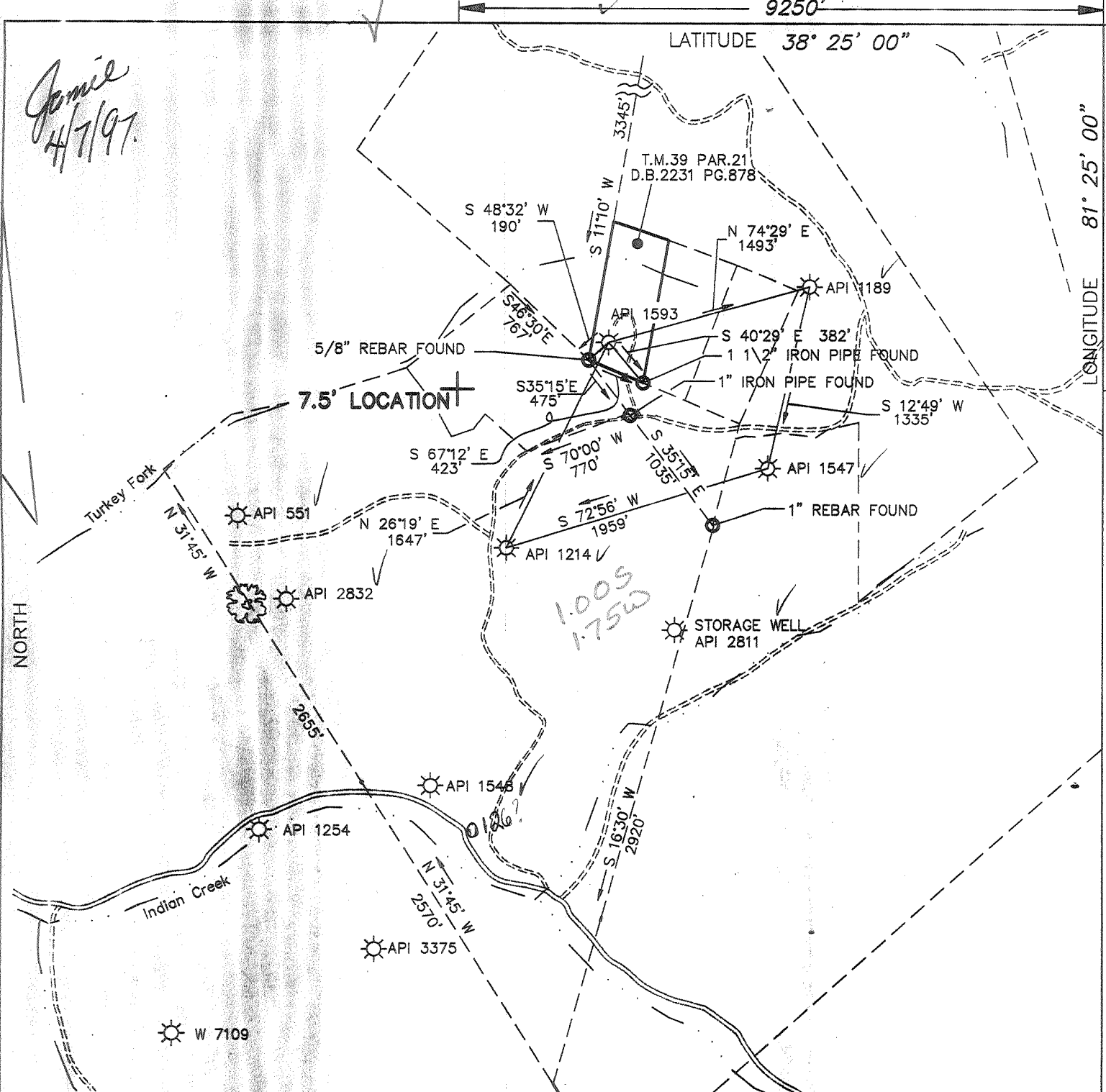


Jamil
4/7/97



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No 96
 DRAWING No. W-7224
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 : 200
 PROVEN SOURCE OF ELEVATION EXISTING WELL
API # 1593

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 MINES
 (SIGNED) *Mark C. Shamblin*
 R.P.E. _____ R.P.S. 827

MARK C. SHAMBLIN
 REGISTERED
 No. 827
 STATE OF WEST VIRGINIA
 PROFESSIONAL SURVEYOR
 PLACE SEAL HERE

WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 #10 McJUNKIN ROAD
 NITRO, WEST VIRGINIA 25143-2506



DATE NOVEMBER 19, 19 96
 OPERATOR'S WELL No. W-7224
 API WELL No. _____

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS") PRODUCTION STORAGE _____ DEEP _____ SHALLOW _____
 LOCATION: ELEVATION 1090.2' WATER SHED BLUE CREEK

DISTRICT ELK COUNTY KANAWHA
 QUADRANGLE BLUE CREEK, 7.5' COORDINATES Lat: 38-24-10 Long: 81-26-59
 SURFACE OWNER RICHARD MULLINS ACREAGE 9.9 AC.
 OIL & GAS ROYALTY OWNER ALEXANDER CORP. LEASE ACREAGE 165 AC

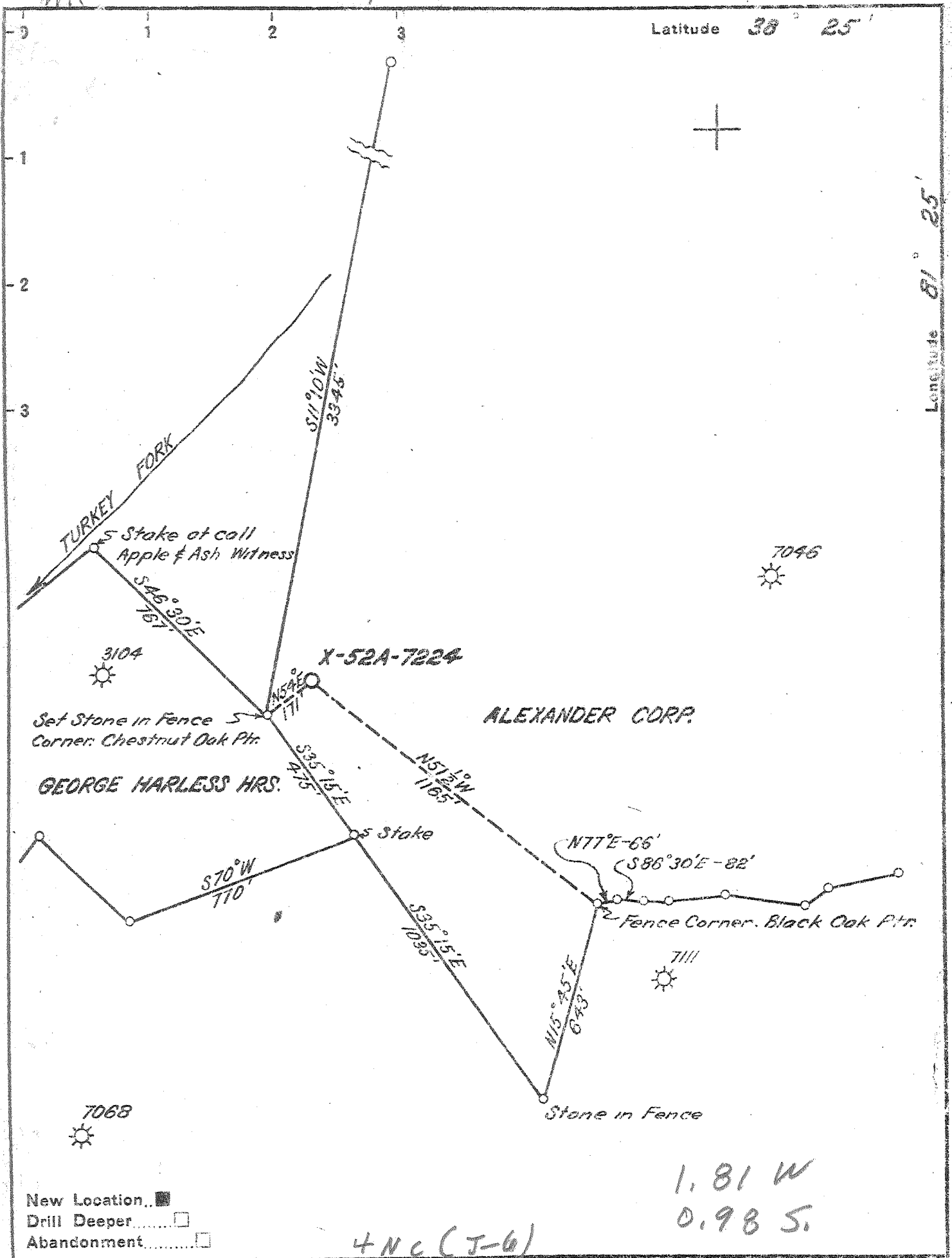
PROPOSED WORK: DRILL _____ CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) STORAGE RECONDITION

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION Christman ESTIMATED DEPTH 5400' APR 11 1997
 WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP. DESIGNATED AGENT RICHARD L. COTY
 ADDRESS P.O. 1273 CHARLESTON, WV 25325 ADDRESS P.O. BOX 1723 CHARLESTON, WV 25325

FORM IV-6 (8-78)

175

DEEP WELL



New Location
 Drill Deeper
 Abandonment

Company	UNITED FUEL GAS CO.	
Address	CHARLESTON W. VA.	
Farm	ALEXANDER CORP.	
Tract	Acres 165	Lease No. 4838
Well (Farm) No.	Serial No. X-52A-7224	
Elevation (Spirit Level)	977.95' GND.	
Quadrangle	CLEDENIN - WC	
County	KANAWHA	District ELK
Engineer	J. A. [Signature]	
Engineer's Registration No.	2529	
File No.	70-63	Drawing No.
Date	5-21-52	Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. KAN-1593

+ 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.

Drill Storage 2-0 2-15 Deep Well

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. KAN-1593

Oil or Gas Well Gas
(KIND)

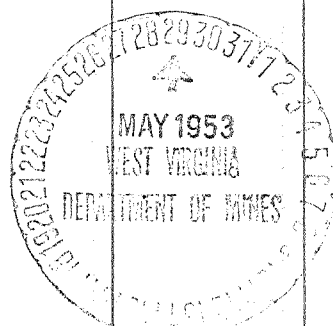
Company UNITED FUEL GAS COMPANY
Address P.O. Box 1273, Charleston 25, W. Va.
Farm Alexander Corporation Acres 165
Location (waters) Indian Creek
Well No. X-52-A-7224 Elev. 977.95
District Elk County Kanawha
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by Alexander Corp.
Address _____
Drilling commenced 8-2-52
Drilling completed 1-14-53
Date Shot Not shot From _____ To _____
With _____
Open Flow 2 /10ths Water in _____ Inch
7 /10ths Merc. in _____ Inch
Volume 7,117,000 Cu. Ft.
Rock Pressure 1235 lbs. 24 hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water 1698' feet
Salt water 965' feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
18 Conductor		405'	
10 -3/4"	1572		Size of
8 5/8		2078'	
6 5/8			Depth set
5 3/16 1/2		5169	
3			Perf. top
2		5282'	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

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

COAL WAS ENCOUNTERED AT 232 FEET 24 INCHES
513 FEET 24 INCHES FEET INCHES
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Soil			0	10			
Clay			10	35			
Slate			35	71			
Sand			71	145			
Coal			145	150			
Slate			150	190			
Sand			190	228			Hole full water 965'
Slate			228	232			
Coal			232	234			Water 1698'
Slate			234	238			
Sand			238	310			Show gas 1765'
Slate			310	320			
Lime			320	329			Show gas 1900'
Slate			329	382			
Sand			382	513			Show oil 2025'
Coal			513	515			
Slate			515	565			Gas 5265-5279' 20/10 Merc. 7" 22# 7,117M
Sand			565	581			
Slate			581	784			
Sand			784	812			NOT SHOT
Slate			812	865			
Sand			865	923			
Slate			923	925			FINAL OPEN FLOW - 7,117 M - Oriskany
Salt Sand			925	1322			24 Hr. R.P. 1235#.
Slate			1322	1326			
Sand			1326	1428			
Slate			1428	1432			
Red Rock			1432	1450			
Lime			1450	1460			
Slate			1460	1468			
Red Rock			1468	1515			
Lime			1515	1524			
Maxon Sand			1524	1555			
Lime			1555	1610			
Slate			1610	1615			
Lime			1615	1622			
Pencil Cave			1622	1627			
Big Lime			1627	1758			
Injun Sand			1758	1797			



Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Weir Sand			1797	2031			
Slate			2031	2075			
Lime Shell			2075	2090			
Slate			2090	2142			
Berea Shells			2142	2162			
Slate & Shells			2162	4645			
Brown Shale			4645	4690			
White Slate			4690	4720			
Brown Shale			4720	5000			
White Slate			5000	5070			
Black Shale			5070	5133			
Corniferous Lime			5133	5251			
Oriskany Sand			5251	5282			
Total depth			5282'				
				5133	5251		
				978	978		
				4155	4273		

Date MAY 28, 1953

APPROVED UNITED FUEL GAS COMPANY, Owner

By [Signature]

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

- 1) Well Operator: Columbia Gas Transmission Corp. ¹⁷⁵ ¹⁰⁴⁵⁰ ④ 258
- 2) Operator's Well Number: 7224 3) Elevation: 978
- Well type: (a) Oil ___ / or Gas X / *Issued 04/08/97*
Expires 04/08/99
- (b) If Gas: Production ___ / Underground Storage X /
Deep X / Shallow ___
- Proposed Target Formation(s): Oriskany Sandstone ⁴²⁵
- Proposed Total Depth: 5400 feet
- Approximate fresh water strata depths: N/A
- 8) Approximate salt water depths: 965', 1698'
- 9) Approximate coal seam depths: 145'-150', 232'-234', 513'-515'
- 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)

RECEIVED
Environmental Protection
DEC 27 1996
Permitting
Office of Oil & Gas

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS			CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	13 3/8"		48	405'	405'	
Fresh Water	10 3/4"		40	1572'	-0-	<i>Existing from well</i>
Coal	8 5/8"		28	2078'	2078'	50 slcs <i>Blocks</i>
Intermediate						
Production	5 1/2"		15.5	5169'	5169'	671 slcs
Tubing						
Liners		<i>C.H. 10-2396</i>				

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)

23047

00171760

RECEIVED
Department of
Environmental Protection

DEC 27 1996

Permitting
Office of Oil & Gas

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

- 1) Date: 10/29/96
- 2) Operator's well number
COCO-A WELL # 7224
- 3) API Well No: 47 - 039 - 01593 - 0
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 Richard K. Mullins
Address 6 Vickers Drive
Elkview, WV 25071
 - b) Name _____
Address _____
 - c) Name _____
Address _____
- 6) Inspector Carlos W. Hiviely
Address 223 Pinch Ridge Road
Elkview, WV 25071
Telephone (304) - 965-6069

- 5) (a) Coal Operator:
 - Name _____
Address _____
- (b) Coal Owner (s) with Declaration
 - Name State of West Virginia
Address _____
- (c) Coal Lessee with
 - Name _____
Address _____

*Copy of lease made
seen in Kanawha City
Office of Oil & Gas
10/29/96*

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT

 Included is the lease or leases or other continuing 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.

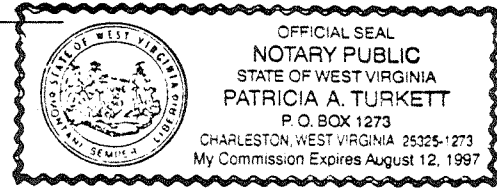
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, 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
My commission expires August 12, 1997 Notary Public



JAN 21 1998

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

Permitting Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: MULLINS, RICHARD K. Operator Well No.: 7224

LOCATION: Elevation: 1,090.20 Quadrangle: BLUE CREEK

District: ELK County: KANAWHA
Latitude: 5250 Feet South of 38 Deg. 25Min. 0 Sec.
Longitude 9250 Feet West of 81 Deg. 25 Min. 0 Sec.

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

Agent: RICHARD L. COTY

Inspector: CARLOS HIVELY
Permit Issued: 04/08/97
Well work Commenced: 07-18-97
Well work Completed: 08-20-97
Verbal Plugging
Permission granted on:
Rotary Cable Rig
Total Depth (feet) 5282'
Fresh water depths (ft)
Not Reported
Salt water depths (ft)
965', 1698'
Is coal being mined in area (Y/N)? N
Coal Depths (ft): Not Reported

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement Fill Up Cu. Ft. Rows include sizes 13 3/8", 10 3/4", 8 5/8", 5 1/2", and 2 3/8" with corresponding well depths and cement fill volumes.

OPEN FLOW DATA

Producing formation ORISKANY STORAGE Pay zone depth (ft) 5251'-5082'
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

Pulled 5244' of 2 3/8" tubing, stimulated ORISKANY with 75 Quality foam frac, using 185 bbls water, 551 MSCF N², and 17,100 lbs 20/40 sand, and snubbed in 5171' of 2 3/8" tubing.

Operator Well No. 2004

Well Name: ORISKANY

Time	Pressure (psi)	Flow Rate (bbl/hr)	Notes
08:00	1000	10	Start of test
08:15	1050	12	Stabilized
08:30	1100	15	Pressure rising
08:45	1150	18	Flow increasing
09:00	1200	20	End of test

Initial flow rate: 10 bbl/hr
 Initial pressure: 1000 psi
 Final flow rate: 20 bbl/hr
 Final pressure: 1200 psi

[Handwritten signature]
 Date: 12/15/2004