

LATITUDE 39-12-30 N

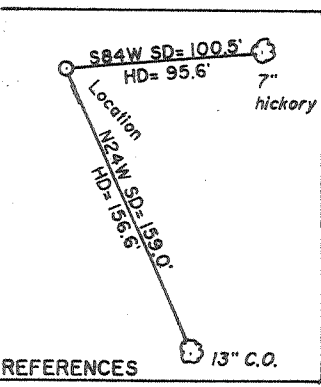
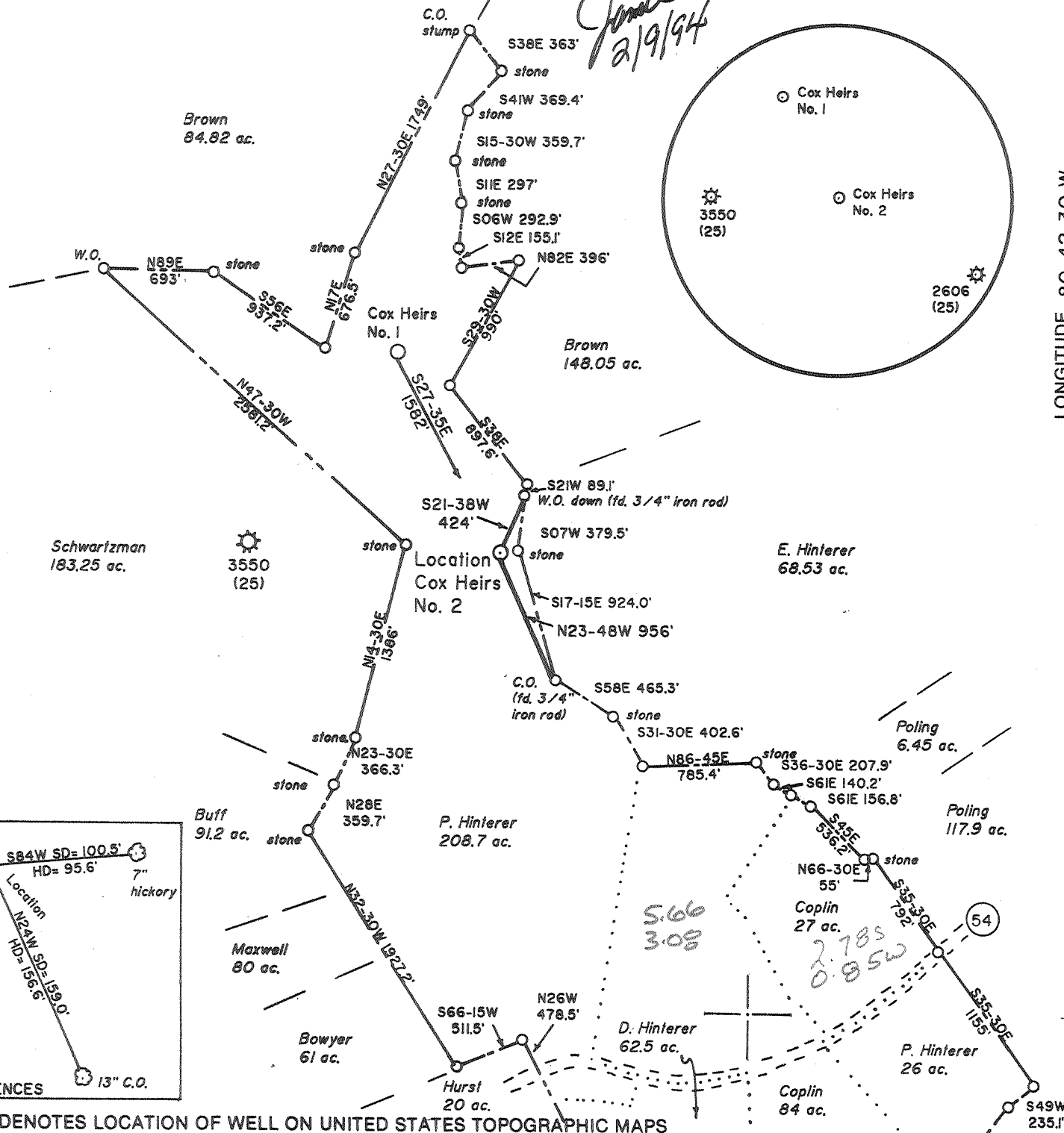
4,525

LONGITUDE 80-42-30 W

14,600

NORTH

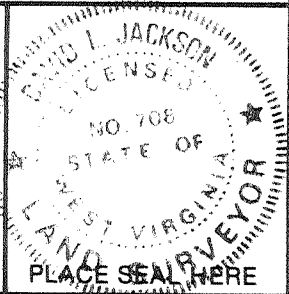
*Janice*  
*2/19/94*



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

FILE NO. \_\_\_\_\_  
 DRAWING NO. 1  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION Hilltop 2220'  
SW of Location: elev. 1337'

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 I. Jackson  
 R.P.E. \_\_\_\_\_ L.L.S. 708



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

DATE February 1, 19 94  
 OPERATOR'S WELL NO. Cox Heirs No. 2  
 API WELL NO. 47-017-04104  
 STATE 47 COUNTY 017 PERMIT 04104

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

LOCATION: ELEVATION 1311 WATER SHED Toms Fork  
 DISTRICT New Milton COUNTY Doddridge  
 QUADRANGLE New Milton 7 1/2' Vadis NW

SURFACE OWNER Phyllis Hinterer et al ACREAGE 208.7  
 OIL & GAS ROYALTY OWNER John S. Cox Heirs et al LEASE ACREAGE 402  
 LEASE NO. 477300

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) 6-6 306

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 687 ADDRESS P.O. Box 26, Bridgeport, WV 26330

COUNTY NAME

PERMIT

WR-35  
 APR 07 94  
 Permittings  
 Office of Oil & Gas

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

Well Operator's Report of Well Work

Farm name: HINTERER, PHYLLIS ETAL. Operator Well No.: COX HEIRS #2

LOCATION: Elevation: Quadrangle:

District: NEW MILTON County: DODDRIDGE  
 Latitude: Feet South of Deg. Min. Sec.  
 Longitude: Feet West of Deg. Min. Sec.

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

Agent: ERIC R. STEARNS

Inspector: MIKE UNDERWOOD  
 Permit Issued: 02/09/94  
 Well work Commenced: 02/22/94  
 Well work Completed: 02/28/94  
 Verbal Plugging  
 Permission granted on: \_\_\_\_\_  
 Rotary <sup>x</sup> Cable \_\_\_\_\_ Rig \_\_\_\_\_  
 Total Depth (feet) 5803'  
 Fresh water depths (ft) \_\_\_\_\_  
 74: 1829  
 Salt water depths (ft) \_\_\_\_\_  
 n/a  
 Is coal being mined in area (Y/N)? N  
 Coal Depths (ft): n/a

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	173'	173'	105 sks
8 5/8"	1923'	1923'	475 sks
4 1/2"	5735'	5735'	540 sks

OPEN FLOW DATA

Producing formation Alexander Pay zone depth (ft) 5411-5521  
 Gas: Initial open flow ns MCF/d Oil: Initial open flow 0 Bbl/d  
 Final open flow 230 MCF/d Final open flow 0 Bbl/d  
 Time of open flow between initial and final tests 4 Hours  
 Static rock Pressure 1550 psig (surface pressure) after 72 Hours

Second producing formation Benson/Riley Pay zone depth (ft) 4830-5271  
 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.

*Eric R. Stearns*

For: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns

Date: April 5, 1994

APR 23 1994

COX HEIRS #2

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Alexander	12 (5411' - 5521')	50	333	500	58
2nd	Benson/Riley	12 (4830' - 5271')	50	300	500	46

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 @ 74'
sand, shale, RR	10	2130	
Maxton	2130	2187	
sand, shale	2187	2341	1" water @ 1829'
Big Lime	2341	2436	gas chk @ 2354' No Show
sand, shale	2436	2442	
Big Injun	2442	2489	gas chk @ 2417' No Show
sand, shale	2489	2556	gas chk @ 2477' No Show
Weir	2556	2641	
sand, shale	2641	2801	gas chk @ 2666' No Show
Berea	2801	2841	gas chk @ 2793' No Show
sand, shale	2841	2997	gas chk @ 2950' No Show
Gordon	2997	3312	gas chk @ 3545' No Show
sand, shale	3312	3329	
5th	3329	3380	gas chk @ 4421' No Show
sand, shale	3380	3657	gas chk @ 5206' No Show
Warren	3657	3790	
sand, shale	3790	3820	gas chk @ 5238' No Show
Speechley	3820	4190	
sand, shale	4190	4230	
Balltown	4230	4615	
sand, shale	4615	4629	gas chk @ 5333' 6/10 thru 1"/water
Bradford	4629	4716	
sand, shale	4716	5036	gas chk @ 5553' 2/10 thru 1"/water
Riley	5036	5209	
sand, shale	5209	5275	gas chk @ 5739' No Show
Benson	5275	5309	
sand, shale	5309	5383	
Leopold	5383	5460	
sand, shale	5460	5516	
Alexander	5516	5646	
sand, shale	5646	5803	
		5802	Drillers TD Logger TD

ER 78,

FEB 0 7 1994

017-4104 Issued 2/9/94

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

Expires 2/9/96

- 1) Well Operator: 687 Petroleum Development Corporation 38200 511
- 2) Operator's Well Number: Cox Heirs #2 3) Elevation: 1311'
- 4) Well type: (a) Oil \_\_\_ / or Gas X /  
(b) If Gas: Production X / Underground Storage \_\_\_ /  
Deep \_\_\_ / Shallow X /
- Proposed Target Formation(s): Alexander 439
- Proposed Total Depth: 5900 feet
- Approximate fresh water strata depths: 180', 270', 360, 500', 795, 890'
- Approximate salt water depths: 1615', 1795', 1860'
- Approximate coal seam depths: 425' - 429'
- 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	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#	<del>150</del> 175	<del>150</del> 175'	Surface
Fresh Water						o.k. - mu
Coal						
Intermediate	8 5/8"	H-40	20#/23#	1,900'	1,900'	Surface
Production	4 1/2"	J-55	10.5#	5900'	5900'	450 sks
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)

008004/5

1) Date: Feb. 2, 1994  
2) Operator's well number  
Cox Heirs #2  
3) API Well No: 47 - 017 - 4104  
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 Phyllis Hinterer  
Address Rt. 1, Box 171D  
Jane Lew, WV 26411  
(b) Name Craig Hinterer  
Address Rt. 1, Box 77  
New Milton, WV 26411  
(c) Name Philip Hinterer  
Address Rt. 1, Box 70A1  
New Milton, WV 26411  
6) Inspector Mike Underwood  
Address Rt. 2, Box 135  
Salem, WV 26426  
Telephone (304)-782-1043

5) (a) Coal Operator:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(b) Coal \_\_\_\_\_ Declaration  
Name Tygart Resources, Inc,  
Address 1900 Grant Building  
Pittsburgh, PA 15219  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

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 PETROLEUM DEVELOPMENT CORPORATION  
By: [Signature]  
Its: \_\_\_\_\_ Geologist  
Address P O Box 26  
Bridgeport, WV 26330  
Telephone 842-6256



OFFICIAL SEAL  
NOTARY PUBLIC  
STATE OF WEST VIRGINIA  
JANET S. GABBERT  
P.O. BOX 714, APT. 507  
BRIDGEPORT, WV 26330  
My Commission Expires July 7, 2003

Subscribed and sworn before me this 3<sup>rd</sup> day of February, 1994

Janet S. Gabbert  
My commission expires July 7, 2003

Notary Public