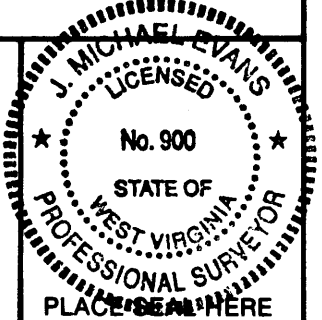


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION Bench Mark 756' West at elev. 1033'

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) J. Michael Evans
 R.P.E. _____ L.L.S. 900



STATE OF WEST VIRGINIA
 Division of Environmental Protection
 OFFICE OF OIL AND GAS



DATE February 8, 19 96
 OPERATOR'S WELL NO. Cookman 1
 API WELL NO. _____

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

LOCATION: ELEVATION 1139' WATERSHED Jesse Run
 DISTRICT Hackers Creek COUNTY Lewis
 QUADRANGLE Berlin 7.5' West

SURFACE OWNER Thomas C. Kennedy ACREAGE 91.20
 OIL & GAS ROYALTY OWNER Adam Cookman Hrs. LEASE ACREAGE 193.50
 LEASE NO. _____

PROPOSED WORK: DRILL 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 Benson ESTIMATED DEPTH 4320
 WELL OPERATOR Dominion Appalachian Dev. DESIGNATED AGENT John Haskins
 ADDRESS P. O. Drawer R Inc. ADDRESS P. o. Drawer R
Jane Lew, WV 26378-0080 6-6 153 Jane Lew, WV 26378-0080

LONGITUDE 80° 08' 20"

COUNTY NAME

PERMIT

FORM WW-6

0-7-2-90

JUL 1 1996
Permitting
Office of Oil & Gas

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

Well Operator's Report of Well Work

Farm name: KENNEDY, THOMAS C. Operator Well No.: Cookman #1

LOCATION: Elevation: 1,139.00 Quadrangle: BERLIN

District: HACKERS CREEK County: LEWIS
Latitude: 6875 Feet South of 39 Deg. 7 Min. 30 Sec.
Longitude 7075 Feet West of 80 Deg. 20 Min. Sec.

Company: DOMINION APPALACHIAN DEVE
P. O. DRAWER R
JANE LEW, WV 26378-0000

Agent: JOHN T. HASKINS

Inspector: TIM BENNETT
Permit Issued: 04/12/96
Well work Commenced: 06/02/96
Well work Completed: 06/09/96
Verbal Plugging
Permission granted on: N/A
Rotary X Cable _____ Rig
Total Depth (feet) 4338'
Fresh water depths (ft) 197,
Salt water depths (ft) N/A

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	30	0	PULLED
8 5/8	505	505	130 SKS
4 1/2	4324	4324	590 SKS

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

109'-115' 4/10'-4/16'

OPEN FLOW DATA

Benson 4152-4160
Balltown - Bradford 3246-3478
Producing formation Warren - Speechley Pay zone depth (ft) 2570-2870
Gas: Initial open flow NOT TESTED MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 267 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 8 Hours
Static rock Pressure 450 psig (surface pressure) after 24 Hours

Bayard 2254-2262
Second producing formation Fifth Sand Pay zone depth (ft) 2188-2200
Gas: Initial open flow 47 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow * MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests * Hours
Static rock Pressure * psig (surface pressure) after * Hours

* Commingled

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.

Larry J. Cavallo

For: DOMINION APPALACHIAN DEVELOPMENT, INC.

By: Larry J. Cavallo, Senior Geologist

Date: 6/25/96

JUL 1 1996

5 STAGES Jelled Water/FoamFRAC

DATE 6/14/96

ZONES	PERFS	HOLE	BBL	BP	ISIP	
enson	4152-4160	17	534	3500	1200	
alltown-Bradford	3246-3478	10	277	1880	800	
arren-Speechley	2570-2870	12	332	2300	870	
ayard	2254-2262	17	175 (foam)	3700	1260	
ifth Sand	2195-2200	13	151 (foam)	3600	1400	
FORMATION	COLOR	HARD/SOFT	TOP	BOTTOM	REMARKS	
ILL			0	12	Hole Wet 58'	
HITE SAND	WHITE	HARD	12	22	APP 1/2"	
AND & SHALE	BROWN	MED.	22	24	1/2" H2O 150'	
HITE SAND	WHITE	HARD	24	58	1/4" H2O 170'	
AND & SHALE	GRAY	MED.	58	109		
COAL	BLACK	SOFT	109	115		
AND/SHALE/RR	GRAY/RED	MED.	115	410		
COAL	BLACK	SOFT	410	416		
AND & SHALE	GRAY	MED.	416	445		
AND	WHITE	HARD	445	501		
AND & SHALE	GRAY	MED.	501	590		
AND	GRAY	HARD	590	725	HOLE DAMP @ 599'	
					635' App 1/2"	
AND & SHALE	GRAY	MED.	725	750		
AND	GRAY	HARD	750	785		
AND & SHALE	GRAY	MED.	785	866		
R/SAND/SHALE	GRAY/RED	SOFT	866	1130		
AND & SHALE	GRAY/WHITE	MED.	1130	1261		
LIME	GRAY	HARD	1261	1271		
HALE	GRAY	SOFT	1271	1310		
. LIME	GRAY	HARD	1310	1380		
. INJUN	GRAY	HARD	1380	1483		
AND & SHALE	GRAY	MED.	1483	1753	CK GAS @ 1501'	
AND	GRAY	HARD	1753	1775		
AND & SHALE	GRAY	MED.	1775	1920		
R/SAND/SHALE	GRAY/RED/WHITE	MED.	1920	2160		
AND & SHALE	GRAY/WHITE	MED.	2160	2260		
AYARD	GRAY	MED.	2260	2270		
HALE	GRAY	SOFT	2277	2649	2338' 20/10 - 1" W/W	
AND & SHALE	GRAY	MED.	2649	4145	3773 1/10 - 2" W/W	
ENSON			4145	4154		
AND & SHALE			4154	4170		
ENSON			4170			
		TD		4338'		

21866

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
 Permitting
 Office of Oil & Gas
WELL WORK PERMIT APPLICATION

47850 (4) 245

Well Operator: ⁵⁷³⁵ DOMINION APPALACHIAN DEVELOPMENT, INC.

Operator's Well Number: COOKMAN #1 3) Elevation: 1139

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

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

- 5) Proposed Target Formation(s): 425 BENSON
- 6) Proposed Total Depth: 4320' feet
- 7) Approximate fresh water strata depths: 20', 440'
- 8) Approximate salt water depths: N/A
- 9) Approximate coal seam depths: 230'
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No X /
- 11) Proposed Well Work: DRILL AND STIMULATE NEW WELL
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11 3/4		27#	30	0	pulled
Fresh Water						
Coal						38 CSR 18-11.3
Intermediate	8 5/8		20#	490	490	38 CSR 18-11.2.2
Production	4 1/2		9.5#	4280	4280-4	38CSR 18-11.1
Tubing						3
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

Fee(s) paid: 1 Well Work Permit 1 Reclamation Fund 1 WPCP
 Plat 1 WW-9 1 WW-2B 1 Bond Blanket Agent

1) Date: MARCH 22, 1996
2) Operator's well number
COOKMAN #1
3) API Well No: 47 - 041 - 4280
State County Permit

RECEIVED
WV Division of
Environmental Protection

MAR 27 1996 STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

Permitting
Office of Oil & Gas **NOTICE AND APPLICATION FOR A WELL WORK PERMIT**

- 4) Surface Owner(s) to be served:
- (a) Name THOMAS KENNEDY
 - Address 227 CARR AVENUE
CLARKSBURG, WV 26301
 - (b) Name _____
 - Address _____
 - (c) Name _____
 - Address _____
- 5) (a) Coal Operator:
- Name N/A
 - Address _____
 - (b) Coal Owner(s) with Declaration
 - Name SAME AS SURFACE
 - Address _____
 - (c) Coal Lessee with Declaration
 - Name N/A
 - Address _____
- 6) Inspector: TIM BENNETT
- Address 737 KARL STREET
WESTON, WV 26452
 - Telephone (304) - 269-6167

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 DOMINION APPALACHIAN DEVELOPMENT, INC.
By: [Signature] JOHN T. HASKINS
Its: SENIOR VICE-PRESIDENT
Address PO DRAWER R
JANE LEW, WV 26378
Telephone (304) 884-7681

Subscribed and sworn before me this 22ND day of MARCH, 1996

[Signature] Notary Public
My commission expires MARCH 14, 2000