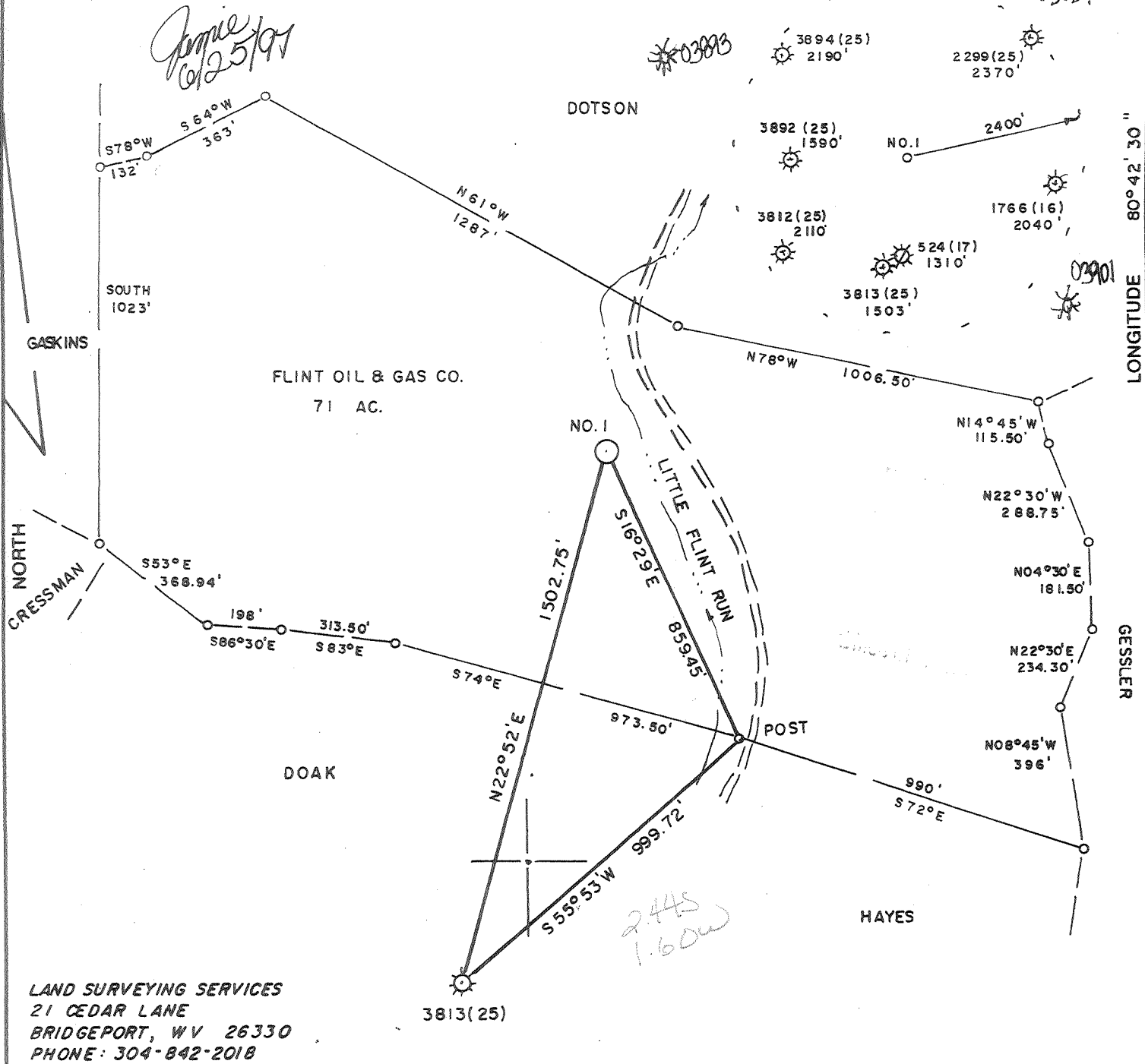


WELL REFERENCES:  
 N83°30'W, 115' TO 3" RED OAK  
 N14°E, 91' TO 10" STEEL CASING

8520'  
 LATITUDE 39°25'00"



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

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 400'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION EXIST. WELL 3813  
 ELE V. - 783'

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) \_\_\_\_\_  
 R.P.E. \_\_\_\_\_ L.L.S. 674  
 STEPHEN D. LOSH



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



DATE SEPTEMBER 16, 1996  
 OPERATOR'S WELL NO. FLINT O&G NO. 1  
 API WELL NO.

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 757' WATERSHED LITTLE FLINT RUN  
 DISTRICT GRANT COUNTY DODDRIDGE  
 QUADRANGLE CENTER POINT 7.5 min.

SURFACE OWNER FLINT OIL & GAS CO. ACREAGE 68.96  
 OIL & GAS ROYALTY OWNER FLINT OIL & GAS CO. LEASE ACREAGE 70  
 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) New drill

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION BENSON ESTIMATED DEPTH 4975' 6-6 97 JUN 27 1997  
 WELL OPERATOR DOMINION APPALACHIAN DEVELOPMENT DESIGNATED AGENT JOHN HASKINS  
 ADDRESS P.O. DRAWER R ADDRESS P.O. DRAWER R  
 JANE LEW, WV 26378 JANE LEW, WV 26378

LONGITUDE 80°42'30"  
 12,830'

COUNTY NAME  
 PERMIT

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: FLINT OIL & GAS CO. Operator Well No.: FLINT #1

LOCATION: Elevation: 757.00 Quadrangle: CENTER POINT

District: GRANT County: DODDRIDGE  
Latitude: 12830 Feet South of 39 Deg. 25Min. 0 Sec.  
Longitude 8520 Feet West of 80 Deg. 42 Min. 30 Sec.

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

Agent: JOHN T. HASKINS

Inspector: MIKE UNDERWOOD  
Permit Issued: 06/25/97  
Well work Commenced: 7/17/97  
Well work Completed: 7/31/97  
Verbal Plugging  
Permission granted on: N/A  
Rotary X Cable Rig  
Total Depth (feet) 5100'  
Fresh water depths (ft) 30', 147', 568'  
Salt water depths (ft) N/A

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 582'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	127.15'	127	65
8 5/8	931.60'	931.60'	200 sks.
4 1/2	5005'	5005'	580 sks.

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4846-4852  
Gas: Initial open flow 33 MCF/d Oil: Initial open flow N/A Bbl/d  
Final open flow 103 MCF/d Final open flow N/A Bbl/d  
Time of open flow between initial and final tests 24 Hours  
Static rock Pressure 1050 psig (surface pressure) after 48 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

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

By: LARRY J. CAVALLO; MANAGER OF ENGINEERING  
Date: 10/9/97

OCT 17 1997

ES	1	STAGE (S)	20	# GEL	FRAC	DATE	8/1/97
		PERFS		HOLES	BBL	BP	ISIP
NSON		4846-4852		14	492	2194	0

FORMATION	COLOR	HARD/SOFT	TOP	BOTTOM	REMARKS
-GL			0	10	
ND & SHALE	GRAY	HARD	10	45	HOLE WET @30'
ND & SHALE	GRAY	MEDIUM	45	55	1/2" Stream
ND & SHALE	GRAY	HARD	55	98	
ND & SHALE	GRAY/RED	MEDIUM	98	103	
ND	GRAY	HARD	103	150	
/SHALE	GRAY/RED	MEDIUM	150	270	
ND & SHALE	GRAY	HARD	270	350	
ND/SHALE/RR	GRAY/RED	MEDIUM	350	483	
ND	GRAY	HARD	483	500	
ND & SHALE	GRAY	HARD	500	582	HOLE SHOWED
AL & SHALE	BLACK/GRAY	SOFT	582	587	1/2" H2O @568'
ND	GRAY	HARD	587	598	
ND & SHALE	GRAY	MEDIUM	598	649	
& SHALE	RED/GRAY	MEDIUM	649	665	
ND	GRAY	HARD	665	711	
& SHALE	GRAY/RED	MEDIUM	711	764	
ND	GRAY	HARD	764	785	
& SHALE	GRAY/RED	MEDIUM	785	808	
ND & SHALE	GRAY	MEDIUM	808	870	
ND	GRAY	HARD	870	882	
ND & SHALE & RR	GRAY/RED	MEDIUM	882	994	DUSTING @ 990'
ND & SHALE	GRAY	HARD	944	1055	
ND & SHALE & RR	GRAY/RED	MEDIUM/SOFT	1055	1293	
ND	WHITE	HARD	1293	1331	
ND & SHALE & RR	GRAY/RED	RED/SOFT	1331	1355	
ND	WHITE	HARD	1355	1364	
ND/SHALE/RR	GRAY/RED	MEDIUM/SOFT	1364	1388	
ND	WHITE	HARD	1388	1406	
ND & SHALE	GRAY	MEDIUM	1406	1502	
ND	GRAY	HARD	1502	1546	
ND & SHALE	GRAY	MEDIUM	1546	1580	
ND	GRAY	HARD	1580	1608	
ND & SHALE	GRAY	MEDIUM	1608	1705	1614' Oil odor
LIME	GRAY	HARD	1705	1716	
ND & SHALE	GRAY	MEDIUM	1716	1740	
LIME	GRAY	HARD	1740	1814	
UN SAND	GRAY	HARD	1814	1903	Gas CK @1925 N.S.
ND & SHALE & OIL	GRAY	MEDIUM	1903	1923	Gas CK @1903' Oil
ND	GRAY	HARD	1923	1970	Odor, Hole Damp
ND & SHALE	GRAY	MEDIUM	1970	2106	S.P. on hole 2009
ND	GRAY	HARD	2106	2145	Gas Ck @2041 N.S
ND & SHALE	GRAY	HARD	2145	2235	Gas CK @2663' N.S
ND & SHALE	GRAY	MEDIUM	2235	3205	Gas Ck @4510' N.S
ND	GRAY	HARD	3205	3236	Gas Ck @ 5100 N.S
ND & SHALE	GRAY	MEDIUM	3236	4403	Gas Ck DCS 10/10-
ILEY	BROWN/GRAY	MEDIUM	4403	4430	1" H2O
ND & SHALE	GRAY	SOFT	4430	4847	
ENSON	BROWN	HARD	4847	4851	
ND & SHALE	GRAY	MEDIUM	4851	4861	
ND	LT. BROWN	HARD	4861	4873	
ND & SHALE	GRAY	MEDIUM	4873	5100	
			TD	5100	

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

- 1) Well Operator: DOMINION APPALACHIAN DEVELOPMENT, INC. <sup>5735</sup> 47850 286 (3)
- 2) Operator's Well Number: FLINT OIL & GAS #1 ( ) 3) Elevation: 757
- 4) Well type: (a) Oil   / or Gas X / *Issued 06/25/97*  
 (b) If Gas: Production X / Underground Storage   / *Expires 06/25/99*  
 Deep   / Shallow X /
- 23774 Proposed Target Formation(s): Benson <sup>435</sup>
- Proposed Total Depth: 5000' feet
- Approximate fresh water strata depths: 80'
- Approximate salt water depths: 850'
- 9) Approximate coal seam depths: 0
- 10) Does land contain coal seams tributary to active mine? Yes   / No X /
- 11) Proposed Well Work: DRILL & STIMULATE NEW WELL
- 12)

JUN 25 1997  
Office of Oil & Gas

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						<i>0.14 mile</i>
Fresh Water	11 3/4"			130'	130' CTS	38 CSR 18-11.3
Coal						
Intermediate	8 5/8"		20#	900'	900' CTS	38 CSR 18-11.2.2
Production	4 1/2"		9.5#	4950'	4950'	38 CSR 18-11.1
Tubing						
Liners						

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 Blanket  Agent  
 (Type)

17

1) Date: JUNE 04, 1997  
2) Operator's well number  
FLINT OIL & GAS #1 (11487)  
3) API Well No: 47 - 017 - 4382  
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: 5) (a) Coal Operator:  
 (a) Name FLINT OIL & GAS Co. Name N/A  
 Address c/o ROSEMARY HAUGHT Address \_\_\_\_\_  
221 S. CHELSEA ST.  
~~(b) Name~~ SISTERSVILLE, WV 26175 (b) Coal Owner(s) with Declaration  
 Address \_\_\_\_\_ Name NONE WITH DECLARATION  
 Address \_\_\_\_\_  
 (c) Name \_\_\_\_\_ Name \_\_\_\_\_  
 Address \_\_\_\_\_ Address \_\_\_\_\_
- 6) Inspector MIKE UNDERWOOD (c) Coal Lessee with Declaration  
 Address ROUTE 2 BOX 135 Name N/A  
SALEM, WV 26426-0135 Address \_\_\_\_\_  
 Telephone (304)- 782 1043

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 P O DRAWER R  
JANE LEW, WV 26378  
 Telephone (304) 884-2000

Subscribed and sworn before me this 4th day of June, 1997

[Signature] Notary Public  
 My commission expires December 26, 2000