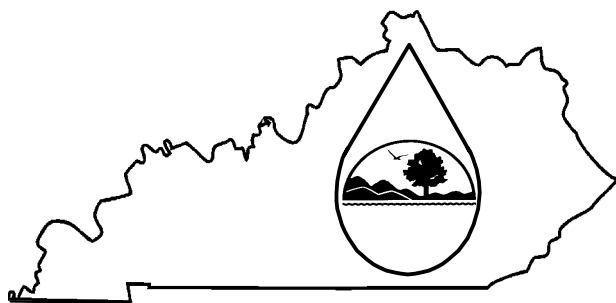


US EPA ARCHIVE DOCUMENT

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 Form SC

For additional information contact:

KPDES Branch (502) 564-3410

I. FACILITY LOCATION AND CONTACT INFORMATION

AGENCY
USE

A. Name of Business, Municipality, Company, Etc. Requesting Permit

Logan Gap Development Company, Inc.

B. Facility Name and Location

Facility Location Name:

Logan 1

Facility Location Address (i.e. street, road, etc., **not P.O. Box**):

KY 1410 Junction with KY Route 7

Facility Location City, State, Zip Code:

Knott County, KY

D. Owner's name (if not the same as in part A and C):

Billy Edd Seals

Owner's Mailing Address: HWY 1410 P.O. Box 609 Whitesburg, KY 41858

C. Primary Mailing Address (all facility correspondence will be sent to this address). **Include owner's mailing address (if different) in D.**

Facility Contact Name and Title: Mr. ☒ Ms. ☐

Billy Edd Seals

Mailing Address:

Logan Gap Development Company, Inc.

Mailing City, State, Zip Code:

Hwy 1410, P.O. Box 609 Whitesburg, KY 41858

Facility Contact Telephone Number:

(606) 634-4686

Owner's Telephone Number (if different):

"Same as Above"

II. FACILITY DESCRIPTION

A. Provide a brief description of activities, products, etc: The Logan 1 Surface Mine will be utilized to conduct contour and auger mining operations to retrieve coal from the Hazard 4 and Hazard 4 Rider seams. Sediment control will be provided in the form of ponds, diversion ditches and roads. The operation will disturb approximately 48 surface acres in the watershed of Little Carr Fork. The eight (8) bench sediment ponds will be used for sediment control of the proposed surface operation.

B. Standard Industrial Classification (SIC) Code and Description

Principal SIC Code & Description:	Bituminous Coal and Lignite Surface Mining SIC Code:1221		
Other SIC Codes:			

III. FACILITY LOCATION

A. Attach a U.S. Geological Survey 7 ½ minute quadrangle map for the site. (See instructions)	
B. County where facility is located: Knott	City where facility is located (if applicable): N/A
C. Body of water receiving discharge: Little Carr Creek	
D. Facility Site Latitude (degrees, minutes, seconds): 37-14-17	Facility Site Longitude (degrees, minutes, seconds): 82-52-30
E. Method used to obtain latitude & longitude (see instructions): Topo	
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable): N/A	

IV. OWNER/OPERATOR INFORMATION**A. Type of Ownership:**

☐ Publicly Owned ☒ Privately Owned ☐ State Owned ☐ Both Public and Private Owned ☐ Federally owned

B. Operator Contact Information (See instructions)

Name of Treatment Plant Operator:

N/A

Telephone Number:

Operator Mailing Address (Street):

Operator Mailing Address (City, State, Zip Code):

Is the operator also the owner?

Yes ☐ No ☐

Is the operator certified? If yes, list certification class and number below.

Yes ☐ No ☐

Certification Class:

Certification Number:

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number:

N/A

Issue Date of Current Permit:

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):

860-0432

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	N/A	
Solid or Special Waste	N/A	
Hazardous Waste - Registration or Permit	N/A	

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). Information in this section serves to specifically identify the name and telephone number of the DMR official and the DMR mailing address (if different from the primary mailing address in Section I.C).

A. DMR Official (i.e., the department, office or individual designated as responsible for submitting DMR forms to the Division of Water):	"Same as Section I.C"
DMR Official Telephone Number:	"Same as Section I.C"

B. DMR Mailing Address:

- Address the Division of Water will use to mail DMR forms (if different from mailing address in Section I.C), or
- Contact address if another individual, company, laboratory, etc. completes DMRs for you; e.g., contract laboratory address.

DMR Mailing Name:	"Same as Section I.C"
DMR Mailing Address:	"Same as Section I.C"
DMR Mailing City, State, Zip Code:	"Same as Section I.C"

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 in "Form 1 Instructions" and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. For permit renewals, please include the KPDES permit number on the check to ensure proper crediting. Please see the separate document "General Instructions" for an expanded description of the base fee amounts.

Facility Fee Category:

\$3,300.00

Filing Fee Enclosed:

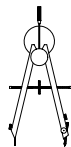
\$660.00

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):		PHONE NUMBER:
Mr. ☒ Ms. ☐	<i>BILLY EDD SEALS</i>	EMAIL: <i>NA</i> <i>633-4686</i>
SIGNATURE		DATE:
<i>Billy Edd Seals</i>		<i>11-10-2009</i>

Return completed application form and attachments to: Surface Water Permits Branch, Division of Water, 200 Fair Oaks Lane, Frankfort, KY 40601. Direct questions to: Surface Water Permits Branch at (502) 564-3410.



MMC, Inc.

P.O. Box 33
Jenkins, KY 41537
Phone: (606) 832-2967
Fax: (606) 832-2922



April 23, 2010
Lynne Brosius
Surface Waters Permit Branch
Division of Water
200 Fair Oaks Lane
Frankfort, KY 40601

Re: Logan Gap Development
Application No. 860-0432
KY0108685
KPDES Effluent Outfall Analysis

Dear Ms. Brosius:

All sediment structures for DNR Permit No. 860-0432 are of identical design treating mining operations of the same seams, at similar elevations possessing the same overburden qualities, while discharging into the same stream. Therefore, it is proposed that the analysis of outfall structure PD-8 is a representative sample of all sediment structures currently permitted.

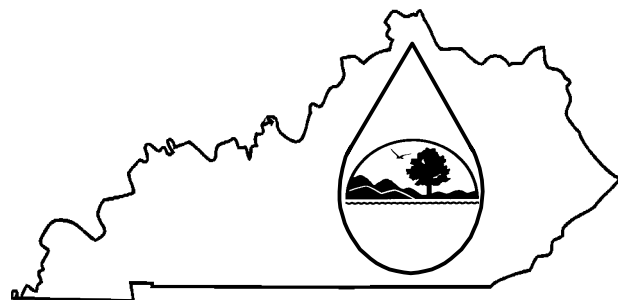
Logan Gap Development is submitting this analysis to represent all sediment structures in regards to Section V of Form C.

Should you have any questions or concerns regarding this matter, please contact me by email or phone.

Sincerely,

Jason Spangler
Permit Technician
MMC, Inc.
P.O. Box 33
Jenkins, Kentucky 41537
email: jspangler@mmceng.com
ph: 606-832-2967

KPDES FORM C



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

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

Name of Facility: Logan 1	County: Knott						
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	
PD-1	37	13	56	82	52	54	Little Carr Creek
PD-2	37	13	55	82	52	59	Little Carr Creek
PD-3	37	13	59	82	52	59	Little Carr Creek
PD-4 → PD-8	"Please	See	Attachment	Form	C	I.	A"

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.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
PD-1	Surface Runoff	22.72 cfs (10 yr peak)	Sedimentaion/Dischage SW	1-U / 4-A
PD-2	Surface Runoff	15.52 cfs (10 yr peak)	Sedimentaion/Discharge SW	1-U / 4-A
PD-3	Surface Runoff	14.64 cfs (10 yr peak)	Sedimentaion/Discharge SW	1-U /4-A
PD-4	Surface Runoff	19.02 cfs (10 yr peak)	Sedimentaion/Discharge SW	1-U / 4-A
PD-5	Surface Runoff	13.81 cfs (10 yr peak)	Seimentaion/Discharge SW	1-U / 4-A
PD-6	Surface Runoff	10.59 cfs (10 yr peak)	Sedimentaion/Discharge SW	1-U / 4-A
PD-7	Surface Runoff	11.66 cfs (10 yr peak)	Sedimentation/Discharge SW	1-U / 4-A
PD-8	Surface Runoff	2.58 cfs (10 yr peak)	Sedimentation/Discharge SW	1-U / 4-A

Attachment I.A

Logan Gap Development Company, Inc.

DNR Permit No. 860-0432

Pond	Latitude	Longitude	Receiving Water
PD-4	37-14-03	82-52-59	Little Carr Creek
PD-5	37-14-06	82-52-59	Little Carr Creek
PD-6	37-14-10	82-52-59	Little Carr Creek
PD-7	37-14-14	82-52-54	Little Carr Creek
PD-8	37-14-16	82-52-55	Little Carr Creek

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

III. 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.

AVERAGE DAILY PRODUCTION			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 currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (List all such pollutants below)
 ☒ No (Go to Item VI-B)

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)
Conjun Laboratories	8717 Highway 15 Isom, KY 41824	(606) 633-8027	Total Suspended Solids Antimony, Total Chromium, Total Nickel, Total Zinc, Total Sulfate, Total pH Arsenic, Total Copper, Total Selenium, Total Cyanide, Total Iron, Total Beryllium, Total Lead, Total Silver, Total Phenols, Total Hardness Manganese, Total Cadmium, Total Mercury, Total Thallium, Total

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): Billy Seals, President	TELEPHONE NUMBER (area code and number): (606) 633-4686
SIGNATURE 	DATE 4-15-2010

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	b. No of Analyses
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				
a. Biochemical Oxygen Demand (BOD)	<3						5 Day	mg/l		
b. Chemical Oxygen Demand (COD)	14						1	mg/l		
c. Total Organic Carbon (TOC)										
d. Total Suspended Solids (TSS)	6						1	mg/l		
e. Ammonia (as N)										
f. Flow (in units of MGD)	VALUE	0.003	VALUE		VALUE		1	MGD	VALUE	
g. Temperature (winter)	VALUE		VALUE		VALUE			°C	VALUE	
h. Temperature (summer)	VALUE		VALUE		VALUE			°C	VALUE	
i. pH	MINIMUM	MAXIMUM 8.09	MINIMUM	MAXIMUM			1	STANDARD UNITS		

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	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)		X									
b. Chloride		X									
c. Chlorine, Total Residual		X									
d. Color		X									
e. Fecal ☐ Coliform Or E.coli ☐		X									
f. Fluoride (16984-48-8)		X									
g. Hardness (as CaCO ₃)	X		200					1	ppm		
h. Nitrate -- Nitrite (as N)		X									
i. Nitrogen, Total Organic (as N)		X									
j. Oil and Grease		X									
k. Phosphorous (as P), Total 7723-14-0		X									
l. Radioactivity											
(1) Alpha, Total		X									
(2) Beta, Total		X									
(3) Radium Total		X									
(4) Radium, 226, Total		X									
(5) Strontium- 90, Total		X									
(6) Uranium		X									

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 (1) Concentration (2) Mass		b. Maximum 30-Day Value (if available) (1) Concentration (2) Mass		c. Long-Term Avg. Value (if available) (1) Concentration (2) Mass		d. No. of Analyses	a. Long-Term Avg. Value (1) Concentration (2) Mass	b. No. of Analyses		
m. Sulfate (as SO ₄) (14808-79-8)	X		92.5						1				
n. Sulfide (as S)		X											
o. Sulfite (as SO ₃) (14286-46-3)		X											
p. Surfactants													
q. Aluminum, Total (7429-90)		X											
r. Barium, Total (7440-39-3)		X											
s. Boron, Total (7440-42-8)		X											
t. Cobalt, Total (7440-48-4)		X											
u. Iron, Total (7439-89-6)	X		0.56						1	mg/l			
v. Magnesium Total (7439-96-4)		X											
w. Molybdenum Total (7439-98-7)		X											
x. Manganese, Total (7439-96-6)	X		0.066						1	mg/l			
y. Tin, Total (7440-31-5)		X											
z. Titanium, Total (7440-32-6)		X											

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.

One table (in 50/60 pages) for each Column. 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. of No. of Analyses	b. Mass			
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass					
METALS, CYANIDE AND TOTAL PHENOLS														
1M. Antimony Total (7440-36-0)	X									1	mg/l			
2M. Arsenic, Total (7440-38-2)	X									1	mg/l			
3M. Beryllium Total (7440-41-7)	X									1	mg/l			
4M. Cadmium Total (7440-43-9)	X									1	mg/l			
5M. Chromium Total (7440-43-9)	X									1	mg/l			
6M. Copper Total (7550-50-8)	X									1	mg/l			
7M. Lead Total (7439-92-1)	X									1	mg/l			
8M. Mercury Total (7439-97-6)	X									1	mg/l			
9M. Nickel, Total (7440-02-0)	X									1	mg/l			
10M. Selenium, Total (7782-49-2)	X									1	mg/l			
11M. Silver, Total (7440-28-0)	X									1	mg/l			

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. 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)	X									1				
13M. Zinc, Total (7440-66-6)	X									1				
14M. Cyanide, Total (57-12-5)	X									1				
15M. Phenols, Total	X									1				
DIOXIN														
2,3,7,8 Tetra- chlorodibenzo, P, Dioxin (1784-01-6)			X	DESCRIBE RESULTS:										
GC/MS FRACTION – VOLATILE COMPOUNDS														
1V. Acrolein (107-02-8)			X											
2V. Acrylonitrile (107-13-1)			X											
3V. Benzene (71-43-2)			X											
5V. Bromoform (75-25-2)			X											
6V. Carbon Tetrachloride (56-23-5)			X											
7V. Chloro- benzene (108-90-7)			X											
8V. Chlorodibromomethane (124-48-1)			X											

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. Long-Term Avg Value	b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass		(1) Concentration	(2) Mass	
9V. Chloroethane (74-00-3)			X										
10V. 2-Chloro-ethylvinyl Ether (110-75-8)			X										
11V. Chloroform (67-66-3)			X										
12V. Dichloro-bromomethane (75-71-8)			X										
14V. 1,1-Dichloroethane (75-34-3)			X										
15V. 1,2-Dichloroethane (107-06-2)			X										
16V. 1,1-Dichloroethylene (75-35-4)			X										
17V. 1,2-Di-chloropropane (78-87-5)			X										
18V. 1,3-Dichloropro-pylene (452-75-6)			X										
19V. Ethyl-benzene (100-41-4)			X										
20V. Methyl Bromide (74-83-9)			X										

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. 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)			X										
22V. Methylene Chloride (75-00-2)			X										
23V. 1,1,2,2- Tetrachloro- ethane (79-34-5)			X										
24V. Tetrachloro- ethylene (127-18-4)			X										
25V. Toluene (108-88-3)			X										
26V. 1,2-Trans- Dichloro- ethylene (156-60-5)			X										
27V. 1,1,1-Tri- chloroethane (71-55-6)			X										
28V. 1,1,2-Tri- chloroethane (79-00-5)			X										
29V. Trichloro- ethylene (79-01-6)			X										
30V. Vinyl Chloride (75-01-4)			X										

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 Concentration		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Long-Term Avg Value (1)	(2)	b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass		Concentration	Mass	
GC/MS FRACTION – ACID COMPOUNDS													
1A. 2-Chloro-phenol (95-57-8)			X										
2A. 2,4-Dichloro-phenol (120-83-2)			X										
3A. 2,4-Dimethyphenol (105-67-9)			X										
4A. 4,6-Dinitro-o-cresol (534-52-1)			X										
5A. 2,4-Dinitro-phenol (51-28-5)			X										
6A. 2-Nitro-phenol (88-75-5)			X										
7A. 4-Nitro-phenol (100-02-7)			X										
8A. P-chloro-m-cresol (59-50-7)			X										
9A. Pentachloro-phenol (87-88-5)			X										
10A. Phenol (108-05-2)			X										
11A. 2,4,6-Tri-chlorophenol (88-06-2)			X										
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS													
1B. Acenaphthene (83-32-9)			X										

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- phylyene (208-96-8)			X												
3B. Anthra- cene (120-12-7)			X												
4B. Benzidine (92-87-5)			X												
5B. Benzo(a)- anthracene (56-55-3)			X												
6B. Benzo(a)- pyrene (50-32-8)			X												
7B. 3,4-Benzo- fluoranthene (205-99-2)			X												
8B. Benzo(ghi) perylene (191-24-2)			X												
9B. Benzo(k)- fluoranthene (207-08-9)			X												
10B. Bis(2- chlor- chlor- oethoxy)- methane (111-91-1)			X												
11B. Bis (2-chlor- oisopropyl)- Ether			X												
12B. Bis (2-ethyl- hexyl)- phthalate (117-81-7)			X												

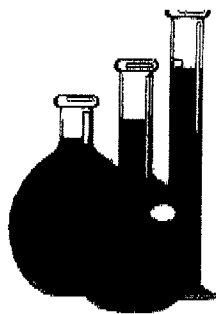
Part C – Continued														
1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT						4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)	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

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 Concentration		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 Concentration		b. No. of Analyses		
				(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																	
24B. Dimethyl Phthalate (131-11-3)			X														
25B. Di-N-butyl Phthalate (84-74-2)			X														
26B. 2,4-Dinitro-toluene (121-14-2)			X														
27B. 2,6-Dinitro-toluene (606-20-2)			X														
28B. Di-n-octyl Phthalate (117-84-0)			X														
29B. 1,2-diphenylhydrazine (as azobenzene) (122-66-7)			X														
30B. Fluoranthene (208-44-0)			X														
31B. Fluorene (86-73-7)			X														
32B. Hexachlorobenzene (118-71-1)			X														
33B. Hexachlorobutadiene (87-68-3)			X														
34B. Hexachlorocyclopentadiene (77-47-4)			X														

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.		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)			X												
36B. Indeno-(1,2,3-oc)-Pyrene (193-39-5)			X												
37B. Isophorone (78-59-1)			X												
38B. Naphthalene (91-20-3)			X												
39B. Nitrobenzene (98-95-3)			X												
40B. N-Nitrosodimethylamine (62-75-9)			X												
41B. N-nitrosodi-n-propylamine (621-64-7)			X												
42B. N-nitrosodiphenylamine (86-30-6)			X												
43B. Phenanthrene (85-01-8)			X												
44B. Pyrene (129-00-0)			X												
45B. 1,2,4 Trichlorobenzene (120-82-1)			X												

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 (1) Concentration (2) Mass		b. Maximum 30-Day Value (if available) (1) Concentration (2) Mass		c. Long-Term Avg. Value (if available) (1) Concentration (2) Mass		d. No. of Analyses	a. Long-Term Avg. Value (1) Concentration (2) Mass	b. No. of Analyses	
GC/MS FRACTION – PESTICIDES													
1P. Aldrin (309-00-2)			X										
2P. α -BHC (319-84-6)			X										
3P. β -BHC (58-89-9)			X										
4P. gamma-BHC (58-89-9)			X										
5P. δ -BHC (319-86-8)			X										
6P. Chlordane (57-74-9)			X										
7P. 4,4'-DDT (50-29-3)			X										
8P. 4,4'-DDE (72-55-9)			X										
9P. 4,4'-DDD (72-54-8)			X										
10P. Dieldrin (60-57-1)			X										
11P. α -Endosulfan (115-29-7)			X										
12P. β -Endosulfan (115-29-7)			X										
13P. Endosulfan Sulfate (1031-07-8)			X										
14P. Endrin (72-20-8)			X										

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 (1) Concentration (2) Mass		b. Maximum 30-Day Value (if available) (1) Concentration (2) Mass		c. Long-Term Avg. Value (if available) (1) Concentration (2) Mass		d. No. of Analyses	a. Long-Term Avg Value (1) Concentration (2) Mass	b. No. of Analyses		
GC/MS FRACTION – PESTICIDES														
15P. Endrin Aldehyde (7421-93-4)			X											
16P. Heptachlor (76-44-8)			X											
17P. Heptachlor Epoxide (1024-57-3)			X											
18P. PCB-1242 (53469-21-9)			X											
19P. PCB-1254 (11097-69-1)			X											
20P. PCB-1221 (11104-28-2)			X											
21P. PCB-1232 (11141-16-5)			X											
22P. PCB-1248 (12672-29-6)			X											
23P. PCB-1260 (11096-82-5)			X											
24P. PCB-1016 (12674-11-2)			X											
25P. Toxaphene (8001-35-2)			X											

**Conjun Laboratories, Inc**

P.O. Box 187
Isom, Kentucky 41824
606-633-8027

LAB MANAGER
Janet Madden

To: Logan Gap Development

Location: Wolfpen Branch
SW-1

Date: March 24, 2010

Permit No.: 860-0432

Results: "Trace Element Study"

Sample Date	04-06-10					
Sample I.D.	TES-1					
PH	8.09					
Alkalinity	106					
Acidity	0					
Total Suspended Solids	6					
Total Iron	0.56					
Dissolved Iron	0.10					
Total Manganese	0.066					
Dissolved Manganese	0.05					
Sulfates	92.5					
Specific Conductivity (μ mhos/cm)	509					
Total Dissolved Solids	288					
Settleable Solids	0.0					
Hardness - ppm	200					
Flow (cfs)	.004					
Temperature °C	13					
Appearance	A-Clear					

Analysis per Standard Methods---Latest Revision unless otherwise indicated.
11 results reported in milligrams per liter unless otherwise indicated.

Sampled by: Lab

Respectfully Submitted

Analysis Sheet #040610-ASA

Janet Madden



APPALACHIAN STATES ANALYTICAL, L.L.C.

PO Box 520
Shelbiana, KY 41562

Conjun Laboratories
POB 187
Isom, KY 41824

Date Received 4/06/10
Date Reported 4/20/10
Order Number 2010-03598

ATTN: Janet Madden

TEST DESCRIPTION	RESULT	UNITS	METHOD	MDL	DATE	TECH
Fraction	2010-03598001					
Sample I.D	TES-1		Wolfpen Br. (SW-1)			
Date Sampled	4/06/2010					
Antimony, Total	<0.002	mg/l	EPA 204.2	0.002	4/17/2010	SC
Arsenic, Total	<0.001	mg/l	EPA 205.2	0.001	4/19/2010	SJ
Beryllium, Total	<0.005	mg/l	EPA 210.1	0.005	4/15/2010	SJ
Cadmium, Total	<0.005	mg/l	EPA 213.1	0.005	4/15/2010	SJ
Copper, Total	<0.01	mg/l	EPA 220.1	0.01	4/12/2010	SJ
Lead, Total	<0.05	mg/l	EPA 239.1	0.05	4/12/2010	SJ
Mercury, Total	<0.0002	mg/l	EPA 245.1	0.0002	4/07/2010	TT
Nickel, Total	<0.005	mg/l	EPA 249.1	0.005	4/07/2010	SJ
Selenium, Total	<0.002	mg/l	EPA 270.2	0.002	4/12/2010	SJ
Thallium, Total	<0.0007	mg/l	EPA 279.2	0.0007	4/14/2010	SJ
Zinc, Total	<0.005	mg/l	EPA 289.1	0.005	4/13/2010	SJ
Cyanide, Total	<0.01	mg/l	SM 4500CN-C,E	0.01	4/13/2010	AH
Phenols	<0.02	mg/l	EPA 420.1	0.02	4/15/2010	SC
Silver, Total	<0.01	mg/l	EPA 272.1	0.01	4/15/2010	SJ
Chromium, Total	<0.001	mg/l	SM 3113 B	0.001	4/07/2010	SJ
BOD, 5-day	<3	mg/l	SM 5210B	3	4/07/2010	TV
Chemical Oxygen Demand	14	mg/l	Hach 8000	4	4/12/2010	TV

* May not be within monthly permit requirements.

Submitted By:

Stann Clapton