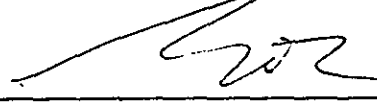


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NUMBER: _____
DRAWING NUMBER: DOMRL29.PCS
SCALE: 1" = 1000'
MINIMUM DEGREE OF ACCURACY: 1 IN 2500
PROVEN SOURCE OF ELEVATION: EXISTING WELL #996
ELEVATION = 2371.04'

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) 

STEPHEN D. LOSH, P.S. #674



STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
FORM WW-6 #10 McJUNKIN ROAD
NITRO, WV 25143-2506

LAND SURVEYING SERVICES
21 CEDAR LANE, BRIDGEPORT, WV 26330
PHONE: 304-842-2018 OR 842-5762

DATE: SEPTEMBER 11, 1998
OPERATORS WELL NO.: ROWLAND LAND #29 (REV.)
API WELL NO. 47-081-01155
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 2264.87' WATERSHED WORKMAN CREEK
DISTRICT CLEAR FORK COUNTY RAIFIGH
QUADRANGLE DOROTHY LEASE NUMBER _____

SURFACE OWNER ROWLAND LAND COMPANY ACREAGE 8962.16
OIL & GAS ROYALTY OWNER ROWLAND LAND COMPANY LEASE ACREAGE 33,000

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

PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION GORDON ESTIMATED DEPTH 4050'

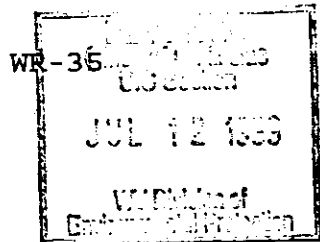
WELL OPERATOR DOMINION APPALACHIAN DEVELOPMENT DESIGNATED AGENT JOHN HASKINS 097 26 1998
ADDRESS P. O. BOX 1248 JANE 11W, WV 26378 ADDRESS P. O. BOX 1248 JANE 11W, WV 26378

COUNTY NAME RAIFIGH
PERMIT 1155

11785

22-Oct-98

API # 47- 81-01155



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

Reviewed KS

Well Operator's Report of Well Work

Farm name: ROWLAND LAND CO Operator Well No.: ROWLAND #29

LOCATION: Elevation: 2,265.00 Quadrangle: ODD

District: RICHMOND County: RALEIGH
Latitude: 12380 Feet South of 37 Deg. 55Min. 0 Sec.
Longitude 1740 Feet West of 81 Deg. 22 Min. 30 Sec.

Company: DOMINION APPALACHIAN DEVE
P. O. BOX 1248
JANE LEW, WV 26378-0000

Agent: JOHN T. HASKINS

Inspector: RODNEY DILLON
Permit Issued: 10/20/98
Well work Commenced: 11/07/98
Well work Completed: 11/16/98
Verbal Plugging
Permission granted on:
Rotary Cable Rig
Total Depth (feet) 3580'
Fresh water depths (ft) 100'

Salt water depths (ft) 1550', 2897'

Is coal being mined in area (Y/N)? N
Coal Depths (ft): None reported

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
9 5/8"	75'	75'	
7"	882'	882'	130 sks
4 1/2"	3480'	3480	235 sks

OPEN FLOW DATA 3282-3410'

Producing formation Weir, Big Lime Pay zone depth (ft) 3078-3082
 Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
 Final open flow 421 MCF/d Final open flow 0 Bbl/d
 Time of open flow between initial and final tests 22 Hours
 Static rock Pressure 450 psig (surface pressure) after 24 Hours

Second producing formation Lower Maxton Pay zone depth (ft) 2580-2586
Middle Maxton Pay zone depth (ft) 2306-2312
 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

* 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.

For: Larry J. Cavallo
DOMINION APPALACHIAN DEVELOPMENT, INC.

By: LARRY J. CAVALLO: MANAGER OF ENGINEERING
Date: 7/7/98

RAL 1/55

JUL 19 1998

4	STAGE(S)	750 foam & acid	FRAC	DATE	11/15/98
ZONES	PERFS	HOLES	BBL	BP	ISIP
Weir	3282-3410	16	388 foam	1420	1650
Big Lime	3078-3082	6	59 28% HCL	2120	547
Lower Maxton	2580-2586	16	298 foam	1440	1816
Middle Maxton	2306-2312	16	344 foam	2831	821

FORMATION	COLOR	HARD/SOFT	TOP	BOTTOM	REMARKS
OVERBURDON			0	40	
SANDY SHALE			40	75	
SANDSTONE			75	120	
SANDY SHALE			120	410	
SANDSTONE			410	500	
SANDY SHALE			500	810	
SANDSTONE			810	1770	
SANDY SHALE			1770	1912	
RAVENCLIFF			1912	1960	
SANDY SHALE			1960	2065	
UPPER MAXTON			2065	2130	
SANDY SHALE			2130	2260	
MIDDLE MAXTON			2260	2310	
SANDY SHALE			2310	2545	
OVER MAXTON			2545	2650	
SANDY SHALE			2650	2680	
BIG LIME			2680	3120	
BIG INJUN			3120	3150	
SANDY SHALE			3150	3180	
SANDSTONE			3180	3220	
POCONO			3220	3280	
SANDY SHALE			3280	3340	
WEIR			3340	3390	
SANDY SHALE			3390	3570	
FD				3580'	