



El Segundo Power, LLC
301 Vista Del Mar Boulevard
El Segundo, CA 90245
Phone: 310.615.6028
Fax: 310.615.6060

February 24, 2010

Division of Water Quality
C/O Discharge Monitoring Report Process Center
1001 I street, 15th Floor
Sacramento, CA 95814

Subject: El Segundo Power, LLC
Monitoring and Reporting Program
No. 54667, January 2010 Monthly and Year 2009 Annual Report

MONTHLY REPORT

Attached are the test results obtained from the required sampling stations during the month of January 2010. This is in compliance with the requirements as set forth in NPDES Permit Number CA0001147, California Regional Water Quality Control Board, Los Angeles Region Order Number 00-084, covering wastes discharged at El Segundo Power, LLC. Please refer to compliance file CI 4667.

All test results contained in this report are within the specified limit for each parameter. There were no Metal Cleaning Wastes nor were there any Non-Metal Cleaning Wastes discharged for the Month of January 2010. For the month of January 2010, the effluent of Sanitary Waste Treatment Plant #1 was routed to Discharge Point #002. This was done to reduce once through cooling water flow and reduce power. There was no chlorination performed on Discharge Point #001 for the month of January 2010. On January 7, 2010, Chronic Toxicity Testing was conducted for Kelp on Discharge Point #001. Please find the results of this test submitted within the report.

There were no hazardous wastes manifests for the month of January 2010. On January 7, 2010, Chronic Toxicity testing was conducted for Giant Kelp. Please find the sample results included within this report.

All analyses were conducted at a laboratory certified for such analyses by the State Department of Health or approved by the Executive Officer and in accordance with current EPA guideline procedures, or as specified in the Monitoring Program.

ANNUAL REPORT

As part of the annual report submittal please find the tabular and graphical summaries of the monitoring data obtained during the year 2009. Also included are copies of ELAP certifications for all laboratories used by El Segundo Power, LLC. Also please find a hazardous material summary for year 2009.

The following is a compilation for the year:

UNITS 1 & 2:

On January 1, 2003, Units 1 and 2 ceased commercial operation. The once through cooling water system for Units 1 and 2 remains in operation. Chlorination of the Units 1 and 2 Circulating Water System terminated at the end of February 2008. The NPDES Monitoring and Reporting Program for discharge point #001 continues without interruption.

CHRONIC TOXICITY TESTING

On May 9, 2009, the second quarter Chronic Kelp Toxicity testing was conducted on Discharge Point #001, with a retest conducted on June 8, 2009. The results of the May 9, 2009 test showed acceptable germination but the results were statistically outside the limits. The May 9, 2009 test had a TUC of 16 and NOEC of 6.25%. The percent germination was between 75.4 % and 87.2%. The percent germination of this test exceeded the acceptability criteria for controls \geq 70%. The June 8, 2009 test results showed a TUC of 1.00 and an NOEC of 100%.

El Segundo Power representatives have met with LARWQCB in the past regarding test results of this nature. El Segundo Power has communicated that results such as these show acceptable germination; no effect on tube length; yet show statistically to be outside of the limits. The director of the laboratory that conducted these tests has provided El Segundo Power, LLC with a conclusory statement that the results indicate no biological or ecological impacts. LARWQCB, after reviewing past similar test results, has previously agreed that results such as these did not indicate any significant biological or ecological impacts.

Fourth quarter Chronic Kelp Toxicity testing was conducted on November 2, 2009 with a retest on December 30, 2009. The November 2, 2009 test showed a TUC of 16 and a NOEC of 6.25%. The results of the November 2, 2009 test showed acceptable germination but the results were statistically outside the limits. The percent germination was between 87.8 % and 99.2%. The percent germination of this test exceeded the acceptability criteria for controls \geq 70%. The December 30, 2009 test showed a TUC of 1.00 and an NOEC of 100%. As stated above, test results of this nature have been previously discussed with the LARWQCB. Additionally, the director of the laboratory that conducted the tests has stated that there was no indication that this sample exhibited any significant biological or ecological impacts.

WATERBOARD INSPECTIONS

There were no Los Angeles Regional Water Quality Control Board inspections conducted at the El Segundo Generating Station during 2009. On September 1, 2009, Paul Shriner, Jan Matuszko, and John Kemmerer of the United States Environmental Protection Agency and Tim Havey and Kelly Meadows of Tetra Tech visited the El Segundo Generating Station. The purpose of their visit was to gather information regarding El Segundo Power, LLC, its repowering efforts and its technological efforts to comply with Rule 316(b).

SANITARY TREATMENT PLANTS

For the year 2009, Sanitary Treatment Plant #1 was routed to Sanitary Treatment Plant #2. This was done to reduce once-through cooling water flow at Units 1 and 2 and to conserve energy.

HEAT TREAT

No heat treats were conducted on discharge point #001 during 2009. On July 1, 2009, a heat treat was conducted on discharge point #002. The maximum temperature attained was 103.4 degrees F. On September 3, 2009, a heat treat was conducted on discharge point #002. The maximum temperature attained was 118.9 degrees F. All heat treats conducted were within permit limits.

METAL CLEANING WASTES

There were no Metal Cleaning Wastes discharged during the year 2009.

NON-METAL CLEANING WASTES

There were no Non-Metal Cleaning Wastes discharged during the year 2009.

STORM WATER

The annual Storm Water Report was submitted on June 25, 2009.

DMR-QA

As directed by the NPDES Permit, El Segundo Power, LLC participated in the annual DMR-QA study. Not-Acceptable values were given on a few parameters. These were all corrected.

KELP MONITORING

El Segundo Power, LLC voluntarily participated in the Regional Kelp Monitoring Study.

OTHER MONITORING

As directed in the NPDES Permit, El Segundo Power, LLC conducted quarterly chronic toxicity bioassays, semi-annual metals, and annual effluent priority pollutants monitoring.

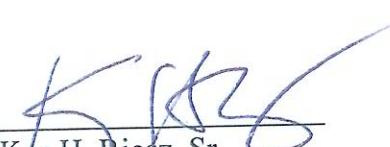
If you should have any questions concerning this report please contact Mr. Alex Sanchez at (310) 615-6351.

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 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, a fine or imprisonment for knowing violations.

Executed on the 24th day of February 2010 in El Segundo, California.

Sincerely,

El Segundo Power, LLC
By: NRG El Segundo Operations Inc.,
It's Authorized Agent

By: 
Ken H. Riesz, Sr.
Plant Manager

Attachments
File Number
1 C 4 2 1H

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

Form Approved
OMB No. 2040-0004

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

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245

FACILITY: EL SEGUNDO GENERATING STATION
LOCATION: 301 Vista Del Mar
El Segundo, CA 90245

ATTN: ALEX SANCHEZ

CA0001147	001-A
DISCHARGE NUMBER	
MONITORING PERIOD	
MM/DD/YYYY 01/01/2010	MM/DD/YYYY 01/31/2010
FROM	TO
DISCHARGE 001/MONTHLY External Outfall	
No Discharge <input type="checkbox"/>	

DMR Mailing ZIP CODE: 90245
MAJOR
(SUBR 04)
DISCHARGE 001/MONTHLY

External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
Temperature, water deg. fahrenheit	SAMPLE	*****		*****	*****		60.7	deg. F	0 Continuous MEASRD
Effluent Gross	MEASUREMENT	*****		*****	*****	DAILY MX			MEASRD
Temperature, water deg. fahrenheit	PERMIT REQUIREMENT	*****		*****	*****	DAILY MX			
Temperature, water deg. fahrenheit	SAMPLE	*****		*****	*****	DAILY MX	125	deg F	Continuous MEASRD
00011 P 0	MEASUREMENT	*****		*****	*****	DAILY MX			
See Comments	PERMIT REQUIREMENT	*****		*****	*****	DAILY MX			
Temperature, water deg. fahrenheit	SAMPLE	*****		*****	*****	DAILY MX	135	deg F	Continuous MEASRD
00011 R 0	MEASUREMENT	*****		*****	*****	DAILY MX			
See Comments	PERMIT REQUIREMENT	*****		*****	*****	DAILY MX			
pH	SAMPLE	*****		*****	*****	DAILY MX	9	SU	0 Weekly GRAB
00400 1 0	MEASUREMENT	*****		*****	*****	DAILY MX			
Effluent Gross	PERMIT REQUIREMENT	*****		*****	*****	DAILY MX			
Flow, in conduit or thru treatment plant	SAMPLE	*****	0.0	gal/d	*****	DAILY MX	6	MAXIMUM	0 Weekly GRAB
50050 1 0	MEASUREMENT	*****		gal/d	*****	DAILY MX			
Effluent Gross	PERMIT REQUIREMENT	*****		gal/d	*****	DAILY MX			
Chlorine, total residual	SAMPLE	*****		*****	*****	DAILY MX	9	MAXIMUM	0 Weekly GRAB
50060 1 0	MEASUREMENT	*****		*****	*****	DAILY MX			
Effluent Gross	PERMIT REQUIREMENT	*****		*****	*****	DAILY MX			
Chlorine, free available	SAMPLE	*****		*****	*****	DAILY MX	14	mgl	0 Daily GRAB
50064 1 0	MEASUREMENT	*****		*****	*****	DAILY MX			
Effluent Gross	PERMIT REQUIREMENT	*****		*****	*****	DAILY MX			

NAMETITLE PRINCIPAL EXECUTIVE OFFICER KEN H. RIESZ, Sr./ PLANT MANAGER	I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to produce accurate quantitative personnel, financial, and statistical information and that to the best of my knowledge and belief, the data contained herein was obtained from sources believed to be reliable for the purpose of this report and that no known effort has been made to falsify or manipulate the data in this report. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly presenting false information.
TYPED OR PRINTED	<i>[Signature]</i>
COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)	

TEMP, PARAM 00011, REPORT BY MLLOC-TEMPERATURE OF DISCHARGE SHALL NOT EXCEED-105F DURING NORMAL OPERATION MLLOC=1;125F DURING HEAT TREATMENT AND READJUSTMENT OF RECIRCULATION GATE MLLOC-R. TEMP > 125F SHALL NO EXCEED 30 MINUTES.

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

Form Approved
OMB No. 2040-0004

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

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245
FACILITY: EL SEGUNDO GENERATING STATION
LOCATION: 301 Vista Del Mar
El Segundo, CA 90245
ATTN: ALEX SANCHEZ

CA0001147	002-A
PERMIT NUMBER	DISCHARGE NUMBER
MM/DD/YYYY	MONITORING PERIOD
01/01/2010	MM/DD/YYYY
TO	01/31/2010

DMR Mailing ZIP CODE: 90245
MAJOR
(SUBR 04)
DISCHARGE 002/MONTHLY
External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS			
Temperature, water deg. fahrenheit	SAMPLE MEASUREMENT	*****	*****	*****	118.9	deg F	0 Continuous
000111 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	105	DAILY MX	MEASRD
Temperature, water deg. fahrenheit	SAMPLE MEASUREMENT	*****	*****	*****	118.9	deg F	0 Continuous
000111 P 0 See Comments	PERMIT REQUIREMENT	*****	*****	*****	125	DAILY MX	MEASRD
Temperature, water deg. fahrenheit	SAMPLE MEASUREMENT	*****	*****	*****	118.9	deg F	0 Continuous
00011 R 0 See Comments	PERMIT REQUIREMENT	*****	*****	*****	135	DAILY MX	MEASRD
pH	SAMPLE MEASUREMENT	*****	*****	*****	8.06	SU	0 Weekly
0040010 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	9	MAXIMUM	GRAB
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	198,600,000	gal/d	*****	6	MINIMUM	CONTIN
5005010 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	DAILY MX	Gaud	*****	*****	DAILY CONTIN
Chlorine, total residual	SAMPLE MEASUREMENT	*****	*****	*****	0.2	mg/L	0 Occurrences
5006010 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	4	DAILY MX	GRAB
Chlorine, free available	SAMPLE MEASUREMENT	*****	*****	*****	0.13	mg/L	0 Occurrences
5006410 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	2	DAILY AV	GRAB
				*****	5	DAILY MX	Chlorination/Occurrences

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with my specific instructions and give my express written consent that the contents of this document may be reproduced by the Regional Office or other appropriate office of the U.S. Environmental Protection Agency for interagency communication. The information contained in this document is reliable to the best of my knowledge and belief, true, accurate, and complete. I can attest that there are no significant omissions.		
KEN H. RIESZ, Sr./ PLANT MANAGER	EL SEGUNDO POWER, LLC	310-615-6030	DATE 02/24/2010
TYPED OR PRINTED	BY: EL SEGUNDO OPERATIONS, INC	AREA Code	MM/DD/YYYY
	IT'S AUTHORIZED AGENT		

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

TEMP PARAM 0011, REPORT BY MLOC; TEMPERATURE OF DISCHARGE SHALL NOT EXCEED 105F DURING NORMAL OPERATION MLOC=1; 125F DURING HEAT TREATMENT MLOC=P1; 130F DURING HEAT TREATMENT AND READJUSTMENT OF RECIRCULATIONATE MLOC=R. TEMP > 125F SHALL NOT EXCEED 30 MINUTES.

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

Form Approved
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name & location if Different)*

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245
FACILITY: EL SEGUNDO GENERATING STATION
LOCATION: 301 Vista Del Mar
El Segundo, CA 90245
ATTN: ALEX SANCHEZ

CA0001147	LVIA
PERMIT NUMBER	DISCHARGE NUMBER
MM/DD/YYYY	MONITORING PERIOD
01/01/2010	MM/DD/YYYY
TO	01/31/2010

DMR Mailing ZIP CODE: 90245
(SUBR 04)
CHEM MTL CLN WST/MONTHLY
External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
pH	SAMPLE	*****		*****	*****				
	MEASUREMENT	*****		*****	*****				
004400 1 0	PERMIT REQUIREMENT	*****		*****	*****		Req. Mon.		
Effluent Gross	SAMPLE	*****		*****	*****		DAILY MX	SU	
Solids, total suspended	MEASUREMENT	*****		*****	*****				
00530 1 0	PERMIT REQUIREMENT	*****		*****	*****				
Effluent Gross	SAMPLE	*****		*****	*****		30 MO AVG	100 DAILY MX	mg/L
Copper, dissolved (as Cu)	MEASUREMENT	*****		*****	*****				
01040 1 0	PERMIT REQUIREMENT	*****		*****	*****		MO AVG	1 DAILY MX	mg/L
Effluent Gross	SAMPLE	*****		*****	*****				
Iron, dissolved (as Fe)	MEASUREMENT	*****		*****	*****				
01046 1 0	PERMIT REQUIREMENT	*****		*****	*****		1 MO AVG	1 DAILY MX	mg/L
Effluent Gross	SAMPLE	*****		*****	*****				
Oil and grease	MEASUREMENT	*****		*****	*****				
03582 1 0	PERMIT REQUIREMENT	*****		*****	*****		15 MO AVG	20 DAILY MX	mg/L
Effluent Gross	SAMPLE	*****		*****	*****				
Flow, in conduit or thru treatment plant	MEASUREMENT	*****		*****	*****				
50050 1 0	PERMIT REQUIREMENT	*****		Req. Mon.	Mg/d				
Effluent Gross									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify hereby that I have read this document and all attachments, and it was prepared under my direction or supervision in accordance with a plan designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person or persons who arranged 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 also declare that I am a participant in the NPDES electronic reporting system, and that this document is being transmitted via that system.		
KEN H. RIESZ, Sr./ PLANT MANAGER	 EL SEGUNDO POWER LLC By: EL SEGUNDO OPERATIONS, INC IT'S AUTHORIZED AGENT		
TYPED OR PRINTED	TELEPHONE	DATE	
	310-615-6030	02/24/2010	
COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)	AREA Code	NUMBER	MM/DD/YYYY

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

Form Approved
OMB No. 2040-0004

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

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245

FACILITY: EL SEGUNDO GENERATING STATION

LOCATION: 301 Vista Del Mar
El Segundo, CA 90245

ATTN: ALEX SANCHEZ

CA0001147	LV2-A
DISCHARGE NUMBER	

MONITORING PERIOD	
MM/DD/YYYY 01/01/2010	MM/DD/YYYY 01/31/2010

DMR Mailing ZIP CODE: 90245
MAJOR (SUBR 04)
NON-CHEM MTL CLN/MONTHLY
External Outfall
No Discharge

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS			
pH							
00400 1 0 Effluent Gross	SAMPLE MEASUREMENT	*****	*****	*****	Req. Mon. DAILY MX	SU	Monthly
Solids, total suspended	PERMIT REQUIREMENT	*****	*****	*****			
00530 1 0 Effluent Gross	SAMPLE MEASUREMENT	*****	*****	*****	Req. Mon. DAILY MX	mg/L	Monthly
Copper, dissolved (as Cu)	PERMIT REQUIREMENT	*****	*****	*****			
01040 1 0 Effluent Gross	SAMPLE MEASUREMENT	*****	*****	*****	Req. Mon. DAILY MX	mg/L	Monthly
Iron, dissolved (as Fe)	PERMIT REQUIREMENT	*****	*****	*****			
01046 1 0 Effluent Gross	SAMPLE MEASUREMENT	*****	*****	*****	Req. Mon. DAILY MX	mg/L	Monthly
Oil and grease	PERMIT REQUIREMENT	*****	*****	*****			
03582 1 0 Effluent Gross	SAMPLE MEASUREMENT	*****	*****	*****	Req. Mon. DAILY MX	mg/L	Monthly
Flow, in conduit or thru treatment plant	PERMIT REQUIREMENT	*****	*****	*****			
50050 1 0 Effluent Gross	SAMPLE MEASUREMENT	*****	Req. Mon. DAILY MX	mg/d	*****	*****	Monthly
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	CONTIN

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were executed under my direction or in my name and on my behalf. I am designee qualified to properly perform and execute this document. I warrant that the information submitted is based on my knowledge of the system or process that manage the system, or those persons directly responsible for gathering the information. I understand that it is a violation of Federal law to attest to any knowledge which I know, or believe to be inaccurate, or to conceal, or to make a false statement of material fact concerning this information, including the possibility of fine and imprisonment for perjury.		
KEIN H. RIESZ, Sr./ PLANT MANAGER	EL SEGUNDO POWER, LLC	310-615-6030	DATE 02/24/2010
TYPED OR PRINTED	By: EL SEGUNDO OPERATIONS, INC	AREA Code	MM/DD/YYYY 02/24/2010
IT'S AUTHORIZED AGENT			

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

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

Form Approved
OMB No. 2040-0004

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

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245
FACILITY: EL SEGUNDO GENERATING STATION
LOCATION: 301 Vista Del Mar
El Segundo, CA 90245
ATTN: ALEX SANCHEZ

CA0001147	LV2-A
PERMIT NUMBER	DISCHARGE NUMBER
MONITORING PERIOD	
MM/DD/YYYY	MM/DD/YYYY
FROM 01/01/2010	To 01/31/2010

DMR Mailing ZIP CODE: 90245
MAJOR
(SUBR 04)
NON-CHEM MTL CLN/MONTHLY
External Outfall
No Discharge

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS			
pH	*****	*****	*****	*****			
00400 1 0							
Effluent Gross							
Solids, total suspended							
00530 1 0							
Effluent Gross							
Copper, dissolved (as Cu)							
01040 1 0							
Effluent Gross							
Iron, dissolved (as Fe)							
01046 1 0							
Effluent Gross							
Oil and grease							
03582 1 0							
Effluent Gross							
Flow, in conduit or thru treatment plant							
50050 1 0							
Effluent Gross							

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify and declare that I am qualified by training and experience to make this statement and that the information contained in this report is true and accurate to the best of my knowledge and belief, and contains all information necessary for submitting this information, including the parts and components for furnishing accurate results.		
KEN H. RIESZ, Sr./ PLANT MANAGER	EL SEGUNDO-POWER, LLC	TELEPHONE 310-615-6030	DATE 02/24/2010
TYPED OR PRINTED	By: EL SEGUNDO OPERATIONS, INC	AREA Code	MM/DD/YYYY
	IT'S AUTHORIZED AGENT		

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

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

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

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245
FACILITY: EL SEGUNDO GENERATING STATION
LOCATION: 301 Vista Del Mar
El Segundo, CA 90245
ATTN: ALEX SANCHEZ

CA000147	LV3-A
PERMIT NUMBER	DISCHARGE NUMBER
MM/DD/YYYY	MONITORING PERIOD
01/10/2010	MM/DD/YYYY
TO	01/31/2010

DMR Mailing ZIP CODE: 90245
(SUBR 04)
MAJOR
NON-SANI LOW VOL/MONTHLY
External Outfall
No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
pH	SAMPLE	*****	*****	*****	*****	8.41	su	0	Monthly
00400 1 0	MEASUREMENT	*****	*****	*****	*****	Reg Mon DAILY MX	SU	Monthly	GRAB
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****			
Solids, total suspended	SAMPLE	*****	*****	*****	*****	4.3	5.1	0	Monthly
00530 1 0	MEASUREMENT	*****	*****	*****	*****	30 MO AVG	100 DAILY MX	mg/L	GRAB
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	Monthly	GRAB
Oil and grease	SAMPLE	*****	*****	*****	*****	2.5	2.8	0	Monthly
03582 1 0	MEASUREMENT	*****	*****	*****	*****	10 MO AVG	20 DAILY MX	mg/L	GRAB
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	Monthly	GRAB
Flow, in conduit or thru treatment plant	SAMPLE	*****	0.150	Mgal/d	*****	*****	*****	0	Monthly
50050 1 0	MEASUREMENT	*****	Req. Mon. DAILY MX	Mgal/d	*****	*****	*****	*****	CONTIN
Effluent Gross	PERMIT REQUIREMENT	*****			*****	*****	*****	Monthly	CONTIN

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of perjury that this document and all attachments were prepared under my direction or on my behalf and to my knowledge the information contained therein is true and accurate. Based on my inquiry of the person or persons who charge 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 aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly		
KEN H. RIESZ, Sr. PLANT MANAGER	EL SEGUNDO POWER, LLC	TELEPHONE	DATE
TYPED OR PRINTED	By: EL SEGUNDO OPERATIONS, INC	310-615-6030	02/24/2010
COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)	IT'S AUTHORIZED AGENT	AREA Code	MM/DD/YYYY

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

Form Approved
OMB No 2040-0004

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

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245

FACILITY: EL SEGUNDO GENERATING STATION
LOCATION: 301 Vista Del Mar
El Segundo, CA 90245

ATTN: ALEX SANCHEZ

CA0001147	LV4-A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	
MM/DD/YYYY	MM/DD/YYYY
01/01/2010	01/31/2010

FROM TO

DMR Mailing ZIP CODE: 90245
MAJOR
(SUBR 04)
SANITARY WASTE 1 /MONTHLY
External Outfall
No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
BOD, 5-day, 20 deg. C	SAMPLE	*****	*****	*****	*****	MO AVG	45	mg/L	Monthly
	MEASUREMENT	*****	*****	*****	*****	DAILY MX	30		GRAB
00310 1 0	PERMIT REQUIREMENT	*****	*****	*****	*****				
Effluent Gross	SAMPLE	*****	*****	*****	*****	MO AVG	30	DAILY MX	mg/L
Solids, total suspended	MEASUREMENT	*****	*****	*****	*****	DAILY MX	45		Monthly
00530 1 0	PERMIT REQUIREMENT	*****	*****	*****	*****	MO AVG	30		GRAB
Effluent Gross	SAMPLE	*****	*****	*****	*****	DAILY MX	45		
Solids, settleable	MEASUREMENT	*****	*****	*****	*****	MO AVG	1	mL/L	Monthly
00545 1 0	PERMIT REQUIREMENT	*****	*****	*****	*****	DAILY MX	3		GRAB
Effluent Gross	SAMPLE	*****	*****	*****	*****	MO AVG	1		
Oil and grease	MEASUREMENT	*****	*****	*****	*****	DAILY MX	15	mg/L	Monthly
03582 1 0	PERMIT REQUIREMENT	*****	*****	*****	*****	MO AVG	10		GRAB
Effluent Gross	SAMPLE	*****	*****	*****	*****	DAILY MX	15		
Flow, in conduit or thru treatment plant	MEASUREMENT	*****	*****	*****	*****	MO AVG	10		
05050 1 0	PERMIT REQUIREMENT	*****	Req. Mon.	DAILY MX	Mg/d	DAILY	1		CONTIN
Effluent Gross	SAMPLE	*****	*****	*****	*****				
Enterococci	MEASUREMENT	*****	*****	*****	*****	CFU/100mL	10 ⁴		
61211 1 0	PERMIT REQUIREMENT	*****	*****	*****	*****	CFU/100mL	10 ⁴		GRAB
Effluent Gross	SAMPLE	*****	*****	*****	*****	CFU/100mL	10 ⁴		
Coliform, fecal general	MEASUREMENT	*****	*****	*****	*****	MPN/100mL	200		
74055 1 0	PERMIT REQUIREMENT	*****	*****	*****	*****	MPN/100mL	200		GRAB
Effluent Gross	SAMPLE	*****	*****	*****	*****	MPN/100mL	200		

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER KEN H. RIESZ, Sr./ PLANT MANAGER TYPED OR PRINTED	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 gathered and evaluated the information submitted, based on my inquiry into the facts or persons who furnished such information, and that no person has been compelled to furnish any information which he or she did not wish to furnish; and that I am aware that there can be significant penalties for furnishing false information, including the possibility of fine and imprisonment for perjury.
TELEPHONE 310-615-6030 DATE 02/24/2010	
BY: EL SEGUNDO OPERATIONS, INC IT'S AUTHORIZED AGENT	

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

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-0004

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

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245
FACILITY: EL SEGUNDO GENERATING STATION
LOCATION: 301 Vista Del Mar
El Segundo, CA 90245
ATTN: ALEX SANCHEZ

CA0001147	I V4-A
DISCHARGE NUMBER	
MONITORING PERIOD	
MM/DD/YYYY 01/01/2010	MM/DD/YYYY 01/31/2010
FROM	TO

DMR Mailing ZIP CODE: 90245
MAJOR (SUBR 04)
SANITARY WASTE 1 MONTHLY
External Outfall
No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
Coliform, total general	*****	*****	CFU/L	*****	*****	CFU/L	Req. Mon. DAILY MAX	MPN/100m L	Monthly GRAB
7405610 Effluent Gross	*****	*****	CFU/L	*****	*****	CFU/L			

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with systems designed to assure that qualified personnel properly gather and evaluate the information submitted based on my inquiry of the person or persons who manage our systems, or those persons directly responsible for gathering and evaluating the information. I further declare that no one has compelled me to make any false statement or to make any statement which I do not believe to be true. I am fully aware that there are severe penalties for making false statements, including the possibility of fine and imprisonment for knowing violations.		
KEN H. RIESZ, Sr./ PLANT MANAGER TYPED OR PRINTED	 EL SEGUNDO POWER, LLC BY: EL SEGUNDO OPERATIONS, INC IT'S AUTHORIZED AGENT		
TELEPHONE	DATE		
310-615-6030	02/24/2010		
AREA Code	MM/DD/YYYY		

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

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

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

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245
FACILITY: EL SEGUNDO GENERATING STATION
LOCATION: 301 Vista Del Mar
El Segundo, CA 90245
ATTN: ALEX SANCHEZ

CA000147	LV5-A
PERMIT NUMBER	DISCHARGE NUMBER
MONITORING PERIOD	
MM/DD/YYYY 01/01/2010	MM/DD/YYYY 01/31/2010
FROM	TO

DMR Mailing ZIP CODE: 90245
(SUBR 04)
SANITARY WASTE 2/MONTHLY
External Outfall
No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
BOD, 5-day, 20 deg. C				19.9	21.4	mg/L	0	Monthly	GRAB
00310 10 Effluent Gross				30	45	mg/L		Monthly	GRAB
Solids, total suspended				17.5	18.0	mg/L	0	Monthly	GRAB
00530 10 Effluent Gross				30	45	mg/L		Monthly	GRAB
Solids, settleable				MO AVG	DAILY MX	mg/L		Monthly	GRAB
00545 10 Effluent Gross				MO AVG	DAILY MX	mg/L	0	Monthly	GRAB
Oil and grease				1.5	1.6	mg/L	0	Monthly	GRAB
03582 10 Effluent Gross				10	15	mg/L		Monthly	GRAB
Flow, in conduit or thru treatment plant	0.0015	Mgal/L				mg/L	0	Monthly	GRAB
50050 10 Effluent Gross	Reg. Mon.	Max.				mg/L		Monthly	CONTIN
Enterococci									
61211 10 Effluent Gross									
Coliform, fecal general									
74055 10 Effluent Gross									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	KEN H. RIESZ, Sr./ PLANT MANAGER
TYPED OR PRINTED	

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

I certify under penalty of perjury that the information contained in this document was furnished under oath or affirmation before a Notary Public or an officer of a court of record and that to my knowledge, the person or persons who furnished the information directly responsible for gathering this information 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 felonies.


EL SEGUNDO POWER, LLC
By: EL SEGUNDO OPERATIONS, INC
IT'S AUTHORIZED AGENT

TELEPHONE: 310-615-6030 DATE: 02/24/2010
AREA Code: NUMBER: MM/DD/YYYY

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

Form Approved
OMB No. 2040-0004

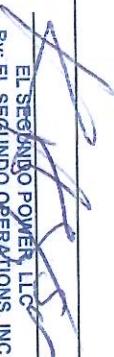
PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: EL SEGUNDO POWER, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245
FACILITY: EL SEGUNDO GENERATING STATION
LOCATION: 301 Vista Del Mar
El Segundo, CA 90245
ATTN: ALEX SANCHEZ

CA001147	LV5-A
DISCHARGE NUMBER	
MONITORING PERIOD	
MM/DD/YYYY 01/01/2010	MM/DD/YYYY 01/31/2010
FROM	TO

DMR Mailing ZIP CODE: 90245
MAJOR (SUBR 04)
SANITARY WASTE 2/MONTHLY
External Outfall
No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
Coliform, total general	*****	*****	*****	*****	*****	*****	2.0	MPN/100mL	0 Monthly GRAB
74056 10 Effluent Gross	*****	*****	*****	*****	*****	*****	Reg. Mon. DAILY MAX 1	MPN/100mL	Monthly GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		certify under penalty of perjury 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 persons fully knowledgeable and responsible for the information. I further certify this information, being made a part of this application for a permit to discharge pollutants to the water may lawfully be used, as evidence against me, if I am found in violation of any applicable requirement for obtaining, renewing, or modifying a permit to discharge pollutants.		
KEN H. RIESZ, Sr./ PLANT MANAGER		 EL SEGUNDO POWER, LLC BY: EL SEGUNDO OPERATIONS, INC IT'S AUTHORIZED AGENT		
TYPED OR PRINTED		TELEPHONE	DATE	
		310-615-6030	02/24/2010	
COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)		AREA code	NUMBER MM/DD/YYYY	



El Segundo Power, LLC
301 Vista Del Mar Boulevard
El Segundo, CA 90245
Phone: 310.615.6028
Fax: 310.615.6060

February 24, 2010

Tracey Egoscue
C/O California Regional Water Quality Control Board
Los Angeles Region
ATTN: Technical Support Unit
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: El Segundo Power, LLC
Monitoring and Reporting Program
No. 54667, January 2010 Monthly and Year 2009 Annual Report

MONTHLY REPORT

Attached are the test results obtained from the required sampling stations during the month of January 2010. This is in compliance with the requirements as set forth in NPDES Permit Number CA0001147, California Regional Water Quality Control Board, Los Angeles Region Order Number 00-084, covering wastes discharged at El Segundo Power, LLC. Please refer to compliance file CI 4667.

All test results contained in this report are within the specified limit for each parameter. There were no Metal Cleaning Wastes nor were there any Non-Metal Cleaning Wastes discharged for the Month of January 2010. For the month of January 2010, the effluent of Sanitary Waste Treatment Plant #1 was routed to Discharge Point #002. This was done to reduce once through cooling water flow and reduce power. There was no chlorination performed on Discharge Point #001 for the month of January 2010. On January 7, 2010, Chronic Toxicity Testing was conducted for Kelp on Discharge Point #001. Please find the results of this test submitted within the report.

There were no hazardous wastes manifests for the month of January 2010. On January 7, 2010, Chronic Toxicity testing was conducted for Giant Kelp. Please find the sample results included within this report.

All analyses were conducted at a laboratory certified for such analyses by the State Department of Health or approved by the Executive Officer and in accordance with current EPA guideline procedures, or as specified in the Monitoring Program.

ANNUAL REPORT

As part of the annual report submittal please find the tabular and graphical summaries of the monitoring data obtained during the year 2009. Also included are copies of ELAP certifications for all laboratories used by El Segundo Power, LLC. Also please find a hazardous material summary for year 2009.

The following is a compilation for the year:

UNITS 1 & 2:

On January 1, 2003, Units 1 and 2 ceased commercial operation. The once through cooling water system for Units 1 and 2 remains in operation. Chlorination of the Units 1 and 2 Circulating Water System terminated at the end of February 2008. The NPDES Monitoring and Reporting Program for discharge point #001 continues without interruption.

CHRONIC TOXICITY TESTING

On May 9, 2009, the second quarter Chronic Kelp Toxicity testing was conducted on Discharge Point #001, with a retest conducted on June 8, 2009. The results of the May 9, 2009 test showed acceptable germination but the results were statistically outside the limits. The May 9, 2009 test had a TUC of 16 and NOEC of 6.25%. The percent germination was between 75.4 % and 87.2%. The percent germination of this test exceeded the acceptability criteria for controls \geq 70%. The June 8, 2009 test results showed a TUC of 1.00 and an NOEC of 100%.

El Segundo Power representatives have met with LARWQCB in the past regarding test results of this nature. El Segundo Power has communicated that results such as these show acceptable germination; no effect on tube length; yet show statistically to be outside of the limits. The director of the laboratory that conducted these tests has provided El Segundo Power, LLC with a conclusory statement that the results indicate no biological or ecological impacts. LARWQCB, after reviewing past similar test results, has previously agreed that results such as these did not indicate any significant biological or ecological impacts.

Fourth quarter Chronic Kelp Toxicity testing was conducted on November 2, 2009 with a retest on December 30, 2009. The November 2, 2009 test showed a TUC of 16 and a NOEC of 6.25%. The results of the November 2, 2009 test showed acceptable germination but the results were statistically outside the limits. The percent germination was between 87.8 % and 99.2%. The percent germination of this test exceeded the acceptability criteria for controls \geq 70%. The December 30, 2009 test showed a TUC of 1.00 and an NOEC of 100%. As stated above, test results of this nature have been previously discussed with the LARWQCB. Additionally, the director of the laboratory that conducted the tests has stated that there was no indication that this sample exhibited any significant biological or ecological impacts.

WATERBOARD INSPECTIONS

There were no Los Angeles Regional Water Quality Control Board inspections conducted at the El Segundo Generating Station during 2009. On September 1, 2009, Paul Shriner, Jan Matuszko, and John Kemmerer of the United States Environmental Protection Agency and Tim Havey and Kelly Meadows of Tetra Tech visited the El Segundo Generating Station. The purpose of their visit was to gather information regarding El Segundo Power, LLC, its repowering efforts and its technological efforts to comply with Rule 316(b).

SANITARY TREATMENT PLANTS

For the year 2009, Sanitary Treatment Plant #1 was routed to Sanitary Treatment Plant #2. This was done to reduce once-through cooling water flow at Units 1 and 2 and to conserve energy.

HEAT TREAT

No heat treats were conducted on discharge point #001 during 2009. On July 1, 2009, a heat treat was conducted on discharge point #002. The maximum temperature attained was 103.4 degrees F. On September 3, 2009, a heat treat was conducted on discharge point #002. The maximum temperature attained was 118.9 degrees F. All heat treats conducted were within permit limits.

METAL CLEANING WASTES

There were no Metal Cleaning Wastes discharged during the year 2009.

NON-METAL CLEANING WASTES

There were no Non-Metal Cleaning Wastes discharged during the year 2009.

STORM WATER

The annual Storm Water Report was submitted on June 25, 2009.

DMR-QA

As directed by the NPDES Permit, El Segundo Power, LLC participated in the annual DMR-QA study. Not-Acceptable values were given on a few parameters. These were all corrected.

KELP MONITORING

El Segundo Power, LLC voluntarily participated in the Regional Kelp Monitoring Study.

OTHER MONITORING

As directed in the NPDES Permit, El Segundo Power, LLC conducted quarterly chronic toxicity bioassays, semi-annual metals, and annual effluent priority pollutants monitoring.

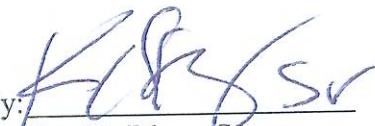
If you should have any questions concerning this report please contact Mr. Alex Sanchez at (310) 615-6351.

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 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, a fine or imprisonment for knowing violations.

Executed on the 24th day of February 2010 in El Segundo, California.

Sincerely,

El Segundo Power, LLC
By: NRG El Segundo Operations Inc.,
It's Authorized Agent

By: 
Ken H. Riesz, Sr.
Plant Manager

Attachments
File Number
1 C 4 2 1H

EL SEGUNDO POWER LLC
EL SEGUNDO GENERATING STATION
EFFLUENT MONITORING ANALYSIS DATA

Jan-10

TOTAL EFFLUENT FROM DISCHARGE SERIAL NO. 001

EL SEGUNDO POWER LLC
EL SEGUNDO GENERATING STATION
EFFLUENT MONITORING ANALYSIS DATA

Jan-10

TOTAL EFFLUENT FROM DISCHARGE SERIAL NO. 002

TOTAL EFFLUENT FROM DISCHARGE SITE II						
	Total Effluent Flow (10E6 GPD)	Maximum Discharge Temp. (Degrees F)	Free Available Chlorine (mg/l)	Total Residual Chlorine (mg/l)	pH	Temp deg C
Day						
1	211.8	74.3				
2	265.7	79.0				
3	199.3	81.8				
4	245.0	81.8	0.12	0.15	8.13	18
5	386.1	78.7				
6	398.6	84.8	0.07	0.09	8.06	19
7	398.6	84.8				
8	398.6	72.3	0.03	0.05		
9	257.4	69.5				
10	199.3	67.6				
11	170.2	62.6	0.06	0.08	8.18	17
12	199.3	77.1				
13	199.3	118.9	0.12	0.14		
14	199.3	71.3				
15	199.3	75.8	0.12	0.13		
16	128.7	75.8				
17	103.8	66.4				
18	199.3	89.4	0.18	0.20	8.24	20
19	186.8	89.4				
20	199.3	80.7	0.15	0.19		
21	199.3	80.6				
22	199.3	80.6	0.11	0.13		
23	145.3	80.9				
24	112.1	91.2				
25	124.6	96.4	0.17	0.20	8.49	19
26	120.4	92.8				
27	116.3	94.3	0.19	0.20		
28	99.6	78.8				
29	99.6	85.0	0.18	0.20		
30	99.6	69.6				
31	99.6	62.5				
Daily Limit			0.2	-	6.0 - 9.0	

Discharge Limit:

Instantaneous Max

6.0 - 9.0

Temperature Discharge Limit:

Normal Ops: 105 Degs. F
 Heat Treat: 125 Degs. F
 Recirc. Gate Adj.: 135 Degs. F

NPDES/DMR

NPDES/DMR						
	Average	80.5	0.13	0.15	8.2	19
	Maximum	118.9	0.19	0.20	8.5	19
	Minimum	62.5	0.03	0.05	8.1	17
	SD	20.6	0.06	0.03	1.1	4.0

Minimum 99.6 62.5 3.00
Maximum 100.0 100.0 100.0
Median 99.6 62.5 3.00
Range 0.00-100.0 0.00-100.0 0.00-100.0
SD 0.00 0.00 0.00
CV (%) 0.00 0.00 0.00
N 10 10 10
Mean 99.6 62.5 3.00
SE 0.00 0.00 0.00
SEM 0.00 0.00 0.00
95% CI 99.6-100.0 62.5-62.5 3.00-3.00
99.9% CI 99.6-100.0 62.5-62.5 3.00-3.00

Indicates significant difference for radioactivity, no radioactive pollutants were added

NOTE: In lieu of monitoring for radioactivity, no radioactive materials shall be introduced into the discharge.

0.00 - Indicates No Discharge of chlorine on these days, or reading

* P-1 - Summary

EL SEGUNDO POWER LLC
 EFFLUENT MONITORING ANALYSIS DATA
 LARWQCB ORDER NO. 00-084, NPDES NO. CA0001147
 Jan-10
 INPLANT WASTE STREAMS

I. LOW VOLUME WASTE

A) RETENTION BASIN - (LVW 1)

Date	Constituent	Concentration	Units	Temp deg C	Concentration Limit (Daily Max.)	30 Day Avg Limit	Frequency of Analysis
	Daily Flow	150,000	MGPD		N/A	N/A	Daily
1/12/10	Suspended Solids-1	3.5	mg/l		100	30	Monthly
1/12/10	Suspended Solids-2	5.1	mg/l		100	30	Monthly
	Suspended Solids-3		mg/l		100	30	Monthly
	Suspended Solids-4		mg/l		100	30	Monthly
	Suspended Solids-5		mg/l		100	30	Monthly
	Suspended Solids-6		mg/l		100	30	Monthly
	Suspended Solids Max	5.1	mg/l		100	30	Monthly
	Suspended Solids Avg	4.3	mg/l		100	30	Monthly
1/7/10	Oil & Grease-1	2.8	mg/l		20	15	Monthly
1/7/10	Oil & Grease-2	2.2	mg/l		20	15	Monthly
	Oil & Grease-3		mg/l		20	15	Monthly
	Oil & Grease-4		mg/l		20	15	Monthly
	Oil & Grease-5		mg/l		20	15	Monthly
	Oil & Grease-6		mg/l		20	15	Monthly
	Oil & Grease Max	2.8	mg/l		20	15	Monthly
	Oil & Grease Avg	2.5	mg/l		20	15	Monthly
1/4/10	pH-1	8.41	pH	18°C	6.0 - 9.1	N/A	Monthly
1/6/10	pH-2	8.06	pH	19°C	6.0 - 9.1	N/A	Monthly
1/25/10	pH-3	8.65	pH	16°C	6.0 - 9.1	N/A	Monthly
	pH-4		pH		6.0 - 9.1	N/A	Monthly
	pH-5		pH		6.0 - 9.1	N/A	Monthly
	pH-6		pH		6.0 - 9.1	N/A	Monthly
	pH Max	8.7	pH		6.0 - 9.1	N/A	Monthly
	pH Min	8.4	pH		6.0 - 9.0	N/A	Monthly

B) SANITARY PLANT 1

Constituent	Concentration	Units	Date	Concentration Limit (Daily Max.)	30 Day Avg Limit	Frequency of Analysis
Daily Flow MAX		GPD		N/A	N/A	Monthly
Oil & Grease-1		mg/l		15	10	Monthly
Oil & Grease-2		mg/l		15	10	Monthly
Oil & Grease-3		mg/l		15	10	Monthly
Oil & Grease-4		mg/l		15	10	Monthly
Oil & Grease-5		mg/l		15	10	Monthly
Oil & Grease Max	ND	mg/l		15	10	Monthly
Oil & Grease Avg	ND	mg/l		15	0.1	Monthly
Settleable Solids-1		ml/l		0.3	0.1	Monthly
Settleable Solids-2		ml/l		0.3	0.1	Monthly
Settleable Solids-3		ml/l		0.3	0.1	Monthly
Settleable Solids-4		ml/l		0.3	0.1	Monthly
Settleable Solids-5		ml/l		0.3	0.1	Monthly
Settleable Solids Max	ND	ml/l		0.3	0.1	Monthly
Settleable Solids Avg	ND	ml/l		0.3	0.1	Monthly
Suspended Solids-1		mg/l		45	30	Monthly
Suspended Solids-2		mg/l		45	30	Monthly
Suspended Solids-3		mg/l		45	30	Monthly
Suspended Solids-4		mg/l		45	30	Monthly
Suspended Solids-5		mg/l		45	30	Monthly
Suspended Solids Max	ND	mg/l		45	30	Monthly
Suspended Solids Avg	ND	mg/l		45	30	Monthly
BOD5 @ 20C-1		mg/l		45	30	Monthly
BOD5 @ 20C-2		mg/l		45	30	Monthly
BOD5 @ 20C-3		mg/l		45	30	Monthly
BOD5 @ 20C-4		mg/l		45	30	Monthly
BOD5 @ 20C-5		mg/l		45	30	Monthly
BOD5 @ 20C Max	ND	mg/l		45	30	Monthly
BOD5 @ 20C Avg	ND	mg/l		45	30	Monthly
Total Coliform-1		100 ml		N/A	N/A	Monthly
Total Coliform-2		100 ml		N/A	N/A	Monthly
Total Coliform-3		100 ml		N/A	N/A	Monthly
Total Coliform-4		100 ml		N/A	N/A	Monthly
Total Coliform-5		100 ml		N/A	N/A	Monthly
Total Coliform Max	ND	100 ml		N/A	N/A	Monthly
Total Coliform Avg	ND	100 ml		N/A	N/A	Monthly
Fecal Coliform-1		100 ml		N/A	N/A	Monthly
Fecal Coliform-2		100 ml		N/A	N/A	Monthly
Fecal Coliform-3		100 ml		N/A	N/A	Monthly
Fecal Coliform-4		100 ml		N/A	N/A	Monthly
Fecal Coliform-5		100 ml		N/A	N/A	Monthly
Fecal Coliform Max		100 ml		N/A	N/A	Monthly
Fecal Coliform Avg	ND	100 ml		N/A	N/A	Monthly
Enterrococi-1		100 ml		N/A	N/A	
Enterrococi-2		100 ml				
Enterrococi-3		100 ml		N/A	N/A	Monthly
Enterrococi-4		100 ml				
Enterrococi-5		100 ml				
Enterrococi Max	ND	100 ml		N/A	N/A	Monthly
Enterrococi Avg	ND	100 ml		N/A	N/A	Monthly

C) SANITARY PLANT 2

Constituent	Concentration	Units	Date	Concentration Limit (Daily Max.)	30 Day Avg Limit	Frequency of Analysis
Daily Flow MAX	1,500	GPD				Monthly
Oil & Grease-1	1.6	mg/l	1/7/10	15	10	Monthly
Oil & Grease-2	1.4	mg/l	1/7/10	15	10	Monthly
Oil & Grease-3		mg/l		15	10	Monthly
Oil & Grease-4		mg/l		15	10	Monthly
Oil & Grease-5		mg/l		15	10	Monthly
Oil & Grease Max	1.6	mg/l		15	10	Monthly
Oil & Grease Avg	1.5	mg/l		15	10	Monthly
Settleable Solids-1	ND	ml/l	1/7/10	0.3	0.1	Monthly
Settleable Solids-2		ml/l		0.3	0.1	Monthly
Settleable Solids-3		ml/l		0.3	0.1	Monthly
Settleable Solids-4		ml/l		0.3	0.1	Monthly
Settleable Solids-5		ml/l		0.3	0.1	Monthly
Settleable Solids Max	ND	ml/l		0.3	0.1	Monthly
Settleable Solids Avg	ND	ml/l		0.3	0.1	Monthly
Suspended Solids-1	18.0	mg/l	1/7/10	45	30	Monthly
Suspended Solids-2	17.0	mg/l	1/7/10	45	30	Monthly
Suspended Solids-3		mg/l		45	30	Monthly
Suspended Solids-4		mg/l		45	30	Monthly
Suspended Solids-5		mg/l		45	30	Monthly
Suspended Solids Max	18.0	mg/l		45	30	Monthly
Suspended Solids Avg	17.50	mg/l		45	30	Monthly
BOD5 @ 20C-1	21.4	mg/l	1/7/10	45	30	Monthly
BOD5 @ 20C-2	19.9	mg/l	1/7/10	45	30	Monthly
BOD5 @ 20C-3		mg/l		45	30	Monthly
BOD5 @ 20C-4		mg/l		45	30	Monthly
BOD5 @ 20C-5		mg/l		45	30	Monthly
BOD5 @ 20C Max	21.4	mg/l		45	30	Monthly
BOD5 @ 20C Avg	20.7	mg/l		45	30	Monthly
Total Coliform-1	11.0	100 ml	1/7/10	N/A	N/A	Monthly
Total Coliform-2		100 ml		N/A	N/A	Monthly
Total Coliform-3		100 ml		N/A	N/A	Monthly
Total Coliform-4		100 ml		N/A	N/A	Monthly
Total Coliform-5		100 ml		N/A	N/A	Monthly
Total Coliform Max	11.0	100 ml		N/A	N/A	Monthly
Total Coliform Avg	11.0	100 ml		N/A	N/A	Monthly
Fecal Coliform-1	2.0	100 ml	1/7/10	N/A	N/A	Monthly
Fecal Coliform-2		100 ml		N/A	N/A	Monthly
Fecal Coliform-3		100 ml		N/A	N/A	Monthly
Fecal Coliform-4		100 ml		N/A	N/A	Monthly
Fecal Coliform-5		100 ml		N/A	N/A	Monthly
Fecal Coliform Max	2.0	100 ml		N/A	N/A	Monthly
Fecal Coliform Avg	2.0	100 ml		N/A	N/A	Monthly
Enterrococi-1	2.0	100 ml	1/7/10	N/A	N/A	Monthly
Enterrococi-2		100 ml				Monthly
Enterrococi-3		100 ml		N/A	N/A	Monthly
Enterrococi-4		100 ml				Monthly
Enterrococi-5		100 ml				Monthly
Enterrococi Max	2.0	100 ml		N/A	N/A	Monthly
Enterrococi Avg	2.0	100 ml		N/A	N/A	Monthly

D) INLET & OUTLET TUNNELS

Constituent	Concentration	Units	Date	Concentration Limit (Daily Max.)	30 Day Avg Limit	Frequency of Analysis
1 & 2 Inlet Fecal Coliform	2	MPN/100	1/7/10	N/A	N/A	Monthly
1 & 2 Inlet Fecal Coliform		MPN/100		N/A	N/A	Monthly
1 & 2 Inlet Total Coliform	4	MPN/100	1/7/10	N/A	N/A	Monthly
1 & 2 Inlet Total Coliform		MPN/100		N/A	N/A	Monthly
1 & 2 Inlet Enterococci	30	MPN/100 ml	1/7/10	N/A	N/A	Monthly
1 & 2 Inlet Enterococci		MPN/100 ml		N/A	N/A	Monthly
#001 Fecal Coliform	2	MPN/100	1/7/10	N/A	N/A	Monthly
#001 Fecal Coliform		MPN/100		N/A	N/A	Monthly
#001 Total Coliform	13	MPN/100	1/7/10	N/A	N/A	Monthly
#001 Total Coliform		MPN/100		N/A	N/A	Monthly
#001 Enterococci	4	MPN/100 ml	1/7/10	N/A	N/A	Monthly
#001 Enterococci		MPN/100 ml		N/A	N/A	Monthly
3 & 4 Inlet Fecal Coliform	2	MPN/100	1/7/10	N/A	N/A	Monthly
3 & 4 Inlet Fecal Coliform		MPN/100		N/A	N/A	Monthly
3 & 4 Inlet Total Coliform	2	MPN/100	1/7/10	N/A	N/A	Monthly
3 & 4 Inlet Total Coliform		MPN/100		N/A	N/A	Monthly
3 & 4 Inlet Enterococci	2	MPN/100 ml	1/7/10	N/A	N/A	Monthly
3 & 4 Inlet Enterococci		MPN/100 ml		N/A	N/A	Monthly
#002 Fecal Coliform	2	MPN/100	1/7/10	N/A	N/A	Monthly
#002 Fecal Coliform		MPN/100		N/A	N/A	Monthly
#002 Total Coliform	30	MPN/100	1/7/10	N/A	N/A	Monthly
#002 Total Coliform		MPN/100		N/A	N/A	Monthly
#002 Enterococci	2	MPN/100 ml	1/7/10	N/A	N/A	Monthly
#002 Enterococci		MPN/100 ml		N/A	N/A	Monthly

E) CHEMICAL METAL CLEANING WASTES				Concentration Limit (Daily Max.)	30 Day Avg Limit	Frequency of Analysis
**There were no metal cleaning wastes discharged during this time period.						
Constituent & Date of Sample	Concentration	Units				
pH Max		pH		6.0 - 9.0	N/A	Monthly
pH Min		pH		6.0 - 9.0	N/A	Monthly
Suspended Solids Max		mg/l		100	30	Monthly
Suspended Solids Min		mg/l		100	30	Monthly
Oil & Grease Max		mg/l		20	15	Monthly
Oil & Grease Min		mg/l		20	15	Monthly
Daily Flow MAX		GPD		N/A	N/A	Monthly
Copper, Total Max		mg/l		1	1	Monthly
Copper, Total Min		mg/l		1	1	Monthly
Iron, Total		mg/l		1	1	Monthly

F) NON-CHEMICAL METAL CLEANING WASTES				Concentration Limit (Daily Max.)	30 Day Avg Limit	Frequency of Analysis
**There were no metal cleaning wastes discharged during this time period.						
Constituent & Date of Sample	Concentration	Units				
pH Max		pH		6.0 - 9.0	N/A	Monthly
pH Min		pH		6.0 - 9.0	N/A	Monthly
Suspended Solids Max		mg/l		100	30	Monthly
Suspended Solids Min		mg/l		100	30	Monthly
Oil & Grease Max		mg/l		20	15	Monthly
Oil & Grease Min		mg/l		20	15	Monthly
Daily Flow MAX		GPD		N/A	N/A	Monthly
Copper, Total Max		mg/l		1	1	Monthly
Copper, Total Min		mg/l		1	1	Monthly
Iron, Total		mg/l		1	1	Monthly

G) HAZARDOUS WASTE				
Type	Quantity	Date	Manifest #	Location
There were no hazardous waste manifests for January 2010				

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H) BIOASSAY												
Discharge Point #001		Constituent	Maximum Concentration						Units	Limit (Daily Max.)	Day Avg 4th Qtr	Frequency of Analysis
1st Qtr	2nd Qtr		2nd Qtr	3rd Qtr	4th Qtr							
Date	2/10/09	5/4/09	6/8/09	8/3/09	8/3/09	11/02/09	12/30/09					
Chronic Kelp Bioassay									Tuc	N/A		
Chronic Kelp Germination and Growth Bioassay	8.0	16.0	1.0	1.0	1.00	16.0	1.0		Tuc	N/A	Quarterly	
Chronic Kelp Germ Tube Length	1.0	1.0	1.0	1.0	1.0	1.0	1.0		Tuc	N/A	Quarterly	
Chronic Abalone Bioassay									Tuc	N/A	Quarterly	
Chronic Abalone Larval Development Bioassay(Tuc)		N/A							Tuc	N/A		
Cultured Abalone									Tuc	N/A	Quarterly	
Larval Development (TUC)									Tuc		Quarterly	
Chlorination												
Chronic Silversides Assay									Tuc	N/A	Quarterly	
Chronic Silversides Larval Survival Bioassay									Tuc	N/A	Quarterly	
Chronic Silversides Growth Bioassay												
Chronic Topsmeat Assay									Tuc	N/A	Quarterly	
Chronic Topsmeat Larval Survival Bioassay		1.0							Tuc	N/A	Quarterly	
Chronic Topsmeat Growth Bioassay		1.0										
Chronic Sea Urchin Larval Development Assay					1.0				Tuc	N/A	Quarterly	
Chronic Sea Urchin Larval Development Bioassay												
Discharge Point #002		Constituent	Maximum Concentration						Units	Limit (Daily Max.)	Frequency of Analysis	
1st Qtr	2nd Qtr		2nd Qtr	3rd Qtr	4th Qtr							
Date	2/10/09	5/4/09	6/8/09	8/3/09	8/3/09	11/02/09						
Chronic Kelp Bioassay			16.0	1.0	1.0	1.0	16.0		Tuc	N/A	Quarterly	
Chronic Kelp Germination Bioassay			4.0	1.0	1.0	1.0	1.0		Tuc	N/A	Quarterly	
Chronic Kelp Tube Length												
Chronic Abalone Bioassay									Tuc	N/A	Quarterly	
Chronic Abalone Larval Development Bioassay(Tuc)		4.0										
Cultured Abalone									Tuc	N/A	Quarterly	
Larval Development (TUC)									Tuc	N/A	Quarterly	
Chlorination												
Chronic Silversides Assay									Tuc	N/A	Quarterly	
Chronic Silversides Larval Survival Bioassay									Tuc	N/A	Quarterly	
Chronic Silversides Growth Bioassay												
Chronic Topsmeat Assay									Tuc	N/A	Quarterly	
Chronic Topsmeat Larval Survival Bioassay		1.0							Tuc	N/A	Quarterly	
Chronic Topsmeat Growth Bioassay		1.0										
Chronic Sea Urchin Larval Development Bioassay					1.0				Tuc	N/A	Quarterly	
Chronic Sea Urchin Larval Development Bioassay												
Receiving Water		Constituent	Concentration						Units	Limit (Daily Max.)	Frequency of Analysis	
1st Qtr	2nd Qtr		3rd Qtr	4th Qtr								
Date	2/10/09	5/4/09	6/8/09	8/3/09	8/3/09	11/02/09	12/30/09					
Chronic Abalone Larval Development Bioassay	1.00	16.0							Tuc	N/A	Quarterly	
Chronic Kelp Larval Development Bioassay									Tuc	N/A	Quarterly	
Chronic Sileversides Larval Survival Bioassay									Tuc	N/A	Quarterly	
Chronic Sileversides Growth Bioassay									Tuc	N/A	Quarterly	
Chronic Kelp Germination Bioassay		16.0	1.0	1.0		16.0	1.0		Tuc	N/A	Quarterly	
Chronic Kelp Growth Bioassay		1.0	1.0	1.0		1.0	1.0		Tuc	N/A	Quarterly	
Chronic Topsmeat Larval Survival Bioassay		1.0							Tuc	N/A	Quarterly	
Chronic Topsmeat Growth Bioassay		1.0							Tuc	N/A	Quarterly	
Chronic Sea Urchin Larval Development Bioassay			1.0						Tuc	N/A	Quarterly	
Chronic Sea Urchin Larval Development Bioassay									Tuc	N/A	Quarterly	

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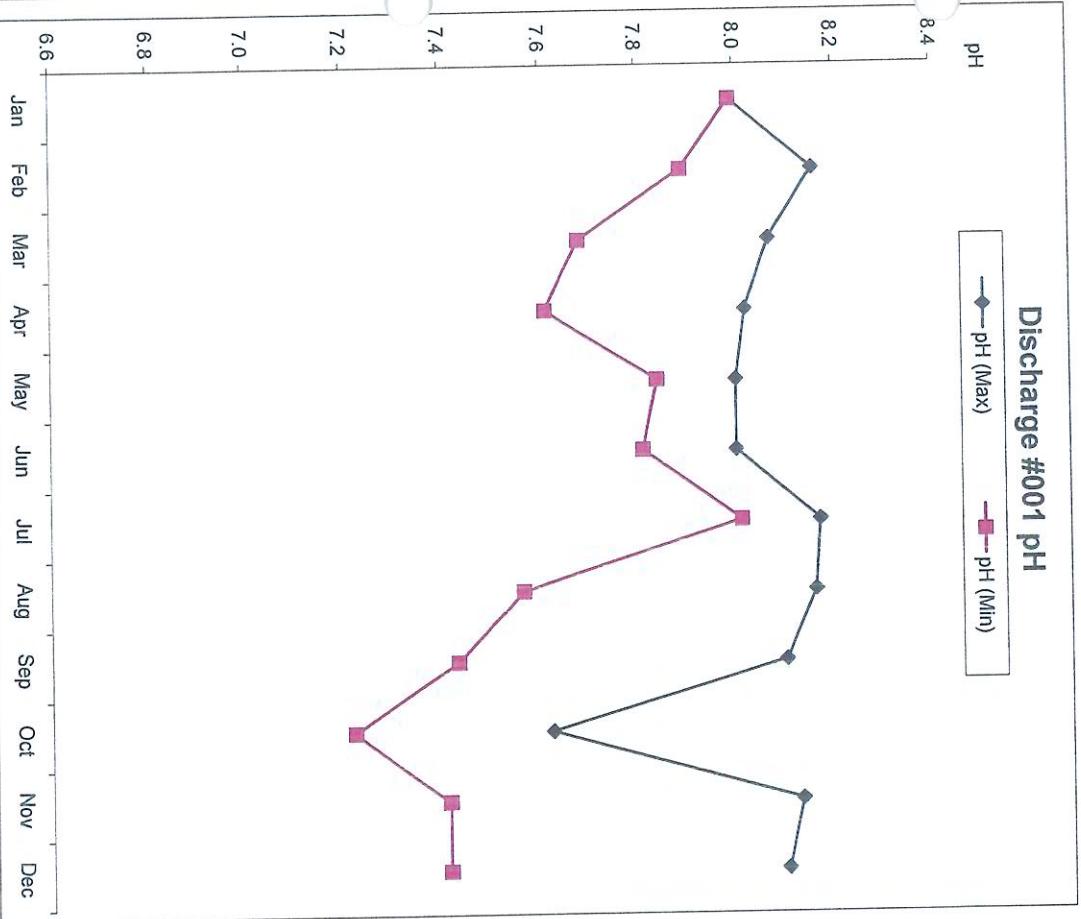
H) BIOASSAY										
Discharge Point #001										
Constituent	Maximum Concentration					Units	Limit (Daily Max.)	Day Avg	4th Qtr	Frequency of Analysis
	1st Qtr	2nd Qtr	2nd Qtr	3rd Qtr	4th Qtr					
Date	1/7/10									
Chronic Kelp Bioassay						Tuc	N/A			Quarterly
Chronic Kelp Germination and Growth Bioassay	1.0					Tuc	N/A			Quarterly
Chronic Kelp Germ Tube Length	1.0					Tuc	N/A			
Chronic Abalone Bioassay						Tuc	N/A			Quarterly
Chronic Abalone Larval Development Bioassay (Tuc)						Tuc	N/A			
Cultured Abalone						Tuc	N/A			Quarterly
Larval Development (TUC)						Tuc				Quarterly
Chlorination										
Chronic Silversides Assay						Tuc	N/A			Quarterly
Chronic Silversides Larval Survival Bioassay						Tuc	N/A			Quarterly
Chronic Silversides Growth Bioassay										
Chronic Topsmeat Assay						Tuc	N/A			Quarterly
Chronic Topsmeat Larval Survival Bioassay						Tuc	N/A			Quarterly
Chronic Topsmeat Growth Bioassay										
Chronic Sea Urchin Larval Development Assay						Tuc	N/A			Quarterly
Chronic Sea Urchin Larval Development Bioassay										
Discharge Point #002										
Constituent	Maximum Concentration					Units	Limit (Daily Max.)	Day Avg	4th Qtr	Frequency of Analysis
	1st Qtr	2nd Qtr	2nd Qtr	3rd Qtr	4th Qtr					
Date										
Chronic Kelp Bioassay						Tuc	N/A			Quarterly
Chronic Kelp Germination Bioassay						Tuc	N/A			Quarterly
Chronic Kelp Tube Length										
Chronic Abalone Bioassay						Tuc	N/A			Quarterly
Chronic Abalone Larval Development Bioassay (Tuc)										
Cultured Abalone						Tuc	N/A			Quarterly
Larval Development (TUC)						Tuc	N/A			Quarterly
Chlorination										
Chronic Silversides Assay						Tuc	N/A			Quarterly
Chronic Silversides Larval Survival Bioassay						Tuc	N/A			Quarterly
Chronic Silversides Growth Bioassay										
Chronic Topsmeat Assay						Tuc	N/A			Quarterly
Chronic Topsmeat Larval Survival Bioassay						Tuc	N/A			Quarterly
Chronic Topsmeat Growth Bioassay										
Chronic Sea Urchin Larval Development Bioassay						Tuc	N/A			Quarterly
Chronic Sea Urchin Larval Development Bioassay										
Receiving Water										
Constituent	Concentration					Units	Limit (Daily Max.)	Day Avg	4th Qtr	Frequency of Analysis
	1st Qtr	2nd Qtr	2nd Qtr	3rd Qtr	4th Qtr					
Date	1/7/10									
Chronic Abalone Larval Development Bioassay						Tuc	N/A			Quarterly
Chronic Kelp Larval Development Bioassay						Tuc	N/A			Quarterly
Chronic Sileversides Larval Survival Bioassay						Tuc	N/A			Quarterly
Chronic Sileversides Growth Bioassay						Tuc	N/A			Quarterly
Chronic Kelp Germination Bioassay	1.0					Tuc	N/A			Quarterly
Chronic Kelp Growth Bioassay	1.0					Tuc	N/A			Quarterly
Chronic Topsmeat Larval Survival Bioassay						Tuc	N/A			Quarterly
Chronic Topsmeat Growth Bioassay						Tuc	N/A			Quarterly
Chronic Sea Urchin Larval Development Bioassay						Tuc	N/A			Quarterly
Chronic Sea Urchin Larval Development Bioassay						Tuc	N/A			Quarterly

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	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
pH (Max)	8.0	8.2	8.1	8.0	8.0	8.0	8.2	8.2	8.1	7.6	8.1	8.1
pH (Min)	8.0	7.9	7.7	7.6	7.8	7.8	8.0	7.6	7.4	7.2	7.4	7.4
Flow (Max)	38.9	51.8	51.8	62.6	51.8	51.8	51.8	51.8	51.8	38.9	17.3	25.4
Flow (Avg)	13.7	12.0	9.5	26.6	16.8	20.7	26.5	18.9	18.9	2.3	1.7	3.2

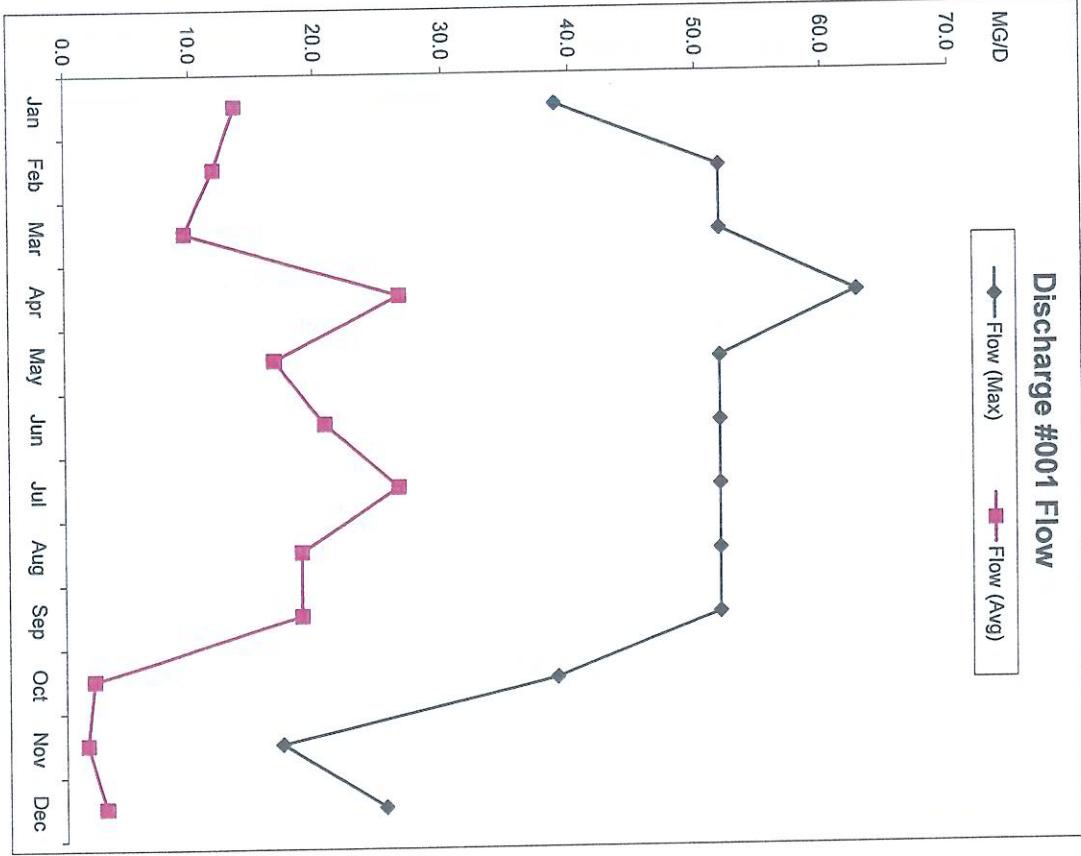
Discharge #001 pH

—◆— pH (Max)
 —■— pH (Min)



Discharge #001 Flow

—◆— Flow (Max)
 —■— Flow (Avg)

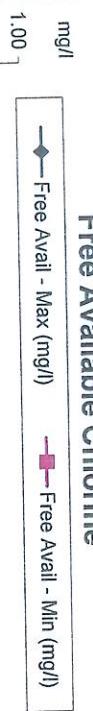


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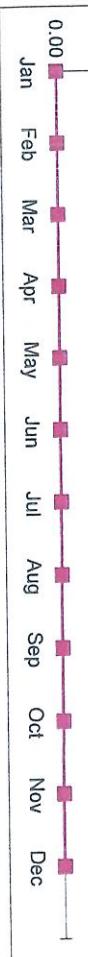
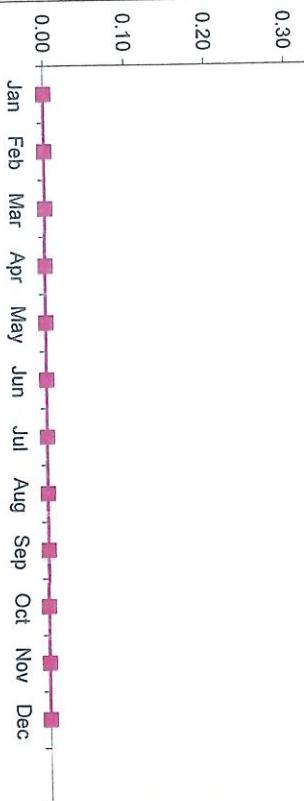
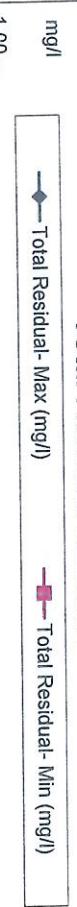
2009

Effluent Discharge No. 001	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Chlorine												
Free Avail - Max (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Free Avail - Min (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Residual- Max (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Residual- Min (mg/l)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Discharge #001
Free Available Chlorine



Discharge #001
Total Residual Chlorine

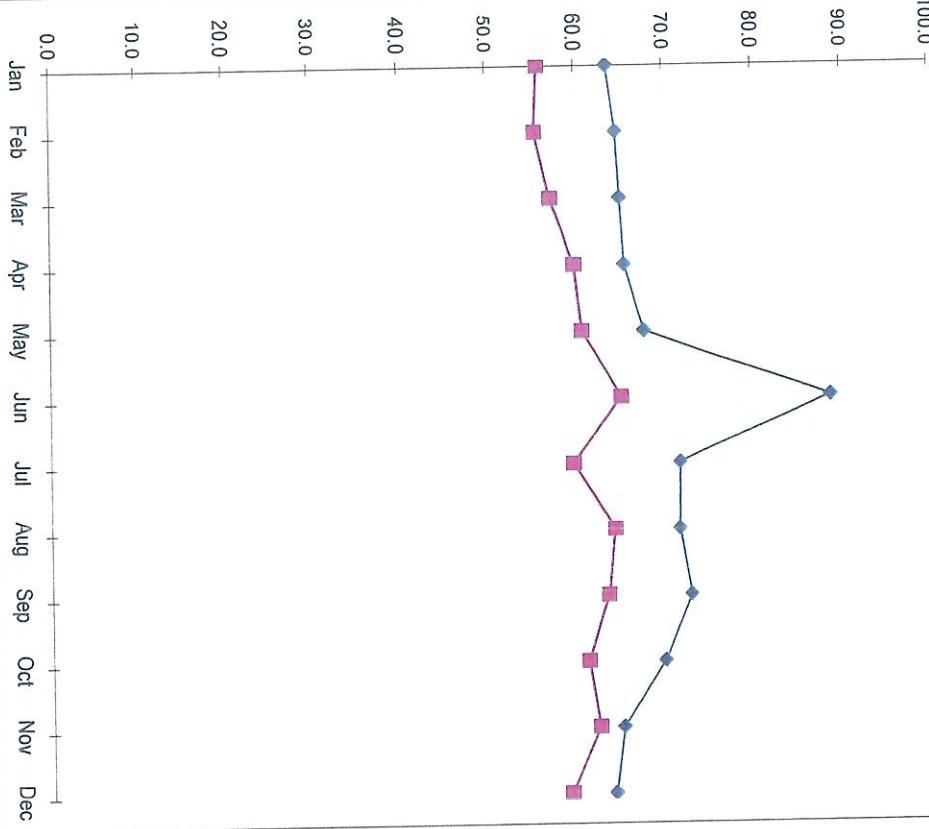


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Effluent Discharge No. 001	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Circ. Water Discharge												
Temp (Max) °F	63.5	64.5	64.9	65.3	67.5	88.6	71.7	71.6	72.9	69.7	64.7	63.8
Temp (Min) °F	56.0	55.6	57.2	59.8	60.6	64.8	59.5	63.9	63.2	60.9	62.0	58.9
Heat Treat Temp °F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

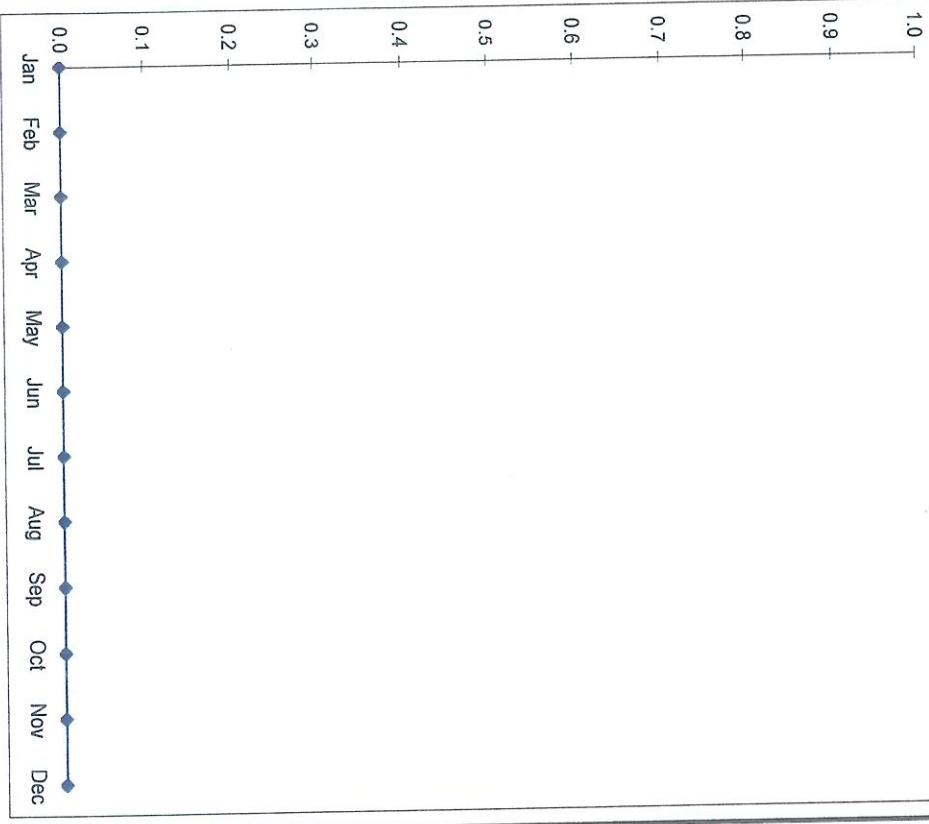
**Discharge #001
Temperature**

—◆— Temp (Max) °F —■— Temp (Min) °F



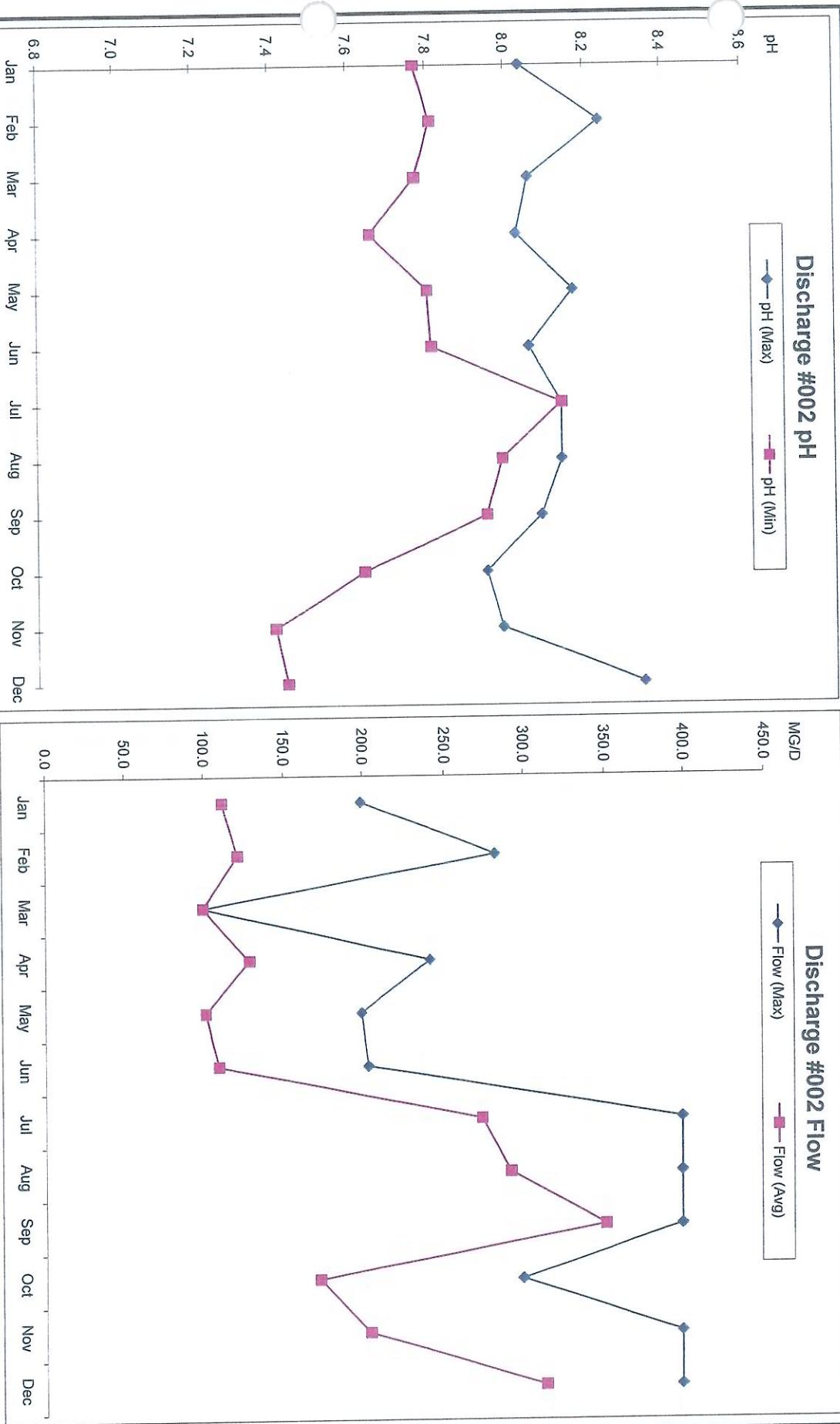
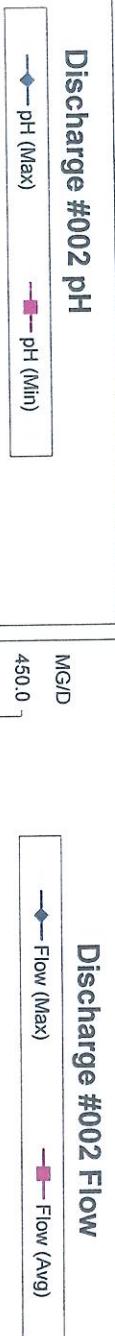
**Discharge #001
Maximum Heat Treat Temperature**

—◆— Heat Treat Temp °F



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Effluent Discharge No. 002		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
pH (Max)		8.0	8.2	8.1	8.0	8.2	8.1	8.1	8.1	8.0	8.0	8.0	8.4
pH (Min)		7.8	7.8	7.8	7.7	7.8	7.8	8.1	8.0	8.0	7.6	7.4	7.4
Flow (Max)		199.3	282.3	99.6	240.8	199.3	203.4	398.6	398.6	398.6	298.9	398.6	398.6
Flow (Avg)		112.4	122.0	99.5	129.0	101.1	109.6	273.1	291.6	350.2	171.6	204.4	313.3

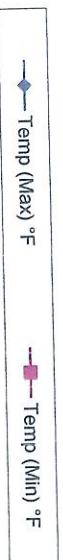


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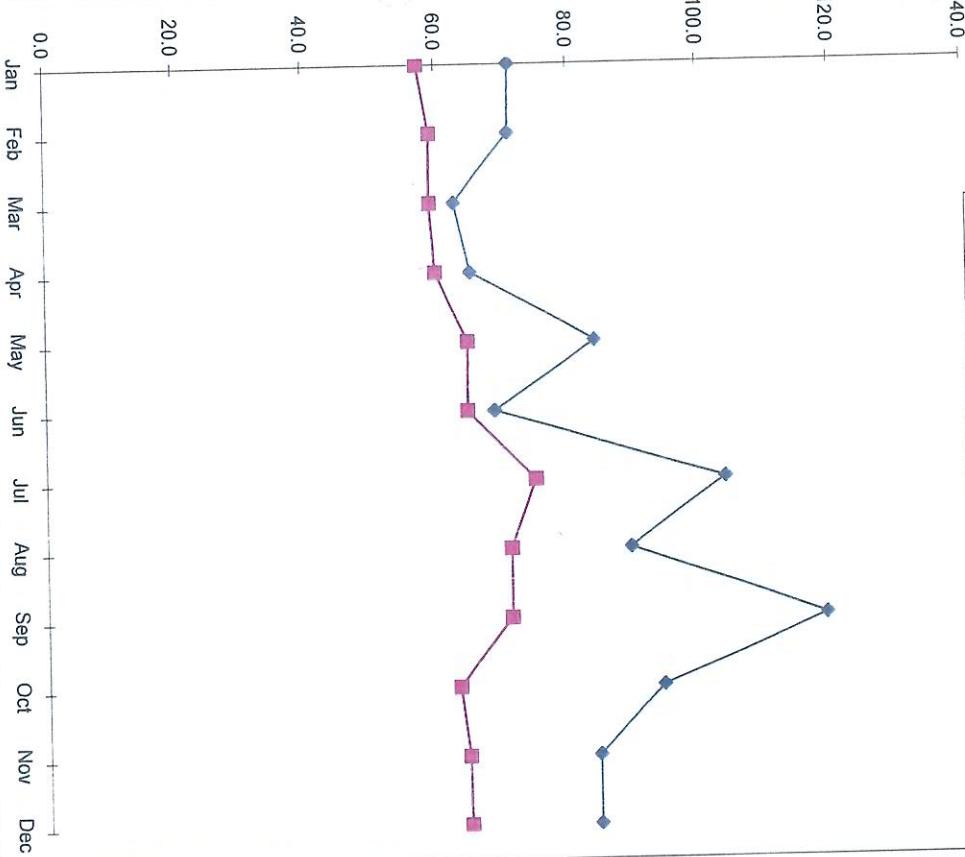
Effluent Discharge No. 002

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Circ. Water Discharge												
Temp (Max) °F	71.4	71.2	63.0	65.3	83.9	68.7	103.4	89.3	118.9	94.0	84.0	84.0
Temp (Min) °F	57.2	59.1	59.0	59.8	64.8	64.6	74.5	70.8	70.8	62.9	64.2	64.3
Heat Treat Temp °F	0	0	0	0	0	0	103.4	0	118.9	0	0	0

Discharge #002 Temperature



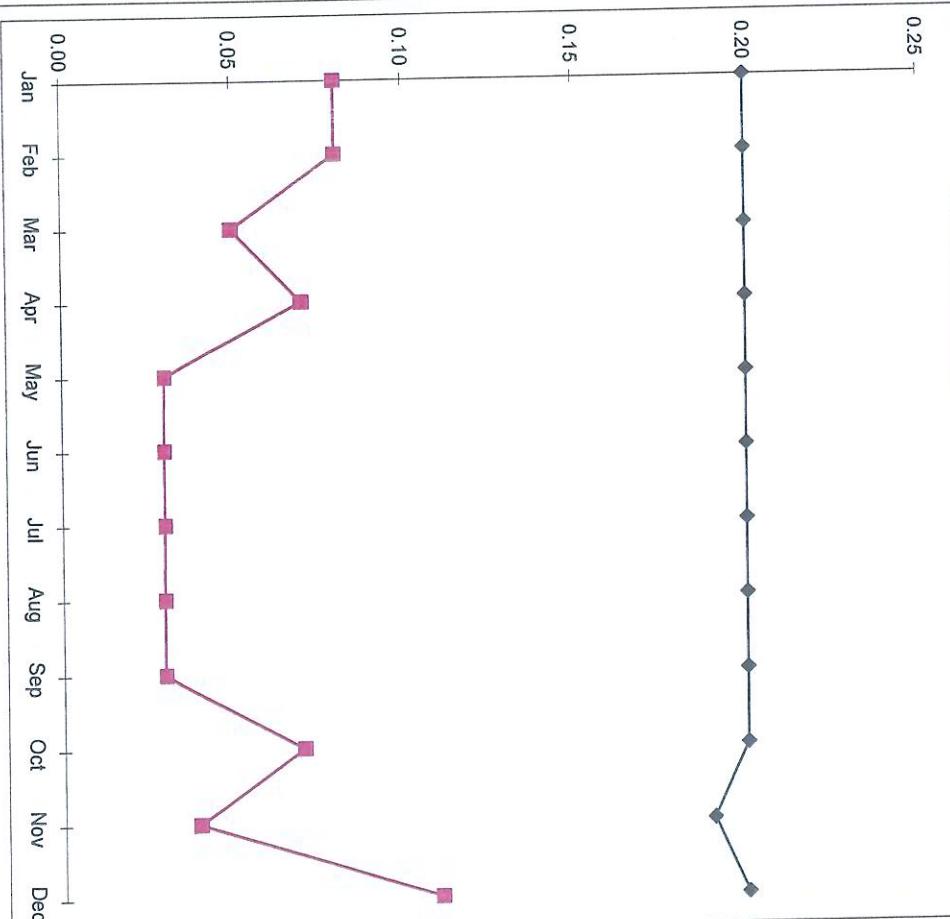
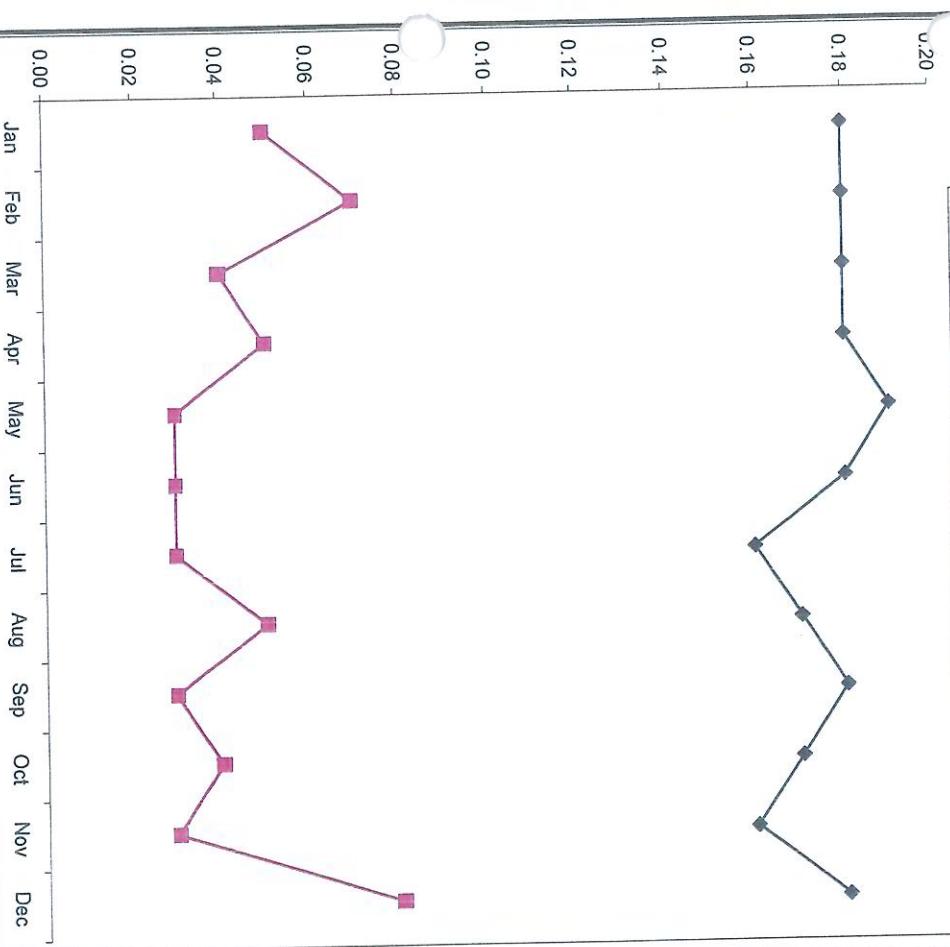
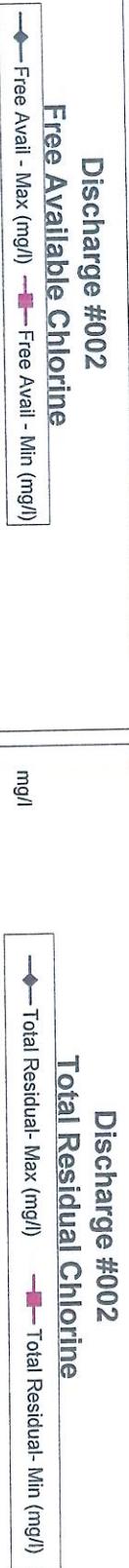
Maximum Heat Treat Temperature



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Effluent Discharge No. 002	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<u>Chlorine</u>												
Free Avail - Max (mg/l)	0.18	0.18	0.18	0.18	0.19	0.18	0.16	0.17	0.18	0.17	0.16	0.18
Free Avail - Min (mg/l)	0.05	0.07	0.04	0.05	0.03	0.03	0.03	0.05	0.03	0.04	0.03	0.08
Total Residual- Max (mg/l)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.19	0.20
Total Residual- Min (mg/l)	0.08	0.08	0.05	0.07	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.11

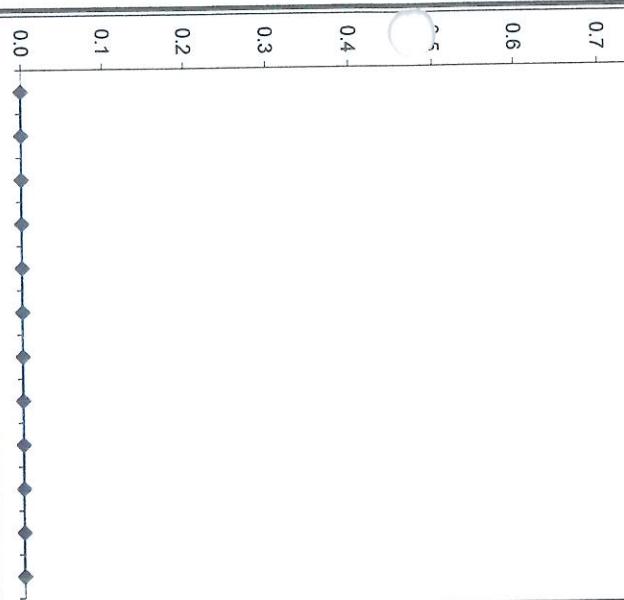


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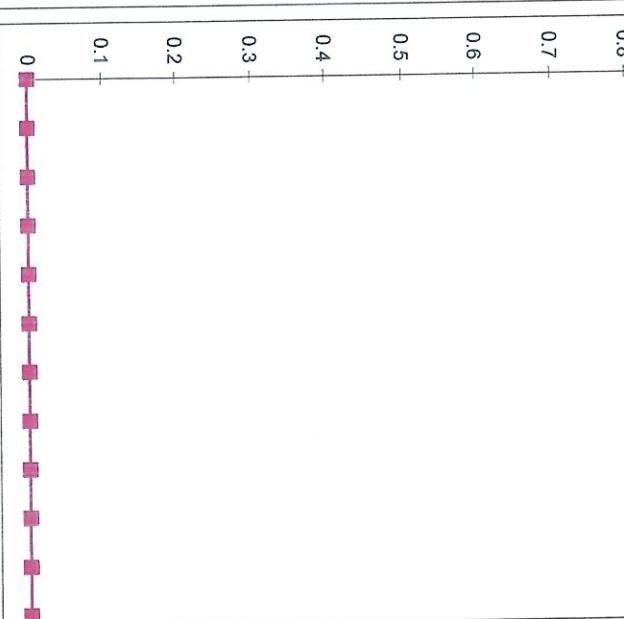
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Treatment Plant No. 1													
Sanitary Wastes													
Average Flow Rate (GPD=Gal/Day)		0	0	0	0	0	0	0	0	0	0	0	0
Oil and Grease - Max (mg/l)		0	0	0	0	0	0	0	0	0	0	0	0
Oil and Grease - Avg (mg/l)		0	0	0	0	0	0	0	0	0	0	0	0
Settleable Solids - Max (ml/l)		0	0	0	0	0	0	0	0	0	0	0	0
Settleable Solids - Avg (ml/l)		0	0	0	0	0	0	0	0	0	0	0	0

Sanitary Waste Treatment Plant #001



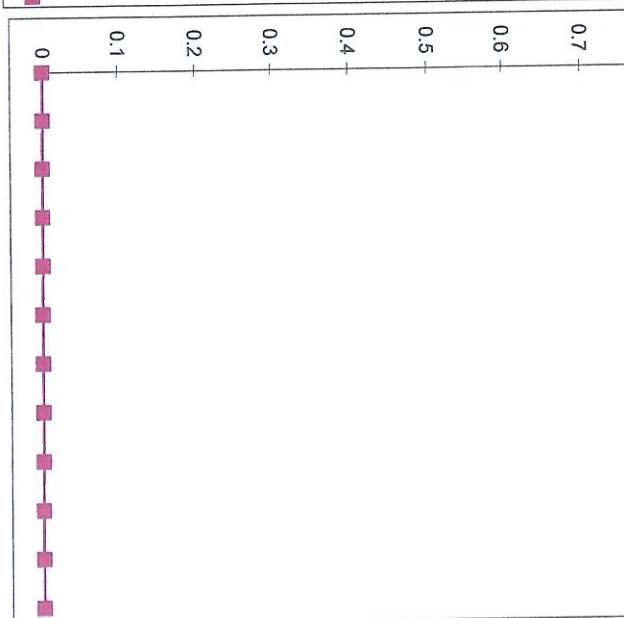
—◆— Average Flow Rate (GPD=Gal/Day)

Sanitary Waste Treatment Plant #001



—◆— Oil and Grease - Max (mg/l)
—■— Oil and Grease - Avg (mg/l)

Sanitary Waste Treatment Plant #001



—◆— Settleable Solids - Max (ml/l)
—■— Settleable Solids - Avg (ml/l)

Sanitary Waste Treatment Plant #001



—◆— Settleable Solids - Max (ml/l)
—■— Settleable Solids - Avg (ml/l)

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Treatment Plant No. 1

Sanitary Wastes

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Total Suspended Solids- Max (mg/l)	0	0	0	0	0	0	0	0	0	0	0	0
Total Suspended Solids- Avg (mg/l)	0	0	0	0	0	0	0	0	0	0	0	0
B.O.D. - Max(mg/l)	0	0	0	0	0	0	0	0	0	0	0	0
B.O.D. - Avg (mg/l)	0	0	0	0	0	0	0	0	0	0	0	0
Total Coliforms- Max (per 100 ml)	0	0	0	0	0	0	0	0	0	0	0	0
Total Coliforms - Avg.(per 100 ml)	0	0	0	0	0	0	0	0	0	0	0	0

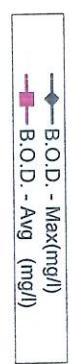
Sanitary Waste Treatment Plant #001

Total Suspended Solids



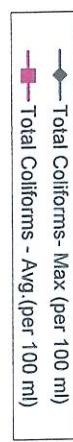
Sanitary Waste Treatment Plant #001

B.O.D.

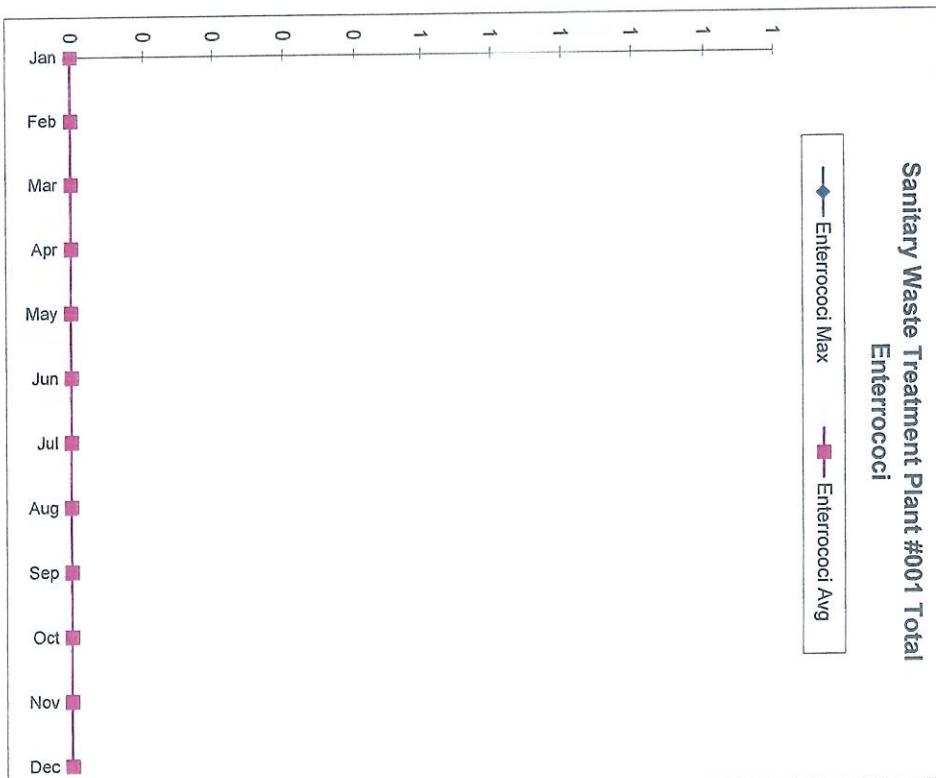


Sanitary Waste Treatment Plant #001

Coliforms



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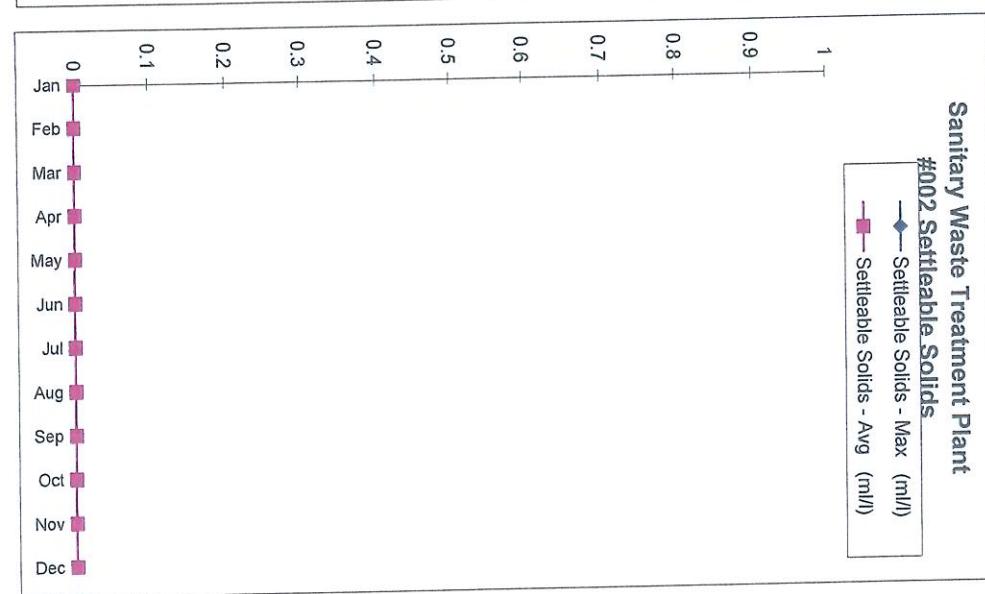
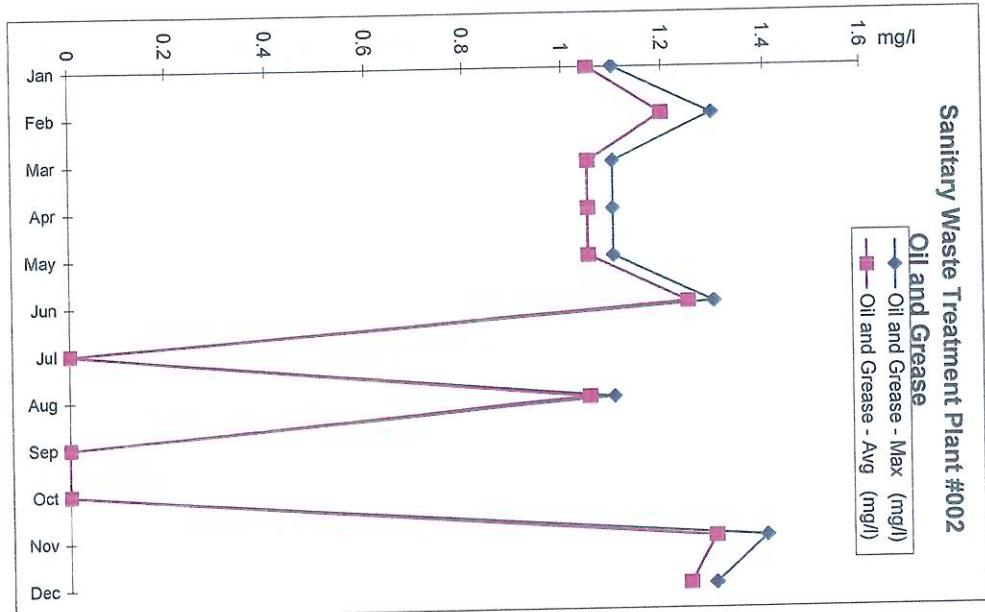
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Sanitary Waste Treatment Plant #002

Average Flow Rate (Gal/Day)

Month	Avg Flow Rate (Gal/Day)
Jan	1,500
Feb	1,480
Mar	1,460
Apr	1,440
May	1,420
Jun	1,400
Jul	1,380
Aug	1,360
Sep	1,340
Oct	1,320
Nov	1,300
Dec	1,280



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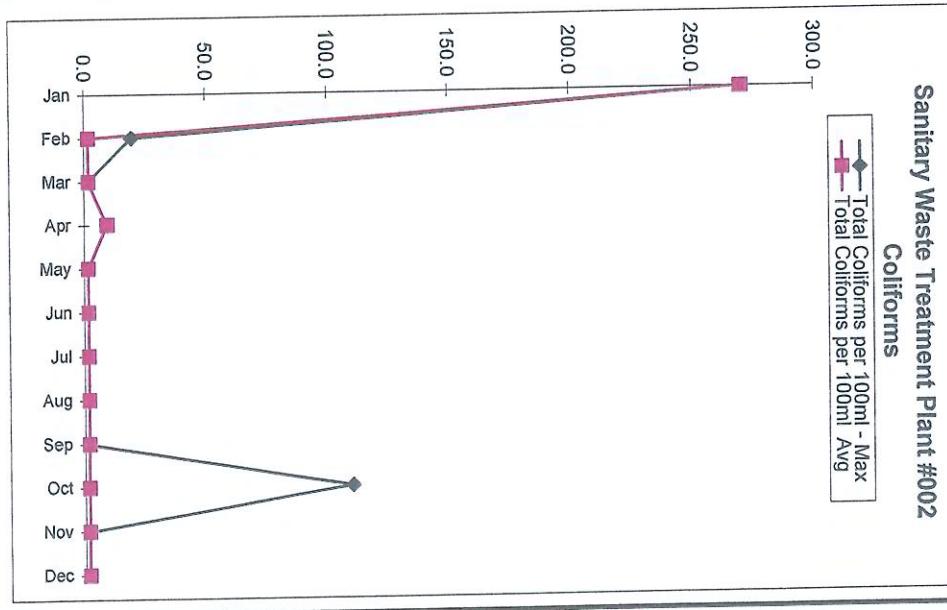
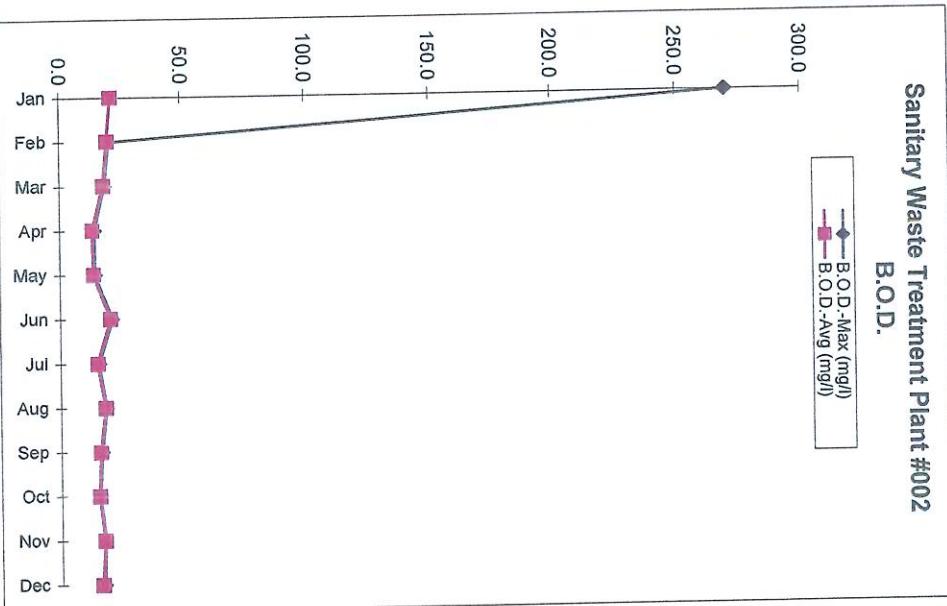
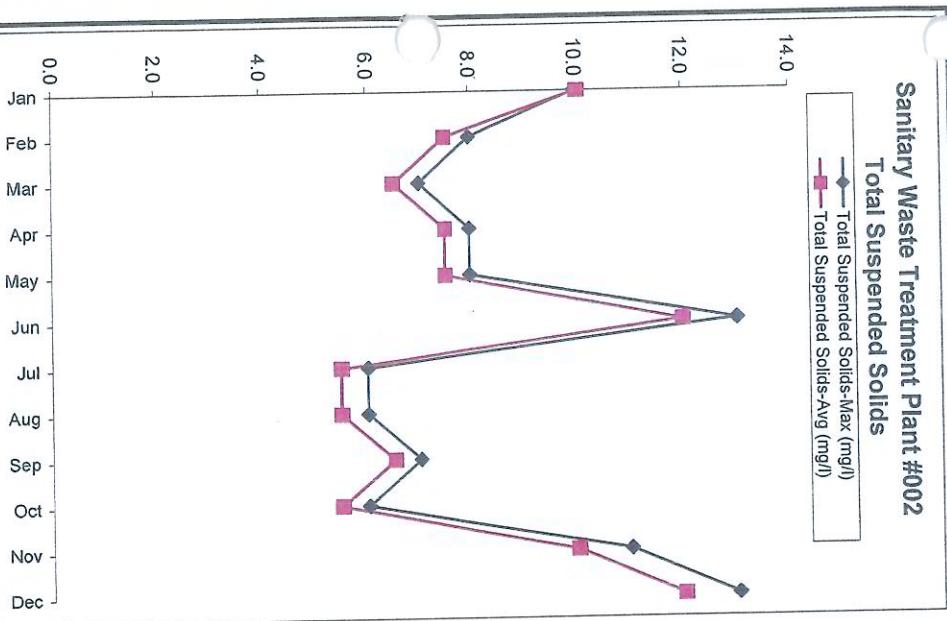
Treatment Plant No. 2

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Sanitary Wastes												
Total Suspended Solids-Max (mg/l)	10.0	8.0	7.0	8.0	8.0	13.0	6.0	6.0	7.0	6.0	11.0	13.0
Total Suspended Solids-Avg (mg/l)	10.1	7.5	6.5	7.5	7.5	12.0	5.5	5.5	6.5	5.5	10.0	12.0
B.O.D.-Max (mg/l)	270.0	21.0	19.2	15.0	15.1	22.0	16.4	19.3	17.4	16.4	18.4	17.9
B.O.D.-Avg (mg/l)	21.9	20.4	18.6	14.0	14.4	21.3	15.8	18.9	16.8	16.1	18.1	17.2
Total Coliforms per 100ml - Max	270.0	20.0	2.0	10.0	2.0	2.0	2.0	2.0	110.0	2.0	2.0	2.0
Total Coliforms per 100ml Avg	270.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Sanitary Waste Treatment Plant #002

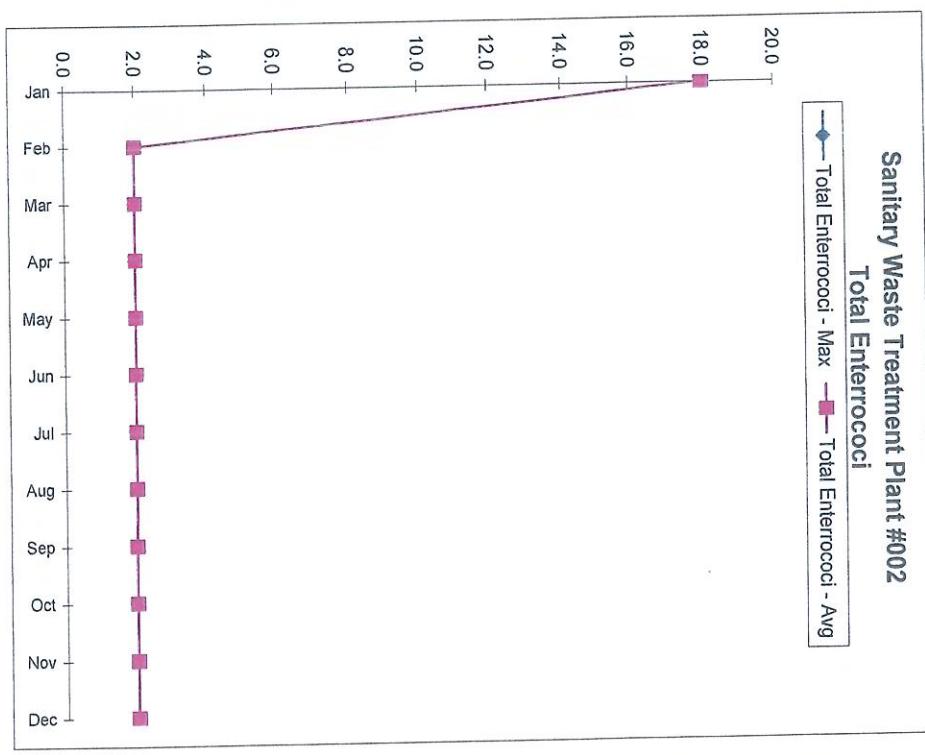
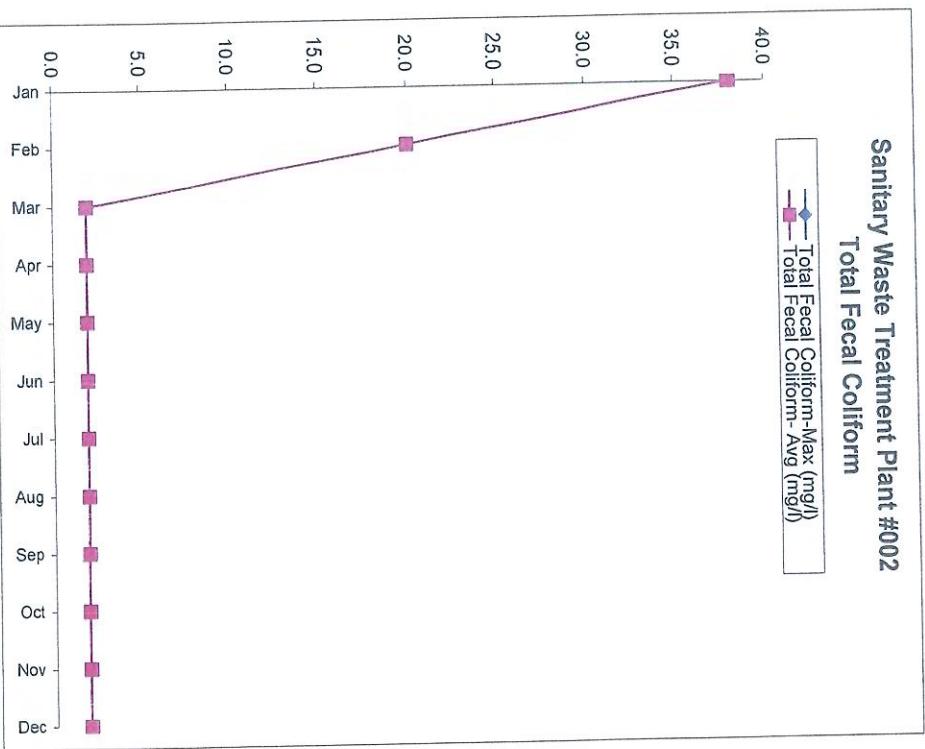
Sanitary Waste Treatment Plant #002

Sanitary Waste Treatment Plant #002



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Treatment Plant No. 2	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Sanitary Wastes												
Total Fecal Coliform-Max (mg/l)	38.0	20.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Total Fecal Coliform- Avg (mg/l)	38.0	20.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Total Enterrococi - Max	18.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Total Enterrococi - Avg	18.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0



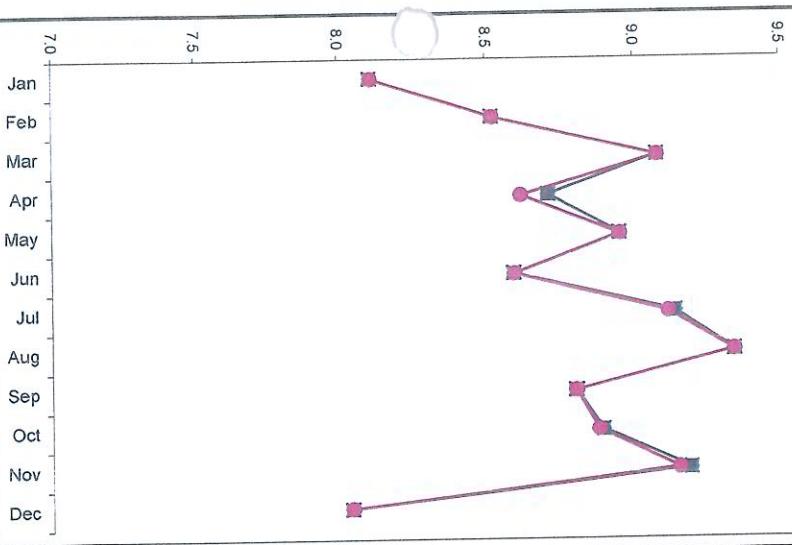
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Low Volume Waste Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
pH (Max)	8.1	8.5	9.1	8.7	9.0	8.6	9.1	9.3	8.8	8.9	9.2	8.0
pH (Min)	8.1	8.5	9.1	8.6	9.0	8.6	9.1	9.3	8.8	8.9	9.2	8.0
Total Suspended Solids-Max (mg/l)	5.5	16.1	10.9	11.2	16.2	15.5	9.4	15.9	21.1	13.2	51.8	5.6
Total Suspended Solids-Avg (mg/l)	5.3	15.4	10.5	11.0	16.0	14.9	8.5	15.8	20.8	12.1	19.8	3.8
Oil and Grease - Max (mg/l)	ND	3.3	4.0	3.9	1.9	2.1	7.7	2.4	2.4	4.1	3.6	4.0
Oil and Grease - Avg (mg/l)	ND	2.8	3.7	3.6	1.7	1.9	7.4	2.4	2.1	4.1	3.4	2.0
Flow Rate (MGD)	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000

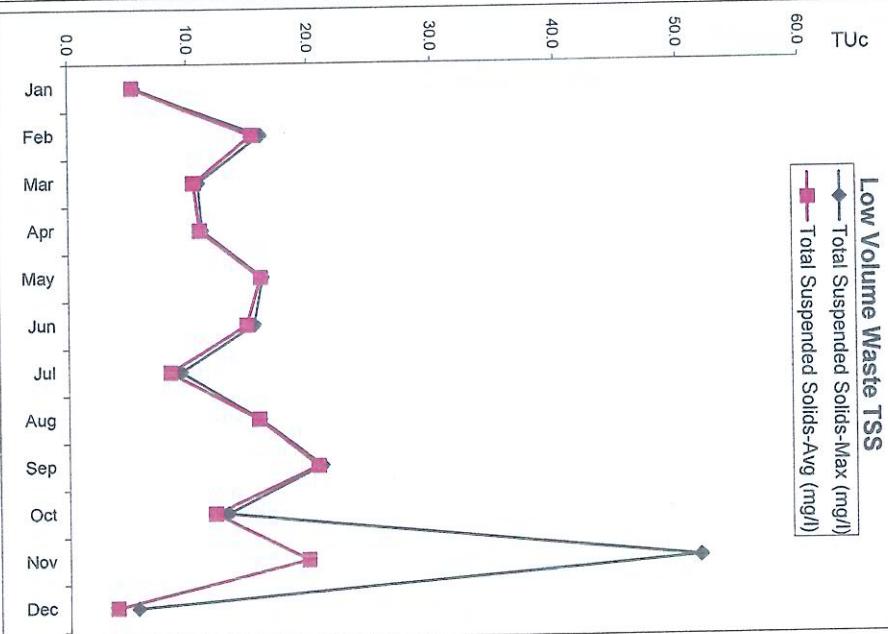
Low Volume Waste pH

—■— pH (Max) —●— pH (Min)



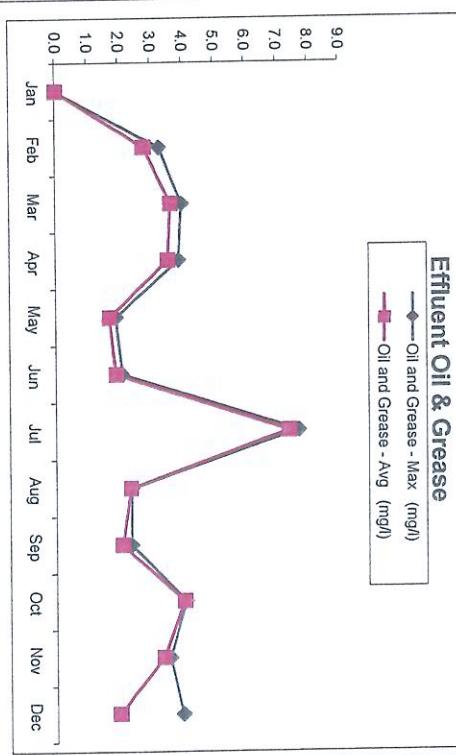
Low Volume Waste TSS

—◆— Total Suspended Solids-Max (mg/l)
—■— Total Suspended Solids-Avg (mg/l)



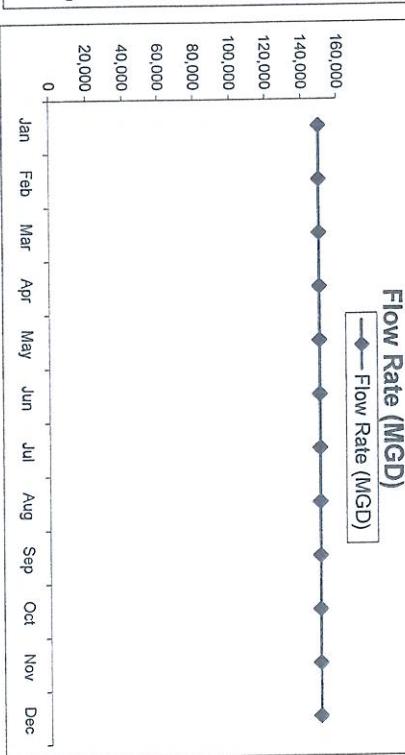
Effluent Oil & Grease

—◆— Oil and Grease - Max (mg/l)
—■— Oil and Grease - Avg (mg/l)



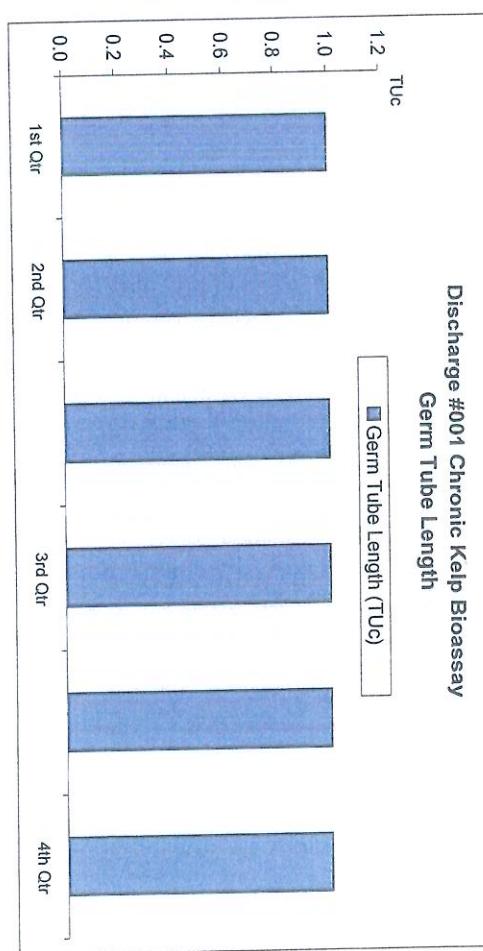
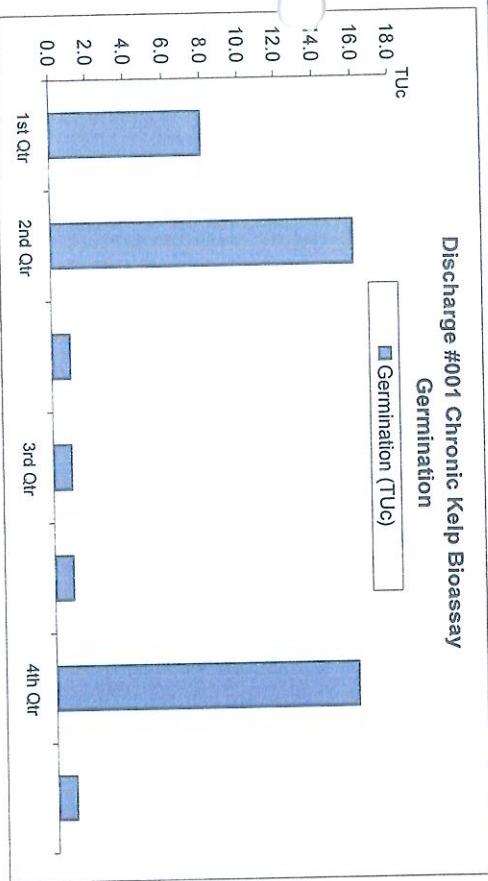
Flow Rate (MGD)

—◆— Flow Rate (MGD)



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Discharge #001 - Chronic Kelp Bioassay								
Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr				
Germination (TUC)	8.0	16.0	1.0	1.0	16.0	1.0		
Germ Tube Length (TUC)	1.0	1.0	1.0	1.0	1.0	1.0		



Discharge #001 - Chronic Abalone Bioassay								
Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr				
Chronic Abalone Larval Devp (Tuc)	0.0	N/A	0.0	0.0	0.0			
Discharge #001 - Cultured Abalone								
Larva Development (Tuc)	0.0	0.0	0.0	0.0	0.0			
Chlorination (Tuc)	0.0	0.0	0.0	0.0	0.0			

Discharge #001 Chronic Abalone Larval

Development Bioassay

Quarter	Chronic Abalone Larval Devp (Tuc)
1st Qtr	0.0
2nd Qtr	0.0
3rd Qtr	0.0
4th Qtr	0.0

Discharge #001 Cultured Abalone

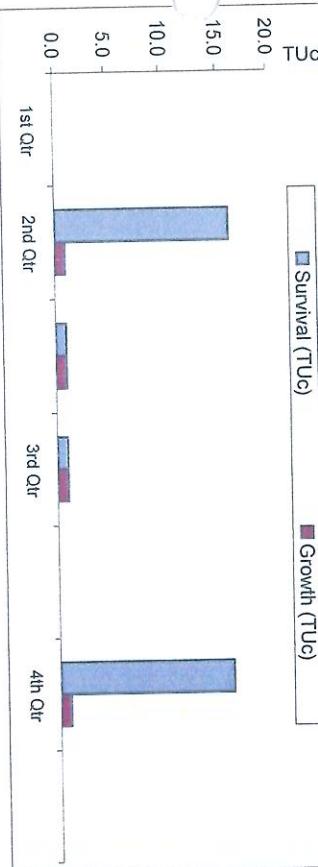
Lava Development (Tuc) Chlorination (Tuc)

Quarter	Lava Development (Tuc)	Chlorination (Tuc)
1st Qtr	0.0	0.0
2nd Qtr	0.0	0.0
3rd Qtr	0.0	0.0
4th Qtr	0.0	0.0

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Discharge #001 - Chronic Silver Slides & Growth Bioassay						
Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr		
2/10/09	5/4/09	6/8/09	8/3/09	8/30/09	11/2/09	12/30/09
Survival (TUC)	0.0	16.0	1.0	1.0	0.0	16.0
Growth (TUC)	0.0	1.0	1.0	1.0	0.0	1.0

Discharge #001 Chronic Silver Slides Bioassay



Discharge #001 - Chronic Topsmeat Bioassay

Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr		
2/10/09	5/4/09	6/8/09	8/3/09	8/30/09	11/2/09	12/30/09
Survival (TUC)	0.0	1.0	0.0	0.0	0.0	0.0
Growth (TUC)	0.0	0.0	0.0	0.0	0.0	0.0

Discharge #001 Chronic Topsmeat Bioassay

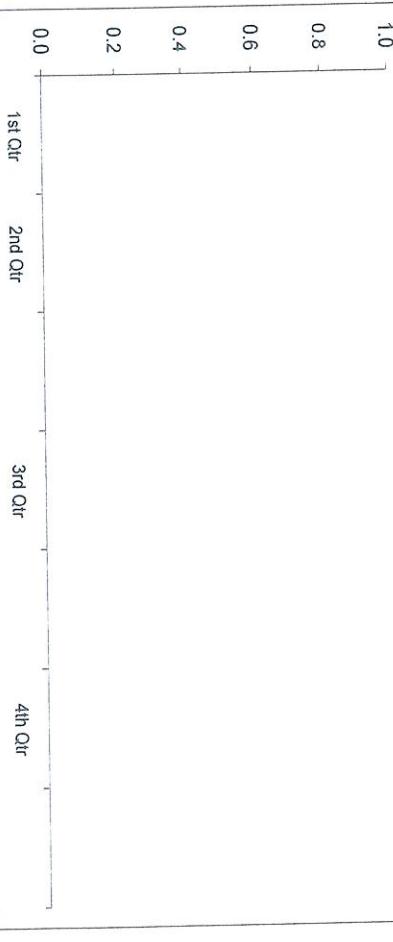
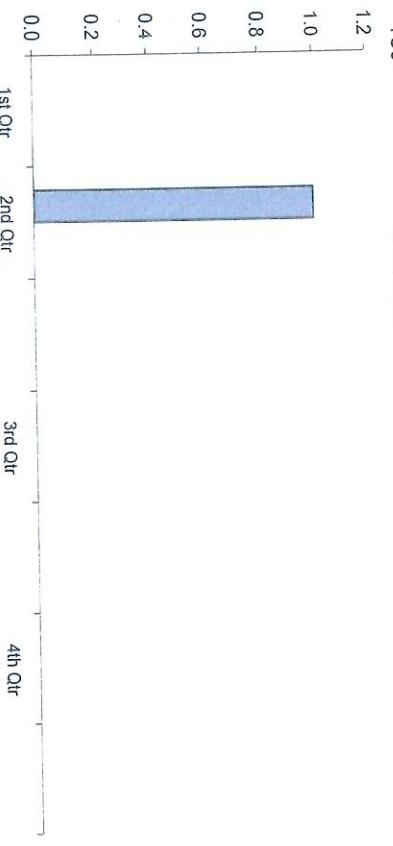
■ Survival (TUC) ■ Growth (TUC)

Discharge #001 - Chronic Sea Urchin Larval Development Bioassay

Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr		
2/10/09	5/4/09	6/8/09	8/3/09	8/30/09	11/2/09	12/30/09
Survival (TUC)	0.0	1.0	0.0	0.0	0.0	0.0
Growth (TUC)	0.0	0.0	0.0	0.0	0.0	0.0

Discharge #001 Chronic Sea Urchin Larval Development Bioassay

■ Survival (TUC) ■ Growth (TUC)

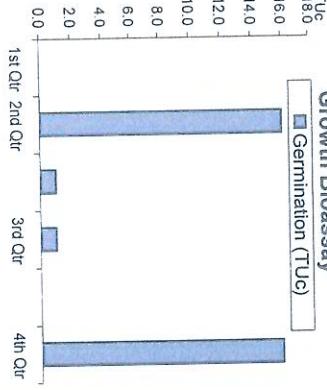


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Discharge #002 - Chronic Kelp Bioassay

Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
2/1/09	5/4/09	6/8/09	8/3/09	8/3/09
Germination (TUC)	0.0	16.0	1.0	1.0
Germ Tube Length (TUC)	0.0	4.0	1.0	1.0

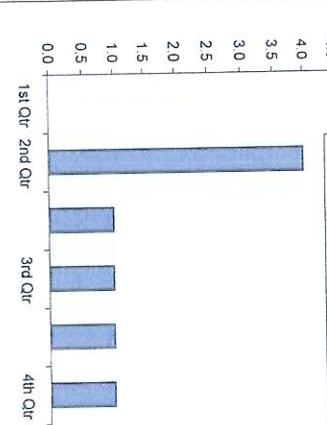
**Discharge #002
Chronic Kelp Germinatnion and
Growth Bioassay**



Discharge #002 - Chronic Silver Slides Bioassay

Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
2/1/09	5/4/09	6/8/09	8/3/09	8/3/09
Survival (TUC)	0.0	0.0	0.0	0.0

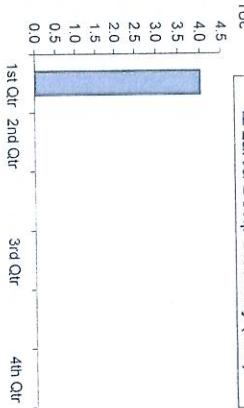
**Discharge #002
Chronic Kelp Germ. Tube Length (TUC)**



Discharge #002 - Chronic Abalone Bioassay

Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
2/1/09	5/4/09	6/8/09	8/3/09	8/3/09
Survival (TUC)	0.0	0.0	0.0	0.0
Growth	0.0	1.0	0.0	0.0
Discharge #002 - Cultured Abalone	0.0	0.0	0.0	0.0
Larva Development(TUC)	0.0	0.0	0.0	0.0
Chlorination (TUC)	0.0	0.0	0.0	0.0

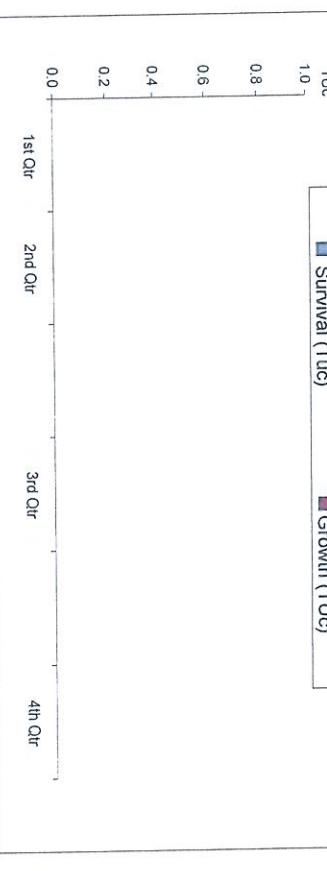
**Discharge #002
Chronic Abalone Bioassay**



Discharge #002 - Chronic Topsmelt Bioassay

Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
2/1/09	5/4/09	6/8/09	8/3/09	8/3/09
Survival (TUC)	0.0	1.0	0.0	0.0
Growth	0.0	1.0	0.0	0.0
Discharge #002 - Chronic Sea Urchin Larval Bioassay	0.0	0.0	1.0	0.0
Growth	0.0	0.0	1.0	0.0

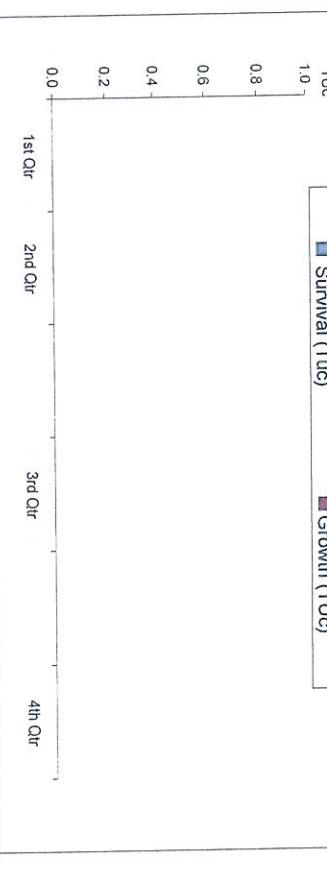
**Discharge #002
Chronic Topsmelt Bioassay**



Discharge #002 - Chronic Sea Urchin Larval Bioassay

Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
2/1/09	5/4/09	6/8/09	8/3/09	8/3/09
Survival (TUC)	0.0	0.0	0.0	0.0
Growth	0.0	0.0	0.0	0.0
Discharge #002 - Chronic Sea Urchin Larval Bioassay	0.0	0.0	0.0	0.0

**Discharge #002
Chronic Sea Urchin Larval Bioassay**



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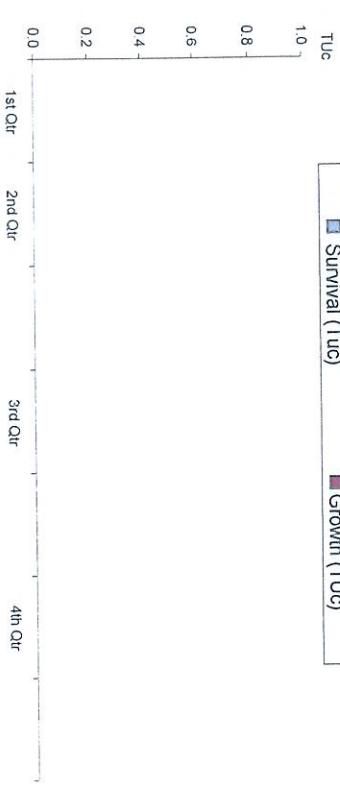
Receiving Water - Chronic Kelp Bioassay

Receiving Water - Chronic Kelp Bioassay												
Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr								
2/10/09	5/4/09	6/8/09	8/3/09	8/3/09	11/2/09	12/30/09						
Germination (TUC)	0.0	16.0	1.0	1.0	0.0	16.0	1.0					
Growth (TUC)	0.0	1.0	1.0	1.0	0.0	1.0	1.0					



Receiving Water - Chronic Silver Slides Bioassay

Receiving Water - Chronic Silver Slides Bioassay												
Date	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr								
2/10/09	5/4/09	6/8/09	8/3/09	8/3/09	11/2/09	12/30/09						
Survival (TUC)	0.0	0.0	0.0	0.0	0.0	0.0						
Growth (TUC)	0.0	0.0	0.0	0.0	0.0	0.0						

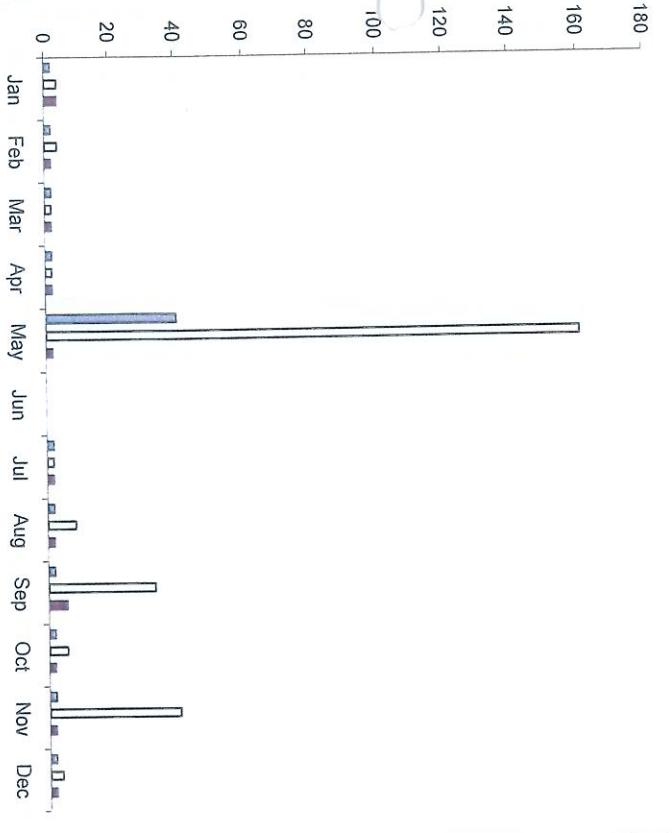


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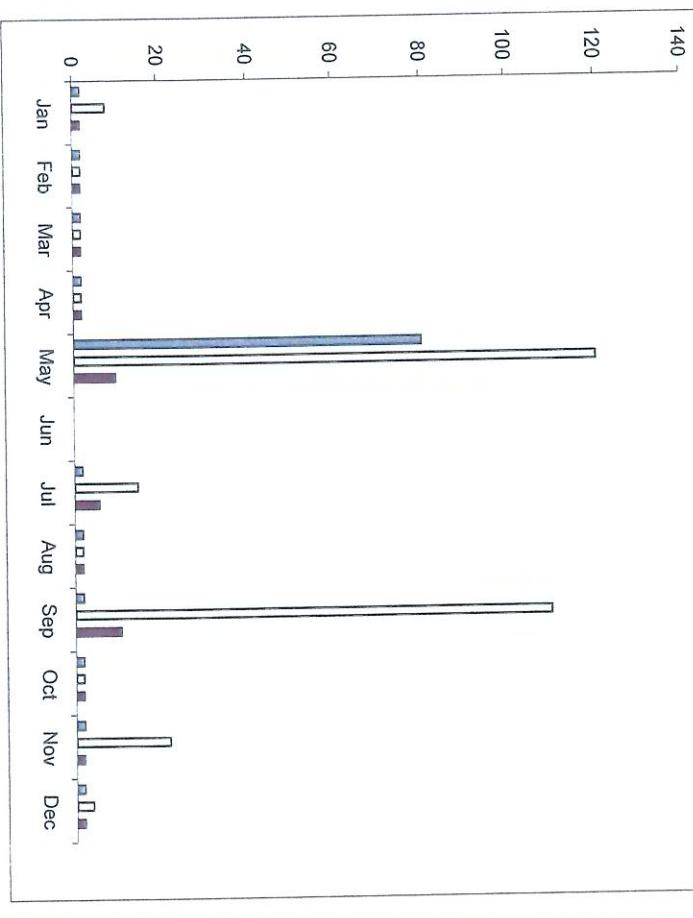
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	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Inlet & Outlet #1 & 2												
1 & 2 Inlet Fecal Coliform	2	2	2	40	0	2	2	2	2	2	2	2
1 & 2 Inlet Fecal Coliform	0	0	0	0	0	0	0	0	0	0	0	0
1 & 2 Inlet Total Coliform	4	4	2	2	160	0	2	9	33	6	40	4
1 & 2 Inlet Total Coliform	0	0	0	0	0	0	0	0	0	0	0	0
1 & 2 Inlet Enterococci	4	2	2	2	0	2	2	6	2	2	2	2
1 & 2 Inlet Enterococci	0	0	0	0	0	0	0	0	0	0	0	0
#001 Fecal Coliform	2	2	2	2	80	0	2	2	2	2	2	2
#001 Fecal Coliform	0	0	0	0	0	0	0	0	0	0	0	0
Total Coliform	8	2	2	2	120	0	15	2	110	2	22	4
Total Coliform	0	0	0	0	0	0	0	0	0	0	0	0
#001 Enterococci	2	2	2	2	10	0	6	2	11	2	2	2
#001 Enterococci	0	0	0	0	0	0	0	0	0	0	0	0

Inlet #1 & 2 - Coliform & Enterococci



Outlet #001 - Coliform & Enterococci



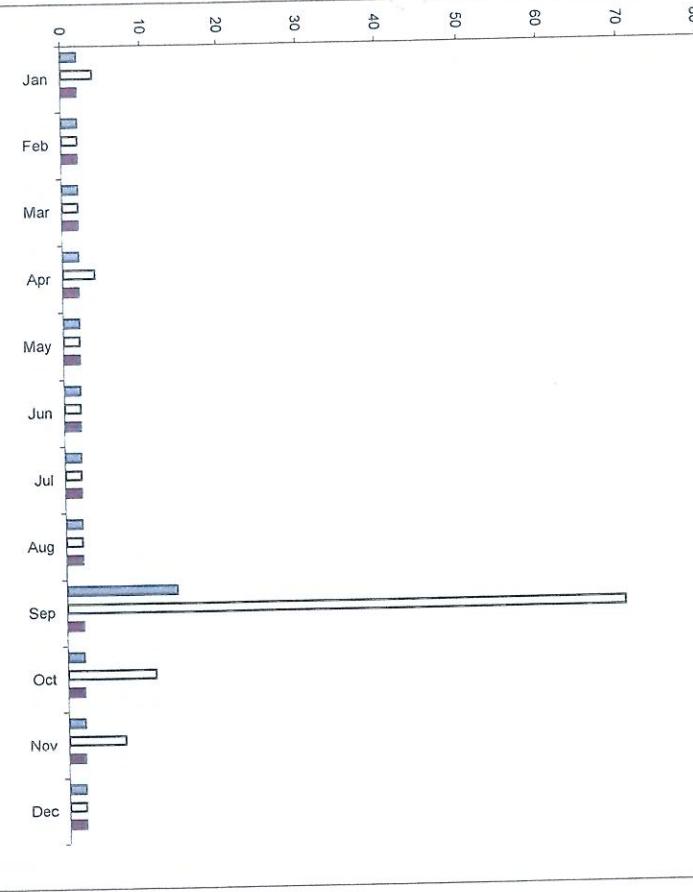
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	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Inlet & Outlet #3 & 4												
3 & 4 Inlet Fecal Coliform	2	2	2	2	2	2	2	14	2	2	2	2
3 & 4 Inlet Total Coliform	0	0	0	0	0	0	0	0	0	0	0	0
3 & 4 Inlet Enterococci	4	2	2	2	4	2	2	2	70	11	7	2
#002 Inlet Total Coliform	0	0	0	0	0	0	0	0	0	0	0	0
#002 Inlet Enterococci	2	2	2	2	2	2	2	2	2	2	2	2
3 & 4 Inlet Enterococci	0	0	0	0	0	0	0	0	0	0	0	0
#002 Fecal Coliform	8	10	2	2	2	30	6	2	2	2	2	2
#002 Total Coliform	0	0	0	0	0	0	0	0	0	0	0	0
2 Total Coliform	0	0	0	0	0	0	0	0	0	0	0	0
#002 Enterococci	2	2	2	2	2	28	9	2	22	2	2	2
#002 Enterococci	0	0	0	0	0	0	0	0	0	0	0	0

Inlet #3 & 4 - Coliform & Enterococci



Outlet #002- Coliform & Enterococci



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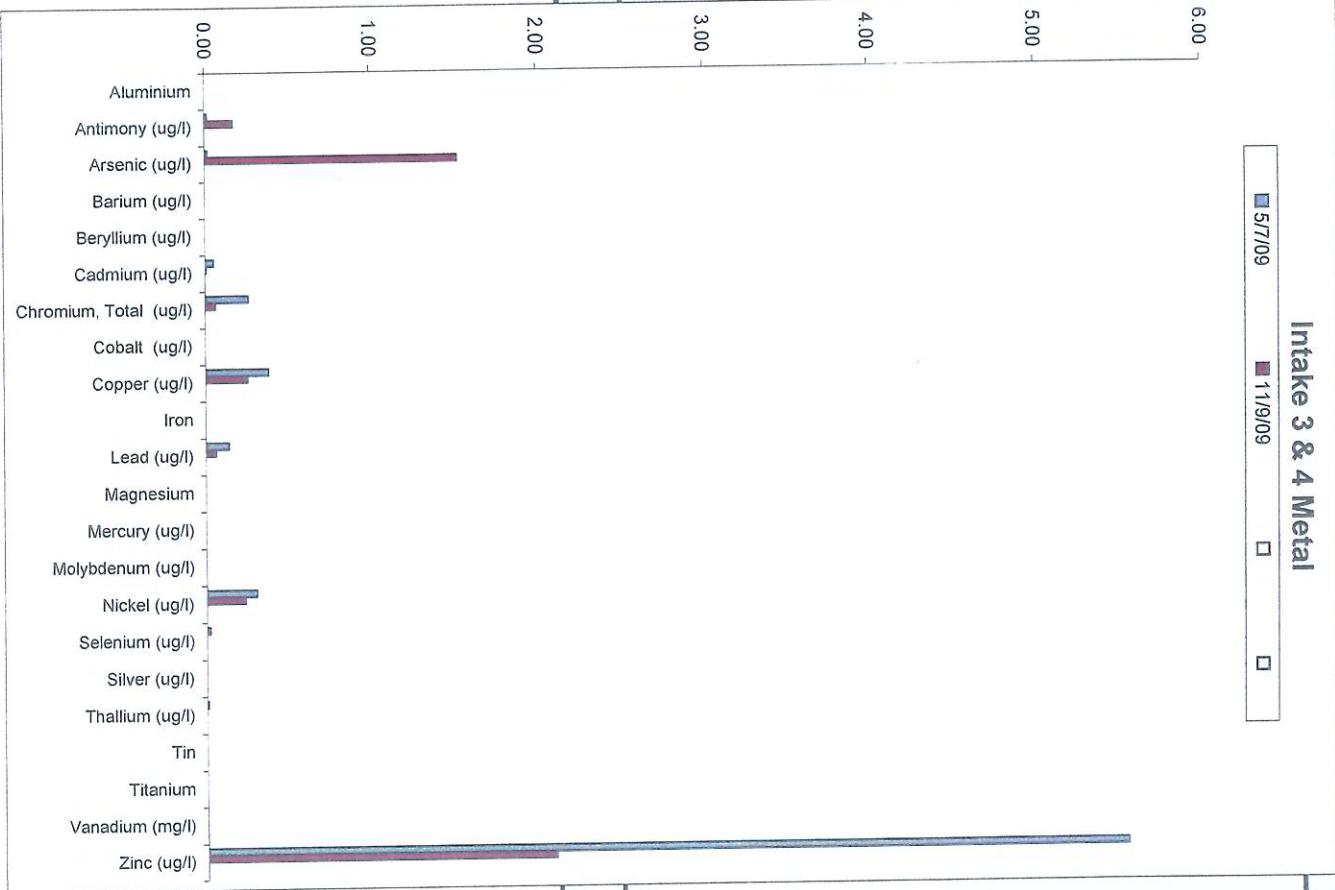
Intake 3 & 4 -Metal

5/7/09 11/9/09

5/7/09 11/9/09 □ □

Intake 3 & 4 -Metal	5/7/09	11/9/09
Aluminium		
Antimony (ug/l)	0.02	0.17
Arsenic (ug/l)	0.02	1.53
Barium (ug/l)	ND	ND
Beryllium (ug/l)	0.05	0.01
Cadmium (ug/l)	0.26	0.06
Chromium, Total (ug/l)		
Cobalt (ug/l)	0.38	0.25
Copper (ug/l)		
Iron		
Iron (ug/l)	0.14	0.06
Magnesium		
Mercury (ug/l)	ND	ND
Molybdenum (ug/l)		
Nickel (ug/l)	0.30	0.23
Selenium (ug/l)	0.02	ND
Silver (ug/l)	ND	ND
Thallium (ug/l)	0.01	ND
Tin		
Titanium		
Vanadium (mg/l)		
Zinc (ug/l)	5.56	2.10

Note: Reporting limit inside of parentheses

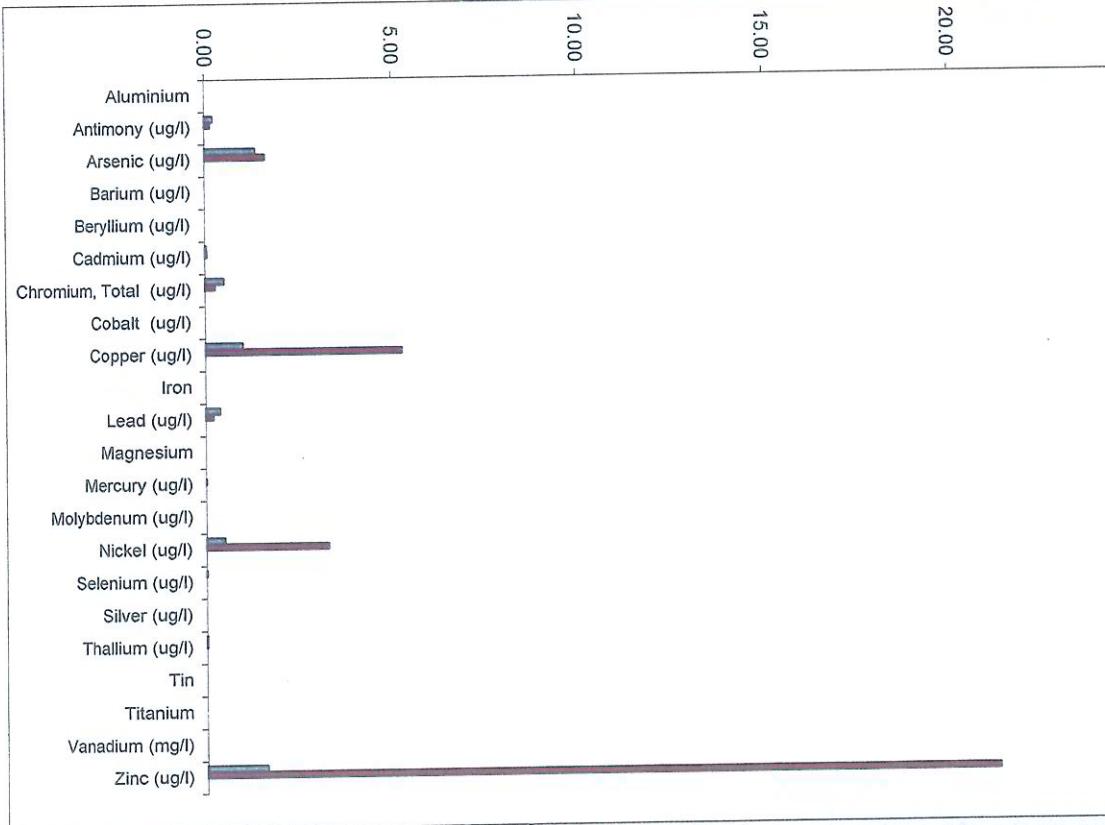


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Outfall #001 (Part 1)

	5/7/09	11/13/09
Aluminium		
Antimony (ug/l)	0.21	0.14
Arsenic (ug/l)	1.40	1.68
Barium (ug/l)		
Beryllium (ug/l)	ND	ND
Cadmium (ug/l)	0.04	0.04
Chromium, Total (ug/l)	0.51	0.27
Cobalt (ug/l)	1.03	5.27
Copper (ug/l)		
Iron		
J (ug/l)	0.40	0.20
Magnesium		
Mercury (ug/l)	ND	0.01
Molybdenum (ug/l)		
Nickel (ug/l)	0.50	3.33
Selenium (ug/l)	0.01	ND
Silver (ug/l)		
Thallium (ug/l)	0.01	0.01
Tin		
Titanium		
Vanadium (mg/l)		
Zinc (ug/l)	1.68	21.50

Outfall #001 Priority Pollutants Part 1



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Outfall #001 (Part 2)

Outfall #001 (Part 2)	5/7/09
1,1,1,2-Tetrachloroethane	ND
1,1,1-Trichloroethane	ND
1,1,2,2-Tetrachloroethane	
1,1,2-Trichloroethane	ND
1,1-Dichloroethane	ND
1,1-Dichloroethene	ND
1,1-Dichloroethylene	
1,1-Dichloropropane	
1,2,3-Trichlorobenzene	
1,2,3-Trichloropropene	
1- 1-Trichlorobenzene	ND
1,2,4-Trimethylbenzene	
1,2-Dibromoethane	
1,2-Dibromo-3-Chloropropane	
1,2-Dichlorobenzene	ND
1,2-Dichlorobezene	
1,2-Dichloroethane	ND
1,2-Diphenylhydrazine	ND
1,2-Trans Dichloroethylene	
1,2-Dichloropropane	ND

Outfall #001 Priority Pollutants Part 2

Outfall #001 Priority Pollutants Part 2

■ 5/7/09

Pollutant	Value
1,1,1,2-Tetrachloroethane	0.00
1,1,1-Trichloroethane	~0.15
1,1,2,2-Tetrachloroethane	0.00
1,1,2-Trichloroethane	0.00
1,1_Dichloroethane	0.00
1,1_Dichloroethene	0.00
1,1_Dichloroethylene	0.00
1,1-Dichloropropane	0.00
1,2,3-Trichlorobenzene	0.00
1,2,3-Trichloropropane	0.00
1,2,4-Trichlorobenzene	0.00
1,2,4-Trimethylbenzene	0.00
1,2-Dibromoethane	0.00
1,2-Dibromo-3-Chloropropane	0.00
1,2-Dichlorobenzene	0.00
1,2-Dichlorobezene	0.00
1,2-Dichloroethane	0.00
1,2-Diphenylhydrazine	0.00
1,2-Trans Dichloroethylene	0.00
1,2-Dichloropropane	0.00

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Outfall #001 (Part 3)

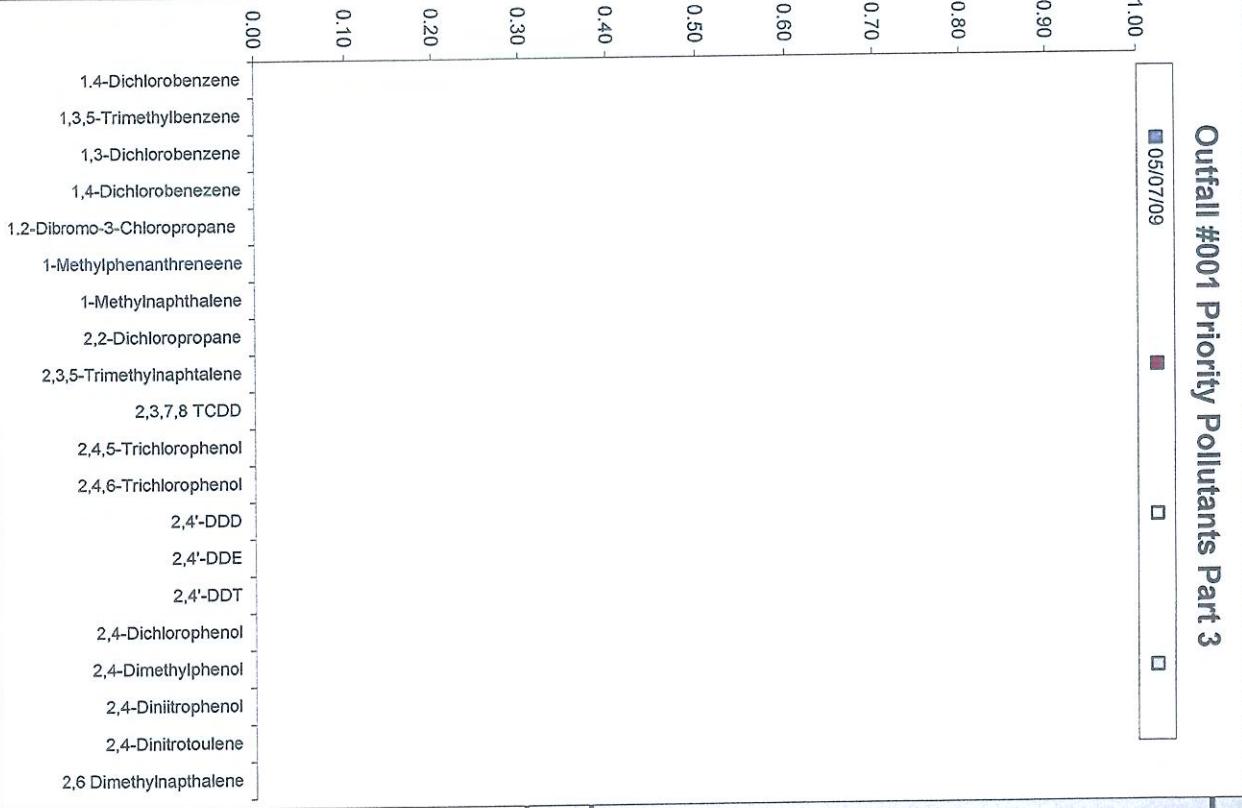
05/07/09

1,4-Dichlorobenzene	ND
1,3,5-Trimethylbenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
1,2-Dibromo-3-Chloropropane	0.90
1-Methylphenanthreneene	0.80
1-Methylnaphthalene	0.70
2,2-Dichloropropane	0.60
2,3,5-Trimethylnaphthalene	0.50
2,3,7,8 TCDD	0.40
5-Trichlorophenol	0.30
2,4,6-Trichlorophenol	0.20
2,4'-DDD	0.10
2,4'-DDE	0.00
2,4'-DDT	
2,4-Dichlorophenol	
2,4-Dimethylphenol	
2,4-Dinitrophenol	
2,4-Dinitrotoluene	
2,6 Dimethylnaphthalene	

Outfall #001 Priority Pollutants Part 3

■ 05/07/09

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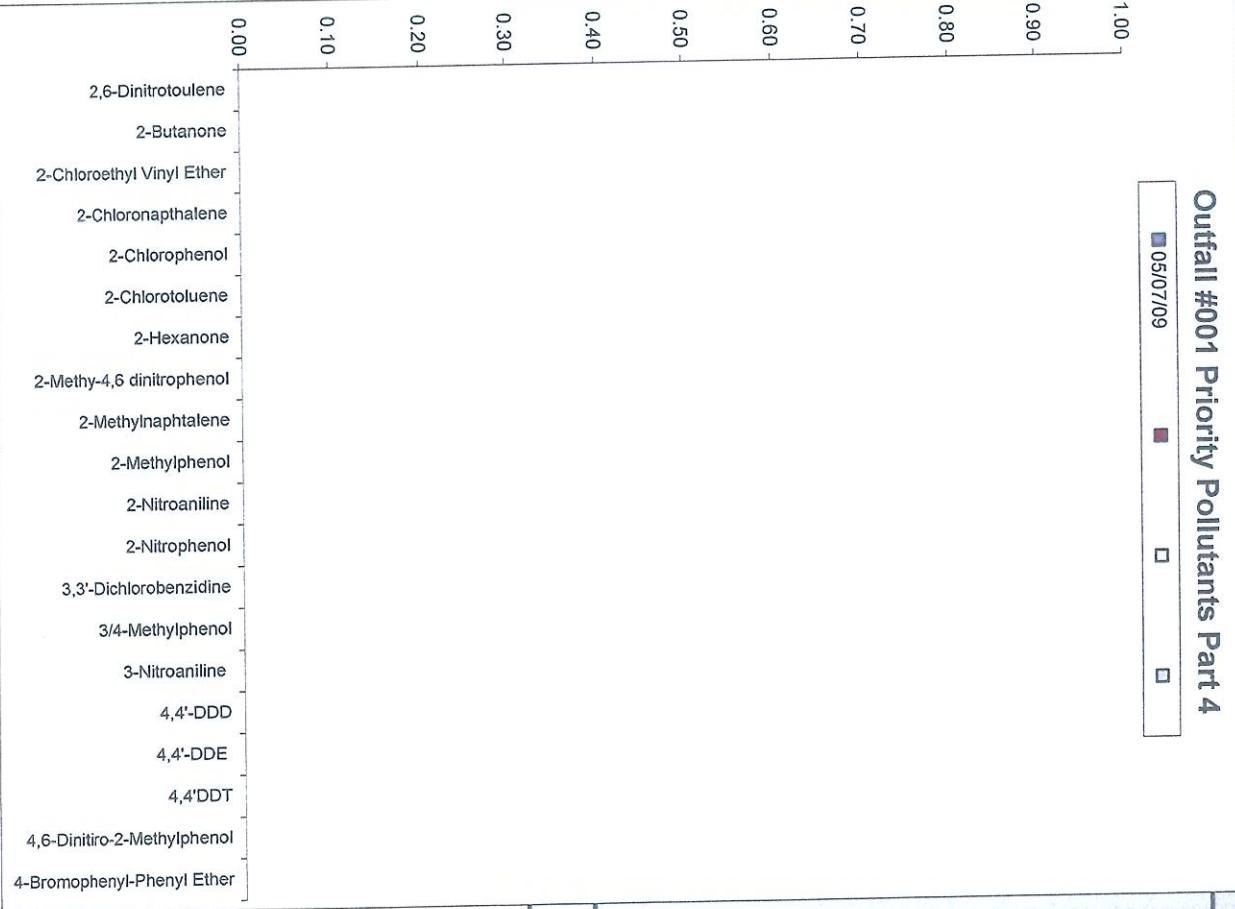
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Outfall #001 (Part 4)

05/07/09

Outfall #001 Priority Pollutants Part 4

05/07/09



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Outfall #001 (Part 5)

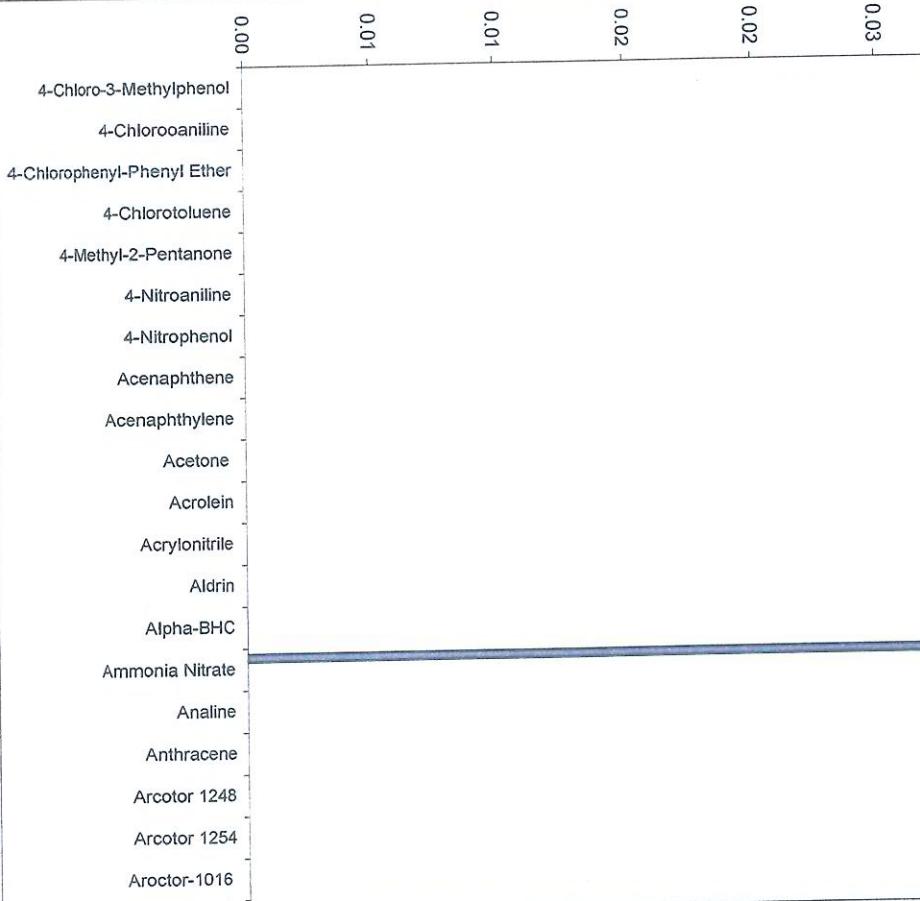
05/07/09

4-Chloro-3-Methylphenol	ND							
4-Chlorooaniline	ND							
4-Chlorophenyl-Phenyl Ether	ND							
4-Chlorotoluene	ND							
4-Methyl-2-Pentanone	ND							
4-Nitroaniline	ND							
4-Nitrophenol	ND							
Acenaphthene	ND							
Acenaphthylene	ND							
Acetone	ND							
Acrolein	ND							
Acrylonitrile	ND							
Aldrin	ND							
Alpha-BHC	ND							
Ammonia Nitrate	0.03							
Analine	ND							
Anthracene	ND							
Arcotor 1248	ND							
Arcotor 1254	ND							
Aroctor-1016	ND							

Outfall #001 Priority Pollutants Part 5

■ 05/07/09

■ □ □



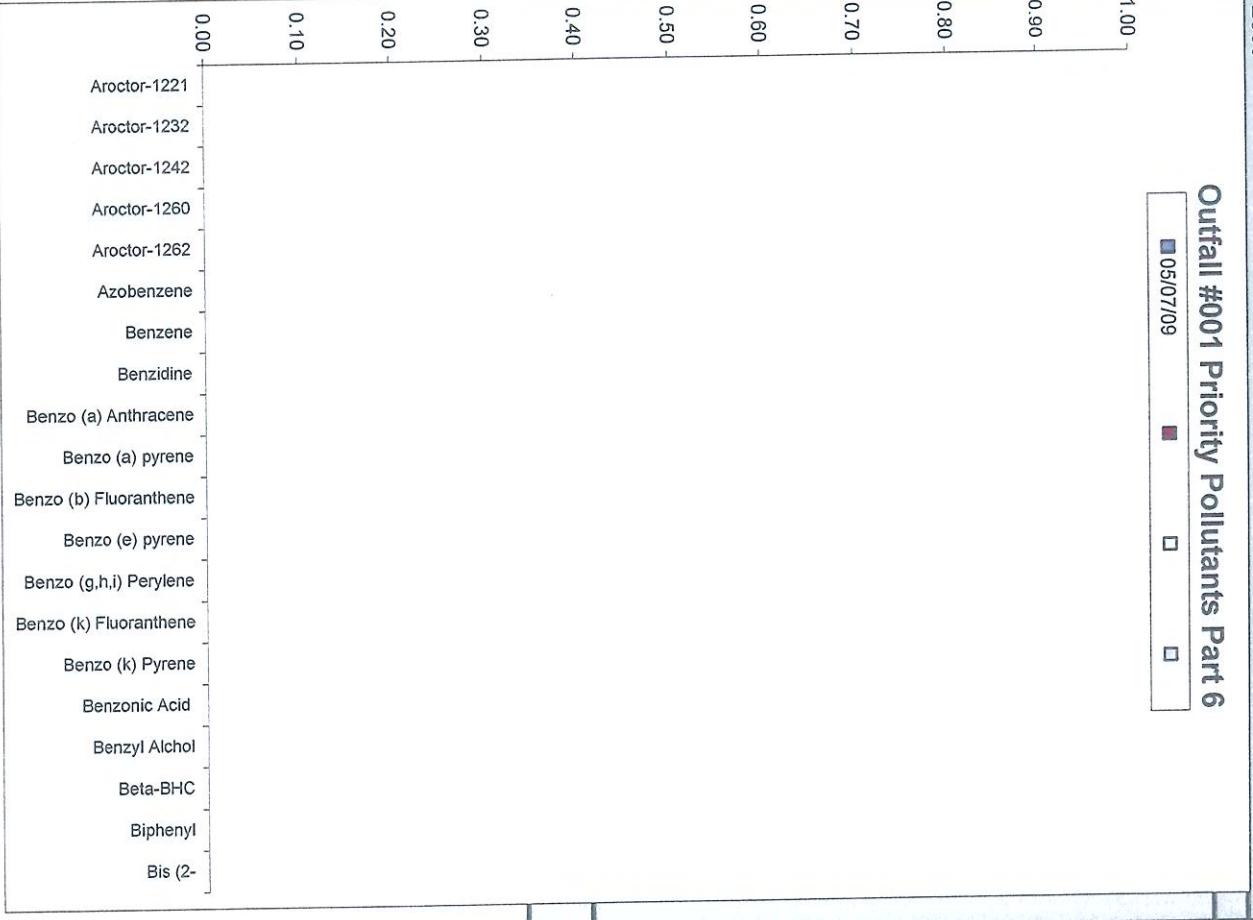
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Outfall #001 (Part 6)

	05/07/09			
Aroctor-1221	ND			
Aroctor-1232	ND			
Aroctor-1242	ND			
Aroctor-1260	ND			
Aroctor-1262	ND			
Azobenzene				
Benzene	ND			
Benzidine	ND			
Benzo (a) Anthracene	ND			
Benzo (a) pyrene	ND			
Benzo (b) Fluoranthene	ND			
Benzo (e) pyrene				
Benzo (g,h,i) Perylene				
Benzo (k) Fluoranthene	ND			
Benzo (k) Pyrene				
Benzonic Acid				
Benzyl Alchol				
Beta-BHC	ND			
Biphenyl				
Bis (2-chloroEthoxy)methane	ND			

Outfall #001 Priority Pollutants Part 6

	05/07/09	■	□	□
Aroctor-1221				
Aroctor-1232				
Aroctor-1242				
Aroctor-1260				
Aroctor-1262				
Azobenzene				
Benzene				
Benzidine				
Benzo (a) Anthracene				
Benzo (a) pyrene				
Benzo (b) Fluoranthene				
Benzo (e) pyrene				
Benzo (g,h,i) Perylene				
Benzo (k) Fluoranthene				
Benzo (k) Pyrene				
Benzonic Acid				
Benzyl Alchol				
Beta-BHC				
Biphenyl				
Bis (2-				



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Outfall #001 (Part 7)

bis(2-chloroethyl)ether

bis(2 ethyhexyl) phthalate

Bis(2-Chloroisopropyl) Ether

Bis(-Chloroethoxy) Methane

Bromobenzene

Bromochloromethane

Bromodichloromethane

Bromoform

Bromomethane

Butyl-Benzyl Phthalate

c-1,2-Dichloroethane

c-1,3-Dichloropropene

Carbon disulfide

Carbon Tetrachloride

Chlordane

Chlordane-alpha

Chlordane-gamma

Chlorehthane

Chlorform

Chlormethane

05/07/09

ND

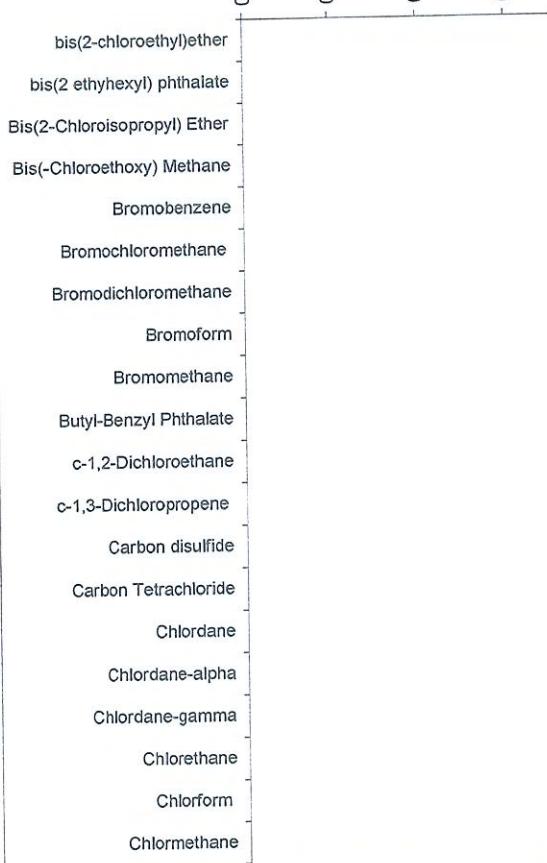
Outfall #001 Priority Pollutants Part 7

■ 05/07/09

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Outfall #001 (Part 8)

Chlorobenzene

Chlorodane-alpha

Chorodane-gamma

Chorodibromo methane

Chrysene-

Cyanide

Delta-BHC

Dibenz (a,h) Anthracene

Dibenzofuran

Dibromochloromethane

Dibromomethane

Dichlorodifluoromethane

Dieldrin

Diethyl Phthalate

Dimethyl Phthalate

Di-n-Butyl Phthalate

Di-n-Octyl Phthalate-

Endosulfan I

Endosulfan II

Endosulfan Sulfate

Endrin

05/07/09

1.00

0.90

0.80

0.70

0.60

0.50

0.40

0.30

0.20

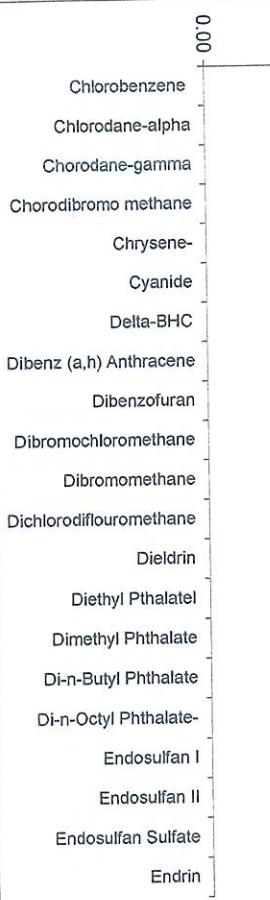
0.10

0.00

Outfall #001 Priority Pollutants Part 8

■ 05/07/09

■



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Outfall #001 (Part 9)

05/07/09

Endrin Aldehyde

Endrin Ketone

Ethylbenzene

Fluoranthene

Fluorene

Gamma-BHC

Heptachlor

Heptachlor Epoxide

Hexachloro-1,3 Butadiene

Hexachlorobutadiene

Hexachlorobenzene

Hexachlorocyclopentadiene

Hexachloroethane

Indeno (1,2,3-c,d) Pyrene

Isophorone

Isopropylbenzene

Methoxychlor

Methyl Bromide

Methylene chloride

Methyl-tert-Butyl Ether

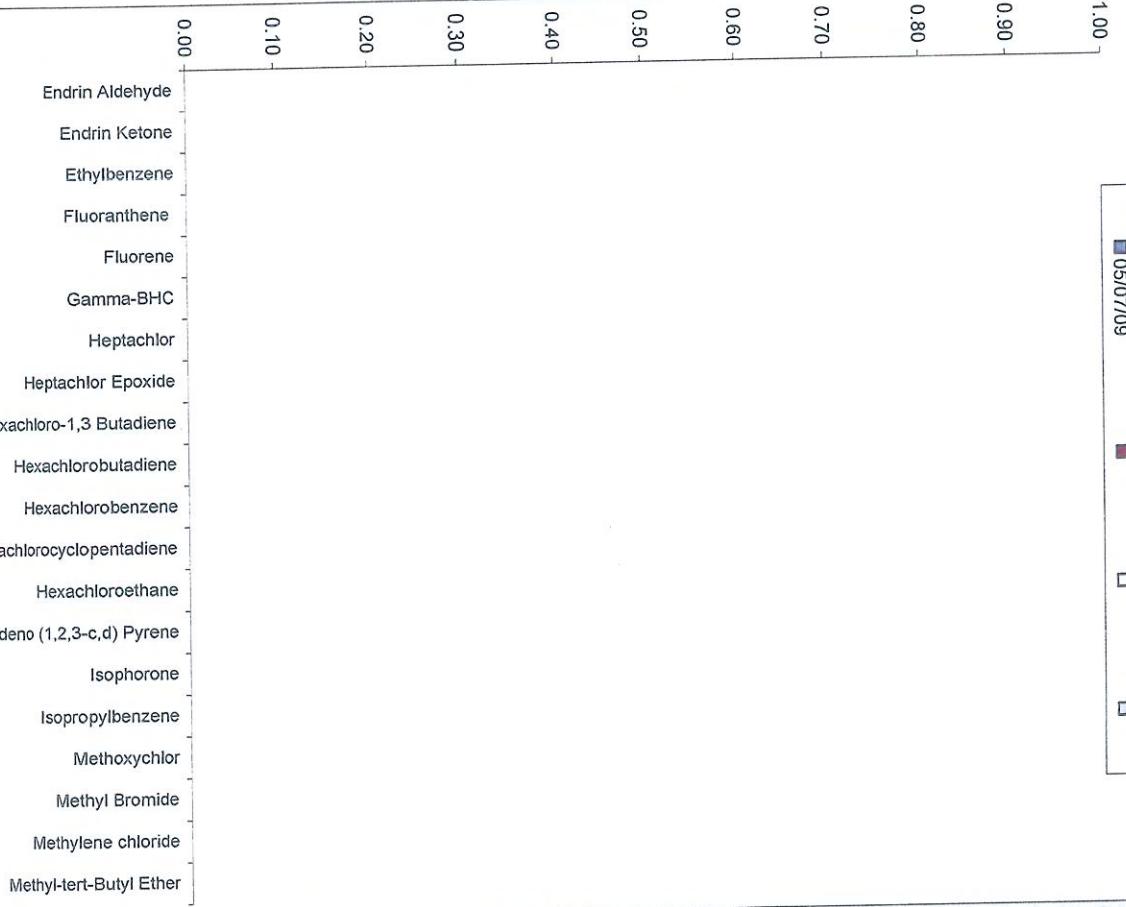
Outfall #001 Priority Pollutants Part 9

■ 05/07/09

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□



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Outfall #001 (Part 10)

05/07/09

1.00

Mirex ND

Naphthalene ND

n-Butylbenzene ND

Nitrobenzene ND

Nitrate-N ND

N-Nitrosodimethylamine ND

N-Nitroso-di-n-propylamine ND

N-Nitrosodiphenylamine ND

n-Propylbenzene ND

o-Xylene ND

p-Xylene ND

Pentachlorophenol ND

Perylene ND

Phenanthrene ND

Phenol ND

p-Isopropyltoluene ND

Pyrene ND

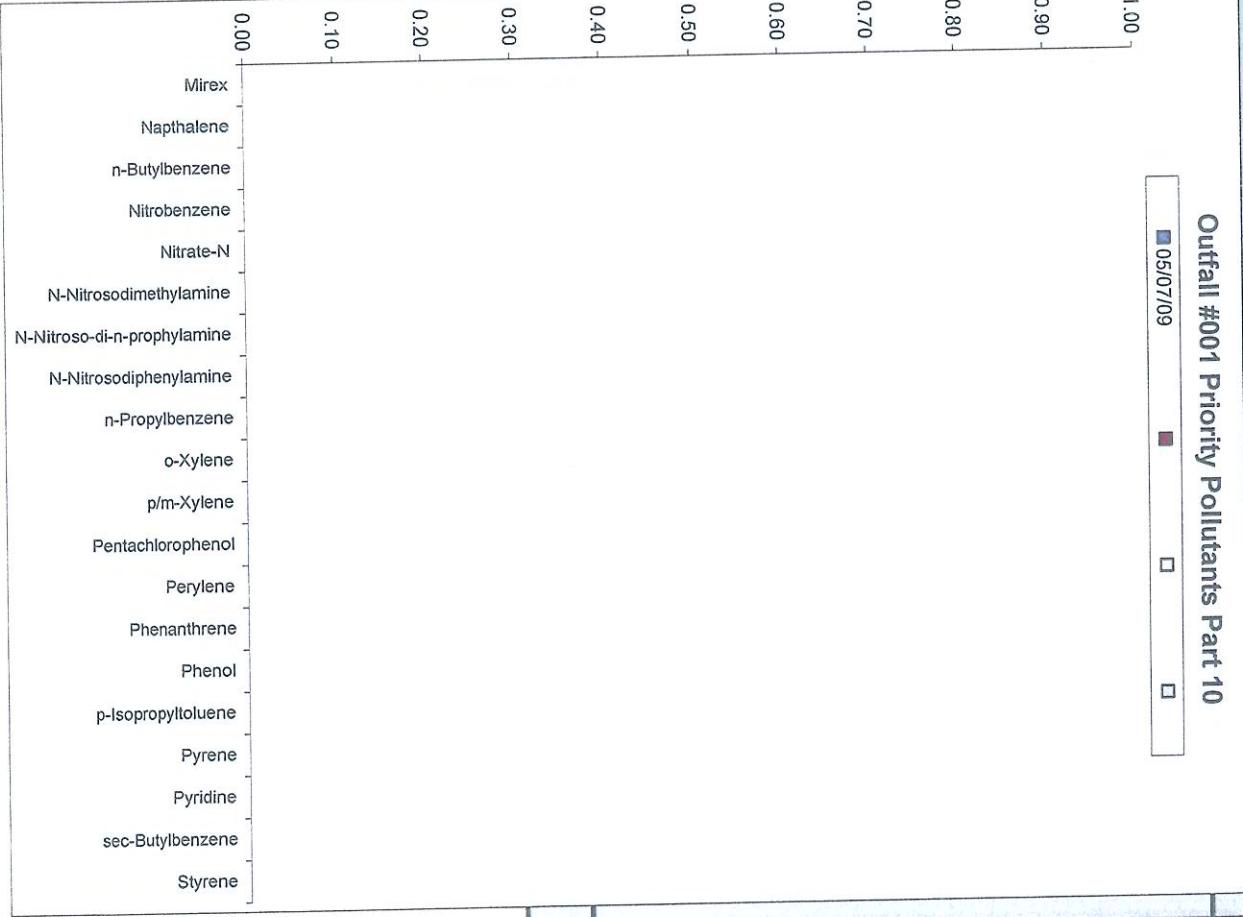
Pyridine ND

sec-Butylbenzene ND

Styrene ND

Outfall #001 Priority Pollutants Part 10

■ 05/07/09 ■ □ □



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Outfall #001 (Part 11)

05/07/09

t-1,2-Dichloroethene	ND
t-1,3-Dichloropropene	ND
tert-Butylbenzene	ND
Tetrachloroethane	ND
Total Cyanide	ND
Total Detectable DDTs	ND
Total Detectable PAHs	ND
Toluene	ND
Toxaphene	ND
trans-Nonachlor	ND
Trichloroethene	ND
Trichlorofluoromethane	ND
Vinyl Acetate	ND
Vinyl Chloride	ND
Xylenes	ND

1.00

0.90

0.80

0.70

0.60

0.50

0.40

0.30

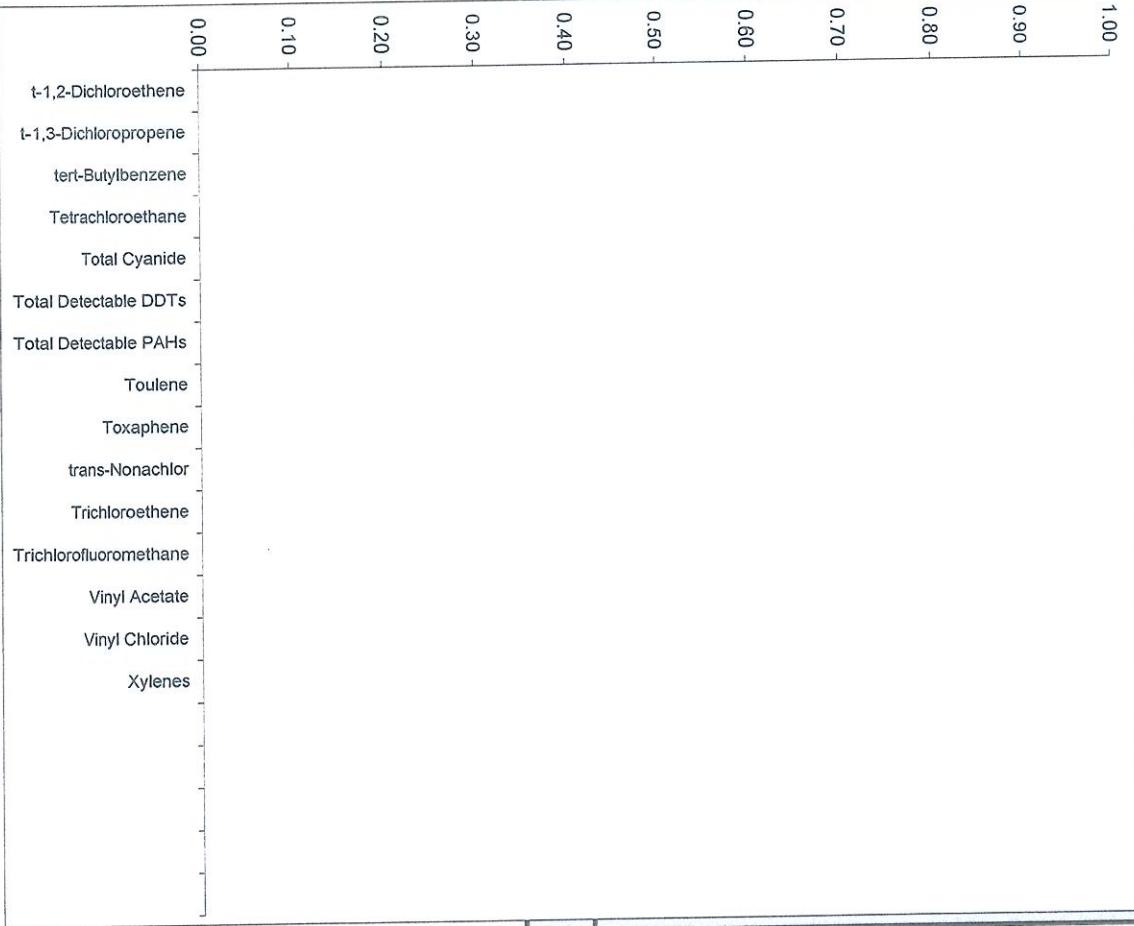
0.20

0.10

0.00

Outfall #001 Priority Pollutants Part 11

	■ 05/07/09	■	□	□
t-1,2-Dichloroethene				
t-1,3-Dichloropropene				
tert-Butylbenzene				
Tetrachloroethane				
Total Cyanide				
Total Detectable DDTs				
Total Detectable PAHs				
Toluene				
Toxaphene				
trans-Nonachlor				
Trichloroethene				
Trichlorofluoromethane				
Vinyl Acetate				
Vinyl Chloride				
Xylenes				



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Outfall #002 (Part 1)

5/7/09

11/13/09

ND

ND

Outfall #002 Part 1

Aluminium

Antimony (ug/l)

Arsenic (ug/l)

Barium (ug/l)

Beryllium (ug/l)

Cadmium (ug/l)

Chromium, Total (ug/l)

Cobalt (ug/l)

Copper (ug/l)

Iron (ug/l)

J (ug/l)

Magnesium

Mercury (ug/l)

Molybdenum (ug/l)

Nickel (ug/l)

Selenium (ug/l)

Silver (ug/l)

Thallium (ug/l)

Tin

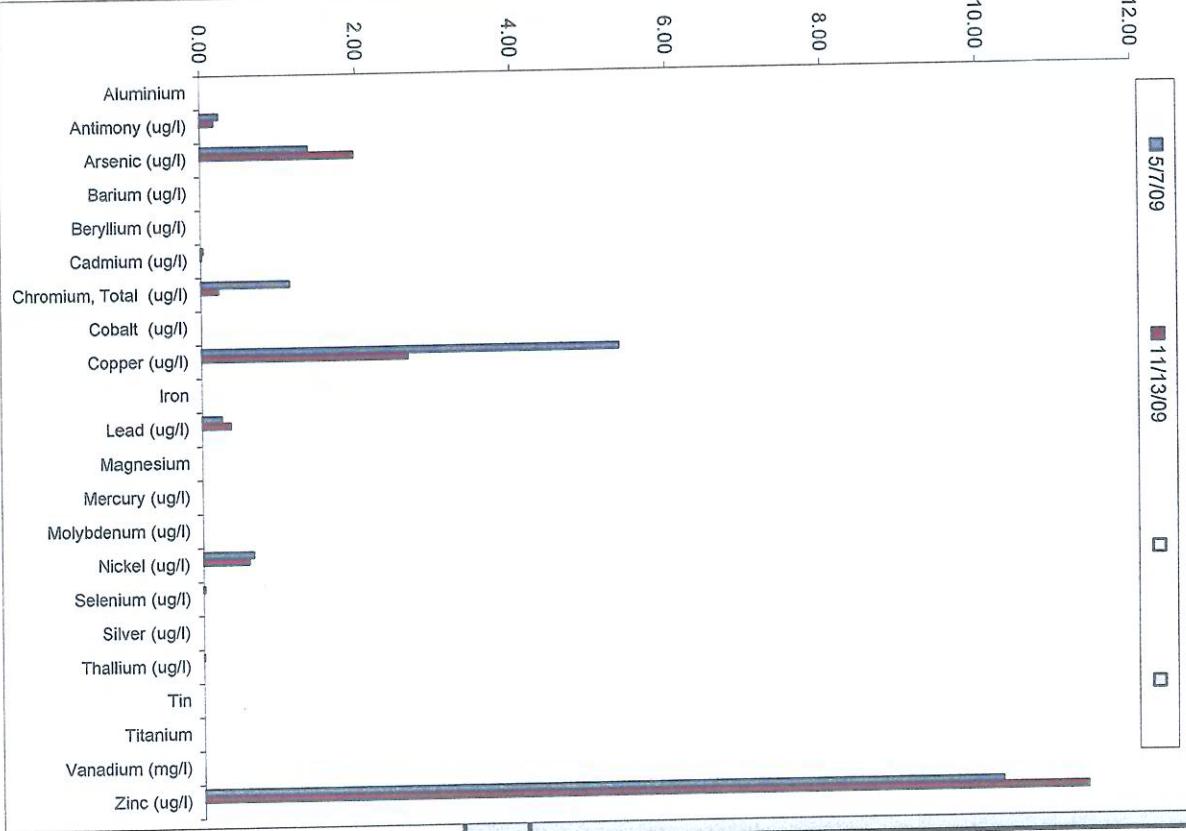
Titanium

Vanadium (mg/l)

Zinc (ug/l)

	5/7/09	11/13/09	ND
Aluminium	0.24	0.18	12.00
Antimony (ug/l)	1.39	1.97	
Arsenic (ug/l)	ND	ND	
Barium (ug/l)	0.03	0.01	
Beryllium (ug/l)	1.15	0.23	
Cadmium (ug/l)	5.37	2.66	
Chromium, Total (ug/l)			
Cobalt (ug/l)			
Copper (ug/l)			
Iron (ug/l)	0.25	0.38	
J (ug/l)			
Magnesium	ND	ND	8.00
Mercury (ug/l)			
Molybdenum (ug/l)			
Nickel (ug/l)	0.66	0.60	
Selenium (ug/l)	0.02	ND	
Silver (ug/l)	ND	ND	6.00
Thallium (ug/l)	0.01	ND	
Tin			
Titanium			
Vanadium (mg/l)	10.30	11.40	
Zinc (ug/l)			

Note: Reporting limit inside of parentheses



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Outfall #002 (Part 2)

5/7/09

1,1,1,2-Tetrachloroethane	ND
1,1,1-Trichloroethane	ND
1,1,2,2-Tetrachloroethane	
1,1,2-Trichloroethane	ND
1,1-Dichloroethane	ND
1,1-Dichloroethylene	ND
1,1-Dichloropropane	ND
1,2,3-Trichlorobenzene	
1,2,3-Trichloropropene	
1,2,3-Trichlorotoluene	ND
1,2,4-Trimethylbenzene	
1,2-Dibromoethane	
1,2-Dibromo-3-Chloropropane	
1,2-Dichlorobenzene	ND
1,2-Dichlorobezene	
1,2-Dichloroethane	ND
1,2-Diphenylhydrazine	ND
1,2-Trans Dichloroethylene	
1,2-Dichloropropane	ND

Outfall #002 Part 2

5/7/09

■ □ □ □



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Outfall #002 (Part 3)

05/07/09

ND

1,3,5-Trimethylbenzene

1.00

1,3-Dichlorobenzene

1,4-Dichlorobenzene

0.90

1,2-Dibromo-3-Chloropropane

1-Methylphenanthrene

1-Methylnaphthalene

2,2-Dichloropropane

2,3,5-Trimethylnaphthalene

2,3,7,8 TCDD

5-Trichlorophenol

2,4,6-Trichlorophenol

2,4'-DDD

2,4'-DDE

2,4'-DDT

2,4-Dichlorophenol

2,4-Dimethylphenol

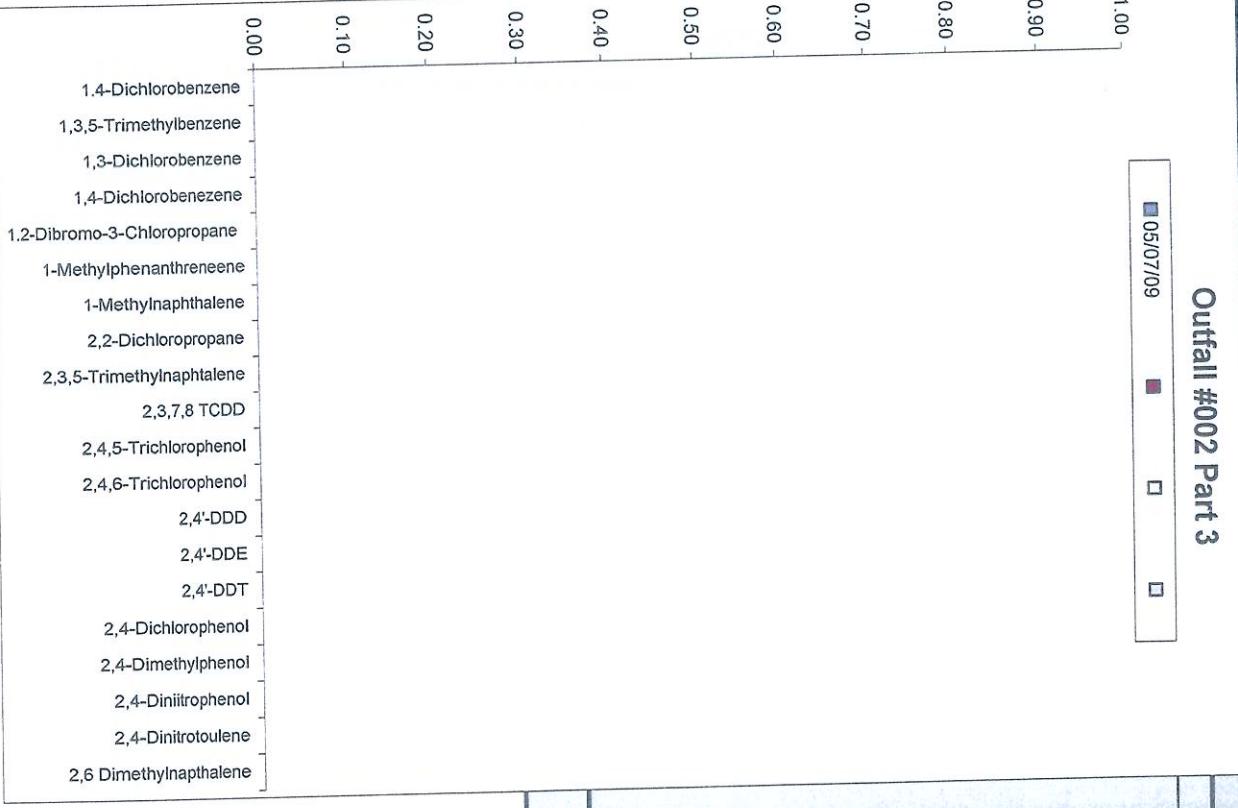
2,4-Dinitrophenol

2,4-Dinitrotoluene

2,6 Dimethylnaphthalene

Outfall #002 Part 3

05/07/09 □ □ □



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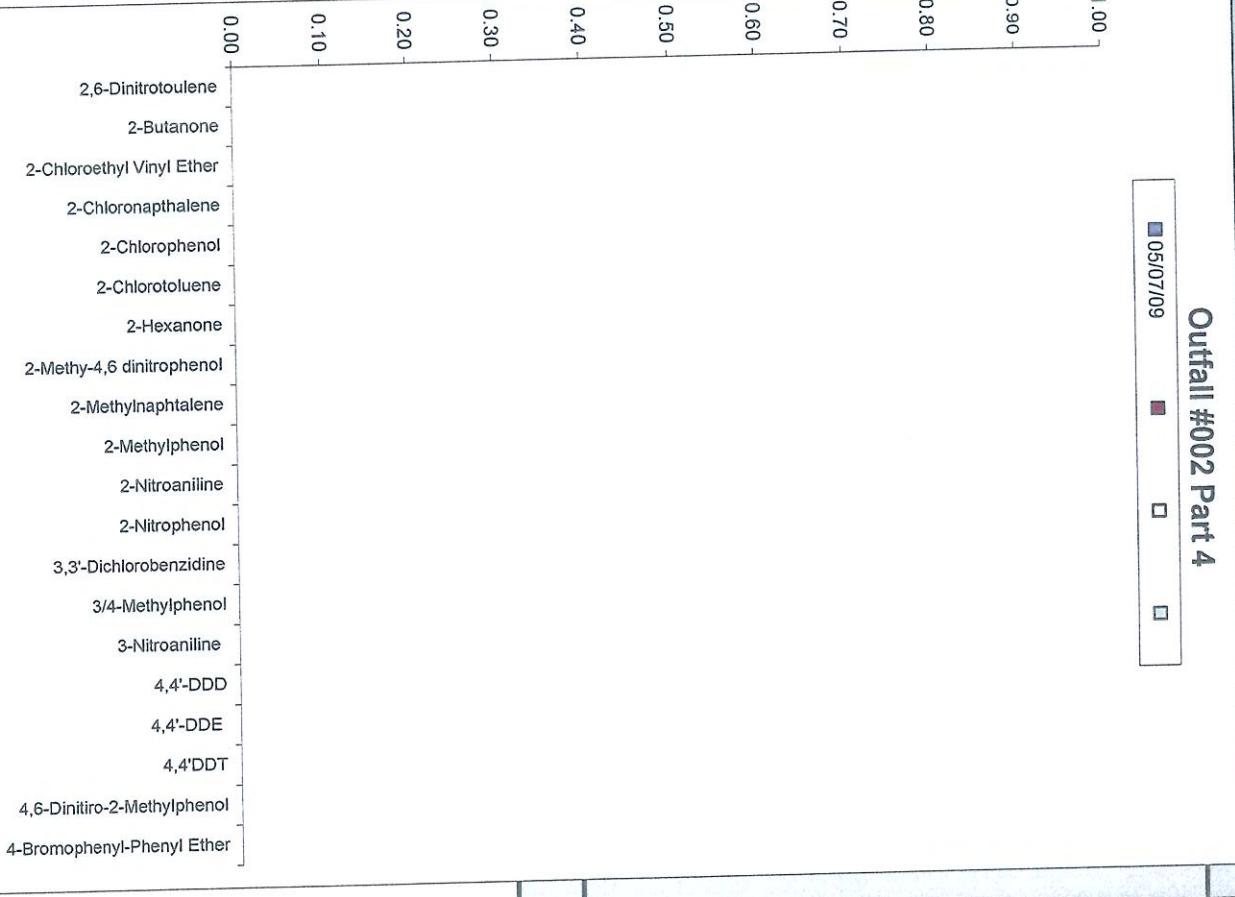
Outfall #002 (Part 4)

05/07/09

Outfall #002 Part 4

■ 05/07/09 ■ □ □

Outfall #002 (Part 4)	05/07/09					
2,6-Dinitrotoluene	ND					
2-Butanone	ND					
2-Chloroethyl Vinyl Ether	ND					
2-Chloronaphthalene	ND					
2-Chlorophenol	ND					
2-Chlorotoluene						0.90
2-Hexanone						
2-Methyl-4,6 dinitrophenol	ND					
2-Methylnaphtalene						
2-Methylphenol						0.80
2-Nitroaniline						
2-Nitrophenol	ND					
3,3'-Dichlorobenzidine	ND					
3/4-Methylphenol						
3-Nitroaniline						
4,4'-DDD	ND					
4,4'-DDE	ND					
4,4'DDT	ND					
4,6-Dinitiro-2-Methylphenol	ND					
4-Bromophenyl-Phenyl Ether	ND					



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Outfall #002 (Part 5)

05/07/09

4-Chloro-3-Methylphenol

ND

4-Chloroaniline

ND

4-Chlorophenyl-Phenyl Ether

ND

4-Chlorotoluene

ND

4-Methyl-2-Pentanone

ND

4-Nitroaniline

ND

4-Nitrophenol

ND

Acenaphthene

ND

Acenaphthylene

ND

Acetone

ND

Acrolein

ND

Acrylonitrile

ND

Aldrin

ND

Alpha-BHC

ND

Ammonia Nitrate

0.03

Ammonia Nitrite

ND

Alpha-Endosulfan

ND

Analine

ND

Anthracene

ND

Arcotor 1248

ND

Arcotor 1254

ND

Aroclor-1016

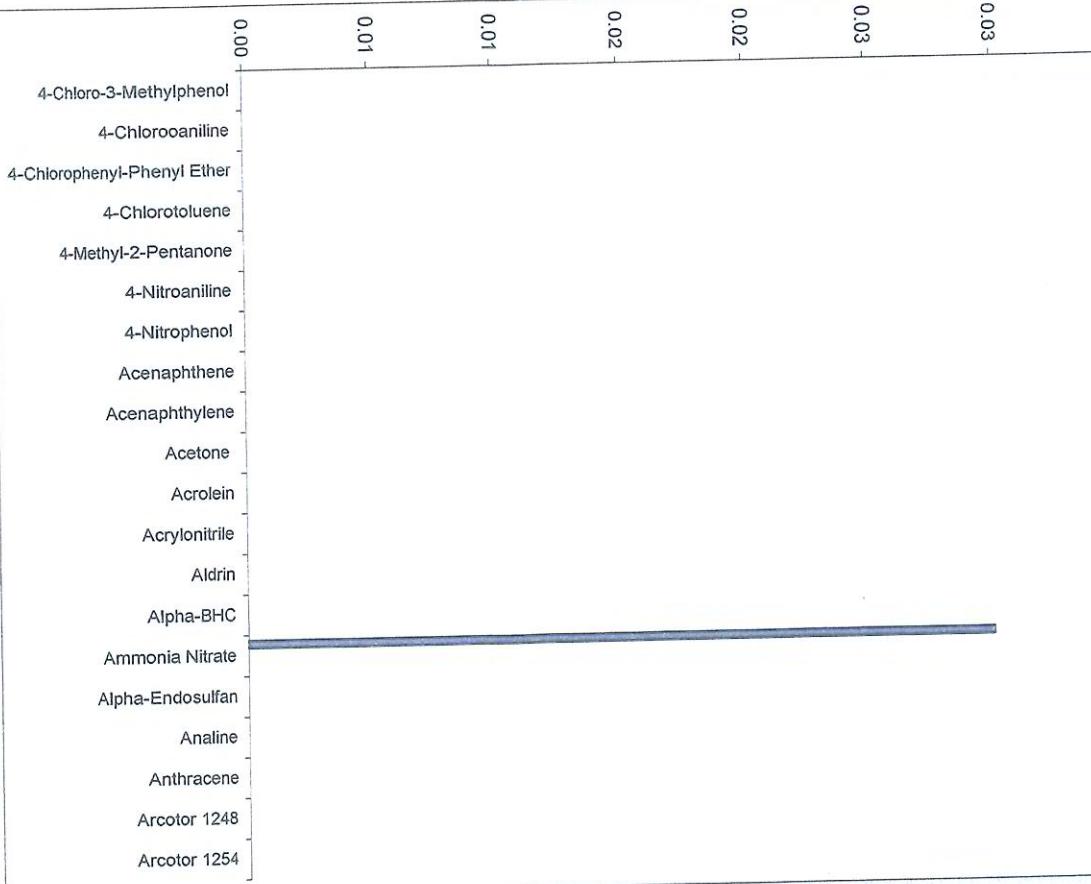
ND

Outfall #002 Part 5

■ 05/07/09

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Outfall #002 (Part 6)

05/07/09

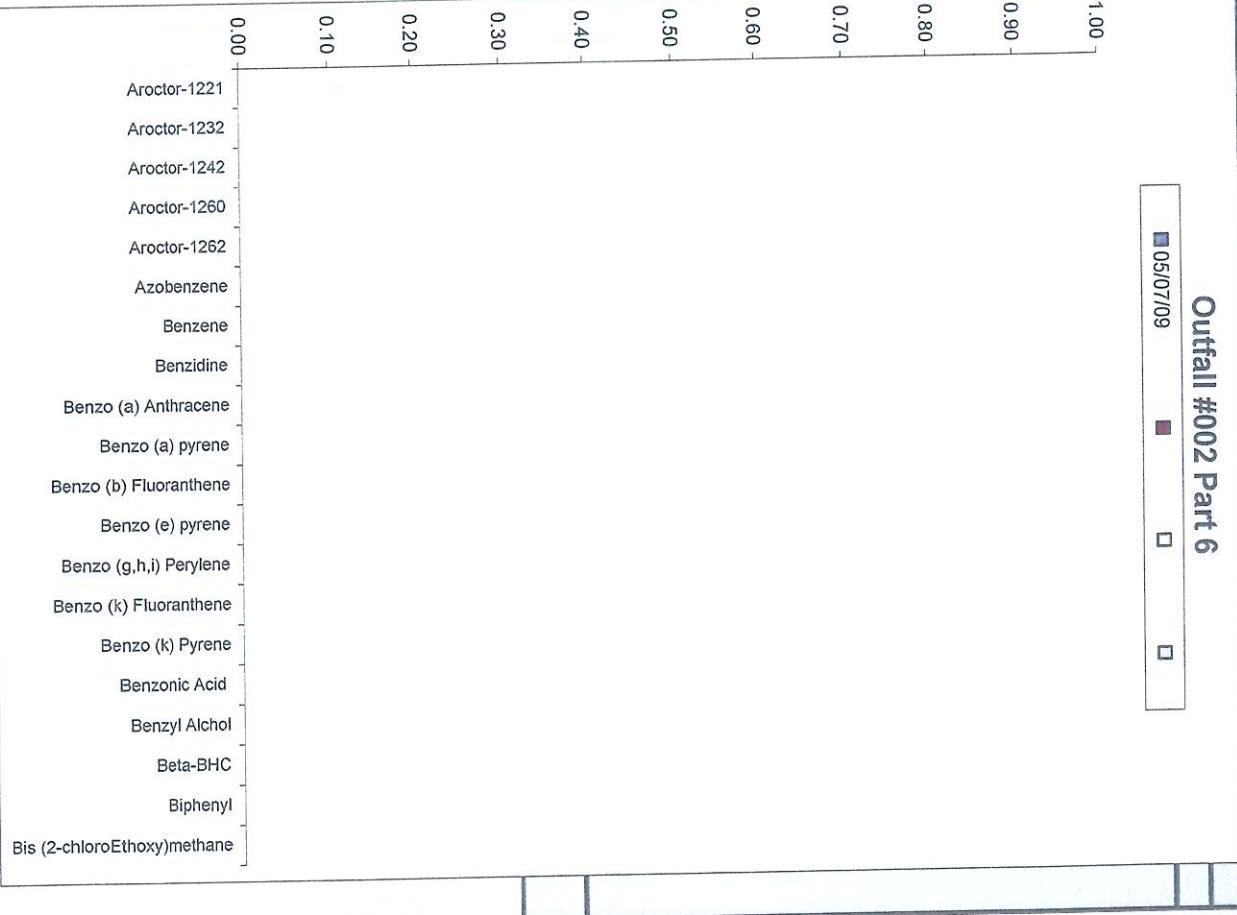
1.00

Outfall #002 Part 6

■ 05/07/09

□ □ □

Aroctor-1221	ND
Aroctor-1232	ND
Aroctor-1242	ND
Aroctor-1260	ND
Aroctor-1262	
Azobenzene	
Benzene	ND
Benzidine	ND
Benzo (a) Anthracene	ND
Benzo (a) pyrene	ND
Benzo (b) Fluoranthene	ND
Benzo (e) pyrene	
Benzo (g,h,i) Perylene	ND
Benzo (k) Fluoranthene	ND
Benzo (k) Pyrene	
Benzonic Acid	
Benzyl Alcohol	
Beta-BHC	ND
Biphenyl	
Bis (2-chloroEthoxy)methane	ND



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Outfall #002 (Part 7)

05/07/09

bis(2-chloroethyl)ether

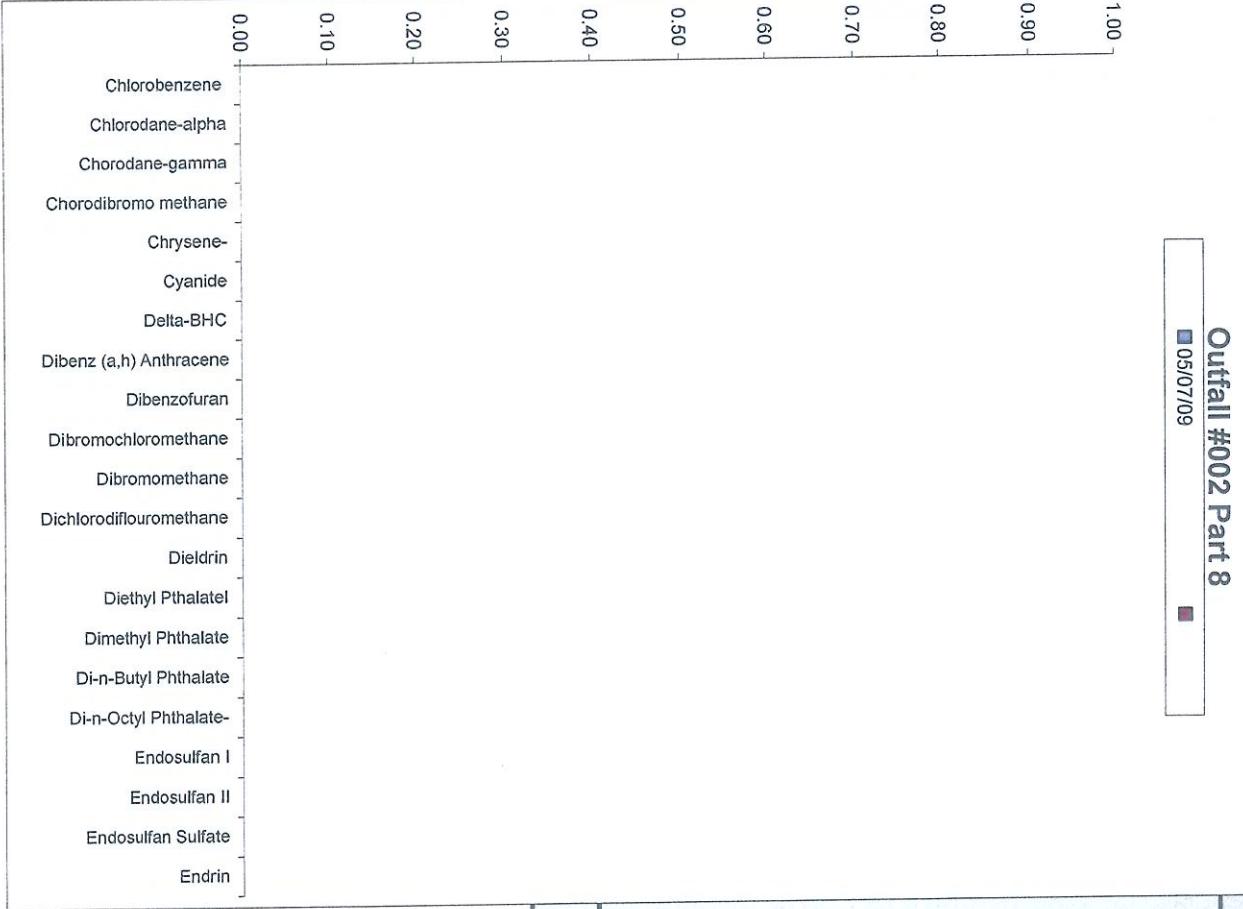
ND

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Outfall #002 (Part 8)	05/07/09
Chlorobenzene	ND
Chlorodane-alpha	
Chorodane-gamma	
Chorodibromo methane	
Chrysene-	ND
Cyanide	ND
Delta-BHC	ND
Dibenz (a,h) Anthracene	ND
Dibenzofuran	
Dibromochloromethane	ND
'omomethane	ND
Dichlorodifluoromethane	ND
Dieldrin	ND
Diethyl Phthalate	ND
Dimethyl Phthalate	ND
Di-n-Butyl Phthalate	ND
Di-n-Octyl Phthalate-	ND
Endosulfan I	ND
Endosulfan II	ND
Endosulfan Sulfate	ND
Endrin	ND

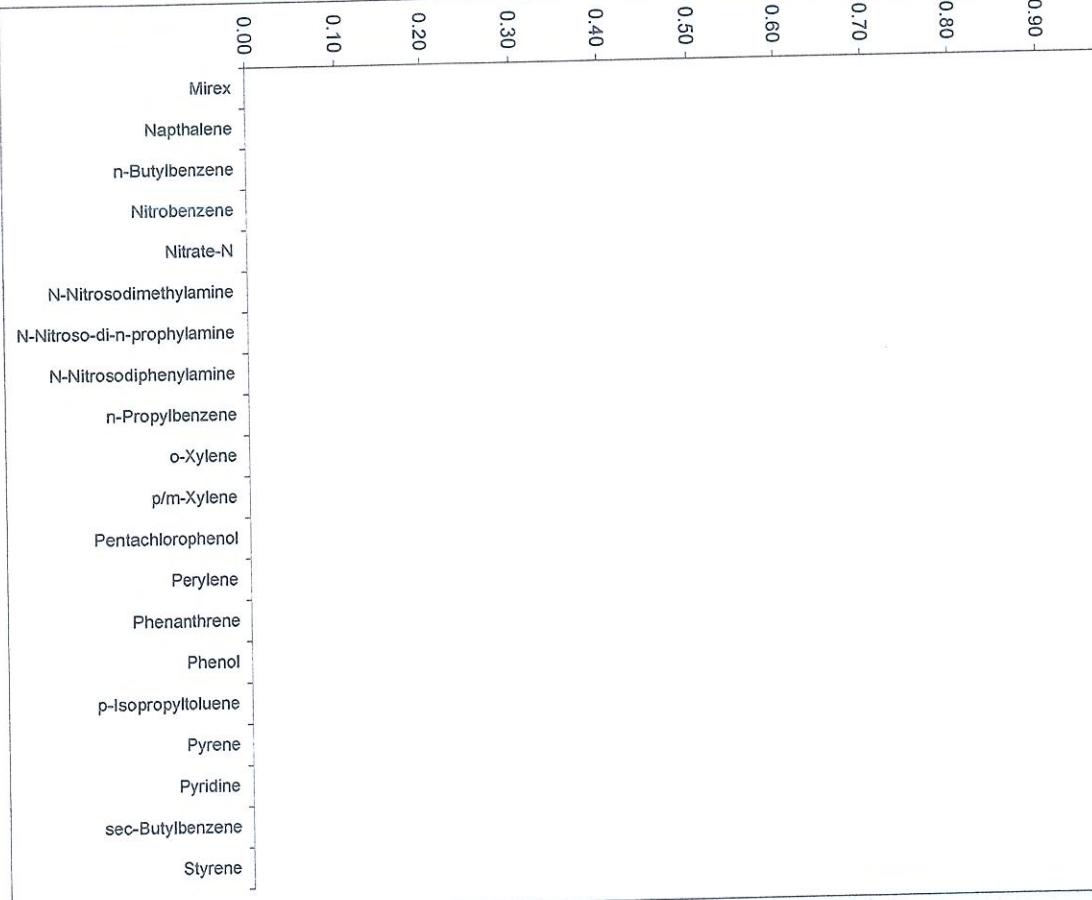


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Outfall #002 (Part 10)

	05/07/09			
Mirex				
Naphthalene	ND			
n-Butylbenzene	ND			
Nitrobenzene	ND			
Nitrate-N	ND			
N-Nitrosodimethylamine	ND			
N-Nitroso-di-n-propylamine	ND			
N-Nitrosodiphenylamine	ND			
n-Propylbenzene				
o-Xylene	ND			
p-Xylene	ND			
Pentachlorophenol	ND			
Perylene	ND			
Phenanthrene	ND			
Phenol	ND			
p-Isopropyltoluene	ND			
Pyrene				
Pyridine				
sec-Butylbenzene				
Styrene				

Outfall #002 Part 10



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ANNUAL REPORT
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Outfall #002 (Part 11)

05/07/09

t-1,2-Dichloroethene	ND
t-1,3-Dichloropropene	ND
tert-Butylbenzene	
Tetrachloroethane	ND
Total Cyanide	
Total Detectable DDTs	
Total Detectable PAHs	
Toluene	ND
Toxaphene	ND
trans-Nonachlor	ND
Trichloroethene	
Trichlorofluoromethane	
Vinyl Acetate	
Vinyl Chloride	
Xylenes	

tert-Butylbenzene

Tetrachloroethane

Total Cyanide

Total Detectable DDTs

Total Detectable PAHs

Toluene

Toxaphene

trans-Nonachlor

Trichloroethene

Trichlorofluoromethane

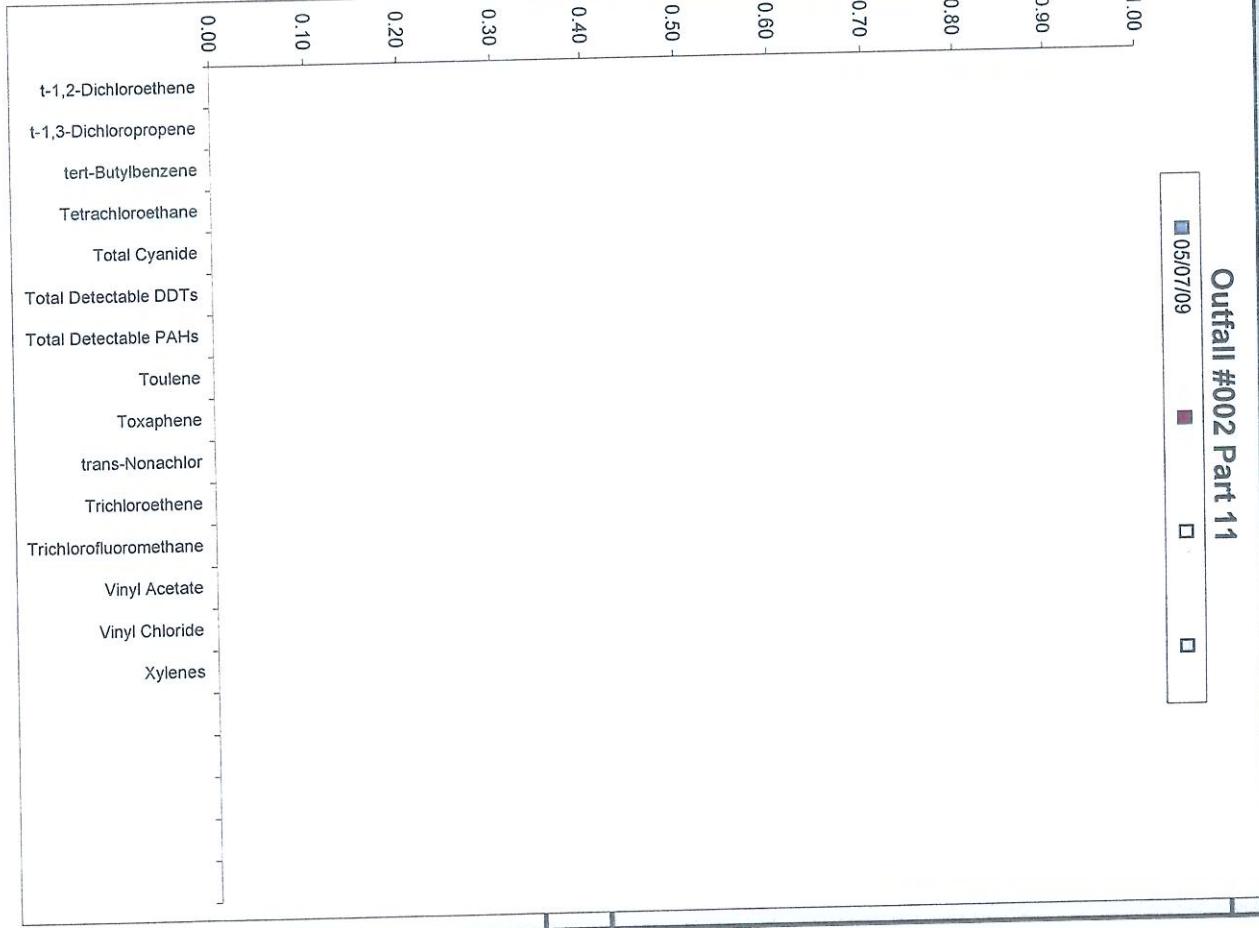
Vinyl Acetate

Vinyl Chloride

Xylenes

Outfall #002 Part 11

■ 05/07/09 ■ □ □



**EI Segundo Power, LLC
ANNUAL REPORT
2009**

Retention Basin (Part 1)	05/07/09
Aluminium	ND
Antimony (ug/l)	ND
Arsenic (ug/l)	ND
Barium (ug/l)	0.32
Beryllium (ug/l)	ND
Cadmium (ug/l)	ND
Chromium, Total (ug/l)	ND
Cobalt (ug/l)	20.50
Copper (ug/l)	25.00
Lead (ug/l)	ND
Magnesium	0.00
Mercury (ug/l)	ND
Molybdenum (ug/l)	20.00
Nickel (ug/l)	2.90
Selenium (ug/l)	12.90
Silver (ug/l)	ND
Thallium (ug/l)	ND
Tin	15.00
Titanium	ND
Vanadium (mg/l)	25.00
Zinc (ug/l)	10.00

Priority Pollutants Part 1

■ 05/07/09 ■ □ □

30.00

25.00

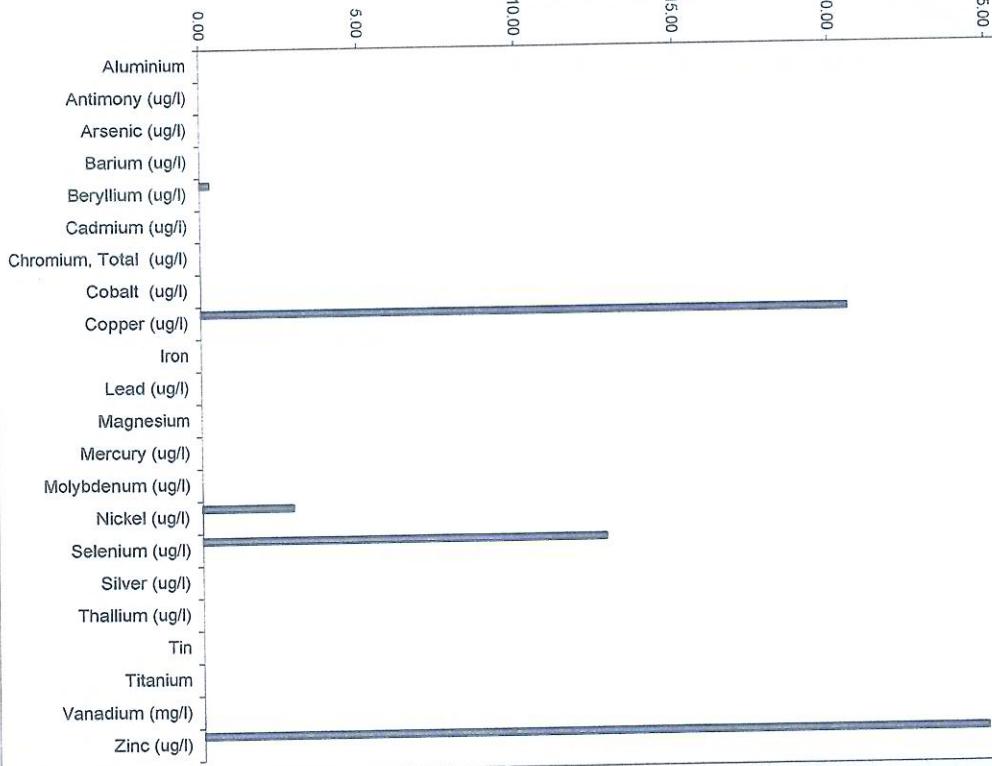
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15.00

10.00

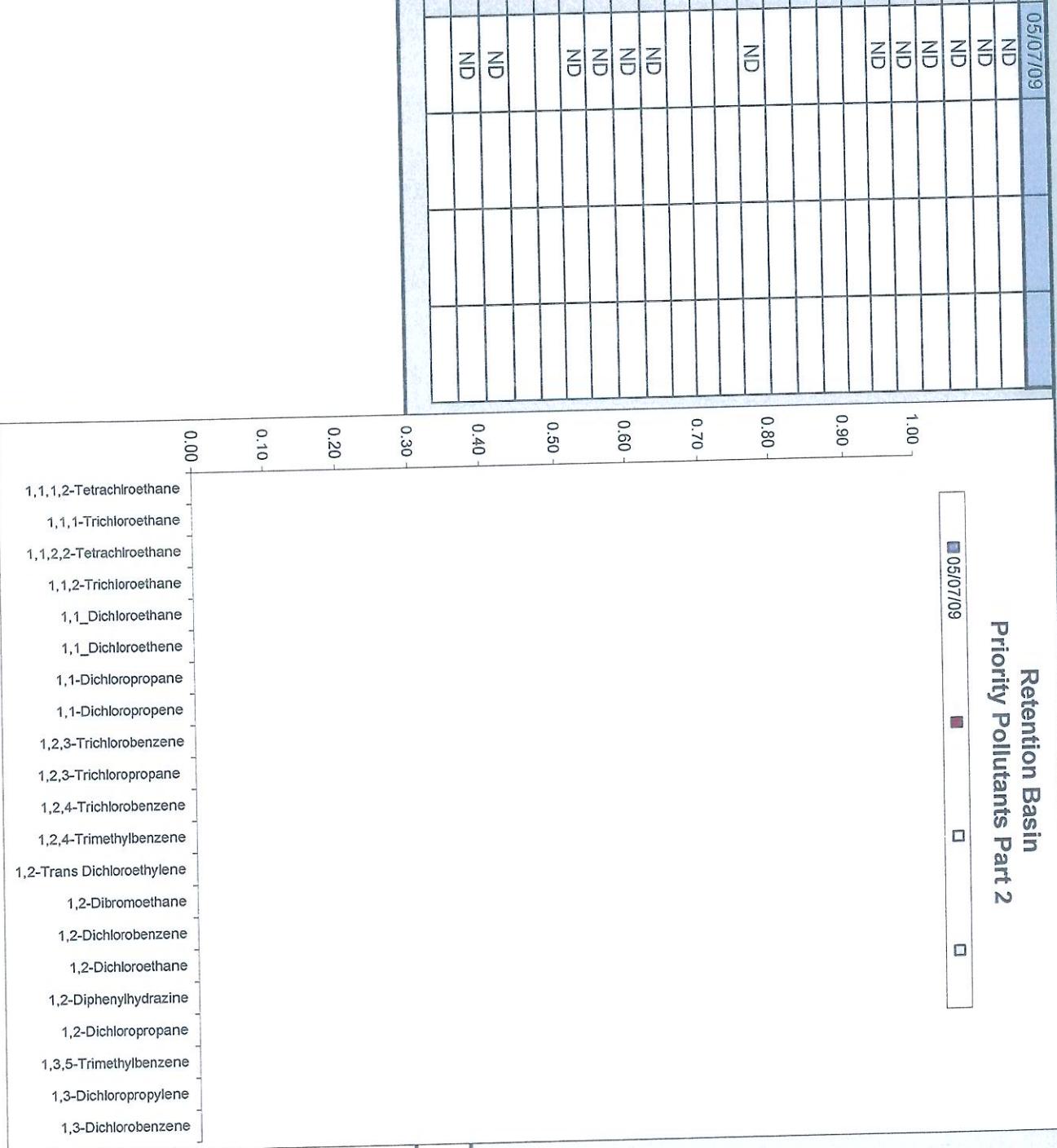
5.00

0.00

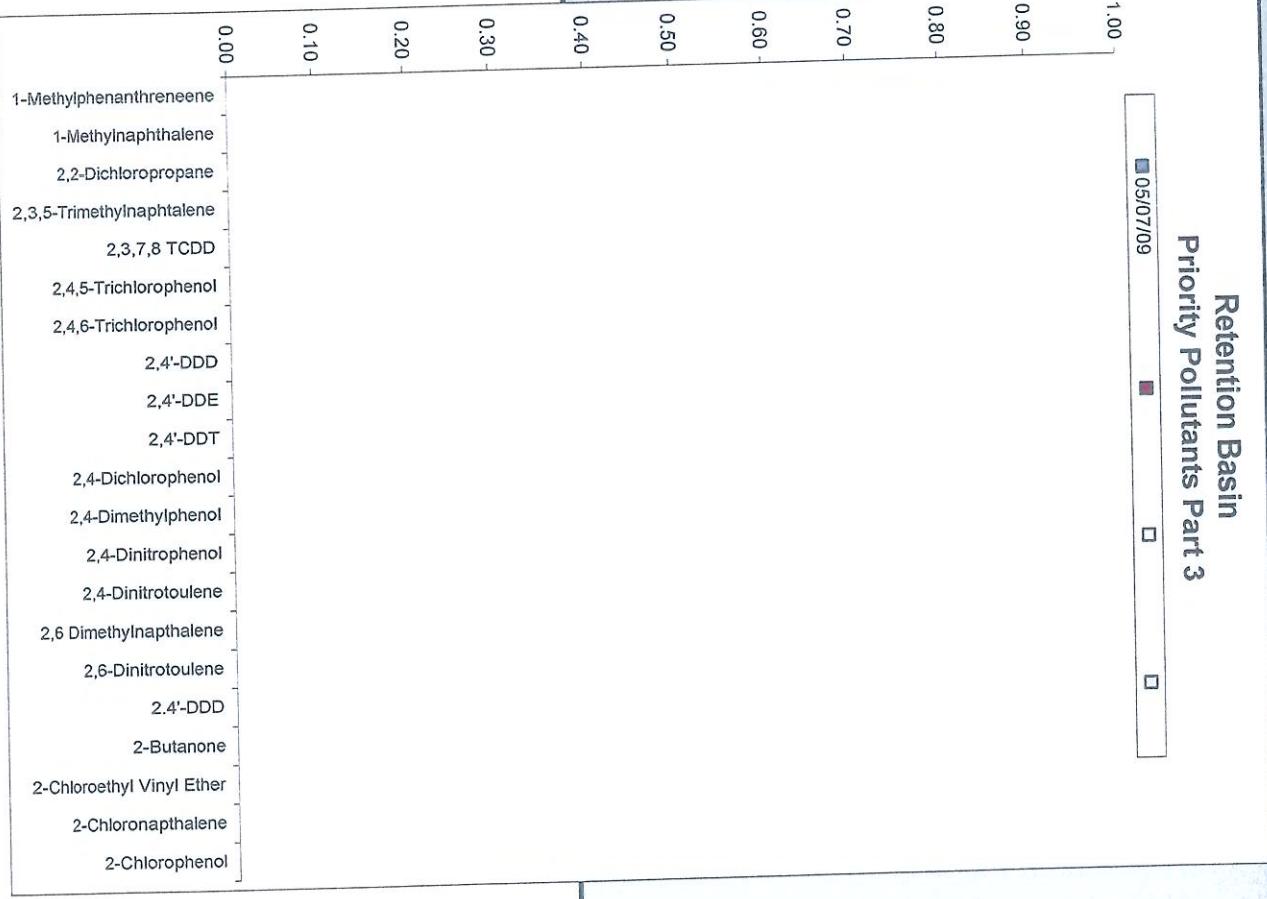


Note: Reporting limit inside of parentheses

El Segundo Power, LLC
ANNUAL REPORT
2009

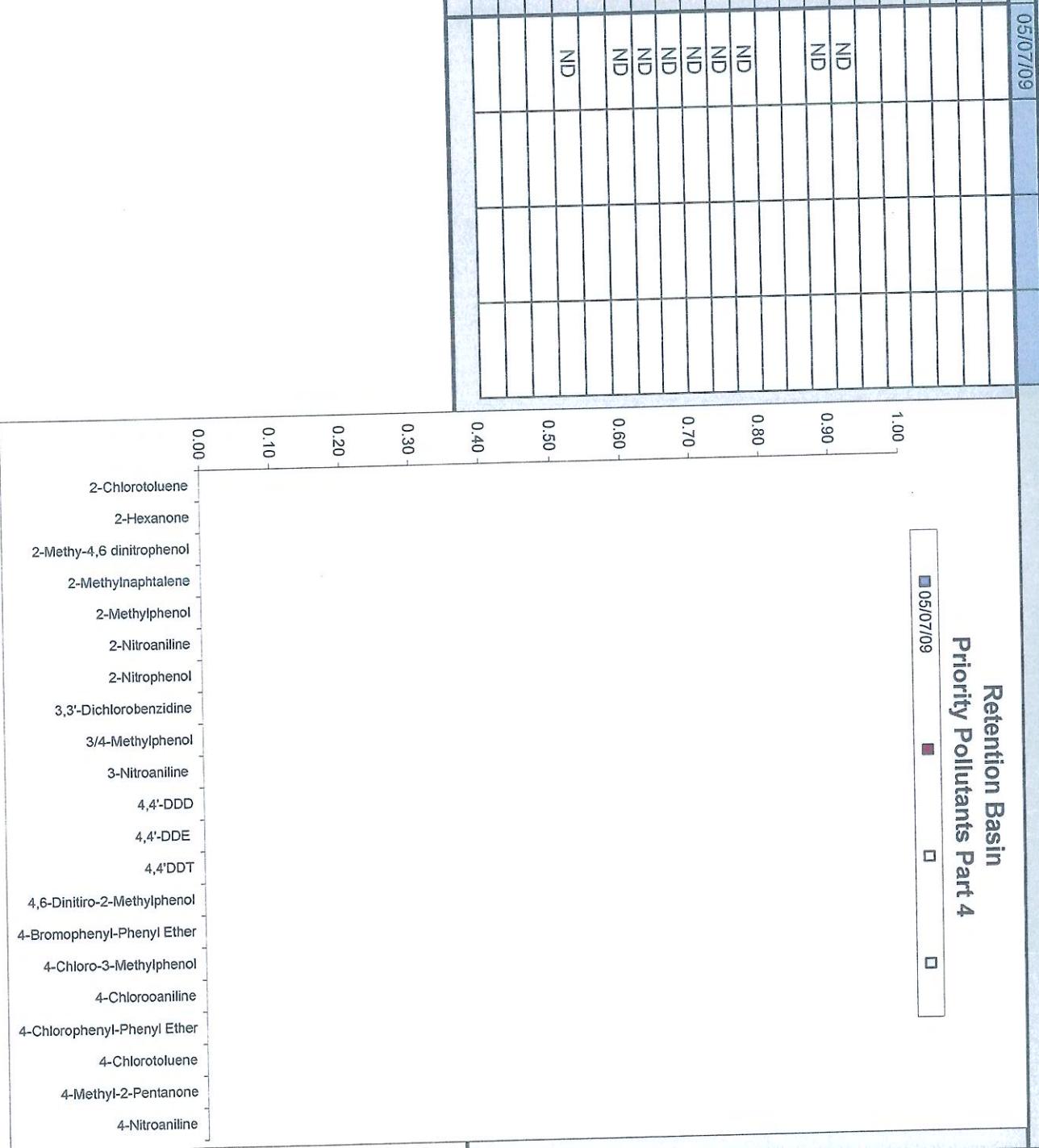


El Segundo Power, LLC
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2009

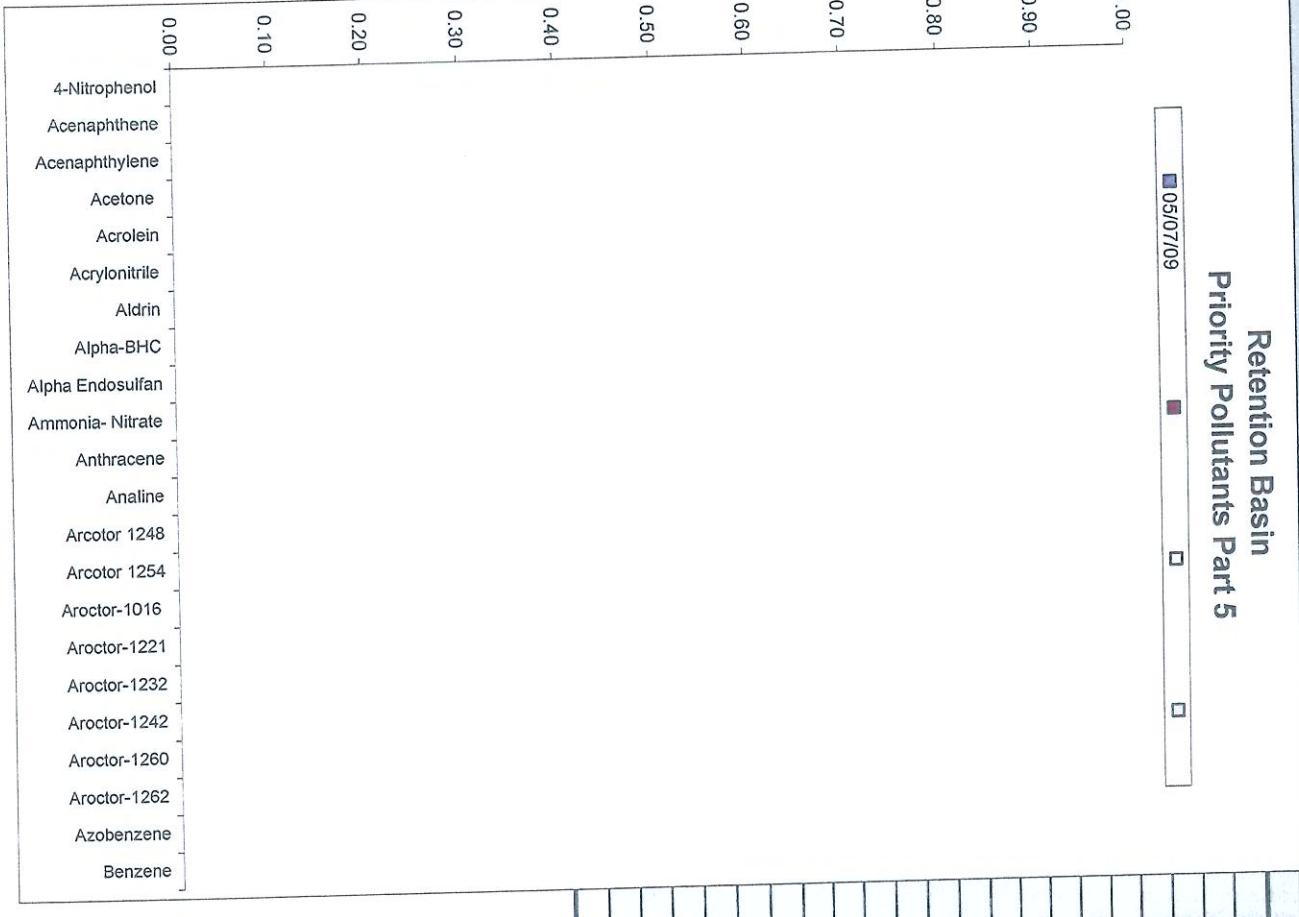


Retention Basin (Part 3)	05/07/09	ND	□	□
1-Methylphenanthreneene				
1-Methylnaphthalene				
2,2-Dichloropropane				
2,3,5,Trimethylnaphthalene				
2,3,7,8 TCDD				
2,4,5-Trichlorophenol				
2,4,6-Trichlorophenol				
2,4'-DDD				
2,4'-DDE				
2,4'-DDT				
2,4-Dichlorophenol				
2,4-Dimethylphenol				
2,4-Dinitrophenol				
2,4-Dinitrotoluene				
2,6 Dimethylnaphthalene				
2,6-Dinitrotoluene				
2,4'-DDD				
2-Butanone				
2-Chloroethyl Vinyl Ether				
2-Chloronaphthalene				
2-Chlorophenol				

EI Segundo Power, LLC
ANNUAL REPORT
2009



El Segundo Power, LLC
ANNUAL REPORT
2009



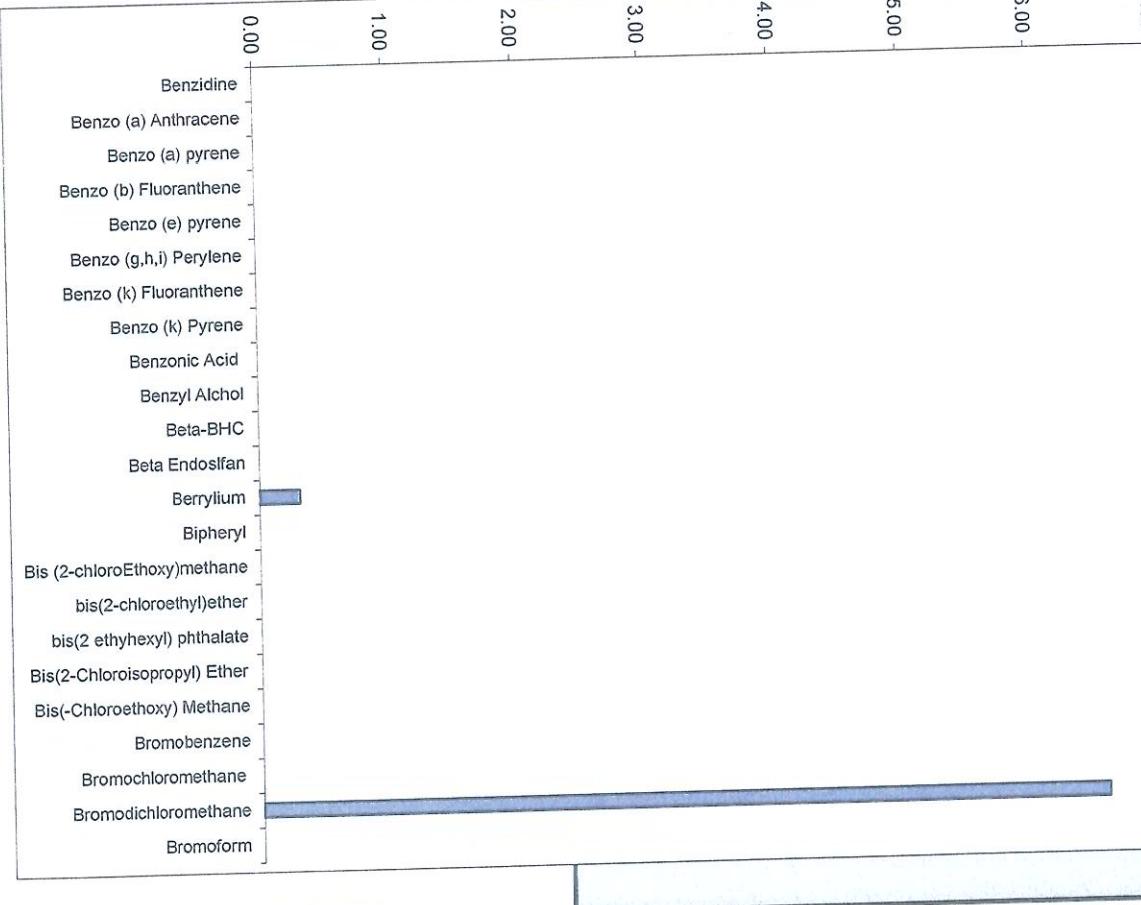
Retention Basin (Part 5)	05/07/09
4-Nitrophenol	ND
Acenaphthene	ND
Acenaphthylene	ND
Acetone	ND
Acrolein	ND
Acrylonitrile	ND
Aldrin	ND
Alpha-BHC	ND
Alpha Endosulfan	ND
Ammonia- Nitrate	ND
Anthracene	ND
Analine	ND
Arcotor 1248	ND
Arcotor 1254	ND
Aroctor-1016	ND
Aroctor-1221	ND
Aroctor-1232	ND
Aroctor-1242	ND
Aroctor-1260	ND
Aroctor-1262	ND
Azobenzene	ND
Benzene	ND

El Segundo Power, LLC
ANNUAL REPORT
2009

Retention Basin (Part 6)	05/07/09
Benzidine	ND
Benzo (a) Anthracene	ND
Benzo (a) pyrene	ND
Benzo (b) Fluoranthene	ND
Benzo (e) pyrene	ND
Benzo (g,h,i) Perylene	ND
Benzo (k) Fluoranthene	ND
Benzo (k) Pyrene	ND
Benzonic Acid	ND
Benzyl Alchol	ND
Beta-BHC	ND
Beta Endosfan	ND
Berrylium	0.32
Biphenyl	ND
Bis (2-chloroEthoxy)methane	ND
bis(2-chloroethyl)ether	ND
bis(2 ethyhexyl) phthalate	ND
Bis(2-Chloroisopropyl) Ether	ND
Bis(-Chloroethoxy) Methane	ND
Bromobenzene	ND
Bromochloromethane	6.60
Bromodichloromethane	ND
Bromoform	ND

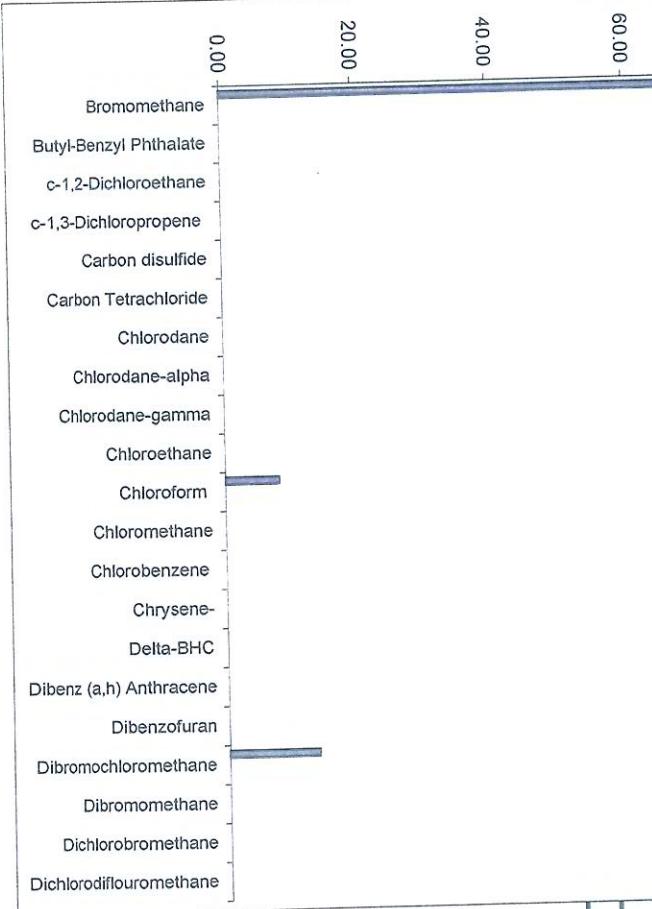
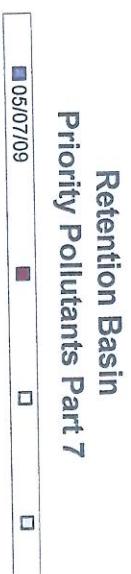
Retention Basin
Priority Pollutants Part 6

■ 05/07/09

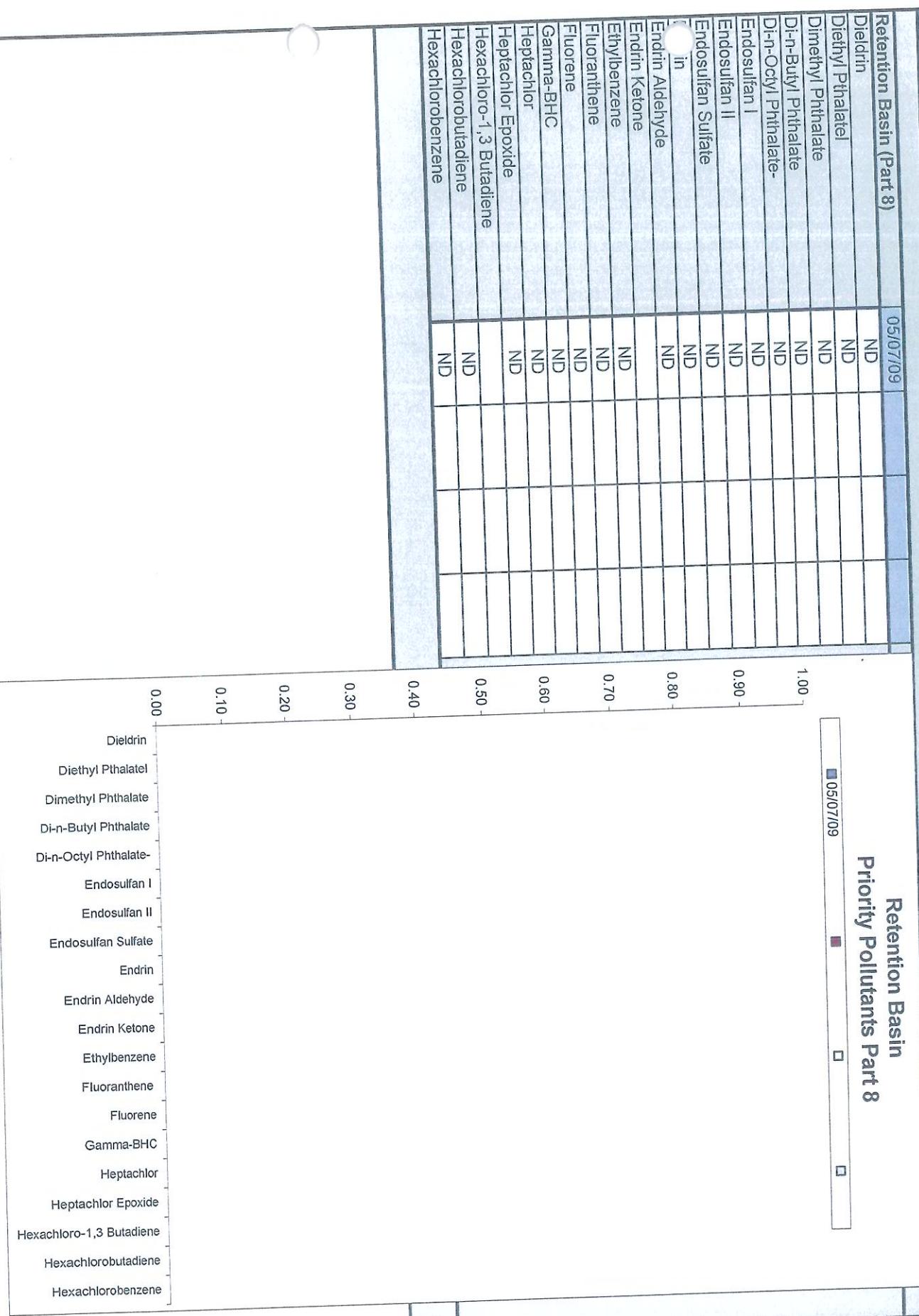


El Segundo Power, LLC
ANNUAL REPORT
2009

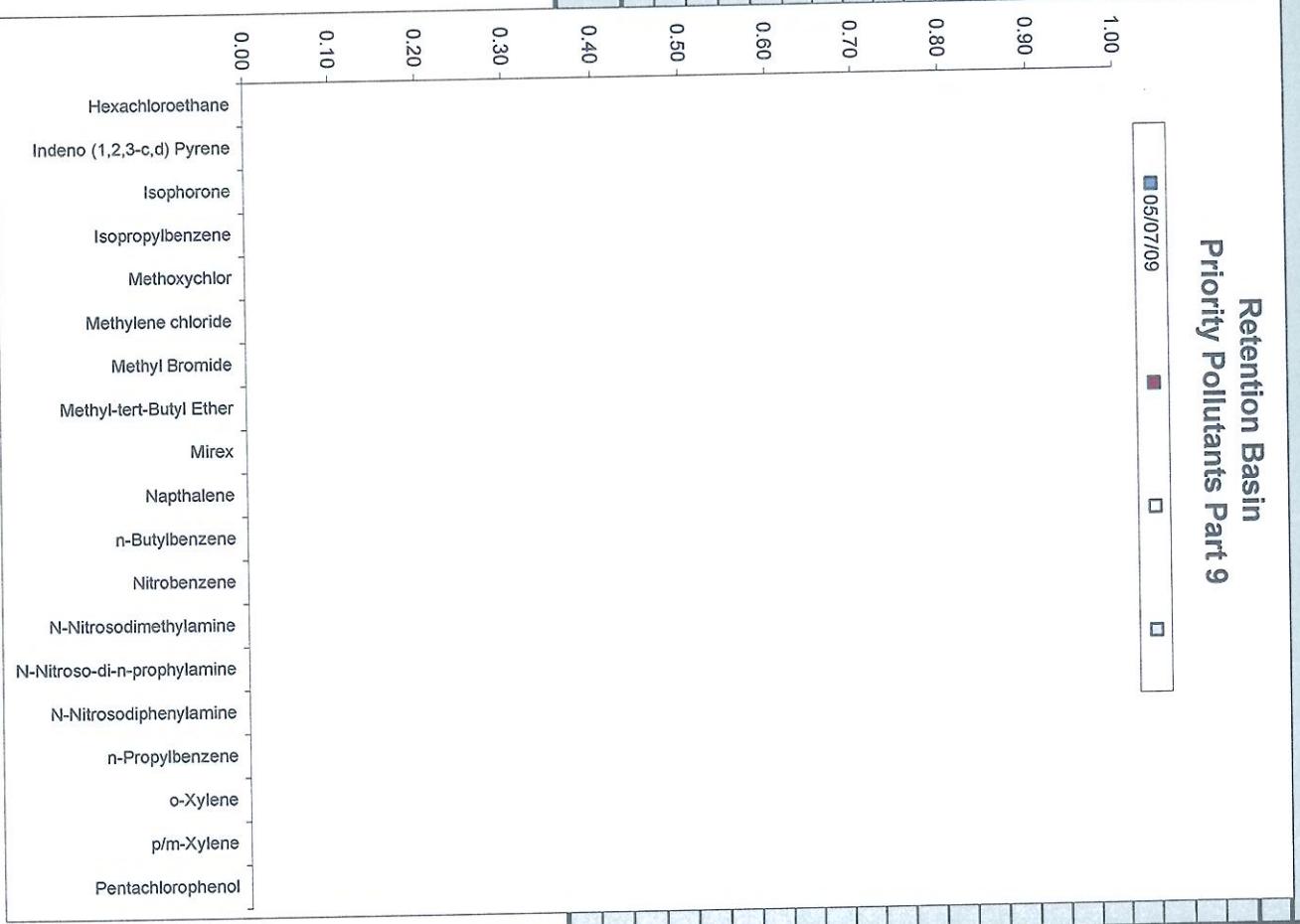
Retention Basin (Part 7)	05/07/09
Bromomethane	120.00
Butyl-Benzyl Phthalate	ND
c-1,2-Dichloroethane	ND
c-1,3-Dichloropropene	ND
Carbon disulfide	ND
Carbon Tetrachloride	ND
Chlorodane	ND
Chlorodane-alpha	ND
Chlorodane-gamma	ND
Chloroethane	ND
Chloroform	8.30
Chloromethane	ND
Chlorobenzene	ND
Chrysene-	ND
Delta-BHC	ND
Dibenz (a,h) Anthracene	ND
Dibenzofuran	14.00
Dibromochloromethane	100.00
Dibromomethane	80.00
Dichlorobromomethane	60.00
Dichlorodifluoromethane	120.00



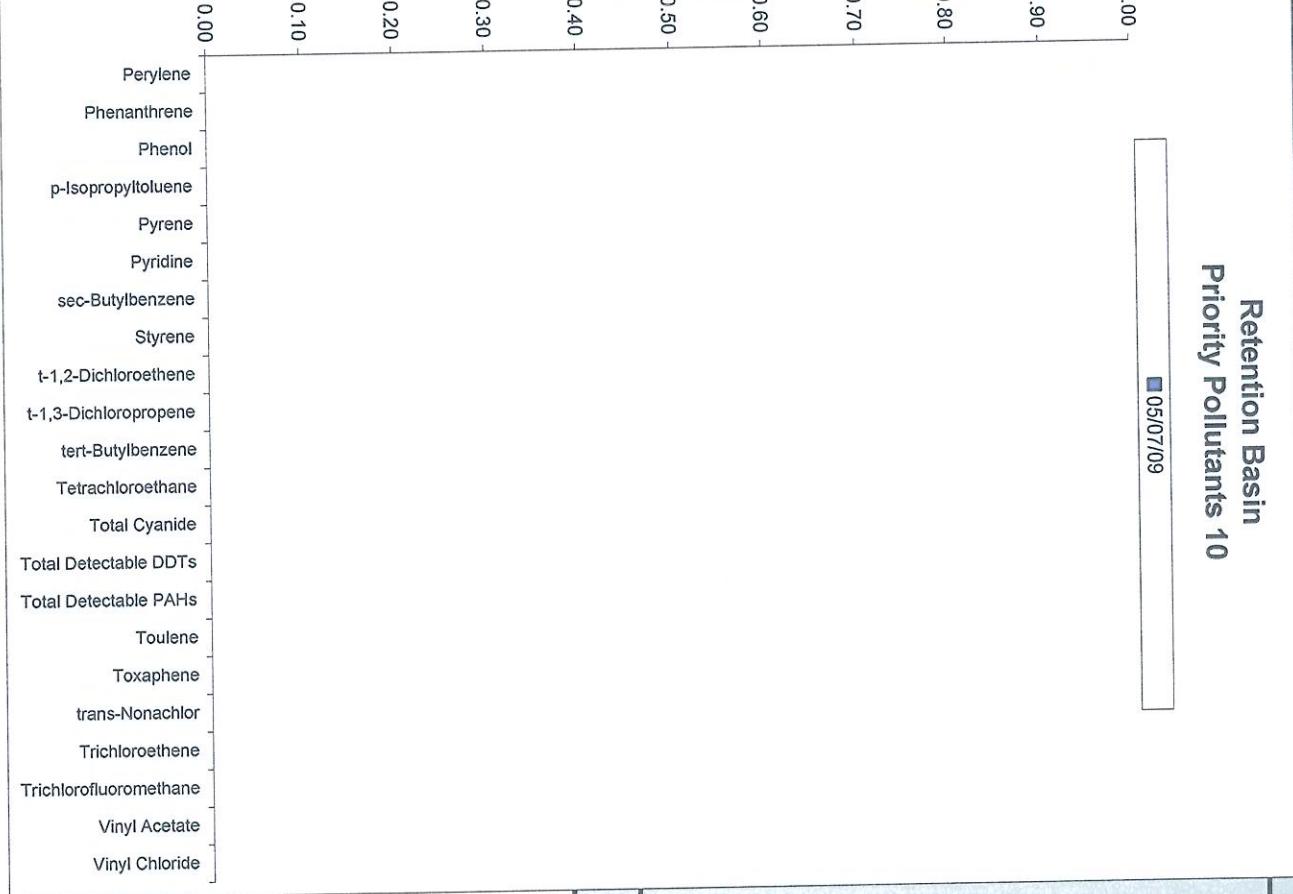
El Segundo Power, LLC
ANNUAL REPORT
2009



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ANNUAL REPORT
2009



Retention Basin (Part 10)	05/07/09		
Perylene			
Phenanthrene			
Phenol	ND		
p-Isopropyltoluene			
Pyrene	ND		
Pyridine			
sec-Butylbenzene			
Styrene			
t-1,2-Dichloroethene			
t-1,3-Dichloropropene	ND		
tert-Butylbenzene	ND		
Tetrachloroethane	ND		
Total Cyanide			
Total Detectable DDTs			
Total Detectable PAHs			
Toulene	ND		
Toxaphene	ND		
trans-Nonachlor			
Trichloroethene	ND		
Trichlorofluoromethane	ND		
Vinyl Acetate			
Vinyl Chloride	ND		



EL SEGUNDO POWER, LLC

ANNUAL CHEMICAL CONSUMPTION REPORT - 2009



Affiliated with Edison Energy Resources, Inc., Edison, NY - Company

ANALYTICAL REPORT

Laboratory Name: Power Production Chemical
Address: 7301 Fenwick Lane, 2nd Floor
Westminster, CA 92683-5202

Telephone: (714) 895-0525
Facsimile: (714) 895-0515

Laboratory Certification (ELAP) No.: 1949 Expires 11/30/11

Laboratory Director's Name: Shawn S. Simmons

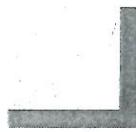
Laboratory Director's Signature:

Shawn S. Simmons 2/3/10
Date

CLIENT: NRG El Segundo Operations, LLC
ADDRESS: 301 Vista Del Mar
El Segundo, CA 90245

DATE(S) SAMPLED: January-10
DATE(S) RECEIVED: January-10

Chain of Custody(ies) Received: Yes



EDISON EST

ANALYTICAL SERVICES / FIELD & LABORATORY

ANALYTICAL REPORT

Cover Page 2

Jan-10		
<u>Inorganic Analyses</u>	<u># of Samples</u>	<u># of Samples Subcontracted</u>
Chlorine - Free Residual, in field	16	0
Chlorine - Total Residual, in field	16	0
Hydrogen Ion (pH)	13	0
Oil and Grease	2	0
Oil and Grease Spike	1	0
Total Suspended Solids (TSS)	2	0
Total Iron	4	0

Organic Analyses

UNITS 1 AND 2 OUTFALL CHLORINE RESIDUAL SAMPLE NUMBER	ANALYSIS DATE	PARAMETER		RL (mg/L)	Free Chlorine (mg/L)	Total Chlorine (mg/L)
NaOCl Tank Empty						

UNITS 1 AND 2 OUTFALL ELECTROMETRIC pH SAMPLE NUMBER	ANALYSIS DATE	PARAMETER	METHOD	RL (pH unit)	RESULT (pH at t°C)
EL-100104-001-pH-1	01/04/10	Electrometric pH	SM 4500-H ⁺ B	0.01	7.46 at 19°C
EL-100104-001-pH-2	01/04/10	Electrometric pH	SM 4500-H ⁺ B	0.01	7.41 at 17°C
EL-100111-001-pH	01/11/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.10 at 16°C
EL-100118-001-pH	01/18/10	Electrometric pH	SM 4500-H ⁺ B	0.01	7.72 at 16°C
EL-100125-001-pH	01/25/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.37 at 16°C

UNITS 3 AND 4 CHLORINE RESIDUAL SAMPLE NUMBER	ANALYSIS DATE	PARAMETER	METHOD	RL (mg/L)	Free Chlorine (mg/L)	Total Chlorine (mg/L)
EL-100104-002-Cl	01/04/10	Chlorine Residual	SM 4500-Cl G	0.03	0.12	0.15
EL-100106-002-Cl	01/06/10	Chlorine Residual	SM 4500-Cl G	0.03	0.07	0.09
EL-100108-002-Cl	01/08/10	Chlorine Residual	SM 4500-Cl G	0.03	0.03	0.05
EL-100111-002-Cl	01/11/10	Chlorine Residual	SM 4500-Cl G	0.03	0.06	0.08
EL-100113-002-Cl	01/13/10	Chlorine Residual	SM 4500-Cl G	0.03	0.12	0.14
EL-100115-002-Cl	01/15/10	Chlorine Residual	SM 4500-Cl G	0.03	0.12	0.13
EL-100118-002-Cl-1	01/18/10	Chlorine Residual	SM 4500-Cl G	0.03	0.18	0.20
EL-100118-002-Cl-2	01/18/10	Chlorine Residual	SM 4500-Cl G	0.03	0.18	0.20
EL-100120-002-Cl	01/20/10	Chlorine Residual	SM 4500-Cl G	0.03	0.15	0.19
EL-100122-002-Cl	01/22/10	Chlorine Residual	SM 4500-Cl G	0.03	0.11	0.13
EL-100125-002-Cl-1	01/25/10	Chlorine Residual	SM 4500-Cl G	0.03	0.16	0.19
EL-100125-002-Cl-2	01/25/10	Chlorine Residual	SM 4500-Cl G	0.03	0.17	0.20
EL-100127-002-Cl-1	01/27/10	Chlorine Residual	SM 4500-Cl G	0.03	0.19	0.20
EL-100127-002-Cl-2	01/27/10	Chlorine Residual	SM 4500-Cl G	0.03	0.18	0.20
EL-100129-002-Cl-1	01/29/10	Chlorine Residual	SM 4500-Cl G	0.03	0.18	0.20
EL-100129-002-Cl-2	01/29/10	Chlorine Residual	SM 4500-Cl G	0.03	0.18	0.20

UNITS 3 AND 4 OUTFALL ELECTROMETRIC pH SAMPLE NUMBER	ANALYSIS DATE	PARAMETER	METHOD	RL (pH unit)	RESULT (pH at t°C)
EL-100104-002-pH	01/04/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.13 at 18°C
EL-100106-002-pH	01/06/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.06 at 19°C
EL-100111-002-pH	01/11/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.18 at 17°C
EL-100118-002-pH	01/18/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.24 at 20°C
EL-100125-002-pH	01/25/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.49 at 19°C

RETENTION BASIN ELECTROMETRIC PH SAMPLE NUMBER	ANALYSIS DATE	PARAMETER	METHOD	RL (pH unit)	RESULT (pH at t°C)
EL-100104-RB-pH	01/04/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.41 at 18°C
EL-100106-RB-pH	01/06/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.06 at 19°C
EL-100125-RB-pH	01/25/10	Electrometric pH	SM 4500-H ⁺ B	0.01	8.65 at 16°C

SUSPENDED SOLIDS SAMPLE NUMBER	ANALYSIS DATE	PARAMETER	METHOD	MDL (mg/L)	RESULT (mg/L)
EL-100106-RB-TSS-1	01/12/10	Total Susp. Solids	SM 2540 D	1.0	3.5
EL-100106-RB-TSS-2	01/12/10	Total Susp. Solids	SM 2540 D	1.0	5.1
Method Blank	01/12/10	Total Susp. Solids	SM 2540 D	1.0	ND

OIL AND GREASE SAMPLE NUMBER	ANALYSIS DATE	PARAMETER	METHOD	MDL (mg/L)	RESULT (mg/L)
EL-100106-RB-OG-2	01/07/10	Oil and Grease	EPA 1664A LLE	1.5	2.8
EL-100106-RB-OG-3	01/07/10	Oil and Grease	EPA 1664A LLE	1.5	2.2
Method Blank	01/07/10	Oil and Grease	EPA 1664A LLE	1.4	ND

Matrix Spike						
Analyte	Date Analyzed	Sample Spiked	Spike Conc. (mg/L)	MS (mg/L)	MS Recovery	Accept. Range
Oil and Grease	01/07/10	EL-100106-RB-OG-1	40.0	36.6	91%	78-114%



EDISON ESI™

A SOUTHERN CALIFORNIA EDISON® Company

POWER PRODUCTION CHEMICAL
7301 Fenwick Lane, 2nd floor, Westminster, CA 92683
Phone: (714) 895-0525; Fax: (714) 895-0515

SAMPLE ANALYSIS MEMORANDUM TO:

Power Production Chemical
7301 Fenwick Lane, 2nd Floor
Westminster, CA 92683

Sample(s) are submitted for treatment/disposition as described below.

Sampler:

Tuan Anh Nguyen	Date: 01-06-2010	
Print Name	Time: 9:00	Signature

Chain of Custody:

RElinquished By	Date:	Received By	Date:
	Time:		Time:
RElinquished By	Date:	Received By	Date:
	Time:		Time:



12 January 2010

Ric Vardel
Integrated Performance Consultants, Inc.
P.O. Box 4362
Mission Viejo, CA 92690

RE:ESGS

Work Order No.: 1001074

Attached are the results of the analyses for samples received by the laboratory on 01/07/10 12:50.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report.
If you require any additional retaining time, please advise us.

Sincerely,

A handwritten signature in black ink that reads "Richard K. Forsyth".

Richard K. Forsyth

Richard K. Forsyth

Laboratory Director

Sierra Analytical Labs, Inc. is certified by the California Department of Health Services (DOHS),
Environmental Laboratory Accreditation Program (ELAP) No. 2320.



Integrated Performance Consultants, Inc.
P.O. Box 4362
Mission Viejo CA, 92690

Project: ESGS
Project Number: NA
Project Manager: Ric Vardel

Reported:
01/12/10 14:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1- WTP2 Effluent	1001074-01	Liquid	01/07/10 07:30	01/07/10 12:50
2- WTP2 Effluent Dup	1001074-02	Liquid	01/07/10 07:30	01/07/10 12:50
1A- Intake 1+2	1001074-03	Liquid	01/07/10 07:30	01/07/10 12:50
1B- Outfall 1+2	1001074-04	Liquid	01/07/10 07:30	01/07/10 12:50
2A- Intake 3+4	1001074-05	Liquid	01/07/10 07:30	01/07/10 12:50
2B- Outfall 3+4	1001074-06	Liquid	01/07/10 07:30	01/07/10 12:50

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 4°C, and accompanied by chain of custody documentation.
PRESERVATION: Samples requiring preservation were verified prior to sample preparation and analysis.
HOLDING TIMES: All holding times were met, unless otherwise noted in the report with data qualifiers.
QA/QC CRITERIA: All quality objective criteria were met, except as noted in the report with data qualifiers.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Integrated Performance Consultants, Inc.
P.O. Box 4362
Mission Viejo CA, 92690

Project: ESGS
Project Number: NA
Project Manager: Ric Vardel

Reported:
01/12/10 14:59

Microbiological Parameters by APHA Standard Methods
Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1- WTP2 Effluent (1001074-01) Liquid Sampled: 01/07/10 07:30 Received: 01/07/10 12:50									
Enterococcus	<2.0	2.0	MPN/100 mL	1	B0A0723	01/07/10	01/07/10 13:00	SM 9230B	
Fecal Coliforms	<2.0	2.0	"	"	"	"	"	SM 9221E	
Total Coliforms	11	2.0	"	"	"	"	"	SM 9221B	
1A- Intake 1+2 (1001074-03) Liquid Sampled: 01/07/10 07:30 Received: 01/07/10 12:50									
Enterococcus	30	2.0	MPN/100 mL	1	B0A0723	01/07/10	01/07/10 13:00	SM 9230B	
Fecal Coliforms	<2.0	2.0	"	"	"	"	"	SM 9221E	
Total Coliforms	4.0	2.0	"	"	"	"	"	SM 9221B	
1B- Outfall 1+2 (1001074-04) Liquid Sampled: 01/07/10 07:30 Received: 01/07/10 12:50									
Enterococcus	4.0	2.0	MPN/100 mL	1	B0A0723	01/07/10	01/07/10 13:00	SM 9230B	
Fecal Coliforms	<2.0	2.0	"	"	"	"	"	SM 9221E	
Total Coliforms	13	2.0	"	"	"	"	"	SM 9221B	
2A- Intake 3+4 (1001074-05) Liquid Sampled: 01/07/10 07:30 Received: 01/07/10 12:50									
Enterococcus	<2.0	2.0	MPN/100 mL	1	B0A0723	01/07/10	01/07/10 13:00	SM 9230B	
Fecal Coliforms	<2.0	2.0	"	"	"	"	"	SM 9221E	
Total Coliforms	<2.0	2.0	"	"	"	"	"	SM 9221B	
2B- Outfall 3+4 (1001074-06) Liquid Sampled: 01/07/10 07:30 Received: 01/07/10 12:50									
Enterococcus	<2.0	2.0	MPN/100 mL	1	B0A0723	01/07/10	01/07/10 13:00	SM 9230B	
Fecal Coliforms	<2.0	2.0	"	"	"	"	"	SM 9221E	
Total Coliforms	30	2.0	"	"	"	"	"	SM 9221B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Integrated Performance Consultants, Inc.
P.O. Box 4362
Mission Viejo CA, 92690

Project: ESGS
Project Number: NA
Project Manager: Ric Vardel

Reported:
01/12/10 14:59

Conventional Chemistry Parameters by APHA/EPA Methods
Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1- WTP2 Effluent (1001074-01) Liquid Sampled: 01/07/10 07:30 Received: 01/07/10 12:50									
Biochemical Oxygen Demand	21.4	2.00	mg/L	1	B0A1210	01/07/10	01/12/10 13:30	EPA 405.1	
Oil & Grease	1.60	1.00	"	"	"	"	01/07/10 13:30	EPA 413.1	
Total Settleable Solids	ND	0.100	mL/L	"	"	"	"	EPA 160.5	
Total Suspended Solids	18.0	1.00	mg/L	"	"	"	"	EPA 160.2	
2- WTP2 Effluent Dup (1001074-02) Liquid Sampled: 01/07/10 07:30 Received: 01/07/10 12:50									
Biochemical Oxygen Demand	19.9	2.00	mg/L	1	B0A1210	01/07/10	01/12/10 13:30	EPA 405.1	
Oil & Grease	1.40	1.00	"	"	"	"	01/07/10 13:30	EPA 413.1	
Total Suspended Solids	17.0	1.00	"	"	"	"	"	EPA 160.2	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

CHRONIC KELP GERMINATION & GROWTH BIOASSAY

DATE: 30 December- 09

STANDARD TOXICANT: Copper Chloride

ENDPOINT: GERMINATION

NOEC = 32.00 ug/l

IC25 = 68.98 ug/l

IC50 = 111.75 ug/l

ENDPOINT: GROWTH-LENGTH

NOEC = 32.00 ug/l

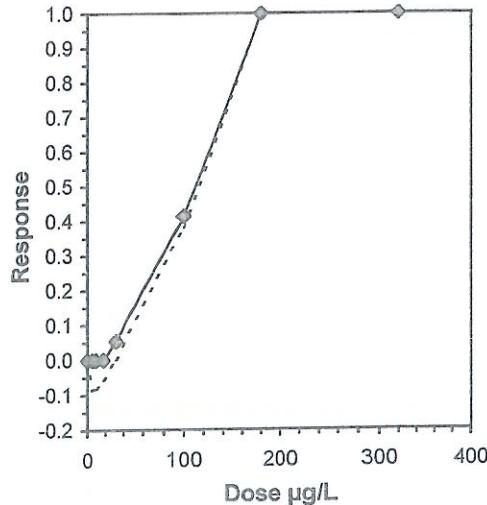
IC25 = 100.78 ug/l

IC50 = 127.19 ug/l

Yours very truly,

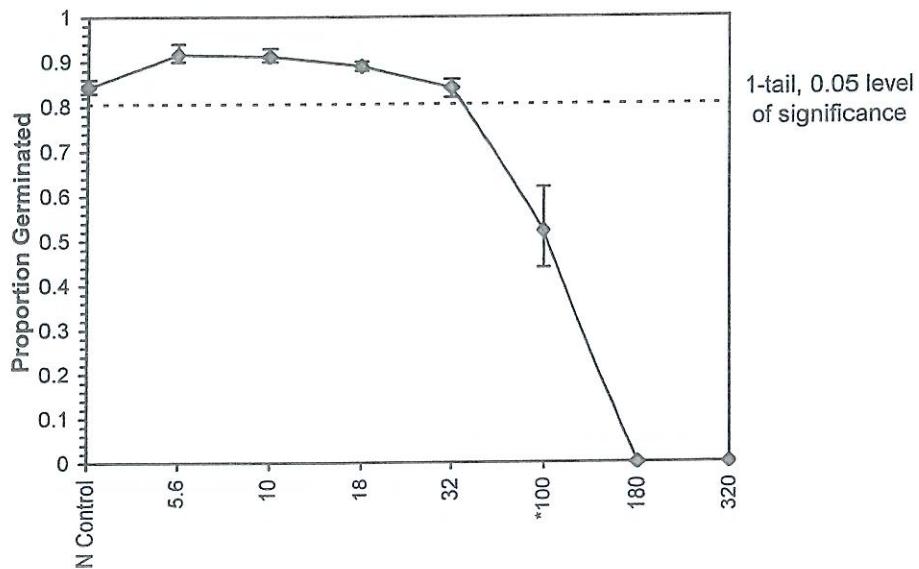

Thomas (Tim) Mikel
Laboratory Director

Macrocytis Germination and Growth Test-Proportion Germinated												
Start Date:	12/30/2009	Test ID:	KLP123009		Sample ID:	CA0000000						
End Date:	1/1/2010	Lab ID:	CAABC		Sample Type:	CUCL-Copper chloride						
Sample Date:	12/29/2009	Protocol:	EPA600/R95/136 1995				Test Species:	MP-Macrocytis pyrifera				
Comments:	Standard Toxicant											
Conc- μ g/L	1	2	3	4	5							
N Control	0.8400	0.8300	0.8600	0.8300	0.8600							
5.6	0.9400	0.9000	0.9100	0.9100	0.9200							
10	0.9200	0.9300	0.9000	0.9100	0.9000							
18	0.8900	0.8800	0.8900	0.9000	0.8900							
32	0.8600	0.8200	0.8400	0.8600	0.8300							
100	0.6200	0.5300	0.4800	0.4400	0.5400							
180	0.0000	0.0000	0.0000	0.0000	0.0000							
320	0.0000	0.0000	0.0000	0.0000	0.0000							
Transform: Arcsin Square Root												
Conc- μ g/L	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	1-Tailed Critical	MSD	Isotonic Mean	Isotonic N-Mean
N Control	0.8440	1.0000	1.1651	1.1458	1.1873	1.802	5				0.8907	1.0000
5.6	0.9160	1.0853	1.2777	1.2490	1.3233	2.218	5	-5.139	2.360	0.0517	0.8907	1.0000
10	0.9120	1.0806	1.2703	1.2490	1.3030	1.838	5	-4.798	2.360	0.0517	0.8907	1.0000
18	0.8900	1.0545	1.2329	1.2171	1.2490	0.918	5	-3.092	2.360	0.0517	0.8900	0.9993
32	0.8420	0.9976	1.1625	1.1326	1.1873	2.112	5	0.120	2.360	0.0517	0.8420	0.9454
*100	0.5220	0.6185	0.8076	0.7253	0.9066	8.475	5	16.311	2.360	0.0517	0.5220	0.5861
180	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	5				0.0000	0.0000
320	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	5				0.0000	0.0000
Auxiliary Tests					Statistic	Critical		Skew	Kurt			
Shapiro-Wilk's Test indicates normal distribution ($p > 0.01$)					0.94171	0.9		0.51364	3.29421			
Bartlett's Test indicates equal variances ($p = 0.02$)					13.7094	15.0863						
Hypothesis Test (1-tail, 0.05)		NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df	
Dunnett's Test		32	100	56.5685		0.03928	0.04653	0.15521	0.0012	1.5E-16	5, 24	
Treatments vs N Control												
Linear Interpolation (200 Resamples)												
Point	μ g/L	SD	95% CL(Exp)		Skew							
IC05	30.79	1.81	25.67	35.75	0.1019							
IC10	40.59	1.66	35.15	45.91	0.0786							
IC15	50.05	2.09	44.44	56.36	0.3163							
IC20	59.51	2.77	52.47	68.42	0.4240							
IC25	68.98	3.55	60.45	80.24	0.4585							
IC40	97.37	4.96	82.56	109.99	-0.1706							
IC50	111.75	3.78	99.56	121.35	-0.3021							



Macrocystis Germination and Growth Test-Proportion Germinated			
Start Date:	12/30/2009	Test ID:	KLP123009
End Date:	1/1/2010	Lab ID:	CAABC
Sample Date:	12/29/2009	Protocol:	EPA600/R95/136 1995
Comments:	Standard Toxicant	Sample ID:	CA0000000
		Sample Type:	CUCL-Copper chloride
		Test Species:	MP-Macrocytis pyrifera

Dose-Response Plot



Macrocystis Germination and Growth Test-Growth-Length									
Start Date:	12/30/2009	Test ID:	KLP123009	Sample ID:	CA0000000				
End Date:	1/1/2010	Lab ID:	CAABC	Sample Type:	CUCL-Copper chloride				
Sample Date:	12/29/2009	Protocol:	EPA600/R95/136 1995	Test Species:	MP-Macrocytis pyrifera				
Comments:	Standard Toxicant								

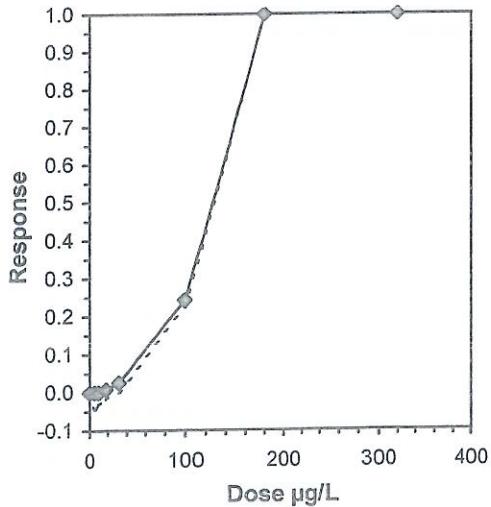
Conc- μ g/L	1	2	3	4	5
N Control	15.000	16.300	15.800	15.800	16.200
5.6	16.500	16.300	16.200	16.600	16.900
10	16.000	16.300	16.700	16.600	16.000
18	15.900	16.600	15.500	15.600	16.800
32	16.100	15.000	16.500	15.700	15.700
100	12.200	11.900	12.000	12.900	12.400
180	0.000	0.000	0.000	0.000	0.000
320	0.000	0.000	0.000	0.000	0.000

Conc- μ g/L	Transform: Untransformed						t-Stat	1-Tailed Critical	Isotonic			
	Mean	N-Mean	Mean	Min	Max	CV%			Mean	N-Mean		
N Control	15.820	1.0000	15.820	15.000	16.300	3.236	5	-2.348	2.360	0.683	16.213	1.0000
5.6	16.500	1.0430	16.500	16.200	16.900	1.660	5	-1.727	2.360	0.683	16.213	1.0000
10	16.320	1.0316	16.320	16.000	16.700	2.004	5	-0.898	2.360	0.683	16.080	0.9918
18	16.080	1.0164	16.080	15.500	16.800	3.663	5	0.069	2.360	0.683	15.800	0.9745
32	15.800	0.9987	15.800	15.000	16.500	3.524	5	12.224	2.360	0.683	12.280	0.7574
*100	12.280	0.7762	12.280	11.900	12.900	3.227	5				0.000	0.0000
180	0.000	0.0000	0.000	0.000	0.000	0.000	5				0.000	0.0000
320	0.000	0.0000	0.000	0.000	0.000	0.000	5					

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution ($p > 0.01$)	0.96917	0.9	-0.0632	-0.5877
Bartlett's Test indicates equal variances ($p = 0.67$)	3.18006	15.0863		
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Dunnett's Test	32	100	56.5685	
				MSDu
				MSDp
				MSB
				MSE
				F-Prob
				df

Treatments vs N Control

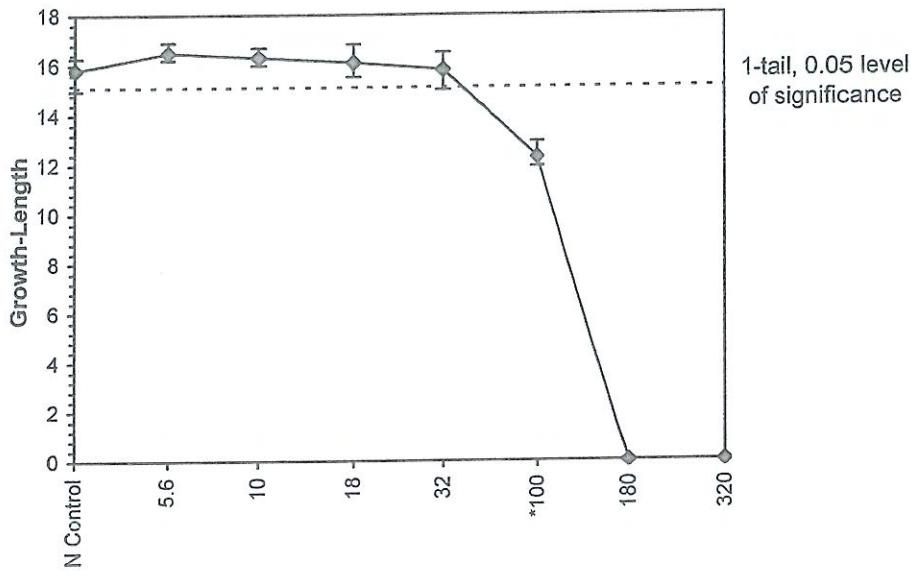
Linear Interpolation (200 Resamples)				
Point	μ g/L	SD	95% CL(Exp)	Skew
IC05	39.68	3.97	24.07	47.93 -0.4704
IC10	55.34	3.18	43.74	61.78 -0.3116
IC15	71.00	2.74	61.74	77.47 0.1212
IC20	86.66	2.81	78.78	94.04 0.5627
IC25	100.78	1.61	94.42	103.46 -1.0103
IC40	116.63	0.85	114.09	118.77 0.2743
IC50	127.19	0.71	125.08	128.97 0.2743



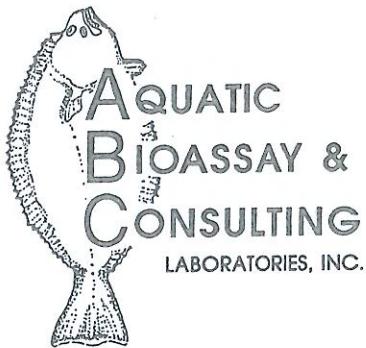
Macrocystis Germination and Growth Test-Growth-Length

Start Date: 12/30/2009 Test ID: KLP123009 Sample ID: CA0000000
End Date: 1/1/2010 Lab ID: CAABC Sample Type: CUCL-Copper chloride
Sample Date: 12/29/2009 Protocol: EPA600/R95/136 1995 Test Species: MP-Macrocystis pyrifera
Comments: Standard Toxicant

Dose-Response Plot



Macrocystis Germination and Growth Test-Growth-Length						
Start Date:	12/30/2009	Test ID:	KLP123009	Sample ID:	CA0000000	
End Date:	1/1/2010	Lab ID:	CAABC	Sample Type:	CUCL-Copper chloride	
Sample Date:	12/29/2009	Protocol:	EPA600/R95/136 1995	Test Species:	MP-Macrocytis pyrifera	
Comments:	Standard Toxicant					
Auxiliary Data Summary						
Conc- μ g/L	Parameter	Mean	Min	Max	SD	CV%
N Control	Temp C	14.95	14.90	15.00	0.07	1.78
5.6		15.00	14.90	15.10	0.14	2.51
10		15.00	14.90	15.10	0.14	2.51
18		15.00	14.90	15.10	0.14	2.51
32		14.95	14.90	15.00	0.07	1.78
100		14.95	14.90	15.00	0.07	1.78
180		14.95	14.90	15.00	0.07	1.78
320		14.95	14.90	15.00	0.07	1.78
N Control	pH	7.90	7.90	7.90	0.00	0.00
5.6		7.90	7.90	7.90	0.00	0.00
10		7.90	7.90	7.90	0.00	0.00
18		7.90	7.90	7.90	0.00	0.00
32		7.90	7.90	7.90	0.00	0.00
100		7.90	7.90	7.90	0.00	0.00
180		7.90	7.90	7.90	0.00	0.00
320		7.90	7.90	7.90	0.00	0.00
N Control	DO mg/L	6.15	5.80	6.50	0.49	11.44
5.6		6.15	5.70	6.60	0.64	12.97
10		6.20	5.70	6.70	0.71	13.56
18		6.25	5.80	6.70	0.64	12.76
32		6.35	5.90	6.80	0.64	12.56
100		6.30	5.80	6.80	0.71	13.35
180		6.20	5.50	6.90	0.99	16.05
320		6.25	5.60	6.90	0.92	15.34
N Control	Salinity ppt	34.00	34.00	34.00	0.00	0.00
5.6		34.00	34.00	34.00	0.00	0.00
10		34.00	34.00	34.00	0.00	0.00
18		34.00	34.00	34.00	0.00	0.00
32		34.00	34.00	34.00	0.00	0.00
100		34.00	34.00	34.00	0.00	0.00
180		34.00	34.00	34.00	0.00	0.00
320		34.00	34.00	34.00	0.00	0.00



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

CHRONIC KELP GERMINATION & GROWTH BIOASSAY

DATE: 7 January - 10

STANDARD TOXICANT: Copper Chloride

ENDPOINT: GERMINATION

NOEC = 100.00 ug/l

IC25 = 133.87 ug/l

IC50 = 174.84 ug/l

ENDPOINT: GROWTH-LENGTH

NOEC = 100.00 ug/l

IC25 = 181.76 ug/l

IC50 = 227.84 ug/l

Yours very truly,

Thomas (Tim) Mikel
Laboratory Director

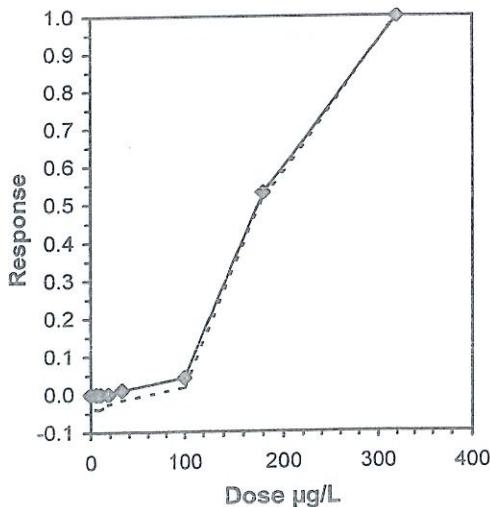
Macrocystis Germination and Growth Test-Proportion Germinated						
Start Date:	1/7/2010	Test ID: KLP010710		Sample ID:	CA0000000	
End Date:	1/9/2010	Lab ID: CAABC		Sample Type:	CUCL-Copper chloride	
Sample Date:	1/7/2010	Protocol: EPA600/R95/136 1995		Test Species:	MP-Macrocytis pyrifera	
Comments: Standard Toxicant						

Conc- μ g/L	1	2	3	4	5
N Control	0.9100	0.8800	0.8900	0.9000	0.9100
5.6	0.9500	0.9300	0.9400	0.9300	0.9200
10	0.9300	0.9400	0.9200	0.9400	0.9400
18	0.9200	0.9300	0.9300	0.9200	0.9100
32	0.9100	0.9200	0.9100	0.9100	0.9100
100	0.8700	0.9000	0.8900	0.8700	0.8800
180	0.4200	0.3800	0.5100	0.3900	0.4600
320	0.0000	0.0000	0.0000	0.0000	0.0000

Conc- μ g/L	Transform: Arcsin Square Root						t-Stat	1-Tailed Critical	Isotonic		
	Mean	N-Mean	Mean	Min	Max	CV%			Mean	N-Mean	
N Control	0.8980	1.0000	1.2462	1.2171	1.2661	1.717	5	-3.894	2.409	0.9220	1.0000
5.6	0.9340	1.0401	1.3117	1.2840	1.3453	1.779	5	-3.874	2.409	0.9220	1.0000
10	0.9340	1.0401	1.3114	1.2840	1.3233	1.346	5	-2.486	2.409	0.9220	1.0000
18	0.9220	1.0267	1.2880	1.2661	1.3030	1.204	5	-1.395	2.409	0.9220	1.0000
32	0.9120	1.0156	1.2697	1.2661	1.2840	0.632	5	1.525	2.409	0.9120	0.9892
100	0.8820	0.9822	1.2205	1.2019	1.2490	1.672	5	31.450	2.409	0.8820	0.9566
*180	0.4320	0.4811	0.7169	0.6642	0.7954	7.540	5			0.4320	0.4685
320	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	5			0.0000	0.0000

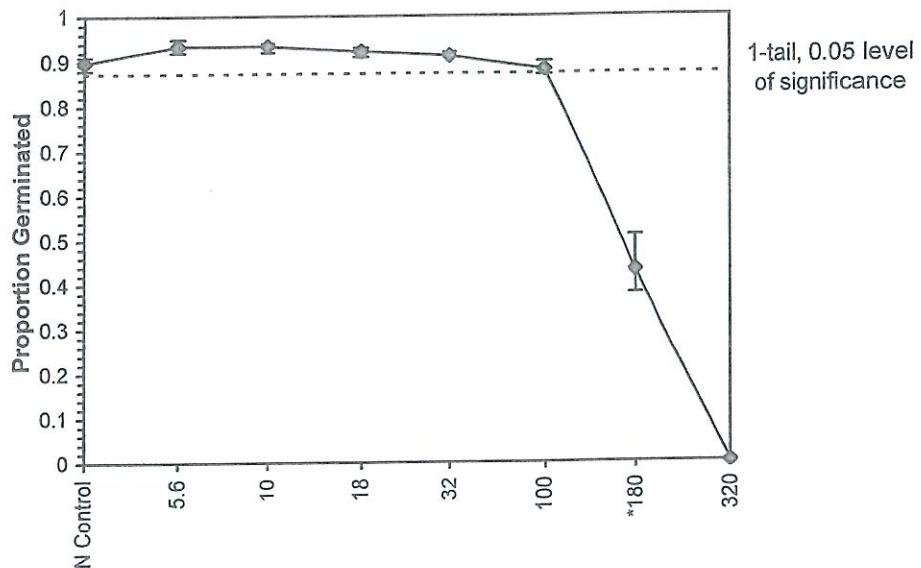
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution ($p > 0.01$)	0.95695	0.91	0.62592	2.33592
Bartlett's Test indicates equal variances ($p = 0.02$)	15.0157	16.8119		
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Dunnett's Test	100	180	134.164	
Treatments vs N Control				

Point	μ g/L	SD	95% CL(Exp)	Skew
IC05	101.08	2.75	86.84	103.75
IC10	109.28	0.97	106.61	112.10
IC15	117.48	1.12	114.12	120.84
IC20	125.67	1.38	121.66	129.69
IC25	133.87	1.70	129.41	138.83
IC40	158.45	2.80	151.52	167.38
IC50	174.84	3.80	166.05	187.89



Macrocystis Germination and Growth Test-Proportion Germinated			
Start Date:	1/7/2010	Test ID:	KLP010710
End Date:	1/9/2010	Lab ID:	CAABC
Sample Date:	1/7/2010	Protocol:	EPA600/R95/136 1995
Comments:	Standard Toxicant	Sample ID:	CA0000000
		Sample Type:	CUCL-Copper chloride
		Test Species:	MP-Macrocystis pyrifera

Dose-Response Plot



Macrocytis Germination and Growth Test-Growth-Length									
Start Date:	1/7/2010	Test ID:	KLP010710	Sample ID:	CA0000000	Protocol:	EPA600/R95/136 1995	Sample Type:	CUCL-Copper chloride
End Date:	1/9/2010	Lab ID:	CAABC	Test Species:	MP-Macrocytis pyrifera				
Sample Date:	1/7/2010								
Comments:	Standard Toxicant								

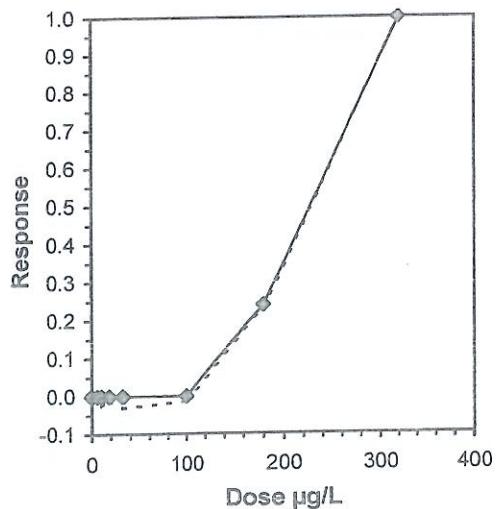
Conc- μ g/L	1	2	3	4	5
N Control	15.500	16.200	16.500	16.500	15.200
5.6	15.200	16.400	16.700	15.900	15.900
10	16.500	16.300	16.500	16.800	15.800
18	16.500	16.100	16.300	15.500	16.100
32	16.700	16.700	16.800	16.100	16.100
100	16.200	15.100	16.400	16.600	16.700
180	12.500	12.500	12.100	12.600	11.800
320	0.000	0.000	0.000	0.000	0.000

Conc- μ g/L	Transform: Untransformed						t-Stat	1-Tailed Critical	Isotonic	
	Mean	N-Mean	Mean	Min	Max	CV%			Mean	N-Mean
N Control	15.980	1.0000	15.980	15.200	16.500	3.739	5	-0.132	2.409	0.731
5.6	16.020	1.0025	16.020	15.200	16.700	3.570	5	-1.318	2.409	0.731
10	16.380	1.0250	16.380	15.800	16.800	2.260	5	-0.395	2.409	0.731
18	16.100	1.0075	16.100	15.500	16.500	2.324	5	-1.647	2.409	0.731
32	16.480	1.0313	16.480	16.100	16.800	2.119	5	-0.725	2.409	0.731
100	16.200	1.0138	16.200	15.100	16.700	3.977	5	12.121	2.409	0.731
*180	12.300	0.7697	12.300	11.800	12.600	2.757	5			12.300
320	0.000	0.0000	0.000	0.000	0.000	0.000	5			0.000

Auxiliary Tests				Statistic	Critical	Skew	Kurt			
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)				0.93469	0.91	-0.7625	-0.1201			
Bartlett's Test indicates equal variances (p = 0.74)				3.55369	16.8119					
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	100	180	134.164		0.73124	0.04576	10.995	0.23043	2.0E-13	6, 28

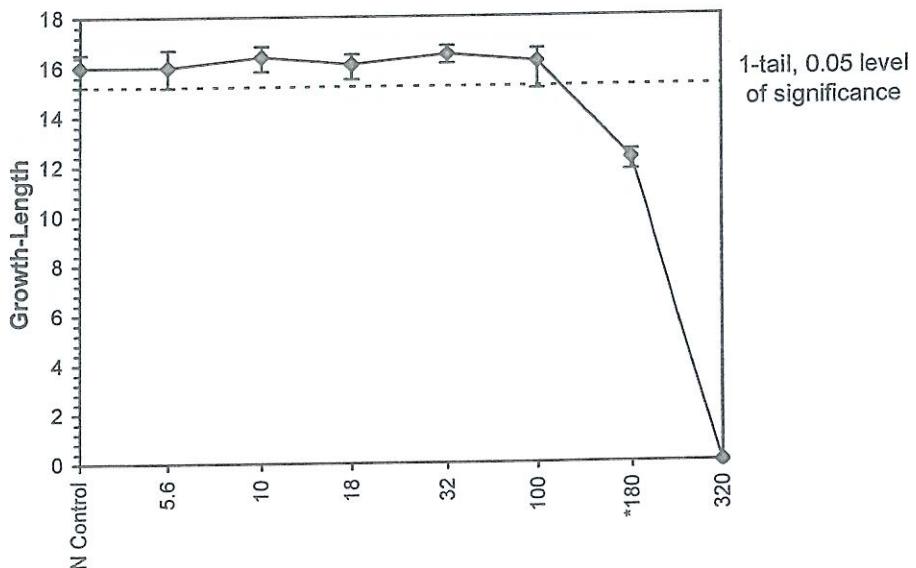
Treatments vs N Control

Linear Interpolation (200 Resamples)					
Point	μ g/L	SD	95% CL(Exp)	Skew	
IC05	116.64	4.86	97.13	118.13	-4.5219
IC10	133.27	3.29	116.77	136.26	-2.0706
IC15	149.91	2.96	137.22	154.50	-1.3363
IC20	166.55	3.02	155.34	173.00	-0.6041
IC25	181.76	2.18	172.61	185.67	-1.0418
IC40	209.41	1.43	204.23	212.54	-0.4133
IC50	227.84	1.19	223.53	230.45	-0.4133



Macrocystis Germination and Growth Test-Growth-Length			
Start Date:	1/7/2010	Test ID:	KLP010710
End Date:	1/9/2010	Lab ID:	CAABC
Sample Date:	1/7/2010	Protocol:	EPA600/R95/136 1995
Comments:	Standard Toxicant	Sample ID:	CA0000000
		Sample Type:	CUCL-Copper chloride
		Test Species:	MP-Macrocytis pyrifera

Dose-Response Plot

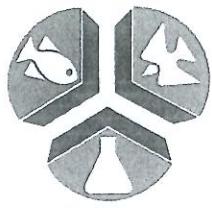


Macrocystis Germination and Growth Test-Growth-Length

Start Date:	1/7/2010	Test ID:	KLP010710	Sample ID:	CA0000000
End Date:	1/9/2010	Lab ID:	CAABC	Sample Type:	CUCL-Copper chloride
Sample Date:	1/7/2010	Protocol:	EPA600/R95/136 1995	Test Species:	MP-Macrocytis pyrifera
Comments:	Standard Toxicant				

Auxiliary Data Summary

Conc.- μ g/L	Parameter	Mean	Min	Max	SD	CV%	N
N Control 5.6 10 18 32 100 180 320	Temp C	14.90	14.80	15.00	0.14	2.52	2
		14.80	14.80	14.80	0.00	0.00	2
		14.80	14.80	14.80	0.00	0.00	2
		14.80	14.80	14.80	0.00	0.00	2
		14.85	14.80	14.90	0.07	1.79	2
		14.85	14.80	14.90	0.07	1.79	2
		14.90	14.90	14.90	0.00	0.00	2
		14.85	14.80	14.90	0.07	1.79	2
N Control 5.6 10 18 32 100 180 320	pH	7.90	7.90	7.90	0.00	0.00	2
		7.90	7.90	7.90	0.00	0.00	2
		7.90	7.90	7.90	0.00	0.00	2
		7.90	7.90	7.90	0.00	0.00	2
		7.90	7.90	7.90	0.00	0.00	2
		7.90	7.90	7.90	0.00	0.00	2
		7.90	7.90	7.90	0.00	0.00	2
		7.90	7.90	7.90	0.00	0.00	2
N Control 5.6 10 18 32 100 180 320	DO mg/L	6.65	6.50	6.80	0.21	6.93	2
		6.65	6.30	7.00	0.49	10.58	2
		6.40	5.90	6.90	0.71	13.14	2
		6.30	5.80	6.80	0.71	13.35	2
		6.15	5.70	6.60	0.64	12.97	2
		6.15	5.60	6.70	0.78	14.34	2
		6.15	5.60	6.70	0.78	14.34	2
		6.15	5.70	6.60	0.64	12.97	2
N Control 5.6 10 18 32 100 180 320	Salinity ppt	34.00	34.00	34.00	0.00	0.00	2
		34.00	34.00	34.00	0.00	0.00	2
		34.00	34.00	34.00	0.00	0.00	2
		34.00	34.00	34.00	0.00	0.00	2
		34.00	34.00	34.00	0.00	0.00	2
		34.00	34.00	34.00	0.00	0.00	2
		34.00	34.00	34.00	0.00	0.00	2
		34.00	34.00	34.00	0.00	0.00	2



MBC

SHORT-TERM CHRONIC TOXICITY TESTING
EPA/600/R-95/136

Giant Kelp (*Macrocystis pyrifera*)

Prepared For:

NRG El Segundo
Generating Station

NPDES Permit #:

CA0001147

Sample Identification:

Discharge 1&2, Intake 3&4

MBC Sample Number:

10-095, 10-096

Sample Collection Date:

1/7/2010

Prepared By:

MBC Applied Environmental Sciences
3000 Redhill Avenue
Costa Mesa, California 92626

LETTER	1
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LETTER

18 January 2010



Alexander Sanchez
El Segundo Generating Station
301 Vista del Mar
El Segundo, CA 90245

Dear Alexander:

The following are the results of the chronic toxicity testing for NRG El Segundo Generating Station (ESGS). Test procedures for the chronic toxicity testing *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, EPA/600/R-95/136, giant kelp (*Macrocystis pyrifera*) was used as the test organism. Samples were collected on 1/7/2010.

MBC Sample #: 10-095

Client Identification: Discharge 1 & 2 (ESGS)

CONCENTRATION	SURVIVAL	GERM-TUBE LENGTH ^{GTL}
Control ¹ - Lab Water	90%	12.8
6.25%	91%	12.9
12.5%	89%	13.1
25%	90%	14.1
50%	88%	13.0
100%	89%	13.2

NOEC² = 100%
LOEC³ > 100%
TU_c⁴ = 1
PMSD⁵ = 5.46%
CV⁶ = 1.48%

NOEC² = 100%
LOEC³ > 100%
TU_c⁴ = 1
PMSD⁵ = 8.16%
CV⁶ = 3.58%
IC₂₅⁷ > 100%

MBC Sample #: 10-096

Client Identification: Intake 3 & 4 (ESGS)

CONCENTRATION	SURVIVAL	GERM-TUBE LENGTH ^{GTL}
Control ¹ - Lab Water	93%	13.3
6.25%	91%	13.5
12.5%	90%	13.5
25%	90%	12.8
50%	90%	12.7
100%	93%	11.1*

NOEC² = 100%
LOEC³ > 100%
TU_c⁴ = 1
PMSD⁵ = 3.96%
CV⁶ = 3.23%

NOEC² = 50%
LOEC³ = 100%
TU_c⁴ = 2
PMSD⁵ = 4.62%
CV⁶ = 2.55%
IC₂₅⁷ > 100%

All original data worksheets will remain on file at MBC. Please contact me at your convenience for further testing in accordance with permit requirements.

Cordially,

MBC Applied Environmental Sciences

Sonja M. Beck
Sonja M. Beck
Bioassay Manager

* The asterisk indicates a result, which is significantly different from the control. A review of the concentration-response graphs indicated the results are reliable and may be used for reporting.

¹ Dilution-water utilized for testing.

² No Observed Effect Concentration, the highest concentration that showed no effect.

³ Lowest Observed Effect Concentration, the highest concentration where there is an effect.

⁴ Toxic Units, determined by 100% / NOEC. The lowest achievable value for chronic testing is 1.

⁵ The minimum significant difference (in percent difference from control).

⁶ The controls' coefficient of variation of transformed variates.

⁷ The concentration at which 25% of the test organisms were inhibited.

^{GTL} The average individual germination tube length measured in micrometers.

CHAIN-OF-CUSTODY



MBC Applied Environmental Sciences
Toxicity Sample Collection / Field Observations

Client : ESGS
Client Project Contact: Alex Span
Field Job # : _____
Laboratory Job # : 10418X

Date: 1/17/10

Contact: Alex Span

Job #:

Laboratory Job #: 10418X

Test(s) Concentrations:

Field Personnel (s): JLR LCM
Vehicle / Vessel: Hornet

Date	Time	Sample Identification	Volume (liters)	Temp. (°C)	Salinity (ppt)	Total Chlorine (mg/l)	Freshwater Intrusion*	Red Tide (Y/N)	Floating Oil/Grease (Y/N)	Notes
1/7/10	1000	Discharge	4L	15.5	33	—	N	P	N	
1/7/10	1010	Forebay	4L	16.2	35	—	N	N	N	

Drizzle Retention Basin or None (Only note if occurring at sampling site).

Discharge = Intake + 4
= Discharge - 4

Forebrain = Intake^o 3 + 4

PRINT NAME	SIGNATURE	DATE / TIME in LABORATORY
Jennifer Rankin		1/7/10 1354
James Nunez		1/7/10 1354

RELINQUISHED BY:

RECEIVED BY

SUMMARY OF TEST CONDITIONS

Summary of Test Conditions for Chronic Toxicity Testing

Protocol:	EPA/600/R-95/136
Test Organism:	Giant Kelp (<i>Macrocystis pyrifera</i>)
Endpoints:	Germination and Germ-tube Length
Test Type:	Static non-renewal
Temperature (°C):	15±1°C.
Photoperiod:	16 hours light, 8 hours dark.
Test Solution Volume:	200 mL
Renewal of Test Solutions:	None
No. of Organisms/Test Chamber:	7500/ml of test solution
No. of Replicate Test Chambers/Test Concentration:	5
Feeding Regime:	None
Cleaning:	None
Aeration:	None
Salinity:	34 ± 2 ppt
Test Duration:	48 hours
Test Acceptability Criteria:	≥70% germination in the controls. ≥10µm germ-tube length in the controls. The NOEC must be <35µg/l in the reference toxicant test. MSD must be <20% for both endpoints in the reference toxicant test.

SAMPLE ANALYSIS DATA

MBC Client: NRG El Segundo Generating Station
MBC Job #: 10418X

Date Prepared: 30-Jan-10
Prepared By: S. M. Beck

- SAMPLE RECEIVING DATA -

CLIENT SAMPLE ID: Discharge 1&2

NPDES Permit #: CA0001147

MBC SAMPLE #: 10-095

PROTOCOL #: EPA/600/R-95/136

SAMPLE COLLECTION DATE/TIME: 01/07/2010 1000

TEST ORGANISM: Giant Kelp (*Macrocystis pyrifera*)

RECEIVED BY LABORATORY DATE/TIM 01/07/2010 1354

DATE/TIME TEST INITIATED: 01/08/2010 1400

DATE/TIME TEST TERMINATED: 01/10/2010 1300

Time	Date of Initial Use	Amount (Liters)	Collection Temp. (°C)	T. Chlorine (mg/l)	Temp. (°C)	pH	DO (mg/l)	Cond. (mS/cm)	Salinity (ppt)	Ammonia (mg/l)
				Upon Sample Arrival						
14:00	01/08/10	4	15.5	0.01	8.4	7.3	4.4	32.4	28.0	0.32

SPECIAL SAMPLE/TESTING REQUIREMENTS: None.

REQUIRED TEST CONCENTRATIONS: Control, 6.25, 12.5, 25, 50, and 100%.

REQUIRED DILUTION WATER (Control): Uncontaminated 1-μm-filtered natural seawater.

REQUIRED ADJUSTMENTS - BEFORE TESTING: Temperature.

REQUIRED ADJUSTMENTS - DURING TESTING: None.

-Temperature Range During Testing -

Temperature Range Requirements: $25 \pm 1^{\circ}\text{C}$, temperature should not deviate by more than 3°C during testing.

TID BIT #: 575154

Recording Interval (Minutes)	Number of Data Points Collected	Temperature (°C)			Average
		Minimum	Maximum	Difference	
10	284	13.3	14.1	0.8	13.7

MBC Client: NRG El Segundo Generating Station
MBC Job #: 10418X

Date Prepared: 30-Jan-10
Prepared By: S. M. Beck

- SAMPLE RECEIVING DATA -

CLIENT SAMPLE ID: Intake 3&4

NPDES Permit #: CA0001147

MBC SAMPLE #: 10-096

PROTOCOL #: EPA/600/R-95/136

SAMPLE COLLECTION DATE/TIME: 01/07/2010 1010 TEST ORGANISM: Giant Kelp (*Macrocystis pyrifera*)

RECEIVED BY LABORATORY DATE/TIM 01/07/2010 1354

DATE/TIME TEST INITIATED: 01/08/2010 1400

DATE/TIME TEST TERMINATED: 01/10/2010 1300

Time	Date of Initial Use	Amount (Liters)	Collection Temp. (°C)	T. Chlorine (mg/l)	Temp. (°C)	pH	DO (mg/l)	Cond. (mS/cm)	Salinity (ppt)	Ammonia (mg/l)
				Upon Sample Arrival						
14:00	01/08/10	4	15.2	0.03	6.2	7.8	7.0	33.4	30.0	0.00

SPECIAL SAMPLE/TESTING REQUIREMENTS: None.

REQUIRED TEST CONCENTRATIONS: Control, 6.25, 12.5, 25, 50, and 100%.

REQUIRED DILUTION WATER (Control): Uncontaminated 1-μm-filtered natural seawater.

REQUIRED ADJUSTMENTS - BEFORE TESTING: Temperature.

REQUIRED ADJUSTMENTS - DURING TESTING: None.

-Temperature Range During Testing -

Temperature Range Requirements: $25 \pm 1^{\circ}\text{C}$, temperature should not deviate by more than 3°C during testing.

TID BIT #: 575154

Recording Interval (Minutes)	Number of Data Points Collected	Minimum	Maximum	Difference	Average
10	284	13.3	14.1	0.8	13.7

SUMMARY OF RESULTS

MBC Client: NRG El Segundo Generating Station
MBC Job #: 10418X

Date Prepared: 30-Jan-10
Prepared By: S. M. Beck

- SUMMARY OF RESULTS -

PROTOCOL #: EPA/600/R-95/136

TEST ORGANISM: Giant Kelp (*Macrocystis pyrifera*)

ORGANISM LOT#: N/A

REFERENCE TOXICANT SAMPLE #: 10-097

NPDES Permit #: CA0001147

CLIENT SAMPLE ID: Discharge 1&2

MBC SAMPLE #: 10-095

SAMPLE DATE / TIME: 01/07/2010 1000

DATE/TIME TEST INITIATED: 01/08/2010 1400

DATE/TIME TEST TERMINATED: 01/10/2010 1300

Concentration: (%)	Mean Germination Rate: Germinated (%)	Mean Length: Germ-Tube Length (μm)
Control ¹ - Lab Water	90	12.8
6.25	91	12.9
12.5	89	13.1
25	90	14.1
50	88	13.0
100	89	13.2
	NOEC ² = 100%	NOEC ² = 100%
	LOEC ³ > 100%	LOEC ³ > 100%
	TU _c ⁴ = 1	TU _c ⁴ = 1
	PMSD ⁵ = 5.46%	PMSD ⁵ = 8.16%
	CV ⁶ = 1.48%	CV ⁶ = 3.58%
		IC ₂₅ ⁷ > 100%

* The asterisk indicates a result, which is significantly different from the control. A review of the concentration-response graphs indicated the results are reliable and may be used for reporting.

¹ Dilution water used.

² No Observed Effect Concentration, the highest concentration which showed no effect.

³ Lowest Observed Effect Concentration, the highest concentration which showed an effect.

⁴ Toxic Units, determined by highest concentration/ NOEC. The lowest value achievable for chronic testing is 1.

⁵ Minimum significant difference (in percent difference from control).

⁶ The controls' coefficient of variation of transformed variates.

⁷ Concentration at which 25% of the test organisms were inhibited.

MBC Client: NRG El Segundo Generating Station
MBC Job #: 10418X

Date Prepared: 30-Jan-10
Prepared By: S. M. Beck

- SUMMARY OF RESULTS -

PROTOCOL #: EPA/600/R-95/136

TEST ORGANISM: Giant Kelp (*Macrocystis pyrifera*)

ORGANISM LOT#: N/A

REFERENCE TOXICANT SAMPLE #: 10-097

NPDES Permit #: CA0001147

CLIENT SAMPLE ID: Intake 3&4

MBC SAMPLE #: 10-096

SAMPLE DATE / TIME: 01/07/2010 1010

DATE/TIME TEST INITIATED: 01/08/2010 1400

DATE/TIME TEST TERMINATED: 01/10/2010 1300

Concentration: (%)	Mean Germination Rate: Germinated (%)	Mean Length: Germ-Tube Length (μm)
Control ¹ - Lab Water	93	13.3
6.25	91	13.5
12.5	90	13.5
25	90	12.8
50	90	12.1
100	93	11.1*
	NOEC ² = 100%	NOEC ² = 50%
	LOEC ³ > 100%	LOEC ³ = 100%
	TU _c ⁴ = 1	TU _c ⁴ = 2
	PMSD ⁵ = 3.96%	PMSD ⁵ = 4.62%
	CV ⁶ = 3.23%	CV ⁶ = 2.55%
		IC ₂₅ ⁷ > 100%

* The asterisk indicates a result, which is significantly different from the control. A review of the concentration-response graphs indicated the results are reliable and may be used for reporting.

¹ Dilution water used.

² No Observed Effect Concentration, the highest concentration which showed no effect.

³ Lowest Observed Effect Concentration, the highest concentration which showed an effect.

⁴ Toxic Units, determined by highest concentration/ NOEC. The lowest value achievable for chronic testing is 1.

⁵ Minimum significant difference (in percent difference from control).

⁶ The controls' coefficient of variation of transformed variates.

⁷ Concentration at which 25% of the test organisms were inhibited.

WATER QUALITY DATA

CETIS Measurement Report

Report Date: 29 Jan-10 10:03 (p 1 of 2)
 Test Code: 13-6884-1688/10-095

Giant Kelp Chronic											MBC Applied Environmental Sciences										
Batch ID:	17-3817-2900	Test Type: Growth-Germination (10m)						Analyst:													
Start Date:	08 Jan-10 14:00	Protocol: EPA/600/R-95/136 (1995)						Diluent:													
Ending Date:	10 Jan-10 13:00	Species: Macrocystis pyrifera						Brine:													
Duration:	47h	Source:						Age:													
Sample ID:	20-3598-9877	Code: 10-095						Client:	ESGS												
Sample Date:	07 Jan-10 10:00	Material: Power Plant Effluent						Project:													
Receive Date:	07 Jan-10 13:54	Source: NPDES Permit # (XX99999999)																			
Sample Age:	28h	Station: Discharge 1 & 2																			
pH-Units																					
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count										
0	Dilution Water	2	8.1	8.099	8.101	8.1	8.1	0	0	0.0%	0										
6.25		2	8.1	8.099	8.101	8.1	8.1	0	0	0.0%	0										
12.5		2	8.1	8.099	8.101	8.1	8.1	0	0	0.0%	0										
25		2	8.1	8.099	8.101	8.1	8.1	0	0	0.0%	0										
50		2	7.95	7.926	7.974	7.9	8	0.01178	0.0707	0.89%	0										
100		2	7.65	7.53	7.77	7.4	7.9	0.05893	0.3536	4.62%	0										
Overall		12	8			7.4	8.1				0 (0%)										
Dissolved Oxygen-mg/L																					
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count										
0	Dilution Water	2	7.1	7.004	7.196	6.9	7.3	0.04714	0.2828	3.98%	0										
6.25		2	7.1	7.099	7.101	7.1	7.1	0	0	0.0%	0										
12.5		2	7.1	7.099	7.101	7.1	7.1	0	0	0.0%	0										
25		2	7.05	7.026	7.074	7	7.1	0.01179	0.07072	1.0%	0										
50		2	6.9	6.756	7.044	6.6	7.2	0.07071	0.4243	6.15%	0										
100		2	6.25	5.891	6.609	5.5	7	0.1768	1.061	16.97%	0										
Overall		12	6.917			5.5	7.3				0 (0%)										
Temperature-°C																					
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count										
0	Dilution Water	2	15.65	15.58	15.72	15.5	15.8	0.03535	0.2121	1.36%	0										
6.25		2	15.45	15.38	15.52	15.3	15.6	0.03536	0.2122	1.37%	0										
12.5		2	15.5	15.5	15.5	15.5	15.5	0	0	0.0%	0										
25		2	15.75	15.73	15.77	15.7	15.8	0.01177	0.07064	0.45%	0										
50		2	15.35	15.18	15.52	15	15.7	0.0825	0.495	3.23%	0										
100		2	15.25	14.89	15.61	14.5	16	0.1768	1.061	6.96%	0										
Overall		12	15.49			14.5	16				0 (0%)										
Conductivity-μhos																					
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count										
0	Dilution Water	2	38.8	38.75	38.85	38.7	38.9	0.02355	0.1413	0.36%	0										
6.25		2	38.15	38.03	38.27	37.9	38.4	0.05892	0.3535	0.93%	0										
12.5		2	37.65	37.48	37.82	37.3	38	0.08249	0.4949	1.32%	0										
25		2	37.7	37.65	37.75	37.6	37.8	0.02359	0.1415	0.38%	0										
50		2	203.3	123.8	282.8	37.2	369.4	39.15	234.9	115.5%	0										
100		2	35.45	35.19	35.71	34.9	36	0.1296	0.7778	2.19%	0										
Overall		12	65.18			34.9	369.4				0 (0%)										
Salinity-ppt																					
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count										
0	Dilution Water	2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0										
6.25		2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0										
12.5		2	35	35	35	35	35	0	0	0.0%	0										
25		2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0										
50		2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0										
100		2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0										
Overall		12	34.58			34	35				0 (0%)										

CETIS Measurement ReportReport Date: 29 Jan-10 10:03 (p 2 of 2)
Test Code: 13-6884-1688/10-095**Giant Kelp Chronic****MBC Applied Environmental Sciences****pH-Units**

Conc-%	Control Type	1	2
0	Dilution Water	8.1	8.1
6.25		8.1	8.1
12.5		8.1	8.1
25		8.1	8.1
50		7.9	8
100		7.4	7.9

Dissolved Oxygen-mg/L

Conc-%	Control Type	1	2
0	Dilution Water	7.3	6.9
6.25		7.1	7.1
12.5		7.1	7.1
25		7	7.1
50		6.6	7.2
100		5.5	7

Temperature-°C

Conc-%	Control Type	1	2
0	Dilution Water	15.5	15.8
6.25		15.3	15.6
12.5		15.5	15.5
25		15.8	15.7
50		15	15.7
100		14.5	16

Conductivity- μ mhos

Conc-%	Control Type	1	2
0	Dilution Water	38.9	38.7
6.25		38.4	37.9
12.5		38	37.3
25		37.8	37.6
50		37.2	369.4
100		36	34.9

Salinity-ppt

Conc-%	Control Type	1	2
0	Dilution Water	34	35
6.25		34	35
12.5		35	35
25		34	35
50		34	35
100		34	35

CETIS Measurement Report

Report Date: 29 Jan-10 10:02 (p 1 of 2)
 Test Code: 15-0884-3381/10-096

Giant Kelp Chronic											MBC Applied Environmental Sciences					
Batch ID:	17-3817-2900	Test Type: Growth-Germination (10m)					Analyst:									
Start Date:	08 Jan-10 14:00	Protocol: EPA/600/R-95/136 (1995)					Diluent:									
Ending Date:	10 Jan-10 13:00	Species: Macrocystis pyrifera					Brine:									
Duration:	47h	Source:					Age:									
Sample ID:	00-8165-0800	Code: 10-096					Client: ESGS									
Sample Date:	07 Jan-10 10:10	Material: Power Plant Effluent					Project:									
Receive Date:	07 Jan-10 13:54	Source: NPDES Permit # (XX99999999)														
Sample Age:	28h	Station: Intake														
pH-Units																
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count					
0	Dilution Water	2	8.05	8.026	8.074	8	8.1	0.01179	0.07073	0.88%	0					
6.25		2	8.1	8.099	8.101	8.1	8.1	0	0	0.0%	0					
12.5		2	8.1	8.099	8.101	8.1	8.1	0	0	0.0%	0					
25		2	8.1	8.099	8.101	8.1	8.1	0	0	0.0%	0					
50		2	8.1	8.099	8.101	8.1	8.1	0	0	0.0%	0					
100		2	8.05	8.026	8.074	8	8.1	0.01179	0.07073	0.88%	0					
Overall		12	8.083			8	8.1				0 (0%)					
Dissolved Oxygen-mg/L																
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count					
0	Dilution Water	2	7.5	7.261	7.739	7	8	0.1179	0.7071	9.43%	0					
6.25		2	7.75	7.535	7.965	7.3	8.2	0.1061	0.6364	8.21%	0					
12.5		2	7.8	7.561	8.039	7.3	8.3	0.1179	0.7071	9.07%	0					
25		2	7.75	7.487	8.013	7.2	8.3	0.1296	0.7778	10.04%	0					
50		2	7.7	7.461	7.939	7.2	8.2	0.1179	0.7071	9.18%	0					
100		2	7.7	7.461	7.939	7.2	8.2	0.1179	0.7071	9.18%	0					
Overall		12	7.7			7	8.3				0 (0%)					
Temperature-°C																
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count					
0	Dilution Water	2	15	14.86	15.14	14.7	15.3	0.07071	0.4243	2.83%	0					
6.25		2	14.7	14.37	15.03	14	15.4	0.165	0.9899	6.73%	0					
12.5		2	14.5	14.26	14.74	14	15	0.1179	0.7071	4.88%	0					
25		2	14.5	14.26	14.74	14	15	0.1179	0.7071	4.88%	0					
50		2	14.5	14.26	14.74	14	15	0.1179	0.7071	4.88%	0					
100		2	14.75	14.39	15.11	14	15.5	0.1768	1.061	7.19%	0					
Overall		12	14.66			14	15.5				0 (0%)					
Conductivity-µhos																
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count					
0	Dilution Water	2	37.1	36.86	37.34	36.6	37.6	0.1179	0.7071	1.91%	0					
6.25		2	36.95	36.69	37.21	36.4	37.5	0.1296	0.7778	2.11%	0					
12.5		2	37.15	36.79	37.51	36.4	37.9	0.1768	1.061	2.86%	0					
25		2	36.95	36.78	37.12	36.6	37.3	0.0825	0.495	1.34%	0					
50		2	37.2	36.87	37.53	36.5	37.9	0.165	0.99	2.66%	0					
100		2	37.85	37.3	38.4	36.7	39	0.2711	1.626	4.3%	0					
Overall		12	37.2			36.4	39				0 (0%)					
Salinity-ppt																
Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count					
0	Dilution Water	2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0					
6.25		2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0					
12.5		2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0					
25		2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0					
50		2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0					
100		2	34.5	34.26	34.74	34	35	0.1179	0.7071	2.05%	0					
Overall		12	34.5			34	35				0 (0%)					

CETIS Measurement ReportReport Date: 29 Jan-10 10:02 (p 2 of 2)
Test Code: 15-0884-3381/10-096**Giant Kelp Chronic****MBC Applied Environmental Sciences****pH-Units**

Conc-%	Control Type	1	2
0	Dilution Water	8.1	8
6.25		8.1	8.1
12.5		8.1	8.1
25		8.1	8.1
50		8.1	8.1
100		8.1	8

Dissolved Oxygen-mg/L

Conc-%	Control Type	1	2
0	Dilution Water	8	7
6.25		7.3	8.2
12.5		7.3	8.3
25		8.3	7.2
50		8.2	7.2
100		8.2	7.2

Temperature-°C

Conc-%	Control Type	1	2
0	Dilution Water	14.7	15.3
6.25		14	15.4
12.5		15	14
25		15	14
50		14	15
100		14	15.5

Conductivity- μ mhos

Conc-%	Control Type	1	2
0	Dilution Water	36.6	37.6
6.25		36.4	37.5
12.5		36.4	37.9
25		36.6	37.3
50		37.9	36.5
100		39	36.7

Salinity-ppt

Conc-%	Control Type	1	2
0	Dilution Water	34	35
6.25		34	35
12.5		35	34
25		34	35
50		34	35
100		34	35

ORGANISM ENUMERATION / STATISTICAL DATA

CETIS Summary Report

Report Date: 29 Jan-10 10:04 (p 1 of 2)
 Test Code: 13-6884-1688/10-095

Giant Kelp Chronic				MBC Applied Environmental Sciences	
Batch ID:	17-3817-2900	Test Type: Growth-Germination (10m)		Analyst:	
Start Date:	08 Jan-10 14:00	Protocol: EPA/600/R-95/136 (1995)		Diluent:	
Ending Date:	10 Jan-10 13:00	Species: Macrocystis pyrifera		Brine:	
Duration:	47h	Source:		Age:	
Sample ID:	20-3598-9877	Code:	10-095	Client:	ESGS
Sample Date:	07 Jan-10 10:00	Material:	Power Plant Effluent	Project:	
Receive Date:	07 Jan-10 13:54	Source:	NPDES Permit # (XX99999999)		
Sample Age:	28h	Station:	Discharge 1 & 2		

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
11-8441-1322	Germination Rate	100	>100	N/A	5.46%	1	Dunnett's Multiple Comparison Test
16-2100-0750	Mean Length	100	>100	N/A	8.16%	1	Dunnett's Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level	%	95% LCL	95% UCL	TU	Method
07-6754-5715	Mean Length	IC5	>100	N/A	N/A	<1	Linear Interpolation (ICPIN)
		IC10	>100	N/A	N/A	<1	
		IC15	>100	N/A	N/A	<1	
		IC20	>100	N/A	N/A	<1	
		IC25	>100	N/A	N/A	<1	
		IC40	>100	N/A	N/A	<1	
		IC50	>100	N/A	N/A	<1	

Germination Rate Summary

Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	Diff%
0	Dilution Water	5	0.904	0.899	0.909	0.89	0.92	0.002449	0.01342	1.48%	0.0%
6.25		5	0.908	0.897	0.919	0.86	0.93	0.005385	0.0295	3.25%	-0.44%
12.5		5	0.894	0.8826	0.9054	0.87	0.94	0.005568	0.0305	3.41%	1.11%
25		5	0.9	0.8905	0.9095	0.87	0.93	0.004655	0.0255	2.83%	0.44%
50		5	0.876	0.8605	0.8915	0.83	0.93	0.007594	0.04159	4.75%	3.1%
100		5	0.886	0.8712	0.9008	0.83	0.94	0.007257	0.03975	4.49%	1.99%

Mean Length Summary

Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	Diff%
0	Dilution Water	5	12.76	12.58	12.93	12.04	13.16	0.08344	0.457	3.58%	0.0%
6.25		5	12.89	12.5	13.28	11.6	14.05	0.1897	1.039	8.06%	-1.05%
12.5		5	13.11	12.82	13.41	12.27	14.05	0.1451	0.7947	6.06%	-2.8%
25		5	14.14	13.81	14.47	12.93	15.16	0.1618	0.8864	6.27%	-10.84%
50		5	12.98	12.86	13.1	12.49	13.38	0.06039	0.3308	2.55%	-1.75%
100		5	13.16	13.04	13.27	12.71	13.38	0.05758	0.3154	2.4%	-3.15%

CETIS Summary ReportReport Date: 29 Jan-10 10:04 (p 2 of 2)
Test Code: 13-6884-1688/10-095**Giant Kelp Chronic****MBC Applied Environmental Sciences****Germination Rate Detail**

Conc-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Dilution Water	0.89	0.92	0.91	0.89	0.91
6.25		0.86	0.92	0.93	0.9	0.93
12.5		0.87	0.91	0.94	0.87	0.88
25		0.92	0.87	0.88	0.9	0.93
50		0.93	0.88	0.9	0.83	0.84
100		0.88	0.83	0.9	0.94	0.88

Mean Length Detail

Conc-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Dilution Water	12.71	13.16	12.71	13.16	12.04
6.25		13.83	12.27	14.05	11.6	12.71
12.5		12.49	12.27	12.93	13.83	14.05
25		14.72	13.6	12.93	14.27	15.16
50		13.38	12.93	12.93	12.49	13.16
100		12.93	13.38	12.71	13.38	13.38

CETIS Summary Report

Report Date: 29 Jan-10 10:03 (p 1 of 2)
 Test Code: 15-0884-3381/10-096

MBC Applied Environmental Sciences

Giant Kelp Chronic

Batch ID:	17-3817-2900	Test Type:	Growth-Germination (10m)	Analyst:
Start Date:	08 Jan-10 14:00	Protocol:	EPA/600/R-95/136 (1995)	Diluent:
Ending Date:	10 Jan-10 13:00	Species:	Macrocystis pyrifera	Brine:
Duration:	47h	Source:		Age:
Sample ID:	00-8165-0800	Code:	10-096	Client: ESGS
Sample Date:	07 Jan-10 10:10	Material:	Power Plant Effluent	Project:
Receive Date:	07 Jan-10 13:54	Source:	NPDES Permit # (XX99999999)	
Sample Age:	28h	Station:	Intake	

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
03-2649-1098	Germination Rate	100	>100	N/A	3.96%	1	Dunnett's Multiple Comparison Test
16-2155-0955	Mean Length	50	100	70.71	4.62%	2	Dunnett's Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level	%	95% LCL	95% UCL	TU	Method
11-4821-0921	Mean Length	IC5	25.89	16.73	70.24	3.862	Linear Interpolation (ICPIN)
		IC10	65.17	52.77	75.6	1.534	
		IC15	86.37	71.62	104.6	1.158	
		IC20	>100	N/A	N/A	<1	
		IC25	>100	N/A	N/A	<1	
		IC40	>100	N/A	N/A	<1	
		IC50	>100	N/A	N/A	<1	

Germination Rate Summary

Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	Diff%
0	Dilution Water	5	0.93	0.9188	0.9412	0.9	0.97	0.005477	0.03	3.23%	0.0%
6.25		5	0.908	0.8987	0.9173	0.89	0.95	0.004546	0.0249	2.74%	2.37%
12.5		5	0.904	0.8932	0.9148	0.86	0.94	0.00526	0.02881	3.19%	2.8%
25		5	0.902	0.8979	0.9061	0.89	0.91	0.002	0.01095	1.21%	3.01%
50		5	0.902	0.8943	0.9097	0.87	0.92	0.003742	0.02049	2.27%	3.01%
100		5	0.926	0.9146	0.9374	0.89	0.96	0.005568	0.0305	3.29%	0.43%

Mean Length Summary

Conc-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	Diff%
0	Dilution Water	5	13.29	13.16	13.42	12.93	13.6	0.06175	0.3382	2.55%	0.0%
6.25		5	13.47	13.25	13.69	12.71	14.05	0.1062	0.5815	4.32%	-1.34%
12.5		5	13.51	13.42	13.61	13.16	13.83	0.04642	0.2543	1.88%	-1.68%
25		5	12.76	12.63	12.88	12.27	13.16	0.06039	0.3308	2.59%	4.03%
50		5	12.71	12.52	12.91	12.27	13.6	0.09548	0.523	4.11%	4.36%
100		5	11.06	10.93	11.19	10.7	11.6	0.06175	0.3382	3.06%	16.78%

CETIS Summary ReportReport Date: 29 Jan-10 10:03 (p 2 of 2)
Test Code: 15-0884-3381/10-096**Giant Kelp Chronic****MBC Applied Environmental Sciences****Germination Rate Detail**

Conc-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Dilution Water	0.9	0.9	0.97	0.94	0.94
6.25		0.89	0.95	0.91	0.89	0.9
12.5		0.94	0.86	0.91	0.9	0.91
25		0.91	0.91	0.89	0.89	0.91
50		0.9	0.87	0.92	0.92	0.9
100		0.9	0.95	0.96	0.89	0.93

Mean Length Detail

Conc-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Dilution Water	12.93	13.38	13.6	13.6	12.93
6.25		14.05	13.38	14.05	12.71	13.16
12.5		13.38	13.6	13.6	13.83	13.16
25		12.71	13.16	12.71	12.27	12.93
50		13.6	12.27	12.49	12.71	12.49
100		10.93	11.6	10.7	10.93	11.15

CETIS Test Data Worksheet

 Report Date: 29 Jan-10 10:04 (p 1 of 1)
 Test Code: 13-6884-1688/10-095

Giant Kelp Chronic
MBC Applied Environmental Sciences

Start Date: 08 Jan-10 14:00 **Species:** *Macrocystis pyrifera*
End Date: 10 Jan-10 13:00 **Protocol:** EPA/600/R-95/136 (1995)
Sample Date: 07 Jan-10 10:00 **Material:** Power Plant Effluent

Sample Code: 10-095

Sample Source: NPDES Permit #

Sample Station: Discharge 1 & 2

Conc-%	Code	Rep	Pos	# Counted	# Germinated	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	CalFactor	Notes
0	D	1	1	100	89	6	5	7	6	7	6	5	5	5	5	2.23	
0	D	2	2	100	92	9	4	5	7	6	6	6	5	5	6	2.23	
0	D	3	3	100	91	7	5	5	5	6	7	6	5	6	5	2.23	
0	D	4	4	100	89	6	5	7	5	6	7	7	6	5	5	2.23	
0	D	5	5	100	91	8	6	5	4	5	5	5	6	5	5	2.23	
6.25		1	6	100	86	7	7	6	6	5	6	5	7	7	6	2.23	
6.25		2	7	100	92	5	7	6	5	5	6	6	5	5	5	2.23	
6.25		3	8	100	93	6	7	6	5	8	7	5	7	6	6	2.23	
6.25		4	9	100	90	5	5	5	5	5	6	5	5	6	5	2.23	
6.25		5	10	100	93	7	6	6	5	5	6	5	5	7	5	2.23	
12.5		1	11	100	87	5	5	6	7	7	6	5	5	5	5	2.23	
12.5		2	12	100	91	5	6	5	6	6	5	7	5	5	5	2.23	
12.5		3	13	100	94	6	5	5	5	6	7	5	5	7	7	2.23	
12.5		4	14	100	87	7	6	7	6	7	7	7	5	5	5	2.23	
12.5		5	15	100	88	6	7	7	7	7	6	6	5	5	5	2.23	
25		1	16	100	92	7	6	6	7	7	7	6	6	8	6	2.23	
25		2	17	100	87	5	7	5	6	6	5	6	6	7	8	2.23	
25		3	18	100	88	7	6	6	5	7	7	5	5	5	5	2.23	
25		4	19	100	90	8	6	7	6	7	6	6	6	6	6	2.23	
25		5	20	100	93	8	6	8	7	6	7	7	7	7	5	2.23	
50		1	21	100	93	6	6	5	7	7	6	5	7	6	5	2.23	
50		2	22	100	88	7	6	6	5	5	6	5	7	5	6	2.23	
50		3	23	100	90	6	5	6	6	7	7	5	5	5	6	2.23	
50		4	24	100	83	5	6	6	5	5	5	6	6	6	6	2.23	
50		5	25	100	84	6	5	7	7	6	5	6	6	6	5	2.23	
100		1	26	100	88	5	6	5	5	7	6	6	6	6	6	2.23	
100		2	27	100	83	8	6	5	6	6	7	6	5	5	6	2.23	
100		3	28	100	90	7	5	6	4	5	5	7	8	5	5	2.23	
100		4	29	100	94	7	6	5	6	6	5	7	7	5	6	2.23	
100		5	30	100	88	6	5	7	7	6	6	6	6	6	5	2.23	

CETIS Test Data Worksheet

 Report Date: 29 Jan-10 10:04 (p 1 of 1)
 Test Code: 15-0884-3381/10-096

Giant Kelp Chronic
MBC Applied Environmental Sciences

 Start Date: 08 Jan-10 14:00 Species: Macrocystis pyrifera
 End Date: 10 Jan-10 13:00 Protocol: EPA/600/R-95/136 (1995)
 Sample Date: 07 Jan-10 10:10 Material: Power Plant Effluent

 Sample Code: 10-096
 Sample Source: NPDES Permit #
 Sample Station: Intake

Conc-%	Code	Rep	Pos	# Counted	# Germinated	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	CalFactor	Notes
0	D	1	1	100	90	6	7	6	6	5	6	5	6	5	5	2.23	
0	D	2	2	100	90	6	6	6	6	7	6	5	6	5	7	2.23	
0	D	3	3	100	97	6	6	6	6	7	5	6	7	5	7	2.23	
0	D	4	4	100	94	6	6	6	5	6	7	7	7	6	5	2.23	
0	D	5	5	100	94	5	7	5	7	6	5	6	5	7	5	2.23	
6.25		1	6	100	89	7	6	5	7	6	6	5	7	7	7	2.23	
6.25		2	7	100	95	6	6	5	6	7	6	5	6	7	6	2.23	
6.25		3	8	100	91	5	6	7	7	6	7	6	6	7	6	2.23	
6.25		4	9	100	89	6	6	6	5	5	6	5	6	6	6	2.23	
6.25		5	10	100	90	7	6	5	5	5	7	5	6	7	6	2.23	
12.5		1	11	100	94	6	7	5	6	8	5	5	5	7	6	2.23	
12.5		2	12	100	86	7	7	6	5	6	6	6	5	6	7	2.23	
12.5		3	13	100	91	6	7	6	6	5	6	5	6	5	5	2.23	
12.5		4	14	100	90	7	6	7	7	8	6	6	5	5	5	2.23	
12.5		5	15	100	91	6	6	6	6	5	6	6	6	6	6	2.23	
25		1	16	100	91	7	7	5	6	6	5	6	5	5	5	2.23	
25		2	17	100	91	7	6	6	6	5	6	6	6	6	5	2.23	
25		3	18	100	89	7	5	6	6	6	6	5	5	5	5	2.23	
25		4	19	100	89	5	6	6	6	6	6	5	5	5	5	2.23	
25		5	20	100	91	7	7	5	5	5	7	6	6	5	5	2.23	
50		1	21	100	90	7	6	6	5	5	6	6	7	8	5	2.23	
50		2	22	100	87	6	6	5	5	6	5	5	5	6	6	2.23	
50		3	23	100	92	6	6	5	5	5	5	5	7	5	7	2.23	
50		4	24	100	92	5	5	6	5	6	5	6	7	6	6	2.23	
50		5	25	100	90	6	6	6	5	6	5	5	5	6	6	2.23	
100		1	26	100	90	5	5	4	5	5	5	5	5	5	5	2.23	
100		2	27	100	95	6	6	6	5	5	5	5	5	5	4	2.23	
100		3	28	100	96	5	5	5	4	5	5	5	5	5	4	2.23	
100		4	29	100	89	5	5	5	5	4	5	5	5	5	5	2.23	
100		5	30	100	93	5	5	5	5	5	5	5	5	5	5	2.23	

REFERENCE TOXICANT DATA

REFERENCE TOXICANT RESULTS DATA

TEST ORGANISM: Giant Kelp (*Macrocystis pyrifera*)

REFERENCE TOXICANT: Copper Chloride (µg/l)

MBC SAMPLE #: 10-097

MBC QA/QC LOG #: 130

TEST START DATE: 01/08/2010 1400

TEST END DATE: 01/10/2010 1300

Concentration:	Germination Rate:	Mean Length:
	Percent Germinated (%)	Germ-Tube Length (µm)
Control ¹	93	12.8
5.6 µg/l	91	13.6
10 µg/l	90	13.9
18 µg/l	91	13.0
32 µg/l	90	11.2*
100 µg/l	16*	7.3*
	NOEL ² = 32 µg/l	NOEL ² = 18 µg/l
	PMSD ³ = 3.69%	PMSD ³ = 6.33%
	CV = 3.11%	CV = 5.96%
	EC ₅₀ ^{4a} = 62.56 µg/l	EC25 ^{4b} = 44.92 µg/l

* The asterisk indicates a result, which is significantly different from control. A review of the concentration-response graphs indicated the results are reliable and may be used for reporting.

¹ Dilution water used, laboratory seawater.

² No Observed Effect Concentration, the highest concentration which showed no effect.

³ Minimum significant difference from control, should be <20% for germination and growth.

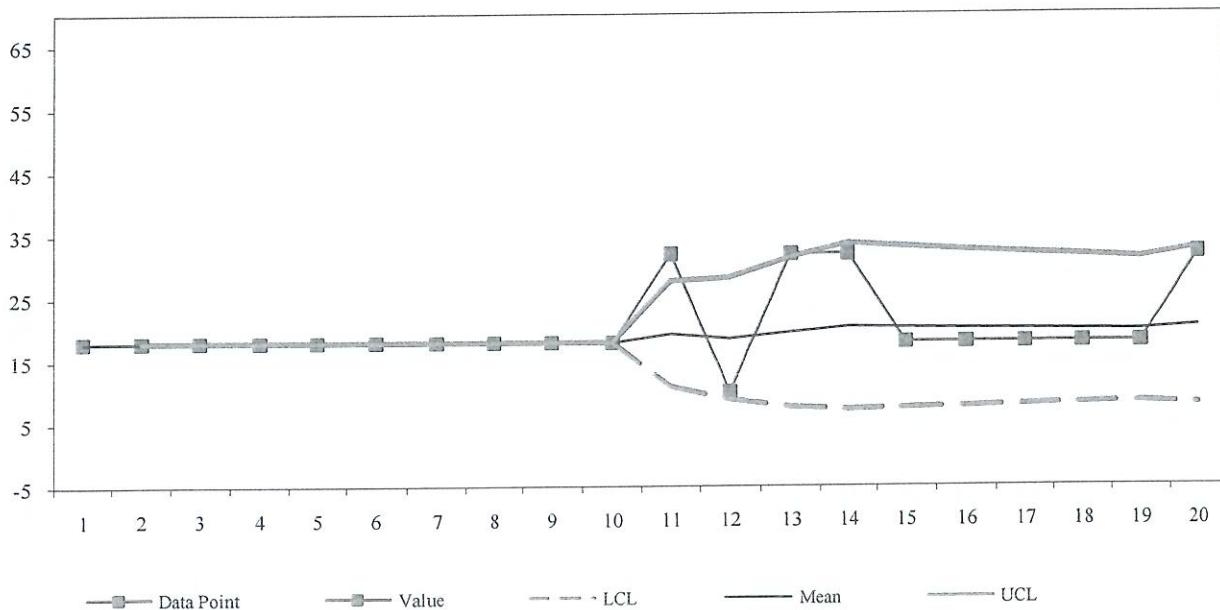
^{4a} Concentration at which 50% of organisms were effected.

^{4b} Concentration at which 25% of organisms were effected.

CV Coefficient of variation of transformed variates of control.

Macrocystis pyrifera - GERMINATION RATE - NOEC (CuCl µg/l)

Count : 20 LCL (-2s.d.) : 7.98 St. Dev. : 6.21
Mean : 20.40 UCL (+2s.d.) : 32.82 CV : 30.44%

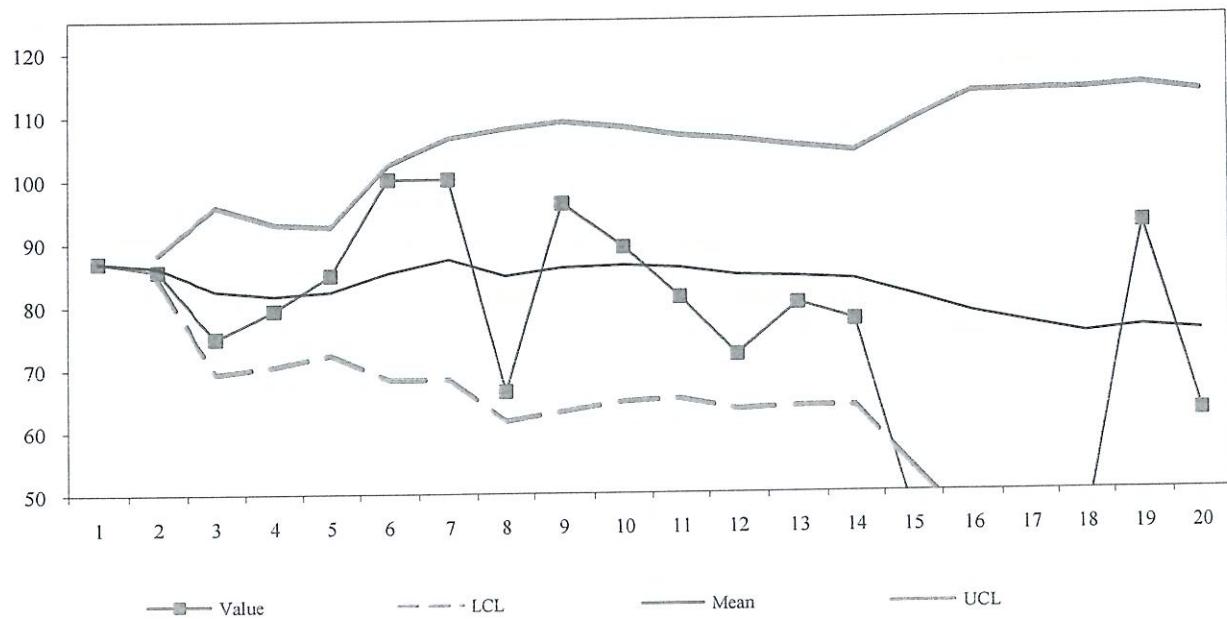


Data Point	MBC Sample #	Date	Value	LCL	Mean	UCL
111	09-230	02/27/09	18	18	18	18.000
112	09-244	03/11/09	18	18.000	18	18.000
113	09-261	03/17/09	18	18.000	18	18.000
114	09-274	04/14/09	18	18.000	18	18.000
115	09-333	05/01/09	18	18.000	18	18.000
116	09-315	05/05/09	18	18.000	18	18.000
117	09-328	05/13/09	18	18.000	18	18.000
118	09-356	06/10/09	18	18.000	18	18.000
119	09-383	07/15/09	18	18.000	18	18.000
120	09-416	08/04/09	18	18.000	18	18.000
121	09-429	08/13/09	32	10.830	19	27.715
122	09-449	08/18/09	10	8.833	19	28.167
123	09-450	08/25/09	32	7.633	20	31.444
124	09-469	09/17/09	32	7.192	20	33.665
125	10-015	10/21/09	18	7.450	20	33.083
126	10-035	11/04/09	18	7.691	20	32.559
127	10-049	11/10/09	18	7.917	20	32.083
128	10-071	12/15/09	18	8.129	20	31.649
129	10-091	01/05/10	18	8.328	20	31.251
130	10-097	01/08/10	32	7.979	20	32.821

red values are greater < 5.6 or > 100.

Macrocystis pyrifera - GERMINATION RATE - EC50 (CuCl µg/l)

Count : 20 LCL (-2s.d.) : 37.55 St. Dev. : 18.87
 Mean : 75.30 UCL (+2s.d.) : 113.05 CV : 25.07%

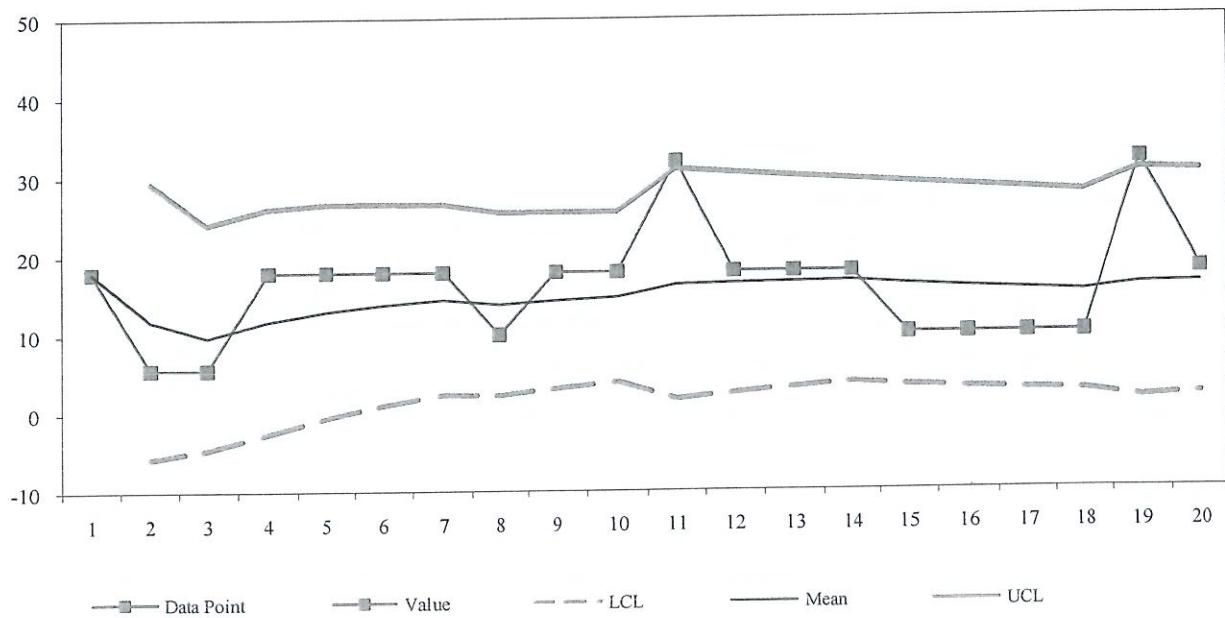


Data Point	MBC Sample #	Date	Value	LCL	Mean	UCL
111	09-230	02/27/09	87	87	87	88.280
112	09-244	03/11/09	85.6	84.320	86	89.738
113	09-261	03/17/09	74.9	69.262	83	92.972
114	09-274	04/14/09	79.3	70.428	82	92.513
115	09-333	05/01/09	84.9	72.167	85	102.334
116	09-315	05/05/09	100	68.233	87	106.517
117	09-328	05/13/09	100	68.254	87	107.902
118	09-356	06/10/09	66.3	61.598	85	108.952
119	09-383	07/15/09	96.1	63.070	86	108.053
120	09-416	08/04/09	89.2	64.607	86	106.702
121	09-429	08/13/09	81.2	65.025	86	106.129
122	09-449	08/18/09	72	63.288	85	105.022
123	09-450	08/25/09	80.2	63.701	84	104.058
124	09-469	09/17/09	77.5	63.685	84	108.811
125	10-015	10/21/09	46.4	53.936	81	113.323
126	10-035	11/04/09	36.4	43.802	79	113.528
127	10-049	11/10/09	48.1	40.013	77	113.583
128	10-071	12/15/09	45.8	36.517	75	114.262
129	10-091	01/05/10	92.5	37.675	76	113.049
130	10-097	01/08/10	62.6	37.551	75	

red values are greater < 5.6 or > 100.

Macrocystis pyrifera - GERM-TUBE LENGTH - NOEC (CuCl µg/l)

Count : 20 LCL (-2s.d.) : 2.00 St. Dev. : 7.08
 Mean : 16.16 UCL (+2s.d.) : 30.32 CV : 43.80%

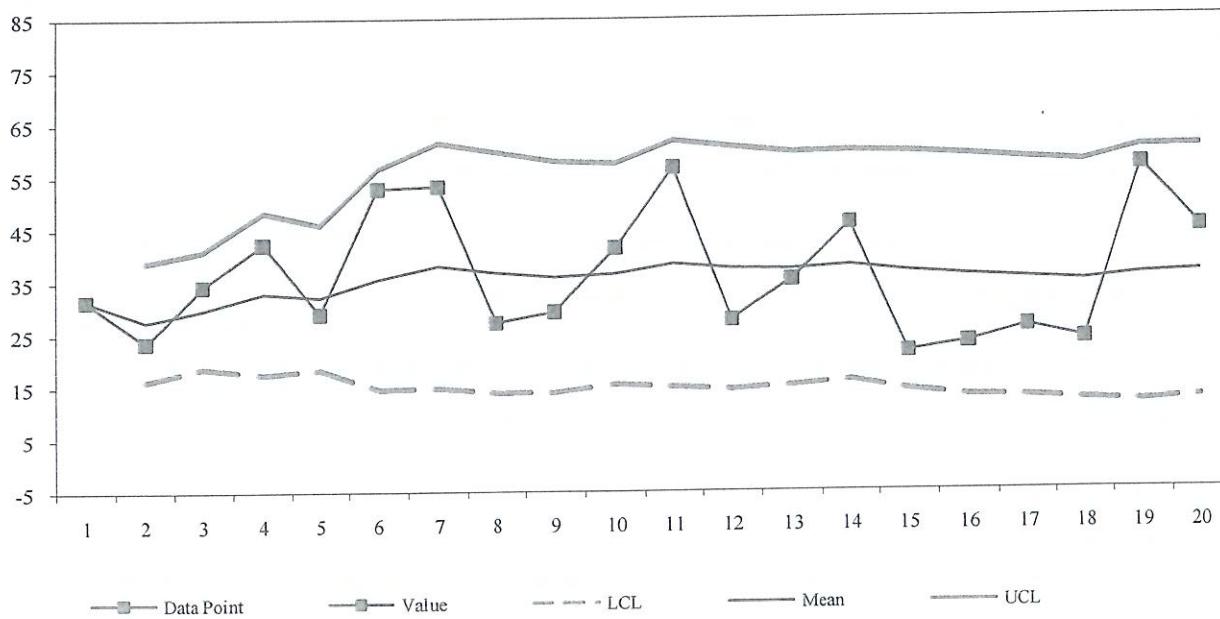


Data Point	MBC Sample #	Date	Value	LCL	Mean	UCL
111	09-230	02/27/09	18	-5.736	12	29.336
112	09-244	03/11/09	5.6	-4.585	10	24.052
113	09-261	03/17/09	5.6	-2.518	12	26.118
114	09-274	04/14/09	18	-0.544	13	26.624
115	09-333	05/01/09	18	1.060	14	26.673
116	09-315	05/05/09	18	2.356	14	26.558
117	09-328	05/13/09	18	2.262	14	25.538
118	09-356	06/10/09	10	3.131	14	25.580
119	09-383	07/15/09	18	3.889	14	25.551
120	09-416	08/04/09	18	1.657	15	25.551
121	09-429	08/13/09	32	2.445	16	30.925
122	09-449	08/18/09	18	3.133	16	30.421
123	09-450	08/25/09	18	3.740	17	29.974
124	09-469	09/17/09	18	3.300	17	29.574
125	10-015	10/21/09	10	2.969	16	28.681
126	10-035	11/04/09	10	2.718	15	28.247
127	10-049	11/10/09	10	2.527	15	27.828
128	10-071	12/15/09	10	1.547	16	30.579
129	10-091	01/05/10	32	2.004	16	30.316
130	10-097	01/08/10	18	-	-	-

red values are greater < 5.6, 18 or > 100.

Macrocystis pyrifera - GERM-TUBE LENGTH - EC25 (CuCl µg/l)

Count : 20 LCL (-2s.d.) : 12.41
 Mean : 36.37 UCL (+2s.d.) : 60.33
 St. Dev. : 11.98
 CV : 32.94%



Data Point	MBC Sample #	Date	Value	LCL	Mean	UCL
111	09-230	02/27/09	31.6		32	
112	09-244	03/11/09	23.6	16.286	28	38.914
113	09-261	03/17/09	34.3	18.704	30	40.962
114	09-274	04/14/09	42.3	17.523	33	48.377
115	09-333	05/01/09	29	18.341	32	45.979
116	09-315	05/05/09	52.9	14.651	36	56.582
117	09-328	05/13/09	53.3	14.798	38	61.487
118	09-356	06/10/09	27.3	13.855	37	59.720
119	09-383	07/15/09	29.3	13.931	36	57.980
120	09-416	08/04/09	41.5	15.451	37	57.569
121	09-429	08/13/09	56.7	14.950	38	61.741
122	09-449	08/18/09	27.7	14.320	37	60.597
123	09-450	08/25/09	35.3	15.107	37	59.478
124	09-469	09/17/09	46.1	16.093	38	59.750
125	10-015	10/21/09	21.5	14.147	37	59.506
126	10-035	11/04/09	23.2	13.029	36	58.921
127	10-049	11/10/09	26.3	12.699	35	58.113
128	10-071	12/15/09	23.79	12.061	35	57.460
129	10-091	01/05/10	56.8	11.653	36	60.188
130	10-097	01/08/10	44.9	12.410	36	60.329

red values are greater < 5.6, 18 or > 100.

NPDES,
ROUTINE SAMPLE
COLLECTION PROCEDURES



NRG El Segundo Power, LLC

Approved by:

Shawn Timmins /sce

2/11/10
Date

RESPONSIBILITIES FOR ROUTINE NPDES SAMPLES

OVERVIEW

Personnel from an outside laboratory come to El Segundo three times per week to perform a chlorination cycle. They also collect monthly, quarterly, semi-annual, and annual samples. Each time they arrive and depart the station, they check in with the control room. They perform the following tests in the field.

1. pH
2. Chlorine residual, free and total

On a monthly basis they also collect samples of the retention basin for:

1. Total suspended solids
2. Oil and grease

During a chlorination cycle the contract laboratory technician adds sodium hypochlorite to each Units 3&4 condenser circulating half for 30 minutes. The sequence is typically done automatically using an automatic timer. The technician is responsible for checking the flow of hypochlorite to each circulator at the intake structure, adjusting the flow of hypochlorite from the storage tank using the valve at the outlet of the hypochlorite feed pump, and recording the hypochlorite tank level before and after chlorination.

The contract technician measures the free and total chlorine at the outfall at 25, 30, and 35 minutes following the start of chlorination addition to a selected circulator half.

NUMBERING SYSTEM FOR IDENTIFYING SAMPLES

A sample identification system is required by the Department of Health Services. Each sample bottle must have a unique identification number. El Segundo uses the use the numbering system below.

EL	-	XX	XX	XX	-	XXX	-	XX	-	X
station abbreviation		year	mo.	day		sample point abbreviation		analyte abbreviation		replicate no.

For example, EL-990704-RB-TSS-2 would specify a duplicate sample for total suspended solids collected from the retention basin on July 4, 1999.

INSTRUCTIONS FOR PH, CHLORINE

1. pH

Determination of pH is to follow Standards Method SM 4500-H⁻ B. In accordance with 40 CFR, Part 136, the pH of samples is done within fifteen minutes of collection. A measurement is done electrometrically using either a glass electrode in combination with a reference or combination electrode.

The pH meter is calibrated using two commercial buffers that bracket the expected pH of the sample and are at least 3 pH units apart. After calibrating, the pH of the buffers is rechecked and must be within ± 0.05 pH units of the value listed on the bottle for t°C.

10% of all pH analyses or one analysis per month (whichever is greater) are done in duplicate. As a rule of thumb, this is best met by analyzing the 1st, 11th, 21st, etc. sample of the month in duplicate.

2. Residual chlorine

Determination of residual chlorine follows Standard Methods 4500-Cl G, 18th edition (the DPD colorimetric method) immediately following sample collection. Both free and total chlorine are measured. The standard reference curve employed in the colorimeter is to be checked routinely using secondary and primary standards. A method detection limit of 0.02 mg/L applies when a reagent blank is analyzed concurrently with the sample and the blank value is subtracted from the sample result. A method detection limit of 0.03 mg/L applies when a reagent blank is not analyzed concurrently with the sample.

10% of all pH analyses or one analysis per month (whichever is greater) are done in duplicate. As a rule of thumb, this is best met by analyzing the 1st, 11th, 21st, etc. sample of the month in duplicate.

INSTRUCTIONS FOR OIL AND GREASE AND TOTAL SUSPENDED SOLIDS

1. Oil and Grease

Oil and grease samples are to be collected in clean 1000-mL glass containers that contain 5 mL 1+1 HCl preservative. They containers are not allowed to be pre-rinsed with sample prior to collection. Oil and grease samples are to be stored refrigerated. The maximum holding time is 28 days.

A duplicate sample and spiked sample are normally done monthly.

2. Total suspended solids (a.k.a. non-filterable residue)

Samples are to be collected in clean 1-liter plastic containers and stored refrigerated until pick up. The maximum holding time is 7 days.

A duplicate samples is normally done monthly.

SAMPLE POINT DESCRIPTIONS AND SAMPLING PROCEDURES

The waste discharge permit for El Segundo Power requires that pH, chlorine, oil and grease, suspended solids, and settleable solids be sampled and analyzed. The following is a description of the sample points and the method of sample collection.

1. Units 1 and 2 circulating water discharge - Discharge Serial No. 001

Cooling water for Units 1 and 2 condensers comes from the Pacific Ocean. Cooling water enters the plant through an underground closed conduit that terminates in a rectangular vault from which the circulating water pumps take suction. There are four pumps. Two pumps serve one unit, each pump supplying cooling water to one half of a divided waterbox condenser. The return lines from the condenser halves of each unit meet and form an underground conduit that carries the circulating water to the outfall structure. From the outfall structure a closed underground tunnel returns the water to the ocean.

2. Units 3 and 4 circulating water discharge - Discharge Serial No. 002

Cooling water for units 3 and 4 condensers comes from the Pacific Ocean. Cooling water enters the plant through an underground conduit that terminates at the intake structure where the seawater is uniformly distributed to four circulating water pumps. Two pumps serve Unit 3, and two pumps serve Unit 4. Each pump supplies cooling water to one half of a divided waterbox condenser. The return lines from the four condenser halves ultimately meet to form a single underground conduit that terminates at the outfall structure. From the outfall structure the circulating water returns to the ocean through an underground pipe. To control microbiological growth in the circulating water system, sodium hypochlorite solution is fed intermittently by gravity to each pump suction.

Circulating water is sampled at the outfall structure using a Teflon™ bailer.

Following the start of a chlorination cycle, chlorine is tested at 25, 30, and 35 minutes to a selected circulator half to catch the residual chlorine level at its highest. The highest of the three readings is reported to the Water Board.

The sample identifier for the Units 3 and 4 circulating water discharge is:

EL	-	XX	XX	XX	-	002	-	XX	-	X
station		year	mo.	day		serial no.		parameter		trial #

For example, EL-002-970306-CL-2 would specify a duplicate Cl₂ test done on this point on March 6, 1997.

3. Units 1 and 2 waste treatment plant

A small sewage treatment plant serves Units 1 and 2. The contractor who operates the plant is responsible for sampling the plant effluent. The effluent is analyzed for oil and grease, total suspended solids, and settleable solids. Samples are taken from the clarifier section as it overflows the weir into the outlet channel, directly in the sample bottles provided by the station chemical technician.

The sample identifier number for the Units 1 and 2 waste treatment plant is:

EL	-	XX	XX	XX	-	WTP1	-	XX	-	X
station		year	mo.	day		waste		parameter		trial #
						treatment				
						plant #1				

For example, EL-WTP1-970506-SS would specify a settleable solids sample collected on this point on May 6, 1997.

4. Units 3 and 4 waste treatment plant

A small sewage treatment plant serves Units 3 and 4. The contractor who operates the plant is responsible for sampling the plant effluent. The effluent is analyzed for oil and grease, total suspended solids, and settleable solids. Samples are taken from the clarifier section as it overflows the weir into the outlet channel, directly in the sample bottles provided by the station chemical technician.

The sample identifier number for the Units 3 and 4 waste treatment plant is:

EL	-	XX	XX	XX	-	WTP2	-	XX	-	X
station		year	mo.	day		waste		parameter		trial #
						treatment				
						plant #2				

5. Retention basin

Miscellaneous station wastewater streams collect in the retention basin. The retention basin drains to the Unit 3 and 4 outfall through a metering chamber containing perforated standpipe that controls the flow of water out of the chamber. The retention basin is sampled through a line connected to the bottom of the standpipe. A second line, terminating at a valve that opens into the metering basin, is also tied into the standpipe. Normally, this valve must be opened to provide adequate flow through the sample line. The sample line, which is very short, is allowed to flush about 15 seconds before the samples are taken. Samples for oil and grease and total suspended solids are taken directly in the sample bottles.

The sample identifier number is:

EL	-	XX	XX	XX	-	RB(N/S)	-	XX	-	X
station		year	mo.	day		retention basin		parameter		trial #

For example, EL-970306-RBN-OG-3 would specify a triplicate oil and grease sample bottle collected on March 6, 1997 from the North retention basin.



CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

POWER PRODUCTION CHEMICAL, SOUTHERN CALIFORNIA EDISON

7301 FENWICK LANE, 2nd FLOOR
WESTMINSTER, CA 92683-5202

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 1949
Expiration Date: 11/30/2011
Effective Date: 12/1/2009

Richmond, California
subject to forfeiture or revocation

George C. Kulasingam
George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch

State of California—Health and Human Services Agency
California Department of Public Health

MARK B HORTON, MD, MSPH
Director

ARNOLD SCHWARZENEGGER
Governor

November 16, 2009

SHAWN SIMMONS
POWER PRODUCTION CHEMICAL, SOUTHERN CALIFORNIA EDISON
7301 FENWICK LANE, 2nd FLOOR
WESTMINSTER, CA 92683-5202

Dear SHAWN SIMMONS:

Certificate No 1949

This is to advise you that the laboratory named above continues to be certified as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seq. Certification for all currently certified Fields of Testing that the laboratory has applied for renewal shall remain in effect until 11/30/2011 unless it is revoked.

Please note that the renewal application for certification is subject to an on-site process, and the continued use of this certificate is contingent upon:

- * successful completion of the on-site process;
- * acceptable performance in the required proficiency testing (PT) studies;
- * timely payment of all fees, including an annual fee due before November 30, 2010;
- * compliance with Environmental Laboratory Accreditation Program Branch (ELAP) statutes (HSC, Section 100825, et seq.) and Regulations (California Code of Regulations (CCR), Title 22, Division 4, Chapter 19).

An updated certificate of the "Fields of Testing" will be issued to the laboratory upon successful completion of the on-site process.

The application for the renewal of this certificate must be received before the expiration date to remain in force according to the HSC100845(a).

Please note that the laboratory is required to notify ELAP of any major changes in the laboratory such as the transfer of ownership, change of laboratory director, change in location, or structural alterations which may affect adversely the quality of analyses (HSC, Section 100845(b)(d)). Please include the above certificate number in all your correspondence with ELAP.

If you have any questions, please contact ELAP at (510) 620-3155.

Sincerely,



George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch

**CALIFORNIA DEPARTMENT OF HEALTH SERVICES
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing**

POWER PRODUCTION CHEMICAL, SOUTHERN CALIFORNIA EDISON

Lab Phone (714) 895-0525

7301 FENWICK LANE, 2nd FLOOR
WESTMINSTER, CA 92683

Certificate No: 1949 Renew Date: 11/30/2007

Field of Testing: 102 - Inorganic Chemistry of Drinking Water

102.045 001	Perchlorate	EPA 314.0
102.100 001	Alkalinity	SM2320B
102.121 001	Hardness	SM2340C
102.130 001	Conductivity	SM2510B
102.140 001	Total Dissolved Solids	SM2540C
102.240 001	Phosphate, Ortho	SM4500-P E
102.530 001	Calcium	SM3500-Ca D

Field of Testing: 108 - Inorganic Chemistry of Wastewater

108.050 001	pH	EPA 150.1
108.110 001	Turbidity	EPA 180.1
108.120 002	Chloride	EPA 300.0
108.120 003	Fluoride	EPA 300.0
108.120 004	Nitrate	EPA 300.0
108.120 005	Nitrite	EPA 300.0
108.120 006	Nitrate-nitrite, Total	EPA 300.0
108.120 008	Sulfate	EPA 300.0
108.270 001	Dissolved Silica	EPA 370.1
108.380 001	Oil and Grease	EPA 1664
108.400 001	Acidity	SM2310B
108.410 001	Alkalinity	SM2320B
108.420 001	Hardness (calc.)	SM2340B
108.421 001	Hardness	SM2340C
108.430 001	Conductivity	SM2510B
108.440 001	Residue, Total	SM2540B
108.441 001	Residue, Filterable	SM2540C
108.442 001	Residue, Non-filterable	SM2540D
108.443 001	Residue, Settleable	SM2540F
108.445 001	Calcium	SM3111B
108.445 003	Magnesium	SM3111B
108.445 004	Potassium	SM3111B
108.445 005	Sodium	SM3111B
108.465 001	Chlorine	SM4500-Cl G
108.531 001	Dissolved Oxygen	SM4500-O G
108.560 001	Sulfite	SM4500-SO3 B
108.580 001	Sulfide	SM4500-S= D

POWER PRODUCTION CHEMICAL, SOUTHERN CALIFORNIA E

Certificate No: 1949
Renew Date: 11/30/2007

108.590 001	Biochemical Oxygen Demand	SM5210B
108.611 001	Total Organic Carbon	SM5310C
108.660 001	Chemical Oxygen Demand	HACH8000
108.672 001	Phosphate, Ortho	HACH8048
108.903 001	Boron	SM4500-B B

Field of Testing: 109 - Toxic Chemical Elements of Wastewater

109.370 006	Copper	SM3111B
109.370 009	Iron	SM3111B
109.410 009	Copper	SM3113B

STATE OF CALIFORNIA—HEALTH AND HUMAN SERVICES AGENCY

DEPARTMENT OF HEALTH SERVICES

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM (ELAP)
1449 W. TEMPLE STREET, ROOM 231
LOS ANGELES, CA 90028-5698
(213) 580-5731



May 2, 2000

Mr. Shawn Simmons
Water Technology Resources
Southern California Edison Company
7103 Marcelle Street
Paramount, California 90723-4840

Dear Mr. Simmons:

Thank you for your April 26, 2000 letter describing your laboratory's policy for the field measurement of pH and Res Cl₂.

It is the opinion of the program that field measurement by qualified staff from your laboratory is appropriate for these specific analytes.

These tests may be performed in the field but must be performed by an accredited laboratory.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Spinner".

Richard Spinner
Public Health Chemist III, Supervisor
Environmental Laboratory Accreditation Program



CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

CRG MARINE LABORATORIES, INC.

2020 DEL AMO BLVD., SUITE 200
TORRANCE, CA 90501

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 2261

Expiration Date: 06/30/2011

Effective Date: 07/01/2009

Richmond, California
subject to forfeiture or revocation

George C. Kulasingam
George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing



CRG MARINE LABORATORIES, INC.

Lab Phone (310) 533-5190

2020 DEL AMO BLVD., SUITE 200
TORRANCE, CA 90501

Certificate No: 2261 Renew Date: 6/30/2011

Field of Testing: 101 - Microbiology of Drinking Water

101.010 001	Heterotrophic Bacteria	SM9215B
101.060 002	Total Coliform	SM9223
101.060 003	E. coli	SM9223

Field of Testing: 107 - Microbiology of Wastewater

107.010 001	Heterotrophic Bacteria	SM9215B
107.020 001	Total Coliform	SM9221B
107.040 001	Fecal Coliform	SM9221C,E(MTF/EC)
107.060 001	Total Coliform	SM9222B
107.080 001	Fecal Coliform	SM9222D
107.110 001	Fecal Streptococcal	SM9230C (MF/ME)

Field of Testing: 108 - Inorganic Chemistry of Wastewater

108.090 001	Residue, Volatile	EPA 160.4
108.110 001	Turbidity	EPA 180.1
108.120 001	Bromide	EPA 300.0
108.120 002	Chloride	EPA 300.0
108.120 003	Fluoride	EPA 300.0
108.120 004	Nitrate	EPA 300.0
108.120 005	Nitrite	EPA 300.0
108.120 006	Nitrate-nitrite	EPA 300.0
108.120 007	Phosphate, Ortho	EPA 300.0
108.120 008	Sulfate	EPA 300.0
108.380 001	Oil and Grease	EPA 1664
108.410 001	Alkalinity	SM2320B
108.420 001	Hardness (calc.)	SM2340B
108.430 001	Conductivity	SM2510B
108.440 001	Residue, Total	SM2540B
108.441 001	Residue, Filterable	SM2540C
108.442 001	Residue, Non-filterable	SM2540D
108.443 001	Residue, Settleable	SM2540F
108.452 001	Chloride	SM4500-Cl- E
108.465 001	Chlorine	SM4500-Cl G
108.470 001	Cyanide, Manual Distillation	SM4500-CN C
108.472 001	Cyanide, Total	SM4500-CN E
108.493 001	Ammonia	SM4500-NH3 D or E (19h/20h)
108.520 001	Nitrate-nitrite	SM4500-NO3 E

CRG MARINE LABORATORIES, INC.

Certificate No: 2261
Renew Date: 6/30/2011

108.521	001	Nitrate calc.	SM4500-NO3 E
108.530	001	Dissolved Oxygen	SM4500-O C
108.540	001	Phosphate, Ortho	SM4500-P E
108.541	001	Phosphorus, Total	SM4500-P E
108.550	001	Dissolved Silica	SM4500-SI D (18th/19th)
108.580	001	Sulfide	SM4500-S= D
108.640	001	Surfactants	SM5540C

Field of Testing: 109 - Toxic Chemical Elements of Wastewater

109.020	001	Aluminum	EPA 200.8
109.020	002	Antimony	EPA 200.8
109.020	003	Arsenic	EPA 200.8
109.020	004	Barium	EPA 200.8
109.020	005	Beryllium	EPA 200.8
109.020	006	Cadmium	EPA 200.8
109.020	007	Chromium	EPA 200.8
109.020	008	Cobalt	EPA 200.8
109.020	009	Copper	EPA 200.8
109.020	010	Lead	EPA 200.8
109.020	011	Manganese	EPA 200.8
109.020	012	Molybdenum	EPA 200.8
109.020	013	Nickel	EPA 200.8
109.020	014	Selenium	EPA 200.8
109.020	015	Silver	EPA 200.8
109.020	016	Thallium	EPA 200.8
109.020	017	Vanadium	EPA 200.8
109.020	018	Zinc	EPA 200.8
109.020	019	Mercury	EPA 200.8
109.191	001	Mercury	EPA 245.2
109.360	001	Mercury	EPA 1631

Field of Testing: 110 - Volatile Organic Chemistry of Wastewater

110.040	040	Halogenated Hydrocarbons	EPA 624
110.040	041	Aromatic Compounds	EPA 624
110.040	042	Oxygenates	EPA 624
110.040	043	Other Volatile Organics	EPA 624

Field of Testing: 111 - Semi-volatile Organic Chemistry of Wastewater

111.101	030	Pesticides	EPA 625
111.101	031	PCBs	EPA 625
111.101	032	Polynuclear Aromatic Hydrocarbons	EPA 625
111.101	033	Adipates	EPA 625
111.101	034	Phthalates	EPA 625
111.101	036	Other Extractables	EPA 625

Field of Testing: 116 - Volatile Organic Chemistry of Hazardous Waste

CRG MARINE LABORATORIES, INC.

Certificate No: 2261
Renew Date: 6/30/2011

116.080 000	Volatile Organic Compounds	EPA 8260B
116.080 120	Oxygenates	EPA 8260B

Field of Testing: 126 - Microbiology of Recreational Water

126.010 001	Total Coliform (Enumeration)	SM9221A,B,C
126.020 001	Total Coliform (Enumeration)	SM9222A,B
126.030 001	Fecal Coliform (Enumeration)	SM9221E
126.040 001	Fecal Coliform (Enumeration)	SM9222D
126.050 001	Total Coliform and E. coli	SM9223
126.060 001	Enterococci	SM9230C
126.080 001	Enterococci	Enterolert



CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

AQUATIC BIOASSAY & CONSULTING LABORATORIES, INC.

29 NORTH OLIVE STREET
VENTURA, CA 93001

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 1907
Expiration Date: 07/31/2011
Effective Date: 07/01/2009

George C. Kulasingam

George C. Kulasingam, Ph.D./Chief
Environmental Laboratory Accreditation Program Branch

Richmond, California
subject to forfeiture or revocation



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing



AQUATIC BIOASSAY & CONSULTING LABORATORIES, INC.
29 NORTH OLIVE STREET
VENTURA, CA 93001
Phone: (805) 643-5621

Certificate No.: 1907
Renew Date: 7/31/2011

Field of Testing: 108 - Inorganic Chemistry of Wastewater

108.490 001 pH SM4500-H+B

Field of Testing: 113 - Whole Effluent Toxicity of Wastewater

113.010 001A	Fathead Minnow (P. promelas)	EPA 600/4-90/027F, Static
113.010 001B	Fathead Minnow (P. promelas)	EPA 600/4-90/027F, Static Renewal
113.010 003A	Rainbow trout (O. mykiss)	EPA 600/4-90/027F, Static
113.010 003B	Rainbow trout (O. mykiss)	EPA 600/4-90/027F, Static Renewal
113.010 005A	Daphnid (C. dubia)	EPA 600/4-90/027F, Static
113.010 005B	Daphnid (C. dubia)	EPA 600/4-90/027F, Static Renewal
113.010 006A	Daphnia spp.	EPA 600/4-90/027F, Static
113.010 006B	Daphnia spp.	EPA 600/4-90/027F, Static Renewal
113.010 008A	Topsmelt (A. affinis)	EPA 600/4-90/027F, Static
113.010 008B	Topsmelt (A. affinis)	EPA 600/4-90/027F, Static Renewal
113.010 009A	Silverside (Menidia spp.)	EPA 600/4-90/027F, Static
113.010 009B	Silverside (Menidia spp.)	EPA 600/4-90/027F, Static Renewal
113.010 012A	Mysid (M. bahia)	EPA 600/4-90/027F, Static
113.010 012B	Mysid (M. bahia)	EPA 600/4-90/027F, Static Renewal
113.021 001A	Fathead Minnow (P. promelas)	EPA 2000 (EPA-821-R-02-012), Static
113.021 001B	Fathead Minnow (P. promelas)	EPA 2000 (EPA-821-R-02-012), Static Renewal
113.022 003A	Rainbow trout (O. mykiss)	EPA 2019 (EPA-821-R-02-012), Static
113.022 003B	Rainbow trout (O. mykiss)	EPA 2019 (EPA-821-R-02-012), Static Renewal
113.023 005A	Daphnid (C. dubia)	EPA 2002 (EPA-821-R-02-012), Static
113.023 005B	Daphnid (C. dubia)	EPA 2002 (EPA-821-R-02-012), Static Renewal
113.024 006A	Daphnia spp.	EPA 2021 (EPA-821-R-02-012), Static
113.024 006B	Daphnia spp.	EPA 2021 (EPA-821-R-02-012), Static Renewal
113.025 009A	Silverside (Menidia spp.)	EPA 2006 (EPA-821-R-02-012), Static
113.025 009B	Silverside (Menidia spp.)	EPA 2006 (EPA-821-R-02-012), Static Renewal
113.027 012A	Mysid (M. bahia)	EPA 2007 (EPA-821-R-02-012), Static
113.027 012B	Mysid (M. bahia)	EPA 2007 (EPA-821-R-02-012), Static Renewal
113.028 008A	Topsmelt (A. affinis)	EPA-821-R-02-012, Static
113.028 008B	Topsmelt (A. affinis)	EPA-821-R-02-012, Static Renewal
113.040 001	Fathead Minnow (P. promelas)	EPA 1000 (EPA/600/4-91/002)
113.041 001	Fathead Minnow (P. promelas)	EPA 1000 (EPA-821-R-02-013)
113.050 005	Daphnid (C. dubia)	EPA 1002 (EPA/600/4-91/002)
113.051 005	Daphnid (C. dubia)	EPA 1002 (EPA-821-R-02-013)
113.060 020	Green algae (S. capricornutum)	EPA 1003 (EPA/600/4-91/002)

AQUATIC BIOASSAY & CONSULTING LABORATORIES, INC.

Certificate No 1907
 Renew Date: 7/31/2011

113.061 020	Green algae (<i>S. capricornutum</i>)	EPA 1003 (EPA-821-R-02-013)
113.080 009	Silverside (<i>Menidia spp.</i>)	EPA 1006 (EPA/600/4-91/003)
113.081 009	Silverside (<i>Menidia spp.</i>)	EPA 1006 (EPA-821-R-02-014)
113.090 012	Mysid (<i>M. bahia</i>)	EPA 1007 (EPA/600/4-91/003)
113.091 012	Mysid (<i>M. bahia</i>)	EPA 1007 (EPA-821-R-02-014)
113.120 008	Topsmelt (<i>A. affinis</i>)	EPA 600/R-95/136
113.120 014	Pacific oyster (<i>C. gigas</i>)	EPA 600/R-95/136
113.120 015D	Sand dollar (<i>D. excentricus</i>)	EPA 600/R-95/136, Fertilization Test
113.120 015E	Sand dollar (<i>D. excentricus</i>)	EPA 600/R-95/136, Development Test
113.120 017D	Purple sea urchin (<i>S. purpuratus</i>)	EPA 600/R-95/136, Fertilization Test
113.120 017E	Purple sea urchin (<i>S. purpuratus</i>)	EPA 600/R-95/136, Development Test
113.120 019	Mussels (<i>Mytilus spp.</i>)	EPA 600/R-95/136
113.120 022	Giant kelp (<i>M. pyrifera</i>)	EPA 600/R-95/136
113.120 023	Red abalone (<i>H. rufescens</i>)	EPA 600/R-95/136

Field of Testing: 119 - Toxicity Bioassay of Hazardous Waste

119.010 001	Fathead Minnow (<i>P. promelas</i>)	Polisini & Miller (CDFG 1988)
119.010 003	Rainbow trout (<i>O. mykiss</i>)	Polisini & Miller (CDFG 1988)

Field of Testing: 126 - Microbiology of Recreational Water

126.010 001	Total Coliform (Enumeration)	SM9221A,B,C
126.030 001	Fecal Coliform (Enumeration)	SM9221E
126.050 001	Total Coliform and E. coli	SM9223
126.080 001	Enterococci	IDEXX



CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

MBC APPLIED ENVIRONMENTAL SCIENCES

3000 RED HILL AVENUE
COSTA MESA, CA 92626

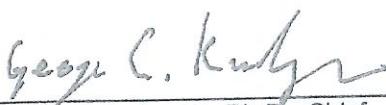
Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 1788
Expiration Date: 07/31/2010
Effective Date: 07/01/2008

Richmond, California
subject to forfeiture or revocation


George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing



MBC APPLIED ENVIRONMENTAL SCIENCES

Lab Phone (714) 850-4830

3000 RED HILL AVENUE
COSTA MESA, CA 92626

Certificate No: 1788 Renew Date: 07/31/2010

Field of Testing: 113 - Whole Effluent Toxicity of Wastewater

113.010 001A	Fathead Minnow (<i>P. promelas</i>)	EPA 600/4-90/027F, Static
113.010 001B	Fathead Minnow (<i>P. promelas</i>)	EPA 600/4-90/027F, Static Renewal
113.010 003A	Rainbow trout (<i>O. mykiss</i>)	EPA 600/4-90/027F, Static
113.010 003B	Rainbow trout (<i>O. mykiss</i>)	EPA 600/4-90/027F, Static Renewal
113.010 005A	Daphnid (<i>C. dubia</i>)	EPA 600/4-90/027F, Static
113.010 005B	Daphnid (<i>C. dubia</i>)	EPA 600/4-90/027F, Static Renewal
113.010 008A	Topsmelt (<i>A. affinis</i>)	EPA 600/4-90/027F, Static
113.010 008B	Topsmelt (<i>A. affinis</i>)	EPA 600/4-90/027F, Static Renewal
113.010 009A	Silverside (<i>Menidia spp.</i>)	EPA 600/4-90/027F, Static
113.010 009B	Silverside (<i>Menidia spp.</i>)	EPA 600/4-90/027F, Static Renewal
113.010 012A	Mysid (<i>M. bahia</i>)	EPA 600/4-90/027F, Static
113.010 012B	Mysid (<i>M. bahia</i>)	EPA 600/4-90/027F, Static Renewal
113.021 001A	Fathead Minnow (<i>P. promelas</i>)	EPA 2000 (EPA-821-R-02-012), Static
113.021 001B	Fathead Minnow (<i>P. promelas</i>)	EPA 2000 (EPA-821-R-02-012), Static Renewal
113.022 003A	Rainbow trout (<i>O. mykiss</i>)	EPA 2019 (EPA-821-R-02-012), Static
113.022 003B	Rainbow trout (<i>O. mykiss</i>)	EPA 2019 (EPA-821-R-02-012), Static Renewal
113.023 005A	Daphnid (<i>C. dubia</i>)	EPA 2002 (EPA-821-R-02-012), Static
113.023 005B	Daphnid (<i>C. dubia</i>)	EPA 2002 (EPA-821-R-02-012), Static Renewal
113.025 009A	Silverside (<i>Menidia spp.</i>)	EPA 2006 (EPA-821-R-02-012), Static
113.025 009B	Silverside (<i>Menidia spp.</i>)	EPA 2006 (EPA-821-R-02-012), Static Renewal
113.027 012A	Mysid (<i>M. bahia</i>)	EPA 2007 (EPA-821-R-02-012), Static
113.027 012B	Mysid (<i>M. bahia</i>)	EPA 2007 (EPA-821-R-02-012), Static Renewal
113.028 008A	Topsmelt (<i>A. affinis</i>)	EPA-821-R-02-012, Static
113.028 008B	Topsmelt (<i>A. affinis</i>)	EPA-821-R-02-012, Static Renewal
113.040 001	Fathead Minnow (<i>P. promelas</i>)	EPA 1000 (EPA/600/4-91/002)
113.041 001	Fathead Minnow (<i>P. promelas</i>)	EPA 1000 (EPA-821-R-02-013)
113.050 005	Daphnid (<i>C. dubia</i>)	EPA 1002 (EPA/600/4-91/002)
113.051 005	Daphnid (<i>C. dubia</i>)	EPA 1002 (EPA-821-R-02-013)
113.080 009	Silverside (<i>Menidia spp.</i>)	EPA 1006 (EPA/600/4-91/003)
113.081 009	Silverside (<i>Menidia spp.</i>)	EPA 1006 (EPA-821-R-02-014)
113.090 012	Mysid (<i>M. bahia</i>)	EPA 1007 (EPA/600/4-91/003)
113.091 012	Mysid (<i>M. bahia</i>)	EPA 1007 (EPA-821-R-02-014)
113.120 008	Topsmelt (<i>A. affinis</i>)	EPA 600/R-95/136
113.120 022	Giant kelp (<i>M. pyrifera</i>)	EPA 600/R-95/136
113.120 023	Red abalone (<i>H. rufescens</i>)	EPA 600/R-95/136

MBC APPLIED ENVIRONMENTAL SCIENCES

Certificate No: 1788
Renew Date: 07/31/2010

Field of Testing: 119 - Toxicity Bioassay of Hazardous Waste

119.010 001	Fathead Minnow (<i>P. promelas</i>)	Polisini & Miller (CDFG 1988)
119.010 003	Rainbow trout (<i>O. mykiss</i>)	Polisini & Miller (CDFG 1988)



NELAP - RECOGNIZED

CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF NELAP ACCREDITATION

Is hereby granted to

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427

Scope of the Certificate is limited to the
"NELAP Fields of Accreditation"
which accompany this Certificate.

Continued accredited status depends on successful
ongoing participation in the program.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 03220CA

Expiration Date: 09/30/2010

Effective Date: 10/01/2009

Richmond, California
subject to forfeiture or revocation

George C. Kulasingam
George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch



MARK B HORTON, MD, MSPH
Director

State of California—Health and Human Services Agency
California Department of Public Health



ARNOLD SCHWARZENEGGER
Governor

September 14, 2009

STEVEN L. LANE
CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427

Dear STEVEN L. LANE:

Certificate No. 03220CA

This is to advise you that the laboratory named above has been accredited under National Environmental Laboratory Accreditation Program (NELAP) as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seq.

The Fields of Accreditation for which this laboratory has been accredited are enclosed. Accreditation shall remain in effect until September 30, 2010 unless revoked by ELAP or withdrawn at your written request. To maintain accreditation, the laboratory shall comply with all the National Environmental Laboratory Accreditation Conference (NELAC) Standards and all associated California Environmental Laboratory Accreditation Program Branch (ELAP) regulations and statutes.

The application for renewal of this certificate must be received before the expiration date of this certificate to remain in force according to the HSC 100845(a).

Please note that your laboratory is required to notify California ELAP of any major changes in key accreditation criteria within 30 calendar days of the change. This written notification includes, but is not limited to, changes in ownership, location, key personnel, and major instrumentation (HSC 100845(b) and (d), and NELAC Standard Section 4.3.2). The certificate must be returned to California ELAP upon loss of accredited status.

Your continued cooperation with the above requirements is essential for maintaining the high quality of the data produced by environmental laboratories accredited by the State of California.

If you have any questions, please contact Rosalinda Lomboy at (213) 580-5731.

Sincerely,

George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch

Enclosure



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM - NELAP RECOGNIZED
NELAP Fields of Accreditation



CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
Lab Phone (714) 895-5494

Certificate No.: 03220CA
Renew Date: 9/30/2010

108 - Inorganic Chemistry of Wastewater

108.200	001	EPA 350.1	Ammonia
108.211	001	EPA 351.2	Kjeldahl Nitrogen
108.260	001	EPA 365.1	Phosphate, Ortho
108.261	001	EPA 365.1	Phosphorus, Total

110 - Volatile Organic Chemistry of Wastewater

110.020	000	EPA 602	Aromatic Volatiles
110.020	001	EPA 602	Benzene
110.020	002	EPA 602	Chlorobenzene
110.020	003	EPA 602	1,2-Dichlorobenzene
110.020	004	EPA 602	1,3-Dichlorobenzene
110.020	005	EPA 602	1,4-Dichlorobenzene
110.020	006	EPA 602	Ethylbenzene
110.020	007	EPA 602	Toluene
110.040	001	EPA 624	Benzene
110.040	002	EPA 624	Bromodichloromethane
110.040	003	EPA 624	Bromoform
110.040	004	EPA 624	Bromomethane
110.040	005	EPA 624	Carbon Tetrachloride
110.040	006	EPA 624	Chlorobenzene
110.040	007	EPA 624	Chloroethane
110.040	008	EPA 624	2-Chloroethyl Vinyl Ether
110.040	009	EPA 624	Chloroform
110.040	010	EPA 624	Chloromethane
110.040	011	EPA 624	Dibromochloromethane
110.040	012	EPA 624	1,2-Dichlorobenzene
110.040	013	EPA 624	1,3-Dichlorobenzene
110.040	014	EPA 624	1,4-Dichlorobenzene
110.040	015	EPA 624	1,1-Dichloroethane
110.040	016	EPA 624	1,2-Dichloroethane
110.040	017	EPA 624	1,1-Dichloroethene
110.040	018	EPA 624	trans-1,2-Dichloroethene
110.040	019	EPA 624	1,2-Dichloropropane
110.040	020	EPA 624	cis-1,3-Dichloropropene

As of 9/15/2009, this list supersedes all previous lists for this certificate number.
Customers: Please verify the current accreditation standing with the State.

110.040	021	EPA 624	trans-1,3-Dichloropropene
110.040	022	EPA 624	Ethylbenzene
110.040	023	EPA 624	Methylene Chloride
110.040	024	EPA 624	1,1,2,2-Tetrachloroethane
110.040	025	EPA 624	Tetrachloroethene
110.040	026	EPA 624	Toluene
110.040	027	EPA 624	1,1,1-Trichloroethane
110.040	028	EPA 624	1,1,2-Trichloroethane
110.040	029	EPA 624	Trichloroethene
110.040	030	EPA 624	Trichlorofluoromethane
110.040	031	EPA 624	Vinyl Chloride
110.040	040	EPA 624	Halogenated Hydrocarbons
110.040	041	EPA 624	Aromatic Compounds
110.040	042	EPA 624	Oxygenates
110.040	043	EPA 624	Other Volatile Organics

111 - Semi-volatile Organic Chemistry of Wastewater

111.060	000	EPA 610	Polynuclear Aromatics
111.060	001	EPA 610	Acenaphthene
111.060	002	EPA 610	Acenaphthylene
111.060	003	EPA 610	Anthracene
111.060	004	EPA 610	Benz(a)anthracene
111.060	005	EPA 610	Benzo(a)pyrene
111.060	006	EPA 610	Benzo(b)fluoranthene
111.060	007	EPA 610	Benzo(k)fluoranthene
111.060	008	EPA 610	Benzo(g,h,i)perylene
111.060	009	EPA 610	Chrysene
111.060	010	EPA 610	Dibenz(a,h)anthracene
111.060	011	EPA 610	Fluoranthene
111.060	012	EPA 610	Fluorene
111.060	013	EPA 610	Indeno(1,2,3-c,d)pyrene
111.060	014	EPA 610	Naphthalene
111.060	015	EPA 610	Phenanthrene
111.060	016	EPA 610	Pyrene
111.100	001	EPA 625	Acenaphthene
111.100	002	EPA 625	Acenaphthylene
111.100	003	EPA 625	Anthracene
111.100	004	EPA 625	Benzidine
111.100	005	EPA 625	Benzo(a)anthracene
111.100	006	EPA 625	Benzo(b)fluoranthene
111.100	007	EPA 625	Benzo(k)fluoranthene
111.100	008	EPA 625	Benzo(g,h,i)perylene

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Certificate No.: 03220CA
Renew Date: 9/30/2010

111.100 009	EPA 625	Benzo(a)pyrene
111.100 010	EPA 625	Benzyl Butyl Phthalate
111.100 011	EPA 625	Bis(2-chloroethoxy)methane
111.100 012	EPA 625	Bis(2-chloroethyl) Ether
111.100 013	EPA 625	Bis(2-chloroisopropyl) Ether
111.100 014	EPA 625	Di(2-ethylhexyl) Phthalate
111.100 015	EPA 625	4-Bromophenyl Phenyl Ether
111.100 016	EPA 625	4-Chloro-3-methylphenol
111.100 017	EPA 625	2-Chloronaphthalene
111.100 018	EPA 625	2-Chlorophenol
111.100 019	EPA 625	4-Chlorophenyl Phenyl Ether
111.100 020	EPA 625	Chrysene
111.100 021	EPA 625	Dibenz[a,h]anthracene
111.100 025	EPA 625	3,3'-Dichlorobenzidine
111.100 026	EPA 625	2,4-Dichlorophenol
111.100 027	EPA 625	Diethyl Phthalate
111.100 028	EPA 625	2,4-Dimethylphenol
111.100 029	EPA 625	Dimethyl Phthalate
111.100 030	EPA 625	Di-n-butyl phthalate
111.100 031	EPA 625	Di-n-octyl phthalate
111.100 032	EPA 625	2,4-Dinitrophenol
111.100 033	EPA 625	2,4-Dinitrotoluene
111.100 034	EPA 625	2,6-Dinitrotoluene
111.100 035	EPA 625	Fluoranthene
111.100 036	EPA 625	Fluorene
111.100 037	EPA 625	Hexachlorobenzene
111.100 038	EPA 625	Hexachlorobutadiene
111.100 039	EPA 625	Hexachlorocyclopentadiene
111.100 040	EPA 625	Hexachloroethane
111.100 041	EPA 625	Indeno(1,2,3-c,d)pyrene
111.100 042	EPA 625	Isophorone
111.100 043	EPA 625	2-Methyl-4,6-dinitrophenol
111.100 044	EPA 625	Naphthalene
111.100 045	EPA 625	Nitrobenzene
111.100 046	EPA 625	2-Nitrophenol
111.100 047	EPA 625	4-Nitrophenol
111.100 048	EPA 625	N-nitrosodimethylamine
111.100 049	EPA 625	N-nitrosodi-n-propylamine
111.100 050	EPA 625	N-nitrosodiphenylamine
111.100 051	EPA 625	Pentachlorophenol
111.100 052	EPA 625	Phenanthrene

As of 9/15/2009, this list supersedes all previous lists for this certificate number.
Customers: Please verify the current accreditation standing with the State.

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Certificate No.: 03220CA
Renew Date: 9/30/2010

111.100 053	EPA 625	Phenol
111.100 054	EPA 625	Pyrene
111.100 055	EPA 625	1,2,4-Trichlorobenzene
111.100 056	EPA 625	2,4,6-Trichlorophenol
111.101 032	EPA 625	Polynuclear Aromatic Hydrocarbons
111.101 034	EPA 625	Phthalates
111.101 036	EPA 625	Other Extractables
111.170 001	EPA 608	Aldrin
111.170 002	EPA 608	a-BHC
111.170 003	EPA 608	b-BHC
111.170 004	EPA 608	d-BHC
111.170 005	EPA 608	g-BHC (Lindane)
111.170 006	EPA 608	Chlordane
111.170 007	EPA 608	4,4'-DDD
111.170 008	EPA 608	4,4'-DDE
111.170 009	EPA 608	4,4'-DDT
111.170 010	EPA 608	Dieldrin
111.170 011	EPA 608	Endosulfan I
111.170 012	EPA 608	Endosulfan II
111.170 013	EPA 608	Endosulfan Sulfate
111.170 014	EPA 608	Endrin
111.170 015	EPA 608	Endrin Aldehyde
111.170 016	EPA 608	Heptachlor
111.170 017	EPA 608	Heptachlor Epoxide
111.170 018	EPA 608	Toxaphene
111.170 019	EPA 608	PCB-1016
111.170 020	EPA 608	PCB-1221
111.170 021	EPA 608	PCB-1232
111.170 022	EPA 608	PCB-1242
111.170 023	EPA 608	PCB-1248
111.170 024	EPA 608	PCB-1254
111.170 025	EPA 608	PCB-1260
111.170 030	EPA 608	Organochlorine Pesticides
111.170 031	EPA 608	PCBs

114 - Inorganic Chemistry of Hazardous Waste

114.010 001	EPA 6010B	Antimony
114.010 002	EPA 6010B	Arsenic
114.010 003	EPA 6010B	Barium
114.010 004	EPA 6010B	Beryllium
114.010 005	EPA 6010B	Cadmium
114.010 006	EPA 6010B	Chromium

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Certificate No.: 03220CA
Renew Date: 9/30/2010

114.010 007	EPA 6010B	Cobalt
114.010 008	EPA 6010B	Copper
114.010 009	EPA 6010B	Lead
114.010 010	EPA 6010B	Molybdenum
114.010 011	EPA 6010B	Nickel
114.010 012	EPA 6010B	Selenium
114.010 013	EPA 6010B	Silver
114.010 014	EPA 6010B	Thallium
114.010 015	EPA 6010B	Vanadium
114.010 016	EPA 6010B	Zinc
114.020 001	EPA 6020	Antimony
114.020 002	EPA 6020	Arsenic
114.020 003	EPA 6020	Barium
114.020 004	EPA 6020	Beryllium
114.020 005	EPA 6020	Cadmium
114.020 006	EPA 6020	Chromium
114.020 007	EPA 6020	Cobalt
114.020 008	EPA 6020	Copper
114.020 009	EPA 6020	Lead
114.020 010	EPA 6020	Molybdenum
114.020 011	EPA 6020	Nickel
114.020 012	EPA 6020	Selenium
114.020 013	EPA 6020	Silver
114.020 014	EPA 6020	Thallium
114.020 015	EPA 6020	Vanadium
114.020 016	EPA 6020	Zinc
114.103 001	EPA 7196A	Chromium (VI)
114.106 001	EPA 7199	Chromium (VI)
114.130 001	EPA 7420	Lead
114.140 001	EPA 7470A	Mercury
114.141 001	EPA 7471A	Mercury
114.222 001	EPA 9014	Cyanide
114.240 001	EPA 9040B	Corrosivity - pH Determination
114.241 001	EPA 9045C	Corrosivity - pH Determination
114.270 001	EPA 9214	Fluoride

115 - Extraction Test of Hazardous Waste

115.020 001	EPA 1311	Toxicity Characteristic Leaching Procedure (TCLP)
115.030 001	CCR Chapter11, Article 5, Appendix II	Waste Extraction Test (WET)
115.040 001	EPA 1312	Synthetic Precipitation Leaching Procedure (SPLP)

116 - Volatile Organic Chemistry of Hazardous Waste

116.020 001	EPA 8015B	Acetone
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As of 9/15/2009, this list supersedes all previous lists for this certificate number.
 Customers: Please verify the current accreditation standing with the State.

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116.020 002	EPA 8015B	Acetonitrile
116.020 004	EPA 8015B	Acrylonitrile
116.020 006	EPA 8015B	n-Butyl Alcohol
116.020 008	EPA 8015B	1,4-Dioxane
116.020 009	EPA 8015B	Ethanol
116.020 010	EPA 8015B	Ethyl Acetate
116.020 011	EPA 8015B	Ethylene Glycol
116.020 013	EPA 8015B	Isobutyl Alcohol
116.020 014	EPA 8015B	Isopropyl Alcohol
116.020 015	EPA 8015B	Methanol
116.020 016	EPA 8015B	Methyl Ethyl Ketone
116.020 017	EPA 8015B	Methyl Isobutyl Ketone
116.020 021	EPA 8015B	Propionitrile
116.020 030	EPA 8015B	Nonhalogenated Volatiles
116.020 031	EPA 8015B	Ethanol and Methanol
116.030 001	EPA 8015B	Gasoline-range Organics
116.040 002	EPA 8021B	Benzene
116.040 039	EPA 8021B	Ethylbenzene
116.040 041	EPA 8021B	Methyl tert-butyl Ether (MTBE)
116.040 047	EPA 8021B	Toluene
116.040 056	EPA 8021B	Xylenes, Total
116.040 062	EPA 8021B	BTEX
116.080 000	EPA 8260B	Volatile Organic Compounds
116.080 001	EPA 8260B	Acetone
116.080 002	EPA 8260B	Acetonitrile
116.080 003	EPA 8260B	Acrolein
116.080 004	EPA 8260B	Acrylonitrile
116.080 005	EPA 8260B	Allyl Alcohol
116.080 006	EPA 8260B	Allyl Chloride
116.080 007	EPA 8260B	Benzene
116.080 008	EPA 8260B	Benzyl Chloride
116.080 009	EPA 8260B	Bromoacetone
116.080 010	EPA 8260B	Bromochloromethane
116.080 011	EPA 8260B	Bromodichloromethane
116.080 012	EPA 8260B	Bromoform
116.080 013	EPA 8260B	Bromomethane
116.080 014	EPA 8260B	n-Butyl Alcohol
116.080 015	EPA 8260B	Carbon Disulfide
116.080 016	EPA 8260B	Carbon Tetrachloride
116.080 017	EPA 8260B	Chloral Hydrate
116.080 018	EPA 8260B	Chlorobenzene

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116.080 019	EPA 8260B	Chloroethane
116.080 020	EPA 8260B	2-Chloroethyl Vinyl Ether
116.080 021	EPA 8260B	Chloroform
116.080 022	EPA 8260B	Chloromethane
116.080 023	EPA 8260B	Chloroprene
116.080 024	EPA 8260B	3-Chloropropionitrile
116.080 025	EPA 8260B	Crotonaldehyde
116.080 026	EPA 8260B	Dibromochloromethane
116.080 027	EPA 8260B	Dibromochloropropane
116.080 028	EPA 8260B	1,2-Dibromoethane
116.080 029	EPA 8260B	Dibromofluoromethane
116.080 030	EPA 8260B	Dibromomethane
116.080 031	EPA 8260B	1,2-Dichlorobenzene
116.080 032	EPA 8260B	1,3-Dichlorobenzene
116.080 033	EPA 8260B	1,4-Dichlorobenzene
116.080 034	EPA 8260B	cis-1,4-Dichloro-2-butene
116.080 035	EPA 8260B	trans-1,4-Dichloro-2-butene
116.080 036	EPA 8260B	Dichlorodifluoromethane
116.080 037	EPA 8260B	1,1-Dichloroethane
116.080 038	EPA 8260B	1,2-Dichloroethane
116.080 039	EPA 8260B	1,1-Dichloroethene
116.080 040	EPA 8260B	trans-1,2-Dichloroethene
116.080 041	EPA 8260B	cis-1,2-Dichloroethene
116.080 042	EPA 8260B	1,2-Dichloropropane
116.080 043	EPA 8260B	1,3-Dichloropropane
116.080 044	EPA 8260B	2,2-Dichloropropane
116.080 045	EPA 8260B	1,1-Dichloropropene
116.080 046	EPA 8260B	cis-1,3-Dichloropropene
116.080 047	EPA 8260B	trans-1,3-Dichloropropene
116.080 048	EPA 8260B	1,3-Dichloro-2-propanol
116.080 049	EPA 8260B	1,2,3,4-Diepoxybutane
116.080 050	EPA 8260B	1,4-Dioxane
116.080 051	EPA 8260B	Epichlorohydrin
116.080 052	EPA 8260B	Ethyl Acetate
116.080 053	EPA 8260B	Ethylbenzene
116.080 054	EPA 8260B	Ethylene Oxide
116.080 055	EPA 8260B	Ethyl Methacrylate
116.080 056	EPA 8260B	Hexachlorobutadiene
116.080 057	EPA 8260B	Hexachloroethane
116.080 058	EPA 8260B	2-Hexanone (MBK)
116.080 059	EPA 8260B	Iodomethane

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116.080 060	EPA 8260B	Isobutyl Alcohol
116.080 061	EPA 8260B	Malononitrile
116.080 062	EPA 8260B	Methacrylonitrile
116.080 063	EPA 8260B	Methanol
116.080 064	EPA 8260B	Methyl tert-butyl Ether (MTBE)
116.080 065	EPA 8260B	Methylene Chloride
116.080 066	EPA 8260B	Methyl Ethyl Ketone
116.080 067	EPA 8260B	Methyl Methacrylate
116.080 068	EPA 8260B	4-Methyl-2-pentanone (MIBK)
116.080 069	EPA 8260B	Naphthalene
116.080 070	EPA 8260B	Nitrobenzene
116.080 071	EPA 8260B	2-Nitropropane
116.080 072	EPA 8260B	N-nitrosodi-n-butylamine
116.080 073	EPA 8260B	Paraldehyde
116.080 074	EPA 8260B	Pentachloroethane
116.080 075	EPA 8260B	Pentafluorobenzene
116.080 076	EPA 8260B	2-Picoline
116.080 077	EPA 8260B	Propargyl Alcohol
116.080 078	EPA 8260B	Propionitrile
116.080 079	EPA 8260B	N-propylamine
116.080 080	EPA 8260B	Pyridine
116.080 081	EPA 8260B	1,1,1,2-Tetrachloroethane
116.080 082	EPA 8260B	1,1,2,2-Tetrachloroethane
116.080 083	EPA 8260B	Tetrachloroethene
116.080 084	EPA 8260B	Toluene
116.080 085	EPA 8260B	o-Toluidine
116.080 086	EPA 8260B	1,2,3-Trichlorobenzene
116.080 087	EPA 8260B	1,2,4-Trichlorobenzene
116.080 088	EPA 8260B	1,1,1-Trichloroethane
116.080 089	EPA 8260B	1,1,2-Trichloroethane
116.080 090	EPA 8260B	Trichloroethene
116.080 091	EPA 8260B	Trichlorofluoromethane
116.080 092	EPA 8260B	1,2,3-Trichloropropane
116.080 093	EPA 8260B	Vinyl Acetate
116.080 094	EPA 8260B	Vinyl Chloride
116.080 095	EPA 8260B	Xylenes, Total
116.080 096	EPA 8260B	tert-Amyl Methyl Ether (TAME)
116.080 097	EPA 8260B	tert-Butyl Alcohol (TBA)
116.080 098	EPA 8260B	Ethyl tert-butyl Ether (ETBE)
116.080 099	EPA 8260B	Bromobenzene
116.080 100	EPA 8260B	n-Butylbenzene

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116.080	101	EPA 8260B	sec-Butylbenzene
116.080	102	EPA 8260B	tert-Butylbenzene
116.080	103	EPA 8260B	2-Chlorotoluene
116.080	104	EPA 8260B	4-Chlorotoluene
116.080	105	EPA 8260B	Isopropylbenzene
116.080	106	EPA 8260B	N-propylbenzene
116.080	107	EPA 8260B	Styrene
116.080	108	EPA 8260B	1,2,4-Trimethylbenzene
116.080	109	EPA 8260B	1,3,5-Trimethylbenzene
116.080	120	EPA 8260B	Oxygenates
116.100	001	LUFT GC/MS	Total Petroleum Hydrocarbons - Gasoline
116.100	002	LUFT GC/MS	Benzene
116.100	003	LUFT GC/MS	Toluene
116.100	004	LUFT GC/MS	Xylenes
116.100	005	LUFT GC/MS	Methyl tert-butyl Ether (MTBE)
116.100	010	LUFT GC/MS	BTEX and MTBE
116.110	001	LUFT	Total Petroleum Hydrocarbons - Gasoline

117 - Semi-volatile Organic Chemistry of Hazardous Waste

117.010	001	EPA 8015B	Diesel-range Total Petroleum Hydrocarbons
117.016	001	LUFT	Diesel-range Total Petroleum Hydrocarbons
117.017	001	EPA 418.1	TRPH Screening
117.110	000	EPA 8270C	Extractable Organics
117.110	001	EPA 8270C	Acenaphthene
117.110	002	EPA 8270C	Acenaphthylene
117.110	003	EPA 8270C	Acetophenone
117.110	004	EPA 8270C	2-Acetylaminofluorene
117.110	005	EPA 8270C	1-Acetyl-2-thiourea
117.110	006	EPA 8270C	4-Aminobiphenyl
117.110	007	EPA 8270C	Aniline
117.110	008	EPA 8270C	Anthracene
117.110	009	EPA 8270C	Aramite
117.110	010	EPA 8270C	Benzidine
117.110	011	EPA 8270C	Benz(a)anthracene
117.110	012	EPA 8270C	Benzo(b)fluoranthene
117.110	013	EPA 8270C	Benzo(k)fluoranthene
117.110	014	EPA 8270C	Benzo(g,h,i)perylene
117.110	015	EPA 8270C	Benzo(a)pyrene
117.110	016	EPA 8270C	Benzoic Acid
117.110	017	EPA 8270C	p-Benzoquinone
117.110	018	EPA 8270C	Benzyl Alcohol
117.110	019	EPA 8270C	Benzyl Butyl Phthalate

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117.110 020	EPA 8270C	Bis(2-chloroethoxy)methane
117.110 021	EPA 8270C	Bis(2-chloroethyl) Ether
117.110 022	EPA 8270C	Bis(2-chloroisopropyl) Ether
117.110 023	EPA 8270C	Di(2-ethylhexyl) Phthalate
117.110 024	EPA 8270C	4-Bromophenyl Phenyl Ether
117.110 025	EPA 8270C	Carbazole
117.110 026	EPA 8270C	4-Chloroaniline
117.110 027	EPA 8270C	4-Chloro-3-methylphenol
117.110 028	EPA 8270C	1-Chloronaphthalene
117.110 029	EPA 8270C	2-Chloronaphthalene
117.110 030	EPA 8270C	2-Chlorophenol
117.110 031	EPA 8270C	4-Chlorophenyl Phenyl Ether
117.110 032	EPA 8270C	Chrysene
117.110 033	EPA 8270C	2-Cyclohexyl-4,6-dinitrophenol
117.110 034	EPA 8270C	2,4-Diaminotoluene
117.110 035	EPA 8270C	Dibenz(a,j)acridine
117.110 036	EPA 8270C	Dibenz(a,h)anthracene
117.110 037	EPA 8270C	Dibenzofuran
117.110 038	EPA 8270C	Dibenzo(a,e)pyrene
117.110 039	EPA 8270C	1,2-Dichlorobenzene
117.110 040	EPA 8270C	1,3-Dichlorobenzene
117.110 041	EPA 8270C	1,4-Dichlorobenzene
117.110 042	EPA 8270C	3,3'-Dichlorobenzidine
117.110 043	EPA 8270C	2,4-Dichlorophenol
117.110 044	EPA 8270C	2,6-Dichlorophenol
117.110 045	EPA 8270C	Diethyl Phthalate
117.110 046	EPA 8270C	Diethylstilbestrol
117.110 047	EPA 8270C	Diethyl Sulfate
117.110 048	EPA 8270C	Dihydrosafrole
117.110 049	EPA 8270C	3,3'-Dimethoxybenzidine
117.110 050	EPA 8270C	p-Dimethylaminoazobenzene
117.110 051	EPA 8270C	7,12-Dimethylbenz(a)anthracene
117.110 052	EPA 8270C	a,a-Dimethylphenethylamine
117.110 053	EPA 8270C	2,4-Dimethylphenol
117.110 054	EPA 8270C	Dimethyl Phthalate
117.110 055	EPA 8270C	Di-n-butyl phthalate
117.110 056	EPA 8270C	Di-n-octyl phthalate
117.110 057	EPA 8270C	1,2-Dinitrobenzene
117.110 058	EPA 8270C	1,3-Dinitrobenzene
117.110 059	EPA 8270C	1,4-Dinitrobenzene
117.110 060	EPA 8270C	2,4-Dinitrophenol

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117.110 061	EPA 8270C	2,4-Dinitrotoluene
117.110 062	EPA 8270C	2,6-Dinitrotoluene
117.110 063	EPA 8270C	Diphenylamine
117.110 064	EPA 8270C	1,2-Diphenylhydrazine
117.110 065	EPA 8270C	Ethyl Carbamate
117.110 066	EPA 8270C	Ethyl Methanesulfonate
117.110 067	EPA 8270C	Fluoranthene
117.110 068	EPA 8270C	Fluorene
117.110 069	EPA 8270C	Hexachlorobenzene
117.110 070	EPA 8270C	Hexachlorobutadiene
117.110 071	EPA 8270C	Hexachlorocyclopentadiene
117.110 072	EPA 8270C	Hexachloroethane
117.110 073	EPA 8270C	Hexachlorophene
117.110 074	EPA 8270C	Hexachloropropene
117.110 075	EPA 8270C	Indeno(1,2,3-c,d)pyrene
117.110 076	EPA 8270C	Isophorone
117.110 077	EPA 8270C	Isosafrole
117.110 078	EPA 8270C	Maleic Anhydride
117.110 079	EPA 8270C	3-Methylcholanthrene
117.110 080	EPA 8270C	2-Methyl-4,6-dinitrophenol
117.110 081	EPA 8270C	4,4'-Methylenebis(2-chloroaniline)
117.110 082	EPA 8270C	Methyl Methanesulfonate
117.110 083	EPA 8270C	2-Methylnaphthalene
117.110 084	EPA 8270C	2-Methylphenol
117.110 085	EPA 8270C	3-Methylphenol
117.110 086	EPA 8270C	4-Methylphenol
117.110 087	EPA 8270C	Naphthalene
117.110 088	EPA 8270C	1,4-Naphthoquinone
117.110 089	EPA 8270C	1-Naphthylamine
117.110 090	EPA 8270C	2-Naphthylamine
117.110 091	EPA 8270C	Nicotine
117.110 092	EPA 8270C	2-Nitroaniline
117.110 093	EPA 8270C	3-Nitroaniline
117.110 094	EPA 8270C	4-Nitroaniline
117.110 095	EPA 8270C	Nitrobenzene
117.110 096	EPA 8270C	2-Nitrophenol
117.110 097	EPA 8270C	4-Nitrophenol
117.110 098	EPA 8270C	N-nitrosodi-n-butylamine
117.110 099	EPA 8270C	N-nitrosodiethylamine
117.110 100	EPA 8270C	N-nitrosodimethylamine
117.110 101	EPA 8270C	N-nitrosodi-n-propylamine

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117.110	102	EPA 8270C	N-nitrosodiphenylamine
117.110	103	EPA 8270C	N-nitrosomethylmethylenimine
117.110	104	EPA 8270C	N-nitrosomorpholine
117.110	105	EPA 8270C	N-nitrosopiperidine
117.110	106	EPA 8270C	N-nitrosopyrrolidine
117.110	107	EPA 8270C	5-Nitro-o-toluidine
117.110	108	EPA 8270C	Pentachlorobenzene
117.110	109	EPA 8270C	Pentachloronitrobenzene
117.110	110	EPA 8270C	Pentachlorophenol
117.110	111	EPA 8270C	Phenacetin
117.110	112	EPA 8270C	Phenanthrene
117.110	113	EPA 8270C	Phenol
117.110	114	EPA 8270C	1,4-Phenylenediamine
117.110	115	EPA 8270C	Phthalic Anhydride
117.110	116	EPA 8270C	2-Picoline
117.110	117	EPA 8270C	Pronamide
117.110	118	EPA 8270C	Propylthiouracil
117.110	119	EPA 8270C	Pyrene
117.110	120	EPA 8270C	Pyridine
117.110	121	EPA 8270C	Resorcinol
117.110	122	EPA 8270C	Safrole
117.110	123	EPA 8270C	Strychnine
117.110	124	EPA 8270C	1,2,4,5-Tetrachlorobenzene
117.110	125	EPA 8270C	2,3,4,6-Tetrachlorophenol
117.110	126	EPA 8270C	Thiophenol
117.110	127	EPA 8270C	Toluene Diisocyanate
117.110	128	EPA 8270C	o-Toluidine
117.110	129	EPA 8270C	1,2,4-Trichlorobenzene
117.110	130	EPA 8270C	2,4,5-Trichlorophenol
117.110	131	EPA 8270C	2,4,6-Trichlorophenol
117.110	132	EPA 8270C	1,3,5-Trinitrobenzene
117.111	073	EPA 8270C	Polynuclear Aromatic Hydrocarbons
117.111	075	EPA 8270C	Phthalates
117.111	076	EPA 8270C	Other Extractables
117.140	000	EPA 8310	Polynuclear Aromatic Hydrocarbons
117.140	001	EPA 8310	Acenaphthene
117.140	002	EPA 8310	Acenaphthylene
117.140	003	EPA 8310	Anthracene
117.140	004	EPA 8310	Benz(a)anthracene
117.140	005	EPA 8310	Benzo(a)pyrene
117.140	006	EPA 8310	Benzo(b)fluoranthene

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117.140 007	EPA 8310	Benzo(k)fluoranthene
117.140 008	EPA 8310	Benzo(g,h,i)perylene
117.140 009	EPA 8310	Chrysene
117.140 010	EPA 8310	Dibenz(a,h)anthracene
117.140 011	EPA 8310	Fluoranthene
117.140 012	EPA 8310	Fluorene
117.140 013	EPA 8310	Indeno(1,2,3-c,d)pyrene
117.140 014	EPA 8310	Naphthalene
117.140 015	EPA 8310	Phenanthrene
117.140 016	EPA 8310	Pyrene
117.170 000	EPA 8330	Nitroaromatics and Nitramines
117.170 001	EPA 8330	4-Amino-2,6-dinitrotoluene
117.170 002	EPA 8330	2-Amino-4,6-dinitrotoluene
117.170 003	EPA 8330	1,3-Dinitrobenzene
117.170 004	EPA 8330	2,4-Dinitrotoluene
117.170 005	EPA 8330	2,6-Dinitrotoluene
117.170 006	EPA 8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)
117.170 007	EPA 8330	Methyl-2,4,6-trinitrophenylnitramine
117.170 008	EPA 8330	Nitrobenzene
117.170 009	EPA 8330	2-Nitrotoluene
117.170 010	EPA 8330	3-Nitrotoluene
117.170 011	EPA 8330	4-Nitrotoluene
117.170 012	EPA 8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
117.170 013	EPA 8330	1,3,5-Trinitrobenzene
117.170 014	EPA 8330	2,4,6-Trinitrotoluene
117.210 000	EPA 8081A	Organochlorine Pesticides
117.210 001	EPA 8081A	Aldrin
117.210 002	EPA 8081A	a-BHC
117.210 003	EPA 8081A	b-BHC
117.210 004	EPA 8081A	d-BHC
117.210 005	EPA 8081A	g-BHC (Lindane)
117.210 006	EPA 8081A	Captafol
117.210 007	EPA 8081A	a-Chlordane
117.210 008	EPA 8081A	g-Chlordane
117.210 009	EPA 8081A	Chlordane (tech.)
117.210 010	EPA 8081A	Chlorobenzilate
117.210 011	EPA 8081A	Chloroneb
117.210 012	EPA 8081A	Chlorothalonil
117.210 013	EPA 8081A	4,4'-DDD
117.210 014	EPA 8081A	4,4'-DDE
117.210 015	EPA 8081A	4,4'-DDT

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117.210 020	EPA 8081A	Dieldrin
117.210 021	EPA 8081A	Endosulfan I
117.210 022	EPA 8081A	Endosulfan II
117.210 023	EPA 8081A	Endosulfan Sulfate
117.210 024	EPA 8081A	Endrin
117.210 025	EPA 8081A	Endrin Aldehyde
117.210 026	EPA 8081A	Endrin Ketone
117.210 027	EPA 8081A	Heptachlor
117.210 028	EPA 8081A	Heptachlor Epoxide
117.210 029	EPA 8081A	Hexachlorobenzene
117.210 033	EPA 8081A	Methoxychlor
117.210 039	EPA 8081A	Toxaphene
117.210 040	EPA 8081A	Trifluralin
117.220 000	EPA 8082	PCBs
117.220 001	EPA 8082	PCB-1016
117.220 002	EPA 8082	PCB-1221
117.220 003	EPA 8082	PCB-1232
117.220 004	EPA 8082	PCB-1242
117.220 005	EPA 8082	PCB-1248
117.220 006	EPA 8082	PCB-1254
117.220 007	EPA 8082	PCB-1260
117.240 000	EPA 8141A	Organophosphorus Pesticides
117.240 001	EPA 8141A	Atrazine
117.240 002	EPA 8141A	Azinphos Methyl
117.240 003	EPA 8141A	Carbofenothon
117.240 004	EPA 8141A	Chlorfenvinphos
117.240 005	EPA 8141A	Chlorpyrifos
117.240 006	EPA 8141A	Chlorpyrifos Methyl
117.240 007	EPA 8141A	Demeton-O
117.240 008	EPA 8141A	Demeton-S
117.240 009	EPA 8141A	Diazinon
117.240 014	EPA 8141A	Famphur
117.240 015	EPA 8141A	Malathion
117.240 016	EPA 8141A	Mevinphos
117.240 017	EPA 8141A	Naled
117.240 018	EPA 8141A	Parathion Ethyl
117.240 019	EPA 8141A	Parathion Methyl
117.240 020	EPA 8141A	Phorate
117.240 022	EPA 8141A	Ronnel
117.240 023	EPA 8141A	Simazine
117.240 024	EPA 8141A	Sulfotep

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Certificate No.: 03220CA
Renew Date: 9/30/2010

117.250	000	EPA 8151A	Chlorinated Herbicides
117.250	001	EPA 8151A	2,4-D
117.250	002	EPA 8151A	2,4-DB
117.250	003	EPA 8151A	2,4,5-T
117.250	004	EPA 8151A	2,4,5-TP
117.250	006	EPA 8151A	Dalapon
117.250	007	EPA 8151A	Dichlorprop
117.250	008	EPA 8151A	Dinoseb
117.250	009	EPA 8151A	MCPA
117.250	010	EPA 8151A	MCPP
117.250	011	EPA 8151A	4-Nitrophenol
117.250	014	EPA 8151A	Dicamba



CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 1230
Expiration Date: 05/31/2010
Effective Date: 06/01/2008

Richmond, California
subject to forfeiture or revocation

George C. Kulasingam
George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch



MARK B HORTON, MD, MSPH
Director

State of California—Health and Human Services Agency
California Department of Public Health



ARNOLD SCHWARZENEGGER
Governor

June 10, 2008

STEVEN L. LANE
CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427

Certificate No. 1230

Dear STEVEN L. LANE:

This is to advise you that the laboratory named above has been certified as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seq.

The Fields of Testing for which this laboratory has been certified are indicated on the enclosed "Fields of Testing." The certificate shall remain in effect until May 31, 2010 unless it is revoked. This certificate is subject to an annual fee as prescribed by HSC 100860(a).

The application for renewal of this certificate must be received before the expiration date of this certificate to remain in force according to the HSC 100845(a).

Any changes in laboratory location or structural alterations, which may affect adversely the quality of analysis in the Fields of Testing for which this laboratory has been granted a certificate, require prior notification. Notification is also required for changes in ownership or laboratory director within 30 days after the change (HSC, Section 100845(b) and (d)).

Your continued cooperation with the above requirements is essential for maintaining the high quality of the data produced by environmental laboratories certified by the State of California.

If you have any questions, please contact Rosalinda Lomboy at (213) 580-5731.

Sincerely,

George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch

Enclosure



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing



CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Lab Phone (714) 895-5494

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427

Certificate No: 1230 Renew Date: 5/31/2010

Field of Testing: 102 - Inorganic Chemistry of Drinking Water

102.030 001	Bromide	EPA 300.0
102.030 003	Chloride	EPA 300.0
102.030 005	Fluoride	EPA 300.0
102.030 006	Nitrate	EPA 300.0
102.030 007	Nitrite	EPA 300.0
102.030 008	Phosphate, Ortho	EPA 300.0
102.030 010	Sulfate	EPA 300.0
102.045 001	Perchlorate	EPA 314.0
102.047 001	Perchlorate	EPA 331.0
102.100 001	Alkalinity	SM2320B
102.121 001	Hardness	SM2340C
102.130 001	Conductivity	SM2510B
102.140 001	Total Dissolved Solids	SM2540C
102.145 001	Total Dissolved Solids	EPA 160.1
102.163 001	Chlorine, Free and Total	SM4500-CI G
102.170 001	Chloride	SM4500-CI- B
102.190 001	Cyanide, Total	SM4500-CN E
102.192 001	Cyanide, amenable	SM4500-CN G
102.260 001	Total Organic Carbon	SM5310B
102.261 001	DOC	SM5310B
102.264 001	Total Organic Carbon	SM5310D
102.265 001	DOC	SM5310D
102.270 001	Surfactants	SM5540C
102.520 001	Calcium	EPA 200.7
102.520 002	Magnesium	EPA 200.7
102.520 003	Potassium	EPA 200.7
102.520 004	Silica	EPA 200.7
102.520 005	Sodium	EPA 200.7
102.520 006	Hardness (calc.)	EPA 200.7

Field of Testing: 103 - Toxic Chemical Elements of Drinking Water

103.130 001	Aluminum	EPA 200.7
103.130 003	Barium	EPA 200.7
103.130 004	Beryllium	EPA 200.7
103.130 005	Cadmium	EPA 200.7
103.130 007	Chromium	EPA 200.7

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Certificate No: 1230
Renew Date: 5/31/2010

103.130 008	Copper	EPA 200.7
103.130 009	Iron	EPA 200.7
103.130 011	Manganese	EPA 200.7
103.130 012	Nickel	EPA 200.7
103.130 015	Silver	EPA 200.7
103.130 017	Zinc	EPA 200.7
103.130 018	Boron	EPA 200.7
103.140 001	Aluminum	EPA 200.8
103.140 002	Antimony	EPA 200.8
103.140 003	Arsenic	EPA 200.8
103.140 004	Barium	EPA 200.8
103.140 005	Beryllium	EPA 200.8
103.140 006	Cadmium	EPA 200.8
103.140 007	Chromium	EPA 200.8
103.140 008	Copper	EPA 200.8
103.140 009	Lead	EPA 200.8
103.140 010	Manganese	EPA 200.8
103.140 012	Nickel	EPA 200.8
103.140 013	Selenium	EPA 200.8
103.140 014	Silver	EPA 200.8
103.140 015	Thallium	EPA 200.8
103.140 016	Zinc	EPA 200.8
103.140 017	Boron	EPA 200.8
103.140 018	Vanadium	EPA 200.8
103.160 001	Mercury	EPA 245.1
103.310 001	Chromium (VI)	EPA 218.6

Field of Testing: 104 - Volatile Organic Chemistry of Drinking Water

104.030 001	1,2-Dibromoethane	EPA 504.1
104.030 002	1,2-Dibromo-3-chloropropane	EPA 504.1
104.035 001	1,2,3-Trichloropropane	SRL 524M-TCP
104.040 000	Volatile Organic Compounds	EPA 524.2
104.040 001	Benzene	EPA 524.2
104.040 007	n-Butylbenzene	EPA 524.2
104.040 008	sec-Butylbenzene	EPA 524.2
104.040 009	tert-Butylbenzene	EPA 524.2
104.040 010	Carbon Tetrachloride	EPA 524.2
104.040 011	Chlorobenzene	EPA 524.2
104.040 015	2-Chlorotoluene	EPA 524.2
104.040 016	4-Chlorotoluene	EPA 524.2
104.040 019	1,3-Dichlorobenzene	EPA 524.2
104.040 020	1,2-Dichlorobenzene	EPA 524.2
104.040 021	1,4-Dichlorobenzene	EPA 524.2
104.040 022	Dichlorodifluoromethane	EPA 524.2

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Certificate No: 1230
Renew Date: 5/31/2010

104.040 023	1,1-Dichloroethane	EPA 524.2
104.040 024	1,2-Dichloroethane	EPA 524.2
104.040 025	1,1-Dichloroethene	EPA 524.2
104.040 026	cis-1,2-Dichloroethene	EPA 524.2
104.040 027	trans-1,2-Dichloroethene	EPA 524.2
104.040 028	Dichloromethane	EPA 524.2
104.040 029	1,2-Dichloropropane	EPA 524.2
104.040 033	cis-1,3-Dichloropropene	EPA 524.2
104.040 034	trans-1,3-Dichloropropene	EPA 524.2
104.040 035	Ethylbenzene	EPA 524.2
104.040 037	Isopropylbenzene	EPA 524.2
104.040 039	Naphthalene	EPA 524.2
104.040 041	N-propylbenzene	EPA 524.2
104.040 042	Styrene	EPA 524.2
104.040 044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040 045	Tetrachloroethene	EPA 524.2
104.040 046	Toluene	EPA 524.2
104.040 048	1,2,4-Trichlorobenzene	EPA 524.2
104.040 049	1,1,1-Trichloroethane	EPA 524.2
104.040 050	1,1,2-Trichloroethane	EPA 524.2
104.040 051	Trichloroethene	EPA 524.2
104.040 052	Trichlorofluoromethane	EPA 524.2
104.040 054	1,2,4-Trimethylbenzene	EPA 524.2
104.040 055	1,3,5-Trimethylbenzene	EPA 524.2
104.040 056	Vinyl Chloride	EPA 524.2
104.040 057	Xylenes, Total	EPA 524.2
104.045 001	Bromodichloromethane	EPA 524.2
104.045 002	Bromoform	EPA 524.2
104.045 003	Chloroform	EPA 524.2
104.045 004	Dibromochloromethane	EPA 524.2
104.045 005	Trihalomethanes	EPA 524.2
104.050 002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050 004	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050 005	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050 006	Trichlorotrifluoroethane	EPA 524.2
104.050 007	tert-Butyl Alcohol (TBA)	EPA 524.2
104.050 008	Carbon Disulfide	EPA 524.2
104.050 009	Methyl Isobutyl Ketone	EPA 524.2

Field of Testing: 105 - Semi-volatile Organic Chemistry of Drinking Water

105.090 004	Benzo(a)pyrene	EPA 525.2
105.090 029	Polynuclear Aromatic Hydrocarbons	EPA 525.2

Field of Testing: 108 - Inorganic Chemistry of Wastewater

108.090 001	Residue, Volatile	EPA 160.4
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CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Certificate No: 1230
Renew Date: 5/31/2010

108.110 001	Turbidity	EPA 180.1
108.112 001	Boron	EPA 200.7
108.112 002	Calcium	EPA 200.7
108.112 003	Hardness (calc.)	EPA 200.7
108.112 004	Magnesium	EPA 200.7
108.112 005	Potassium	EPA 200.7
108.112 006	Silica	EPA 200.7
108.112 007	Sodium	EPA 200.7
108.113 001	Boron	EPA 200.8
108.120 001	Bromide	EPA 300.0
108.120 002	Chloride	EPA 300.0
108.120 003	Fluoride	EPA 300.0
108.120 004	Nitrate	EPA 300.0
108.120 005	Nitrite	EPA 300.0
108.120 006	Nitrate-nitrite, Total	EPA 300.0
108.120 007	Phosphate, Ortho	EPA 300.0
108.120 008	Sulfate	EPA 300.0
108.264 001	Phosphate, Ortho	EPA 365.3
108.265 001	Phosphorus, Total	EPA 365.3
108.350 001	Total Recoverable Petroleum Hydrocarbons	EPA 418.1
108.360 001	Phenols, Total	EPA 420.1
108.380 001	Oil and Grease	EPA 1664
108.390 001	Turbidity	SM2130B
108.400 001	Acidity	SM2310B
108.410 001	Alkalinity	SM2320B
108.420 001	Hardness (calc.)	SM2340B
108.421 001	Hardness	SM2340C
108.430 001	Conductivity	SM2510B
108.440 001	Residue, Total	SM2540B
108.441 001	Residue, Filterable	SM2540C
108.442 001	Residue, Non-filterable	SM2540D
108.443 001	Residue, Settleable	SM2540F
108.451 001	Chloride	SM4500-Cl C
108.464 001	Chlorine	SM4500-Cl F
108.490 001	pH	SM4500-H+ B
108.492 001	Ammonia	SM4500-NH3 C (19th/20th)
108.492 002	Kjeldahl Nitrogen	SM4500-NH3 C (19th/20th)
108.494 001	Ammonia	SM4500-NH3 F or G (18th)
108.510 001	Nitrite	SM4500-NO2 B
108.520 001	Nitrate-nitrite, Total	SM4500-NO3 E
108.520 002	Nitrite	SM4500-NO3 E
108.531 001	Dissolved Oxygen	SM4500-O G
108.560 001	Sulfite	SM4500-SO3 B

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Certificate No: 1230
 Renew Date: 5/31/2010

108.580 001	Sulfide	SM4500-S=D
108.590 001	Biochemical Oxygen Demand	SM5210B
108.591 001	Carbonaceous BOD	SM5210B
108.602 001	Chemical Oxygen Demand	SM5220D
108.610 001	Total Organic Carbon	SM5310B
108.630 001	Oil and Grease	SM5520B (20th)
108.640 001	Surfactants	SM5540C

Field of Testing: 109 - Toxic Chemical Elements of Wastewater

109.010 001	Aluminum	EPA 200.7
109.010 002	Antimony	EPA 200.7
109.010 003	Arsenic	EPA 200.7
109.010 004	Barium	EPA 200.7
109.010 005	Beryllium	EPA 200.7
109.010 007	Cadmium	EPA 200.7
109.010 009	Chromium	EPA 200.7
109.010 010	Cobalt	EPA 200.7
109.010 011	Copper	EPA 200.7
109.010 012	Iron	EPA 200.7
109.010 013	Lead	EPA 200.7
109.010 015	Manganese	EPA 200.7
109.010 016	Molybdenum	EPA 200.7
109.010 017	Nickel	EPA 200.7
109.010 019	Selenium	EPA 200.7
109.010 021	Silver	EPA 200.7
109.010 023	Thallium	EPA 200.7
109.010 024	Tin	EPA 200.7
109.010 025	Titanium	EPA 200.7
109.010 026	Vanadium	EPA 200.7
109.010 027	Zinc	EPA 200.8
109.020 001	Aluminum	EPA 200.8
109.020 002	Antimony	EPA 200.8
109.020 003	Arsenic	EPA 200.8
109.020 004	Barium	EPA 200.8
109.020 005	Beryllium	EPA 200.8
109.020 006	Cadmium	EPA 200.8
109.020 007	Chromium	EPA 200.8
109.020 008	Cobalt	EPA 200.8
109.020 009	Copper	EPA 200.8
109.020 010	Lead	EPA 200.8
109.020 011	Manganese	EPA 200.8
109.020 012	Molybdenum	EPA 200.8
109.020 013	Nickel	EPA 200.8
109.020 014	Selenium	EPA 200.8

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Certificate No: 1230
 Renew Date: 5/31/2010

109.020	015	Silver	EPA 200.8
109.020	016	Thallium	EPA 200.8
109.020	017	Vanadium	EPA 200.8
109.020	018	Zinc	EPA 200.8
109.020	020	Gold	EPA 200.8
109.020	021	Iron	EPA 200.8
109.020	022	Tin	EPA 200.8
109.020	023	Titanium	EPA 200.8
109.104	001	Chromium (VI)	EPA 218.6
109.190	001	Mercury	EPA 245.1
109.824	001	Iron	SM3500-Fe B (20th)

Field of Testing: 113 - Whole Effluent Toxicity of Wastewater

113.010	001A	Fathead Minnow (P. promelas)	EPA 600/4-90/027F, Static
113.021	001A	Fathead Minnow (P. promelas)	EPA 2000 (EPA-821-R-02-012), Static

Field of Testing: 119 - Toxicity Bioassay of Hazardous Waste

119.010	001	Fathead Minnow (P. promelas)	Polisini & Miller (CDFG 1988)
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Field of Testing: 120 - Physical Properties of Hazardous Waste

120.010	001	Ignitability	EPA 1010
120.030	001	Corrosivity	EPA 1110
120.040	001	Reactive Cyanide	Section 7.3 SW-846
120.050	001	Reactive Sulfide	Section 7.3 SW-846
120.070	001	Corrosivity - pH Determination	EPA 9040B
120.080	001	Corrosivity - pH Determination	EPA 9045C



NELAP - RECOGNIZED

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF NELAP ACCREDITATION

Is hereby granted to

CALTEST ANALYTICAL LABORATORY

1885 NORTH KELLY ROAD
NAPA, CA 94558

Scope of the Certificate is limited to the
"NELAP Fields of Accreditation"
which accompany this Certificate.

Continued accredited status depends on successful
ongoing participation in the program.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 01103CA

Expiration Date: 01/31/2010

Effective Date: 01/31/2009

Richmond, California
subject to forfeiture or revocation

A handwritten signature in black ink, appearing to read "George C. Kulasingam".

George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch

CALTEST ANALYTICAL LABORATORY

Certificate No: 01103CA
 Renew Date: 01/31/2010

109.430	002	SM3120B	Antimony
109.430	003	SM3120B	Arsenic
109.430	004	SM3120B	Barium
109.430	005	SM3120B	Beryllium
109.430	007	SM3120B	Cadmium
109.430	009	SM3120B	Chromium
109.430	010	SM3120B	Cobalt
109.430	011	SM3120B	Copper
109.430	012	SM3120B	Iron
109.430	013	SM3120B	Lead
109.430	015	SM3120B	Manganese
109.430	016	SM3120B	Molybdenum
109.430	017	SM3120B	Nickel
109.430	019	SM3120B	Selenium
109.430	021	SM3120B	Silver
109.430	023	SM3120B	Thallium
109.430	024	SM3120B	Vanadium
109.430	025	SM3120B	Zinc
109.811	001	SM3500-Cr D (18th/19th)	Chromium (VI)

110 - Volatile Organic Chemistry of Wastewater

110.040	001	EPA 624	Benzene
110.040	002	EPA 624	Bromodichloromethane
110.040	003	EPA 624	Bromoform
110.040	004	EPA 624	Bromomethane
110.040	005	EPA 624	Carbon Tetrachloride
110.040	006	EPA 624	Chlorobenzene
110.040	007	EPA 624	Chloroethane
110.040	008	EPA 624	2-Chloroethyl Vinyl Ether
110.040	009	EPA 624	Chloroform
110.040	010	EPA 624	Chloromethane
110.040	011	EPA 624	Dibromochloromethane
110.040	012	EPA 624	1,2-Dichlorobenzene
110.040	013	EPA 624	1,3-Dichlorobenzene
110.040	014	EPA 624	1,4-Dichlorobenzene
110.040	015	EPA 624	1,1-Dichloroethane
110.040	016	EPA 624	1,2-Dichloroethane
110.040	017	EPA 624	1,1-Dichloroethene
110.040	018	EPA 624	trans-1,2-Dichloroethene
110.040	019	EPA 624	1,2-Dichloropropane
110.040	020	EPA 624	cis-1,3-Dichloropropene
110.040	021	EPA 624	trans-1,3-Dichloropropene

As of 12/23/2008, this list supersedes all previous lists for this certificate number.
 Customers: Please verify the current accreditation standing with the State.

110.040 022	EPA 624	Ethylbenzene
110.040 023	EPA 624	Methylene Chloride
110.040 024	EPA 624	1,1,2,2-Tetrachloroethane
110.040 025	EPA 624	Tetrachloroethene
110.040 026	EPA 624	Toluene
110.040 027	EPA 624	1,1,1-Trichloroethane
110.040 028	EPA 624	1,1,2-Trichloroethane
110.040 029	EPA 624	Trichloroethene
110.040 030	EPA 624	Trifluoromethane
110.040 031	EPA 624	Vinyl Chloride
110.040 040	EPA 624	Halogenated Hydrocarbons
110.040 041	EPA 624	Aromatic Compounds
110.040 042	EPA 624	Oxygenates
110.040 043	EPA 624	Other Volatile Organics

111 - Semi-volatile Organic Chemistry of Wastewater

111.100 001	EPA 625	Acenaphthene
111.100 002	EPA 625	Acenaphthylene
111.100 003	EPA 625	Anthracene
111.100 004	EPA 625	Benzidine
111.100 005	EPA 625	Benz(a)anthracene
111.100 006	EPA 625	Benz(b)fluoranthene
111.100 007	EPA 625	Benz(k)fluoranthene
111.100 008	EPA 625	Benzo(g,h,i)perylene
111.100 009	EPA 625	Benzo(a)pyrene
111.100 010	EPA 625	Benzyl Butyl Phthalate
111.100 011	EPA 625	Bis(2-chloroethoxy)methane
111.100 012	EPA 625	Bis(2-chloroethyl) Ether
111.100 013	EPA 625	Bis(2-chloroisopropyl) Ether
111.100 014	EPA 625	Di(2-ethylhexyl) Phthalate
111.100 015	EPA 625	4-Bromophenyl Phenyl Ether
111.100 016	EPA 625	4-Chloro-3-methylphenol
111.100 017	EPA 625	2-Chloronaphthalene
111.100 018	EPA 625	2-Chlorophenol
111.100 019	EPA 625	4-Chlorophenyl Phenyl Ether
111.100 020	EPA 625	Chrysene
111.100 021	EPA 625	Dibenz(a,h)anthracene
111.100 025	EPA 625	3,3'-Dichlorobenzidine
111.100 026	EPA 625	2,4-Dichlorophenol
111.100 027	EPA 625	Diethyl Phthalate
111.100 028	EPA 625	2,4-Dimethylphenol
111.100 029	EPA 625	Dimethyl Phthalate



NELAP - RECOGNIZED



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF NELAP ACCREDITATION

Is hereby granted to

TESTAMERICA WEST SACRAMENTO

880 RIVERSIDE PARKWAY
WEST SACRAMENTO, CA 95605

Scope of the Certificate is limited to the
"NELAP Fields of Accreditation"
which accompany this Certificate.

Continued accredited status depends on successful
ongoing participation in the program.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 01119CA

Expiration Date: 01/31/2010

Effective Date: 01/31/2009

Richmond, California
subject to forfeiture or revocation

George C. Kulasingam

George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch

TESTAMERICA WEST SACRAMENTO

Certificate No: 01119CA
Renew Date: 01/31/2010

109.020	010	EPA 200.8	Lead
109.020	011	EPA 200.8	Manganese
109.020	012	EPA 200.8	Molybdenum
109.020	013	EPA 200.8	Nickel
109.020	014	EPA 200.8	Selenium
109.020	015	EPA 200.8	Silver
109.020	016	EPA 200.8	Thallium
109.020	017	EPA 200.8	Vanadium
109.020	018	EPA 200.8	Zinc
109.190	001	EPA 245.1	Mercury

111 - Semi-volatile Organic Chemistry of Wastewater

111.111	000	EPA 1613B	Dioxins
111.111	001	EPA 1613B	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
111.111	002	EPA 1613B	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)
111.111	003	EPA 1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
111.111	004	EPA 1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
111.111	005	EPA 1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)
111.111	006	EPA 1613B	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)
111.111	007	EPA 1613B	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)
111.111	008	EPA 1613B	2,3,7,8-Tetrachlorodibenzofuran (TCDF)
111.111	009	EPA 1613B	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
111.111	010	EPA 1613B	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)
111.111	011	EPA 1613B	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
111.111	012	EPA 1613B	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
111.111	013	EPA 1613B	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
111.111	014	EPA 1613B	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
111.111	015	EPA 1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
111.111	016	EPA 1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
111.111	017	EPA 1613B	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)
111.111	018	EPA 1613B	Total TCDD
111.111	019	EPA 1613B	Total PeCDD
111.111	020	EPA 1613B	Total HxCDD
111.111	021	EPA 1613B	Total HpCDD
111.111	022	EPA 1613B	Total TCDF
111.111	023	EPA 1613B	Total PeCDF
111.111	024	EPA 1613B	Total HxCDF
111.111	025	EPA 1613B	Total HpCDF
111.273	001	EPA 1664A	Oil and Grease

114 - Inorganic Chemistry of Hazardous Waste

114.010	001	EPA 6010B	Antimony
114.010	002	EPA 6010B	Arsenic

As of 12/30/2008, this list supersedes all previous lists for this certificate number.
 Customers: Please verify the current accreditation standing with the State.



West Sacramento CA NELAP Certificate
Weir, Douglas to: shawn.simmons

01/28/2010 09:54 AM

1 attachment



CA NELAP 2009 1_12_09.pdf

Shawn,

Attached is our current certificate. We should be receiving our new certificate in the next few days and I will forward a copy to you when we receive it from the state.

Sincerely,

Doug

<<CA NELAP 2009 1_12_09.pdf>>

DOUGLAS WEIR

Quality Assurance Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

880 Riverside Parkway
West Sacramento, CA 95605
(916) 373-5600 main
(916) 374-4389 direct
(916) 372-1059 fax

www.testamericainc.com

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CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

APPLIED MICROBIOLOGICAL SERVICES

TESTING LABORATORY

1538 W. GAYLORD STREET
LONG BEACH, CA 90813

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1257**

Expiration Date: **07/31/2010**

Effective Date: **07/01/2008**

Richmond, California
subject to forfeiture or revocation


George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch

State of California—Health and Human Services Agency
California Department of Public Health

MARK B HORTON, MD, MSPH
Director

ARNOLD SCHWARZENEGGER
Governor

July 2, 2008

DANIEL B. DURON
APPLIED MICROBIOLOGICAL SERVICES
1538 W. GAYLORD STREET
LONG BEACH, CA 90813

Certificate No. 1257

Dear DANIEL B. DURON:

This is to advise you that the laboratory named above continues to be certified as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seq. Certification for all currently certified Fields of Testing that the laboratory has applied for renewal shall remain in effect until 07/31/2010 unless it is revoked.

Please note that the renewal application for certification is subject to an on-site process, and the continued use of this certificate is contingent upon:

- * successful completion of the on-site process;
- * acceptable performance in the required proficiency testing (PT) studies;
- * timely payment of all fees, including an annual fee due before July 31, 2009;
- * compliance with Environmental Laboratory Accreditation Program Branch (ELAP) statutes (HSC, Section 100825, et seq.) and Regulations (California Code of Regulations (CCR), Title 22, Division 4, Chapter 19).

An updated certificate of the "Fields of Testing" will be issued to the laboratory upon successful completion of the on-site process.

The application for the renewal of this certificate must be received before the expiration date to remain in force according to the HSC100845(a).

Please note that the laboratory is required to notify ELAP of any major changes in the laboratory such as the transfer of ownership, change of laboratory director, change in location, or structural alterations which may affect adversely the quality of analyses (HSC, Section 100845(b)(d)). Please include the above certificate number in all your correspondence with ELAP.

If you have any questions, please contact Wanda Porter at (510) 620-3155.
Sincerely,

George C. Kulasingam

George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch

UPS CampusShip: Label/Receipt

**Shipment Receipt**

Transaction Date 25 Feb 2010

(Keep this for your records.)

DS + L3 - DWR monthly Appt. Data 2010 &
Annual Report 2009

Address Information

Ship To:
 CA Reg. Water Quality Control Board
 Tracy Egoscue
 Los Angeles Region
 Executive Officer
 320 W. 4th Street, Suite 200
 LOS ANGELES CA 90013-2343

Shipper:
 El Segundo Operations
 Environmental Department
 310-615-6387
 301 Vista Del Mar
 El Segundo CA 90245

Shipment Information

Service:	UPS Next Day Air
*Guaranteed By:	10:30 A.M., Fri. 26 Feb. 2010
Quantum View Notify SM 1: Delivery	srie.coustar@nrgenergy.com
Quantum View Notify SM 2: Delivery	alexander.sanchez@nrgenergy.com
Quantum View Notify SM 3: Delivery	william.collins@nrgenergy.com
Quantum View Notify SM 4: Delivery	george.piantka@nrgenergy.com
E-mail Failure Notification:	srie.coustar@nrgenergy.com

Fuel Surcharge:**Package Information**

Package 1 of 1	
Tracking Number:	1Z10Y65E2594483422
Package Type:	UPS Letter
Actual Weight:	Letter
Billable Weight:	Letter
Delivery Confirmation:	Delivery Confirmation

Billing Information

Bill Shipping Charges to: Shipper's Account 10Y65E

All Shipping Charges in USD

1-800-PICK-

* For delivery and guarantee information, see the [UPS Service Guide](#). To speak to a customer service representative, call 1-800-PICK-UPS for domestic services and 1-800-782-7892 for international services.

UPS CampusShip: Label/Receipt

**Shipment Receipt**

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Transaction Date 25 Feb 2010

ESD-LB - DML monthly Rep Jan 2010
Annual Report 2008

Address Information

Ship To:
 Division of Water Quality
 C/O DMR PROCESSING CENTER
 1001 I Street 15th Floor
 SACRAMENTO CA 95814-2828

Shipper:
 El Segundo Operations
 Environmental Department
 310-615-6387
 301 Vista Del Mar
 El Segundo CA 90245

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Quantum View Notify SM 2: Delivery	alexander.sanchez@nrgenergy.com
Quantum View Notify SM 3: Delivery	william.collins@nrgenergy.com
Quantum View Notify SM 4: Delivery	george.piantka@nrgenergy.com
E-mail Failure Notification:	srie.coustar@nrgenergy.com

Fuel Surcharge:

Package Information

Package 1 of 1	
Tracking Number:	1Z10Y65E2594575038
Package Type:	UPS Letter
Actual Weight:	Letter
Billable Weight:	Letter
Delivery Confirmation:	Delivery Confirmation

Billing Information

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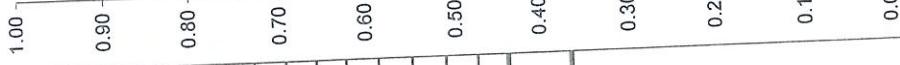
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El Segundo Power, LLC
ANNUAL REPORT
2009

Retention Basin (Part 9)	05/07/09	
Hexachlorocyclopentadiene	ND	
Hexachloroethane	ND	
Indeno (1,2,3-c,d) Pyrene	ND	
Isophorone	ND	
Isopropylbenzene	ND	
Methoxychlor	ND	
Methylene chloride	ND	
Methyl Bromide	ND	
Methyl-tert-Butyl Ether	ND	
Mirex	ND	
Naphthalene	ND	
n-Butylbenzene	ND	
Nitrobenzene	ND	
N-Nitrosodimethylamine	ND	
N-Nitroso-dln-propylamine	ND	
N-Nitrosodiphenylamine	ND	
n-Propylbenzene	ND	
o-Xylene	ND	
p,m-Xylene	ND	
Pentachlorophenol	ND	

Retention Basin
Priority Pollutants Part 9

■ 05/07/09 □ □ □



Penachlorophenol
p,m-Xylene
o-Xylene
n-Propylbenzene
N-Nitrosodiphenylamine
N-Nitrosodimethylamine
Nitrobenzene
n-Buylbenzene
Naphthalene
Mirex
Methyl-tert-Butyl Ether
Methyl Bromide
Methylene chloride
Methoxychlor
Isopropylbenzene
Isophorone
Indeno (1,2,3-c,d) Pyrene
Hexachloroethane