



MSD

*Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
www.msdlouky.org*

July 25, 2007

Ms. Kathy Thurman
Kentucky Division of Water
14 Reilly Road
Frankfort, Kentucky 40601

RE: Hite Creek Wastewater Treatment Plant, KPDES No: KY0022420
Discharge Monitoring Report for June 2007

Dear Ms. Thurman:

Attached are the Discharge Monitoring Report (DMR) and the Monthly Operating Report (MOR) report for the Hite Creek Wastewater Treatment Plant, for the month of May 2007.

Also included is the biomonitoring / metals results for the second quarter.

If you have any questions concerning the attached DMR's, please contact me at (502)241-9093.

Sincerely,

John Kessel
Process Supervisor, East Region

JMK/ Hite Creek. 0607

Enclosures

cc: M. Mudd (DOW Louisville)
E. Brady
T. Singleton
P. Burgin
R. Shaw



*Beneficial Use of Louisville's Biosolids
www.louisvillegreen.com*

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

NAME RTI 175 CREEK STP
ADDRESS 170 BURNVILLE/JEFF CO MO
622 ALBION HWY
LOUISVILLE KY 40211-2497
FACILITY RTI 175 CREEK STP
LOCATION LOUISVILLE KY 40201
RTN ALEX E NYMAN OPER MGR

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

KY0022420
PERMIT NUMBER

001 2
DISCHARGE NUMBER

MAJOR
(SUBR LV)
F - FINAL
MUNICIPAL WASTEWATER
EFFLUENT

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
07	08	01		07	08	30

FROM

TO

*** 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			
DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		7.1	*****	*****	(19)	0	3/7	Grab
DO (DO)	PERMIT REQUIREMENT	*****	*****	***	INST MIN	*****	*****	MG/L		WEEK	
EFFLUENT DOSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.4	*****	8.0	(12)	0	3/7	Grab
DO (DO)	PERMIT REQUIREMENT	*****	*****	****	MINIMUM	*****	MAXIMUM	GU		WEEK	
EFFLUENT DOSS VALUE	SAMPLE MEASUREMENT	7198	8006	(26)	*****	254.17	279.33	(17)	0	3/7	Comp
SUSPENDED (SS)	PERMIT REQUIREMENT	REPORT	REPORT		*****	REPORT	REPORT			WEEK	
RAW SEW EFFLUENT		MD AVG	MX WK AV	LBS/DY		MD AVG	MX WK AV	MG/L		WEEK	
SOLIDS, TOTAL (TSS)	SAMPLE MEASUREMENT	117	192	(26)	*****	4.17	6.67	(17)	0	3/7	Comp
SUSPENDED (SS)	PERMIT REQUIREMENT	1100	1650		*****	GU	45			WEEK	
EFFLUENT DOSS VALUE		MD AVG	MX WK AV	LBS/DY		MD AVG	MX WK AV	MG/L		WEEK	
AMMONIA (NH3-N)	SAMPLE MEASUREMENT	570	629	(26)	*****	20.19	21.87	(17)	0	3/7	Comp
TOTAL (AS N)	PERMIT REQUIREMENT	REPORT	REPORT		*****	REPORT	REPORT			WEEK	
RAW SEW EFFLUENT		MD AVG	MX WK AV	LBS/DY		MD AVG	MX WK AV	MG/L		WEEK	
AMMONIA (NH3-N)	SAMPLE MEASUREMENT	3	5	(26)	*****	0.12	0.18	(17)	0	3/7	Comp
TOTAL (AS N)	PERMIT REQUIREMENT	147	220		*****	4	0			WEEK	
EFFLUENT DOSS VALUE		MD AVG	MX WK AV	LBS/DY		MD AVG	MX WK AV	MG/L		WEEK	
THRU TREATMENT PLANT	SAMPLE MEASUREMENT	3.373	4.090	(13)	*****	*****	*****		0	C/N	C/N
DOSS (DOSS)	PERMIT REQUIREMENT	REPORT	REPORT		*****	*****	*****	***		WEEK	
EFFLUENT DOSS VALUE		MD AVG	DAILY MX	MGD		*****	*****	***		WEEK	

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

H.S. Schardew
Exec Director

TYPED OR PRINTED

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.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE

NUMBER

YEAR

MO

DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

USE MD AVG FOR DOSS/SS REMV, REPT IN MINIMUM COLUMN.

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

NAME
ADDRESS
CITY
STATE
ZIP

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

PERMIT NUMBER
DISCHARGE NUMBER

MONITORING PERIOD
FROM TO
YEAR MO DAY YEAR MO DAY

MAJOR
(SUBR LV)
F - FINAL
MUNICIPAL WASTEWATER
EFFLUENT
*** 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			
GENERAL	SAMPLE MEASUREMENT	*****	*****		*****	5	25	(13)	0	3/1	Grb
	PERMIT REQUIREMENT	*****	*****	***	*****	200	400	*/		WEEK	
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	(23)	*****	184.75	211.00	(19)	0	3/1	Comp
	PERMIT REQUIREMENT	REPORT	REPORT	LB5/DY	*****	REPORT	REPORT	MG/L		WEEK	
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	59	67	(26)	*****	2.08	2.33	(14)	0	3/1	Comp
	PERMIT REQUIREMENT	367	550	LB5/DY	*****	10	15	MG/L		WEEK	
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		98.9%	*****	*****	(23)	0	1/30	Cal
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	*****	PER-CENT		MONTH	
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		98.4%	*****	*****	(23)	0	1/30	Cal
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	*****	PER-CENT		MONTH	
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER H.J. Schindler Exec. Director TYPED OR PRINTED	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.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
			AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

USE NO. 40 FOR SOLIDS REMV. REPT IN MINIMUM COLUMN.

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

NAME: 1801 N. LEXA BLVD
 ADDRESS: 470 LOUISVILLE/JEFF CO WSD
 4522 ALDINGHAM PARK
 LOUISVILLE KY 40211-2477
 FACILITY: NEW HITE TRAIL S/W
 LOCATION: LOUISVILLE KY 40201
 CONTACT: ALEX E NOVAK, OPER MGR

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

KY002P420
 PERMIT NUMBER

001 5
 DISCHARGE NUMBER

MAJOR
 (SUOR LV)
 F - FINAL
 METALS/BIO-MONITORING/QUARTERLY
 EFFLUENT
 *** NO DISCHARGE ***

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
07	07	01	07	07	01

FROM TO

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			
ARSENIC, TOTAL (AS CAD03)	SAMPLE MEASUREMENT	*****	*****		*****	166	166	(17)	0	1/4	Comp
ARSENIC, TOTAL (AS CAD03)	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT MD AVG	REPORT DAILY MX	MG/L			
ARSENIC, DISSOLVED (AS CD)	SAMPLE MEASUREMENT	*****	*****		*****	<0.001	<0.001	(17)	0	1/4	Comp
ARSENIC, DISSOLVED (AS CD)	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT MD AVG	REPORT DAILY MX	MG/L			
COPPER, DISSOLVED (AS CU)	SAMPLE MEASUREMENT	*****	*****		*****	<0.002	<0.002	(17)	0	1/4	Comp
COPPER, DISSOLVED (AS CU)	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT MD AVG	REPORT DAILY MX	MG/L			
LEAD, DISSOLVED (AS PB)	SAMPLE MEASUREMENT	*****	*****		*****	<0.005	<0.005	(17)	0	1/4	Comp
LEAD, DISSOLVED (AS PB)	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT MD AVG	REPORT DAILY MX	MG/L			
ZINC, DISSOLVED (AS ZN)	SAMPLE MEASUREMENT	*****	*****		*****	0.0589	0.0589	(17)	0	1/4	Comp
ZINC, DISSOLVED (AS ZN)	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT MD AVG	REPORT DAILY MX	MG/L			
TOTAL RECOVERABLE ZINC	SAMPLE MEASUREMENT	*****	*****		*****	0.0583	0.0583	(17)	0	1/4	Comp
TOTAL RECOVERABLE ZINC	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT MD AVG	REPORT DAILY MX	MG/L			
TOTAL RECOVERABLE ZINC	SAMPLE MEASUREMENT	*****	*****		*****	<0.001	<0.001	(17)	0	1/4	Comp
TOTAL RECOVERABLE ZINC	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT MD AVG	REPORT DAILY MX	MG/L			

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

H.J. Schneider
 Exec Director
 TYPED OR PRINTED

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.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

508
 AREA CODE

1241-4693
 NUMBER

07 07 25
 YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

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

NAME: B. J. Sch...
 ADDRESS: 1/2 LOUISVILLE/JEFF CO RD
 LOUISVILLE KY 40211-2497
 FACILITY: B. J. Sch...
 LOCATION: LOUISVILLE KY 40201

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

KY00022420
 PERMIT NUMBER

001-V
 DISCHARGE NUMBER

MAJOR: (SUBR LV)
 F - FINAL
 METALS/BIO-MONITORING/QUARTERLY
 EFFLUENT
 *** NO DISCHARGE ***

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
07	04	01		07	05	01

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			
LEAD	SAMPLE MEASUREMENT	*****	*****		*****	<0.005	<0.005	(19)	0	1/4	Comp
TOTAL RES AVAILABLE	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT	REPORT				
EFFLUENT DROPS VALUE						NO AVG	DAILY MX	MG/L			
EFFLUENT	SAMPLE MEASUREMENT	*****	*****		*****	<0.002	<0.002	(19)	0	1/4	Comp
TOTAL RES AVAILABLE	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT	REPORT				
EFFLUENT DROPS VALUE						NO AVG	DAILY MX	MG/L			
TOXICITY	SAMPLE MEASUREMENT	*****	*****		*****		<1.0	(25)	0	1/4	Comp
TOXICITY UNITS	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	1.00	HROND			
EFFLUENT DROPS VALUE							DAILY MX	TOXCTY			
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

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SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE

NUMBER

YEAR

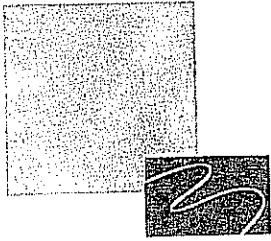
MO

DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NAME -36		HITE CREEK WTP						COUNTY JEFFERSON						MONTH OF: June 2007																			
KPDES PERMIT NUMBER		KY0022420						PLANT CAPACITY 4.4 MGD						RECEIVING STREAM HITE CREEK																			
DATE	TOTAL FLOW (MILLION GALLONS)	RAW SEWAGE		pH		SETTLEABLE SOLIDS (mg/L)		DISSOLVED OXYGEN (mg/L)		SUSPENDED SOLIDS (mg/L)		5 DAY CBOD (mg/L)		ACTIVATED SLUDGE		AERATION BASIN				SLUDGE HANDLING				FINAL									
		GRIT REMOVED (CUBIC FEET)	SCREENINGS (CUBIC FEET)	RAW	FINAL	RAW	PRIMARY EFFLUENT	FINAL EFFLUENT	STREAM ABOVE	FINAL EFFLUENT	STREAM BELOW	RAW	PRIMARY EFFLUENT	FINAL EFFLUENT	RAW	PRIMARY EFFLUENT	FINAL EFFLUENT	GAL/DAY X 1000	MLSS X 1000	MLVSS X 1000	DISSOLVED OXYGEN (mg/L)	MLSS (mg/L) X 1000	MLVSS (mg/L) X 1000	SETTLED SLUDGE VOLUME		RAW		HAULED		NH3-N (mg/L)	FECAL COLIFORM (COLONIES/100ML)		
																								30 MIN.	60 MIN.	GALLONS X 1000	% DRY SOLIDS	% VOLATILE SOLIDS	% DRY SOLIDS			% VOLATILE SOLIDS	WITHDRAWN GALLONS X 1000
1	3.23	36	36	7.4		20.0		0.0										1960	12.32	98.6	3.5	3.775		200							88.2		
2	2.91			7.7		15.0		0.0										1890	6.83	59.2	5.1	3.43		190							50.4		
3	3.12			7.4		15.0		0.0			288	7	283	3	2060	7.99	59.2	4.9	3.295				190							31.5	0.1	3	
4	3.42			8.5	7.4	14.0		0.0	8.0		327	7	190	2	2000	9.03	92	2.4	3.47				200							113.4	0.1	3	
5	3.87	36	36	8.1	7.4	14.0		0.0	7.4		223	6	160	2	2100	9.04	98.6	1.1	3.68				210							88.2	0.1	3	
6	3.6			8.1	7.4	16.0		0.0	7.5									1910	7.62	92	1.5	3.29		200							75.6		
7	3.22			7.6		18.0		0.0										1960	7.24	65.7	5.1	3.195	2.25	200					0.5	62	69.3		
8	3.44	36	36	7.8		15.0		0.0										2020	9.75	105.1	4.7	4.115		250							126		
9	2.95			7.5		19.0		0.0										1870	8.91	59.2	5.1	3.425		180							107.1		
10	2.82			7.8		15.0		0.0			238	5	166	2	1630	6.22	59.2	5.1	3.595				200							31.5	0.1	3	
11	3.15			8.4	7.9	16.0		0.0	7.4		284	3	214	2	1820	8.28	105	5	3.86				230							170.1	0.1	3	
12	3.1	36	36	8.4	7.8	15.0		0.0	7.4		237	3	179	2	1830	12.68	98.6	5	3.33	2.31		200							0.75	65	100.8	0.1	7
13	3.03			8.2	8.0	16.0		0.0	7.8									1780	5.77	98.6	4.3	3.435		200							138.6		
14	3.09			8.7		15.0		0.0										1800	8.65		3.7	3.5		200							119.7		
15	2.88	36	36	7.4		15.0		0.0										1850	8.49	59.2	5.6	4.11		240							100.8		
16	3.14			7.8		13.0		0.0										1790	4.19	59.2	4.9	3.765		210							6.3		
17	3.24			7.9		14.0		0.0			248	4	194	2	1920	9.63	62.5	5.2	5.215				270								0.1	3	
18	3.5			8.1	7.9	15.0		0.0	7.4		226	4	182	2	1820	12.14	65.7	4.6	4.89				250								88.2	0.1	10
19	3.98	36	36	7.4	7.9	13.0		0.0	7.3		247	3	178	2	1720	9.96	85.4	4.8	4.66	3.105		240						0.65	61	107.1	0.1	498	
20	3.73			9.0	7.8	14.0		0.0	7.9									1820	11.62	98.6	4.8	4.851		250							100.8		
21	3.42			7.5		15.0		0.0										1820	12.04	105.1	5.8	4.09		230							138.6		
22	3.32	36	36	7.4		14.0		0.0										1840	10.36	92	6.1	4.145		250							88.2		
23	3.81			8.3		15.0		0.0										1830	6.38		4.8	3.92		240							69.3		
24	3.74			7.9		14.0		0.0			211	2	151	2	1730	11.74	85.4	4.9	4.635				250								100.8	0.1	3
25	3.58			8.5	8.0	14.0		0.0	7.4		270	3	161	2	1760	10.15	111.7	1.7	4.345				250								107.1	0.1	3
26	3.36	36	36	7.5	7.9	15.0		0.0	7.2		251	3	159	2	1960	10.34	118.3	5	3.905	2.64		210						0.82	63	88.2	0.34	3	
27	3.73			8.3	7.8	14.0		0.0	7.1									1800	9.71	118.3	5	3.785		200							163.8		
28	4.09			8.3		12.0		0.0										2070	9.65	98.6	5.3	3.49		200							100.8		
29	3.58	36	36	7.6		15.0		0.0										2410	10	105.1	5	3.41		200							176.4		
30	3.13			7.6		7.0		0.0										2030	5.47	65.7	5.2	3.155		180							151.2		
31																															2898		
Tot.	101.2	324	324															56800															
Avg.	3.373	36	36	7.9	7.8	14.7			7.5		254	4	185	2	1893	9.073	86.49	4.507	3.859	2.576		217.3						0.68	62.75	99.93	0.12	5	

RESIDENTIAL		INDUSTRIAL WASTE POPULATION EQUIVALENT		OPERATOR		CERT. NO.	
COMMERCIAL		32121		30569		34044	
INDUSTRIAL		FLOW		CBOD		TSS	
TOTAL NUMBER OF SEWER CONNECTIONS		0		EARL DUNN		7826	
SEWER CONNECTIONS		0 X 4 = 0		PLANT TELEPHONE		502-241-9310	
		SEWERED POPULATION					



**Chronic Toxicity Evaluation
for the
MSD - Hite Creek
Wastewater Treatment Plant**

June 2007

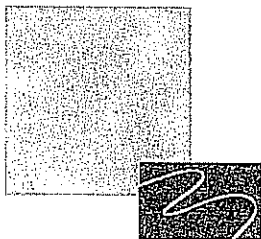
Prepared by:

Beckmar Environmental Laboratory
Biomonitoring Department
3251 Ruckriegel Parkway
Louisville, KY. 40299
(502) 266-6533

Submitted to:

Mr. John Kessle
Hite Creek Wastewater Treatment Plant
700 West Liberty St.
Louisville, KY. 40203

Released by: Amanda L. Spalding
Biomonitoring QA Officer 7-23-07



Summary

Chronic, definitive, toxicity testing was performed on final effluent samples collected June 11 through 16, 2007 from the MSD – Hite Creek Wastewater Treatment Plant. Testing was performed June 13 through 19, 2007 and upon termination, the following conclusions were reached:

For the 6-day *Ceriodaphnia dubia* survival and reproduction test run inside the CO2 chamber, the IC₂₅ for reproduction was greater than 100%, yielding less than 1.0 chronic toxicity units (TUC=100/IC₂₅).

Introduction

At the request of Mr. John Kessle, chronic, definitive, toxicity testing was performed on 24 hour composite effluent samples collected June 11 through 16, 2007 from the MSD - Hite Creek Wastewater Treatment Plant in Louisville, KY. Metals analyses were also performed on effluent, influent, and mlss samples collected during this time period. Information concerning plant and laboratory conditions can be found on the following pages.

The chronic toxicity testing was performed in accordance with the US EPA methodology as defined in the US EPA manual "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" fourth edition, 2002 (EPA-821-R-02-013). The actual methods used were "Daphnid, *Ceriodaphnia dubia*, Survival and Reproduction Test Method 1002.0". The chronic toxicity test was performed in order to ascertain the IC₂₅ values for *Ceriodaphnia dubia* reproduction.



Date of Issue: June 28, 2007

Page 1 of 1

Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP: Biomonitoring metals - Day 1.

BECKMAR CERTIFICATE OF ANALYSIS # 185623

Sample Date: 6/12/2007

Sample Time: 7:25

Sampled by: E. Dunn

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Hardness	166	mg/l	C	EPA 130.2	6/14/2007 11:15	PJB
Cadmium (TR)	< 0.001	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Cadmium (D)	< 0.001	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Copper (TR)	< 0.002	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Copper (D)	< 0.002	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Lead (TR)	< 0.005	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Lead (D)	< 0.005	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Zinc (TR)	0.0593	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Zinc (D)	0.0589	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Nickel (TR)	0.034	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Nickel (D)	0.031	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Chromium, Hex	< 0.01	mg/l	G	SM3500cr-d	6/13/2007 17:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

Jeffersontown Business Park

3251 Ruckriegel Parkway

Jeffersontown, KY 40299

502.266.6533

FAX 502.266.6446



Date of Issue: June 28, 2007

Page 1 of 1

Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP: Week composite.

BECKMAR CERTIFICATE OF ANALYSIS # 185883

Sample Date: 6/16/2007

Sample Time: 10:00

Sampled by: Rhonda Baker

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Arsenic	< 0.0005	mg/l	C	SM3113b	6/21/2007 11:30	ALS
Barium	< 0.001	mg/l	C	EPA 200.7	6/21/2007 15:30	ALS
Cadmium	< 0.001	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS
Iron	0.032	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS
Lead	< 0.005	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS
Mercury	< 0.0005	mg/l	C	EPA 245.1	6/20/2007 14:00	ALS
Selenium	< 0.0005	mg/l	C	SM3113b	6/21/2007 12:40	ALS
Silver	< 0.001	mg/l	C	EPA 200.7	6/21/2007 15:30	ALS
Zinc	0.0520	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

Jeffersonton Business Park

3251 Ruckriegel Parkway

Jeffersonton, KY 40299

502.266.6533

FAX: 502.266.6446

Test Type: Acute Screen
Chronic X Definitive X

TOXICITY TEST REPORT SHEET

- 1) Facility/Discharger: Hite Creek WWTP
Report Date: 7/17/2007
- 2) Address: 5512 Hitt Ln. Louisville, KY. 40201
- 3) NPDES Permit #: KY0022420 4) Receiving Stream: Hite Creek - mile point 1.9
- 5) Facility Contact: Mr. John Kessel 6) Phone #: (502) 241-9310
- 7) Consultant/Testing Lab Name: Beckmar Environmental Laboratory
- 8) Lab Contact: Becky Barker Phone #: (502) 266-6533
- 9) Outfall(s) Tested: 1
- 10) Average Daily flow on day sampled (MGD) 1) 3.15 2) 3.03
3) 2.88 4) 5) 6) 7)
- 11) Test Species: 1) Ceriodaphnia dubia 2)
- 12) Species Age: 1) 15-22 hours old 2)
- 13) Organism Source: 1) brood board 061207 2)
- 14) Acclimation Procedures: 1) Reared at test conditions in synthetic water
2)
- 15) Test Conditions: Static: Static-Renewal: X
- 16) Dilution Water Type (Synthetic, Receiving Stream) synthetic - mhs
- 17) Aeration? (Before Test/During Test/None): no
- 18) Dechlorination? no Original Chlorine Level: <0.01 m

Rhonda Baker

(Signature of person filling out form)

Rhonda Baker

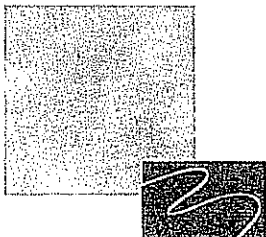
Name (Typed or Printed)

7/17/2007

Date

Biologist

Title



Materials and Methods

Sampling

Composite effluent samples were collected once every other 24 hours (Table I) and delivered to Beckmar Environmental Laboratory. Upon receipt, each sample went through standard log in procedures.

Control/Dilution Water

All chemicals used are reagent grade, obtained from Aldrich. 1.20 grams of CaSO_4 , 1.2 grams of MgSO_4 , 1.92 grams of NaHCO_3 , and 0.080 grams of KCl were dissolved in distilled water provided by a Barnstead Thermolyne distillation system and aerated for a minimum of 24 hours.

Test Containers

C. dubia tests were performed in 1 ounce plastic cups obtained from Plastics Inc. (St. Paul, MN).

Toxicity Testing

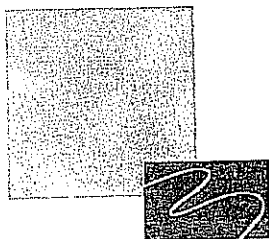
Samples were allowed to warm to room temperature (25°C) and were tested for residual chlorine immediately prior to dilution. Testing was then performed in accordance with US EPA methodology. Data was recorded on Beckmar generated lab sheets (Appendix I).

Chemical Analysis

All test dilutions as well as control/dilution water were tested to determine initial dissolved oxygen, temperature, and pH. At the end of 24 hours, the control/dilution water and test dilutions were again tested to determine final dissolved oxygen, temperature and pH. Also, specific conductance, hardness, and alkalinity analyses were performed on the initial control/dilution water and 100% effluent samples. Data was recorded on Beckmar generated lab sheet (Appendix I).

Statistical Analysis

Statistical data was generated using ToxCalc 5.0[®] (Tidepool Scientific software, McKinleyville, CA) and ToxStat[®] (USEPA, Cincinnati, OH) on a Pentium IV[®], computer using Windows 98[®] Operating System.



Additional Toxicity Test Information

- 1) Submit copies of all bench sheets and statistical calculations/printouts obtained during the test(s). Data must be presented in tabular form and must include all physical and/or chemical measurements recorded during the test (e.g. temperature, conductivity, total residual chlorine, dissolved oxygen, etc.).
- 2) Methods/Instrumentation used in chemical analysis:

Dissolved Oxygen/temperature:	YSI Model 52
PH:	Orion Model 720A
Conductivity:	Oakton CON 100 Series
Alkalinity:	Standard Methods Titration
Hardness:	Standard Methods Titration
Total Chlorine Residual:	Fisher-Porter Titration
EPA Acute/Chronic Manual:	4 th Chronic Edition, 2002
- 3) Indicate below any other relevant information that may aid in the evaluation of this report. Include any deviations from EPA methodology that was necessary for these tests as well as any sample manipulations that were performed, such as aeration, dechlorination with sodium thiosulfate, etc., and the justification for such manipulations or deviations. Attach additional pages as needed.
- 4) Sample temperature upon receipt may be greater than 4°C. Samples are picked up immediately after the 24 hours composite is completed. The sampler is cooled and the samples are refrigerated; however it may be impossible to rapidly drop the effluent to 4°C.
- 5) In an effort to hold test pH drift to 0.3 s.u., the *Ceriodaphnia dubia* test was conducted in a CO₂ chamber.

TABLE I
Sampling Summary

Outfall	Sample Type	Volume	Collection Period		Rainfall	Sample Temp
1	Composite	1 gallon	06/11/07 @ 7:25 a.m.	= 06/12/07 @ 7:50 a.m.	0	4.0 degrees c
	Composite	1 gallon	06/13/07 @ 7:20 a.m.	= 06/14/07 @ 7:30 a.m.	0	4.0 degrees c
	Composite	1 gallon	06/15/07 @ 7:20 a.m.	= 06/16/07 @ 7:30 a.m.	0	4.0 degrees c

Dates/Times of Test Performance

Species #1: *Ceriodaphnia dubia*

Initiated: 06/13/07 @ 2:00 P.M.
Renewed Daily @ 2:00 P.M.
Terminated 06/19/07 @ 2:00 P.M.

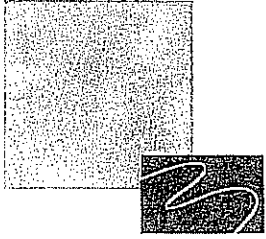
Results

Ceriodaphnia dubia exhibited 100% survival in the control, 100% survival in the 20% dilution, 100% survival in the 40% dilution, 100% survival in the 60% dilution, 100% survival in the 80% dilution, and 100% survival in the 100% dilution with reproduction occurring in all of the dilutions (Table II).

For the 6-day *Ceriodaphnia dubia* survival and reproduction test run inside the CO₂ chamber, the IC₂₅ for reproduction was greater than 100%, generating a chronic toxicity value of less than 1.0 TUC.

Table II: *Ceriodaphnia dubia* Reproduction Results

<u>C</u>	<u>20%</u>	<u>40%</u>	<u>60%</u>	<u>80%</u>	<u>100%</u>
20	22	22	24	24	26
26	25	26	24	27	29
20	23	24	20	26	30
26	26	25	28	24	23
22	25	28	26	24	23
28	28	30	25	25	21
24	25	27	27	27	31
28	31	27	26	22	24
19	21	24	24	22	25
25	26	26	28	25	29
<u>238</u>	<u>252</u>	<u>259</u>	<u>252</u>	<u>246</u>	<u>261</u>



Appendix I

Ceriodaphnia dubia
Data Sheets

Ceriodaphnia Survival and Reproduction Test-Reproduction

Start Date: 6/13/2007 Test ID: hc0607 Sample ID: hc0607
 End Date: 6/19/2007 Lab ID: 0044:beckmar environmental Sample Type: EFF1-POTW
 Sample Date: 6/12/2007 Protocol: EPAF 94-EPA Freshwater Test Species: CD-Ceriodaphnia dubia
 Comments: biter creek cerio chronic June 2007

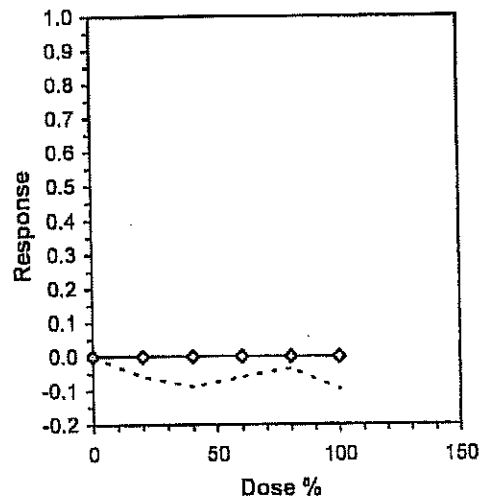
Conc-%	1	2	3	4	5	6	7	8	9	10
B-Control	20.000	26.000	20.000	26.000	22.000	28.000	24.000	28.000	19.000	25.000
20	22.000	25.000	23.000	26.000	25.000	28.000	25.000	31.000	21.000	26.000
40	22.000	26.000	24.000	25.000	28.000	30.000	27.000	27.000	24.000	26.000
60	24.000	24.000	20.000	28.000	26.000	25.000	27.000	26.000	24.000	28.000
80	24.000	27.000	26.000	24.000	24.000	25.000	27.000	22.000	22.000	25.000
100	26.000	29.000	30.000	23.000	23.000	21.000	31.000	24.000	25.000	29.000

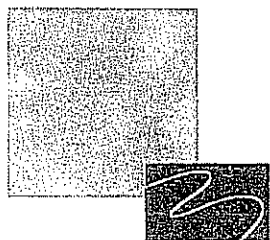
Conc-%	Mean	N-Mean	Transform: Untransformed					Isotonic	
			Mean	Min	Max	CV%	N	Mean	N-Mean
B-Control	23.800	1.0000	23.800	19.000	28.000	14.117	10	25.133	1.0000
20	25.200	1.0588	25.200	21.000	31.000	11.501	10	25.133	1.0000
40	25.900	1.0882	25.900	22.000	30.000	8.814	10	25.133	1.0000
60	25.200	1.0588	25.200	20.000	28.000	9.502	10	25.133	1.0000
80	24.600	1.0336	24.600	22.000	27.000	7.221	10	25.133	1.0000
100	26.100	1.0966	26.100	21.000	31.000	13.205	10	25.133	1.0000

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Kolmogorov D Test indicates normal distribution ($p > 0.01$)	0.42014	1.035	-0.0236	-0.5715
Bartlett's Test indicates equal variances ($p = 0.39$)	5.21671	15.0863		

Linear Interpolation (200 Resamples)

Point	%	SD	95% CL	Skew
IC05	>100			
IC10	>100			
IC15	>100			
IC20	>100			
IC25	>100			
IC40	>100			
IC50	>100			





Grab # _____

Toxicity Test Results

Results of *Ceriodaphnia dubia* 6 day chronic definitive
(Genus) (Species) (Type / Duration)

Toxicity Test

Conducted: 06/13/07 -- 06/19/07
(mm/dd/yy) (mm/dd/yy)Using Effluent from Outfall # 1

Test Solution	Percent Survival (time intervals used:- DAY)								# of Young		Dry Weight	
	1	2	3	4	5	6	7	8	Total	Mean	Total	Mean
Control	100	100	100	100	100	100			238	23.8		
20% Effluent	100	100	100	100	100	100			252	25.2		
40% Effluent	100	100	100	100	100	100			259	25.9		
60% Effluent	100	100	100	100	100	100			252	25.2		
80% Effluent	100	100	100	100	100	100			246	24.6		
100% Effluent	100	100	100	100	100	100			261	26.1		
LC ₅₀ / IC ₂₅ Value: <u>> 100%</u>								Calculated TU Estimate * <u>< 1.0 TU_c</u> (indicate Acute / Chronic)				
95% Confidence Limits								Permit Limits: <u>1.0 TU_c</u> (Indicate TU _a / TU _c)				
UL: <u>n/a</u> LL: <u>n/a</u>								If acute test, method used to determine LC50 and Confidence Limit Valued: _____				
UL = Upper Limit LL = Lower Limit												

Note: TU_a = 100/LC₅₀; TU_c = 100/IC₂₅

Reference Toxicant Test Results

Species	Date	Time	Duration	Toxicant	Results (LC ₅₀ / IC ₂₅)
<i>Ceriodaphnia dubia</i>	06/12/07	3:00 P.M.	6 days	NaCl	IC25=1.0254g/l

Client: HITE CREEKAnalyst: B. BurkeTest Start - Date/Time: 6-13-07 2PTest Stop - Date/Time: 6-19-07 2PBrood Board Batch: 61207Neonate Age: 15-22hData form for *Ceriodaphia dubia* survival and reproduction test

Control	Replicate										No. Of Young	No. Of Adults	Analyst
	Day	1	2	3	4	5	6	7	8	9	10		
	1	0	0	0	0	0	0	0	0	0	0		BB
	2	0	0	0	0	0	0	0	0	0	0		BB
	3	0	0	0	0	0	0	0	0	0	0		BB
	4	4	6	5	4	4	6	4	6	3	6	47	BB
	5	7	10	7	10	7	10	9	10	8	9	87	BB
	6	9	11	8	12	11	12	11	12	8	10	104	BB
	7												
	8												
	Total	20	26	20	26	22	28	24	28	19	25	238	BB

Conc.	Replicate										No. Of Young	No. Of Adults	Analyst
	Day	1	2	3	4	5	6	7	8	9	10		
	1	0	0	0	0	0	0	0	0	0	0		BB
	2	0	0	0	0	0	0	0	0	0	0		BB
	3	0	0	0	0	0	0	0	0	0	0		BB
	4	4	4	5	5	4	6	5	6	4	5	48	BB
	5	8	9	9	10	9	9	10	11	8	10	93	BB
	6	10	12	9	11	12	13	10	14	9	11	111	BB
	7												
	8												
	Total	22	25	23	26	25	28	25	31	21	26	252	BB

Conc.	Replicate										No. Of Young	No. Of Adults	Analyst
	Day	1	2	3	4	5	6	7	8	9	10		
	1	0	0	0	0	0	0	0	0	0	0		BB
	2	0	0	0	0	0	0	0	0	0	0		BB
	3	0	0	0	0	0	0	0	0	0	0		BB
	4	5	4	5	4	5	6	4	5	5	5	48	BB
	5	7	10	9	9	10	10	11	9	8	9	92	BB
	6	10	12	10	12	13	14	12	13	11	12	119	BB
	7												
	8												
	Total	22	26	24	25	28	30	27	27	24	26	259	BB

Client: HITE CREEKAnalyst: B. BurkeTest Start - Date/Time: 6-13-07 2PTest Stop - Date/Time: 6-19-07 2PData form for *Ceriodaphnia dubia* survival and reproduction test

Survival for <i>Colaspis</i> adults survival and reproduction test.														
Conc.	Replicate											No. Of	No. Of	Analyst
	Day	1	2	3	4	5	6	7	8	9	10	Young	Adults	
100%	1	0	0	0	0	0	0	0	0	0	0	0		BB
	2	0	0	0	0	0	0	0	0	0	0	0		BB
	3	0	0	0	0	0	0	0	0	0	0	0		BB
	4	6	5	5	5	5	4	6	5	5	6	52		BB
	5	8	9	7	9	8	10	9	9	10	10	89		BB
	6	10	10	8	14	13	11	12	12	9	12	111		BB
	7													
	8													
	Total	24	24	20	28	26	25	27	26	24	28	252		BB

Conc.	Replicate											No. Of Young	No. Of Adults	Analyst
	Day	1	2	3	4	5	6	7	8	9	10			
100%	1	0	0	0	0	0	0	0	0	0	0	0		BB
	2	0	0	0	0	0	0	0	0	0	0	0		BB
	3	0	0	0	0	0	0	0	0	0	0	0		BB
	4	6	6	6	5	5	4	6	5	6	5	54		BB
	5	7	8	9	10	7	9	10	5	8	9	82		BB
	6	11	13	11	9	12	12	11	12	8	11	110		BB
	7													
	8													
	Total	24	27	26	24	24	25	27	22	22	25	246		BB

Conc.	Replicate											No. Of Young	No. Of Adults	Analyst
100%	Day	1	2	3	4	5	6	7	8	9	10			
	1	0	0	0	0	0	0	0	0	0	0	0		BB
	2	0	0	0	0	0	0	0	0	0	0	0		BB
	3	0	0	0	0	0	0	0	0	0	0	0		BB
	4	6	6	5	5	5	6	6	6	6	5	56		BB
	5	7	10	15	8	6	11	12	8	9	12	98		BB
	6	13	13	10	10	12	4	13	10	10	12	107		BB
	7													
	8													
	Total	26	29	30	23	23	21	31	24	25	29	266 261		BB

O = daphnid Alive, no reproduction
 # = number of neonates released

X = Daphnid dead
 X# = Daphnid dead but (#) of neonates released

ND = near death

Data form for the *Ceriodaphnia dubia* survival and reproduction test.
Routine chemical and physical determinations.

Page 1 of 2



Client: HITE CREEK
Test Start: 6-13-07 2P
Test Stop: 6-19-07 2P

Analyst: B. Bunker
Analyst: _____
Analyst: _____

Control:		Day							Remarks
		1	2	3	4	5	6	7	
Temp. Degree C.	Initial	24.2	24.3	24.0	24.1	24.4	24.1		
	Final	24.0	24.1	24.0	24.2	24.1	24.0		
D. O. mg/l	Initial	8.0	8.1	7.9	8.0	8.2	8.0		
	Final	9.0	9.0	8.9	8.8	8.9	8.0		
pH S.U.	Initial	7.92	7.88	7.89	7.99	8.00	8.00		
	Final	7.45	7.50	7.61	7.59	7.60	7.51		
Alkalinity (mg/l)		101.6	92.8	110.8	90	118.4	101.6		
Hardness (mg/l)		98.3	120.4	104.6	114.0	123.0	101.6		
Conductivity (µmhos)		420	365	375	390	388	400		
Chlorine (mg/l)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Analyst (init.)		B	B	B	B	B	B		

Conc. <u>20%</u>		Day							Remarks
		1	2	3	4	5	6	7	
Temp. Degree C.	Initial	24.0	24.3	24.0	24.1	24.4	24.1		
	Final	24.0	24.1	24.0	24.2	24.1	24.0		
D. O. mg/l	Initial	8.2	8.3	8.2	8.3	8.4	8.5		
	Final	9.0	9.2	8.9	9.0	9.0	8.0		
pH S.U.	Initial	7.83	7.84	7.94	7.96	7.97	7.98		
	Final	7.50	7.52	7.70	7.61	7.63	7.57		
Analyst (init.)		B	B	B	B	B	B		

Conc. <u>40%</u>		Day							Remarks
		1	2	3	4	5	6	7	
Temp. Degree C.	Initial	24.0	24.3	24.0	24.1	24.4	24.1		
	Final	24.0	24.1	24.0	24.2	24.1	24.0		
D. O. mg/l	Initial	8.4	8.5	8.4	8.5	8.7	8.8		
	Final	9.0	9.3	9.0	9.0	9.0	8.1		
pH S.U.	Initial	7.77	7.80	7.94	7.95	7.94	7.95		
	Final	7.55	7.54	7.77	7.67	7.63	7.60		
Analyst (init.)		B	B	B	B	B	B		

Data form for the *Ceriodaphnia dubia* survival and reproduction test.
Routine chemical and physical determinations.

Page 2 of 2



Client: HITE CREEK
Test Start: 6-13-07 2P
Test Stop: 6-19-07 2P

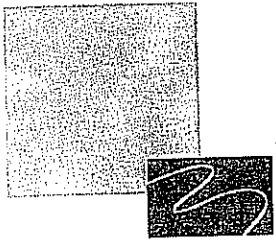
Analyst: B. Bach
Analyst: _____
Analyst: _____

Conc. <u>60%</u>		Day							Remarks
		1	2	3	4	5	6	7	
Temp. Degree C.	Initial	24.0	24.3	24.0	24.1	24.4	24.1		
	Final	24.0	24.1	24.0	24.2	24.1	24.0		
D. O. mg/l	Initial	8.6	8.7	8.6	8.8	9.2	9.1		
	Final	9.0	9.3	9.0	9.0	9.3	8.0		
pH S.U.	Initial	7.72	7.76	7.93	7.94	7.91	7.92		
	Final	7.58	7.55	7.80	7.66	7.57	7.60		
Analyst (init.)		AB	AB	AB	AB	AB	AB		

Conc. <u>80%</u>		Day							Remarks
		1	2	3	4	5	6	7	
Temp. Degree C.	Initial	24.0	24.3	24.0	24.1	24.4	24.1		
	Final	24.0	24.1	24.0	24.2	24.1	24.0		
D. O. mg/l	Initial	8.8	8.9	8.9	9.1	9.6	9.5		
	Final	8.9	9.2	9.0	9.0	9.3	8.4		
pH S.U.	Initial	7.68	7.72	7.90	7.91	7.88	7.89		
	Final	7.52	7.55	7.81	7.63	7.50	7.58		
Analyst (init.)		AB	AB	AB	AB	AB	AB		

Conc. <u>100%</u>		Day							Remarks
		1	2	3	4	5	6	7	
Temp. Degree C.	Initial	24.0	24.3	24.0	24.1	24.4	24.1		
	Final	24.0	24.1	24.0	24.2	24.1	24.0		
D. O. mg/l	Initial	9.0	9.1	9.2	9.4	10.0	9.9		
	Final	8.9	9.1	9.0	9.0	9.2	8.2		
pH S.U.	Initial	7.62	7.67	7.87	7.89	7.85	7.85		
	Final	7.49	7.52	7.77	7.60	7.48	7.59		
Alkalinity (mg/l)		202	207.2	172.8	209.6	176.8	182		
Hardness (mg/l)		151.5	149.7	190.9	158.3	203.3	175.1		
Conductivity (µmhos)		952	932	929	952	959	965		
Chlorine (mg/l)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Analyst (init.)		AB	AB	AB	AB	AB	AB		

Bachman Sample # 185622 185622 185790 185790 185879 185879



Appendix II

Chain of Custody Data Sheets

NAME OF TREATMENT PLANT HILE CREEK Bio-Monitoring

TYPE OF SAMPLE: INFLUENT (COMPOSITE) <u>X</u>	TYPE OF SAMPLE: EFFLUENT (COMPOSITE) <u>X</u>
SAMPLE DATE: <u>6-11-07 TO 6-12-07</u>	SAMPLE DATE: <u>6-11-07 TO 6-12-07</u>
EXPLAIN LOCATION: <u>RAW SEWAGE INFLUENT</u>	EXPLAIN LOCATION: <u>U-V SYSTEM DISCHARGE</u>
NAME <u>E. DUNN</u> TIME <u>7:10</u> VOL: <u>mls 1000</u>	NAME <u>E. DUNN</u> TIME <u>7:25</u> VOL: <u>mls 4000</u>
NAME <u>sample</u> TIME <u>7:10</u> VOL: <u>mls</u>	NAME <u>sample</u> TIME <u>7:25</u> VOL: <u>mls</u>
NAME <u>sample</u> TIME <u>7:10</u> VOL: <u>mls</u>	NAME <u>sample</u> TIME <u>7:25</u> VOL: <u>mls</u>
NAME <u>E. DUNN</u> TIME <u>7:10</u> VOL: <u>mls</u>	NAME <u>E. DUNN</u> TIME <u>7:25</u> VOL: <u>mls</u>
DELIVERED TO: <u>H.C. LAB</u>	DELIVERED TO: <u>H.C. LAB</u>
DATE: <u>6-12-07</u> TIME: <u>7:50</u>	DATE: <u>6-12-07</u> TIME: <u>7:50</u>
TYPE OF SAMPE: EFF. NH ₃ N (COMPOSITE)	TYPE OF SAMPLE: OTHER <u>MIXED LIQUOR GRAB</u>
SAMPLE DATE:	SAMPLE DATE: <u>6-12-07</u>
EXPLAIN LOCATION:	EXPLAIN LOCATION: <u>#3 SPLITTER BOX</u>
NAME <u>E. DUNN</u> TIME <u>7:10</u> VOL: <u>mls</u>	NAME <u>E. COOMER</u> TIME <u>8:10</u> VOL: <u>mls 1000</u>
NAME <u>sample</u> TIME <u>7:10</u> VOL: <u>mls</u>	NAME <u>sample</u> TIME <u>8:10</u> VOL: <u>mls</u>
NAME <u>sample</u> TIME <u>7:10</u> VOL: <u>mls</u>	NAME <u>sample</u> TIME <u>8:10</u> VOL: <u>mls</u>
NAME <u>sample</u> TIME <u>7:10</u> VOL: <u>mls</u>	NAME <u>sample</u> TIME <u>8:10</u> VOL: <u>mls</u>
DELIVERED TO:	DELIVERED TO: <u>H.C. LAB</u>
DATE:	DATE: <u>6-12-07</u> TIME: <u>8:15</u>

E EFFLUENT GRAB (1000 mls)
7-DAYS DURING Bio-
ing EVENT

TYPE OF SAMPLE: FECAL COLIFORM (GRAB)
SAMPLE DATE:
EXPLAIN LOCATION:
NAME <u>sample</u> TIME <u>7:10</u> VOL: <u>mls</u>
DELIVERED TO:
DATE:

Temp at
Pickup
70° F

I have accepted the above sample:

NAME John Hamilton
 and delivered to: Beckmar Lab

DATE 6/12/07 TIME 1045
 DATE 6/12/07 TIME 1045 12p

I have accepted the above sample:

NAME sample DATE 6/12/07 TIME 1045
 and delivered to: Beckmar Lab

I have accepted the above sample:

NAME sample DATE 6/12/07 TIME 1045
 and delivered to: Beckmar Lab

I have accepted the above sample:

NAME sample DATE 6/12/07 TIME 1045

4 0 3.15
13 0 3.03
15 0 2.88

185780

185791

185772

185793

NAME OF TREATMENT PLANT

HILL CREEK

Bio-Monitoring

TYPE OF SAMPLE: INFLUENT (COMPOSITE) XSAMPLE DATE: 6-13-07 TO 6-14-07EXPLAIN LOCATION: RAIL SEWAGE INFLUENTNAME E. DONN TIME 7:10 VOL: mls 1000NAME Auto Sample Composite TIME 7:10 VOL: mlsNAME Auto Sample Composite TIME 7:10 VOL: mlsNAME E. DONN TIME 7:10 VOL: mlsDELIVERED TO: H.C. LABDATE: 6-14-07 TIME: 7:30TYPE OF SAMPLE: EFFLUENT (COMPOSITE) XSAMPLE DATE: 6-13-07 TO 6-14-07EXPLAIN LOCATION: U-1 SYSTEM DISCHARGENAME E. DONN TIME 7:20 VOL: mls 4000NAME Auto Sample Composite TIME 7:20 VOL: mlsNAME Auto Sample Composite TIME 7:20 VOL: mlsNAME E. DONN TIME 7:20 VOL: mlsDELIVERED TO: H.C. LABDATE: 6-14-07 TIME: 7:30TYPE OF SAMPE: EFF. NH₃N (COMPOSITE)

SAMPLE DATE:

EXPLAIN LOCATION:

NAME E. DONN TIME 7:45 VOL: mls 1000NAME Auto Sample Composite TIME 7:45 VOL: mlsNAME Auto Sample Composite TIME 7:45 VOL: mlsNAME E. DONN TIME 7:45 VOL: mls

DELIVERED TO:

DATE: 6-14-07 TIME: 7:30TYPE OF SAMPLE: OTHER Mixed Liquid GrabSAMPLE DATE: 6-14-07EXPLAIN LOCATION: #3 SPLITTER BOXNAME E. DONN TIME 7:45 VOL: mls 1000NAME Auto Sample Composite TIME 7:45 VOL: mlsNAME Auto Sample Composite TIME 7:45 VOL: mlsNAME E. DONN TIME 7:45 VOL: mlsDELIVERED TO: H.C. LABDATE: 6-14-07 TIME: 7:50

E EFFLUENT GRAB (1000 mls)
7-DAYS DURING Bio-
logy EVENT ☐

TYPE OF SAMPLE: FECAL COLIFORM (GRAB)

SAMPLE DATE:

EXPLAIN LOCATION:

NAME E. DONN TIME 7:45 VOL: mls

DELIVERED TO:

DATE: 6-14-07 TIME: 7:45

I have accepted the above sample:

NAME E. DONNDATE 6-14-07 TIME 7:45

and delivered to:

DATE 6-14-07 TIME 7:45

I have accepted the above sample:

NAME E. DONNDATE 6-14-07 TIME 7:45

and delivered to:

DATE 6-14-07 TIME 7:45

I have accepted the above sample:

NAME E. DONNDATE 6-14-07 TIME 7:45

and delivered to:

DATE 6-14-07 TIME 7:45

I have accepted the above sample:

NAME E. DONNDATE 6-14-07 TIME 7:45

4

185877

80

81

82

83

NAME OF TREATMENT PLANT HILE CREEKBio-monitoringTYPE OF SAMPLE: INFLUENT (COMPOSITE) XSAMPLE DATE: 6-15-07 TO 6-16-07EXPLAIN LOCATION: RAW SEWAGE INFLUENTNAME E. DUNN TIME 7:10 VOL: mls 1000NAME ~~Auto Sample~~ TIME ~~Auto~~ VOL: ~~mls~~NAME ~~Auto Sample~~ TIME ~~Auto~~ VOL: ~~mls~~NAME G. GRAVES TIME ~~Auto~~ VOL: ~~mls~~DELIVERED TO: H.C. LABDATE: 6-16-07 TIME: 730TYPE OF SAMPLE: EFFLUENT (COMPOSITE) XSAMPLE DATE: 6-15-07 TO 6-16-07EXPLAIN LOCATION: U-V SYSTEM DISCHARGENAME E. DUNN TIME 7:20 VOL: mls 4000NAME ~~Auto Sample~~ TIME ~~Auto~~ VOL: ~~mls~~NAME ~~Auto Sample~~ TIME ~~Auto~~ VOL: ~~mls~~NAME G. GRAVES TIME ~~Auto~~ VOL: ~~mls~~DELIVERED TO: H.C. LABDATE: 6-16-07 TIME: 730TYPE OF SAMPE: EFF. NH₃-N (COMPOSITE) _____

SAMPLE DATE: _____

EXPLAIN LOCATION: _____

NAME _____ TIME _____ VOL: mlsNAME _____ TIME _____ VOL: mlsNAME _____ TIME _____ VOL: mlsNAME _____ TIME _____ VOL: mls

DELIVERED TO: _____

DATE: _____ TIME: _____

TYPE OF SAMPLE: OTHER MIXED LIQUOR GRABSAMPLE DATE: 6-16-07EXPLAIN LOCATION: #3 SPLITTER BOXNAME G TIME 7⁰⁰ VOL: mls 1000NAME _____ TIME _____ VOL: mlsNAME _____ TIME _____ VOL: mlsNAME _____ TIME _____ VOL: mlsDELIVERED TO: H.C. LABDATE: 6-16-07 TIME: 730

E EFFLUENT GRAB (1000 mls)
7-DAYS DURING Bio-
logy EVENT ☐

TYPE OF SAMPLE: FECAL COLIFORM (GRAB) _____

SAMPLE DATE: _____

EXPLAIN LOCATION: _____

NAME _____ TIME _____ VOL: mls

DELIVERED TO: _____

DATE: _____ TIME: _____

I have accepted the above sample:

NAME Paul P. RyanDATE 6-16-07 TIME 8:52and delivered to: Recher CoDATE 6-16-07 TIME 10⁴

I have accepted the above sample:

NAME _____

DATE _____ TIME _____

and delivered to: _____

DATE _____ TIME _____

I have accepted the above sample:

NAME _____

DATE _____ TIME _____

and delivered to: _____

DATE _____ TIME _____

I have accepted the above sample:

NAME _____

DATE _____ TIME _____



Date of Issue: June 28, 2007

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Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP: Influent day 1.

BECKMAR CERTIFICATE OF ANALYSIS # 185624

Sample Date: 6/12/2007

Sample Time: 7:10

Sampled by: E. Dunn

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Nickel	0.053	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Nickel (D)	0.022	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

Jeffersontown Business Park

3251 Ruckriegel Parkway

Jeffersontown, KY 40299

502-266-6533

FAX: 502-266-6446



Date of Issue: June 28, 2007

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Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP: MLSS day 1.

BECKMAR CERTIFICATE OF ANALYSIS # 185625

Sample Date: 6/12/2007

Sample Time: 8:10

Sampled by: E. Dunn

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Nickel	0.429	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS
Nickel (D)	0.031	mg/l	C	EPA 200.7	6/14/2007 16:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

Jeffersontown Business Park

3251 Ruckriegel Parkway

Jeffersontown, KY 40299

502/266-6533

FAX 502-266-6446



Date of Issue: June 28, 2007

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Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP: Influent day 2.

BECKMAR CERTIFICATE OF ANALYSIS # 185792

Sample Date: 6/14/2007

Sample Time: 7:10

Sampled by: E. Dunn

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Nickel	0.037	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS
Nickel (D)	0.036	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

Jeffersontown Business Park

3251 Ruckriegel Parkway

Jeffersontown, KY 40299

502-266-6533

FAX: 502-266-6446



Date of Issue: June 28, 2007

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Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP: Effluent day 2.

BECKMAR CERTIFICATE OF ANALYSIS # 185791

Sample Date: 6/14/2007

Sample Time: 7:20

Sampled by: E. Dunn

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Nickel	0.015	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS
Nickel (D)	0.015	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

Jeffersontown Business Park

3251 Ruckriegel Parkway

Jeffersontown, KY 40299

502-266-6533

FAX 502-266-6446



Date of Issue: June 28, 2007

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Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP: MLSS day 2.

BECKMAR CERTIFICATE OF ANALYSIS # 185793

Sample Date: 6/14/2007

Sample Time: 7:45

Sampled by: E. Dunn

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Nickel	0.405	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS
Nickel (D)	0.011	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

Jeffersontown Business Park

3251 Ruckriegel Parkway

Jeffersontown, KY 40299

502-266-6533

FAX 502-266-6446



Date of Issue: June 28, 2007

Page 1 of 1

Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP; Influent day 3.

BECKMAR CERTIFICATE OF ANALYSIS # 185881

Sample Date: 6/16/2007

Sample Time: 7:10

Sampled by: G. Graves

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Nickel	0.046	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS
Nickel (D)	0.033	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

JeffersonTown Business Park

3251 Rockledge Parkway

Jeffersontown, KY 40299

502.266.6593

FAX: 502.266.6446



Date of Issue: June 28, 2007

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Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP: Effluent day 3.

BECKMAR CERTIFICATE OF ANALYSIS # 185880

Sample Date: 6/16/2007

Sample Time: 7:20

Sampled by: G. Graves

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Nickel	< 0.004	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS
Nickel (D)	< 0.004	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

Jeffersontown Business Park

3251 Rockledge Parkway

Jeffersontown, KY 40299

502-266-6533

FAX 502-266-6446



Date of Issue: June 28, 2007

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Metropolitan Sewer District c/o Mr. John Kessle
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: Hite Creek WWTP: MLSS day 3.

BECKMAR CERTIFICATE OF ANALYSIS # 185882

Sample Date: 6/16/2007

Sample Time: 7:00

Sampled by: G. Graves

Parameter	Results	Units	Type	Method	Analyzed Date / Time	Analyst
Nickel	0.468	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS
Nickel (D)	0.046	mg/l	C	EPA 200.7	6/21/2007 14:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

ENVIRONMENTAL
LABORATORY

Jeffersontown Business Park

3251 Ruckriegel Parkway

Jeffersontown, KY 40299

502-266-6533

FAX 502-266-6446