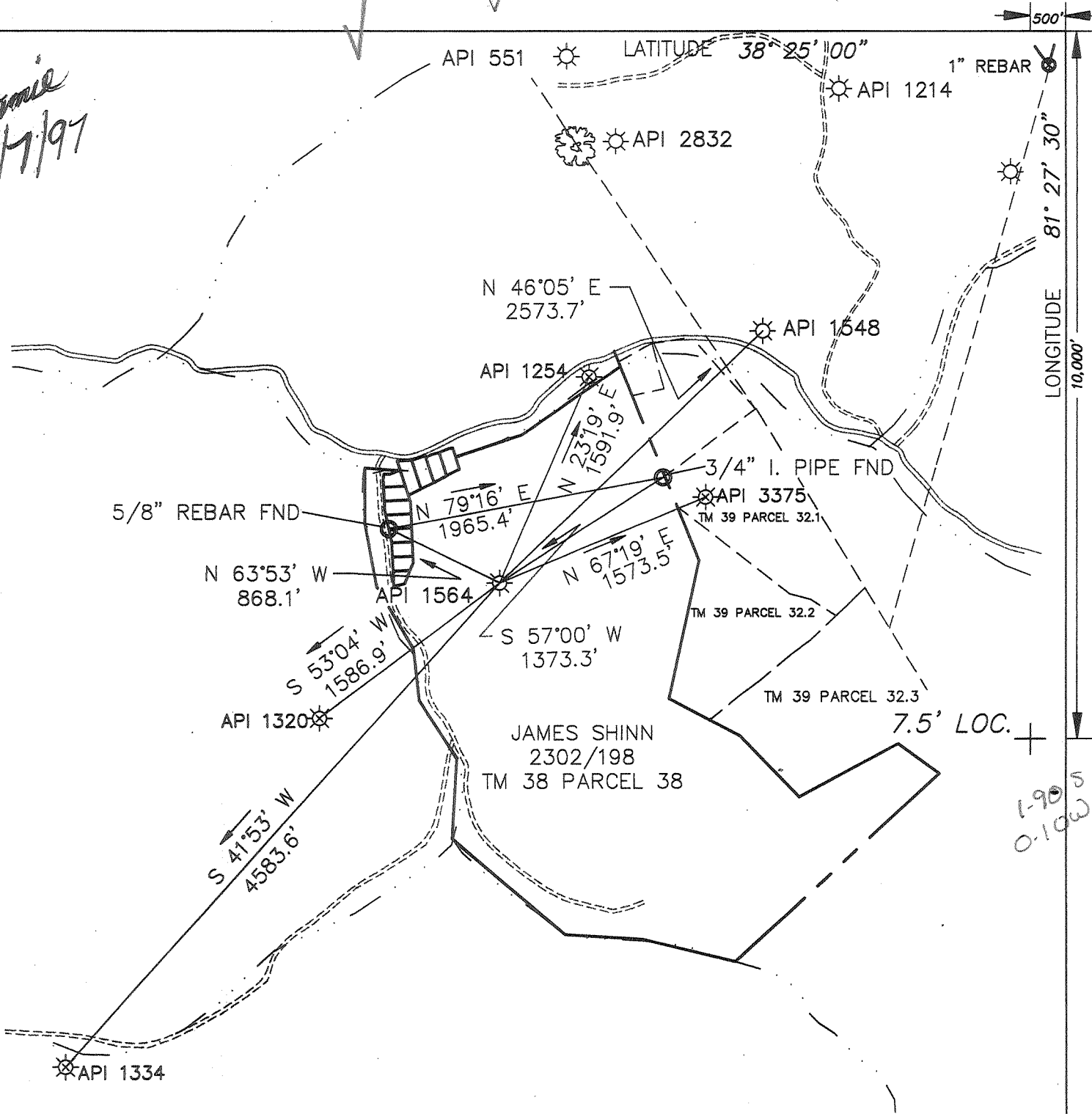


Janice
1/17/97

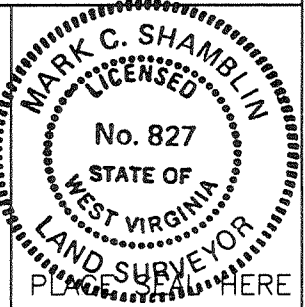


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No 96X208
 DRAWING No. W-7109
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 : 200
 PROVEN SOURCE OF ELEVATION EXISTING WELL

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



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



DATE NOVEMBER 26, 19 96
 OPERATOR'S WELL No. W-7109
 API WELL No. _____

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL STATE 47 COUNTY 039 PERMIT 01564
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 963.24' WATER SHED BLUE CREEK
 DISTRICT ELK COUNTY KANAWHA
 QUADRANGLE BLUE CREEK, 7.5' COORDINATES Lat: 38°-23'-21" Long: 81°-27'-38"

SURFACE OWNER JAMES SHINN ETAL. ACREAGE 190 AC
 OIL & GAS ROYALTY OWNER NUMA BLOCK COAL CO. LEASE ACREAGE 1025 AC
 LEASE No. 881

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) drilled 1952
drill existing storage well deeper

PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION Oriskany ESTIMATED DEPTH 5325'
 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

DEEPWELL

FORM IV-6 (8-78)

JAN 21 1997

M

P

Latitude 38° 25'

Longitude 81° 25'



7.5 0615 topo loc 15' loc
 38° 25' 00" 1.90S 1.90S
 81° 27' 30" D. 10W 2.36W

U.F.G. Co. 1.85
 2.4W

- New Location...
- Drill Deeper.....
- Abandonment.....

Company UNITED FUEL GAS CO.
 Address CHARLESTON W.VA
 Farm NUMA BLOCK COAL CO.
 Tract _____ Acres 1025 Lease No. 990 1/2 lat
 Well (Farm) No. 11 Serial No. 7109
 Elevation (Spirit Level) 963.24
 Quadrangle GLENDENIN - WC
 County KANAWHA District ELK
 Engineer [Signature]
 Engineer's Registration No. 662
 File No. 70-61 Drawing No. _____
 Date 7-5-51 Scale 1" = 1320'

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

WELL LOCATION MAP
 FILE NO. KAN-1564

* Denotes location of well on United States Topographic Map, 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. K AN #564
Clendenin Quad.

Gas

CASING & TUBING

Company	United Fuel Gas Co.		
Address	Box 1273, Charleston, W. Va.		
Farm	Numa Block Coal Co. #11 Acres 1025	13	14
Location	Mile Fr. of Indian Cr.	10 3/4	1416
Well No.	X-52A-7109 Elev. 963.24		Pulled
District	Elk County - Kanawha	8 5/8	2002
Mineral	Marcia E. Widmer	5 1/2	5103
	4820 Wornall Road, Kansas City, Mo.		
Commenced	6/8/51		
Completed	2/29/52		
Open Flow	110/10ths Water in 7"		
Volume	4,525 M		
R.P.	900E 24 hrs.		

Surface	0	10	Lime	1469	1507
Clay	10	30	-Maxon Sand	1507	1537
Sand	30	55	-Little Lime	1537	1567
Slate	55	70	Slate	1567	1571
Sand	70	85	Lime	1571	1577
Slate	85	130	-Pencil Caved	1577	1581
Sand	130	140	-Big Lime	1581	1736
Black Slate	140	152	Slate & Shells	1736	1745
-Coal	152	155	-Injun Sand	1745	1787
Slate	155	175	Lime	1787	1796
Sand	175	210	-Squaw Sand	1796	1845
Slate	210	255	-Weir Sand	1845	1982
Sand	255	275	Slate & Shells	1982	2135
Slate	275	315	-Brown Shale	2135	2141
Sand	315	330	-Berca Shells	2141	2146
Slate	330	340	Slate & Shells	2146	3320
Sand	340	365	Brown Shale	3320	3412
Slate	365	376	Lime Shells	3412	3642
Sand	376	492	Brown Shale	3642	4150
Slate	492	540	White Slate	4150	4517
Lime	540	560	Shale	4517	5066
Slate & Shells	560	650	-Corniferous Lime	5066	5188
-Coal	650	654	-Oriskany Sand	5188	5217
Lime	654	760	TOTAL DEPTH	5217	
Slate	760	835			
-Gas Sand	835	917	Water 315'		
-Salt Sand	917	1351	Hole full water 930'		
Slate	1351	1366	Show of water 1680'		
Sand	1366	1386	Gas 5203-5206' 38/10 W 7" 2,659 M		
Slate	1386	1390	Gas 5206-5210' 30/10 W 7" 22# 3,858 M		
Lime	1390	1456	Gas 5210-5212' 30/10 W 7" 22# 3,858 M		
White Slate	1456	1466	Gas 5212-5215' increased to 110/10		
Red Rock	1466	1469	W 7" 4,525 M		
			Gas 5215-5217' 110/10 W 7" 4,525 M		

FINAL OPEN FLOW - 4,525 M - Oriskany
24 Hr. R.P. 900#

039 1564D

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

- 1) Well Operator: Columbia Gas¹⁷⁵ Transmission Corp. 10450 (4) 258
- 2) Operator's Well Number: 7109 3) Elevation: 963'
- 4) Well type: (a) Oil / or Gas X /
 (b) If Gas: Production / Underground Storage X /
 Deep X / Shallow /
- Proposed Target Formation(s): Oriskany⁴⁷⁵ Sandstone
- Proposed Total Depth: 5325 feet
- Approximate fresh water strata depths: N/A
- Approximate salt water depths: N/A
- Approximate coal seam depths: 152'-155' 650'-654'
- 1) 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)

Issued 01/13/97
 Expires 01/13/99

RECEIVED
 WV Division of
 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"}			14'	14'	
Fresh Water	10 ^{3/4"}			1416'		0-filled
Coal						
Intermediate	8 ^{5/8"}		24	2002'	2002' ✓	50 sx
Production	5 ^{1/2"}		15.5	5103'	5103' ✓	787 sx
Tubing						
Liners		C-4 10-23-96				3005/18.1 if pipe or tubing needed

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)

23044

171760
12

RECEIVED
Environmental Protection
DEC 27 1996

- 1) Date: 10/29/96
- 2) Operator's well number
COCO- WELL # 7109
- 3) API Well No: 47 - 039 - 01564 - D P
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 James Edra & Ila Mae Shinn
Address 221 A Coopers Drive
Charleston, WV 25302
 - b) Name William E. & Thelma I. Shinn
Address 214 Coopers Drive
Charleston, WV 25302
 - 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 Columbia Natural Resources
Address P. O. Box 6070
Charleston, WV 25362-0070
Name Mount Storm Energy, Inc.
Address 107 Azalea Road
Elkview, WV 25071
- (c) Coal Lessee with Declaration
Name _____
Address _____

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

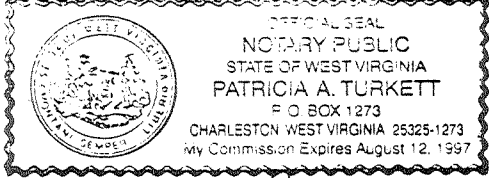
Copy of lease in Kan City office

_____ 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: [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 29th day of November, 19 96

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

RECEIVED
WV Division of
Environmental Protection

WR-35

07-Jan-97

API # 47- 39-01564 D

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: EDRA, JAMES/ILA M. SHINN Operator Well No.: 7109

LOCATION: Elevation: 963.24 Quadrangle: BLUE CREEK

District: ELK County: KANAWHA
Latitude: 10000 Feet South of 38 Deg. 25Min. 0 Sec.
Longitude 500 Feet West of 81 Deg. 27 Min. 30 Sec.

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

Agent: RICHARD L. COTY

Inspector: CARLOS HIVELY
Permit Issued: 01/13/97
Well work Commenced: 07/16/97
Well work Completed: 12/04/97
Verbal Plugging _____
Permission granted on: _____
Rotary Cable Rig _____
Total Depth (feet) 5217'
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 Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13 3/8"		14'	
8 5/8"		2002'	50SX
5 1/2"		5103'	7787SX
2 3/8"		5087'	

OPEN FLOW DATA

Producing formation ORISKANY STORAGE Pay zone depth (ft) 5188' - 5217
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 23 1998

Pulled 5807' of 2 3/8" tubing, installed new 8 5/8" X 5 1/2" API 3000 wellhead, Stimulated ORISKANY with N₂ - Assist Deltafrac using 414 bbls water, 131 mscf N₂, and 11,500 lbs 20/40 sand, and snubbed in 5087' of 2 3/8" tubing.

Table with multiple columns and rows, containing technical data and possibly well logs. The text is very faint and difficult to read, but appears to be a structured data table.

Section of text containing technical notes or descriptions, possibly related to the well stimulation process. The text is faint and partially illegible.

Section of text at the bottom of the page, possibly containing a signature or additional notes. The text is very faint and difficult to decipher.