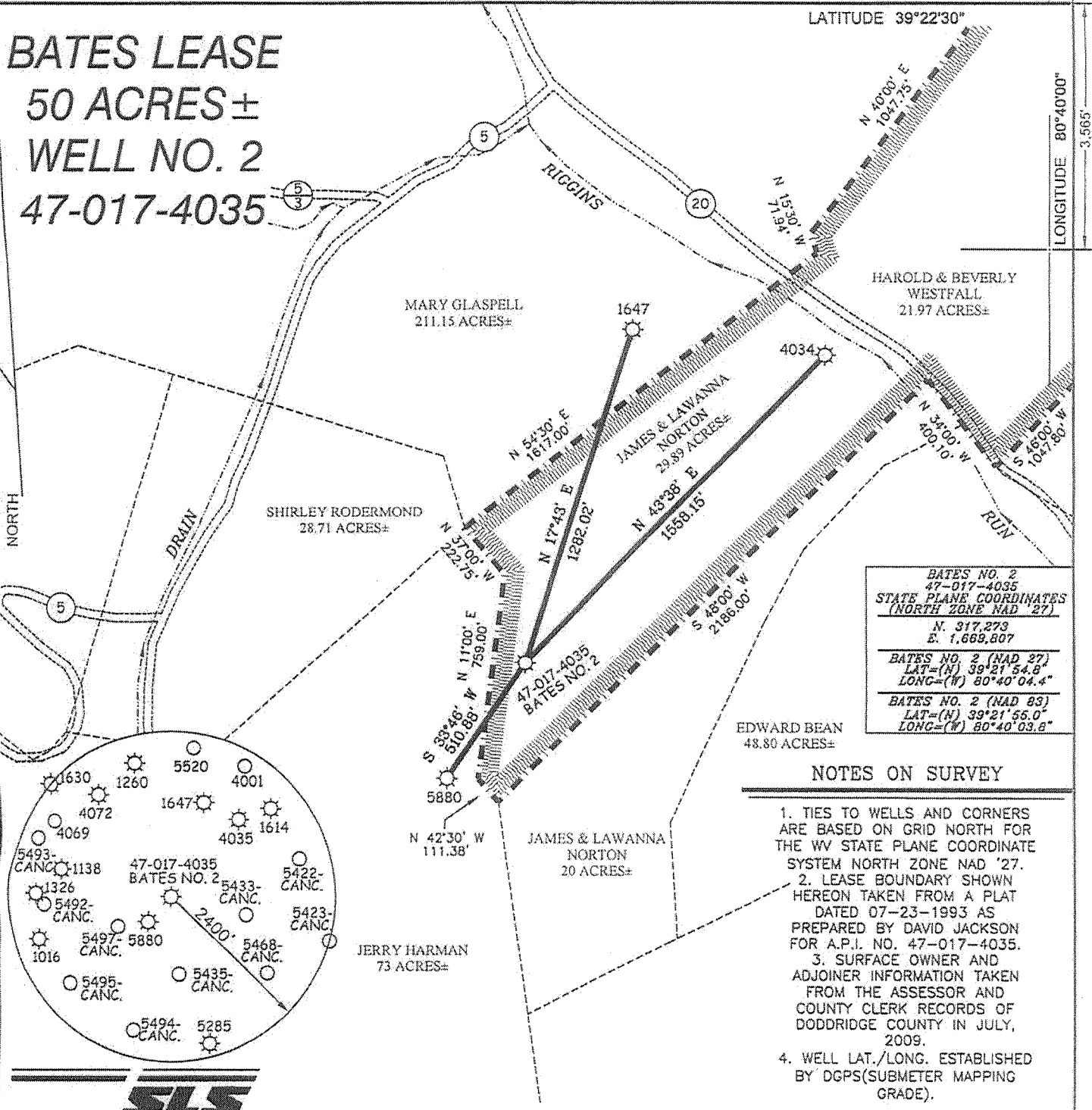


BATES LEASE

50 ACRES±

WELL NO. 2

47-017-4035



BATES NO. 2
47-017-4035
STATE PLANE COORDINATES
(NORTH ZONE NAD '27)
N. 317,273
E. 1,668,807

BATES NO. 2 (NAD 27)
LAT=(N) 39°21'54.6"
LONG=(W) 80°40'04.4"

BATES NO. 2 (NAD 83)
LAT=(N) 39°21'55.0"
LONG=(W) 80°40'03.6"

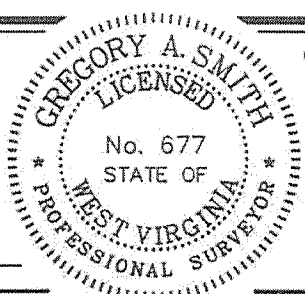
NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A PLAT DATED 07-23-1993 AS PREPARED BY DAVID JACKSON FOR A.P.I. NO. 47-017-4035.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JULY, 2009.
4. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).



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 DIVISION OF ENVIRONMENTAL PROTECTION.


P.S. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE JANUARY 21, 20 10
OPERATORS WELL NO. BATES NO. 2
API WELL NO. 47-017-4035R *redrill*
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 7367P2(292-57)
PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 500'

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



WELL TYPE: OIL GAS INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

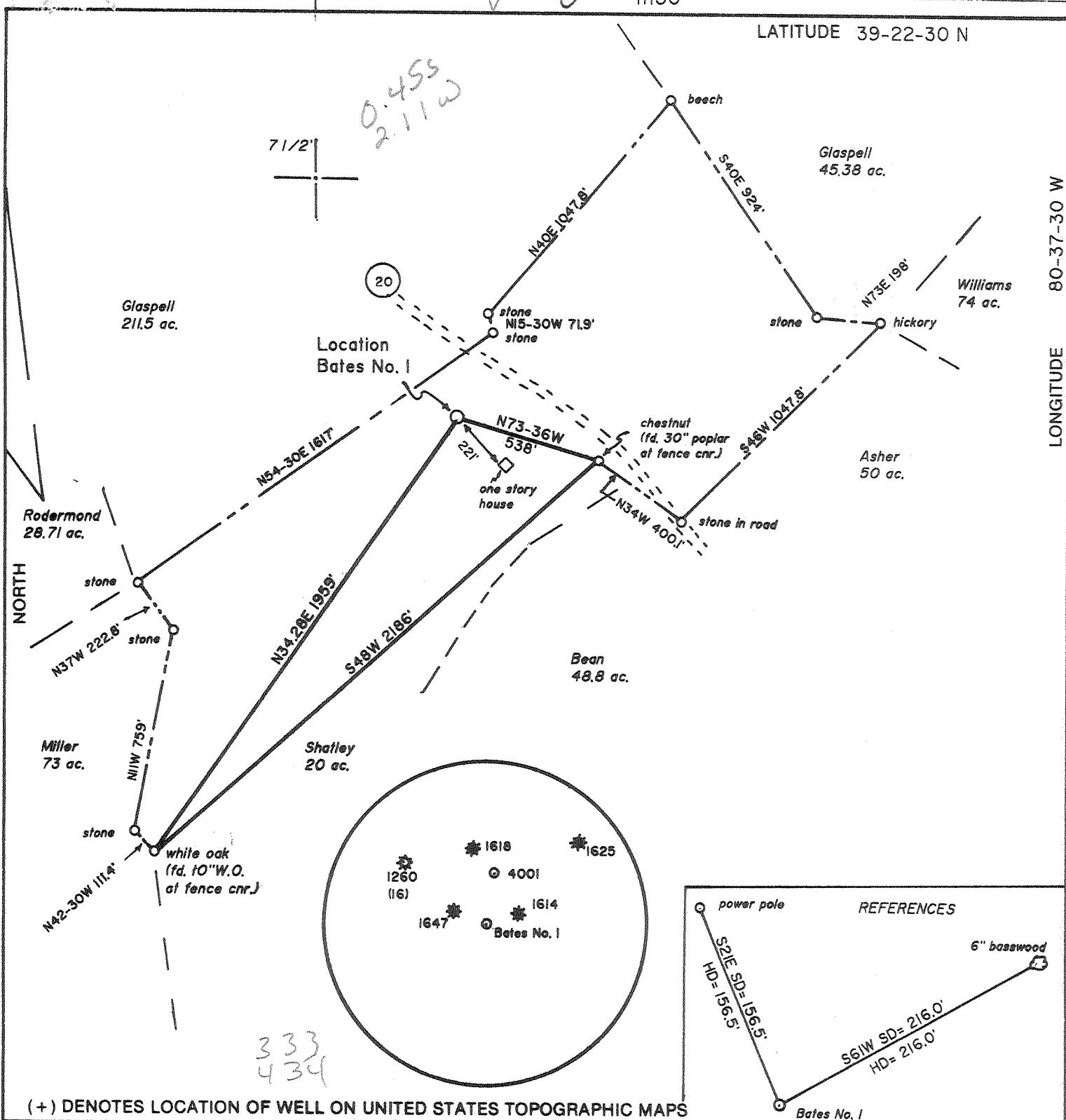
LOCATION: ELEVATION 1,255' WATERSHED RIGGINS RUN
DISTRICT McCLELLAN COUNTY DODDRIDGE QUADRANGLE SMITHBURG 7.5'

SURFACE OWNER JAMES & LAWANNA NORTON ACREAGE 29.89±
ROYALTY OWNER ARBY F. GLASPELL, ET AL LEASE ACREAGE 50±

PROPOSED WORK: LEASE NO. _____
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER _____
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION GORDON
ESTIMATED DEPTH 3,282'

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

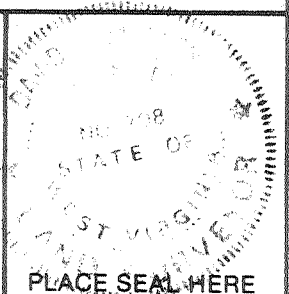
COUNTY NAME PERMIT



(+) 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
1300'NW of Location: elev. 859

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 L. Jackson
 R.P.E. _____ L.L.S. 708



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

DATE July 23, 19 93
 OPERATOR'S WELL NO. Bates No. 1
 API WELL NO. _____

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

LOCATION: ELEVATION 883' WATER SHED Riggins Run
 DISTRICT McClellan COUNTY Doddridge
 QUADRANGLE Smithburg 7 1/2'

SURFACE OWNER Fletcher G. Shatley ACREAGE 50
 OIL & GAS ROYALTY OWNER Arby E. Glaspell et al LEASE ACREAGE 50
 LEASE NO. 474400

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 5000
 WELL OPERATOR Petroleum Development Corp. 687 DESIGNATED AGENT Eric R. Stearns
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

AUG 3 1993

FORM WW-6

LONGITUDE 80-37-30 W
 COUNTY NAME
 PERMIT

6-6 Centerpoint (98)

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 10/16/2012
API #: 47-017-04035 - R(w)

Farm name: Shalley, Fletcher G. Operator Well No.: Bates 2

LOCATION: Elevation: 1245' GL Quadrangle: Smithburg 7.5

District: McClellan County: Doddridge
Latitude: 2.240 Feet South of 39 Deg. 22 Min. 30 Sec.
Longitude 11.150 Feet West of 80 Deg. 37 Min. 30 Sec.

Company: Petroleum Development Corporation

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
120 Genesis Boulevard Bridgeport, WV 26330	11 3/4"	174'	174'	230
Agent: Bob Williamson	8 5/8"	1869'	1869'	618
Inspector: David Scranage	4 1/2"	5481'	5481'	921
Date Permit Issued: 02/10/2010				
Date Well Work Commenced: 03/25/2010				
Date Well Work Completed: 03/30/2010				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): 5516'				
Total Measured Depth (ft): 5516'				
Fresh Water Depth (ft.): 140'				
Salt Water Depth (ft.): None Reported				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 136'-39', 445'-448'				
Void(s) encountered (N/Y) Depth(s) N				

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

Producing formation Gordon Pay zone depth (ft) 2988'
Gas: Initial open flow NT MCF/d Oil: Initial open flow --- Bbl/d
Final open flow 60 MCF/d Final open flow 5 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure NT psig (surface pressure) after --- 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

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 - Sedalia (99) 6-6

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

Well Operator's Report of Well Work

Farm name: SHATLEY, FLETCHER G. Operator Well No.: BATES #2

LOCATION: Elevation: 1,245.00 Quadrangle: SMITHBURG

District: MCCLELLAN County: DODDRIDGE
 Latitude: 2420 Feet South of 39 Deg. 22Min. 30 Sec.
 Longitude 11150 Feet West of 80 Deg. 37 Min. 30 Sec.

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

Agent: ERIC R. STEARNS

Inspector: MIKE UNDERWOOD
 Permit Issued: 08/24/93
 Well work Commenced: 09/18/93
 Well work Completed: 09/24/93

Verbal Plugging _____
 Permission granted on: _____
 Rotary x Cable _____ Rig _____
 Total Depth (feet) _____
 Fresh water depths (ft) _____

140
 Salt water depths (ft) _____

Is coal being mined in area (Y/N)? N

Coal Depths (ft): 136-139; 445-448

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	174'	174'	195 sks
8 5/8"	1869'	1869'	464 sks
4 1/2"	5481'	5481'	545 sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 5332-5335
 Gas: Initial open flow 311 MCF/d Oil: Initial open flow 0 Bbl/d
 Final open flow 338 MCF/d Final open flow 0 Bbl/d
 Time of open flow between initial and final tests 4 Hours
 Static rock Pressure 750 psig (surface pressure) after 72 Hours

Second producing formation Big Injun Pay zone depth (ft) 2355-2361
 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.

TM6

For: ERIC R. STEARNS
 PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns
 Date: October 15, 1993

OCT 27 1993

BATES #2

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1ST	Benson	13(5332'-5335')	50	400	500	60
2nd	Big Injun	18(2355'-2361')	50	400	500	60

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	1/2" water @ 140'
sand, shale, RR	10	2004	
Maxton	2004	2095	Coal @136'-139', 445'-448'
sand, shale	2095	2178	
Big Lime	2178	2315	gas chk @ 2347' No Show
sand, shale	2315	2334	
Big Injun	2334	2408	gas chk @2378' 6/10 thru 2"/water
sand, shale	2408	2556	
Weir	2556	2641	
sand, shale	2641	2764	
Berea	2764	2800	gas chk @2502' 6/10 thru 2"/water
sand, shale	2800	2959	
Gordon	2959	3004	
sand, shale	3004	3282	gas chk @2660' 4/10 thru 2"/water
5th	3282	3332	gas chk @2861' 6/10 thru 2"/water
sand, shale	3332	3633	gas chk @4029' 4/10 thru 2"/water
Warren	3633	3718	gas chk @5205' 4/10 thru 2"/water
sand, shale	3718	3740	
Speechley	3740	3982	gas chk @5297' 4/10 thru 2"/water
sand, shale	3982	4030	gas chk @5590' 4/10 thru 2"/water
Balltown	4030	4419	
sand, shale	4419	4492	gas chk @5516' 6/10 thru 2"/water
Bradford	4492	4609	
sand, shale	4609	4830	
Riley	4830	5263	
sand, shale	5263	5329	
Benson	5329	5390	
sand, shale		5516	Drillers TD
		5517	Logger TD

DF - 424
DFT - 435

17759

BATES #2

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1ST	Benson	13(5332' -5335')	50	400	500	60
2nd	Big Injun	18(2355' -2361')	50	400	500	60

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	1/2" water @ 140'
sand, shale, RR	10	2004	
Maxton	2004	2095	Coal @136' -139' ,445' -448'
sand, shale	2095	2178	
Big Lime	2178	2315	gas chk @ 2347' No Show
sand, shale	2315	2334	
Big Injun	2334	2408	gas chk @2378' 6/10 thru 2"/water
sand, shale	2408	2556	
Weir	2556	2641	
sand, shale	2641	2764	
Berea	2764	2800	gas chk @2502' 6/10 thru 2"/water
sand, shale	2800	2959	
Gordon	2959	3004	
sand, shale	3004	3282	gas chk @2660' 4/10 thru 2"/water
5th	3282	3332	gas chk @2861' 6/10 thru 2"/water
sand, shale	3332	3633	gas chk @4029' 4/10 thru 2"/water
Warren	3633	3718	gas chk @5205' 4/10 thru 2"/water
sand, shale	3718	3740	
Speechley	3740	3982	gas chk @5297' 4/10 thru 2"/water
sand, shale	3982	4030	gas chk @5590' 4/10 thru 2"/water
Balltown	4030	4419	
sand, shale	4419	4492	gas chk @5516' 6/10 thru 2"/water
Bradford	4492	4609	
sand, shale	4609	4830	
Riley	4830	5263	
sand, shale	5263	5329	
Benson	5329	5390	
sand, shale		5516	Drillers TD
		5517	Logger TD

10/19/2012

AUG 0 6 93

017-4035
Issued 08/24/93
Page ___ of ___
Expires 08/24/95

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

17759

- 1) Well Operator: Petroleum Development Corporation ⁶⁸⁷ 38200 (5) 611
- 2) Operator's Well Number: Bates #2 3) Elevation: 1245'
- Well type: (a) Oil ___ / or Gas X /
(b) If Gas: Production X / Underground Storage ___ /
Deep ___ / Shallow X /
- Proposed Target Formation(s): Benson Sand 435
- Proposed Total Depth: 5500 feet
- Approximate fresh water strata depths: 35', 435', 1140', 1240', 1335'
- Approximate salt water depths: 1835'
- Approximate coal seam depths: 375, 770'
- Does land contain coal seams tributary to active mine? Yes ___ / No X /
- 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	
Conductor	11 3/4"	H-40	42#	30'/150'	30'/150' <u>175</u>	-/surf.
Fresh Water						<u>38CSRA-1.3</u>
Coal					<u>1245'</u>	<u>38CSRA-1.2.2</u>
Intermediate	8 5/8"	H-40	20#/23#	1450'/1875'	1450'/1875'	Surface
Production	4 1/2"	J-55	10.5#	5500'	5500'	450 sks
Tubing						<u>38CSRA-1.1</u>
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

005616/15

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

1) Date: July 27, 1993
2) Operator's well number _____
Bates #2 _____
3) API Well No: 47 - 017 - 4035
State - County - Permit _____

AUG
Permitting
Office of Oil & Gas

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 Fletcher G. Shatley
Address Box 8234, Honolulu Drive
Orlando, FL 32818
- (b) Name _____
Address _____
- (c) Name _____
Address _____
- 5) (a) Coal Operator:
Name _____
Address _____
- (b) Coal Owner(s) with Declaration
Name No Coal Declaration
Address _____
- Name _____
Address _____
- (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Mike Underwood
Address Rt. 2, Box 135
Salem, WV 26426
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 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)
X 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 27th day of July, 1993

Janet S. Gabbert Notary Public
My commission expires July 7, 1993

