

DECIMAL LONG.: 80.81363
SURVEYED LONG.: 80° 38' 49.06"

LATITUDE 39° 22' 30"

8584'

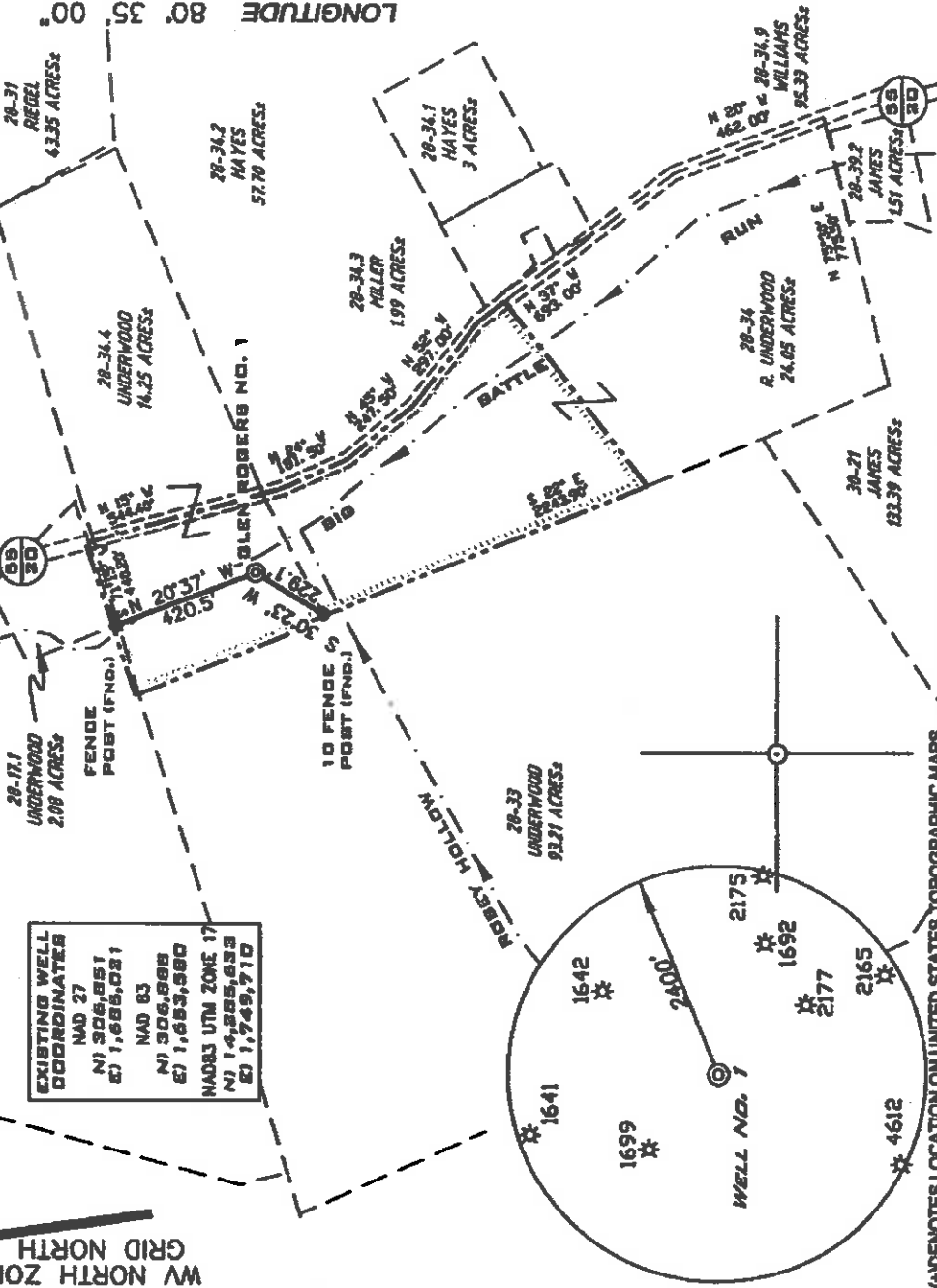
GLEN ROGERS LEASE 12.5 ACRES WELL NO. 1

WV NORTH ZONE
GRID NORTH

REFERENCE NOTES

LEASE AS SHOWN TAKEN FROM
DESCRIPTION RECORDED IN DEED
BOOK 64 PAGE 183 AND OTHERS.
OWNERSHIP TAKEN FROM PUBLIC
RECORDS OF HARRISON COUNTY,
WV IN JANUARY, 2010.
WMO 27 LAY/ALONG BY DIFFERENTIAL
SUBMETER MAPPING GRADE OPS
DRAWN BY: J.M.S.

EXISTING WELL
COORDINATES
WAD 27
N) 306,851
E) 1,685,081
WAD 83
N) 306,898
E) 1,683,980
NAD83 UTM ZONE 17
N) 14,885,633
E) 1,749,910



13.795'

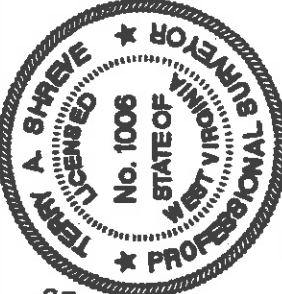
LONGITUDE 80° 35' 00"

(*) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

FILE NUMBER W0100236 (WB17-16)
DRAWING NUMBER W0100236_WP.dwg
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION SUBMETER MAPPING
GRADE GPS

I, THE UNDERSIGNED HEREBY CERTIFY THAT THIS PLAN 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 ENVIRONMENTAL PROTECTION

P.S.
1006
J. A. Smith



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

DATE: FEBRUARY 16, 2010

OPERATORS WELL NO. GLEN ROGERS NO. 1
API WELL NO.

47-017-4108 F
STATE COUNTY PERMIT

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

LOCATION ELEVATION 956' WATERSHED BIG BATTLE RUN

DISTRICT McCLELLAN COUNTY DODDRIDGE
LEASE NUMBER SALEM 7.5
SURFACE OWNER RICHARD UNDERWOOD
OIL & GAS ROYALTY OWNER GLEN ROGER st. ux
ACREAGE 4.55 AC OF 14.25 AC
LEASE ACREAGE 12.5

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

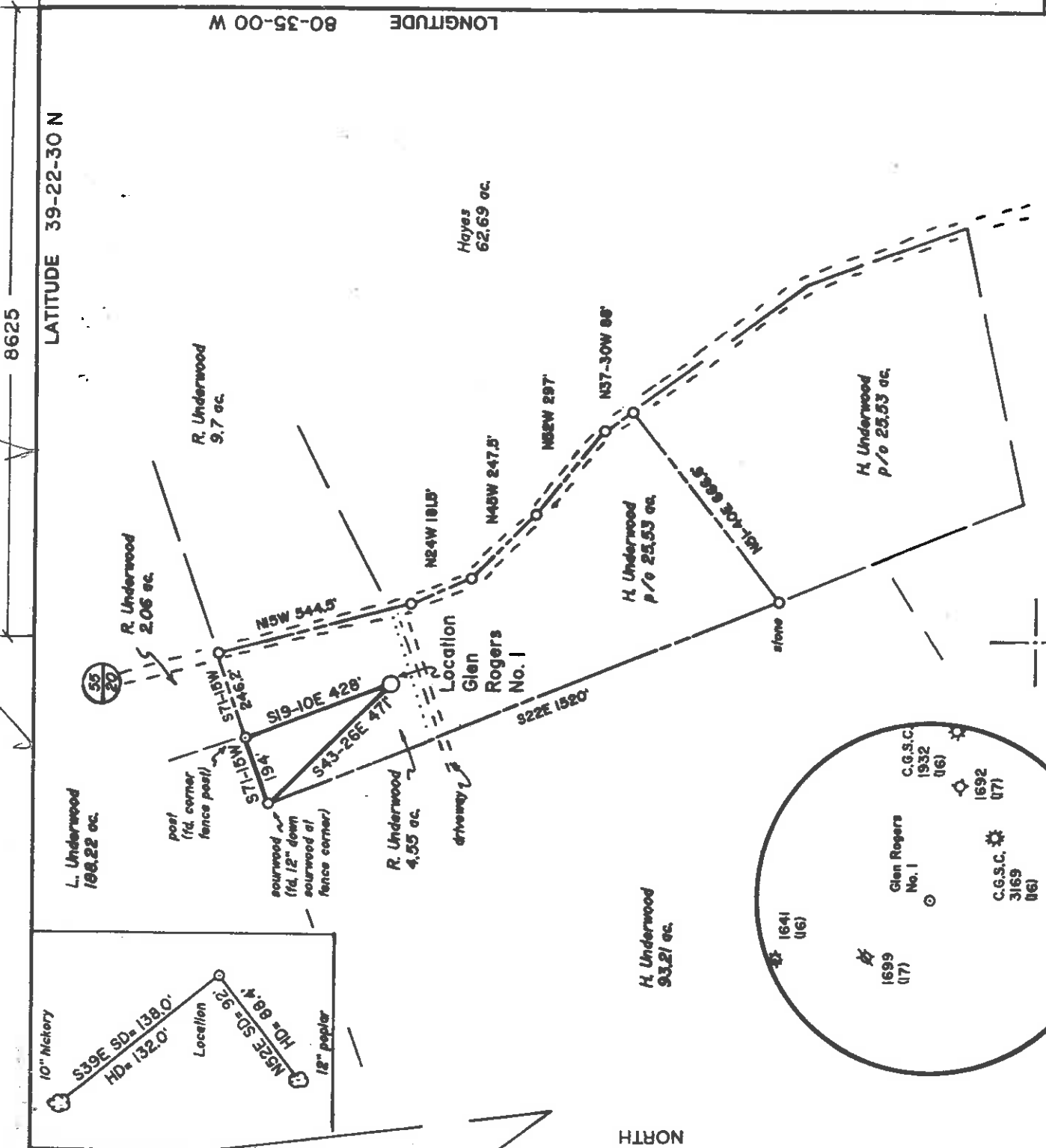
FRACTURE BIG INJUN & GORDON FORMATION
TARGET FORMATION GORDON ESTIMATED DEPTH 2680' (EXISTING TD 5087')

WELL OPERATOR PETROLEUM DEVELOPMENT CORP. DESIGNATED AGENT ALAN SMITH
ADDRESS 120 GENESIS BLVD., BRIDGEPORT, WV 26330 ADDRESS 120 GENESIS BLVD., BRIDGEPORT, WV 26330

DECIMAL LAT.: 39.37712
SURVEYED LAT.: 39° 20' 13.66"

8625

LATITUDE 39-22-30 N



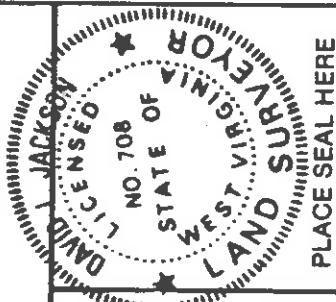
5.52
1.65

7 1/2'
2.65
4.50

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

FILE NO. _____
 DRAWING NO. 1
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION Road Junction 3500'
NW of Location: elev. 900'

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 J. Gochum
 R.P.E. L.L.S. 708



PLACE SEAL HERE

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



DATE February 22, 19 94
 OPERATOR'S WELL NO. Glen Rogers No. 1
 API WELL NO. _____

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

LOCATION: ELEVATION 955 WATER SHED Big Baffle Run
 DISTRICT McClellan COUNTY Doddridge

SURFACE OWNER Salem 7 1/2'
Richard A. Underwood
 OIL & GAS ROYALTY OWNER Glen L. Rogers et ux LEASE ACREAGE 12.5 ACREAGE 4.55

PROPOSED WORK: DRILL CONVERT 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 5000
 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

6-6-94

COUNTY NAME PERMIT

47-017-4108

Farm name: Underwood, Richard A. Operator Well No.: G Rogers 1

LOCATION: Elevation: 956' GL Quadrangle: Salem 7.5

District: _____ County: _____
Latitude: 13.785 Feet South of 39 Deg. 22 Min. 30 Sec.
Longitude 8.584 Feet West of 80 Deg. 35 Min. 00 Sec.

Company: Petroleum Development Corporation

Address:	120 Genesis Boulevard Bridgeport, WV 26330	Casing & Tubing:	16"	Used in drilling:	30'	Left in well	30'	Cement fill up Cu. Ft.	Sanded In
Agent:	Bob Williamson		11 3/4"		177'		177'		130
Inspector:	David Scranage		8 5/8"		1609'		1609'		511
Date Permit Issued:	03/22/2010		4 1/2"		5045'		5045'		929
Date Well Work Commenced:	04/05/2010								
Date Well Work Completed:	04/06/2010								
Verbal Plugging:									
Date Permission granted on:									
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>									
Total Vertical Depth (ft):	5087'								
Total Measured Depth (ft):	5087'								
Fresh Water Depth (ft.):	50', 270'								
Salt Water Depth (ft.):	None Reported								
Is coal being mined in area (N/Y)?	N								
Coal Depths (ft.):	200'								
Void(s) encountered (N/Y)	Depth(s) N								

RECEIVED
Office of Oil & Gas

OCT 17 2012

WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation: Gordon Pay zone depth (ft) 2578, 2684

Gas: Initial open flow 84 MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 119 MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests 24 Hours

Static rock Pressure NT psig (surface pressure) after _____ Hours

Second producing formation: Keener (commingled) Pay zone depth (ft) 1893

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

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the 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.

Signature

Signature

10/16/2012

Date

10/19/2012

Smithton Flint & Dalia (99) 66

Glenn Rogers #1

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Benson	14 (4924' - 4978')	50	550	500	58

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	Hole damp @ 50'
sand, shale, RR	10	1634	1/2 stream water @270'
Maxton	1634	1722	
sand, shale	1722	1832	gas chk @ 1763' No Show
Big Lime	1832	1922	
sand, shale	1922	1925	gas chk @ 1919' No Show
Big Injun	1925	1974	
sand, shale	1974	2158	gas chk @2103', 10/10 thru 1"/water
Weir	2158	2262	gas chk @2259', 50/10 thru 1"/water
sand, shale	2262	2350	
Berea	2350	2382	
sand, shale	2382	2656	gas chk @2506' 14/10 thru 1"/water
Gordon	2656	2680	
sand, shale	2680	2912	gas chk @2693' 6/10 thru 2"/water
5th	2912	2980	
sand, shale	2980	3236	gas chk @3127' 6/10 thru 2"/water
Warren	3236	3340	
sand, shale	3340	3377	
Speechley	3377	3795	gas chk @3502' 4/10 thru 2"/water
sand, shale	3795	3850	
Balltown	3850	4248	
sand, shale	4248	4266	
Bradford	4266	4427	
sand, shale	4427	4638	gas chk @4809' 4/10 thru 2"/water
Riley	4638	4861	
sand, shale	4861	4906	gas chk @4965' 4/10 thru 2"/water
Benson	4906	4962	Drillers TD
sand, shale	4962	5089	
	5087	5087	Logger TD

10/19/2012

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

Well Operator's Report of Well Work

Farm name: UNDERWOOD, RICHARDA. Operator Well No.: G. ROGERS #1

LOCATION: Elevation: 955.00 Quadrangle: SALEM

District: MCCLELLAN County: DODDRIDGE
Latitude: 13800 Feet South of 39 Deg. 22Min. 30 Sec.
Longitude 8625 Feet West of 80 Deg. 35 Min. Sec.

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

Agent: ERIC R. STEARNS

Inspector: MIKE UNDERWOOD
Permit Issued: 03/04/94
Well work Commenced: 03/07/94
Well work Completed: 03/14/94
Verbal plugging
Permission granted on: _____
Rotary x Cable R19
Total Depth (feet) 5087
Fresh water depths (ft) _____
50; 270

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

OPEN FLOW DATA

Producing formation Benson
Gas: Initial open flow 84 MCF/d Oil: Initial open flow (ft) 4977-4978
Final open flow 335 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 1600 psig (surface pressure) after 72 Hours

Second producing formation
Gas: Initial open flow MCF/d Oil: Initial open flow (ft) 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.

For: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns
Date: April 25, 1994

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	30'	30'	
11 3/4"	177'	177'	105 sks
8 5/8"	1609'	1609'	385 sks
4 1/2"	5045'	5045'	550 sks

4924-4926
(4977-4978)

Lenn Rogers #1

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
st	Benson	14 (4924' - 4978')	50	550	500	58

W E L L L O G

TOP FEET BOTTOM FEET

REMARKS: FRESH & SALT WATER, COAL, OIL & GAS

FORMATION	TOP FEET	BOTTOM FEET	REMARKS
CB - GL	0	10	
and, shale, RR	10	1634	Hole damp @ 50'
axton	1634	1722	1/2 stream water @270'
and, shale	1722	1832	gas chk @ 1763' No Show
Big Lime	1832	1922	
and, shale	1922	1925	gas chk @ 1919' No Show
Big Injun	1925	1974	
and, shale	1974	2158	gas chk @2103' 10/10 thru 1"/water
Belr	2158	2262	gas chk @2259' 50/10 thru 1"/water
and, shale	2262	2350	
Berea	2350	2382	
and, shale	2382	2656	gas chk @2506' 14/10 thru 1"/water
Jordan	2656	2680	
and, shale	2680	2912	gas chk @2693' 6/10 thru 2"/water
5th	2912	2980	
and, shale	2980	3236	gas chk @3127' 6/10 thru 2"/water
Warren	3236	3340	
and, shale	3340	3377	
Speckley	3377	3795	gas chk @3502' 4/10 thru 2"/water
and, shale	3795	3850	
Balltown	3850	4248	
and, shale	4248	4266	
Bradford	4266	4427	
and, shale	4427	4638	gas chk @4809' 4/10 thru 2"/water
Riley	4638	4861	
and, shale	4861	4906	gas chk @4965' 4/10 thru 2"/water
Benson	4906	4962	
and, shale	4962	5089	Drillers TD
	5089	5087	Logger TD

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

18777

Well Operator: 687 Petroleum Development Corporation 38200 5 596

Operator's Well Number: G. Rogers #1 3) Elevation: 955'

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

5) Proposed Target Formation(s): Benson Sand 435
6) Proposed Total Depth: 5500 feet
7) Approximate fresh water strata depths: 38', 605', 887'
8) Approximate salt water depths: 1435', 1545'
9) Approximate coal seam depths: 80', 250', 630'

10) Does land contain coal seams tributary to active mine? Yes ___ / No X
11) Proposed Well Work: Drill & stimulate new well
12)

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOOTAGE	LEFT IN WELL	FILL-UP (cu. ft.)	CEMENT
Conductor	11 3/4"	H-40	42#	30'/175'	-175'	C.T.S.	
Fresh Water							
Coal							
Intermediate	8 5/8"	H-40	20#/23#	950'/1600'	950'/1600'	C.T.S.	
Production	4 1/2"	J-55	10.5#	5500'	5500'	450 sks	
Tubing							
Liners							

PACKERS : Kind _____
Sizes _____
Depths set _____

Fee(s) paid: _____
Plat: WW-9 | WW-2B | Bond: _____ | Reclamation Fund: _____ | WPCP Agent: _____
Per Division of Oil and Gas Use Only

1) Date: March 3, 1994
2) Operator's well number
Glen Rogers #1
3) API Well No: 47 - 017 - 4108
State - County - Permit

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:

(a) Name Richard A. Underwood
Address Salem, WV 26426

5) (a) Coal Operator:
Name
Address

(b) Name
Address

(b) Coal Owner(s) with Declaration
Name No Declaration
Address

(c) Name
Address

Name
Address

6) Inspector Mike Underwood

Address Rt. 2, Box 135
Salem, WV 26426

(c) Coal Lessee with Declaration
Name
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 xxx 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.

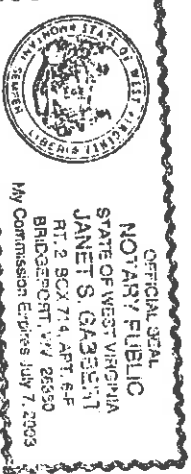
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

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

Well Operator PATRICK M. DEVELOPMENT CORPORATION

By: *Patrick M. Development Corporation*
Its: Geologist
Address P O Box 26
Bridgport, WV 26330

Telephone 842-6256
Bridgport, WV 26330



Subscribed and sworn before me this 38th day of MARCH, 1994

My commission expires July 7, 2003 Notary Public