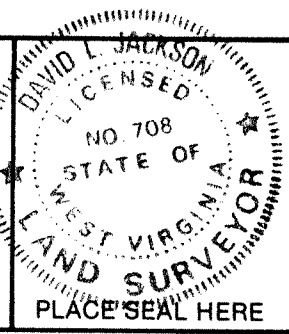


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. 1
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION Hill top 3500' NE of Location: elev. 1207'

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 October 6, 19 93
 OPERATOR'S WELL NO. Verna Haught No. 2
 API WELL NO. _____

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

LOCATION: ELEVATION 1277 WATERSHED Little Buck Run
 DISTRICT Cove COUNTY Doddridge
 QUADRANGLE New Milton 7 1/2' Vadis WC

SURFACE OWNER Paul R. Pierro & Pamela L. Miller ACREAGE 69.38
 OIL & GAS ROYALTY OWNER Verna Haught LEASE ACREAGE 106
 LEASE NO. 463500

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. 686 DESIGNATED AGENT Eric R. Stearns
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

6-6 142

NOV 12 1993

COUNTY NAME _____ PERMIT _____

FEB 1 1994

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

Well Operator's Report of Well Work

Farm name: BRYANT, ANDREW & PEGGY Operator Well No.: V. HAUGHT #2

LOCATION: Elevation: 1,277.00 Quadrangle: NEW MILTON

District: COVE County: DODDRIDGE
Latitude: 13900 Feet South of 39 Deg. 10Min. Sec.
Longitude 2110 Feet West of 80 Deg. 42 Min. 30 Sec.

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

Agent: ERIC R. STEARNS

Inspector: MIKE UNDERWOOD
Permit Issued: 11/12/93
Well work Commenced: 01/11/94
Well work Completed: 01/18/94

Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig
Total Depth (feet) 5708
Fresh water depths (ft) _____

1002; 1090
Salt water depths (ft) _____

n/a
Is coal being mined in area (Y/N)? N
Coal Depths (ft): 604-609; 990-995

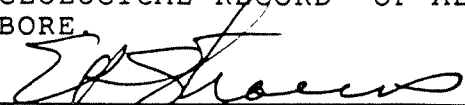
Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	159'	159'	96 sks
8 5/8"	1625'	1625'	405 sks
4 1/2"	5642'	5642'	245 sks

OPEN FLOW DATA

Producing formation Alexander Pay zone depth (ft) 5445-5511
Gas: Initial open flow 103 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 300 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 800 psig (surface pressure) after 72 Hours

Second producing formation Benson Pay zone depth (ft) 5185-5189
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: February 10, 1994

VERNA HAUGHT #2

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N ₂ (MCF)
1st	Alexander	14(5445' - 5511')	50	700	500	77
2nd	Benson	17(5185' - 5189')	50	500	500	55

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	2098	Coal @604' -609', 990' -995'
Maxton	2098	2237	hole damp @1002' & 1090'
sand, shale	2237	2311	gas chk @ 2269' no show
Big Lime	2311	2427	
sand, shale	2427	2431	gas chk @ 2427' no show
Big Injun	2431	2478	
sand, shale	2478	2547	
Weir	2547	2642	gas chk @ 2582' no show
sand, shale	2642	2751	
Berea	2751	2794	gas chk @ 2766' no show
sand, shale	2794	2940	gas chk @ 2922' no show
Gordon	2940	3020	
sand, shale	3020	3278	
5th	3278	3347	
sand, shale	3347	3570	
Warren	3570	3692	
sand, shale	3692	3763	gas chk @ 3934' no show
Speechley	3763	4060	gas chk @ 3987' no show
sand, shale	4060	4110	
Balltown	4110	4434	
sand, shale	4434	4448	
Bradford	4448	4614	
sand, shale	4614	4750	gas chk @ 4678' 10/10 thru 2"/water
Riley	4750	5145	gas chk @ 5086' 8/10 thru 2"/water
sand, shale	5145	5203	
Benson	5203	5248	gas chk @ 5241' 24/10 thru 1"/water
sand, shale	5248	5316	
Leopold	5316	5342	
sand, shale	5342	5447	gas chk @ 5396' 6/10 thru 2"/water
Alexander	5447	5562	
sand, shale	5562	5685	
		5708	Drillers TD Logger TD

1814

017-4064
Issued 11/12/93
Expires 11/12/95

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

Page 2 of 511

- 1) Well Operator: Petroleum Development Corporation ⁶⁸⁷ 38200 (2) 511
- 2) Operator's Well Number: Verna Haught #2 3) Elevation: 1277'
- Well type: (a) Oil / or Gas XX /
- (b) If Gas: Production XX / Underground Storage /
Deep / Shallow XX /
- Proposed Target Formation(s): Alexander Sand ⁴³⁹
- Proposed Total Depth: 5700' feet
- Approximate fresh water strata depths: 225', 350', 445' ^{01 2 6 02}
- Approximate salt water depths: ^{Permitting Office of Oil & Gas}
- Approximate coal seam depths: 385'
- Does land contain coal seams tributary to active mine? Yes / No XX /
- Proposed Well Work: Drill and stimulate new well

18164

RECEIVED
Division of
Environmental Protection

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#	150' 175'	150' 175'	surface
Fresh Water						
Coal						
Intermediate	8 5/8"	H-40	20/23#	1585'	1585'	surface
Production	4 1/2"	J-55	10.5#	5700'	5700'	450sks
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 Agent

(Type)

006489
22

12

RECEIVED

WV Division of
Environmental Protection

OCT 26 93

Permitting
Div. of Oil & Gas

1) Date: October 13, 1993
2) Operator's well number
Verna Haught #2
3) API Well No: 47 - 017 - 4064
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 Andrew & Peggy Bryant
Address 43 Backbone Hill Road
Englishtown, NJ 07726
 - (b) Name Paul R. Pierro and Pamela Miller
Address 196 Lido Court
Brick, NJ 08724
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
Name _____
Address _____
- (b) Coal Owner(s) with Declaration
Name Eastern Associated Coal Corp.
Address P O Box 1233, Laidley Tower
Charleston, WV 25324
- 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 xxxx 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:

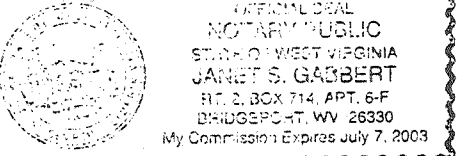
- _____ Personal Service (Affidavit attached)
- _____ Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

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: [Signature]
Its: _____ Geologist
Address P O Box 26
Bridgeport, WV 26330
Telephone 304-842-6256



Subscribed and sworn before me this 14th day of October, 1993

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