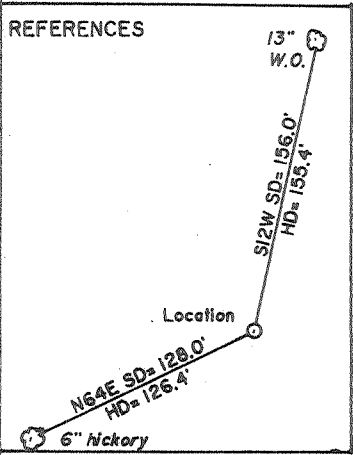


LATITUDE 39-10-00 N

0.185
0.080
7 1/2'

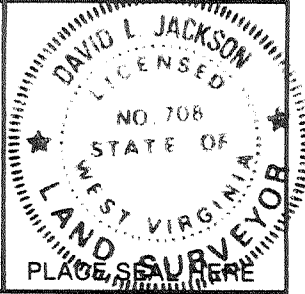
LONGITUDE 80-42-30 W



(+) 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 710'
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 L. 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. 3
 API WELL NO. _____

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

LOCATION: ELEVATION 1277 WATER SHED Toms Fork
 DISTRICT New Milton COUNTY Doddridge
 QUADRANGLE New Milton 7 1/2' Vadis WC

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

COUNTY NAME PERMIT

LONG. 80.72485

4,630'

LATITUDE 39°10'00"

LONGITUDE 80°42'30"
LAT. 39.16400

COX LEASE 402 ACRES±

S. BROWN
84.81 ACRES±

I.L. MORRIS
183.25 ACRES±

WELL NO. COX HEIRS 3 A.P.I. #47-017-4105

H. BUFF
91.2 ACRES±

COX HEIRS #3
47-017-4105

PHYLLIS
HINTERER,
ET AL
208.7 ACRES±

B. NOVAK, ET AL
148.05 ACRES±

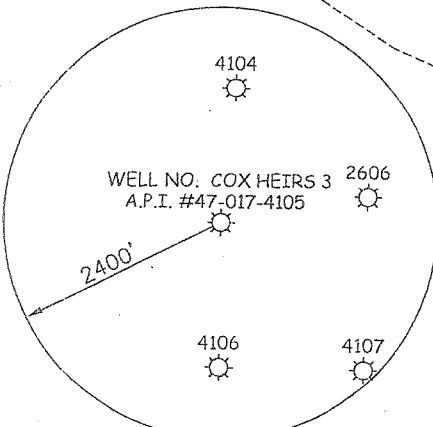
J. HEIM, ET AL
68.53 ACRES±

P. COPLIN
84 ACRES±

P. COPLIN
27 ACRES±

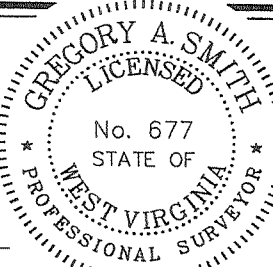
NOTES ON SURVEY

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 DEED RECORDED IN DEED BOOK 108 AT PAGE 272 AND WELL PLAT 47-017-4106
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JULY, 2008.
4. WELL LAT./LONG. (NAD'27) 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 FEBRUARY 6, 20 09
 OPERATORS WELL NO. COX HEIRS NO. 3
 API WELL NO. 47-017-4105W
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 6457P3 (271-72)
 PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 800'

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



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

LOCATION: ELEVATION 1,257' WATERSHED TOMS FORK

DISTRICT NEW MILTON COUNTY DODDRIDGE QUADRANGLE NEW MILTON 7.5'

SURFACE OWNER PHYLLIS HINTERER, ET AL ACREAGE 208.7±

ROYALTY OWNER JOHN S. COX HEIRS, ET AL LEASE ACREAGE 402±

PROPOSED WORK: LEASE NO. 477300

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 2,900'

WELL OPERATOR PETROLEUM DEVELOPMENT CORP.
 ADDRESS 120 GENESIS BOULEVARD
BRIDGEPORT, WV 26330

DESIGNATED AGENT ALAN H. SMITH MAY 01 2009
 ADDRESS 120 GENESIS BOULEVARD
BRIDGEPORT, WV 26330

COUNTY NAME DODD
 PERMIT 4105 W

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 #: 47-017-04105 W

Farm name: Hinter, Phyllis, Et Al Operator Well No.: Cox Heirs 3

LOCATION: Elevation: 1257' GL Quadrangle: New Milton 7.5

District: New Milton County: Doddridge
Latitude: 1,030 Feet South of 39 Deg. 10 Min. 00 Sec.
Longitude 4,630 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Petroleum Development Corporation

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>120 Genesis Boulevard</u> <u>Bridgeport, WV 26330</u>	<u>11 3/4"</u>	<u>177'</u>	<u>177'</u>	<u>128</u>
Agent: <u>Bob Williamson</u>	<u>8 5/8"</u>	<u>1815'</u>	<u>1815'</u>	<u>615</u>
Inspector: <u>David Scranage</u>	<u>4 1/2"</u>	<u>5662'</u>	<u>5662'</u>	<u>902</u>
Date Permit Issued: <u>04/27/2009</u>				
Date Well Work Commenced: <u>07/28/2009</u>				
Date Well Work Completed: <u>08/07/2009</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): <u>5750'</u>				
Total Measured Depth (ft): <u>5750'</u>				
Fresh Water Depth (ft.): <u>40', 1784'</u>				
Salt Water Depth (ft.): <u>None Reported</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>None Reported</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

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

Producing formation Gordon Pay zone depth (ft) 2970'
Gas: Initial open flow 237 MCF/d Oil: Initial open flow 5 Bbl/d
Final open flow 103 MCF/d Final open flow 5 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 Weir (commingled) Pay zone depth (ft) 2624'
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

10/16/2012

Date

10/19/2012

New-Milton Smith (307) 66

Were core samples taken? Yes _____ No XX

Were cuttings caught during drilling? Yes _____ No XX

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Hotwell Wireline GR/CCL log from 3000' - 2400'.

NOTE: IN THE AREA BELOW 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 THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

2009/08/07: MIRU Hotwell Service Wireline & Halliburton Frac Crew. Ran in hole and set composite bridge plug at 3,010'. Pressure tested lines to 4,500 psig. Filled hole with 12 bbl of acid and treated water. Pressure tested to 3,500 psig. Perforated and fractured Gordon formation. Stimulated well with 30 quality N2 assist, 23004 lbs of 20/40 white sand and 65117 scf N2 (ATP 2352 psig, MTP 2597 psig) (Avg Rates 23.6 bpm, 4089 scfm). Broke down formation at 2597 psig. Pumped a pad of 27 bbl, 2,150 scf @ 17.9 bpm, 1,316 scfm. Ramped sand concentrations from .5-4 ppa in 287 bbl, 5,161 scf @ 28.3 bpm, 62,638 scf. Pumped 330 bbl of slurry. Flushed with 7 bbl spacer, 12 bbl 20% HCl. & 31 bbl of treated H2O @ 11 bpm. ISIP 1,627 psig, 2 min 1,483 psig, 5 min 1,373 psig, 10 min 1,333 psig, 15 min 1,313 psig. Hotwell set a flow through comp. plug at 2,683'. Perforated and fractured Weir formation. Stimulated well with 50 quality N2 assist, 31,563 lbs of 20/40 white sand and 155,079 scf N2 (ATP 2,763 psig, MTP 3,644 psig) (Avg Rates 22.0 bpm, 5,305 scfm). Broke down formation at 3544 psig. Pumped a ~~Plug Back Details Including Plug Type and Depth(s):~~ pad of 50 bbl, 6617 scf @ 17.1 bpm, 1895 scfm. Ramped sand concentrations from .5-3 ppa in 284 bbl, 92110 scf @ 23 bpm, 5,704 scfm. Held 3# sand concentration for 62 bbl, 19,456 scf @ 24 bpm, 5,779 scfm. Held 4# sand concentration for 45 bbl, 20,722 scf @ 18.5 bpm, 5,783 scf. **

Formations Encountered: _____ / _____ Top Depth / _____ Bottom Depth
Surface: _____

See Attached WR-35 & "Well Log" from original completion of this well (47-017-04105).

**Pumped 299 bbl of slurry in ramp. Pumped 107 bbbls of slurry in 3 & 4# holds. Flushed with 32 bbl of H2O @ 11 bpm ISIP 2580 psig, 1 min 2183 psig, 2 min 2152 psig, 5 min 2057 psig, 10 min 2060 psig, 15 min 2034 psig.

COX HEIRS #3

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Alexander	16 (5532' - 5535')	58	306	500	50
2nd	Benson	16 (5132' - 5135')	58	310	500	39

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 @ 40'
sand, shale, RR	10	2112	
Maxton	2112	2228	
sand, shale	2228	2306	1" water @ 1784'
Big Lime	2306	2398	gas chk @ 2291' No Show
sand, shale	2398	2403	
Big Injun	2403	2452	gas chk @ 2387' No Show
sand, shale	2452	2595	
Weir	2595	2652	
sand, shale	2652	2764	
Berea	2764	2788	gas chk @ 2448' No Show
sand, shale	2788	2972	
Gordon	2972	2983	gas chk @ 2670' No Show
sand, shale	2983	3312	
Bayard	3312	3333	gas chk @ 2750' No Show
sand, shale	3333	3622	gas chk @ 2921' No Show
Warren	3622	3757	gas chk @ 3110' No Show
sand, shale	3757	3785	gas chk @ 3444' No Show
Speechley	3785	4154	gas chk @ 4333' No Show
sand, shale	4154	4204	gas chk @ 5119' No Show
Balltown	4204	4611	gas chk @ 5212' No Show
sand, shale	4611	4646	gas chk @ 5274' No Show
Bradford	4646	4817	
sand, shale	4817	5000	gas chk @ 5430' No Show
Riley	5000	5174	gas chk @ 5682' No Show
sand, shale	5174	5228	gas chk @ TD No Show
Benson	5228	5270	
sand, shale	5270	5344	
Leopold	5344	5455	
sand, shale	5455	5475	
Alexander	5475	5590	
sand, shale	5590	5750	
		5748	Drillers TD Logger TD

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 #3

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: 03/01/94
Well work Completed: 03/08/94
Verbal Plugging
Permission granted on: _____
Rotary Cable _____ Rig
Total Depth (feet) 5750'
Fresh water depths (ft) _____
40; 1784
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"	177'	177'	110 sks
8 5/8"	1815'	1815'	462 sks
4 1/2"	5662'	5662'	534 sks

OPEN FLOW DATA

Producing formation Alexander Pay zone depth (ft) 5532-5535
Gas: Initial open flow ns MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 84 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 1450 psig (surface pressure) after 72 Hours

Second producing formation Benson Pay zone depth (ft) 5132-5135
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: April 5, 1994

APR 23 1994

8684

COX HEIRS #3

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Alexander	16 (5532' - 5535')	58	306	500	50
2nd	Benson	16 (5132' - 5135')	58	310	500	39

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 @ 40'
sand, shale, RR	10	2112	
Maxton	2112	2228	
sand, shale	2228	2306	1" water @ 1784'
Big Lime	2306	2398	gas chk @ 2291' No Show
sand, shale	2398	2403	
Big Injun	2403	2452	gas chk @ 2387' No Show
sand, shale	2452	2595	
Weir	2595	2652	
sand, shale	2652	2764	
Berea	2764	2788	gas chk @ 2448' No Show
sand, shale	2788	2972	
Gordon	2972	2983	gas chk @ 2670' No Show
sand, shale	2983	3312	
Bayard	3312	3333	gas chk @ 2750' No Show
sand, shale	3333	3622	gas chk @ 2921' No Show
Warren	3622	3757	gas chk @ 3110' No Show
sand, shale	3757	3785	gas chk @ 3444' No Show
Speechley	3785	4154	gas chk @ 4333' No Show
sand, shale	4154	4204	gas chk @ 5119' No Show
Balltown	4204	4611	gas chk @ 5212' No Show
sand, shale	4611	4646	gas chk @ 5274' No Show
Bradford	4646	4817	
sand, shale	4817	5000	gas chk @ 5430' No Show
Riley	5000	5174	gas chk @ 5682' No Show
sand, shale	5174	5228	gas chk @ TD No Show
Benson	5228	5270	
sand, shale	5270	5344	
Leopold	5344	5455	
sand, shale	5455	5475	
Alexander	5475	5590	
sand, shale	5590	5750	Drillers TD
		5748	Logger TD

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

017-4105
Issued 2/9/94
Page ___ of ___
Expires 2/9/96

- 1) Well Operator: 687 Petroleum Development Corporation 38200 (6) 511
- 2) Operator's Well Number: Cox Heirs #3 3) Elevation: 1277'
- 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: 145', 235', 325, 465', 760, 855'
- Approximate salt water depths: 1580', 1760', 1825'
- Approximate coal seam depths: 390' - 394'
- 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#	<u>150' 175'</u>	<u>150' 175'</u>	Surface
Fresh Water					<u>38059A 11.3</u>	<u>o.k</u>
Coal					<u>38059A 11.22</u>	<u>nickal</u>
Intermediate	8 5/8"	H-40	20#/23#	1,865'	1,865'	Surface
Production	4 1/2"	J-55	10.5#	5900'	5900'	450 sks
Tubing						<u>38059A 11.1</u>
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

008003/5

Fee(s) paid: 1 Well Work Permit 1 Reclamation Fund 1 WPCP
 Plat 1 WW-9 1 WW-2B 1 Bond Blanket O.D. Agent

(Type)

1) Date: Feb. 2, 1994
2) Operator's well number
Cox Heirs #3
3) API Well No: 47 - 017 - 4105
State - County - Permit

FEB 07 94

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

5) (a) Coal Operator:
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name Tygart Resources, Inc.
Address 1900 Grant Building
Pittsburgh, PA 15219
Name _____
Address _____

6) Inspector Mike Underwood
Address Rt. 2, Box 135
Salem, WV 26426
Telephone (304)-782-1043

(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

Subscribed and sworn before me this 3rd day of FEBRUARY, 1994

Janet S. Gabbert
My commission expires July 7, 2003

Notary Public

