

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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION BM 1020 3900'
 East of location: Elev-1020'

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) Jeffrey A. Adams
 R.P.E. _____ L.L.S. 791

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE February 26, 19 90
 OPERATOR'S WELL NO. E. Stuart No. 3
 API WELL NO. _____

WELL TYPE: OIL _____ GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 1092' WATERSHED Elk Creek
 DISTRICT Elk 5 COUNTY Harrison
 QUADRANGLE Brownton 7 1/2' Philippi NW
 SURFACE OWNER Edward L. Stuart ACREAGE 67 ac.
 OIL & GAS ROYALTY OWNER Edward L. Stuart LEASE ACREAGE 67 ac.
 LEASE NO. 432200

PROPOSED WORK: DRILL CONVERT _____ DRILL 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 Steven Williams
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

687
 6-6 Elk Creek (Overfield) (155)

COUNTY NAME
 PERMIT

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: STUART, EDWARD Operator Well No.: ED STUART #3

LOCATION: Elevation: 1092.00 Quadrangle: BROWNTON

District: ELK County: HARRISON
Latitude: 13350 Feet South of 39 Deg. 12Min. 30 Sec.
Longitude: 10900 Feet West of 80 Deg. 12 Min. 30 Sec.

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

Agent: ERIC R. STEARNS

Inspector: STEVE CASEY
Permit Issued: 02/27/90
Well work Commenced: 03/15/90
Well work Completed: 03/19/90
Verbal Plugging _____
Permission granted on: _____
Rotary Cable _____ Rig _____
Total Depth (feet) 4450'
Fresh water depths (ft) _____
75
Salt water depths (ft) _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	17'		
8 5/8"	1061'	1061'	246 sks
4 1/2"	3095.65'	3095.65'	305 sks

Is coal being mined in area (Y/N)? n
Coal Depths (ft): 306-311; 612-616; 956-959

OPEN FLOW DATA

Producing formation Speechley Pay zone depth (ft) 2923-2924
Gas: Initial open flow _____ MCF/d Oil: Initial open flow 2959.5-60.5 Bbl/d
Final open flow 237 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 800 psig (surface pressure) after 72 Hours
2333-2334
Second producing formation Fifth Sand Pay zone depth (ft) 2393.5-94.5
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: 4-11-90

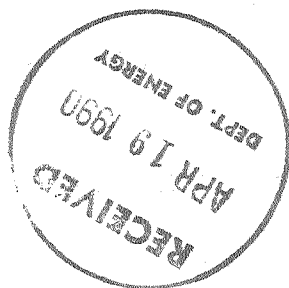
APR 20 1990

Stuart #3

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1ST	Speechley	5(2923-2924) 5(2959.5-2960.5)	100	450	500	61
2ND	Fifth Sand	5(2333-2334) 5(2393.5-2394.5)	100	450	750	71

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	1368	
Lime Little	1368	1396	3/4" stream H2O @ 75'
sand, shale	1396	1411	Coal 306-311, 612-616
Big Lime	1411	1482	Coal 956-959
Big Injun	1482	1596	
sand, shale	1596	1788	gas chk @ 1624' 8/10-1" H2O
Gantz	1788	1809	
sand, shale	1809	1823	
50 ft	1823	1868	
sand, shale	1868	1897	
30 ft	1897	1930	
sand, shale	1930	1998	gas chk @ 1935' 8/10-1" H2O
Gordon	1998	2020	
sand, shale	2020	2198	gas chk @ 2058' 8/10-1" H2O
4th	2198	2268	
sand, shale	2268	2324	gas chk @ 2306' 6/10-1" H2O
5th	2324	2366	
sand, shale	2366	2393	
Elizabeth	2393	2438	gas chk @ 2429' 6/10-1" H2O
sand, shale	2438	2716	
Speechley	2716	3053	gas chk @ 3053' 10/10-1" H2O
sand, shale	3053	3111	
Balltown	3111	3473	
sand, shale	3473	3578	gas chk @ 3521' 10/10-1" H2O
Bradford	3578	3730	gas chk @ 3644' 12/10-1" H2O
sand, shale	3730	4044	
Riley	4044	4120	
sand, shale	4120	4279	gas chk @ 4203' 8/10-1" H2O
Benson	4279	4339	gas chk @ 4327' 8/10-1" H2O
sand, shale	4339	4450	
	4450	4450	Driller TD 6/10-1" H2O
		4439	Logger TD



033 3699

Issued 2/27/90

Expires 2/27/92

FORM WW-2B

Page ___ of ___

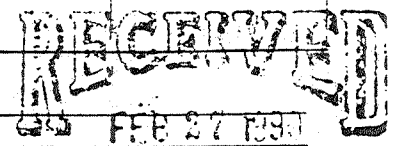
STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: Petroleum Development Corporation 38200 (S) 246
- 2) Operator's Well Number: Ed Stuart #3 3) Elevation: 1092'
- 4) Well type: (a) Oil ___ / or Gas XX
(b) If Gas: Production XX / Underground Storage ___
Deep ___ / Shallow XX
- 5) Proposed Target Formation(s): Benson
- 6) Proposed Total Depth: 5000 feet
- 7) Approximate fresh water strata depths: 108, 630, 792, 822
- 8) Approximate salt water depths: N/A
- 9) Approximate coal seam depths: 218, 629
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No XX /
- 11) Proposed Well Work:
- 12)

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	1075	1075	
Production	4 1/2	J-55	10.5	5000	5000	950 sks
Tubing						
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____



For Division of Oil and Gas Use Only DEPARTMENT OF ENERGY

085-4911
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond _____ Agent
 (Type)

RECEIVED
FEB 27 1990
DIVISION OF OIL & GAS 3)
DEPARTMENT OF ENERGY

Date: February 23, 1990
Operator's well number
Edward Stuart #3
API Well No: 47 - 033 - 3699
State - County - Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- | | |
|--|--|
| <p>4) Surface Owner(s) to be served:
 (a) Name <u>Edward Stuart</u>
 Address <u>207 Davisson Street</u>
 <u>Bridgeport, WV 26330</u>
 (b) Name _____
 Address _____
 (c) Name _____
 Address _____</p> | <p>5) (a) Coal Operator:
 Name _____
 Address _____
 (b) Coal Owner(s) with Declaration
 Name <u>Same as Surface</u>
 Address _____
 Name _____
 Address _____</p> |
| <p>6) Inspector <u>Stephen Casey</u> #2
 Address <u>Rt. 2, Box 232-D</u>
 <u>Jane Lew, WV 26378</u>
 Telephone (304)- <u>745-4888</u></p> | <p>(c) Coal Lessee with Declaration
 Name _____
 Address _____</p> |

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:

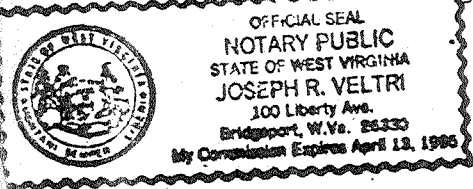
- _____ Personal Service (Affidavit attached)
- XX Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

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 26th day of February, 19 90

Joseph R. Veltri Notary Public
 My commission expires April 13, 1995