



1) Date 9-25-03
Operator's
2) Well No. LC-19
3) SIC Code 1310
4) API Well No. 47 - 109 - 01433
State County Permit

STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
for the

OFFICE OF OIL AND GAS, DIVISION OF ENVIRONMENTAL PROTECTION

- 6) SURFACE OWNER(S) OF RECORD TO BE SERVED
- (i) Name Pocahontas Land Corp.
Address P.O. Box 1517
Bluefield, WV 24701
- (ii) Name _____
Address _____
- (iii) Name _____
Address _____
- 7 (i) COAL OPERATOR Eastern Associated Coal Corp.
Address P.O. Box 1233
Charleston, WV 25324
- 7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____
Address _____
- 7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:
Name Eastern Associated Coal Corp.
Address P.O. Box 1233
Charleston, WV 25324

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

- (1) The Application for a Liquid Injection or Waste Disposal Well Work Permit on Form WW-3(B), which sets out the parties involved in the drilling or other work, and
- (2) The plat (surveyor's map) showing the well location on Form WW-6; and
- (3) The Construction and Reclamation Plan on Form WW-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

The date proposed for the first injection or waste disposal is November, 192003.

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM WW-3(B)) DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice that under Chapter 22B of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Chief of the Office of Oil and Gas, West Virginia Division of Environmental Protection, with respect to a well at the location described on the attached Application and depicted on attached form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

The person signing this document shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document 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.

Donn Virginia Oil & Gas Corp.
Well Operator
By Mike Murney
V.P.
PH: _____

CH# 1075
500.-

I N S T R U C T I O N S T O A P P L I C A N T

CONCERNING THE LINE ITEMS:

- 1) Date of Notice.
- 2) Your well name and number.
- 3) Designated Standard Industrial Code
- 4) To be filled out by the Office of Oil & Gas
- 5) To be filled out by the Office of Oil and Gas unless this well is covered by an existing area permit: See Instruction Sheet WW-3-AP.
- 6) & 7) Use separate sheet if necessary.
- 6) Surface owner(s) of record to be served with Notice of Application. However, see also Code 22B-1-9(b) if "more than three tenants in common or other co-owners of interest described in subsection (a) of this section hold interests in such lands".
- 7 (i) "Coal Operator" means any person, firm, partnership, partnership association or corporation that proposes to or does operator a coal operator.
- 7 (ii, iii) See Code 22B-1-36.

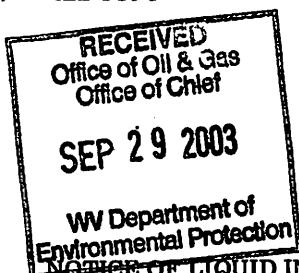
CONCERNING THE REQUIRED COPIES FOR FILING AND SERVICE:

Filing. Code 22B-1-6 and Regulation 7.02 provide that the original and two copies of the Notice and Application must be filed with the Chief, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code 22B-1-26, (iii) the "Construction and Reclamation Plan" for Form WW-9, applicable to the plan required by Code 22-1-G(d) and the reclamation required by Code 22B-1-30 and Regulation 23, (iv) unless (v) if applicable, the consent required by Code 22B-1-21 from the owner of any water well or dwelling within 200 feet of the proposed well.

Service. In addition, service must be made on the surface owner(s) and the person(s) with interest in the coal. See Code 22B-1-9, 22B-1-13, and 22B-1-14.

(Obverse)

10/91



STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
for the

DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

1) Date: SEPTEMBER 25, 2003
 2) Operator's Well No. LC-19
 3) SIC Code 1310
 4) API Well NO. 47 - 109 - 01433
 State County Permit
 5. UIC Permit No. _____

- 6) WELL TYPE: Liquid injection X / Gas injection (not storage) _____ / Waste disposal _____
 7) LOCATION: Elevation: 2148 Watershed: Crane Fork
 District: Oceana County: Wyoming Quadrangle: Pilot Knob
 8) WELL OPERATOR Penn Virginia Oil & Gas Corp. 9) DESIGNATED AGENT Harry Jewell
 Address 2550 East Stone Drive, Suite 110 Address P.O. Box 466
 Kingsport, TN 37660 Ravincliff, WV 25913
 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Ralph Triplett
 Address 1150 State Route 10, N
 Branchland, WV 25506
 11) DRILLING CONTRACTOR:
 Name N/A
 Address _____
 12) PROPOSED WELL WORK: Drill _____ / Drill deeper _____ / Redrill _____ / Stimulate _____
 Plug off old formation _____ / Perforate new formation _____ / Convert _____
 Other physical change in well (specify) _____
 13) GEOLOGICAL TARGET FORMATION, Weir Depth 3540 feet(top) to 3578 feet(bottom)
 14) Estimated depth of completed well, (or actual depth of existing well) 4261 ft.
 15) Approximate water strata depths; Fresh, 110', 660' feet; salt, None feet.
 16) Approximate coal seam depths: 275' - 278'; 303' - 307'; 592' - 596'; 734' - 737'
 17) Is coal being mined in the area? Yes _____ / No X /
 18) Virgin reservoir pressure in target formation 700 psig. Source Data from wells in field
 19) Estimated reservoir fracture pressure 0.68 psi/ft: 2,407 psig (BHFP)
 20) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour: 50 Bottom hole pressure 2300
 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Gas field brine
 no additives anticipated
 22) FILTERS (IF ANY): _____
 23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: None

24) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	16"					30'	30'		Kinds Tension
Fresh water	11 3/4"	H-40	42			298'	298'	177	
Coal	8-5/8"	J-55	24			1553'	1553'	476	Size 4-1/2 x 2-3/8
Intermediate									
Production	4-1/2	J-55	10.5				4186	455	Depths set 3500
Proposed Tubing	2-3/8	J-55	4.7				3500		
Liners									Perforations: Weir
									Top 3530 Bottom 3570

- 25) APPLICANT'S OPERATING RIGHTS were acquired from UMC Corporation
 by deed _____ / lease _____ / other contract X / dated January 1, 1995, 19 _____, of record in the
 Wyoming County Clerk's office in Book 010 at page 147

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

OFFICE USE ONLY
DRILLING PERMIT

Permit number _____

TO INSPECTOR OF OIL AND GAS
DISTRICT 15
Date _____

19

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and (if required) construction and reclamation plan, subject to any modifications and conditions specified below.

Permit expires _____ unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee

NOTE: Keep one copy of this permit posted at the drilling location.

CHIEF, OFFICE OF OIL AND GAS

PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

OFFICE USE ONLY

This part of Form IV-3(b) is to record the dates of certain occurrences and any follow-up inspections.

	Date	Follow-up inspection(s)	Date(s)
Application received			
Well work started		" "	
Total depth reached		" "	
Well Record received		" "	
Reclamation completed		" "	
OTHER INSPECTIONS			

Reason: _____

Reason: _____

FORM WW-3(B) FILE COPY
(Obverse)

10/91



1) Date SEPTEMBER 25, 2003
 2) Operator's Well No. LC-19
 3) SIC Code 1310
 4) API Well NO. 47 - 109 - 01433
 State County Permit
 5) UIC Permit No. _____

STATE OF WEST VIRGINIA
 NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
 for the
 DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

6) WELL TYPE: Liquid injection ☒ / Gas injection (not storage) _____ / Waste disposal _____
 7) LOCATION: Elevation: 2148 Watershed: Crane Fork
 District: Oceana County: Wyoming Quadrangle: Pilot Knob
 8) WELL OPERATOR Penn Virginia Oil & Gas Corp. 9) DESIGNATED AGENT Harry Jewell
 Address 2550 East Stone Drive, Suite 110 Address P.O. Box 466
 Kingsport, TN 37660 Ravincliff, WV 25913
 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Ralph Triplett
 Address 1150 State Route 10, N
 Branchland, WV 25506
 11) DRILLING CONTRACTOR:
 Name N/A
 Address _____

12) PROPOSED WELL WORK: Drill _____ / Drill deeper _____ / Redrill _____ / Stimulate _____
 Plug off old formation _____ / Perforate new formation _____ / Convert _____
 Other physical change in well (specify) _____

13) GEOLOGICAL TARGET FORMATION, Weir Depth 3540 feet (top) to 3578 feet (bottom)

14) Estimated depth of completed well, (or actual depth of existing well) 4261 ft.

15) Approximate water strata depths: Fresh, 110', 660' feet; salt, None feet.

16) Approximate coal seam depths: 275' - 278'; 303' - 307'; 592' - 596'; 734' - 737'

17) Is coal being mined in the area? Yes _____ / No ☒ /

18) Virgin reservoir pressure in target formation 700 psig. Source Data from wells in field

19) Estimated reservoir fracture pressure 0.68 psi/ft: 2,407 psig (BHFP)

20) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour: 50 Bottom hole pressure 2300

21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Gas field brine
no additives anticipated

22) FILTERS (IF ANY): _____

23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: None

24) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	16"					30'	30'		Kinds Tension
Fresh water	11 3/4"	H-40	42			298'	298'	177	
Coal	8-5/8"	J-55	24			1553'	1553'	476	Size 4-1/2 x 2-3/8
Intermediate									
Production	4-1/2"	J-55	10.5				4186	455	Depths set 3500
posed Tubing	2-3/8"	J-55	4.7				3500		Perforations: Weir
Liners									Top 3530 Bottom 3570

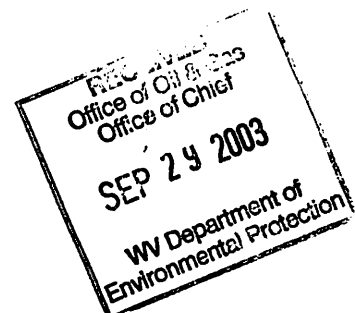
25) APPLICANT'S OPERATING RIGHTS were acquired from UMC Corporation
 by deed _____ / lease _____ / other contract ☒ / dated January 1, 1995 is _____ of record in the
Wyoming County Clerk's office in Book 010 at page 147

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

Exhibit 9

LC-19 Conversion to SWD Well Procedure

1. Disconnect well from sales line.
2. Set CIBP at 4100' (above Gordon perforations at 4114' - 4136'). Place 10 feet of cement on top of CIBP with dump bailer.
3. Pick up squeeze packer and 2-3/8" tubing. Set packer above Little Lime perforations at 2986' - 2990'.
4. Squeeze Little Lime perforations with 50 sacks Class A cement.
5. Release packer. Pull out 5 joints. Reverse out to insure cement is out of tubing. Finish pulling out of hole and lay down packer.
6. Move in and rig up reverse unit and power swivel.
7. Load casing with fresh water.
8. Run in hole with bit. Drill out squeeze. Pull out of hole and lay down bit.
9. Pressure test 4-1/2" casing to 2000 psi. Hold pressure for 30 minutes. Record on chart. Note: If casing does not test, re-squeeze and test as required.
10. Perforate Weir from 3550' to 3570' with 80 holes, 4 SPF. Correlate depth with Young Wireline Services OH log, dated 8/13/94.
11. Make gage ring run to 3500'. If problem is encountered, MIRU WS unit and run casing scraper, on tubing to same depth.
12. Pick up and run in hole with SN, one joint tail pipe, packer, and 2-3/8", 4.7 ppf, 8rd, EUE tubing. Spot 6 bbls 15% acid across Weir perforations. Load casing with packer fluid. Set packer at \pm 3500'.
13. Install pressure gages on 8-5/8" x 4-1/2" and 4-1/2" x 2-3/8" annuluses. Establish injection rates/pressures using filtered produced water. Do not exceed maximum allowable WH injection pressure established by permit. Record all pressures and injection rates.
14. Perform MIT test on 4-1/2" x 2-3/8" annulus. Record pressures on chart.
15. Install surface equipment.



Original: 06/26/03

LC #19
47-109-01433
Wyoming County, West Virginia
Current Completion

Elevations: 2148' GL
2158' DFL
2158' RKB

No Tubing

16" Conductor @ 40'

11-3/4" 42# H-40 @ 325'
Cement to Surface with 150 Sx

8-5/8" 24# J-55 @ 1,563'
Cement to Surface with 435 Sx

TOC @ 2,728' - CBL

Acidize Little Lime with 5,000 gal. 28% HCL with N2 assist

Little Lime 8 holes
2,986' to 2,990'

Frac Gordon with 75 quality foam, 51,600 lbs. 20/40 sand

Gordon 16 holes
4,114' to 4,136'

4-1/2" 10.5# J-55 @ 4,194'
Cement with 250 Sx

TAC

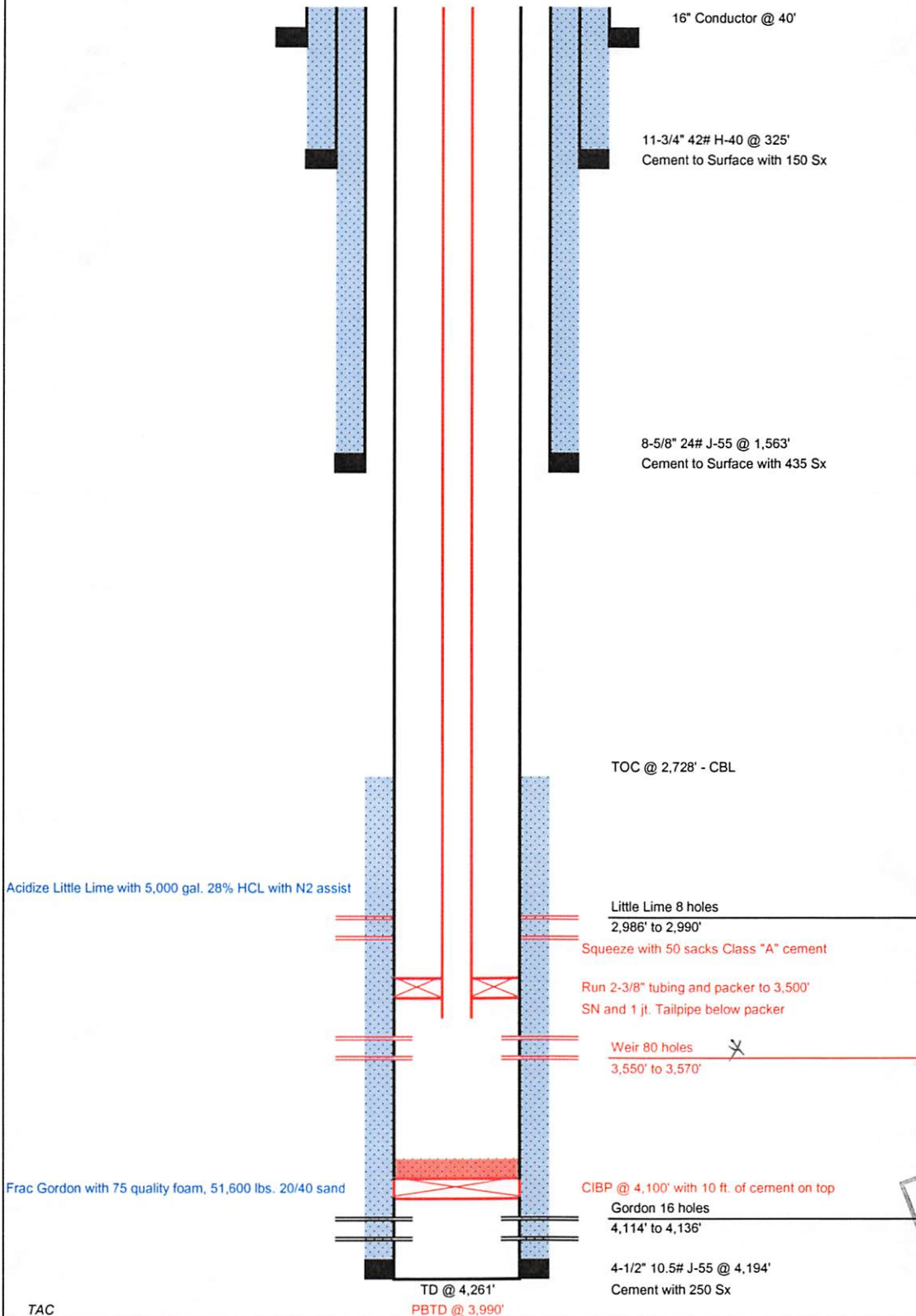
TD @ 4,261'
PBTD @ 4,140'



Original: 07/17/03

LC #19
47-109-01433
Wyoming County, West Virginia
Proposed Completion

Elevations: 2148' GL
2158' DFL
2158' RKB



FORM WW-3(A)
Obverse

1) D. 9-25-03
Operator's
2) Well No. LC-19
3) SIC Code 1310
4) API Well No. 47 - 109 - 01433
State County Permit

STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
for the

OFFICE OF OIL AND GAS, DIVISION OF ENVIRONMENTAL PROTECTION

6) SURFACE OWNER(S) OF RECORD TO BE SERVED

7 (1) COAL OPERATOR Eastern Associated Coal Corp.
Address P.O. Box 1233
Charleston WV 25324

(1) Name Peachontas Land Corp.
Address P.O. Box 1517
Bluefield, WV 24701

7 (11) COAL OWNER(S) WITH DECLARATION ON RECORD:

Name
Address

(11) Name
Address

7 (111) COAL LESSEE WITH DECLARATION ON RECORD:

Name Eastern Associated Coal Corp
Address P.O. Box 1233
Charleston, WV 25324

(111) Name
Address

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

- (1) The Application for a Liquid Injection or Waste Disposal Well Work Permit on Form WW-3(B), which sets out the parties involved in the drilling or other work, and
- (2) The plat (surveyor's map) showing the well location on Form WW-6; and
- (3) The Construction and Reclamation Plan on Form WW-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

The date proposed for the first injection or waste disposal is November, 2003.

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM WW-3(B)) DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice that under Chapter 22B of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Chief of the Office of Oil and Gas, West Virginia Division of Environmental Protection, with respect to a well at the location described on the attached Application and depicted on attached form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

The person signing this document shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document 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.

Penn Virginia Oil & Gas Corp.
Well Operator

By Mike Mowrey
V.P.

PH: _____



PENN VIRGINIA OIL & GAS CORPORATION

A subsidiary of Penn Virginia Corporation

September 26, 2003

Certified Mail

7003 0500 0004 4565 1868

Pocahontas Land Corporation
PO Box 1517
Bluefield, WV 24701

RE: LC-19

Wyoming County, West Virginia

Dear Sir or Madam:

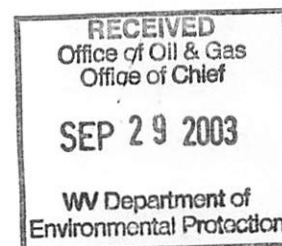
Enclosed please find a copy of the permit application to convert this well to a water injection well on above referenced well. This application is being sent to you as surface owner on this tract of land.

If you have any questions, please call the number listed below.

Sincerely,

Kita Gibson
Lease Records Supervisor

Enclosures





PENN VIRGINIA OIL & GAS CORPORATION

A subsidiary of Penn Virginia Corporation

September 26, 2003

Certified Mail
7003 0500 0004 4565 1875

Eastern Associated Coal Corporation
PO Box 1233
Charleston, WV 25324

RE: LC-19
Wyoming County, West Virginia

Dear Sir or Madam:

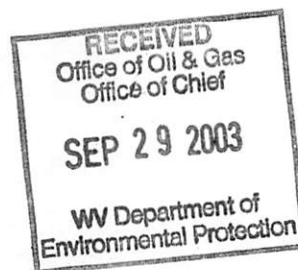
Enclosed please find a copy of the permit application to convert this well to a water injection well on above referenced well. This application is being sent to you as coal owner/operator on this tract of land.

If you have any questions, please call the number listed below.

Sincerely,

Kita Gibson
Lease Records Supervisor

Enclosures





PENN VIRGINIA OIL & GAS CORPORATION
A subsidiary of Penn Virginia Corporation

September 26, 2003

Certified Mail
7003 0500 0004 4565 1882

Mr. Ralph Triplett
1150 State Route 10, N
Branchland, WV 25506

RE: LC-19
Wyoming County, West Virginia

Dear Mr. Triplett:

Enclosed please find a copy of the permit application to convert this well to a water injection well on above referenced well.

If you have any questions, please call the number listed below.

Sincerely,

Kita Gibson

Kita Gibson
Lease Records Supervisor

Enclosures

