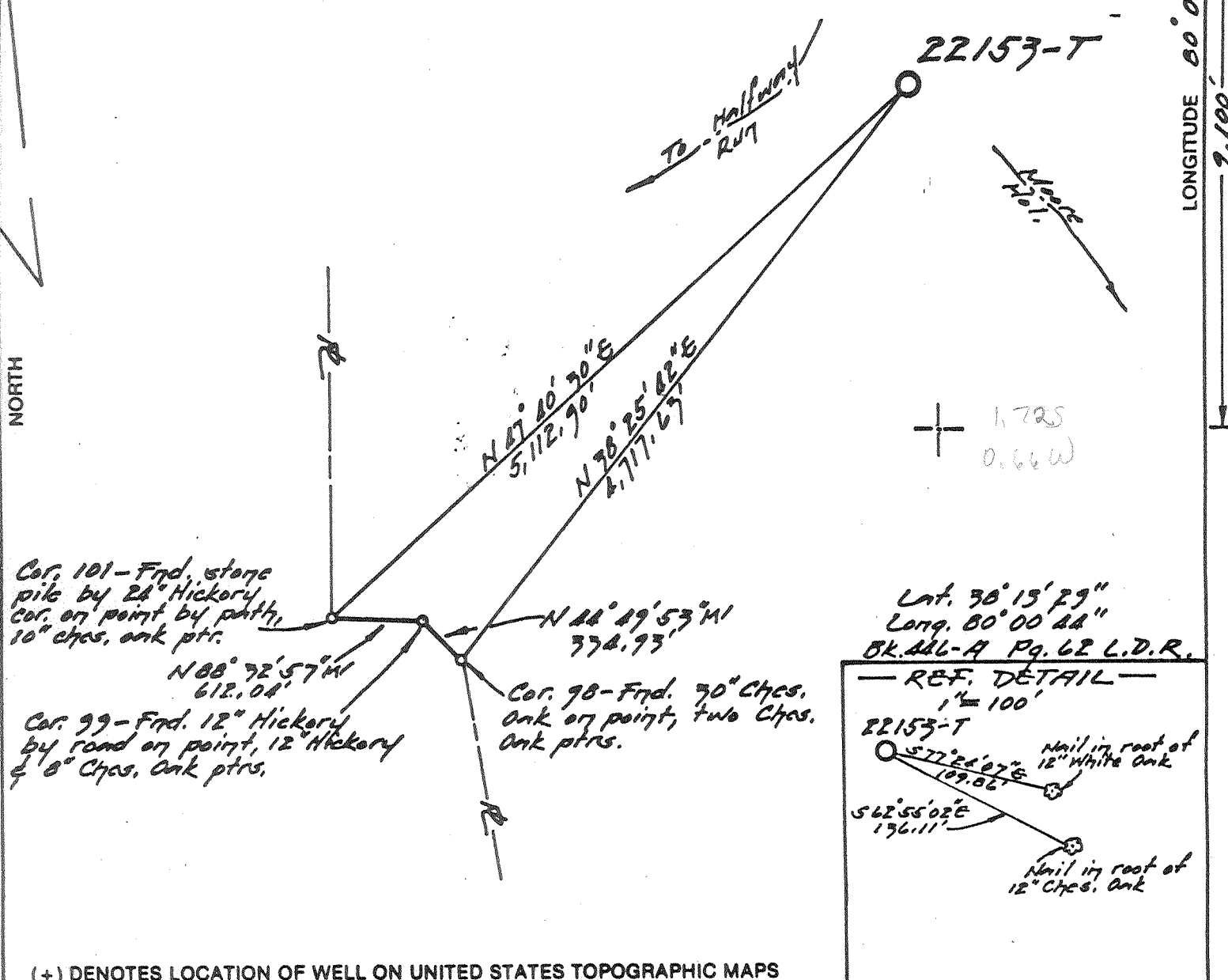


7,500'  
LATITUDE 38° 15' 00"

*Janil*  
*10/6/91*  
*Now into work in area*

U.S.A. Bureau of Land Mgmt.  
Monongahela National Forest  
Lease No. 200221-0,591 AC



FILE NO. 721-50C  
DRAWING NO. 22153-T  
SCALE 1" = 1000'  
MINIMUM DEGREE OF ACCURACY 1:2500  
PROVEN SOURCE OF ELEVATION U.S. Gov't. U.S. on knob (El. 3209')

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) James L. Browning  
R.P.E. \_\_\_\_\_ L.L.S. 398



STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
OIL AND GAS DIVISION



DATE Feb. 18, 1990  
OPERATOR'S WELL NO. 22153-T  
API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
LOCATION: ELEVATION 3,306' WATERSHED Meers Hollow of Browns Crk.  
DISTRICT Huntersville COUNTY Putnam  
QUADRANGLE Marlinton 15' 10" 178 S 0.66W  
SURFACE OWNER U.S.A. (Monongahela National Forest) ACREAGE 0.591  
OIL & GAS ROYALTY OWNER U.S.A. Bureau of Land Mgmt. LEASE ACREAGE 0.591  
LEASE NO. 200221

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

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
TARGET FORMATION Oriskany ESTIMATED DEPTH 6775'  
WELL OPERATOR Columbia Natural Res., Inc. DESIGNATED AGENT J.E. Campbell  
ADDRESS P.O. Box 6070 ADDRESS Same

00000000 EQUINOX  
0019  
LONGITUDE  
0043  
COUNTY NAME  
PERMIT

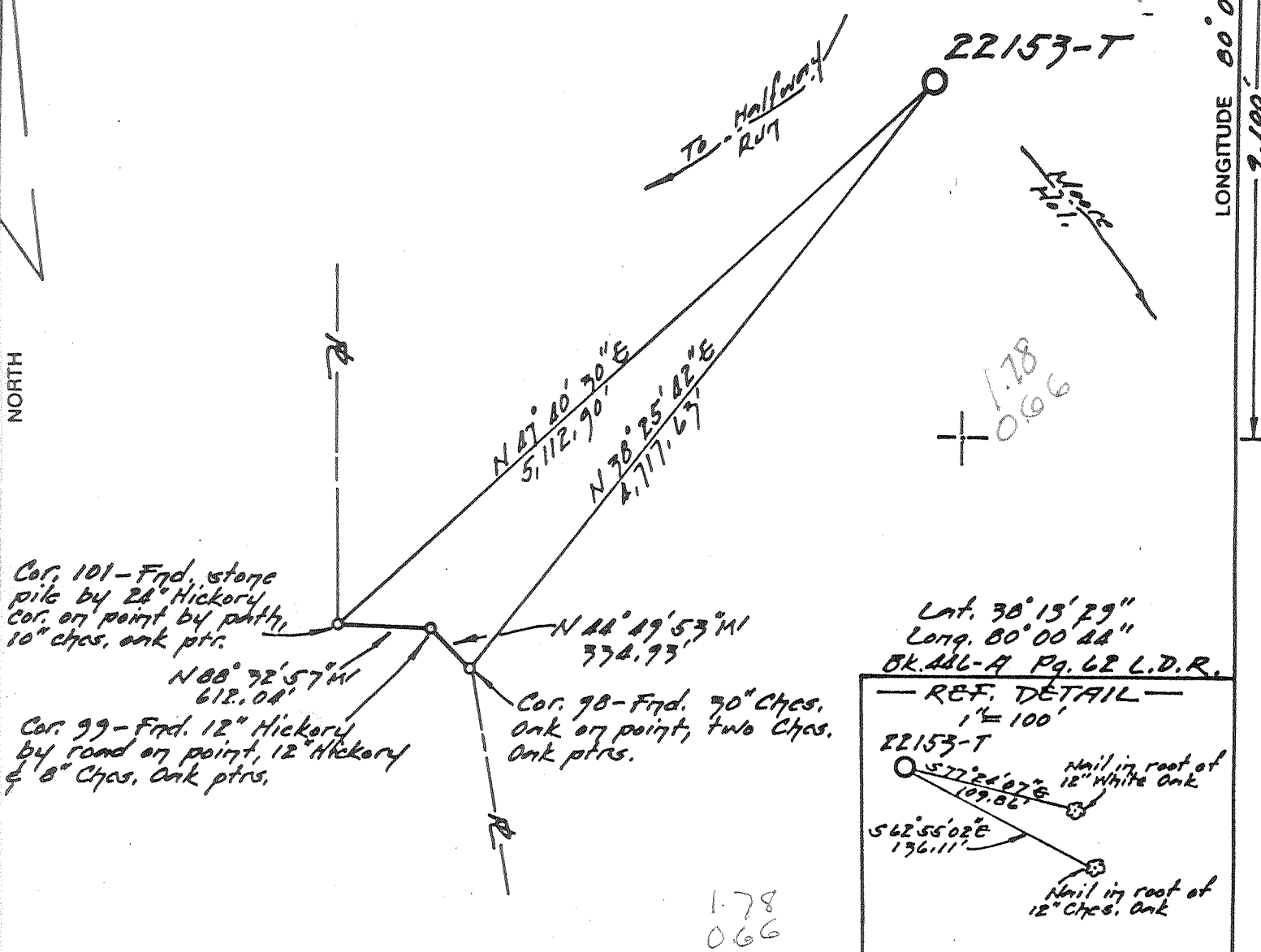
FORM WW-6  
MT. HALL 48673

LATITUDE 70° 15' 00"

*Jamil*  
6/6/91  
New wells wish in area

U.S.A. Bureau of Land Mgmt.  
Monongahela National Forest  
Lease No. 200221-0,591 AC

LONGITUDE 80° 00' 00"



Lat. 30° 15' 29"  
 Long. 80° 00' 22"  
 BK. 446-A Pg. 62 L.D.R.  
 REF. DETAIL  
 1" = 100'  
 22153-T  
 57° 22' 07" E, 109.86'  
 56° 55' 02" E, 176.11'  
 Nail in roof of 12" White Oak  
 Nail in roof of 12" Chas. Oak

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

FILE NO. T21-50C  
 DRAWING NO. 22153-T  
 SCALE 1"=1000'  
 MINIMUM DEGREE OF ACCURACY 1:2500  
 PROVEN SOURCE OF ELEVATION U.S. Gov't. UE on Knob (El. 3209')

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) James L. Browning  
 R.P.E. \_\_\_\_\_ L.L.S. 398



**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION

DATE Feb. 18, 1990  
 OPERATOR'S WELL NO. 22153-T  
 API WELL NO. 47-075-0043  
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 3,306' WATERSHED Moore Hollow of Browns Crk.  
 DISTRICT Huntersville 3 COUNTY Pocahontas  
 QUADRANGLE Marlinton or 15 NE

SURFACE OWNER U.S.A. (Monongahela National Forest) ACREAGE 0,591  
 OIL & GAS ROYALTY OWNER U.S.A. Bureau Ld. Mgmt. LEASE ACREAGE 0,591  
 LEASE NO. 200221

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

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Oris. / Tusc. ESTIMATED DEPTH 6775'  
 WELL OPERATOR Columbia Natural Res., Inc. DESIGNATED AGENT J.E. Campbell  
 ADDRESS P.O. Box 6070 ADDRESS same  
Charleston W.Va. 25362 10V3

JUN 7 1991

COUNTY NAME PERMIT

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: UNITED STATES FOREST SERVICE Operator Well No.: 22153  
LOCATION: Elevation 3306.00 Quadrangle: MARLINTON

District: HUNTERSVILLE County: ROANE  
Latitude: 3500 Feet South of 38 Deg. 15 Min. 00 Sec.  
Longitude 91000 Feet West of 80 Deg. 00 Min. 00 Sec.

Company: COLUMBIA NATURAL RESOURCES  
P. O. BOX 6070  
CHARLESTON, WV 25362-0070

Agent: JOSEPH E. CAMPBELL

Inspector: CRAIG DUCKWORTH  
Permit Issued: 06/06/91  
Well Work Commenced: 05/05/93  
Well Work Completed: 07/11/93  
Verbal Plugging  
Permission granted on: 07/10/93  
Rotary X Cable      Rig  
Total Depth (feet) 7870  
Fresh water depths (ft) 5045

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13-3/8	115	115	79
9-5/8	2013	2013	625

Salt water depths (ft)       
Is coal being mined in area (Y/N)? N  
Coal Depths (ft):     

OPEN FLOW DATA No Gas (P&A)

Producing formation Tuscarawas Pay zone depth (ft) 7870  
 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.

JOSEPH E. CAMPBELL  
For: COLUMBIA NATURAL RESOURCES, INC  
By: [Signature]  
Date: November 11, 1993

WELL 22153  
Pocahontas County, West Virginia

FORMATIONS

0	-	4986	Sand/Shale/Rock
4986	-	5006	Onondaga
5006	-	5124	H. Chert (Fresh Water @ 5045')
5124	-	5216	Oriskany
5216	-	5258	Helderberg
5258	-	5455	Clifton Forge
5455	-	5459	Mandata Sh.
5459	-	5854	Corriganville LS
5854	-	6496	Toroloway LS
6496	-	6510	Newburg Sd
6510	-	6720	Wills Creek Sd
6720	-	6746	Williams Spon Sd
6746	-	6997	McKenzie Sd
6997	-	7020	Keefer Sd
7020	-	7273	Rose Hill Sh.
7273	-	7363	Cacapon Sd
7363	-	7520	Tuscarawas <sup>ofa</sup>
7520	-	7564	Cacapon Sd
7564	-	7870	Tuscarawas <sup>ofa</sup> Sd
		DTD	7870

WEST VIRGINIA POCAHONTAS

\* PERMIT 43  
38.15.00 80.00.00  
9100 S 3500 W  
WF WF (D&A)  
WILDCAT

COLUMBIA NATURAL RES  
22153-T USA BUREAU LND MGMT  
EL: 3306 GR

API 47-075-20043

SPUD: 05/05/93 COMP: 07/11/93 PROJ DEPTH/FM: 6775 TUSCARORA

CONTR: UNION DRL RIG #9 (R)  
DTD: 7870 FM/TD: TUSCARORA (07/11/93)

COMP 7/11/93, D&A

LOC DESC: HUNTERSVILLE DIST, MARLINTON 7.5 QUAD; 8591 AC LSE; 25 1/2 MI SW  
THORNWOOD/GREEN BANK FLD(ORISKANY) 4 1/4 MI E MARLINTON, WV; LAT: 3822501 LONG: 8001219  
CASING: 13 3/8 @ 115 W/79 SX, 9 5/8 @ 2013 W/625 SX;

DRLR TOPS:

ONONDAGA	4986	-1680	CORRIGANVILLE	5459	-2153
B/ ONONDAGA	5006	-1700	B/ CORRIGANVILLE	5854	-2548
HUNTERSVILLE	5006	-1700	TONOLOWAY	5854	-2548
B/ HUNTERSVILLE	5124	-1818	B/ TONOLOWAY	6496	-3190
ORISKANY	5124	-1818	NEWBURG	6496	-3190
B/ ORISKANY	5216	-1910	B/ NEWBURG	6510	-3204
HELDERBERG	5216	-1910	WILLS CREEK	6510	-3204
B/ HELDERBERG	5258	-1952	B/ WILLS CREEK	6720	-3414
MANDATA	5455	-2149	MCKENZIE	6746	-3440
B/ MANDATA	5459	-2153	B/ MCKENZIE	6997	-3691

(OVER)

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DATE 06/08/94CARD # 00108-AB

WEST VIRGINIA POCAHONTAS

\* PERMIT 43  
38.15.00 80.00.00  
9100 S 3500 W  
WF WF (D&A)  
WILDCAT

COLUMBIA NATURAL RES  
22153-T USA BUREAU LND MGMT  
EL: 3306 GR

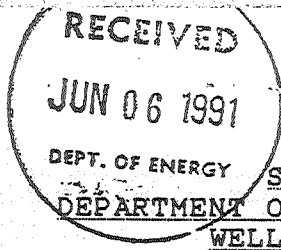
API 47-075-20043

(CONTINUED)

KEEFER	6997	-3691	CACAPON	7273	-3967
B/ KEEFER	7020	-3714	B/ CACAPON	7564	-4258
ROSE HILL	7020	-3714	TUSCARORA	7564	-4258
TD	7870	-4564			

SUBSEA MEASUREMENTS FROM GR;  
DRLG SHOWS: 5045-5045 HUNTERSVILLE FWTR  
OPER ADD: BOX 6070, CHARLESTON, WV, 25362;

DATE 06/08/94CARD # 00108-AB



075-0043

FORM WW-2B

Page 3 of 4

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

Issued 06/07/91 Expires 06/07/93

- 1) Well Operator: Columbia Natural Resources, Inc. 10460 (13) 459
2) Operator's Well Number: 22153-T 3) Elevation: 3306
4) Well type: (a) Oil \_\_\_ or Gas X/ (b) If Gas: Production X/ Underground Storage \_\_\_ Deep X/ Shallow \_\_\_
5) Proposed Target Formation(s): Oriskany/Tuscarora
6) Proposed Total Depth: 6775 feet
7) Approximate fresh water strata depths: --
8) Approximate salt water depths: --
9) Approximate coal seam depths: --
10) Does land contain coal seams tributary to active mine? Yes \_\_\_ No X/
11) Proposed Well Work: Drill gas well/stimulate
12)

CASING AND TUBING PROGRAM

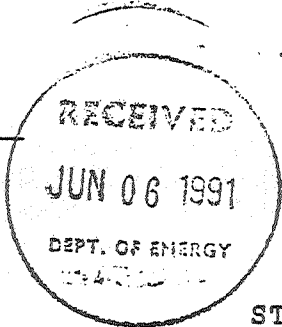
Table with columns: TYPE, SPECIFICATIONS (Size, Grade), FOOTAGE INTERVALS (Weight per ft., For drilling, Left in well), CEMENT (Fill-up). Rows include Conductor, Fresh Water, Coal, Intermediate, Production, Tubing, and Liners.

12376

PACKERS : Kind \_\_\_\_\_ Sizes \_\_\_\_\_ Depths set \_\_\_\_\_

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)



1) Date: April 3, 1991  
2) Operator's well number 22153-T  
3) API Well No: 47 - 075 - 43  
State - County - Permit

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served: 5) (a) Coal Operator:  
 (a) Name United States Dept. of the Interior Name \_\_\_\_\_  
 Address Bureau of Land Management Address \_\_\_\_\_  
Forest Supervisor  
 (b) Name United States Forest Service (b) Coal Owner(s) with Declaration  
 Address Sycamore Street Name \_\_\_\_\_  
Box 1548 Address Same as surface  
 (c) Name Elkins, WV 26241 Name \_\_\_\_\_  
 Address \_\_\_\_\_ Address \_\_\_\_\_

6) Inspector Craig Duckworth (c) Coal Lessee with Declaration  
 Address Box 107, Davisson Route Name \_\_\_\_\_  
Gassaway, WV 26624 Address \_\_\_\_\_  
 Telephone (304)- 364-5942

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 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 4 on the above named parties, by:

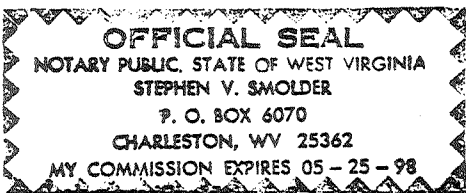
- \_\_\_\_\_ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- \_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B 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.

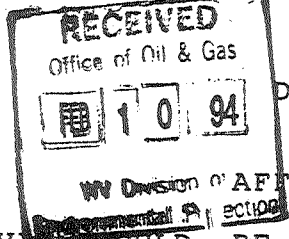
I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Columbia Natural Resources, Inc.  
By: [Signature]  
Its: Vice President, Drilling & Production Operations  
Address P. O. Box 6070  
Charleston, WV 25362  
Telephone 304/353-5000



Subscribed and sworn before me this 10 day of April, 1991

[Signature] Notary Public  
My commission expires May 25, 1998



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

WV Division of AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: U.S. DEPT INTERIOR Operator Well No.: 22153

LOCATION: Elevation: 3,306.00 Quadrangle: MARLINTON  
District: HUNTERSVILLE County: POCAHONTAS  
Latitude: 9100 Feet South of 30 Deg. 15 Min. Sec.  
Longitude 3500 Feet West of 80 Deg. Min. Sec.

Well Type: OIL \_\_\_\_\_ GAS X

Company: Columbia Natural Resources, Inc. Coal Operator N/A  
P. O. Box 6070 or Owner \_\_\_\_\_  
Charleston, WV 25362-0070 \_\_\_\_\_

Agent: \_\_\_\_\_ Coal Operator N/A  
or Owner \_\_\_\_\_

Permit Issued: 11/16/93

AFFIDAVIT

STATE OF WEST VIRGINIA,  
County of Pocahontas ss:

C. E. Bellinger and L. L. Friend being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Craig Duckworth Oil and Gas Inspector representing the Director, say that said work was commenced on the 10th day of July, 1993, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	DEPTH
13-3/8 Csg.	-	-	-	79'
9-5/8	-	-	-	2013'
Pumped hole full of Gel				
Cmt Plug	7870	7550	Gel Between	
Cmt Plug	5200	5050	Cmt plugs	
Cast Iron Plug		2980		
Cmt Plug	2980	2925		
Cmt Plug	2130	1840		
Cmt Plug	120	25' Below Surface		

Description of monument: As Required by State Inspector  
and that the work of plugging and filling said well was completed on the 12th day of July, 1993.

And further deponents saith not.

Charles E. Bellinger 2/7/94  
L. L. Friend 2/7/94  
Stephen V. Smolder 2/7/94  
Notary Public

Sworn and subscribe before me this 7 day of February, 1994  
My commission expires: May 25, 1998

Oil and Gas Inspector: \_\_\_\_\_

FEB 16 1994