

**BROOKHAVEN**  
NATIONAL LABORATORY

Managed by Brookhaven Science Associates  
for the U.S. Department of Energy

October 21, 2003

Mr. Scott Mallette  
Director, Operations Management Division  
U. S. Department of Energy  
Brookhaven Group  
Upton, NY 11973

Dear Mr. Mallette:

**SUBJECT: NPDES - Discharge Monitoring Report (DMR) for September 2003**

Included as Attachment I, please find the DMR for the month of August 2003. Chemical analyses for the reported parameters are conducted by NYS Department of Health certified laboratories. As of June 1, 2003, General Engineering Laboratories (GEL) will be performing most of the analyses on all SPDES samples. The BNL Analytical Services Laboratory will be performing volatile organic compound analyses whereas H2M Labs, Inc. will be performing the BOD<sub>5</sub>, Nitrogen series, and fecal coliform analyses. Copies of the analytical reports are contained in Attachments IV and V. Field measured parameters (pH, settleable solids, flow) are recorded and/or measured by the Plant Engineering Division, Sewage Treatment Plant Operators or the Environmental and Waste Management Services Division, Field Sampling Team.

With the exception of one excursion for the total aluminum concentration at Outfall 008, review of the analytical data shows that all parameters met their respective SPDES effluent limitations this reporting period. With regard to aluminum, the sample collected on July 11, 2003, exhibited an aluminum concentration of 2.27 mg/L. A filtered sample collected at the same time had an aluminum concentration of 0.08 mg/L. The excursion is therefore attributed to sediments entrained in the stormwater system. Please see Attachment II for the non-compliance report on this excursion event.

Attachment III contains amended DMR data sheets for Outfalls 002 and 005 for August 2003. After the August DMR was submitted, it was discovered that the calculation for the average daily flow for both outfalls contained an error. The corrected flow data is based on a factor of 100 (factory default) instead of a factor of 1000. It is believed that the flow monitoring equipment reverted to the factory default after the blackout of August 14, 2003.

Collection and analysis of the SPDES permit samples are performed in accordance with the guidelines of the BNL Quality Assurance program. These guidelines include the routine calibration of instruments, standard operating procedures for collection and analysis of samples, use of standard methods of analysis, and validation of the contractor analytical data by the BNL analytical services



REGISTERED TO  
ISO 14001: 1996



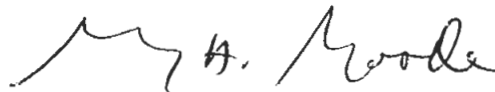
NSF's Registration Program  
is accredited by the American  
National Standards Institute  
Registration Accreditation Board

laboratory. Brookhaven National Laboratory personnel collected all samples. A Quality Assurance inspection is performed periodically on contractor laboratories. The Quality Assurance documentation is available from the Environmental and Waste Management Services Division and Plant Engineering Divisions. Based on this information, we believe the values reported on the DMR are representative of the effluent from the BNL during the month of September 2003.

Although it is no longer necessary for BNL to include copies of the laboratory analysis when submitting the DMR, we are including them in the package submitted to you for recordkeeping purposes. You do not have to forward the analytical reports to the NYSDEC-Region 1 or SCDHS when submitting the DMR.

Please sign each page of the computer generated DMR where indicated and transmit it to the New York State Department of Environmental Conservation and the Suffolk County Department of Health Services no later than October 28, 2003. If there are any questions regarding the information contained on the DMR or the analytical data packages, please do not hesitate to contact R. Lee at extension 3148 or M. Allocco at extension 3166.

Sincerely,



George A. Goode  
Environmental & Waste Management Services  
Division Manager

GAG/MA:car

- Attachment I: Discharge Monitoring Report for September 2003.
- Attachment II: Non-Compliance Report for Quarterly SPDES Excursion at Outfall 008.
- Attachment III: Amended DMR data sheets for Outfall 002 and 005 for August 2003
- Attachment IV: Analytical Results from H2M Labs Inc., the BNL Analytical Services Laboratory, and GEL LLC for samples collected on 9/8/03, 9/10/03, and 9/12/03 from Outfall 001.
- Attachment V: Analytical Results from H2M Labs Inc., the BNL Analytical Services Laboratory, GEL LLC, and CHEMTEX, Inc. for samples collected from Outfalls 001A, 001B, 001D, 001F, 002, 002B, 005, 006A, 006B, 008, and 010.

cc:	M. Allocco	w/ attachments	M. Baldwin	w/ attachments
	M. Bebon	w/o attachments	W. Chaloupka	w/ attachments
	S. Dierker	w/o attachments	G. Goode	w/o Attachments
	G. Granzen	w/o attachments	C. Johnson	w/o attachments
	R. Lee	w/ attachments	K. Klaus	w/ attachments

E. Lessard w/o attachments  
E. Murphy w/ attachments  
V. Radeka w/o attachments  
J. Tarpinian w/o attachments

D. Lowenstein w/o attachments  
A. Queirolo w/o attachments  
B. Style w/o attachments  
D. Van Duyne w/ attachments

EC62ER.03

**ATTACHMENT I**  
**BROOKHAVEN NATIONAL LABORATORY**  
**SPDES PERMIT NO. NY0005835**  
**DISCHARGE MONITORING REPORT FOR SEPTEMBER 2003**  
**FOR OUTFALLS NO. 001 – 010**

**Brookhaven National Laboratory**  
**SPDES Permit No. NY0005835**  
**Discharge Monitoring Report for September 2003**  
**Discharge Monitoring Report Notes:**

1. The reported concentration is estimated at less than the method detection limit but greater than the instrument detection limit.
2. Flow is estimated based upon an instantaneous flow measurement and the assumption that flow continued for the entire day (i.e., 1,440 minutes).
3. Since flow records are maintained on a weekly or monthly basis, the flow rate provided is the daily average.
4. PCBs were not detected above the detection limit for any congener. Total PCBs have been reported as less than the maximum of the individual detection limits.
5. Two individual photographic processors generate photographic rinse waters discharged from Building 197B. Wastewater samples are collected from each processor and analyzed separately. Table I summarizes the individual results. The maximum concentrations and total average flow have been reported in the DMR.

Location	Flow	pH	Total Nitrogen	Cyanide	Silver	Phenolics
1-87 <sup>(a)</sup>	Shutdown	Shutdown	Shutdown	Shutdown	Shutdown	Shutdown
1-93B	5.4 GPD	7.4 SU	1.34 mg/L	≤ 1.72 µg/L	16.4 µg/L	< 0.002 µg/L
<b>Total Flow</b>	5.4 GPD					

<sup>(a)</sup>The photographic processor in Bldg. 197, Room 1-87 was shutdown during the third quarter of 2003 and is scheduled for dismantling.

6. The total aluminum concentration at Outfall 008 was 2.27 mg/L on 7/11/2003, which exceeded the permit limit of 2.0 mg/L. Please see Attachment II for an explanation of this excursion.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)  
 NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR  
 NY0005835 001 A Discharge Number (SUBR 01)  
 F - FINAL

ACID/CAUSTIC CLEANG RINSE 535B  
 \*\*\* No Discharge \*\*\*

Monitoring Period	
From	To
YR MO DAY	YR MO DAY
03 07 01	03 09 30

Note: Read Instructions before completing this form

PARAMETER	SAMPLE MEASUREMENT PERMIT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW RATE		124	*****	(07)	*****	*****		0	01/90	RC
00056 1 0 1	PERMIT REQUIREMENT	REPORT DAILY AV	*****	****	*****	*****			QTRLY	RCORDR
PH	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	GPD	6.1	6.1	(12)	0	01/90	GR
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	****	REPORT MINIMUM	REPORT MAXIMUM	SU		QTRLY	GRAB
EFFLUENT GROSS VALUE		*****	*****	****	*****	11	(28)	0	01/90	GR
BIS (2-ETHYLHEXYL) PHTHALATE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	****	*****	REPORT DAILY MX	UG/L		QTRLY	GRAB
39100 1 0 0	PERMIT REQUIREMENT	*****	*****	****	*****	1	(28)	0	01/90	GR
EFFLUENT GROSS VALUE		*****	*****	****	*****	REPORT DAILY MX	UG/L		QTRLY	GRAB
DI-N-BUTYL PHTHALATE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	****	*****					
See Note 1										
39110 1 0 0	PERMIT REQUIREMENT	*****	*****	****	*****					
EFFLUENT GROSS VALUE		*****	*****	****	*****					
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.									
Mr. Michael Holland Area Group Manager										
Telephone 631-344-3424										
Typed or Printed	Signature of Principal Executive Officer or Authorized Agent									
Comments and Explanation of any violations (Reference all attachments here)	Date Signed									

NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCH TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

NY0005835 Permit Number  
 001 B Discharge Number  
 (SUBR 01)  
 F - FINAL  
 MAJOR RINSE FROM CENTRL DEGREASR 498  
 \*\*\* No Discharge

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30

Note: Read Instructions before completing this form

PARAMETER	X	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE			
FLOW RATE	SAMPLE MEASUREMENT	265	*****	(07)	*****	*****	0	01/90	RC
00056 1 0 1	PERMIT REQUIREMENT	REPORT DAILY AV	*****	GPD	*****	*****		QTRLY	RCORDR
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		6.9	6.9	0	01/90	GR
PH	PERMIT REQUIREMENT	*****	*****		REPORT MINIMUM	REPORT MAXIMUM		QTRLY	GRAB
00400 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	116	0	01/90	GR
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****		*****	314	0	01/90	GRAB
CHROMIUM, TOTAL (AS CR)	SAMPLE MEASUREMENT	*****	*****		*****	5218	0	01/90	GR
01034 1 0 0	PERMIT REQUIREMENT	*****	*****		*****	REPORT DAILY MX		QTRLY	GRAB
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	54.6	0	01/90	GR
COPPER, TOTAL (AS CU)	PERMIT REQUIREMENT	*****	*****		*****	REPORT DAILY MX		QTRLY	GRAB
01042 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	34.3	0	01/90	GR
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****		*****	REPORT DAILY MX		QTRLY	GRAB
IRON, TOTAL (AS FE)	SAMPLE MEASUREMENT	*****	*****		*****	*****		QTRLY	GRAB
01045 1 0 0	PERMIT REQUIREMENT	*****	*****		*****	*****		QTRLY	GRAB
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	*****		QTRLY	GRAB
MANGANESE, TOTAL (AS MN)	PERMIT REQUIREMENT	*****	*****		*****	*****		QTRLY	GRAB
01055 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	*****		QTRLY	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****		*****	*****		QTRLY	GRAB
NICKEL, TOTAL (AS NI)	SAMPLE MEASUREMENT	*****	*****		*****	*****		QTRLY	GRAB
01067 1 0 0	PERMIT REQUIREMENT	*****	*****		*****	*****		QTRLY	GRAB
EFFLUENT GROSS VALUE	NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.							

Mr. Michael Holland Area Group Manager	Telephone 631-344-3424
Typed or Printed	Date Signed
Signature of Principal Executive Officer or Authorized Agent	

Comments and Explanation of any violations (Reference all attachments here)  
 NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCH TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR  
 NY0005835 001 B Discharge Number (SUBR 01)  
 Permit Number F - FINAL

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30  
 RINSE FROM CENTRL DEGREASR 498  
 \*\*\* No Discharge \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
ZINC, TOTAL (AS ZN)		*****	*****	*****	*****	*****	*****	*****	*****	*****
01092 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
1,2-DICHLOROETHANE	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
32103 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
CHLOROFORM	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
32106 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
1,1,1-TRICHLORO-ETHANE	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
34506 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
DICHLOROBROMOMETHANE EFFLUENT	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
32101 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
BIS (2-ETHYLHEXYL) PHTHALATE See Note 1	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
39100 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
DI-N-BUTYL PHTHALATE	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
39110 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	*****	*****

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/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager  
 Signature of Principal Executive Officer or Authorized Agent  
 Telephone 631-344-3424  
 Date Signed

Comments and Explanation of any violations (Reference all attachments here)

NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCH TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS BROOKHAVEN NATIONAL LABORATORY  
BROOKHAVEN AREA OFFICE  
UPTON NY 11973  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION UPTON NY 11973  
ATTN: GEORGE MALOSH, GROUP MGR

NY0005835 Permit Number  
001 B Discharge Number  
(SUBR 01)  
F - FINAL

RINSE FROM CENTRL DEGREA SR 498  
\*\*\* No Discharge

Monitoring Period		From		To	
YR	MO	DAY	YR	MO	DAY
03	07	01	03	09	30

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
TETRACHLOROETHYLENE	*****	*****	*****	*****	*****	< 1.0	0	01/90	GR
85814 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	REPORT DAILY MX		QTRLY	GRAB
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT									
PERMIT REQUIREMENT									
<p>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.</p>									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	Signature of Principal Executive Officer or Authorized Agent	
Mr. Michael Holland Area Group Manager		
Telephone	Date Signed	
631-344-3424		

Comments and Explanation of any violations (Reference all attachments here)  
NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCH TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

NY0005835 Permit Number  
 001 D Discharge Number  
 (SUBR 01)  
 F - FINAL

MAJOR  
 PHOTOPROCESSNG RINSE FROM 197B  
 \*\*\* No Discharge

Monitoring Period		From		To	
YR	MO	DAY	YR	MO	DAY
03	07	01	03	09	30

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	MAXIMUM			
FLOW RATE	5.4	*****	*****	*****	0	01/90	RC
00056 1 0 1 EFFLUENT GROSS VALUE	REPORT DAILY AV	*****	*****	*****	0	QTRLY	RCORDR
PH	*****	*****	7.4	7.4	0	01/90	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	REPORT MINIMUM	REPORT MAXIMUM	0	QTRLY	GRAB
NITROGEN, TOTAL (AS N)	*****	*****	*****	1.3	0	01/90	GR
00600 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	REPORT DAILY MX	0	QTRLY	GRAB
CYANIDE, TOTAL (AS CN)	*****	*****	*****	< 1.72	0	01/90	GR
00720 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	REPORT DAILY MX	0	QTRLY	GRAB
SILVER, TOTAL (AS AG)	*****	*****	*****	16.4	0	01/90	GR
01077 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	REPORT DAILY MX	0	QTRLY	GRAB
PHENOLICS, TOTAL RECOVERABLE	*****	*****	*****	<0.002	0	01/90	GR
32730 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	REPORT DAILY MX	0	QTRLY	GRAB

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/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM MANHOLE NEAREST THE BUILDING. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR (SUBR 01) F - FINAL  
 BOILER BLOWDN FROM 244,405,ETC  
 \*\*\* No Discharge \*\*\*

NY0005835 Permit Number  
 001 E Discharge Number

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30

Note: Read Instructions before completing this form

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW RATE	SAMPLE MEASUREMENT	30	*****	(07)	*****	*****	*****	0	01/90	RC
00056 1 0 1 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT DAILY AV	*****	GPD	*****	*****	*****		QTRLY	RCORDR
PH	SAMPLE MEASUREMENT	*****	*****		9.5	10.0	(12)	0	01/90	GR
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	REPORT MINIMUM	REPORT MAXIMUM	SU		QTRLY	GRAB
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Signature of Principal Executive Officer or Authorized Agent

Telephone  
 631-344-3424

Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSEDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCHARGE TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN NATIONAL LABORATORY  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

Permit Number NY0005835  
 Discharge Number 001 F  
 Monitoring Period From 03 07 To 09 30  
 YR MO DAY YR MO DAY  
 MAJOR (SUBR 01)  
 F - FINAL  
 COOLING TOWER WTR & BLOWDN 902  
 \*\*\* No Discharge  \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM			
FLOW RATE	5265	*****	*****	*****	*****	0	01/90	RC
00056 1 0 1 EFFLUENT GROSS VALUE	REPORT DAILY AV	*****	*****	*****	*****	0	QTRLY	RCORDR
PH	*****	*****	8.0	*****	8.0	0	01/90	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	REPORT MINIMUM	*****	REPORT MAXIMUM	0	QTRLY	GRAB
PROPYLENE GLYCOL MONOBUTYL ETHER 49875 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	< 500	0	01/90	GR
	*****	*****	*****	*****	REPORT DAILY MX	0	QTRLY	GRAB
					UG/L			
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/TITLE PRINCIPAL EXECUTIVE OFFICER		Mr. Michael Holland Area Group Manager						
Typed or Printed		Signature of Principal Executive Officer or Authorized Agent						
		Telephone 631-344-3424						
		Date Signed						

Comments and Explanation of any violations (Reference all attachments here)  
 NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCHARGE TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR (SUBR 01)  
 F - FINAL  
 PROCESS SANIT & STORMWTR RNOFF

\*\*\* No Discharge

NY0005835		001 M	
Permit Number		Discharge Number	
Monitoring Period			
From	To		
YR MO DAY	YR MO DAY	YR MO DAY	YR MO DAY
03 07 01	03 09 30		

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	UNITS			
TEMPERATURE, WATER	*****	*****	*****	*****	*****	(15)	0	01/01	GR
DEG. FAHRENHEIT	*****	*****	*****	*****	*****	73			
00011 1 0 0	*****	*****	*****	*****	*****	90			
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	DAILY MX	0	DAILY	GRAB
BOD, 5-DAY	*****	*****	*****	*****	*****	< 2	0	03/30	24
(20 DEG. C)	*****	*****	*****	*****	*****	< 2			
000310 1 0 0	*****	*****	*****	*****	*****	10			
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	DAILY AV	0	ONCE/ MONTH	COMP24
PH	*****	*****	*****	*****	*****	DAILY MX			
00400 1 0 0	*****	*****	*****	*****	*****	6.7	0	01/01	GR
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	9.0			
SOLIDS, TOTAL	*****	*****	*****	*****	*****	MAXIMUM			
SUSPENDED	*****	*****	*****	*****	*****	5.8			
00530 1 0 0	*****	*****	*****	*****	*****	MINIMUM	0	DAILY	GRAB
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	1.0	0	03/30	24
SOLIDS, SETTLEABLE	*****	*****	*****	*****	*****	0.65			
00545 1 0 0	*****	*****	*****	*****	*****	10	0	ONCE/ MONTH	COMP24
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	DAILY AV			
NITROGEN, TOTAL	*****	*****	*****	*****	*****	0.0	0	01/01	GR
(AS N)	*****	*****	*****	*****	*****	0.1			
00600 1 0 0	*****	*****	*****	*****	*****	DAILY MX			
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	5.5	0	DAILY	GRAB
NITROGEN, AMMONIA	*****	*****	*****	*****	*****	10			
TOTAL (AS N)	*****	*****	*****	*****	*****	DAILY MX	0	ONCE/ MONTH	COMP24
00610 1 0 0	*****	*****	*****	*****	*****	< 0.10	0	03/30	24
EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	2			
NAME/TITLE	PRINCIPAL EXECUTIVE OFFICER								
Mr. Michael Holland		Area Group Manager							
Typed or Printed									
Comments and Explanation of any violations (Reference all attachments here)									
QUANTITIES OR CONCENTRATIONS OF RADIOACTIVITY IN EFFLUENT ARE SUBJECT TO REQUIREMENTS OF THE USDOE INCL BUT NOT LIMITED TO USDOE ORDER 5400.5.									
APPROX 15% OF STP DISCHARGE CAN BE TO GW VIA EXFILTRATION FROM SFBS. SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.									

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.

Telephone  
631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
Date Signed

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME USDOE  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR  
 (SUBR 01)  
 F - FINAL  
 PROCESS SANIT & STORMWTR RNOFF  
 \*\*\* No Discharge

NY0005835		001 M		Discharge Number	
Permit Number					
Monitoring Period					
From			To		
YR	MO	DAY	YR	MO	DAY
03	07	01	03	09	30

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUANTITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	MINIMUM	MAXIMUM				UNITS
PHOSPHORUS, TOTAL (AS P)	*****	*****	*****	0.78	(19)	0	03/30	24
00665 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	REPORT DAILY MX	MG/L	0	ONCE/MONTH	COMP24
CYANIDE, TOTAL (AS CN)	*****	*****	*****	< 1.72	(28)	0	03/30	GR
00720 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	100 DAILY MX	UG/L	0	TWICE/MONTH	GRAB
COPPER, TOTAL (AS CU)	*****	*****	*****	0.043	(19)	0	03/30	24
01042 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	0.15 DAILY MX	MG/L	0	ONCE/MONTH	COMP24
IRON, TOTAL (AS FE)	*****	*****	*****	0.16	(19)	0	03/30	24
01045 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	0.37 DAILY MX	MG/L	0	ONCE/MONTH	COMP24
LEAD, TOTAL (AS PB)	*****	*****	*****	0.0021	(19)	0	03/30	24
01051 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	0.019 DAILY MX	MG/L	0	ONCE/MONTH	COMP24
NICKEL, TOTAL (AS NI)	*****	*****	*****	0.0037	(19)	0	03/30	24
01067 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	0.11 DAILY MX	MG/L	0	ONCE/MONTH	COMP24
SILVER, TOTAL (AS AG)	*****	*****	*****	0.0021	(19)	0	03/30	24
01077 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	0.015 DAILY MX	MG/L	0	ONCE/MONTH	COMP24

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/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager  
 Typed or Printed

Comments and Explanation of any violations (Reference all attachments here)

QUANTITIES OR CONCENTRATIONS OF RADIOACTIVITY IN EFFLUENT ARE SUBJECT TO REQUIREMENTS OF THE USDOE INCL BUT NOT LIMITED TO USDOE ORDER 5400.5. APPROX 15% OF STP DISCHARGE CAN BE TO GW VIA EXFILT FROM SFBS. SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.

Signature of Principal Executive Officer or Authorized Agent

Signature of Principal Executive Officer or Authorized Agent

Signature of Principal Executive Officer or Authorized Agent

Telephone  
 631-344-3424

Date Signed



PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

Permit Number NY0005835  
 Discharge Number 001 M  
 Monitoring Period From YR MO DAY YR MO DAY To YR MO DAY YR MO DAY  
 03 07 01 03 09 30  
 MAJOR (SUBR 01) F - FINAL  
 PROCESS SANIT & STORMWTR RNOFF  
 \*\*\* No Discharge  \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
ZINC, TOTAL (AS ZN)	*****	*****	*****	*****	*****	0.06	(19)	0	03/30	24
01092 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	0.1 DAILY MX	MG/L	0	ONCE/MONTH	COMP24
TOLUENE	*****	*****	*****	*****	*****	< 2	(28)	0	03/30	GR
34010 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	5 DAILY MX	UG/L	0	TWICE/MONTH	GRAB
METHYLENE CHLORIDE	*****	*****	*****	*****	*****	< 2	(28)	0	03/30	GR
34423 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	5 DAILY MX	UG/L	0	TWICE/MONTH	GRAB
1,1,1-TRICHLORO-ETHANE	*****	*****	*****	*****	*****	< 2	(28)	0	03/30	GR
34506 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	5 DAILY MX	UG/L	0	TWICE/MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	0.36	0.45	(03)	*****	*****	*****	UG/L	0	99/99	RC
50050 1 0 0 EFFLUENT GROSS VALUE	REPORT DAILY AV	2.3 DAILY MX	MGD	*****	*****	*****	*****	0	CONTINUOUS	RCORDR
MERCURY, TOTAL (AS HG)	*****	*****	*****	*****	*****	0.0001	(19)	0	03/30	24
71900 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	0.0008 DAILY MX	MG/L	0	ONCE/MONTH	COMP24
COLIFORM, FECAL GENERAL	*****	*****	*****	*****	*****	< 2	(13)	0	03/30	GR
74055 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	*****	200 DAILY AV	#	0	ONCE/MONTH	GRAB

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.

Telephone  
631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 QUANTITIES OR CONCENTRATIONS OF RADIOACTIVITY IN EFFLUENT ARE SUBJECT TO REQUIREMENTS OF THE USDOE INCL BUT NOT LIMITED TO USDOE ORDER 5400.5. APPROX 15% OF STP DISCHARGE CAN BE TO GW VIA EXFILTR FROM SFBS. SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

NY0005835 Permit Number  
 001 M Discharge Number  
 (SUBR 01)  
 F - FINAL

MAJOR PROCESS SANIT & STORMWTR RNOFF

\*\*\* No Discharge  \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM			
2-BUTANONE	*****	*****	*****	*****	< 2	0	03/30	GR
78356 1 0 0	*****	*****	*****	*****	50		TWICE/MONTH	GRAB
EFFLUENT GROSS VALUE	*****	*****	*****	*****	DAILY MX			
BOD, 5-DAY PERCENT REMOVAL	*****	*****	> 95	*****	*****	0	01/30	CA
81010 K 0 0	*****	*****	85	*****	*****		ONCE/MONTH	CALCTD
PERCENT REMOVAL	*****	*****	MO AV MN	*****	*****			
SOLIDS, SUSPENDED PERCENT REMOVAL	*****	*****	> 98	*****	*****	0	01/30	CA
81011 K 0 0	*****	*****	85	*****	*****		ONCE/MONTH	CALCTD
PERCENT REMOVAL	*****	*****	MO AV MN	*****	*****			
SAMPLE MEASUREMENT								
PERMIT REQUIREMENT								
SAMPLE MEASUREMENT								
PERMIT REQUIREMENT								
SAMPLE MEASUREMENT								
PERMIT REQUIREMENT								
SAMPLE MEASUREMENT								
PERMIT REQUIREMENT								
SAMPLE MEASUREMENT								
PERMIT REQUIREMENT								

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/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager  
 Typed or Printed

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 QUANTITIES OR CONCENTRATIONS OF RADIOACTIVITY IN EFFLUENT ARE SUBJECT TO REQUIREMENTS OF THE USDOE INCL BUT NOT LIMITED TO USDOE ORDER 5400.5. APPROX 15% OF STP DISCHARGE CAN BE TO GW VIA EXFILT FROM SFBS. SEE PERMIT FOR ADDITIONAL NOTES COMMENTS AND REQUIREMENTS.



PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)  
 NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR (SUBR 01)  
 F - FINAL  
 PROCESS SANIT EFFL & STORMWTR  
 \*\*\* No Discharge \*\*\*\*

NY0005835		001 Q	
Permit Number		Discharge Number	
Monitoring Period			
From	To		
YR	MO	DAY	MO
03	07	01	09
			30

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	UNITS			
POLYCHLORINATED BIPHENYLS (PCBS) 39516 1 0 0 See Note 4 EFFLUENT GROSS VALUE	*****	*****	*****	*****	< 0.08	(28)	0	03/90	GR
	*****	*****	*****	*****	REPORT DAILY MIX	UG/L		QTRLY	GRAB
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									
SAMPLE MEASUREMENT PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent

Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 PCB ANALYSIS TO USE EPA METHOD 608 WITH AN MDL GOAL OF 0.065 PPB

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR  
 NY0005835 Permit Number  
 002 B Discharge Number  
 F - FINAL (SUBR 01)

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30  
 RF(1004) & BRAHMS(1002) BLOWDN  
 \*\*\* No Discharge \*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE			
PH	*****	*****	7.4	*****	0	04/30	GR
	*****	*****	REPORT MINIMUM	*****	0	ONCE/MONTH	GRAB
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	0	01/30	GR
OIL & GREASE See Note 1	*****	*****	*****	*****	0	ONCE/MONTH	GRAB
	*****	*****	*****	*****	0	ONCE/MONTH	GRAB
00556 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	0	04/30	RC
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	*****	0.002	*****	*****	0	ONCE/MONTH	RC
50050 1 0 0 See Note 3 EFFLUENT GROSS VALUE	*****	*****	*****	*****	0	ONCE/MONTH	RCORDR
MEASUREMENT							
PERMIT REQUIREMENT							
SAMPLE MEASUREMENT							
PERMIT REQUIREMENT							
SAMPLE MEASUREMENT							
PERMIT REQUIREMENT							
SAMPLE MEASUREMENT							
PERMIT REQUIREMENT							
SAMPLE MEASUREMENT							
PERMIT REQUIREMENT							

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.		Telephone 631-344-3424
Mr. Michael Holland Area Group Manager	Signature of Principal Executive Officer or Authorized Agent	Date Signed	
Typed or Printed			

Comments and Explanation of any violations (Reference all attachments here)  
 DISCHARGE MAY BE DIRECTED TO SURROUNDING LOW LYING AREA INSIDE THE ROADWAY THAT IS INSIDE RHIC RING. ONCE STORMWATER COLLECTION SYSTEM IS EXTENDED TO BLDG 1010 & A NEW RECHARGE BASIN IS CONSTRUCTED, DISCHARGE SHOULD BE TO NEW BASIN.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR (SUBR 01)  
 F - FINAL  
 AGS NON-C COOLING,PRCP,ETC (HN)  
 \*\*\* No Discharge \*\*\*

NY0005835		002 M	
Permit Number		Discharge Number	
Monitoring Period			
From	To		
YR MO DAY	YR MO DAY		
03 07 01	03 09 30		

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
PH				6.6	*****	7.3	(12)	0	04/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE OIL & GREASE	*****	*****	****	REPORT MINIMUM	*****	9.0 MAXIMUM	SU	0	ONCE/ MONTH	GRAB
See Note 1	*****	*****	****	*****	*****	2.4	(19)	0	01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE FLOW, IN CONDUIT OR THRU TREATMENT PLANT	*****	*****	****	*****	*****	15 DAILY MX	MG/L	0	ONCE/ MONTH	GRAB
50050 1 0 1 EFFLUENT GROSS VALUE	0.09	*****	(03)	*****	*****	*****		0	04/30	RC
	REPORT DAILY AV	*****	MGD	*****	*****	*****		0	ONCE/ MONTH	RCORDR
	MEASUREMENT									
	PERMIT									
	REQUIREMENT									
	SAMPLE									
	MEASUREMENT									
	PERMIT									
	REQUIREMENT									
	SAMPLE									
	MEASUREMENT									
	PERMIT									
	REQUIREMENT									
	SAMPLE									
	MEASUREMENT									
	PERMIT									
	REQUIREMENT									

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

Telephone  
631-344-3424

Comments and Explanation of any violations (Reference all attachments here)  
 SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS. SAMPLING FOR THIS OUTFALL SHALL BE CONDUCTED AT A LOCATION DOWNSTREAM OF WHERE EXISTING DISCHARGE MIXES WITH THE COOLING TOWER BLOWDOWN FROM THE STAR DETECTOR.

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR (SUBR 01)  
 F - FINAL  
 AGS NON-C COOLG, PRECP ETC (HN) \*\*\* No Discharge

NY0005835 Permit Number		002 Q Discharge Number	
Monitoring Period			
From	To		
YR MO DAY	YR MO DAY		
03 07 01	03 09 30		

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	MINIMUM	MAXIMUM				UNITS
ALUMINUM, TOTAL (AS AL)	*****	*****	*****	0.016	(19)	0	01/90	GR
01105 1 0 1 See Note 1	*****	*****	*****	2.0 DAILY MX	MG/L		QTRLY	GRAB
EFFLUENT GROSS VALUE	*****	*****	*****	< 2	(28)	0	01/90	GR
CHLOROFORM	*****	*****	*****	50 DAILY MX	UG/L		QTRLY	GRAB
32106 1 0 0	*****	*****	*****	< 2	(28)	0	01/90	GR
EFFLUENT GROSS VALUE	*****	*****	*****	7 DAILY MX	UG/L		QTRLY	GRAB
1,1,1-TRICHLOROETHANE	*****	*****	*****	< 2	(28)	0	01/90	GR
34506 1 0 0	*****	*****	*****	< 2	(28)	0	01/90	GR
EFFLUENT GROSS VALUE	*****	*****	*****	5 DAILY MX	UG/L		QTRLY	GRAB
DICHLOROBROMOMETHANE EFFLUENT	*****	*****	*****	< 0.05	(19)	0	01/90	GR
32101 1 0 0	*****	*****	*****	0.5 DAILY MX	MG/L		QTRLY	GRAB
EFFLUENT GROSS VALUE	*****	*****	*****	< 0.005	(19)	0	01/90	GR
1-HYDROXY-ETHYLIDENE	*****	*****	*****	0.2 DAILY MX	MG/L		QTRLY	GRAB
85812 1 0 0	*****	*****	*****					
EFFLUENT GROSS VALUE	*****	*****	*****					
TOLYTRIAZOLE	*****	*****	*****					
85813 1 0 0	*****	*****	*****					
EFFLUENT GROSS VALUE	*****	*****	*****					

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.

Comments and Explanation of any violations (Reference all attachments here)  
 NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS. SAMPLING TO BE DOWNSTREAM OF WHERE EXISTING DISCHARGE MIXES WITH COOLING TOWER BLOWDOWN FROM STAR DETECTOR.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Signature of Principal Executive Officer or Authorized Agent  
 Telephone  
 631-344-3424

Date Signed

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR  
 NY0005835 002 R Discharge Number  
 (SUBR 01) F - FINAL  
 RF(1004) & BRAHMS(1002) BLOWDN  
 \*\*\* No Discharge

Monitoring Period

From		To	
YR	MO	DAY	MO
03	07	01	03
		09	30

Note: Read Instructions before completing this form

PARAMETER	X	QUANTITY OR LOADING		QUALITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	MINIMUM	UNITS			
1-HYDROXY-ETHYLIDENE	SAMPLE MEASUREMENT	*****	*****	*****	< 0.05	0	01/90	GR
85812 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MX		QTRLY	GRAB
TOLYTRIAZOLE	SAMPLE MEASUREMENT	*****	*****	*****	< 0.005	0	01/90	GR
85813 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	0.2 DAILY MX		QTRLY	GRAB
	SAMPLE MEASUREMENT							
	PERMIT REQUIREMENT							
	SAMPLE MEASUREMENT							
	PERMIT REQUIREMENT							
	SAMPLE MEASUREMENT							
	PERMIT REQUIREMENT							
	SAMPLE MEASUREMENT							
	PERMIT REQUIREMENT							

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/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

Comments and Explanation of any violations (Reference all attachments here)

DISCHARGE MAY BE DIRECTED TO SURROUNDING LOW LYING AREA INSIDE THE ROADWAY THAT IS INSIDE RHIC RING. ONCE STORMWATER COLLECTION SYSTEM IS EXTENDED TO BLDG 1010 & A NEW RECHARGE BASIN IS CONSTRUCTED, DISCHARGE SHOULD BE DIRECTED TO THE NEW BASIN.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR (SUBR 01)  
 F - FINAL  
 NLS COOLING TOWR BLDN ETC (HS)  
 \*\*\* No Discharge

NY0005835 005 M Discharge Number  
 Permit Number

Monitoring Period		From		To	
YR	MO	DAY	YR	MO	DAY
03	07	01	03	09	30

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	MAXIMUM			
PH	*****	*****	7.9	8.5	(12)	0 04/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	REPORT MINIMUM	8.5	SU	ONCE/MONTH	GRAB
OIL & GREASE	*****	*****	*****	1.5	(19)	0 01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	15	DAILY MX	ONCE/MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	0.20	*****	*****	*****	MG/L	0 04/30	RC
50050 1 0 1 EFFLUENT GROSS VALUE	REPORT DAILY AV	*****	*****	*****	MGD	ONCE/MONTH	RCORDR
SAMPLE MEASUREMENT REQUIREMENT							
SAMPLE MEASUREMENT REQUIREMENT							
SAMPLE MEASUREMENT REQUIREMENT							
SAMPLE MEASUREMENT REQUIREMENT							
SAMPLE MEASUREMENT REQUIREMENT							
SAMPLE MEASUREMENT REQUIREMENT							
SAMPLE MEASUREMENT REQUIREMENT							
SAMPLE MEASUREMENT REQUIREMENT							

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager  
 Telephone  
 631-344-3424

Comments and Explanation of any violations (Reference all attachments here)  
 SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.  
 Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR

NY0005835 Permit Number  
 005 Q Discharge Number  
 (SUBR 01)  
 F - FINAL

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30

NLS COOLG TOWR BLOWDN ETC (HS) \*\*\*\*\*  
 \*\*\* No Discharge

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM				UNITS
COPPER, TOTAL (AS CU)	*****	*****	*****	*****	0.0055	(19)	0	01/90	GR
01042 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	1.0 DAILY MX	MG/L		QTRLY	GRAB
1-HYDROXY-ETHYLIDENE	*****	*****	*****	*****	< 0.05	(19)	0	01/90	GR
85812 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	0.5 DAILY MX	MG/L		QTRLY	GRAB
TOLYTRIAZOLE	*****	*****	*****	*****	< 0.005	(19)	0	01/90	GR
85813 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	0.2 DAILY MX	MG/L		QTRLY	GRAB
SAMPLE MEASUREMENT REQUIREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT REQUIREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT REQUIREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT REQUIREMENT									
PERMIT REQUIREMENT									
SAMPLE MEASUREMENT REQUIREMENT									
PERMIT REQUIREMENT									

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.

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.







PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR (SUBR 01)  
 F - FINAL  
 STORMWTR RUNOFF WAREHOUSE (HW)  
 \*\*\* No Discharge \*\*\*

NY0005835 Permit Number		008 M Discharge Number	
Monitoring Period			
From	To		
YR MO DAY	YR MO DAY		
03 07 01	03 09 30		

Note: Read Instructions before completing this form

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW RATE		*****	514	(07)	*****	*****	*****	0	01/30	IN
00056 1 0 0 EFFLUENT GROSS VALUE		*****	REPORT DAILY MX	GPD	*****	*****	*****		ONCE/MONTH	INSTAN
PH		*****	*****		6.7	6.7	(12)	0	01/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE		*****	*****		REPORT MINIMUM	8.5 MAXIMUM	SU		ONCE/MONTH	GRAB
OIL & GREASE		*****	*****		*****	1.4	(19)	0	01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE		*****	*****		*****	15 DAILY MX	MG/L		ONCE/MONTH	GRAB
1,1-DICHLOROETHYLENE		*****	*****		*****	< 2	(28)	0	01/30	GR
34501 1 0 0 EFFLUENT GROSS VALUE		*****	*****		*****	5 DAILY MX	UG/L		ONCE/MONTH	GRAB
1,1,1-TRICHLORO-ETHANE		*****	*****		*****	< 2	(28)	0	01/30	GR
34506 1 0 0 EFFLUENT GROSS VALUE		*****	*****		*****	5 DAILY MX	UG/L		ONCE/MONTH	GRAB
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		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 fines and imprisonment for knowing violations.								
Mr. Michael Holland Area Group Manager		Telephone 631-344-3424								
Typed or Printed		Signature of Principal Executive Officer or Authorized Agent								

Comments and Explanation of any violations (Reference all attachments here)  
 PARAMETERS EXCEPT FOR FLOW TO BE SAMPLED MONTHLY DURING A STORM EVENT. (IF NO DISCHARGE, ENTER AN "X" IN THE "NO DISCHARGE" BOX AT THE UPPER RIGHT.) SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

Permit Number NY0005835  
 Discharge Number 008 Q  
 Monitoring Period From YR MO DAY YR MO DAY To YR MO DAY YR MO DAY  
 03 07 01 03 09 30  
 MAJOR (SUBR 01) F - FINAL  
 SW RUNOFF FROM WAREHOUSE AREA  
 \*\*\* No Discharge \*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM			
ALUMINUM, TOTAL (AS AL)	*****	*****	*****	*****	2.3	1	01/90	GR
See Note 6			****	****	2.0			
EFFLUENT GROSS VALUE	*****	*****	*****	*****	DAILY MX		QTRLY	GRAB

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.

Telephone  
631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
Date Signed

Comments and Explanation of any violations (Reference all attachments here)

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Typed or Printed  
 Signature of Principal Executive Officer or Authorized Agent

**PERMITTEE NAME/ADDRESS (include Facility Name/Location if Different)**

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)**

MAJOR (SUBR 01)  
 F - FINAL  
 STORMWTR R O CENTRAL STEAM (H)  
 \*\*\* No Discharge  \*\*\*\*

NY0005835 Permit Number		010 M Discharge Number	
Monitoring Period			
From	To		
YR	MO	DAY	
03	07	01	03
09	09	30	

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW RATE See Note 2	SAMPLE MEASUREMENT	15912	(07)	*****	*****	*****	0	01/30	IN
	PERMIT REQUIREMENT	REPORT DAILY MX	GPD	*****	*****	*****		ONCE/MONTH	INSTAN
PH	SAMPLE MEASUREMENT	*****		6.6	6.6	(12)	0	01/30	GR
	PERMIT REQUIREMENT	*****		REPORT MINIMUM	8.5	SU		ONCE/MONTH	GRAB
00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****		*****	2.1	(19)	0	01/30	GR
	PERMIT REQUIREMENT	*****		*****	15	DAILY MX		ONCE/MONTH	GRAB
00556 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****		*****					
	PERMIT REQUIREMENT	*****		*****					
	SAMPLE MEASUREMENT	*****		*****					
	PERMIT REQUIREMENT	*****		*****					
	SAMPLE MEASUREMENT	*****		*****					
	PERMIT REQUIREMENT	*****		*****					
	SAMPLE MEASUREMENT	*****		*****					
	PERMIT REQUIREMENT	*****		*****					
	SAMPLE MEASUREMENT	*****		*****					
	PERMIT REQUIREMENT	*****		*****					
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	SAMPLE MEASUREMENT	*****		*****					
	PERMIT REQUIREMENT	*****		*****					

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.

Telephone  
631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
Date Signed

Comments and Explanation of any violations (Reference all attachments here)

PARAMETERS EXCEPT FOR FLOW TO BE SAMPLED MONTHLY DURING A STORM EVENT. (IF NO DISCHARGE, ENTER AN "X" IN THE "NO DISCHARGE" BOX AT THE UPPER RIGHT.) SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

Permit Number NY0005835  
 Discharge Number 010 Q  
 MAJOR (SUBR 01)  
 F - FINAL

Monitoring Period From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30  
 SW RUNOFF FROM CENTRAL STM (H) \*\*\* No Discharge

\*\*\* No Discharge

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	UNITS			
COPPER, TOTAL (AS CU) See Note 1	*****	*****	*****	*****	0.010	(19)	0	01/90	GR
EFFLUENT GROSS VALUE	*****	*****	*****	*****	1.0 DAILY MX	MG/L		QTRLY	GRAB
LEAD, TOTAL (AS PB) See Note 1	*****	*****	*****	*****	0.0018	(19)	0	01/90	GR
EFFLUENT GROSS VALUE	*****	*****	*****	*****	0.05 DAILY MX	MG/L		QTRLY	GRAB
VANADIUM, TOTAL (AS V) See Note 1	*****	*****	*****	*****	0.017	(19)	0	01/90	GR
EFFLUENT GROSS VALUE	*****	*****	*****	*****	REPORT DAILY MX	MG/L		QTRLY	GRAB
ALUMINUM, TOTAL (AS AL) See Note 1	*****	*****	*****	*****	0.082	(19)	0	01/90	GR
EFFLUENT GROSS VALUE	*****	*****	*****	*****	2.0 DAILY MX	MG/L		QTRLY	GRAB
MEASUREMENT PERMIT REQUIREMENT									
MEASUREMENT PERMIT REQUIREMENT									
MEASUREMENT PERMIT REQUIREMENT									
MEASUREMENT PERMIT REQUIREMENT									

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.

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent  
 Date Signed

Comments and Explanation of any violations (Reference all attachments here)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

NY0005835 06A M MAJOR (SUBR 01)  
 Permit Number Discharge Number F - FINAL  
 Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30  
 \*\*\* No Discharge

LINAC NCCW, FLOOR DNS, ETC (HTI) \*\*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE		
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS	
PH	SAMPLE MEASUREMENT	*****	*****	7.0	*****	7.5	(12)	0	04/30	GR	
	PERMIT REQUIREMENT	*****	*****	REPORT MINIMUM	*****	9.0 MAXIMUM	SU		ONCE/MONTH	GRAB	
00400 1 0 0 EFFLUENT GROSS VALUE OIL & GREASE	SAMPLE MEASUREMENT	*****	*****	*****	*****	2.3	(19)	0	01/30	GR	
	PERMIT REQUIREMENT	*****	*****	*****	*****	15 DAILY MX	MG/L		ONCE/MONTH	GRAB	
00556 1 0 0 EFFLUENT GROSS VALUE FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.001	*****	(03)	*****	*****		0	04/30	RC	
	PERMIT REQUIREMENT	REPORT DAILY AV	*****	MGD	*****	*****			ONCE/MONTH	RCORDR	
50050 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		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.								Telephone 631-344-3424	
Mr. Michael Holland Area Group Manager										Signature of Principal Executive Officer or Authorized Agent	

Comments and Explanation of any violations (Reference all attachments here)  
 SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.

PERMITTEE NAME/ADDRESS (include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR (SUBR 01)  
 F - FINAL  
 LINAC NCCW, FLOOR DNS, SW (HT1)

NY0005835 Discharge Number  
 06A Q

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30

\*\*\* No Discharge \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
1-HYDROXY-ETHYLIDENE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	(19)	0	01/90	GR	
85812 1 0 0	PERMIT REQUIREMENT	*****	*****	****	*****	*****	0.5 DAILY MX		QTRLY	GRAB	
TOLYTRIAZOLE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	(19)	0	01/90	GR	
85813 1 0 0	PERMIT REQUIREMENT	*****	*****	****	*****	*****	0.2 DAILY MX		QTRLY	GRAB	
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Telephone  
 631-344-3424

Signature of Principal Executive Officer or Authorized Agent

Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL.  
 SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS

PERMITTEE NAME/ADDRESS (include Facility Name/Location if Different)  
 NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR  
 (SUBR 01)  
 F - FINAL

COOLING TOWER FROM 919 ETC (HT2)

NY0005835 06B M Discharge Number  
 Permit Number  
 Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30  
 \*\*\* No Discharge \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	MINIMUM			
PH	*****	*****		7.0	*****	7.2	(12)		0	04/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE OIL & GREASE	*****	*****	****	REPORT MINIMUM	*****	9.0 MAXIMUM	SU			ONCE/ MONTH	GRAB
See Note 1	*****	*****	****	*****	*****	2.1	(19)		0	01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE FLOW, IN CONDUIT OR THRU TREATMENT PLANT	*****	*****	****	*****	*****	15 DAILY MX	MG/L			ONCE/ MONTH	GRAB
50050 1 0 1 EFFLUENT GROSS VALUE	0.07	*****	(03)	*****	*****	*****			0	04/30	RC
	REPORT DAILY AV	*****	MGD	*****	*****	*****				ONCE/ MONTH	RCORDR
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		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.									
Mr. Michael Holland Area Group Manager											
Typed or Printed		Signature of Principal Executive Officer or Authorized Agent									
Comments and Explanation of any violations (Reference all attachments here) SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.		Telephone 631-344-3424									
		Date Signed									



PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

Permit Number NY0005835  
 Discharge Number 06B Q  
 MAJOR (SUBR 01) F - FINAL  
 COOLG TOWRS FROM 919 ETC (HT2)

Monitoring Period  
 From To  
 YR MO DAY YR MO DAY  
 03 07 01 03 09 30

\*\*\* No Discharge  \*\*\*\*

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM				UNITS
1-HYDROXY-ETHYLIDENE 85812 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	0.09	(19)	0	01/90	GR
TOLYTRIAZOLE 85813 1 0 0 EFFLUENT GROSS VALUE	*****	*****	*****	*****	0.5 DAILY MX	MG/L	0	QTRLY	GRAB
	*****	*****	*****	*****	< 0.005	(19)	0	01/90	GR
	*****	*****	*****	*****	0.2 DAILY MX	MG/L		QTRLY	GRAB

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/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Signature of Principal Executive Officer or Authorized Agent

Telephone  
 631-344-3424

Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL.  
 SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.



**ATTACHMENT II**

**BROOKHAVEN NATIONAL LABORATORY**

**SPDES PERMIT NO. NY0005835**

**DISCHARGE MONITORING REPORT FOR SEPTEMBER 2003**

**NON-COMPLIANCE REPORT**

SECTION 1



New York State Department of Environmental Conservation  
Division of Water



**Report of Noncompliance Event**

To: DEC Water Contact R. Sorrentino DEC Region: 1

Report Type:  5 Day  Permit Violation  Order Violation  Anticipated Noncompliance  Bypass/Overflow

SECTION 2

SPDES #: NY-0005835 Facility: U.S. Department of Energy/Brookhaven National Laboratory

Date of noncompliance: 7/ 11/ 03 Location (Outfall) Treatment Unit, or Pump Station): 008

Description of noncompliance(s) and cause(s): The total aluminum concentration at outfall 008 was 2.27 mg/L, which exceeds the permit level of 2.0 mg/L. A filtered sample was also collected at the same time with an aluminum concentration of 0.08 mg/L. Therefore, the excursion is due to sediments entrained within the storm water system.

Has event ceased? (Yes) (No) If so, when? \_\_\_\_\_ Was event due to plant upset? (Yes)  (No) SPDES limits violated?  (Yes) (No)

Start date, time of event: 7 / 11 / 03 10 :10 (AM) (PM) End date, time of event:  / / , : (AM) (PM)

Date, time oral notification made to DEC?  / / , : (AM) (PM) DEC Official contacted: \_\_\_\_\_

Immediate corrective actions: None

Preventive (long term) corrective actions: This outfall receives stormwater runoff from the ware housing areas. Aluminum and iron are natural components of soil which become entrained in the runoff. The sediments settle out in the recharge basin and do not impact the quality of groundwater.

SECTION 3

Complete this section if event was a bypass:

Bypass amount: \_\_\_\_\_ Was prior DEC authorization received for this event? (Yes) (No)

DEC Official contacted: \_\_\_\_\_ Date of DEC approval:  / /

Describe event in "Description of noncompliance and cause" area in Section 2. Detail the start and end dates and times in Section 2 also.

SECTION 4

Facility Representative: \_\_\_\_\_ Title: \_\_\_\_\_ Date:  / /

Phone #: ( ) - - Fax #: ( ) - -

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.

X  
Signature of Principal Executive Officer or Authorized Agent

**ATTACHMENT III**  
**BROOKHAVEN NATIONAL LABORATORY**  
**SPDES PERMIT NO. NY0005835**  
**AMENDED DISCHARGE MONITORING REPORT FOR AUGUST 2003**  
**FOR OUTFALLS 002 AND 005**

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)  
 NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN AREA OFFICE NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

MAJOR (SUBR 01)  
 F - FINAL  
 NSLS COOLING TOWR BLDN ETC(HS)  \*\*\*\*  
 \*\*\* No Discharge

NY0005835 Permit Number  
 005 M Discharge Number

Monitoring Period  
 From To  
 YR MO DY YR MO DY  
 03 08 01 03 08 31

Note: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE			
PH	*****	*****		7.1	*****	0	04/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	REPORT MINIMUM	8.5 MAXIMUM		ONCE/MONTH	GRAB
OIL & GREASE See Note 1	*****	*****	****	*****	3.1	0	01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE	*****	*****	****	*****	15 DAILY MX		ONCE/MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	0.20	*****	(03)	*****	*****	0	04/30	RC
50050 1 0 1 EFFLUENT GROSS VALUE	REPORT DAILY AV	*****	MGD	*****	*****		ONCE/MONTH	RCORDR
	SAMPLE MEASUREMENT							
	PERMIT REQUIREMENT							
	SAMPLE MEASUREMENT							
	PERMIT REQUIREMENT							
	SAMPLE MEASUREMENT							
	PERMIT REQUIREMENT							
	SAMPLE MEASUREMENT							
	PERMIT REQUIREMENT							
	SAMPLE MEASUREMENT							
	PERMIT REQUIREMENT							

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/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Signature of Principal Executive Officer or Authorized Agent

Telephone  
 631-344-3424

Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS.

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)**

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)  
 NAME U S D O E  
 ADDRESS BROOKHAVEN NATIONAL LABORATORY  
 BROOKHAVEN NATIONAL LABORATORY  
 UPTON NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION UPTON NY 11973  
 ATTN: GEORGE MALOSH, GROUP MGR

MAJOR  
(SUBR 01)  
F - FINAL

002 M Discharge Number  
 Monitoring Period  
 From To  
 YR MO DY YR MO DY  
 03 08 01 03 08 31

AGS NON-C COOLING, PRCP, ETC (HN)  \*\*\*\*  
 \*\*\* No Discharge

Note: Read Instructions before completing this form

PARAMETER	X	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE			
PH		*****	*****		6.8	*****	0	04/30	GR
00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	****	REPORT MINIMUM	*****	0	ONCE/MONTH	GRAB
OIL & GREASE	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	0	01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	*****	*****	0	ONCE/MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	1.4	*****	(03)	*****	*****	0	04/30	RC
50050 1 0 1 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT DAILY AV	*****	MGD	*****	*****	0	ONCE/MONTH	RCORDR
	SAMPLE MEASUREMENT PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT PERMIT REQUIREMENT								

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/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Mr. Michael Holland  
 Area Group Manager

Signature of Principal Executive Officer or Authorized Agent

Telephone  
 631-344-3424

Date Signed

Comments and Explanation of any violations (Reference all attachments here)  
 SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS. SAMPLING FOR THIS OUTFALL SHALL BE CONDUCTED AT A LOCATION DOWNSTREAM OF WHERE EXISTING DISCHARGE MIXES WITH THE COOLING TOWER BLOWDOWN FROM THE STAR DETECTOR.

**ATTACHMENT IV**

**BROOKHAVEN NATIONAL LABORATORY**

**SPDES PERMIT NO. NY0005835**

**DISCHARGE MONITORING REPORT FOR SEPTEMBER 2003**

**ANALYTICAL RESULTS FROM H2M LABS,**

**THE BNL ANALYTICAL SERVICES LABORATORY,**

**AND GEL LLC**

**FOR REGULATORY COMPLIANCE SAMPLES COLLECTED**

**9/8/03, 9/10/03, AND 9/12/03**

**FROM OUTFALL 001**

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Sample Information...

Type : Aqueous

Origin:

Brookhaven National Lab.-BNLS

70 Bell Ave.

Upton, NY 11973

Attn To : S. Scarpitta

Lab No. : 0309213-001

Client ID. : 17582-001

Collected 9/8/2003 10:40:00 AM

Received 9/8/2003 3:15:00 PM

Collected By CLIENT

Copies To Original

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Method Number</u>	<u>Analyzed</u>
Biochemical Oxygen Demand	< 2	mg/L	E405.1	9/10/2003 6:40:00 AM
Nitrogen, Total	3.0	mg/L	M4500-N C	9/18/2003
Nitrogen, Ammonia (As N)	< 0.10	mg/L	E350.1	9/17/2003 1:37:47 PM
Nitrite as N	0.01	mg/L	E353.2	9/9/2003 6:34:51 PM
Nitrate as N	2.78	mg/L	E353.2	9/16/2003 3:52:46 PM
Nitrogen, Kjeldahl, Total	0.24	mg/L	E351.2	9/18/2003 3:09:36 PM

Outfall 001  
Sampled 9-8-03  
24Hr. Composite

Qualifiers: E - Value above quantitation range

D - Results for Dilution

Date Reported : 9/22/2003

*Joann M. Slavin*

Laboratory Manager

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Sample Information...

Type : Aqueous

Origin:

Brookhaven National Lab.-BNLS

Lab No. : 0309310-001

70 Bell Ave.

Upton, NY 11973

Attn To : S. Scarpitta

Client ID. : 17597-001

Collected 9/10/2003 10:24:00 AM

Received 9/10/2003 3:31:00 PM

Collected By CLIENT

Copies To Original

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Method Number</u>	<u>Analyzed</u>
Biochemical Oxygen Demand	< 2	mg/L	E405.1	9/11/2003 8:11:00 AM
Nitrogen, Total	3.6	mg/L	M4500-N C	9/18/2003
Nitrogen, Ammonia (As N)	< 0.10	mg/L	E350.1	9/17/2003 1:40:24 PM
Nitrite as N	0.04	mg/L	E353.2	9/11/2003 4:15:48 PM
Nitrate as N	3.39	mg/L	E353.2	9/16/2003 3:54:46 PM
Nitrogen, Kjeldahl, Total	0.16	mg/L	E351.2	9/18/2003 3:11:37 PM

Outfall 001  
Sampled 9-10-03  
24 Hr. Composite

Qualifiers: E - Value above quantitation range  
D - Results for Dilution

Date Reported : 9/22/2003

*Joann M. Slavin*

Laboratory Manager



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040, FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Sample Information...

Type : Aqueous

Origin:

Brookhaven National Lab.-BNLS

Lab No. : 0309385-001

70 Bell Ave.

Upton, NY 11973

Attn To : S. Scarpitta

Client ID. : 17607-001

Collected 9/12/2003 10:00:00 AM

Received 9/12/2003 3:30:00 PM

Collected By CLIENT

Copies To Original

CC

Parameter(s)	Results	Units	Method Number	Analyzed
Biochemical Oxygen Demand	< 2	mg/L	E405.1	9/13/2003 8:22:00 AM
Nitrogen, Total	5.5	mg/L	M4500-N C	9/18/2003
Nitrogen, Ammonia (As N)	< 0.10	mg/L	E350.1	9/17/2003 1:41:15 PM
Nitrite as N	0.01	mg/L	E353.2	9/13/2003 10:18:37 AM
Nitrate as N	5.33	mg/L	E353.2	9/16/2003 3:55:27 PM
Nitrogen, Kjeldahl, Total	0.18	mg/L	E351.2	9/18/2003 3:12:17 PM

Outfall 001  
Sampled 9-12-03  
24 hr. Composite

Qualifiers: E - Value above quantitation range

D - Results for Dilution

Date Reported : 9/22/2003

*Joann M. Slavin*

Laboratory Manager

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLS  
70 Bell Ave.  
Upton, NY 11973  
Attn To : S. Scarpitta

Lab No. : 0309213-002

Sample Information...  
Type : Aqueous  
  
Origin:

Client ID. : 17582-002

Collected 9/8/2003 1:45:00 PM  
Received 9/8/2003 3:15:00 PM  
Collected By CLIENT  
Copies To Original  
CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Method Number</u>	<u>Analyzed</u>
Fecal Coliform	< 2	MPN	M9221 C	9/8/2003 4:00:00 PM

Outfall 001  
Sampled 9-8-03  
Grab Sample

Qualifiers: E - Value above quantitation range  
D - Results for Dilution

Date Reported : 9/22/2003

*Joann M. Slavin*

Laboratory Manager

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Sample Information...

Type : Aqueous

Origin:

Brookhaven National Lab.-BNLS

70 Bell Ave.

Upton, NY 11973

Attn To : S. Scarpitta

Lab No. : 0309310-002

Client ID. : 17597-002

Collected 9/10/2003 2:00:00 PM

Received 9/10/2003 3:31:00 PM

Collected By CLIENT

Copies To Original

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Method Number</u>	<u>Analyzed</u>
Fecal Coliform	< 2	MPN	M9221 C	9/10/2003 3:45:00 PM

Outfall 001  
Sampled 9-10-03  
Grab Sample

Qualifiers: E - Value above quantitation range  
D - Results for Dilution

Date Reported : 9/22/2003

*Joann M. Blavin*

Laboratory Manager

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Sample Information...

Type : Aqueous

Origin:

Brookhaven National Lab.-BNLS

70 Bell Ave.

Upton, NY 11973

Attn To : S. Scarpitta

Lab No. : 0309385-002

Client ID. : 17607-002

Collected 9/12/2003 1:25:00 PM

Received 9/12/2003 3:30:00 PM

Collected By CLIENT

Copies To Original

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Method Number</u>	<u>Analyzed</u>
Fecal Coliform	< 2	MPN	M9221 C	9/12/2003 4:00:00 PM

Outfall 001  
Sampled 9-12-03  
Grab Sample

Qualifiers: E - Value above quantitation range  
D - Results for Dilution

Date Reported : 9/22/2003

*Joann M. Slavin*

Laboratory Manager

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Contact: John Burke  
 Project: SPDES

Report Date: September 18, 2003

Page 1 of 2

Client Sample ID: 17581-001	Project: BRKL00404
Sample ID: 87574001	Client ID: BRKL004
Matrix: Water	COC: 17581
Collect Date: 08-SEP-03 10:40	Samp Recv.: 17581
Receive Date: 09-SEP-03 09:00	Client Desc.: STP EFFLUENT
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Solids Analysis Federal</b>											
<i>EPA 160.2 Total Suspended Liq</i>											
Total Suspended Solids	J	1.00	0.424	2.78	mg/L	SDS	09/15/03	1405	277104		1
<b>TRAACS Nutrient Analysis Fed</b>											
<i>EPA 365.4 Phosphorus, Total in</i>											
Phosphorus, Total as PO4		0.779	0.0162	0.050	mg/L	1	THL	09/17/03	0930	277387	2

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	EXN1	09/16/03	1200	277385

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	EPA 160.2	
2	EPA 365.4	

**Notes:**

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

outfall 001  
 Sampled 9-8-03  
 24 Hr. Composite

**Certificate of Analysis**

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Report Date: September 29, 2003

Contact: John Burke  
 Project: SPDES

Page 1 of 2

Client Sample ID: 17596-001  
 Sample ID: 87764001  
 Matrix: Water  
 Collect Date: 10-SEP-03 10:24  
 Receive Date: 11-SEP-03 09:15  
 Collector: Client

Project: BRKL00404  
 Client ID: BRKL004  
 COC: 17596  
 Sample Recv.: 17596  
 Client Desc.: STP Effluent

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Solids Analysis Federal</b>											
<i>EPA 160.2 Total Suspended Liq</i>											
Total Suspended Solids	U	0.100	0.382	2.50	mg/L		SDS	09/15/03	1405	277104	1
<b>TRAACS Nutrient Analysis Fed</b>											
<i>EPA 365.4 Phosphorus, Total in</i>											
Phosphorus, Total as PO4		0.551	0.0162	0.050	mg/L	1	THL	09/17/03	0932	277387	2

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	EXN1	09/16/03	1200	277385

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	EPA 160.2	
2	EPA 365.4	

*Outfall 001  
 Sampled 9-10-03  
 24 hr. Composite*

**Notes:**

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973-5000

Report Date: September 22, 2003

Contact: John Burke  
 Project: SPDES

Page 1 of 2

Client Sample ID: 17608-001	Project: BRKL00404
Sample ID: 87936001	Client ID: BRKL004
Matrix: Water	COC: 17608
Collect Date: 12-SEP-03 10:00	Sampl Recv.: 17608
Receive Date: 13-SEP-03 09:15	Client Desc.: STP Effluent
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Solids Analysis Federal</b>											
<i>EPA 160.2 Total Suspended Liq</i>											
Total Suspended Solids	J	0.556	0.424	2.78	mg/L		SDS	09/17/03	1103	277722	1
<b>TRAACS Nutrient Analysis Fed</b>											
<i>EPA 365.4 Phosphorus, Total in</i>											
Phosphorus, Total as PO4		0.587	0.0162	0.050	mg/L	1	THL	09/17/03	0934	277387	2

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	EXN1	09/16/03	1200	277385

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	EPA 160.2	
2	EPA 365.4	

**Notes:**

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Outfall 001  
 Sampled 9-12-03  
 24 Hr. Composite

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973-5000

Report Date: September 18, 2003

Contact: John Burke  
 Project: SPDES

Page 1 of 2

Client Sample ID: 17581-002  
 Sample ID: 87574002  
 Matrix: Water  
 Collect Date: 08-SEP-03 13:45  
 Receive Date: 09-SEP-03 09:00  
 Collector: Client

Project: BRKL00404  
 Client ID: BRKL004  
 COC: 17581  
 Samp Recv.: 17581  
 Client Desc.: STP EFFLUENT

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Rapid Flow Analysis Federal</b>											
<i>SW9012A Cyanide, Total Federal</i>											
Cyanide, Total	U	ND	1.72	5.00	ug/L	1	ADF	09/17/03	1309	277287	1

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	EXN1	09/17/03	1000	277286

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9012A	

**Notes:**

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

*Outfall 001  
 Sampled 9-8-03  
 Grab Sample*



**GENERAL ENGINEERING LABORATORIES, LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Report Date: September 29, 2003

Contact: John Burke  
 Project: SPDES

Page 1 of 2

Client Sample ID: 17596-002  
 Sample ID: 87764002  
 Matrix: Water  
 Collect Date: 10-SEP-03 14:00  
 Receive Date: 11-SEP-03 09:15  
 Collector: Client

Project: BRKL00404  
 Client ID: BRKL004  
 COC: 17596  
 Samp Recv.: 17596  
 Client Desc.: STP Effluent

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Rapid Flow Analysis Federal</b>											
<i>SW9012A Cyanide, Total Federal</i>											
Cyanide, Total	U	0.719	1.72	5.00	ug/L	1	ADF	09/17/03	1317	277287	1

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	EXN1	09/17/03	1000	277286

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9012A	

**Notes:**

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

*outfall 001  
 Sampled 9-10-03  
 Grab Sample*

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973-5000

Report Date: September 24, 2003

Contact: John Burke  
 Project: SPDES

Page 1 of 2

Client Sample ID: 17608-002  
 Sample ID: 87936002  
 Matrix: Water  
 Collect Date: 12-SEP-03 13:25  
 Receive Date: 13-SEP-03 09:15  
 Collector: Client

Project: BRKL00404  
 Client ID: BRKL004  
 COC: 17608  
 Samp Recv.: 17608  
 Client Desc.: STP Effluent

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Rapid Flow Analysis Federal</b>											
<i>SW9012A Cyanide, Total Federal</i>											
Cyanide, Total	U	1.26	1.72	5.00	ug/L	1	ADF	09/17/03	1321	277287	1

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	EXN1	09/17/03	1000	277286

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9012A	

*Outfall 001  
 Sampled 9-12-03  
 Grab Sample*

Notes:

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Volatile Organics Analysis Data Sheet  
Method 624 (CLP)

Brookhaven National Laboratory  
Environment Safety and Health Services Division  
Non-Radiological Analytical Services Laboratory

Analytical Services Lab ID:

23090809-01
-------------

Matrix: (soil/water) water Date Analyzed: 9/17/2003  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 30917B07.D  
 Level: (low/med) low Dilution Factor: 1  
 Dilution information: N/A

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	<u>ug/L</u>	
74-87-3	Chloromethane		2	U
75-01-4	Vinyl chloride		2	U
74-83-9	Bromomethane		2	U
75-00-3	Chloroethane		2	U
75-69-4	Trichlorofluoromethane		2	U
75-35-4	1,1-Dichloroethylene		2	U
67-64-1	Acetone		2	U
75-09-2	Methylene Chloride		2	U
1634-04-4	MTBE		2	U
156-60-5	trans-1,2-Dichloroethene		2	U
75-34-3	1,1-Dichloroethane		2	U
156-59-4	cis-1,2-Dichloroethylene		2	U
78-93-3	2-Butanone		2	U
67-66-3	Chloroform		2	U
71-55-6	1,1,1-Trichloroethane		2	U
56-23-5	Carbon Tetrachloride		2	U
71-43-2	Benzene		2	U
107-06-2	1,2-Dichloroethane		2	U
79-01-6	Trichloroethylene		2	U
78-87-5	1,2-Dichloropropane		2	U
75-27-4	Bromodichloromethane		2	U
10061-01-5	cis-1,3-Dichloropropene		2	U
108-10-1	4-Methyl-2-pentanone		2	U
108-88-3	Toluene		2	U
10061-02-6	trans-1,3-Dichloropropene		2	U
79-00-5	1,1,2-Trichloroethane		2	U
127-18-4	Tetrachloroethylene		2	U
142-28-9	1,3-Dichloropropane		2	U
591-78-6	2-Hexanone		2	U
124-48-1	Dibromochloromethane		2	U
108-90-7	Chlorobenzene		2	U
100-41-4	Ethylbenzene		2	U
108-38-3/106-42-3	p- + m-Xylene		2	U
95-47-6	o-Xylene		2	U
75-25-2	Bromoform		2	U
79-34-5	1,1,2,2-Tetrachloroethane		2	U
541-73-1	1,3-Dichlorobenzene		2	U
106-46-7	1,4-Dichlorobenzene		2	U
95-50-1	1,2-Dichlorobenzene		2	U

Outfall 001  
Sampled 9-8-03  
Grab Sample

Volatile Organics Analysis Data Sheet  
Method 624 (CLP)

Brookhaven National Laboratory  
Environment Safety and Health Services Division  
Non-Radiological Analytical Services Laboratory

Analytical Services Lab ID:

23091010-01

Matrix: (soil/water) water Date Analyzed: 9/17/2003  
Sample wt/vol: 25.0 (g/mL)      mL Lab File ID: 30917B12.D  
Level: (low/med) low Dilution Factor: 1  
Dilution information: N/A

CAS No.	Compound	Concentration Units:		
		(ug/L or ug/Kg)	ug/L	Q
74-87-3	Chloromethane		2	U
75-01-4	Vinyl chloride		2	U
74-83-9	Bromomethane		2	U
75-00-3	Chloroethane		2	U
75-69-4	Trichlorofluoromethane		2	U
75-35-4	1,1-Dichloroethylene		2	U
67-64-1	Acetone		2	U
75-09-2	Methylene Chloride		2	U
1634-04-4	MTBE		2	U
156-60-5	trans-1,2-Dichloroethene		2	U
75-34-3	1,1-Dichloroethane		2	U
156-59-4	cis-1,2-Dichloroethylene		2	U
78-93-3	2-Butanone		2	U
67-66-3	Chloroform		2	U
71-55-6	1,1,1-Trichloroethane		2	U
56-23-5	Carbon Tetrachloride		2	U
71-43-2	Benzene		2	U
107-06-2	1,2-Dichloroethane		2	U
79-01-6	Trichloroethylene		2	U
78-87-5	1,2-Dichloropropane		2	U
75-27-4	Bromodichloromethane		2	U
10061-01-5	cis-1,3-Dichloropropene		2	U
108-10-1	4-Methyl-2-pentanone		2	U
108-88-3	Toluene		2	U
10061-02-6	trans-1,3-Dichloropropene		2	U
79-00-5	1,1,2-Trichloroethane		2	U
127-18-4	Tetrachloroethylene		2	U
142-28-9	1,3-Dichloropropane		2	U
591-78-6	2-Hexanone		2	U
124-48-1	Dibromochloromethane		2	U
108-90-7	Chlorobenzene		2	U
100-41-4	Ethylbenzene		2	U
108-38-3/106-42-3	p- + m-Xylene		2	U
95-47-6	o-Xylene		2	U
75-25-2	Bromoform		2	U
79-34-5	1,1,2,2-Tetrachloroethane		2	U
541-73-1	1,3-Dichlorobenzene		2	U
106-46-7	1,4-Dichlorobenzene		2	U
95-50-1	1,2-Dichlorobenzene		2	U

Outfall 001  
Sampled 9-10-03  
Grab Sample

1A  
 Volatile Organics Analysis Data Sheet  
 Method 624 (CLP)

Brookhaven National Laboratory  
 Environment Safety and Health Services Division  
 Non-Radiological Analytical Services Laboratory

Analytical Services Lab ID:

23091208-01

Matrix: (soil/water)      water      Date Analyzed: 9/17/2003  
 Sample wt/vol:      25.0 (g/mL)      mL      Lab File ID: 30917B14.D  
 Level: (low/med)      low      Dilution Factor:     1  
 Dilution information:      N/A

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	<u>ug/L</u>	
74-87-3	Chloromethane		2	U
75-01-4	Vinyl chloride		2	U
74-83-9	Bromomethane		2	U
75-00-3	Chloroethane		2	U
75-69-4	Trichlorofluoromethane		2	U
75-35-4	1,1-Dichloroethylene		2	U
67-64-1	Acetone		2	U
75-09-2	Methylene Chloride		2	U
1634-04-4	MTBE		2	U
156-60-5	trans-1,2-Dichloroethene		2	U
75-34-3	1,1-Dichloroethane		2	U
156-59-4	cis-1,2-Dichloroethylene		2	U
78-93-3	2-Butanone		2	U
67-66-3	Chloroform		2	U
71-55-6	1,1,1-Trichloroethane		2	U
56-23-5	Carbon Tetrachloride		2	U
71-43-2	Benzene		2	U
107-06-2	1,2-Dichloroethane		2	U
79-01-6	Trichloroethylene		2	U
78-87-5	1,2-Dichloropropane		2	U
75-27-4	Bromodichloromethane		2	U
10061-01-5	cis-1,3-Dichloropropene		2	U
108-10-1	4-Methyl-2-pentanone		2	U
108-88-3	Toluene		2	U
10061-02-6	trans-1,3-Dichloropropene		2	U
79-00-5	1,1,2-Trichloroethane		2	U
127-18-4	Tetrachloroethylene		2	U
142-28-9	1,3-Dichloropropane		2	U
591-78-6	2-Hexanone		2	U
124-48-1	Dibromochloromethane		2	U
108-90-7	Chlorobenzene		2	U
100-41-4	Ethylbenzene		2	U
108-38-3/106-42-3	p- + m-Xylene		2	U
95-47-6	o-Xylene		2	U
75-25-2	Bromoform		2	U
79-34-5	1,1,2,2-Tetrachloroethane		2	U
541-73-1	1,3-Dichlorobenzene		2	U
106-46-7	1,4-Dichlorobenzene		2	U
95-50-1	1,2-Dichlorobenzene		2	U

Outfall 001  
 Sampled 9-12-03  
 Grab Sample

TOTAL METALS  
- 1 -  
INORGANIC ANALYSIS DATA PACKAGE

SDG No.: 87574

Method Type: SW846

Sample ID: 87574001

Client ID: 17581-001

Contract: BRKL00404

Lab Code: GEL

Case No.: GEL

SAS No.:

Matrix: WATER

Date Received: 9/9/2003

Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	84.5	µg/L	B		P	70.8	TJA61 Trace ICP2	91103
7440-36-0	Antimony	3.280	µg/L	U		P	3.280	TJA61 Trace ICP2	91103
7440-38-2	Arsenic	2.360	µg/L	U		P	2.360	TJA61 Trace ICP2	91103
7440-39-3	Barium	23.6	µg/L	B		P	0.360	TJA61 Trace ICP2	91103
7440-41-7	Beryllium	0.230	µg/L	U		P	0.230	TJA61 Trace ICP2	91103
7440-43-9	Cadmium	0.610	µg/L	U		P	0.610	TJA61 Trace ICP2	91103
7440-70-2	Calcium	9930	µg/L			P	9.300	TJA61 Trace ICP2	91103
7440-47-3	Chromium	2.080	µg/L	U		P	2.080	TJA61 Trace ICP2	91103
7440-48-4	Cobalt	1.100	µg/L	U		P	1.100	TJA61 Trace ICP2	91103
7440-50-8	Copper	43.1	µg/L			P	2.020	TJA61 Trace ICP2	91103
7439-89-6	Iron	155	µg/L			P	25.3	TJA61 Trace ICP2	91103
7439-92-1	Lead	2.140	µg/L	U		P	2.140	TJA61 Trace ICP2	91103
7439-95-4	Magnesium	2960	µg/L	B		P	12.7	TJA61 Trace ICP2	91103
7439-96-5	Manganese	4.990	µg/L	B		P	0.760	TJA61 Trace ICP2	91103
7439-97-6	Mercury	0.120	µg/L	B		AV	0.033	PE CVAA2	091103W1Hg
7440-02-0	Nickel	3.690	µg/L	B		P	2.980	TJA61 Trace ICP2	91103
7440-09-7	Potassium	4120	µg/L	B		P	22.2	TJA61 Trace ICP2	91103
7782-49-2	Selenium	4.560	µg/L	U		P	4.560	TJA61 Trace ICP2	91103
7440-22-4	Silver	1.980	µg/L	U		P	1.980	TJA61 Trace ICP2	91103
7440-23-5	Sodium	30800	µg/L			P	32.0	TJA61 Trace ICP2	91103
7440-28-0	Thallium	4.080	µg/L	U		P	4.080	TJA61 Trace ICP2	91103
7440-62-2	Vanadium	3.450	µg/L	B		P	2.470	TJA61 Trace ICP2	91103
7440-66-6	Zinc	57.7	µg/L		*	P	1.090	TJA61 Trace ICP2	91103

Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

Outfall 001  
Sampled 9-8-03  
24 Hr. Composite

AMC 9/15/03

**TOTAL METALS**  
- 1 -  
**INORGANIC ANALYSIS DATA PACKAGE**

SDG No.: 87764

Method Type: SW846

Sample ID: 87764001

Client ID: 17596-001

Contract: BRKL004

Lab Code: GEL

Case No.: GEL

SAS No.:

Matrix: WATER

Date Received: 09/11/2003

Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	70.8	µg/L	U		P	70.8	TJA61 Trace ICP2	91603
7440-36-0	Antimony	3.280	µg/L	U		P	3.280	TJA61 Trace ICP2	91603
7440-38-2	Arsenic	2.360	µg/L	U		P	2.360	TJA61 Trace ICP2	91603
7440-39-3	Barium	22.1	µg/L	B		P	0.360	TJA61 Trace ICP2	91603
7440-41-7	Beryllium	0.230	µg/L	U		P	0.230	TJA61 Trace ICP2	91603
7440-43-9	Cadmium	0.610	µg/L	U		P	0.610	TJA61 Trace ICP2	91603
7440-70-2	Calcium	10800	µg/L			P	9.300	TJA61 Trace ICP2	91603
7440-47-3	Chromium	2.080	µg/L	U		P	2.080	TJA61 Trace ICP2	91603
7440-48-4	Cobalt	1.330	µg/L	B		P	1.100	TJA61 Trace ICP2	91603
7440-50-8	Copper	33.1	µg/L			P	2.020	TJA61 Trace ICP2	91603
7439-89-6	Iron	95.5	µg/L	B		P	25.3	TJA61 Trace ICP2	91603
7439-92-1	Lead	2.140	µg/L	U		P	2.140	TJA61 Trace ICP2	91603
7439-95-4	Magnesium	3250	µg/L	B		P	12.7	TJA61 Trace ICP2	91603
7439-96-5	Manganese	2.960	µg/L	B		P	0.760	TJA61 Trace ICP2	91603
7439-97-6	Mercury	0.063	µg/L	B		AV	0.033	PE CVAA2	092203w1Hg
7440-02-0	Nickel	3.670	µg/L	B		P	2.980	TJA61 Trace ICP2	91603
7440-09-7	Potassium	3690	µg/L	B		P	22.2	TJA61 Trace ICP2	91603
7782-49-2	Selenium	4.560	µg/L	U		P	4.560	TJA61 Trace ICP2	91603
7440-22-4	Silver	1.980	µg/L	U		P	1.980	TJA61 Trace ICP2	91603
7440-23-5	Sodium	29100	µg/L			P	32.0	TJA61 Trace ICP2	91603
7440-28-0	Thallium	4.190	µg/L	B		P	4.080	TJA61 Trace ICP2	91603
7440-62-2	Vanadium	3.030	µg/L	B		P	2.470	TJA61 Trace ICP2	91603
7440-66-6	Zinc	31.1	µg/L			P	1.090	TJA61 Trace ICP2	91603

Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

STP outfall 001  
Sampled 9-10-03  
24 hr. composite

**TOTAL METALS**  
- 1 -  
**INORGANIC ANALYSIS DATA PACKAGE**

SDG No.: 87936

Method Type: SW846

Sample ID: 87936001

Client ID: 17608-001

Contract: BRKL00404

Lab Code: GEL

Case No.: GEL

SAS No.:

Matrix: WATER

Date Received: 9/13/2003

Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	93.5	µg/L	B		P	70.8	TJA61 Trace ICP2	91903
7440-36-0	Antimony	3.280	µg/L	U		P	3.280	TJA61 Trace ICP2	91903
7440-38-2	Arsenic	3.610	µg/L	B		P	2.360	TJA61 Trace ICP2	91903
7440-39-3	Barium	30.0	µg/L	B		P	0.360	TJA61 Trace ICP2	91903
7440-41-7	Beryllium	0.230	µg/L	U		P	0.230	TJA61 Trace ICP2	91903
7440-43-9	Cadmium	0.610	µg/L	U		P	0.610	TJA61 Trace ICP2	91903
7440-70-2	Calcium	14400	µg/L			P	9.300	TJA61 Trace ICP2	91903
7440-47-3	Chromium	2.080	µg/L	U		P	2.080	TJA61 Trace ICP2	91903
7440-48-4	Cobalt	1.100	µg/L	U		P	1.100	TJA61 Trace ICP2	91903
7440-50-8	Copper	37.2	µg/L			P	2.020	TJA61 Trace ICP2	91903
7439-89-6	Iron	92.3	µg/L	B		P	25.3	TJA61 Trace ICP2	91903
7439-92-1	Lead	2.140	µg/L	U		P	2.140	TJA61 Trace ICP2	91903
7439-95-4	Magnesium	4220	µg/L	B		P	12.7	TJA61 Trace ICP2	91903
7439-96-5	Manganese	2.980	µg/L	B		P	0.760	TJA61 Trace ICP2	91903
7439-97-6	Mercury	0.111	µg/L	B		AV	0.033	PE CVAA2	091903W1Hg
7440-02-0	Nickel	3.680	µg/L	B		P	2.980	TJA61 Trace ICP2	91903
7440-09-7	Potassium	4880	µg/L	B		P	22.2	TJA61 Trace ICP2	91903
7782-49-2	Selenium	4.560	µg/L	U		P	4.560	TJA61 Trace ICP2	91903
7440-22-4	Silver	2.060	µg/L	B		P	1.980	TJA61 Trace ICP2	91903
7440-23-5	Sodium	35200	µg/L			P	32.0	TJA61 Trace ICP2	91903
7440-28-0	Thallium	4.080	µg/L	U		P	4.080	TJA61 Trace ICP2	91903
7440-62-2	Vanadium	4.290	µg/L	B		P	2.470	TJA61 Trace ICP2	91903
7440-66-6	Zinc	42.1	µg/L			P	1.090	TJA61 Trace ICP2	91903

Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

*Outfall 001  
Sampled 9-12-03  
24hr. Composite*



# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Contact: John Burke  
 Project: SPDES

Report Date: October 21, 2003

Page 1 of 2

Client Sample ID: 17581-002  
 Sample ID: 87574002  
 Matrix: Water  
 Collect Date: 08-SEP-03 13:45  
 Receive Date: 09-SEP-03 09:00  
 Collector: Client

Project: BRKL00404  
 Client ID: BRKL004  
 COC: 17581  
 Samp Recv.: 17581  
 Client Desc.: STP EFFLUENT

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Semi-Volatiles-Pesticide &amp; PCB Federal</b>											
<i>608/3510C Pest/PCB Liquid Fed</i>											
4,4'-DDD	U	ND	0.0055	0.050	ug/L	1	MM	09/15/03	1637	276438	1
4,4'-DDE	U	ND	0.0044	0.100	ug/L	1					
4,4'-DDT	U	ND	0.0109	0.100	ug/L	1					
Aldrin	U	ND	0.00525	0.050	ug/L	1					
Chlordane (tech.)	U	ND	0.155	0.250	ug/L	1					
Dieldrin	U	ND	0.00385	0.100	ug/L	1					
Endosulfan I	U	ND	0.00615	0.050	ug/L	1					
Endosulfan II	U	ND	0.0119	0.100	ug/L	1					
Endosulfan sulfate	U	ND	0.00465	0.100	ug/L	1					
Endrin	U	ND	0.0038	0.100	ug/L	1					
Endrin aldehyde	U	ND	0.00695	0.100	ug/L	1					
Heptachlor	U	ND	0.00585	0.050	ug/L	1					
Heptachlor epoxide	U	ND	0.003	0.050	ug/L	1					
Toxaphene	U	ND	0.105	5.00	ug/L	1					
alpha-BHC	U	ND	0.00145	0.050	ug/L	1					
beta-BHC	U	ND	0.00285	0.050	ug/L	1					
delta-BHC	U	ND	0.00275	0.100	ug/L	1					
gamma-BHC (Lindane)	U	ND	0.0021	0.050	ug/L	1					

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C-608 PEST/PCB Prep Liquid FED	NAH1	09/12/03	1600	276437

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	EPA 608	

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
4cmx	608/3510C Pest/PCB Liquid Fed	75	(39%-112%)
Decachlorobiphenyl	608/3510C Pest/PCB Liquid Fed	77	(25%-125%)

**Notes:**

The Qualifiers in this report are defined as follows :

< Result is less than amount reported.

*Outfall 001  
 Sampled 9-8-03  
 Grab sample*

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Contact: John Burke  
 Project: SPDES

Report Date: October 21, 2003

Page 1 of 2

Client Sample ID: 17596-002  
 Sample ID: 87764002  
 Matrix: Water  
 Collect Date: 10-SEP-03 14:00  
 Receive Date: 11-SEP-03 09:15  
 Collector: Client

Project: BRKL00404  
 Client ID: BRKL004  
 COC: 17596  
 Samp Recv.: 17596  
 Client Desc.: STP Effluent

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Semi-Volatiles-Pesticide &amp; PCB Federal</b>											
<i>608/3510C Pest/PCB Liquid Fed</i>											
4,4'-DDD	U	ND	0.0055	0.050	ug/L	1	MM	09/15/03	1645	276438	1
4,4'-DDE	U	ND	0.0044	0.100	ug/L	1					
4,4'-DDT	U	ND	0.0109	0.100	ug/L	1					
Aldrin	U	ND	0.00525	0.050	ug/L	1					
Chlordane (tech.)	U	ND	0.155	0.250	ug/L	1					
Dieldrin	U	ND	0.00385	0.100	ug/L	1					
Endosulfan I	U	ND	0.00615	0.050	ug/L	1					
Endosulfan II	U	ND	0.0119	0.100	ug/L	1					
Endosulfan sulfate	U	ND	0.00465	0.100	ug/L	1					
Endrin	U	ND	0.0038	0.100	ug/L	1					
Endrin aldehyde	U	ND	0.00695	0.100	ug/L	1					
Heptachlor	U	ND	0.00585	0.050	ug/L	1					
Heptachlor epoxide	U	ND	0.003	0.050	ug/L	1					
Toxaphene	U	ND	0.105	5.00	ug/L	1					
alpha-BHC	U	ND	0.00145	0.050	ug/L	1					
beta-BHC	U	ND	0.00285	0.050	ug/L	1					
delta-BHC	U	ND	0.00275	0.100	ug/L	1					
gamma-BHC (Lindane)	U	ND	0.0021	0.050	ug/L	1					

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C-608 PEST/PCB Prep Liquid FED	NAH1	09/12/03	1600	276437

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	EPA 608	

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
4cmx	608/3510C Pest/PCB Liquid Fed	72	(39%-112%)
Decachlorobiphenyl	608/3510C Pest/PCB Liquid Fed	76	(25%-125%)

**Notes:**

The Qualifiers in this report are defined as follows :

< Result is less than amount reported.

*Outfall 001  
 Sampled 9-10-03  
 Grab Sample*

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Contact: John Burke  
 Project: SPDES

Report Date: October 21, 2003

Page 1 of 2

Client Sample ID:	17608-002	Project:	BRKL00404
Sample ID:	87936002	Client ID:	BRKL004
Matrix:	Water	COC:	17608
Collect Date:	12-SEP-03 13:25	Sampl Recv.:	17608
Receive Date:	13-SEP-03 09:15	Client Desc.:	STP Effluent
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Semi-Volatiles-Pesticide &amp; PCB Federal</b>											
<i>608/3510C Pest/PCB Liquid Fed</i>											
4,4'-DDD	U	ND	0.00556	0.050	ug/L	1	SJ	09/18/03	1408	277652	1
4,4'-DDE	U	ND	0.00444	0.100	ug/L	1					
4,4'-DDT	J	0.0151	0.011	0.100	ug/L	1					
Aldrin	U	ND	0.0053	0.050	ug/L	1					
Chlordane (tech.)	U	ND	0.157	0.253	ug/L	1					
Dieldrin	U	ND	0.00389	0.100	ug/L	1					
Endosulfan I	U	ND	0.00621	0.050	ug/L	1					
Endosulfan II	U	ND	0.012	0.100	ug/L	1					
Endosulfan sulfate	U	ND	0.0047	0.100	ug/L	1					
Endrin	U	ND	0.00384	0.100	ug/L	1					
Endrin aldehyde	U	ND	0.00702	0.100	ug/L	1					
Heptachlor	U	ND	0.00591	0.050	ug/L	1					
Heptachlor epoxide	U	ND	0.00303	0.050	ug/L	1					
Toxaphene	U	ND	0.106	5.00	ug/L	1					
alpha-BHC	U	ND	0.00146	0.050	ug/L	1					
beta-BHC	U	ND	0.00288	0.050	ug/L	1					
delta-BHC	U	ND	0.00278	0.100	ug/L	1					
gamma-BHC (Lindane)	U	ND	0.00212	0.050	ug/L	1					

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C-608 PEST/PCB Prep Liquid FED	NAH1	09/17/03	1100	277651

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	EPA 608	

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
4cmx	608/3510C Pest/PCB Liquid Fed	29*	(39%-112%)
Decachlorobiphenyl	608/3510C Pest/PCB Liquid Fed	69	(25%-125%)

**Notes:**

The Qualifiers in this report are defined as follows :

< Result is less than amount reported.

Outfall 001  
 Sampled 9-12-03  
 Grab Sample

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Report Date: October 20, 2003

Contact: John Burke  
 Project: SPDES

Page 1 of 2

Client Sample ID: 17581-002  
 Sample ID: 87574004  
 Matrix: Water  
 Collect Date: 08-SEP-03 13:45  
 Receive Date: 09-SEP-03 09:00  
 Collector: Client

Project: BRKL00404  
 Client ID: BRKL004  
 COC: 17581  
 Samp Recv.: 17581  
 Client Desc.: STP EFFLUENT

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Semi-Volatiles-PCB Federal</b>											
<i>8082 3510C PCB H2O Fed</i>											
Aroclor-1016	U	ND	0.050	0.100	ug/L	1	CAK	10/20/03	1513	285784	1
Aroclor-1221	U	ND	0.0833	0.100	ug/L	1					
Aroclor-1232	U	ND	0.050	0.100	ug/L	1					
Aroclor-1242	U	ND	0.060	0.100	ug/L	1					
Aroclor-1248	U	ND	0.050	0.100	ug/L	1					
Aroclor-1254	U	ND	0.050	0.100	ug/L	1					
Aroclor-1260	U	ND	0.050	0.100	ug/L	1					

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C PCB Prep H2O Federal	NAHI	09/12/03	1600	285783

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 8082	

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
4cmx	8082 3510C PCB H2O Fed	39	(33%-126%)
Decachlorobiphenyl	8082 3510C PCB H2O Fed	54	(30%-135%)

**Notes:**

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.

*Outfall 001  
 Sampled 9-8-03  
 Grab Sample*

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Contact: John Burke  
 Project: SPDES

Report Date: October 20, 2003

Page 1 of 2

Client Sample ID: 17596-002	Project: BRKL00404
Sample ID: 87764004	Client ID: BRKL004
Matrix: Water	COC: 17956
Collect Date: 10-SEP-03 11:00	Samp Recv.: 17956
Receive Date: 11-SEP-03 09:15	Client Desc.: STP Effluent
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Semi-Volatiles-PCB Federal</b>											
<i>8082 3510C PCB H2O Fed</i>											
Aroclor-1016	U	ND	0.050	0.100	ug/L	1	CAK	10/20/03	1526	285784	1
Aroclor-1221	U	ND	0.0833	0.100	ug/L	1					
Aroclor-1232	U	ND	0.050	0.100	ug/L	1					
Aroclor-1242	U	ND	0.060	0.100	ug/L	1					
Aroclor-1248	U	ND	0.050	0.100	ug/L	1					
Aroclor-1254	U	ND	0.050	0.100	ug/L	1					
Aroclor-1260	U	ND	0.050	0.100	ug/L	1					

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C PCB Prep H2O Federal	NAH1	09/12/03	1600	285783

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 8082	

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
4cmx	8082 3510C PCB H2O Fed	44	(33%-126%)
Decachlorobiphenyl	8082 3510C PCB H2O Fed	51	(30%-135%)

**Notes:**

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.

Outfall 001  
 Sampled 9-10-03  
 Grab Sample

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Contact: John Burke  
 Project: SPDES

Report Date: October 20, 2003

Page 1 of 2

Client Sample ID: 17608-002	Project: BRKL00404
Sample ID: 87936004	Client ID: BRKL004
Matrix: Water	COC: 17608
Collect Date: 12-SEP-03 13:25	Samp Recv.: 17608
Receive Date: 13-SEP-03 09:15	Client Desc.: STP Effluent
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Semi-Volatiles-PCB Federal</b>											
<i>8082 3510C PCB H2O Fed</i>											
Aroclor-1016	U	ND	0.0505	0.101	ug/L	1	CAK	10/20/03	1538	285784	1
Aroclor-1221	U	ND	0.0841	0.101	ug/L	1					
Aroclor-1232	U	ND	0.0505	0.101	ug/L	1					
Aroclor-1242	U	ND	0.0606	0.101	ug/L	1					
Aroclor-1248	U	ND	0.0505	0.101	ug/L	1					
Aroclor-1254	U	ND	0.0505	0.101	ug/L	1					
Aroclor-1260	U	ND	0.0505	0.101	ug/L	1					

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C PCB Prep H2O Federal	NAHI	09/17/03	1100	285783

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 8082	

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
4cmx	8082 3510C PCB H2O Fed	32 *	(33%-126%)
Decachlorobiphenyl	8082 3510C PCB H2O Fed	41	(30%-135%)

**Notes:**

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.

Outfall 001  
 Sampled 9-12-03  
 Grab Sample

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040. FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

### Sample Information...

Type : Aqueous

Origin:

Brookhaven National Lab.-BNLS

70 Bell Ave.

Upton, NY 11973

Attn To : S. Scarpitta

Lab No. : 0309213-003

Client ID. : 17582-003

Collected 9/8/2003 11:20:00 AM

Received 9/8/2003 3:15:00 PM

Collected By CLIENT

Copies To Original

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Method Number</u>	<u>Analyzed</u>
Biochemical Oxygen Demand	45	mg/L	E405.1	9/10/2003 6:50:00 AM

STP Influent

Sampled 9-8-03

24 hr. Composite

Qualifiers: E - Value above quantitation range

D - Results for Dilution

Date Reported : 9/22/2003

*Joann M. Slavin*

Laboratory Manager

# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Sample Information...

Type : Aqueous

Origin:

Brookhaven National Lab.-BNLS

70 Bell Ave.

Upton, NY 11973

Attn To : S. Scarpitta

Lab No. : 0309310-003

Client ID. : 17597-003

Collected 9/10/2003 11:00:00 AM

Received 9/10/2003 3:31:00 PM

Collected By CLIENT

Copies To Original

CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Method Number</u>	<u>Analyzed</u>
Biochemical Oxygen Demand	38	mg/L	E405.1	9/11/2003 8:12:00 AM

STP Influent

Sampled 9-10-03

~~Grab Sample~~ 9-10-03

24 Hr. Composite

Qualifiers: E - Value above quantitation range  
D - Results for Dilution

Date Reported : 9/22/2003

*Joann M. Slavin*

Laboratory Manager



# H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747  
(631) 694-3040. FAX: (631) 420-8436 NYSDOH ID# 10478

## LABORATORY RESULTS

Brookhaven National Lab.-BNLS  
70 Bell Ave.  
Upton, NY 11973  
Attn To : S. Scarpitta

Lab No. : **0309385-003**

Sample Information...  
Type : Aqueous

Origin:

Client ID. : 17607-003

Collected 9/12/2003 10:30:00 AM  
Received 9/12/2003 3:30:00 PM  
Collected By CLIENT  
Copies To Original  
CC

<u>Parameter(s)</u>	<u>Results</u>	<u>Units</u>	<u>Method Number</u>	<u>Analyzed</u>
Biochemical Oxygen Demand	31	mg/L	E405.1	9/13/2003 8:27:00 AM

STP Influent  
Sampled 9-12-03  
62 Hr. composite

Qualifiers: E - Value above quantitation range  
D - Results for Dilution

Date Reported : 9/22/2003

*Joann M. Slavin*

Laboratory Manager

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
Address : Building 51  
Upton, New York 11973--5000

Report Date: September 18, 2003

Contact: John Burke  
Project: SPDES

Page 1 of 1

Client Sample ID: 17581-003  
Sample ID: 87574003  
Matrix: Water  
Collect Date: 08-SEP-03 11:20  
Receive Date: 09-SEP-03 09:00  
Collector: Client

Project: BRKL00404  
Client ID: BRKL004  
COC: 17581  
Samp Recv.: 17581  
Client Desc.: STP INFLUENT

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Solids Analysis Federal											
EPA 160.2 Total Suspended Liq											
Total Suspended Solids		43.6	1.53	10.0	mg/L	SDS	09/15/03	1405	277104	1	

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 160.2	

### Notes:

The Qualifiers in this report are defined as follows :

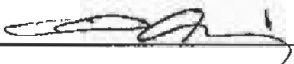
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

*STP Influent  
Sampled 9-8-03  
24 hr. Composite*

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.get.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
Address : Building 51  
Upton, New York 11973-5000

Contact: John Burke  
Project: SPDES

Report Date: September 29, 2003

Page 1 of 1

Client Sample ID: 17596-003  
Sample ID: 87764003  
Matrix: Water  
Collect Date: 10-SEP-03 11:00  
Receive Date: 11-SEP-03 09:15  
Collector: Client

Project: BRKL00404  
Client ID: BRKL004  
COC: 17596  
Samp Recv.: 17596  
Client Desc.: STP Influent

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
<b>Solids Analysis Federal</b>										
<i>EPA 160.2 Total Suspended Liq</i>										
Total Suspended Solids		35.3	1.27	8.33	mg/L		SDS 09/15/03	1405	277104	1

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 160.2	

### Notes:

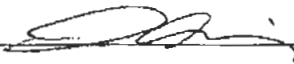
The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 

*STP Influent  
Sampled 9-10-03  
24 hr. composite*

**Certificate of Analysis**

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973-5000

Report Date: September 22, 2003

Contact: John Burke  
 Project: SPDES

Page 1 of 1

Client Sample ID: 17608-003  
 Sample ID: 87936003  
 Matrix: Water  
 Collect Date: 12-SEP-03 10:30  
 Receive Date: 13-SEP-03 09:15  
 Collector: Client

Project: BRKL00404  
 Client ID: BRKL004  
 COC: 17608  
 Samp Recv.: 17608  
 Client Desc.: STP Influent

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Solids Analysis Federal</b>											
EPA 160.2 Total Suspended Liq											
Total Suspended Solids		27.3	0.955	6.25	mg/L		SDS	09/17/03	1103	277722	1

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	EPA 160.2	

Notes:

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

*STP Influent  
 Sampled 9-12-03  
 24hr. Composite*

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

\_\_\_\_\_  
 Reviewed by

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Contact: John Burke  
 Project: Hazardous & Radiochemical Analytical Services-Full

Report Date: October 17, 2003

Page 1 of 2

Client Sample ID: 17581-003  
 Sample ID: 89349001  
 Matrix: Water  
 Collect Date: 08-SEP-03 11:20  
 Receive Date: 06-OCT-03 12:00  
 Collector: Client

Project: BRKL00400  
 Client ID: BRKL004  
 COC: 17581  
 Samp Recv.: 17581  
 Client Desc.: STP Influent

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Mercury Analysis-CVAA</b>											
<i>7470 Cold Vapor Hg Liquid</i>											
Mercury	HJh	0.183	0.0472	0.200	ug/L	1	NOR1	10/16/03	1653	282363	1
<b>Metals Analysis-ICP</b>											
<i>6010 TAL Metals Liquid Federal</i>											
Aluminum		207	14.7	200	ug/L	1	HSC	10/14/03	2014	282637	2
Antimony	U	ND	5.08	60.0	ug/L	1					
Arsenic	J	3.21	2.24	10.0	ug/L	1					
Barium	J	43.6	0.222	200	ug/L	1					
Beryllium	U	ND	0.158	5.00	ug/L	1					
Cadmium	J	0.617	0.313	5.00	ug/L	1					
Calcium		13100	5.54	5000	ug/L	1					
Chromium	J	1.80	0.503	10.0	ug/L	1					
Cobalt	U	ND	0.541	50.0	ug/L	1					
Copper		112	1.39	25.0	ug/L	1					
Iron		1280	12.6	100	ug/L	1					
Magnesium	J	3780	5.18	5000	ug/L	1					
Manganese		30.2	0.296	15.0	ug/L	1					
Nickel	J	3.64	0.690	40.0	ug/L	1					
Selenium	U	ND	2.81	5.00	ug/L	1					
Silver	U	ND	0.835	10.0	ug/L	1					
Thallium	U	ND	10.0	20.0	ug/L	1					
Vanadium	U	ND	0.606	50.0	ug/L	1					
Zinc		108	0.883	20.0	ug/L	1					
Lead		16.2	1.72	5.00	ug/L	1	HSC	10/15/03	1455	282637	3
Potassium	J	3590	16.5	5000	ug/L	1					
Sodium		34700	14.4	5000	ug/L	1					

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-TRACE SW846 3005A	CQH1	10/08/03	1702	282636
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	ETL	10/16/03	1015	282362

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 7470A	
2	SW846 3005/6010B	

STP Influent  
 Sampled 9-8-03  
 24 Hr. Composite

**TOTAL METALS**  
- 1 -  
**INORGANIC ANALYSIS DATA PACKAGE**

SDG No.: 87764

Method Type: SW846

Sample ID: 87764003

Client ID: 17596-003

Contract: BRKL004

Lab Code: GEL

Case No.: GEL

SAS No.:

Matrix: WATER

Date Received: 09/11/2003

Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	503	µg/L			P	70.8	TJA61 Trace ICP2	91603
7440-36-0	Antimony	3.280	µg/L	U		P	3.280	TJA61 Trace ICP2	91603
7440-38-2	Arsenic	2.360	µg/L	U		P	2.360	TJA61 Trace ICP2	91603
7440-39-3	Barium	33.6	µg/L	B		P	0.360	TJA61 Trace ICP2	91603
7440-41-7	Beryllium	0.230	µg/L	U		P	0.230	TJA61 Trace ICP2	91603
7440-43-9	Cadmium	0.692	µg/L	B		P	0.610	TJA61 Trace ICP2	91603
7440-70-2	Calcium	12000	µg/L			P	9.300	TJA61 Trace ICP2	91603
7440-47-3	Chromium	2.870	µg/L	B		P	2.080	TJA61 Trace ICP2	91603
7440-48-4	Cobalt	1.450	µg/L	B		P	1.100	TJA61 Trace ICP2	91603
7440-50-8	Copper	106	µg/L			P	2.020	TJA61 Trace ICP2	91603
7439-89-6	Iron	1440	µg/L			P	25.3	TJA61 Trace ICP2	91603
7439-92-1	Lead	12.1	µg/L			P	2.140	TJA61 Trace ICP2	91603
7439-95-4	Magnesium	3460	µg/L	B		P	12.7	TJA61 Trace ICP2	91603
7439-96-5	Manganese	42.3	µg/L			P	0.760	TJA61 Trace ICP2	91603
7439-97-6	Mercury	0.332	µg/L			AV	0.033	PE CVAA2	091603wlHg
7440-02-0	Nickel	3.720	µg/L	B		P	2.980	TJA61 Trace ICP2	91603
7440-09-7	Potassium	5130	µg/L			P	22.2	TJA61 Trace ICP2	91603
7782-49-2	Selenium	4.560	µg/L	U		P	4.560	TJA61 Trace ICP2	91603
7440-22-4	Silver	1.980	µg/L	U		P	1.980	TJA61 Trace ICP2	91603
7440-23-5	Sodium	31200	µg/L			P	32.0	TJA61 Trace ICP2	91603
7440-28-0	Thallium	4.080	µg/L	U		P	4.080	TJA61 Trace ICP2	91603
7440-62-2	Vanadium	2.470	µg/L	U		P	2.470	TJA61 Trace ICP2	91603
7440-66-6	Zinc	73.0	µg/L			P	1.090	TJA61 Trace ICP2	91603

Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

STP Influent  
Sampled 9-10-03  
24 Hr. Composite

TOTAL METALS  
- 1 -  
INORGANIC ANALYSIS DATA PACKAGE

SDG No.: 87936

Method Type: SW846

Sample ID: 87936003

Client ID: 17608-003

Contract: BRKL00404

Lab Code: GEL

Case No.: GEL

SAS No.:

Matrix: WATER

Date Received: 9/13/2003

Level: LOW

% Solids: 0.00

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	509	µg/L			P	70.8	TJA61 Trace ICP2	91903
7440-36-0	Antimony	3.280	µg/L	U		P	3.280	TJA61 Trace ICP2	91903
7440-38-2	Arsenic	2.900	µg/L	B		P	2.360	TJA61 Trace ICP2	91903
7440-39-3	Barium	31.4	µg/L	B		P	0.360	TJA61 Trace ICP2	91903
7440-41-7	Beryllium	0.230	µg/L	U		P	0.230	TJA61 Trace ICP2	91903
7440-43-9	Cadmium	0.610	µg/L	U		P	0.610	TJA61 Trace ICP2	91903
7440-70-2	Calcium	12300	µg/L			P	9.300	TJA61 Trace ICP2	91903
7440-47-3	Chromium	2.390	µg/L	B		P	2.080	TJA61 Trace ICP2	91903
7440-48-4	Cobalt	1.100	µg/L	U		P	1.100	TJA61 Trace ICP2	91903
7440-50-8	Copper	86.4	µg/L			P	2.020	TJA61 Trace ICP2	91903
7439-89-6	Iron	1340	µg/L			P	25.3	TJA61 Trace ICP2	91903
7439-92-1	Lead	12.4	µg/L			P	2.140	TJA61 Trace ICP2	91903
7439-95-4	Magnesium	3510	µg/L	B		P	12.7	TJA61 Trace ICP2	91903
7439-96-5	Manganese	38.8	µg/L			P	0.760	TJA61 Trace ICP2	91903
7439-97-6	Mercury	0.221	µg/L			AV	0.033	PE CVAA2	091903W1Hg
7440-02-0	Nickel	3.880	µg/L	B		P	2.980	TJA61 Trace ICP2	91903
7440-09-7	Potassium	5430	µg/L			P	22.2	TJA61 Trace ICP2	91903
7782-49-2	Selenium	4.560	µg/L	U		P	4.560	TJA61 Trace ICP2	91903
7440-22-4	Silver	1.980	µg/L	U		P	1.980	TJA61 Trace ICP2	91903
7440-23-5	Sodium	33500	µg/L			P	32.0	TJA61 Trace ICP2	91903
7440-28-0	Thallium	4.080	µg/L	U		P	4.080	TJA61 Trace ICP2	91903
7440-62-2	Vanadium	2.530	µg/L	B		P	2.470	TJA61 Trace ICP2	91903
7440-66-6	Zinc	52.3	µg/L			P	1.090	TJA61 Trace ICP2	91903

Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

STP Influent  
Sampled 9-12-03  
24hr. Composite

**ATTACHMENT V**

**BROOKHAVEN NATIONAL LABORATORY**

**SPDES PERMIT NO. NY0005835**

**DISCHARGE MONITORING REPORT FOR SEPTEMBER 2003**

**ANALYTICAL RESULTS FROM H2M LABS INC., THE BNL ANALYTICAL  
SERVICES LABORATORY, GEL LLC, AND CHEMTEX, INC.**

**FOR REGULATORY COMPLIANCE SAMPLES COLLECTED FROM  
OUTFALLS 001A, 001B, 001D, 001F, 002, 002B, 005, 006A, 006B, 008, AND 010**



## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

17159-001

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BNLS

SAS No.: \_\_\_\_\_

SDG No.: BNLS761Matrix: (soil/water) WATERLab Sample ID: 0307561-001ASample wt/vol: 1000 (g/mL) MLLab File ID: A\DI1227.DLevel: (low/med) LOWDate Received: 07/16/03% Moisture: Decanted: (Y/N) NDate Extracted: 07/18/03Concentrated Extract Volume: 1000 (µL)Date Analyzed: 07/21/03Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg)	UG/L	Q
62-75-9	N-Nitrosodimethylamine	10		U
108-95-2	Phenol	10		U
111-44-4	Bis(2-chloroethyl) ether	10		U
95-57-8	2-Chlorophenol	10		U
541-73-1	1,3-Dichlorobenzene	10		U
106-46-7	1,4-Dichlorobenzene	10		U
95-50-1	1,2-Dichlorobenzene	10		U
108-60-1	2,2'-oxybis(1-Chloropropane)	10		U
621-64-7	N-Nitroso-di-n-propylamine	10		U
67-72-1	Hexachloroethane	10		U
98-95-3	Nitrobenzene	10		U
78-59-1	Isophorone	10		U
88-75-5	2-Nitrophenol	25		U
105-67-9	2,4-Dimethylphenol	10		U
111-91-1	Bis(2-chloroethoxy)methane	10		U
120-83-2	2,4-Dichlorophenol	10		U
120-82-1	1,2,4-Trichlorobenzene	10		U
91-20-3	Naphthalene	10		U
87-68-3	Hexachlorobutadiene	10		U
59-50-7	4-Chloro-3-methylphenol	10		U
77-47-4	Hexachlorocyclopentadiene	10		U
88-06-2	2,4,6-Trichlorophenol	10		U
91-58-7	2-Chloronaphthalene	10		U
131-11-3	Dimethylphthalate	10		U
208-96-8	Acenaphthylene	10		U
606-20-2	2,6-Dinitrotoluene	10		U
83-32-9	Acenaphthene	10		U
51-28-5	2,4-Dinitrophenol	25		U
100-02-7	4-Nitrophenol	25		U
121-14-2	2,4-Dinitrotoluene	10		U
84-66-2	Diethylphthalate	10		U
86-73-7	Fluorene	10		U
7005-72-3	4-Chlorophenyl-phenylether	10		U
534-52-1	4,6-Dinitro-2-methylphenol	25		U
86-30-6	N-Nitrosodiphenylamine	10		U
101-55-3	4-Bromophenyl-phenylether	10		U

Outfall 001A  
 Sampled 7-15-03  
 Grab Sample

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

17159-001

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BNLS

SAS No.: \_\_\_\_\_

SDG No.: BNLS761Matrix: (soil/water) WATERLab Sample ID: 0307561-001ASample wt/vol: 1000 (g/mL) MLLab File ID: A\D11227.DLevel: (low/med) LOWDate Received: 07/16/03% Moisture: Decanted: (Y/N) NDate Extracted: 07/18/03Concentrated Extract Volume: 1000 (µL)Date Analyzed: 07/21/03Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butyl phthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butyl benzyl phthalate	10	U
56-55-3	Benzo(a)anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	11	
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

Outfall 001A  
 Sampled 7-15-03  
 Grab Sample.

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

17128-002

Lab Name: GEL, LLC.

Contract: N/A

Lab Code: N/A

Case No.: N/A

SAS No.: N/A

SDG No.: 83584

Matrix: (soil/water) WATER

Lab Sample ID: 83584002

Sample wt/vol: 5.000 (g/ml) ML

Lab File ID: 1R322

Level: (low/med) LOW

Date Received: 07/08/03

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/09/03

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
75-09-2	Methylene chloride	2.0	U
1634-04-4	tert-Butyl methyl ether	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
67-66-3	Chloroform	1.7	
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
110-75-8	2-Chloroethylvinyl ether	5.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U

Outfall 001B  
Sampled  
7-7-03  
Grab Sample

1B  
SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

17128-002

Lab Name: GEL, LLC.

Contract: N/A

Lab Code: N/A

Case No.: N/A

SAS No.: N/A

SDG No.: 83584

Matrix: (soil/water) WATER

Lab Sample ID: 83584002

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S2G1429

Level: (low/med) LOW

Date Received: 07/08/03

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 07/09/03

Concentrated Extract Volume: 1.00 (mL)

Date Analyzed: 07/14/03

Injection Volume: 0.5 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L Q

62-75-9	N-Methyl-N-nitrosomethylamin	10.0	U
108-95-2	Phenol	10.0	U
111-44-4	bis(2-Chloroethyl) ether	10.0	U
95-57-8	2-Chlorophenol	10.0	U
541-73-1	1,3-Dichlorobenzene	10.0	U
106-46-7	1,4-Dichlorobenzene	10.0	U
95-50-1	1,2-Dichlorobenzene	10.0	U
108-60-1	bis(2-Chloroisopropyl) ether	10.0	U
621-64-7	N-Nitrosodipropylamine	10.0	U
67-72-1	Hexachloroethane	10.0	U
98-95-3	Nitrobenzene	10.0	U
78-59-1	Isophorone	10.0	U
88-75-5	2-Nitrophenol	10.0	U
105-67-9	2,4-Dimethylphenol	10.0	U
111-91-1	bis(2-Chloroethoxy)methane	10.0	U
120-83-2	2,4-Dichlorophenol	10.0	U
120-82-1	1,2,4-Trichlorobenzene	10.0	U
91-20-3	Naphthalene	10.0	U
87-68-3	Hexachlorobutadiene	10.0	U
59-50-7	4-Chloro-3-methylphenol	10.0	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.0	U
88-06-2	2,4,6-Trichlorophenol	10.0	U
95-95-4	2,4,5-Trichlorophenol	10.0	U
91-58-7	2-Chloronaphthalene	10.0	U
131-11-3	Dimethylphthalate	10.0	U
606-20-2	2,6-Dinitrotoluene	10.0	U
208-96-8	Acenaphthylene	10.0	U
83-32-9	Acenaphthene	10.0	U
51-28-5	2,4-Dinitrophenol	50.0	U
132-64-9	Dibenzofuran	10.0	U
121-14-2	2,4-Dinitrotoluene	10.0	U

Outfall 001B  
Sampled  
7-7-03  
Grab Sample

FORM I SV-1

OLM03.0

1C  
SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

17128-002

Lab Name: GEL, LLC.

Contract: N/A

Lab Code: N/A

Case No.: N/A

SAS No.: N/A

SDG No.: 83584

Matrix: (soil/water) WATER

Lab Sample ID: 83584002

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S2G1429

Level: (low/med) LOW

Date Received: 07/08/03

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 07/09/03

Concentrated Extract Volume: 1.00 (mL)

Date Analyzed: 07/14/03

Injection Volume: 0.5 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
84-66-2	Diethylphthalate	10.0	U
100-02-7	4-Nitrophenol	50.0	U
86-73-7	Fluorene	10.0	U
7005-72-3	4-Chlorophenylphenylether	10.0	U
534-52-1	2-Methyl-4,6-dinitrophenol	50.0	U
122-39-4	Diphenylamine	10.0	U
101-55-3	4-Bromophenylphenylether	10.0	U
118-74-1	Hexachlorobenzene	10.0	U
87-86-5	Pentachlorophenol	50.0	U
85-01-8	Phenanthrene	10.0	U
120-12-7	Anthracene	10.0	U
84-74-2	Di-n-butylphthalate	10.0	U
206-44-0	Fluoranthene	10.0	U
92-87-5	Benzidine	50.0	U
129-00-0	Pyrene	10.0	U
85-68-7	Butylbenzylphthalate	10.0	U
56-55-3	Benzo(a)anthracene	10.0	U
91-94-1	3,3'-Dichlorobenzidine	40.0	U
218-01-9	Chrysene	10.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	1.8	J
117-84-0	Di-n-octylphthalate	10.0	U
205-99-2	Benzo(b)fluoranthene	10.0	U
207-08-9	Benzo(k)fluoranthene	10.0	U
50-32-8	Benzo(a)pyrene	10.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U
53-70-3	Dibenzo(a,h)anthracene	10.0	U
191-24-2	Benzo(ghi)perylene	10.0	U

Outfall 001B  
Sampled  
77-03  
Grab Sample

NYSDEC - ASP  
1  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Brookhaven National Laboratory - ASL  
 Lab Code: \_\_\_\_\_  
 Matrix: Water  
 Level: \_\_\_\_\_

SAMPLE NO.  
17127-005

C.O.C.#: 17127  
 Lab sample ID: 23070707-05  
 Date Rcvd.: 7/7/03

Concentration Units: ( ug/L )

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	370	J PH		ICP/MS
7440-36-0	Antimony	6	U		ICP/MS
7440-38-2	Arsenic	1.0	U		ICP/MS
7440-39-3	Barium	9.2			ICP/MS
7440-41-7	Beryllium	0.5	U J PH		ICP/MS
7440-43-9	Cadmium	0.5	U		ICP/MS
7440-47-3	Chromium	116			ICP/MS
7440-48-4	Cobalt	1.7	B		ICP/MS
7440-50-8	Copper	314			ICP/MS
7439-89-6	Iron	5218			AA
7439-92-1	Lead	20.8			ICP/MS
7439-96-5	Manganese	54.6			ICP/MS
7439-97-6	Mercury	0.1	U		CV
7439-98-7	Molybdenum	6.3			ICP/MS
7440-02-0	Nickel	34.3			ICP/MS
7782-49-2	Selenium	0.6	B J PH		ICP/MS
7440-22-4	Silver	1	U		ICP/MS
7440-23-5	Sodium	2704			AA
7440-28-0	Thallium	1	U		ICP/MS
7440-62-2	Vanadium	5	U		ICP/MS
7440-66-6	Zinc	64.1			ICP/MS

outfall 001B  
 Sampled 7-7-03  
 Grab Sample

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000  
 Contact: John Burke  
 Project: SPDES

Report Date: July 18, 2003

Page 1 of 2

Client Sample ID:	17128-001	Project:	BRKL00404
Sample ID:	83584001	Client ID:	BRKL004
Matrix:	Water	COC:	17128
Collect Date:	07-JUL-03 11:12	Samp Recv.:	17128
Receive Date:	08-JUL-03 09:00	Client Desc.:	Bldg 197-93B
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Rapid Flow Analysis Federal</b>											
<i>EPA 420.2 Phenols, Total Liquid</i>											
Total Phenol	U	-0.00278	0.00184	0.010	mg/l	1	ADF	07/17/03	1137	263497	1
<i>SW9012A Cyanide, Total Federal</i>											
Cyanide, Total	U	0.382	1.72	5.00	ug/L	1	ADF	07/17/03	0913	263457	2
<b>TRAACS Nutrient Analysis Fed</b>											
<i>EPA 351.2/353.1 Total Nitrogen</i>											
Total Nitrogen		1.34	0.030	0.100	mg/L	1	THL	07/15/03	1528	263619	3
<i>EPA 353.1 Nitrogen, (NO3/NO2)</i>											
Nitrogen, Nitrate/Nitrite		0.270	0.010	0.050	mg/L	1	THL	07/11/03	1646	262307	4
<i>Nitrogen, Total Kjeldahl (TKN)</i>											
Nitrogen, Total Kjeldahl		1.07	0.030	0.100	mg/L	1	THL	07/11/03	1251	262182	5

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	EXN1	07/09/03	1100	262180
EPA 420.2 Prep	EPA 420.2 Phenols, Total in liquid-Fed P	ADF	07/15/03	1300	263496
SW846 9010B Prep	SW846 9010B Prep	EXN1	07/16/03	1120	263456

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	EPA 420.2	
2	SW846 9012A	
3	EPA 351.2/353.1	
4	EPA 353.1	
5	EPA 351.2	

Outfall 001D  
 Sampled 7/23  
 Grab Sample

**Notes:**

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.

NYSDEC - ASP  
1  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Brookhaven National Laboratory - ASL  
 Lab Code: \_\_\_\_\_  
 Matrix: Water  
 Level: \_\_\_\_\_

SAMPLE NO.  
17127-004

C.O.C.#: 17127  
 Lab sample ID: 23070707-04  
 Date Rcvd.: 7/7/03

Concentration Units: ( ug/L )

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				ICP/MS
7440-36-0	Antimony				ICP/MS
7440-38-2	Arsenic				ICP/MS
7440-39-3	Barium				ICP/MS
7440-41-7	Beryllium				ICP/MS
7440-43-9	Cadmium				ICP/MS
7440-47-3	Chromium				ICP/MS
7440-48-4	Cobalt				ICP/MS
7440-50-8	Copper				ICP/MS
7439-89-6	Iron				AA
7439-92-1	Lead				ICP/MS
7439-96-5	Manganese				ICP/MS
7439-97-6	Mercury				CV
7439-98-7	Molybdenum				ICP/MS
7440-02-0	Nickel				ICP/MS
7782-49-2	Selenium				ICP/MS
7440-22-4	Silver	16.4			ICP/MS
7440-23-5	Sodium				AA
7440-28-0	Thallium				ICP/MS
7440-62-2	Vanadium				ICP/MS
7440-66-6	Zinc				ICP/MS

outfall 001D  
 Sampled 7-7-03  
 Grab Sample  
 Rm 1-93B

Form I - IN





# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
Address : Building 51  
Upton, New York 11973--5000

Contact: John Burke  
Project: SPDES

Report Date: September 12, 2003

Page 1 of 1

Client Sample ID: 17569-003  
Sample ID: 87494003  
Matrix: Water  
Collect Date: 04-SEP-03 13:44  
Receive Date: 06-SEP-03 09:15  
Collector: Client

Project: BRKL00404  
Client ID: BRKL004  
COC: 17569  
Samb Recv.: 17569  
Client Desc.: HN

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
<b>Oil &amp; Grease Analysis Federal</b>										
<i>EPA 1664 n-Hexane/Silica Gel Treated HEM(Oil &amp; Grease and TPH)</i>										
Oil and Grease	J	2.44	0.600	5.00	mg/L		RDH1 09/11/03 0835	276448	1	
Total Petroleum Hydrocarbons	J	2.22	0.528	4.44	mg/L		RDH1 09/12/03 0707	276449	2	

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664	
2	EPA 1664	

### Notes:

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 

*Outfall 002  
Sampled 9-4-03  
Grab Sample.*

NYSDEC - ASP  
1  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Brookhaven National Laboratory - ASL

Lab Code: \_\_\_\_\_

Matrix: Water

Level: \_\_\_\_\_

SAMPLE NO.

17127-001

C.O.C.#: 17127

Lab sample ID: 23070707-01B

Date Rcvd.: 7/7/03

Concentration Units: ( ug/L )

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.9	B		ICP/MS
7440-36-0	Antimony	6	U		ICP/MS
7440-38-2	Arsenic	1.0	U		ICP/MS
7440-39-3	Barium	24.3	B		ICP/MS
7440-41-7	Beryllium	0.5	U		ICP/MS
7440-43-9	Cadmium	0.5	U		ICP/MS
7440-47-3	Chromium	1.0	U		ICP/MS
7440-48-4	Cobalt	5.0	U		ICP/MS
7440-50-8	Copper	19.5			ICP/MS
7439-89-6	Iron	192	B		AA
7439-92-1	Lead	1.2			ICP/MS
7439-96-5	Manganese	12.3			ICP/MS
7439-97-6	Mercury	0.57	B		CV
7439-98-7	Molybdenum	12.6			ICP/MS
7440-02-0	Nickel	1.3	B		ICP/MS
7782-49-2	Selenium	0.5	U		ICP/MS
7440-22-4	Silver	11.1			ICP/MS
7440-23-5	Sodium	17270			AA
7440-28-0	Thallium	1.0	U		ICP/MS
7440-62-2	Vanadium	5.0	U		ICP/MS
7440-66-6	Zinc	47.2			ICP/MS

Outfall 002  
Sampled 7-7-03  
Grab Sample  
Total Metals

Form I - IN

Volatile Organics Analysis Data Sheet  
Method 624 (CLP)

Brookhaven National Laboratory  
Environment Safety and Health Services Division  
Non-Radiological Analytical Services Laboratory

Analytical Services Lab ID:

23070707-01

Matrix: (soil/water) water Date Analyzed: 7/18/2003  
Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 30718B12.D  
Level: (low/med) low Dilution Factor: 1  
Dilution information: N/A

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	<u>ug/L</u>	
74-87-3	Chloromethane		2	U
75-01-4	Vinyl chloride		2	U
74-83-9	Bromomethane		2	U
75-00-3	Chloroethane		2	U
75-69-4	Trichlorofluoromethane		2	U
75-35-4	1,1-Dichloroethylene		2	U
67-64-1	Acetone		10	
75-09-2	Methylene Chloride		2	U
1634-04-4	MTBE		2	U
156-60-5	trans-1,2-Dichloroethene		2	U
75-34-3	1,1-Dichloroethane		2	U
156-59-4	cis-1,2-Dichloroethylene		2	U
78-93-3	2-Butanone		2	U
67-66-3	Chloroform		2	U
71-55-6	1,1,1-Trichloroethane		2	U
56-23-5	Carbon Tetrachloride		2	U
71-43-2	Benzene		2	U
107-06-2	1,2-Dichloroethane		2	U
79-01-6	Trichloroethylene		2	U
78-87-5	1,2-Dichloropropane		2	U
75-27-4	Bromodichloromethane		2	U
10061-01-5	cis-1,3-Dichloropropene		2	U
108-10-1	4-Methyl-2-pentanone		2	U
108-88-3	Toluene		2	U
10061-02-6	trans-1,3-Dichloropropene		2	U
79-00-5	1,1,2-Trichloroethane		2	U
127-18-4	Tetrachloroethylene		2	U
142-28-9	1,3-Dichloropropane		2	U
591-78-6	2-Hexanone		2	U
124-48-1	Dibromochloromethane		2	U
108-90-7	Chlorobenzene		2	U
100-41-4	Ethylbenzene		2	U
108-38-3/106-42-3	p- + m-Xylene		2	U
95-47-6	o-Xylene		2	U
75-25-2	Bromoform		2	U
79-34-5	1,1,2,2-Tetrachloroethane		2	U
541-73-1	1,3-Dichlorobenzene		2	U
106-46-7	1,4-Dichlorobenzene		2	U
95-50-1	1,2-Dichlorobenzene		2	U

Outfall 002  
Sampled 7-7-03  
Grab Sample

# CHEMTX

Environmental & Industrial Hygiene Services

3082 25<sup>th</sup> Street, Port Arthur, TX 77642  
 Phone (409) 983-4575 Fax (409) 982-1522

Client: **Brookhaven National Laboratory**  
 Safety & Environmental  
 Protection Division  
 Bldg. 535A  
 Upton, NY 11973-5000  
 Attn: **Mr. B. Lee**

Report Date: 07/29/03

**AIHA** Laboratory # 101478

**nelap** certificate # 02077

RESULTS OF ANALYSIS  
PROJECT: EWMSD

*Outfall 002  
 Sampled 7-7-03  
 Grab Sample*

ATTACHMENT I

COC_num	Site-ID	Samp_type	Samp-ID	Samp_date	Samp_time	Rec_date	SDG	Lab_file_ID	Samp_depth	Flow_rate	Notes	Lab_qual	Lab_QCnotes	Rev_qual	Rev_conc	Rev_QCnotes
17129	HN	W	HN	07/07/03	1055	07/11/03		P3070389	0							
Cas_num	Name	Concen	Error	Det_limit	Units	Anal_date	Method	Lab_batch-ID	Ext_date	Dilution						
	H E D P as Organic Phosphorus	< 0.05		0.05	mg/l	07/18/03	EPA 365.3	P3070391								
	Inorganic Phosphorus	< 0.05		0.05	mg/l	07/18/03	EPA 365.3									
	Total Phosphorus	0.06		0.05	mg/l	07/18/03	EPA 365.3									
	Tolytriazole(TTA)	< 0.005		0.005	mg/l	07/15/03	SOP # O121-049									

Required fields are shaded  
 Required field under some circumstances (see Att. 2)

Organic, Metal, Wet Chemical, Biological and Petro  
 Chemical Analysis for Multi-Media Environmental  
 And Industrial Hygiene Services

Facilities are also available at:  
 5544 Leopard Street, Corpus Christi, Tx 78408  
 138 Cities Services Hwy. Sulphur, LA 70663  
 (361)299-9900 FAX (361)299-1155  
 (337)626-2121 FAX (337)626-0405

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
Address : Building 51  
Upton, New York 11973--5000

Contact: John Burke  
Project: SPDES

Report Date: September 12, 2003

Page 1 of 1

Client Sample ID: 17569-006  
Sample ID: 87494006  
Matrix: Water  
Collect Date: 04-SEP-03 13:34  
Receive Date: 06-SEP-03 09:15  
Collector: Client

Project: BRKL00404  
Client ID: BRKL004  
COC: 17569  
Samp Recv.: 17569  
Client Desc.: 1004/1002

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Oil &amp; Grease Analysis Federal</b>											
<i>EPA 1664 n-Hexane/Silica Gel Treated HEM(Oil &amp; Grease and TPH)</i>											
Oil and Grease	J	1.61	0.581	5.00	mg/L		RDH1	09/11/03	0835	276448	1
Total Petroleum Hydrocarbons	J	1.40	0.511	4.30	mg/L		RDH1	09/12/03	0707	276449	2

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664	
2	EPA 1664	

### Notes:

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by \_\_\_\_\_

*Outfall 002B  
Sampled 9-4-03  
Grab Sample*

# CHEMTEx

Environmental & Industrial Hygiene Services

3082 25<sup>th</sup> Street, Port Arthur, TX 77642  
Phone (409) 983-4575 Fax (409) 982-1522

Client: **Brookhaven National Laboratory**  
Safety & Environmental  
Protection Division  
Bldg. 535A  
Upton, NY 11973-5000  
Attn: **Mr. B. Lee**

Report Date: 07/29/03

**AIHA** Laboratory # 101478

**RESULTS OF ANALYSIS**  
PROJECT: EWMSD

nelap certificate # 02077

*Outfall 002B  
Sampled 7-7-03  
Grab Sample*

ATTACHMENT 1

COC_num	Site-ID	Samp_type	Samp-ID	Samp_date	Samp_time	Rec_date	SDG	Lab_file-ID	Samp_depth	Flow_rate	Notes	
Cas_num	Name	Concn	Error	Det_limit	Units	Anal_date	Method	Lab_batch-ID	Ext_date	Dilution	Lab_qual	
											Lab_QCNotes	
											Rev_qual	
											Rev_conc	
17129	1004/1002	W	1004/1002	07/07/03	1555	07/11/03		P3070389	0			
	HE D P as Organic Phosphorus	< 0.05/ < 0.05*		0.05	mg/l	07/18/03	EPA 365.3	P3070394				
	Inorganic Phosphorus	0.06/ 0.06*		0.05	mg/l	07/18/03	EPA 365.3					
	Total Phosphorus	0.08/ 0.08*		0.05	mg/l	07/18/03	EPA 365.3					
	Tolytriazole(TTA)	< 0.005		0.005	mg/l	07/15/03	SOP # 0121-049					
	* Duplicate Analysis											

Required fields are shaded

Required field under some circumstances (see Att. 2)

Organic, Metal, Wet Chemical, Biological and Petro  
Chemical Analysis for Multi-Media Environmental  
And Industrial Hygiene Services

Facilities are also available at:  
5544 Leopard Street, Corpus Christi, Tx 78408  
138 Cities Services Hwy. Sulphur, LA 70663

(361)299-9900 FAX (361)299-1155  
(337)626-2121 FAX (337)626-0405

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
Address : Building 51  
Upton, New York 11973--5000

Contact: John Burke  
Project: SPDES

Report Date: September 12, 2003

Page 1 of 1

Client Sample ID: 17569-004  
Sample ID: 87494004  
Matrix: Water  
Collect Date: 04-SEP-03 11:50  
Receive Date: 06-SEP-03 09:15  
Collector: Client

Project: BRKL00404  
Client ID: BRKL004  
COC: 17569  
Sample Recv.: 17569  
Client Desc.: HS

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Oil &amp; Grease Analysis Federal</b>											
<i>EPA 1664 n-Hexane/Silica Gel Treated HEM(Oil &amp; Grease and TPH)</i>											
Oil and Grease	J	1.46	0.607	5.00	mg/L		RDH1	09/11/03	0835	276448	1
Total Petroleum Hydrocarbons	J	1.46	0.534	4.49	mg/L		RDH1	09/12/03	0707	276449	2

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664	
2	EPA 1664	

### Notes:

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

*Outfall 005  
Sampled 9-4-03  
Grab Sample*

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 



NYSDEC - ASP  
1  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Brookhaven National Laboratory - ASL  
 Lab Code: \_\_\_\_\_  
 Matrix: Water  
 Level: \_\_\_\_\_

SAMPLE NO.  
17127-003

C.O.C.#: 17127  
 Lab sample ID: 23070707-03  
 Date Rcvd.: 7/7/03

Concentration Units: ( ug/L )

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20	U		ICP/MS
7440-36-0	Antimony	6	U		ICP/MS
7440-38-2	Arsenic	1.0	U		ICP/MS
7440-39-3	Barium	29.2			ICP/MS
7440-41-7	Beryllium	0.5	U		ICP/MS
7440-43-9	Cadmium	0.5	U		ICP/MS
7440-47-3	Chromium	1.0	U		ICP/MS
7440-48-4	Cobalt	5.0	U		ICP/MS
7440-50-8	Copper	5.5			ICP/MS
7439-89-6	Iron	75	U		AA
7439-92-1	Lead	0.3	U		ICP/MS
7439-96-5	Manganese	3.6			ICP/MS
7439-97-6	Mercury	0.1	U		CV
7439-98-7	Molybdenum	5	U		ICP/MS
7440-02-0	Nickel	4.0	U		ICP/MS
7782-49-2	Selenium	1.1	B		ICP/MS
7440-22-4	Silver	1	U		ICP/MS
7440-23-5	Sodium	26150			AA
7440-28-0	Thallium	1	U		ICP/MS
7440-62-2	Vanadium	5.0	U		ICP/MS
7440-66-6	Zinc	6.5			ICP/MS

Outfall 005  
 Sampled 7-7-03  
 Grab Sample

Form I - IN



# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
Address : Building 51  
Upton, New York 11973--5000

Contact: John Burke  
Project: SPDES

Report Date: September 12, 2003

Page 1 of 1

Client Sample ID: 17569-001  
Sample ID: 87494001  
Matrix: Water  
Collect Date: 04-SEP-03 13:50  
Receive Date: 06-SEP-03 09:15  
Collector: Client

Project: BRKL00404  
Client ID: BRKL004  
COC: 17569  
Samp Recv.: 17569  
Client Desc.: HTW

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
<b>Oil &amp; Grease Analysis Federal</b>										
<i>EPA 1664 n-Hexane/Silica Gel Treated HEM(Oil &amp; Grease and TPH)</i>										
Oil and Grease	J	2.28	0.587	5.00	mg/L		RDH1 09/11/03 0835	276448	1	
Total Petroleum Hydrocarbons	J	2.07	0.516	4.35	mg/L		RDH1 09/12/03 0707	276449	2	

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664	
2	EPA 1664	

### Notes:

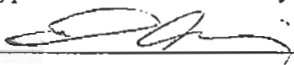
The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 

*Outfall 006BA<sup>MA</sup>  
Sampled 9-4-03  
Grab Sample*

# CHEMTX

Environmental & Industrial Hygiene Services

3082 25<sup>th</sup> Street, Port Arthur, TX 77642  
Phone (409) 983-4575 Fax (409) 982-1522

Client: **Brookhaven National Laboratory**  
Safety & Environmental  
Protection Division  
Bldg. 535A  
Upton, NY 11973-5000  
Attn: **Mr. B. Lee**

Report Date: 07/29/03

**AIHA Laboratory # 101478**

**RESULTS OF ANALYSIS**  
**PROJECT: EWMSD**

**nelap certificate # 02077**

*Outfall 006A  
Sampled 7-7-03  
Grab Sample*

ATTACHMENT I

COC_num	Site-ID	Samp_type	HT-W	W	Concen	Error	HT-W	Samp-date	Samp-time	Units	Rec_date	SDG	Lab_file-ID	Samp-depth	Flow_rate	Notes	Lab_qual	Lab_QCnotes	Rev_qual	Rev_conc	Rev_QCnotes
17129	HT-W	W					HT-W	07/07/03	1040		07/11/03		P3070389	0							
	Name							Det_limit			Anal_date	Method	Lab_batch-ID	Ext_date	Dilution						
	H E D P as Organic Phosphorus	< 0.05			0.05			mg/l			07/18/03	EPA 365.3	P3070390								
	Inorganic Phosphorus	< 0.05			0.05			mg/l			07/18/03	EPA 365.3									
	Total Phosphorus	< 0.05			0.05			mg/l			07/18/03	EPA 365.3									
	Tolyltriazole(TTA)	< 0.005			0.005			mg/l			07/15/03	SOP # O121-049									

Required fields are shaded

Required field under some circumstances (see Att. 2)

Organic, Metal, Wet Chemical, Biological and Petro  
Chemical Analysis for Multi-Media Environmental  
And Industrial Hygiene Services

Facilities are also available at:  
5544 Leopard Street, Corpus Christi, TX 78408  
138 Cities Services Hwy. Sulphur, LA 70663

(361)299-9900 FAX (361)299-1155  
(337)626-2121 FAX (337)626-0405

# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
Address : Building 51  
Upton, New York 11973-5000

Contact: John Burke  
Project: SPDES

Report Date: September 12, 2003

Page 1 of 1

Client Sample ID: 17569-002  
Sample ID: 87494002  
Matrix: Water  
Collect Date: 04-SEP-03 13:47  
Receive Date: 06-SEP-03 09:15  
Collector: Client

Project: BRKL00404  
Client ID: BRKL004  
COC: 17569  
Samp Recv.: 17569  
Client Desc.: HTE

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Oil &amp; Grease Analysis Federal</b>											
<i>EPA 1664 n-Hexane/Silica Gel Treated HEM(Oil &amp; Grease and TPH)</i>											
Oil and Grease	J	2.14	0.578	5.00	mg/L		RDH1	09/11/03	0835	276448	1
Total Petroleum Hydrocarbons	J	1.82	0.508	4.28	mg/L		RDH1	09/12/03	0707	276449	2

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664	
2	EPA 1664	

### Notes:

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by



*Outfall 006B  
Sampled 9-4-03  
Grab Sample*



# GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Brookhaven National Laboratory  
Address : Building 51  
Upton, New York 11973-5000

Contact: John Burke  
Project: SPDES

Report Date: September 12, 2003

Page 1 of 1

Client Sample ID: 17563-001  
Sample ID: 87300001  
Matrix: Water  
Collect Date: 02-SEP-03 11:08  
Receive Date: 04-SEP-03 09:15  
Collector: Client

Project: BRKL00404  
Client ID: BRKL004  
COC: 17563  
Samp Recv.: 17563  
Client Desc.: HW

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
<b>Oil &amp; Grease Analysis Federal</b>										
<i>EPA 1664 n-Hexane/Silica Gel Treated HEM(Oil &amp; Grease and TPH)</i>										
Oil and Grease	J	1.40	0.540	5.00	mg/L		RDH1 09/11/03 0835	276448	1	
Total Petroleum Hydrocarbons	J	1.40	0.475	4.00	mg/L		RDH1 09/12/03 0707	276449	2	

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664	
2	EPA 1664	

*outfall 008  
Sampled 9-2-03  
Grab Sample.*

### Notes:

The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 

## Volatile Organics Analysis Data Sheet

Method 624 (CLP)

Brookhaven National Laboratory  
 Environment Safety and Health Services Division  
 Non-Radiological Analytical Services Laboratory

Analytical Services Lab ID:

23090205-02

Matrix: (soil/water) water Date Analyzed: 9/5/2003  
 Sample wt/vol: 25.0 (g/mL)      mL Lab File ID: 30905B08.D  
 Level: (low/med) low Dilution Factor: 1  
 Dilution information: N/A

CAS No.	Compound	Concentration Units:		
		(ug/L or ug/Kg)	ug/L	Q
74-87-3	Chloromethane		2	U
75-01-4	Vinyl chloride		2	U
74-83-9	Bromomethane		2	U
75-00-3	Chloroethane		2	U
75-69-4	Trichlorofluoromethane		2	U
75-35-4	1,1-Dichloroethylene		2	U
67-64-1	Acetone		2	U
75-09-2	Methylene Chloride		2	U
1634-04-4	MTBE		2	U
156-60-5	trans-1,2-Dichloroethene		2	U
75-34-3	1,1-Dichloroethane		2	U
156-59-4	cis-1,2-Dichloroethylene		2	U
78-93-3	2-Butanone		2	U
67-66-3	Chloroform		2	U
71-55-6	1,1,1-Trichloroethane		2	U
56-23-5	Carbon Tetrachloride		2	U
71-43-2	Benzene		2	U
107-06-2	1,2-Dichloroethane		2	U
79-01-6	Trichloroethylene		2	U
78-87-5	1,2-Dichloropropane		2	U
75-27-4	Bromodichloromethane		2	U
10061-01-5	cis-1,3-Dichloropropene		2	U
108-10-1	4-Methyl-2-pentanone		2	U
108-88-3	Toluene		2	U
10061-02-6	trans-1,3-Dichloropropene		2	U
79-00-5	1,1,2-Trichloroethane		2	U
127-18-4	Tetrachloroethylene		2	U
142-28-9	1,3-Dichloropropane		2	U
591-78-6	2-Hexanone		2	U
124-48-1	Dibromochloromethane		2	U
108-90-7	Chlorobenzene		2	U
100-41-4	Ethylbenzene		2	U
108-38-3/106-42-3	p- + m-Xylene		2	U
95-47-6	o-Xylene		2	U
75-25-2	Bromoform		2	U
79-34-5	1,1,2,2-Tetrachloroethane		2	U
541-73-1	1,3-Dichlorobenzene		2	U
106-46-7	1,4-Dichlorobenzene		2	U
95-50-1	1,2-Dichlorobenzene		2	U

Outfall 008  
 Sampled 9-2-03  
 Grab Sample



U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

17133-001

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: BNLS768

Matrix (soil/water): WATER

Lab Sample ID: 0308040-001

Level (low/med): LOW

Date Received: 7/30/2003

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2270			P
7440-36-0	Antimony	2.2	U		P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	13.7	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	1.1	B		P
7440-70-2	Calcium	9060			P
7440-47-3	Chromium	3.7	B		P
7440-48-4	Cobalt	0.90	B		P
7440-50-8	Copper	12.3	B		P
7439-89-6	Iron	2050			P
7439-92-1	Lead	9.8			P
7439-95-4	Magnesium	1790	B		P
7439-96-5	Manganese	20.3			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.2	B		P
7440-09-7	Potassium	736	B		P
7782-49-2	Selenium	2.2	U	N	P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	2430	B		P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	6.5	B		P
7440-66-6	Zinc	75.9			P

*Outfall 008  
Sampled 7-11-03  
Grab Sample  
Total metals*

Color Before: COLORLESS Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 8/11/03

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GENERAL ENGINEERING LABORATORIES, LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.geel.com

**Certificate of Analysis**

Company : Brookhaven National Laboratory  
 Address : Building 51  
 Upton, New York 11973--5000

Report Date: September 12, 2003

Contact: John Burke  
 Project: SPDES

Page 1 of 1

Client Sample ID: 17563-002  
 Sample ID: 87300002  
 Matrix: Water  
 Collect Date: 02-SEP-03 10:47  
 Receive Date: 04-SEP-03 09:15  
 Collector: Client

Project: BRKL00404  
 Client ID: BRKL004  
 COC: 17563  
 Samp Recv.: 17563  
 Client Desc.: CSF Pit

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
<b>Oil &amp; Grease Analysis Federal</b>										
<i>EPA 1664 n-Hexane/Silica Gel Treated HEM(Oil &amp; Grease and TPH)</i>										
Oil and Grease	J	2.14	0.551	5.00	mg/L		RDH1 09/11/03	0835	276448	1
Total Petroleum Hydrocarbons	J	1.73	0.485	4.08	mg/L		RDH1 09/12/03	0707	276449	2

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	EPA 1664	
2	EPA 1664	

*outfall 010  
 Sampled 9-2-03  
 Grab Sample*

**Notes:**

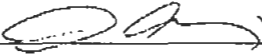
The Qualifiers in this report are defined as follows :

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by 

U.S. EPA - CLP

1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

17133-002

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: BNLS768

Matrix (soil/water): WATER

Lab Sample ID: 0308040-002

Level (low/med): LOW

Date Received: 7/30/2003

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	81.7	B		P
7440-36-0	Antimony	2.2	U		P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	15.5	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.16	B		P
7440-70-2	Calcium	6520			P
7440-47-3	Chromium	0.77	B		P
7440-48-4	Cobalt	0.60	U		P
7440-50-8	Copper	10.2	B		P
7439-89-6	Iron	106			P
7439-92-1	Lead	1.8	B		P
7439-95-4	Magnesium	846	B		P
7439-96-5	Manganese	12.2	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	10.9	B		P
7440-09-7	Potassium	1140	B		P
7782-49-2	Selenium	2.2	U	N	P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	1810	B		P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	17.0	B		P
7440-66-6	Zinc	77.3			P

*Outfall 010  
Sampled 7-11-03  
Grab Sample  
Total metals*

Color Before: COLORLESS Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

Date Reported: 8/11/03