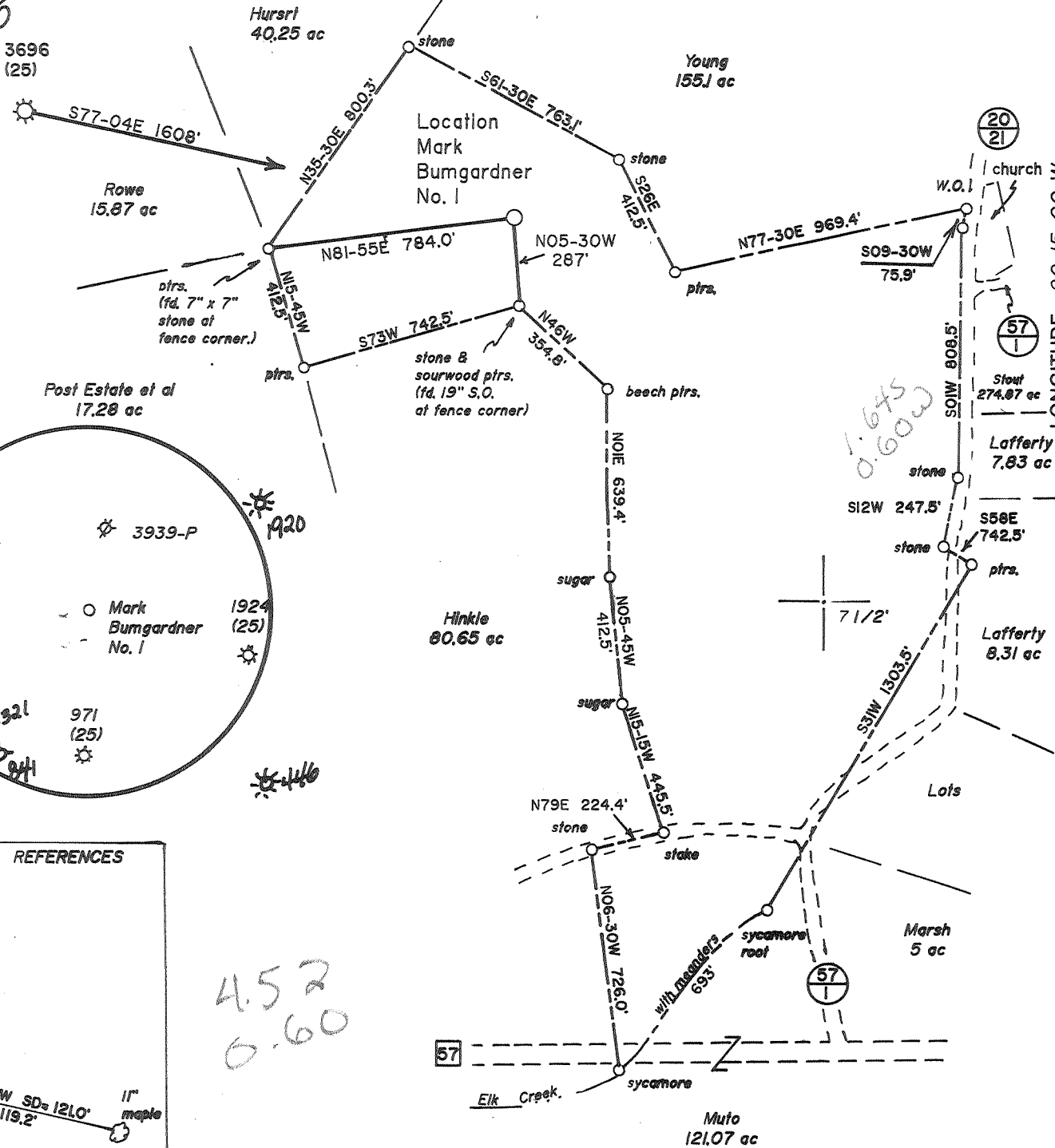
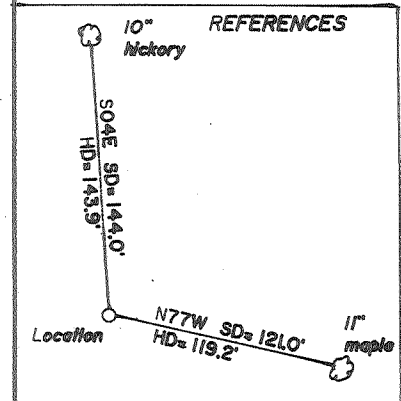


Janice
2/15/95



NORTH

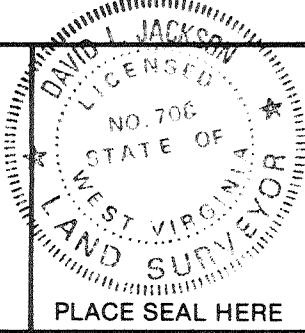


4.52
0.60

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

FILE NO. _____
 DRAWING NO. 1
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION Road Junction 3000'
SE of location: elev. 1021

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) David Z. Jackson
 R.P.E. _____ L.L.S. 708



PLACE SEAL HERE

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



DATE January 26, 19 95
 OPERATOR'S WELL NO. Mark Bumgardner
 API WELL NO. No. 1

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1233' WATER SHED Stouts Run
 DISTRICT Elk COUNTY Harrison
 QUADRANGLE Mount Clare 7 1/2' western NE
 SURFACE OWNER Mark E. Bumgardner and Veronica F. Bumgardner ACREAGE 76.5
 OIL & GAS ROYALTY OWNER Mark E. Bumgardner et al LEASE ACREAGE 76.5
 LEASE NO. 458800

47 - 033 - 4081
 STATE COUNTY PERMIT

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

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Benson ESTIMATED DEPTH 4600'
 WELL OPERATOR Petroleum Development Corp. DESIGNATED AGENT Eric R. Stearns
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

6-6-153

FORM WW-6

COUNTY NAME PERMIT

RECEIVED
WV Division of
Environmental Protection

14-Feb-95
API # 47- 33-04081

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

APR 04 1995

Well Operator's Report of Well Work

Permitting
Office of Oil & Gas

BUMGARDNER, MARK & ETUX Operator Well No.: M.BUMGARDNER #1

LOCATION: Elevation: 1,233.00 Quadrangle: MOUNT CLARE

District: ELK County: HARRISON
Latitude: 8560 Feet South of 39 Deg. 12Min. 30 Sec.
Longitude 3210 Feet West of 80 Deg. 15 Min. 0 Sec.

Company: PETROLEUM DEVELOPMENT COR
103 E. MAIN ST. - P.O. BOX 26
BRIDGEPORT, WV 26330-0026

Agent: ERIC STEARNS

Inspector: TIM BENNETT
Permit Issued: 02/15/95
Well work Commenced: 03/01/95
Well work Completed: 03/05/95
Verbal Plugging
Permission granted on: _____
Rotary Cable _____ Rig _____
Total Depth (feet) 4550'
Fresh water depths (ft) _____

267
Salt water depths (ft) _____
n/a

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 58-60; 270-272

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	22'		
8 5/8"	1020'	1020'	255 sks
4 1/2"	4493'	4493'	560 sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4392-4395
Gas: Initial open flow 596 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 3147 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 550 psig (surface pressure) after 72 Hours

Second producing formation Keener Pay zone depth (ft) 1531-1541
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow co-mingled 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: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns

Date: March 24, 1995

APR 17 1995

Bumgardner #1

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Benson	13 (4392' - 4395')	50	400	500	55
2nd	Keener	20 (1531' - 1541')	50	400	500	

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	
sand, shale, RR	10	1406	Coal 58' - 60', 270' - 272' hole damp @267'
Little Lime	1406	1433	
sand, shale	1433	1465	
Big Lime	1465	1520	
sand, shale	1520	1521	
Keener	1521	1574	gas chk @ 1567' 200/10 thru 2" w/water
sand, shale	1574	1576	
Big Injun	1576	1631	
sand, shale	1631	1854	gas chk @ 1658' 200/10 thru 2" w/water
Gantz	1854	1862	
sand, shale	1862	1888	gas chk @ 1936' 200/10 thru 2" w/water
50 ft	1888	1942	
sand, shale	1942	1956	
30 ft	1956	1995	gas chk @ 2029' 150/10 thru 2" w/water
sand, shale	1995	2234	gas chk @ 2120' 150/10 thru 2" w/water
4th	2234	2355	
sand, shale	2355	2400	gas chk @ 2338' 200/10 thru 2" w/water
5th	2400	2435	
sand, shale	2435	2462	
Bayard	2462	2505	gas chk @ 2465' 200/10 thru 2" w/water
sand, shale	2505	2630	
Elizabeth	2630	2650	gas chk @ 2652' 200/10 thru 2" w/water
sand, shale	2650	2780	gas chk @ 2996' 200/10 thru 2" w/water
Speechly	2780	3190	gas chk @ 3120' 200/10 thru 2" w/water
sand, shale	3190	3230	
Balltown	3230	3615	gas chk @ 3497' 200/10 thru 2" w/water
sand, shale	3615	3650	
Bradford	3650	3785	gas chk @ 4146' 200/10 thru 2" w/water
sand, shale	3785	4075	gas chk @ 4458' 200/10 thru 2" w/water
Riley	4075	4369	gas chk @ 4535' 200/10 thru 2" w/water
sand, shale	4369	4395	gas chk @ TD 200/10 thru 2" w/water
Benson	4395	4450	gas chk @ Collar 200/10 thru 2" w/water
	4450	4535	Drillers TD
		4550	Logger TD

FORM WW-2B FEB 09 1995

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

- Well Operator: Petroleum Development Corporation ⁶⁸⁷ 38200 (5) 499
- Operator's Well Number: M. Bumgardner #1 3) Elevation: 1,233'
- Well type: (a) Oil ___ / or Gas XX
- (b) If Gas: Production XX / Underground Storage ___
 Deep ___ / Shallow XX
- Proposed Target Formation(s): Benson Sand ⁴³⁵
- Proposed Total Depth: 4,600' feet
- Approximate fresh water strata depths: 440', 485', 655', 820'
- Approximate salt water depths: None Reported
- Approximate coal seam depths: 500'-02'; 620'-23'; 955'-57'
- Does land contain coal seams tributary to active mine? Yes ___ / No XX
- Proposed Well Work: Drill & Stimulate new well

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4"	H-40	42#	30		
Fresh Water						
Coal						
Intermediate	8 5/8"	H-40	20/23#	1,015'	<u>38CSR18-11.2.2</u> 38CSR18-11.3	<u>cts.</u>
Production	4 1/2"	J-55	10.5#	4,600'	4,600' ← 38CSR18-11.2.2 38CSR18-11.1	400 sks
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

014491
 014587
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Blanket Agent
 (Type)

20226

RECEIVED
WV Division of
Environmental Protection
FEB 09 1995
Permitting
Office of Oil & Gas

- 1) Date: January 31, 1995
- 2) Operator's well number
M. Bumgardner #1
- 3) API Well No: 47 - 033 - 4081
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:
 - (a) Name Mark E. and Veronica Bumgardner
 - Address Rt. 1, Box 493
Mt. Clare, WV 26408
 - (b) Name _____
 - Address _____
 - (c) Name _____
 - Address _____
- 5) (a) Coal Operator:
 - Name _____
 - Address _____
 - (b) Coal Owner(s) with Declaration
 - Name _____
 - Address _____
 - (c) Coal Lessee with Declaration
 - Name _____
 - Address _____
- 6) Inspector Tim Bennett
- Address 737 Karl Street
Weston, WV 26452
- Telephone (304)- _____

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
 XX 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 _____ on the above named parties, by:

- _____ Personal Service (Affidavit attached)
- _____ Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

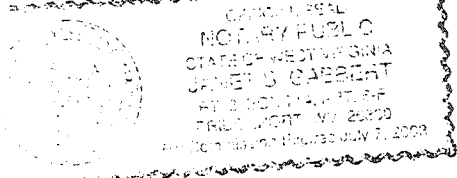
I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

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 PETROLEUM Development Corporation
 By: _____
 Its: _____ Geologist
 Address _____ P O Box 26
 _____ Bridgeport, WV 26330
 Telephone _____ 304-842-6256

Subscribed and sworn before me this 7TH day of FEBRUARY, 1995



Janet S. Cabbert Notary Public
 My commission expires July 7, 2003