit Level) 2407.60'
 Quadrangle KINGWOOD C
 County PRESTON District UNION
 Engineer W. E. [Signature]
 Engineer's Registration No. 2330
 File No. 172-129 Drawing No. _____
 Date JAN. 20, 1970 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. Pres-147

+ 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.

WR-35

03-Dec-96

API # 47- 077-00147 W

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

Well Operator's Report of Well Work

PERFORATED

Perforated 4-1/2" casing 10/27/97 with Western Atlas Logging Services 3-3/8" expendable guns from: 6,068'-6,088', 6,048'-6,050', 6,058'-6,068', and 6,032'-6,048', 6,002'-6,018', 5,992'-6,002' @ 6 shots/foot.

Perforated 4-1/2" casing 11/03/97 with Western Atlas Logging Services (Chert) from:
5,932'-5,952' 5,912'-5,932' 5,892'-5,912' 5,872'-5,892' 5,852'-5,872' 5,832'-5,852'
5,812'-5,832' 5,808'-5,812'.

STIMULATION

- Acidized on 10/29/97
- Halliburton Coiled Tubing Conveyed -Selective Injection Packer -Acid Job.
- Acidized with 7,308 gals 15% Halliburton FE Acid setting selective injection packer and treating with five foot intervals as follows:

6,075'-6,080'	6,070'-6,075'	6,065'-6,070'	6,060'-6,065'	6,055'-6,060'	6,050'-6,055'
6,045'-6,050'	6,040'-6,045'	6,035'-6,040'	6,030'-6,035'	6,025'-6,030'	6,020'-6,025'
6,015'-6,020'	6,010'-6,015'	6,005'-6,010'	6,000'-6,005'	5,995'-6,000'	5,990'-5,095'
5,985'-5,990'	5,980'-5,985'	5,975'-5,980'	5,970'-5,975'	5,965'-5,970'	6,005'-6,010'
6,010'-6,015'	6,015'-6,020'	6,020'-6,025'	6,025'-6,030'	6,030'-6,035'	6,035'-6,040'
6,040'-6,045'	6,045'-6,050'	6,050'-6,055'	6,055'-6,060'	6,060'-6,065'	6,058'-6,063'
6,065'-6,070'	6,070'-6,075'	6,075'-6,080'	6,080'-6,085'	6,085'-6,090'	6,090'-6,095'

Form CG-10

39-30
5-44



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION 9

Rotary
Spudder
Cable Tools
Storage

Quadrangle Kingwood
Permit No. Pres. 147

WELL RECORD

Oil or Gas Well Gas (KIND)

Company Atlantic Seaboard Corporation
Address P. O. Box 1273, Charleston, W. Va. 25325
Farm Lindsley E. Nice Acres 53
Location (waters) Garlic Creek
Well No. X-76-S-7520 Elev. 2407.60'
District Union County Preston
The surface of tract is owned in fee by Lindsley E. Nice
Address Rowlesburg, W. Va.
Mineral rights are owned by Lindsley E. Nice
Address Rowlesburg, W. Va.
Drilling commenced September 3, 1970
Drilling completed October 22, 1970
Date Shot 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 (DETAILS) (See Reverse Side)
WELL FRACTURED (DETAILS)

Casing and Tubing Size	Used in Drilling	Left in Well	Packers
16			Kind of Packer
17 13 3/8"	32'	32'	
18 9 5/8"	2218'	2218'	Size of
8 1/4"			
6 3/4" 7"	5961'	5961'	Depth set
5 3/16"			
4 1/2"			
3"			Perf. top. (See Rev)
2 2 3/8"	6150'	6150'	Perf. bottom Side
Liners Used			Perf. top
			Perf. bottom

Attach copy of cementing record.
CASING CEMENTED SIZE No. Ft.
Amount of cement used (bags) (See Reverse Side)
Name of Service Co. Dowell
COAL WAS ENCOUNTERED AT None FEET INCH
FEET INCHES FEET INCH
FEET INCHES FEET INCH

RESULT AFTER TREATMENT (Initial open Flow or μ WV) 20.0 M 70.000
ROCK PRESSURE AFTER TREATMENT 1600 # HOURS 24
Fresh Water Feet Salt Water Feet
Producing Sand Depth

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Siltstone & Shale			0	5035	Measured	from KB	
Tully Lime			5035	5057			
Shale			5057	5730			
Onondaga Lime			5730	5760			
Chert - HUNTERSVILLE			5760	5956			
Shale - NEEDMORE			5956	5966			
Oriskany Sand			5966	6096	Gas		
Helderberg Lime			6096				
Total Depth			485	6147			

RECEIVED

NOV 27 1970

OIL & GAS DIVISION
DEPT. OF MINES

(over)

DEC 4 1970

Formation	Color	Hard or Soft	Top η	Bottom	Oil, Gas or Water	Depth Found	Remarks
NOTE:							
13 3/8"	48#/ft.,	H-40,	casing cemented to surface with 40 sacks of neat cement plus 2% CaCl, September 4, 1970.				
9 5/8"	36#/ft.,	K-55,	casing cemented to surface with 680 sacks of Kolite cement plus 2% CaCl, September 10, 1970.				
7"	23#/ft.,	K-55,	Seal-lok casing cemented in 1000' with 410 gallons latex cement and 200 cubic feet of Kolite cement, October 18, 1970. Gel drilling mud to surface. Pipe set 13' from top of Oriskany sand.				
2 3/8"	4.7#/ft.,	J-55,	Seal-lok tubing, run to T. D. (1) Baker seating nipple, (1) Baker BFC Model "L" sliding sleeve. Sliding sleeve is 423' off bottom, October 22, 1970.				
Perforations:							
	Chert (5816' - 5960')		with 144, 3 1/2" Alum Jet shots. Oriskany open hole. Basin Surveys Inc., October 21, 1970.				
Stimulation:							
	Halliburton stimulated both the Oriskany and chert pays using one (1) drum Baroid B-11, 1500 gallons MCA 15% mud acid and 700 bbls. of fresh water. Average pressure 1800#, average pump rate 18 BPM, October 28, 1970.						
Logging: Gamma Ray - P.D.C.: 6147' - 4900', October 21, 1970.							

Date November 20, 19 70

APPROVED *Atlantic Seaboard Corp.* Owner

By *[Signature]* Supt. (Title)

RECEIVED
WV Division of
Environmental Protection
NOV 18 1996

1) Date: 10/24/96
2) Operator's well number
TERRA ALTA SOUTH WELL 7520
3) API Well No: 47 - 077 - 00147 - 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 Lindsley W. Nice
Address 2429 Park Ave.
Norwood, Ohio 45212

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:

_____ 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:

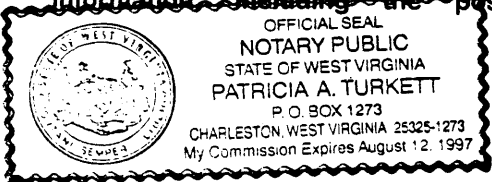
_____ Personal Service (Affidavit attached)
X Certified Mail (Postmarked postal receipt attached)
_____ Publication (Notice of Publication attached)

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



Subscribed and sworn before me this 24th day of November, 19 96

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