

US EPA ARCHIVE DOCUMENT

April 2010

FORM 1 and FORM C
KPDES INDIVIDUAL PERMIT APPLICATION

Laurel Mountain Resources, LLC
KDMRE Permit No. 836-0385
Raccoon Branch Surface Mine

Prepared for:

Laurel Mountain Resources, LLC
1801 Watergap Road
Prestonsburg, KY 41653

Prepared by:

Summit Engineering, Inc.
131 Summit Drive
Pikeville, KY 41501
Telephone: (606) 432-1447



SUMMIT ENGINEERING, INC.

April 1, 2010

William Shane
KPDES Branch
Division of Water
200 Fair Oaks Lane
Frankfort, Kentucky 40601

RE: Laurel Mountain Resources, LLC
DMRE Permit No. 836-0385
Raccoon Branch Surface Mine

Mr. Shane:

Please find enclosed a completed Form 1 and Form C submitted for the above-referenced surface mine to be located in Floyd County. The attached application was originally submitted to Division of Water as a general permit application under Miller Brothers Coal Permit No. 836-0338. Following a transfer in company ownership to Laurel Mountain Resources, LLC, and per comments received by Division of Water, Laurel Mountain Resources, LLC, seeks approval for individual permit coverage under KPDES for their proposed mining activities under permit No. 836-0385.

Due to changes in the SMCRA application an individual permit is required for the proposed mining activities, which would provide coverage through Amendment 3 of Laurel Mountain Resources Permit No. 836-0385.

In regards to the above submitted Individual Permit application for Laurel Mountain Resources, LLC, a variance is requested for the following parameters found on Form C, Part V-A:

- Biochemical Oxygen Demand (BOD)
- Chemical Oxygen Demand (COD)
- Total Organic Carbon (TOC)
- Ammonia (as N)

These parameters are not usually affected by mining activity; therefore, sampling was not conducted and should not be required.

In addition, following issuance of KPDES Individual Permit coverage, water monitoring and benthic macroinvertebrate sampling will be conducted in accordance with permit requirements.

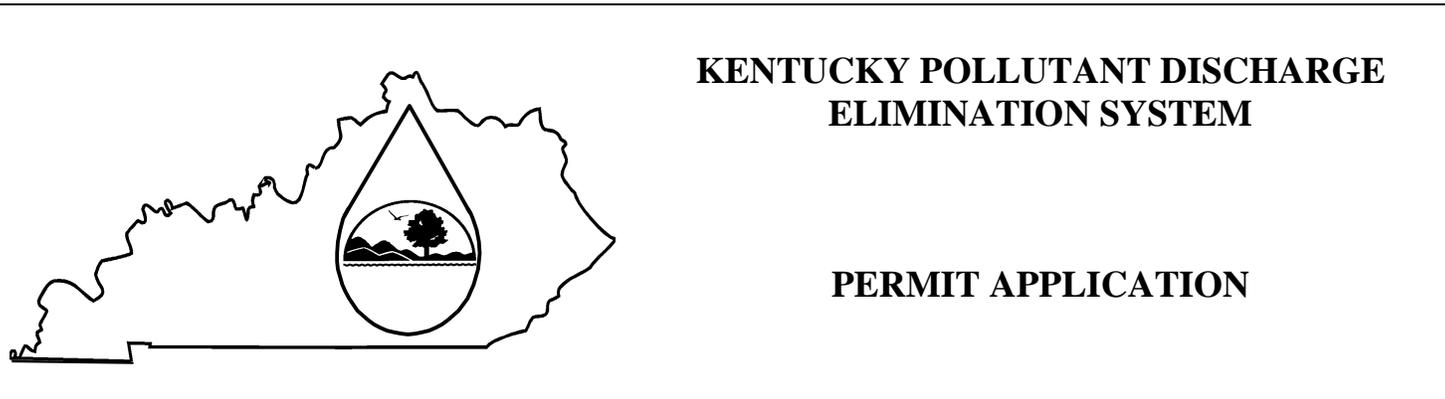
If you have any questions, or require additional information, please call me at (606) 432-1447 ext. 311 or e-mail khaas@summit-engr.com.

Regards,

Kari Haas
Environmental Scientist

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KPDES FORM 1



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

This is an application to: (check one)

- Apply for a new permit.
- Apply for reissuance of expiring permit.
- Apply for a construction permit.
- Modify an existing permit.

Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:

Form A, Form B, Form C, Form F, or Short Form C

For additional information contact:

KPDES Branch (502) 564-3410

I. FACILITY LOCATION AND CONTACT INFORMATION	AGENCY USE						
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A. Name of business, municipality, company, etc. requesting permit Laurel Mountain Resources, LLC	
B. Facility Name and Location Facility Location Name: KDNR Permit No. 836-0385 - Raccoon Branch Surface Mine	C. Facility Owner/Mailing Address Owner Name: Laurel Mountain Resources, LLC
Facility Location Address (i.e. street, road, etc.): Unnamed Tributary of Raccoon Branch and KY Route 7	Mailing Street: 1801 Watergap Road
Facility Location City, State, Zip Code: Prestonsburg, KY 41563	Mailing City, State, Zip Code: Prestonsburg, KY 41563
	Telephone Number: 606-874-7725

II. FACILITY DESCRIPTION	
A. Provide a brief description of activities, products, etc: The removal of bituminous coal through contour/auger mining of the Fireclay, Fireclay Rider and Lower Taylor coal seams. Drainage control will be provided with the construction of 1 pond, 4 dugouts, and 1 hollow fill.	
B. Standard Industrial Classification (SIC) Code and Description	
Principal SIC Code & Description:	1221 – Bituminous Coal & Lignite Mining-Surface
Other SIC Codes:	

III. FACILITY LOCATION	
A. Attach a U.S. Geological Survey 7 1/2 minute quadrangle map for the site. (See instructions)	
B. County where facility is located: Floyd	City where facility is located (if applicable): Prestonsburg, KY 41563
C. Body of water receiving discharge: Raccoon Branch of Saltlick Creek	
D. Facility Site Latitude (degrees, minutes, seconds): 37° 29' 40" N	Facility Site Longitude (degrees, minutes, seconds): 82° 52' 46" W
E. Method used to obtain latitude & longitude (see instructions): 7.5' USGS Topographic Map	
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):	

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IV. OWNER/OPERATOR INFORMATION	
A. Type of Ownership: <input type="checkbox"/> Publicly Owned <input checked="" type="checkbox"/> Privately Owned <input type="checkbox"/> State Owned <input type="checkbox"/> Both Public and Private Owned <input type="checkbox"/> Federally owned	
B. Operator Contact Information (See instructions)	
Name of Treatment Plant Operator: Laurel Mountain Resources, LLC	Telephone Number: 606-874-7725
Operator Mailing Address (Street): 1801 Watergap Road	
Operator Mailing Address (City, State, Zip Code): Prestonsburg, KY 41563	
Is the operator also the owner? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the operator certified? If yes, list certification class and number below. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Certification Class:	Certification Number:

V. EXISTING ENVIRONMENTAL PERMITS		
Current NPDES Number: KYG046118	Issue Date of Current Permit: 05/29/08	Expiration Date of Current Permit:
Number of Times Permit Reissued:	Date of Original Permit Issuance:	Sludge Disposal Permit Number:
Kentucky DOW Operational Permit #:	Kentucky DSMRE Permit Number(s): 836-0385	

C. Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source		
Solid or Special Waste		
Hazardous Waste - Registration or Permit		

VI. DISCHARGE MONITORING REPORTS (DMRs)	
KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). The information in this section serves to specifically identify the department, office or individual you designate as responsible for submitting DMR forms to the Division of Water.	
A. Name of department, office or official submitting DMRs:	Laurel Mountain Resources, LLC
B. Address where DMR forms are to be sent. (Complete only if address is different from mailing address in Section I.)	
DMR Mailing Name:	Laurel Mountain Resources, LLC
DMR Mailing Street:	1801 Watergap Road
DMR Mailing City, State, Zip Code:	Prestonsburg, KY 41563
DMR Official Telephone Number:	606-874-7725

VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

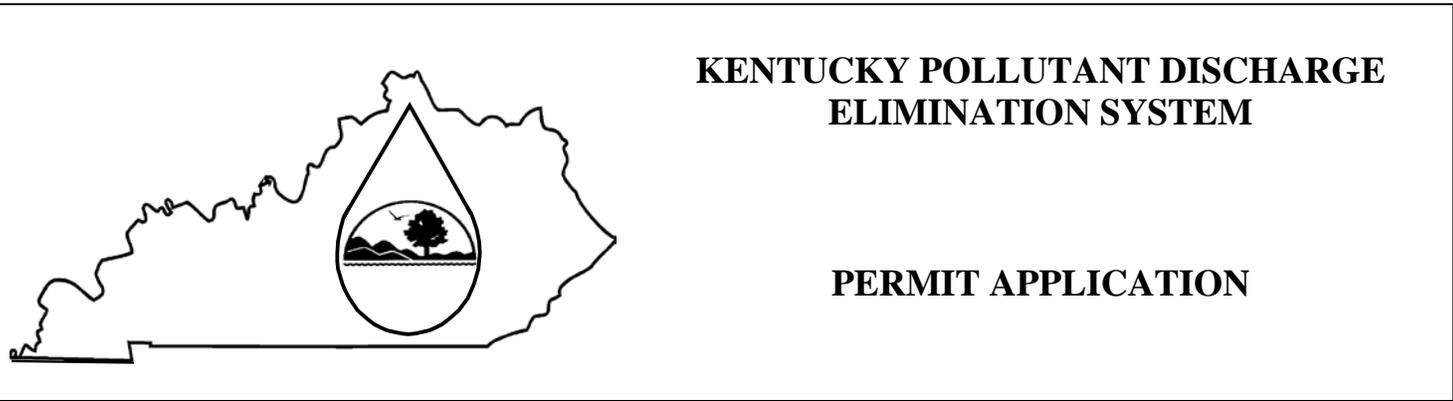
Facility Fee Category:	Filing Fee Enclosed:
Surface Mining Operation	\$660.00

VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Gene D. Campbell,	606-874-7677
SIGNATURE	DATE:
	3-30-2010

KPDES FORM C



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Raccoon Branch Surface Mine- Permit No. 836-0385				County: Floyd			
I. OUTFALL LOCATION				AGENCY USE			

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
SS-1	37	29	46	82	52	40	Raccoon Branch
SS-2	37	29	50	82	52	47	Raccoon Branch
SS-3	37	29	42	82	52	32	Raccoon Branch
SS-4	37	30	05	82	53	48	Raccoon Branch
SS-5	37	30	10	82	53	57	Raccoon Branch
SS-6	37	30	09	82	53	58	In-Series with Pond SS-4
SS-7	37	29	42	82	53	33	Raccoon Branch
SS-8	37	29	42	82	54	06	Raccoon Branch
SS-9	37	30	10	82	52	14	Salyers Branch
SS-10	37	30	34	82	53	26	Raccoon Branch
SS-11	37	30	30	82	52	37	Salyers Branch
SS-12	37	30	31	82	52	47	Salyers Branch
SS-13	37	30	23	82	53	40	Raccoon Branch
SS-14	37	29	44	82	52	11	Saltlick Creek
SS-15	37	29	49	82	51	59	Salyers Branch
SS-16	37	29	43	82	51	59	Saltlick Creek
SS-17	37	29	35	82	52	22	Saltlick Creek
SS-18	37	29	46	82	52	19	In Series with Pond SS-14

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

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OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow 10 Year (include units)	Description	List Codes from Table C-1
SS-1	Surface runoff	100.3 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-2	Surface runoff	18.18 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-3	Surface runoff	20.82 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-4	Surface runoff	64.37 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-5	Surface runoff	22.77 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-6	Surface runoff	In-Series with SS-4	Sedimentation	1-U
			Discharge to surface water	4-A
SS-7	Surface runoff	24.39 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-8	Surface runoff	25.66 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-9	Surface runoff	36.36 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-10	Surface runoff	16.81 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-11	Surface runoff	27.83 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-12	Surface runoff	24.12 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-13	Surface runoff	31.13 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-14	Surface runoff	112.93 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-15	Surface runoff	17.11 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-16	Surface runoff	8.85 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-17	Surface runoff	16.22 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
SS-18	Surface runoff	In-Series with SS-14	Sedimentation	1-U
			Discharge to surface water	4-A

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

- Yes (Complete the following table.) No (Go to Section III.)

OUTFALL NUMBER (list)	OPERATIONS CONTRIBUTING FLOW (list)	FREQUENCY		FLOW				
		Days Per Week (specify average)	Months Per Year (specify average)	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III. MAXIMUM PRODUCTION

- A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
- Yes (Complete Item III-B) List effluent guideline category:
- No (Go to Section IV)
- B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?
- Yes (Complete Item III-C) No (Go to Section IV)
- C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

- A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.
- Yes (Complete the following table) No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

- B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

Yes (List all such pollutants below)

No (Go to Item VI-B)

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

Yes (Complete Item VI-C)

No (Go to Item VII)

C. If you answered “Yes” to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

- Yes (Identify the test(s) and describe their purposes below) No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

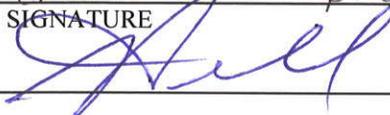
Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

- Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below) No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print): <i>Gene D Campbell</i>	TELEPHONE NUMBER (area code and number): <i>606-874-7677</i>
SIGNATURE 	DATE <i>3-30-2010</i>

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)										OUTFALL NO.		
Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.												
1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No of Analyses
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Biochemical Oxygen Demand (BOD)	INFORMATION WILL BE SUBMITTED IN ACCORDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE											
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)												
e. Ammonia (as N)												
f. Flow (in units of MGD)												
g. Temperature (winter)												
h. Temperature (summer)												
i. pH												

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		6. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Bromide (24959-67-9)														
b. Bromine Total Residual														
c. Chloride														
d. Chlorine, Total Residual														
e. Color														
f. Fecal Coliform														
g. Fluoride (16984-48-8)														
h. Hardness (as CaCO ₃)														
i. Nitrate – Nitrite (as N)														
j. Nitrogen, Total Organic (as N)														
k. Oil and Grease														
l. Phosphorous (as P), Total 7723-14-0														
m. Radioactivity														
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium Total														
(4) Radium, 226, Total														

INFORMATION WILL BE SUBMITTED IN ACCORDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE

Part B - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
n. Sulfate (as SO ₄) (14808-79-8)														
o. Sulfide (as S)														
p. Sulfite (as SO ₃) (14286-46-3)														
q. Surfactants														
r. Aluminum, Total (7429-90)														
s. Barium, Total (7440-39-3)														
t. Boron, Total (7440-42-8)														
u. Cobalt, Total (7440-48-4)														
v. Iron, Total (7439-89-6)														
w. Magnesium Total (7439-96-4)														
x. Molybdenum Total (7439-98-7)														
y. Manganese, Total (7439-96-6)														
z. Tin, Total (7440-31-5)														
aa. Titanium, Total (7440-32-6)														

INFORMATION WILL BE SUBMITTED IN ACCORDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark “X” in the **Testing Required** column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark “X” in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark “X” in the **Believed Absent** column for each pollutant you believe to be absent. If you mark either the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
METALS, CYANIDE AND TOTAL PHENOLS															
1M. Antimony Total (7440-36-0)															
2M. Arsenic, Total (7440-38-2)															
3M. Beryllium Total (7440-41-7)															
4M. Cadmium Total (7440-43-9)															
5M. Chromium Total (7440-43-9)															
6M. Copper Total (7550-50-8)															
7M. Lead Total (7439-92-1)															
8M. Mercury Total (7439-97-6)															
9M. Nickel, Total (7440-02-0)															
10M. Selenium, Total (7782-49-2)															
11M. Silver, Total (7440-28-0)															
INFORMATION WILL BE SUBMITTED IN ACCORANDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE															

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
METALS, CYANIDE AND TOTAL PHENOLS (Continued)															
12M. Thallium, Total (7440-28-0)	INFORMATION WILL BE SUBMITTED IN ACCORANDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE														
13M. Zinc, Total (7440-66-6)															
14M. Cyanide, Total (57-12-5)															
15M. Phenols, Total															
DIOXIN															
2,3,7,8 Tetra- chlorodibenzo, P, Dioxin (1784-01-6)	INFORMATION WILL BE SUBMITTED IN ACCORANDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE														
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	INFORMATION WILL BE SUBMITTED IN ACCORANDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE														
2V. Acrylonitrile (107-13-1)															
3V. Benzene (71-43-2)															
5V. Bromoform (75-25-2)															
6V. Carbon Tetrachloride (56-23-5)															
7V. Chloro- benzene (108-90-7)															
8V. Chlorodibro- momethane (124-48-1)															

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
9V. Chloroethane (74-00-3)															
10V. 2-Chloroethylvinyl Ether (110-75-8)															
11V. Chloroform (67-66-3)															
12V. Dichlorobromomethane (75-71-8)															
14V. 1,1-Dichloroethane (75-34-3)															
15V. 1,2-Dichloroethane (107-06-2)															
16V. 1,1-Dichloroethylene (75-35-4)															
17V. 1,2-Dichloropropane (78-87-5)															
18V. 1,3-Dichloropropylene (452-75-6)															
19V. Ethylbenzene (100-41-4)															
20V. Methyl Bromide (74-83-9)															

INFORMATION WILL BE SUBMITTED IN ACCORDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
21V. Methyl Chloride (74-87-3)															
22V. Methylene Chloride (75-00-2)															
23V. 1,1,2,2-Tetrachloroethane (79-34-5)															
24V. Tetrachloroethylene (127-18-4)															
25V. Toluene (108-88-3)															
26V. 1,2-Trans-Dichloroethylene (156-60-5)															
27V. 1,1,1-Trichloroethane (71-55-6)															
28V. 1,1,2-Trichloroethane (79-00-5)															
29V. Trichloroethylene (79-01-6)															
30V. Vinyl Chloride (75-01-4)															

INFORMATION WILL BE SUBMITTED IN ACCORDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chloro-phenol (95-57-8)	INFORMATION WILL BE SUBMITTED IN ACCORANDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE														
2A. 2,4-Dichlor-Orophenol (120-83-2)															
3A. 2,4-Dimeth-ylphenol (105-67-9)															
4A. 4,6-Dinitro-o-cresol (534-52-1)															
5A. 2,4-Dinitro-phenol (51-28-5)															
6A. 2-Nitro-phenol (88-75-5)															
7A. 4-Nitro-phenol (100-02-7)															
8A. P-chloro-m-cresol (59-50-7)															
9A. Pentachloro-phenol (87-88-5)															
10A. Phenol (108-05-2)															
11A. 2,4,6-Tri-chlorophenol (88-06-2)															
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acena-phthene (83-32-9)	INFORMATION WILL BE SUBMITTED IN ACCORANDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE														

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
2B. Acena- phtylene (208-96-8)	INFORMATION WILL BE SUBMITTED IN ACCORANDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE														
3B. Anthra- cene (120-12-7)															
4B. Benzidine (92-87-5)															
5B. Benzo(a)- anthracene (56-55-3)															
6B. Benzo(a)- pyrene (50-32-8)															
7B. 3,4-Benzo- fluoranthene (205-99-2)															
8B. Benzo(ghi) perylene (191-24-2)															
9B. Benzo(k)- fluoranthene (207-08-9)															
10B. Bis(2- chlor- oethoxy)- methane (111-91-1)															
11B. Bis (2-chlor- oisopropyl)- Ether															
12B. Bis (2-ethyl- hexyl)- phthalate (117-81-7)															

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
13B. 4-Bromo-phenyl Phenyl ether (101-55-3)															
14B. Butyl- benzyl phthalate (85-68-7)															
15B. 2-Chloro- naphthalene (7005-72-3)															
16B. 4-Chloro- phenyl phenyl ether (7005-72-3)															
17B. Chrysene (218-01-9)															
18B. Dibenzo- (a,h) Anthracene (53-70-3)															
19B. 1,2- Dichloro- benzene (95-50-1)															
20B. 1,3- Dichloro- Benzene (541-73-1)															
21B. 1,4- Dichloro- benzene (106-46-7)															
22B. 3,3- Dichloro- benzidene (91-94-1)															
23B. Diethyl Phthalate (84-66-2)															

INFORMATION WILL BE SUBMITTED IN ACCORDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE

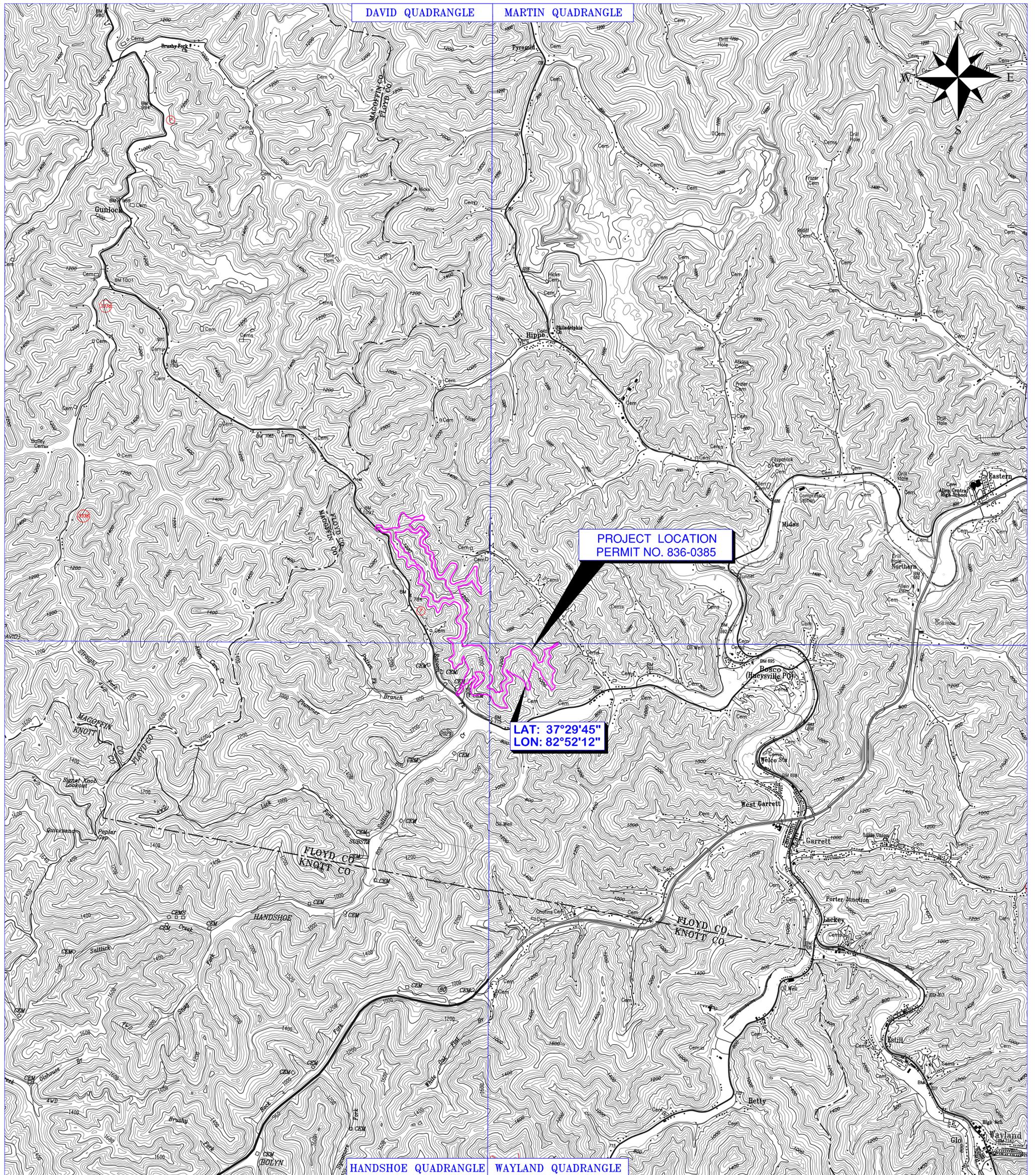
Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
24B. Dimethyl Phthalate (131-11-3)															
25B. Di-N-butyl Phthalate (84-74-2)	INFORMATION WILL BE SUBMITTED IN ACCORANDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE														
26B. 2,4-Dinitrotoluene (121-14-2)															
27B. 2,6-Dinitrotoluene (606-20-2)															
28B. Di-n-octyl Phthalate (117-84-0)															
29B. 1,2-diphenylhydrazine (as azonbenzene) (122-66-7)															
30B. Fluoranthene (208-44-0)															
31B. Fluorene (86-73-7)															
32B. Hexachlorobenzene (118-71-1)															
33B. Hexachlorobutadiene (87-68-3)															
34B. Hexachlorocyclopentadiene (77-47-4)															

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
35B. Hexachloroethane (67-72-1)	INFORMATION WILL BE SUBMITTED IN ACCORDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE														
36B. Indeno-(1,2,3-oc)-Pyrene (193-39-5)															
37B. Isophorone (78-59-1)															
38B. Naphthalene (91-20-3)															
39B. Nitrobenzene (98-95-3)															
40B. N-Nitrosodimethylamine (62-75-9)															
41B. N-nitrosodipropylamine (621-64-7)															
42B. N-nitrosodiphenylamine (86-30-6)															
43B. Phenanthrene (85-01-8)															
44B. Pyrene (129-00-0)															
45B. 1,2,4 Trichlorobenzene (120-82-1)															

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)															
2P. α-BHC (319-84-6)															
3P. β-BHC (58-89-9)															
4P. gamma-BHC (58-89-9)															
5P. δ-BHC (319-86-8)															
6P. Chlordane (57-74-9)															
7P. 4,4'-DDT (50-29-3)															
8P. 4,4'-DDE (72-55-9)															
9P. 4,4'-DDD (72-54-8)															
10P. Dieldrin (60-57-1)															
11P. α- Endosulfan (115-29-7)															
12P. β- Endosulfan (115-29-7)															
13P. Endosulfan Sulfate (1031-07-8)															
14P. Endrin (72-20-8)															

INFORMATION WILL BE SUBMITTED IN ACCORDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – PESTICIDES															
15P. Endrin Aldehyde (7421-93-4)	INFORMATION WILL BE SUBMITTED IN ACCORANDANCE WITH KPDES REQUIREMENTS FOLLOWING ISSUANCE														
16P. Heptachlor (76-44-8)															
17P. Heptachlor Epoxide (1024-57-3)															
18P. PCB-1242 (53469-21-9)															
19P. PCB-1254 (11097-69-1)															
20P. PCB-1221 (11104-28-2)															
21P. PCB-1232 (11141-16-5)															
22P. PCB-1248 (12672-29-6)															
23P. PCB-1260 (11096-82-5)															
24P. PCB-1016 (12674-11-2)															
25P. Toxaphene (8001-35-2)															



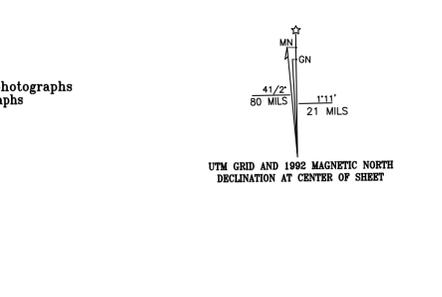
Produced by the United States Geological Survey
in cooperation with Kentucky Geological Survey
Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs
taken 1951. Field checked 1954. Revised from aerial photographs
taken 1988. Field checked 1990. Map edited 1992

Projection and 10,000-foot grid ticks: Kentucky coordinate
system, south zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 17
1927 North American Datum

The difference between 1927 North American Datum and North
American Datum of 1983 (NAD 83) for 7.5-minute intersections
is given in USGS Bulletin 1875. The NAD 83 is shown by
dashed corner ticks

Unlabeled wells are gas wells



SCALE 1:24000

1000 0 1000 2000
KILOMETERS

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
METERS

1 0 1 2
MILES

CONTOUR INTERVAL 40 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S.GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
KENTUCKY GEOLOGICAL SURVEY, LEXINGTON, KENTUCKY 40506
AND KENTUCKY DEPARTMENT OF COMMERCE, FRANKFORT, KENTUCKY 40601
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

CENTRIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1992

ROAD CLASSIFICATION

Primary highway, hard surface..... Light-duty road, hard or improved surface.....

Secondary highway, hard surface..... Unimproved road.....

Interstate Route U.S. Route State Route

PROJECT LOCATION MAP
LAUREL MOUNTAIN RESOURCES, LLC
UNNAMED TRIBUTARY OF SALTICK CREEK
PERMIT NO. 836-0385

LEGEND
 PERMIT BOUNDARY

