Facility Name:	**Upper Occoquan Sewage Authority**	**Report Date:**	**07/05/11**
Report:	**2012 Permit Application Metals Results -- Third of Three Events**	**Outfall No.:**	**001**
Sampling Date:	**05/03/11**	**Site ID:**	**Final Effluent**

Metal	Method Reference [1]	Reporting Units	Final Effluent Concentration		Sample Type [5]	Quantification Level [6]
			Total Recoverable (Fin Eff TM)	Dissolved (Fin Eff DM)		
Antimony, Sb	EPA 200.9	µg/L	< 10.0		c	10.0
Arsenic, As	EPA 200.9	µg/L	< 10.0		c	10.0
Barium, Ba	SM 3111 [2]	µg/L	< 500		c	500
Beryllium, Be	SM 3113 B [2]	µg/L	< 0.5		c	0.5
Cadmium, Cd	EPA 200.9	µg/L	< 0.5		c	0.5
Calcium, Ca	SM 3111 [2]	**mg/L**	61.6		c	0.5
Chromium, Hexavalent, Cr^{6+}	SM 3500-Cr D. [2]	µg/L		< 6.3 [4]	g	5.0
Chromium,Total, Cr	EPA 200.9	µg/L	< 5.0		c	5.0
Copper, Cu	EPA 200.9	µg/L	< 6.0		c	6.0
Lead, Pb	EPA 200.9	µg/L	< 6.0		c	6.0
Magnesium, Mg	SM 3111 [2]	**mg/L**	4.2		c	0.05
Mercury, Hg	EPA 245.1 [3]	µg/L	< 0.3		c	0.3
Molybdenum, Mo	SM 3113 B [2]	µg/L	< 5.0		c	5.0
Nickel, Ni	EPA 200.9	µg/L	< 10.0		c	10.0
Selenium, Se	EPA 200.9	µg/L	< 2.0		c	2.0
Silver, Ag	EPA 200.9	µg/L	< 1.0		c	1.0
Sodium, Na	SM 3111 [2]	**mg/L**	67.4		c	0.5
Thallium, Tl	EPA 200.9	µg/L	< 10.0		c	10.0
Zinc, Zn	SM 3111 [2]	µg/L	< 50.0		c	50.0

VA DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN
JUL 11 2011
REGIONAL OFF

[1] *EPA Method 200.9, Revision 2.2: Determination of Trace Elements By Stabilized Temperature Graphite Furnace Atomic Absorption*; Environmental Protection Agency, Office of Research and Development, May 1994.

[2] *Standard Methods for the Examination of Water and Wastewater*, 18th Edition, APHA, AWWA, WEF; 1992.

[3] *EPA Method 245.1, version 3: Determination of Mercury in Water by Cold Vapor Atomic Absorption Spectrometry;* Environmental Protection Agency Office of Research and Development, May 1994.

[4] Sample was diluted 4+1 (for a dilution factor of 1.25) to reduce matrix interference.

[5] c = composite sample; g = grab sample.

[6] Quantification level is defined as the lowest calibration standard.

Prepared by / Date: Patricia Kordas 7/5/11 Reviewed by / Date: [illegible] 7-5-11

REPORT OF ANALYSIS

CLIENT: Upper Occoquan Sewage Authority
ATTN: Cecilia Vernaci
ADDRESS: 14631 Compton Road
Centreville, VA 20121-2506
PHONE: (703) 830-2200
FAX: (703) 266-4064

Special Notes:
RE: PA/PT 11-1

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 5/5/11 Time: 1025
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: FEDERAL EXPRESS
SAMPLE RECEIPT:
Date: 5/6/11 Time: 0930
NUMBER OF CONTAINERS: 3
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)
REPORT NO: 11-06611 14:20

SAMPLE ID: FIELD BLANK
SAMPLE NO: 11-06611

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Xylenes	8021B	0.2	< 0.2	ug/L	TAG	5/9/11	2008

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

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The results on this report relate only to the sample(s) provided for analysis.

Results conform to NELAC standards, where applicable, unless otherwise indicated.

Authorized By: Elaine Claiborne
Elaine Claiborne, Laboratory Director
Date: 11-May-11

James R. Reed & Associates
770 Pilot House Drive, Newport News, VA 23606
(757) 873-4703 ● Fax: (757) 873-1498

VELAP# 460013
EPA# VA00015

REPORT OF ANALYSIS

CLIENT: Upper Occoquan Sewage Authority
ATTN: Cecilia Vernaci
ADDRESS: 14631 Compton Road
Centreville, VA 20121-2506
PHONE: (703) 830-2200
FAX: (703) 266-4064

Special Notes:
RE: PA/PT 11-1

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 5/5/11 Time: 1025
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: FEDERAL EXPRESS
SAMPLE RECEIPT:
Date: 5/6/11 Time: 0930
NUMBER OF CONTAINERS: 3
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)
REPORT NO: 11-06612 14:20

SAMPLE ID: FINAL EFFLUENT
SAMPLE NO: 11-06612

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Xylenes	8021B	0.2	< 0.2	ug/L	TAG	5/9/11	2237

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

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Authorized By: Elaine Claiborne
Elaine Claiborne, Laboratory Director
Date: 11-May-11

James R. Reed & Associates
770 Pilot House Drive, Newport News, VA 23606
(757) 873-4703 ● Fax: (757) 873-1498

VELAP# 460013
EPA# VA00015

QA/ QC Summary
Upper Occoquan Sewage Authority

JRA ID #: 11-06610 through 11-06612

Method SW- 846 8021B - Xylenes

Regulatory Holding Time

Collection Date: 05/05/2011

Analysis Date: 05/09/2011 — 14 days from collection

Initial Calibration: Performed: 05/09/2011

	Correlation Coefficient	Acceptance Range
m,p-xylene	0.9995	0.99x or better
o-xylene	0.9998	

The calibration curve consists of six standards in the range of 0.1ug/L to 5.0 ug/L for o-Xylene, 0.2ug/L to 10 ug/L for m,p-Xylene.

Sample ID	Surrogate Recovery %	Acceptance Range %
Beginning Calib Check	115	70 – 130
LFB (Second Source)	115	70 – 130
Method Blank	101	70 – 130
11-06610	108	70 – 130
11-06610 DUP	104	70 – 130
11-06611	108	70 – 130
11-06612	105	70 – 130
11-06612SPIKE	107	70 – 130
Ending Calib. Check	106	70 – 130

Beginning Calibration Verification:

	True Value	Recovery %	Acceptance Range %
m,p- xylene	4 ug/L	105	80 - 120
o-xylene	2 ug/L	108	80 - 120

Lab Fortified Blank

	True Value	Recovery %	Acceptance Range %
m,p- xylene	4 ug/L	105	70 - 130
o-xylene	2 ug/L	108	70 - 130

Ending Calibration Verification:

	True Value	Recovery %	Acceptance Range %
m,p- xylene	4 ug/L	100	80 - 120
o-xylene	2 ug/L	104	80 - 120

MATRIX SPIKE (11-06612)

	Spike True Value	Recovery %	Acceptance Range %
m,p- xylene	5 ug/L	102	70 - 130
o-xylene	2.5 ug/L	104	70 - 130

DUPLICATE RPD (11-06610)

	Results			
	11-06610	11-06610 DUP	RPD	Acceptance Range %
m,p- xylene	< QL	< QL	0	20
o-xylene	< QL	< QL	0	20

QC Notes:
Xylenes on the Raw Influent sample was confirmed by GC-MS.

Elaine Claiborne
for Fe P. Estoesta
QA/QC Director

REPORT OF ANALYSIS

CLIENT: Upper Occoquan Sewage Authority
ATTN: Cecilia Vernaci
ADDRESS: 14631 Compton Road
Centreville, VA 20121-2506
PHONE: (703) 830-2200
FAX: (703) 266-4064

Special Notes:
RE: PA/PT 11-1

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 5/5/11 Time: 1008
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: FEDERAL EXPRESS
SAMPLE RECEIPT:
Date: 5/6/11 Time: 0930
NUMBER OF CONTAINERS: 3
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)
REPORT NO: 11-06610 13:53

SAMPLE ID: RAW INFLUENT
SAMPLE NO: 11-06610

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Xylenes	8021B	0.2	0.7	ug/L	TAG	5/9/11	2058

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

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Results conform to NELAC standards, where applicable, unless otherwise indicated.

Authorized By: Elaine Claiborne
Elaine Claiborne, Laboratory Director
Date: 11-May-11

James R. Reed & Associates
770 Pilot House Drive, Newport News, VA 23606
(757) 873-4703 ● Fax: (757) 873-1498

VELAP# 460013
EPA# VA00015

CHAIN OF CUSTODY

Company Name: Upper Occoquan Sewage Authority
Company Contact: Cecilia Vernaci Telephone: 703-830-2200
Results To: Cecilia Vernaci Fax: 703-266-4064
Address: 14631 Compton Road
Centreville, VA 20121
Project ID: PA/PT 11-1

ANALYSES REQUESTED

																Bottle I.D	A
																Preserv.	1,11
JRA ID # 11	Sample Type*	Sample Location	Composite Start Date	Composite Start Time	Composite End Date	Composite End Time	Grab Date	Grab Time	Total # of cont.	Xylenes (8021B)							
060611	WW	Field Blank					050511	1025	3	X							
		~~Raw Influent~~							~~3~~	~~X~~							
060612	WW	Final Effluent					050511	1025	3	X							

*WW= Wastewater, GW = Groundwater, DW - Drinking Water, HW - Hazardous Waste, OTHERS

Sampled By: [signature] Date/Time: 050511 / 1025
Relinquished By: [signature] Date/Time: 050511 / 1205
Received By: A P Bullock Date/Time: 050511 1205
Relinquished By: A P Bullock Date/Time: 050511 1245
Received By: FedEx Date/Time: 5-6-11 0930

Relinquished by: FedEx 5-6-11 0930
Rcvd by: [signature]

___for Compliance
___Not for Compliance

VOA Chlorine Check: POS___NEG___ By:_____
Dechlorinated:_____Yes

Preservatives:

1 = <6°C	6 = $Na_2S_2O_3$ + HCl	10=Ascorbic Acid + HCl
2 = HNO_3	7 = NaOH + ZnOAc	11=HCl
3 = H_2SO_4	8 = H_2SO_4 + FAS	12=Zinc Acetate + NaOH
4 = NaOH	9 = NH_4Cl	13=Na_2SO_3 + HCl
5 = $Na_2S_2O_3$		14=Na_2SO_3 + H_2SO_4

CN Interference Check: Positive Negative
Sulfide: _____ _____
Oxidizing Agent: _____ _____

Arrival Temp: 1-2 °C

JAMES R. REED and ASSOCIATES (757) 873-4703; FAX (757) 873-1498
770 Pilot House Drive, Newport News, VA 23606

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CHAIN OF CUSTODY

Company Name: Upper Occoquan Sewage Authority
Company Contact: Cecilia Vernaci Telephone: 703-830-2200
Results To: Cecilia Vernaci Fax: 703-266-4064
Address: 14631 Compton Road
Centreville, VA 20121
Project ID: PA/PT 11-1

ANALYSES REQUESTED

										Bottle I.D	A														
										Preserv.	1,11														
			Composite				Grab																		
JRA ID #	Sample Type*	Sample Location	Start Date	Start Time	End Date	End Time	Date	Time	Total # of cont.		Xylenes (8021B)														
		~~Field Blank~~							~~3~~		~~X~~														
06610	WW	Raw Influent					050511	1008	3		X														
		~~Final Effluent~~							~~3~~		~~X~~														

*WW= Wastewater, GW = Groundwater, DW - Drinking Water, HW - Hazardous Waste, OTHERS

Sampled By: AP Bullock Date/Time: 050511 1008
Relinquished By: AP Bullock Date/Time: 050511 1245
Received By: FedEx Date/Time:
Relinquished By: FedEx Date/Time:
Received By: [signature] Date/Time: 5-6-11 0930

___for Compliance
___Not for Compliance

VOA Chlorine Check: POS___NEG___ By:_____
Dechlorinated:_____Yes

Preservatives:

1 = <6°C	6 = $Na_2S_2O_3$ + HCl	10=Ascorbic Acid + HCl
2 = HNO_3	7 = NaOH + ZnOAc	11=HCl
3 = H_2SO_4	8 = H_2SO_4 + FAS	12=Zinc Acetate + NaOH
4 = NaOH	9 = NH_4Cl	13=Na_2SO_3 + HCl
5 = $Na_2S_2O_3$		14=Na_2SO_3 + H_2SO_4

CN Interference Check: Positive Negative
Sulfide: _____ _____
Oxidizing Agent: _____ _____

Arrival Temp: 1.2 °C

JAMES R. REED and ASSOCIATES (757) 873-4703; FAX (757) 873-1498
770 Pilot House Drive, Newport News, VA 23606

HRSD
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05/05/11 - UOSA - Upper Occoquan Sewage Authority - Permit Application

This analytical report contains 23 pages

Cecilia Vernaci
UOSA
14631 Compton Road
Centreville, VA 20121-2506

cecilia.vernaci@uosa.org

RECEIVED
JUL 11 2011
VA DEQ - NRO

Date Sent: 06/07/11

HRSD CEL, Central Environmental Laboratory is VELAP/NELAC accredited by DCLS, the Division of Consolidated Laboratory Services.

VA Laboratory ID#: 460011
Effective Date: June 15, 2010
Expiration Date: June 14, 2011
Certificate # 643

Analytical test results meet all requirements of VELAP/NELAC unless otherwise noted under the analysis.

Test results relate only to the sample tested. Clients should be aware that a critical step in chemical or microbiological analysis is the collection of the sample.

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If you have any questions concerning this report, please do not hesitate to call
Danny Barker, TSD Environmental Scientist at (757) 460-4247,
Robin Parnell, CEL Laboratory Manager at (757) 460-4203 or
Cindi Reno, CEL Administrative Assistant at (757) 460-4205.

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Wet Chemistry							
Cyanide	EPA 335.4	ug/L	<10	10	JRICKS	05/12/11	13:07
Oil and Grease	EPA 1664A	mg/L	26.3	10.0	JRICKS	05/11/11	07:45
Total Phenol	EPA 420.4	mg/L	<0.05	0.05	JRICKS	05/19/11	15:41
Volatiles							
Acrolein	EPA 624	ug/L	<10.0	10.0	IGERAS	05/06/11	16:35
Acrylonitrile	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Benzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Bromoform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Carbon Tetrachloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Chlorodibromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Chloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
2-Chloro-ethylvinyl Ether	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Chloroform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Dichlorobromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,2 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,3 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,4 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,1-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,2-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,1-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Trans-1,2-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,2-Dichloropropane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,3 Dichloropropylene[2]	EPA 624	ug/L	<20.0	20.0	SLOPEZ	05/09/11	17:54
Ethylbenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Methyl Bromide	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Methyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Methylene Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Monochlorobenzene (Chlorobenzene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Tetrachloro-ethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Toluene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,1,1-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
1,1,2-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Trichloroethylene (Trichloroethene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54
Vinyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:54

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,3-Dichloropropylene is the total of cis-1,3-Dichloropropylene and trans-1,3-Dichloropropylene.*

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Acid Extractable Compounds							
p-Chloro-m-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
2-Chlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
2,4 Dichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
2,4 Dimethylphenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
4,6-Dinitro-o-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
2,4-Dinitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
2-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
4-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Pentachlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Phenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
2,4,6 Trichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Base Neutral Compounds							
Acenaphthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Acenapthylene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Benzo(a)anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Benzo(a)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
3,4 Benzo-Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Benzo(GHI)Perylene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Benzo(k)fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Benzidine	EPA 625	ug/L	<10.0	10.0	SLOPEZ	05/27/11	20:35
Bis-(2-Chloroethoxy) Methane	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Bis-(2-chloroethyl)-Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Bis-2-(Chloroisopropyl) Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Bis-2-ethyl hexyl phthalate	EPA 625	ug/L	<10.0	10.0	SLOPEZ	05/27/11	20:35
4-Bromophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Base Neutral Compounds - Continued							
Butyl benzyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
2-Chloronaphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
4-Chlorophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Chrysene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Dibenzo(a,h) anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Dibutyl phthalate (Di-n-butyl phthalate)	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Di-n-octyl phthalate	EPA 625	ug/L	<10.0	10.0	SLOPEZ	05/27/11	20:35
3,3-Dichlorobenzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Diethyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Dimethyl Phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
2,4-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
2,6-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
1,2-Diphenylhydrazine[2, Δ]	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Fluorene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Hexachlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Hexachlorobutadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Hexachlorocyclopentadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Hexachloroethane	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Isophorone	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Naphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Nitrobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
N-Nitrosodi-n-propyl amine	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
N-Nitrosodimethylamine	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
N-Nitrosodiphenylamine[3]	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Phenanthrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
Pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36
1,2,4 Trichlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	02:36

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*

[3] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*

[Δ] *Parameter is not included in VELAP scope of accreditation.*

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Pesticides & PCB's							
Aldrin	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
Chlordane	EPA 608	ug/L	<0.20	0.20	CCURRY	05/12/11	06:57
DDD	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
DDE	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
DDT	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
Dieldrin	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
Endosulfan I	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
Endosulfan II	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
Endrin	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
Heptachlor	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
Lindane	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:27
Methoxychlor	EPA 8081B	ug/L	<0.05	0.05	CCURRY	05/20/11	00:02
Mirex	EPA 8081B	ug/L	<0.05	0.05	CCURRY	05/20/11	00:02
PCB 1016	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:57
PCB 1221	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:57
PCB 1232	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:57
PCB 1242	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:57
PCB 1248	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:57
PCB 1254	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:57
PCB 1260	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:57
PCB Total	EPA 608	ug/L	ND	7.00	CCURRY	05/12/11	06:57
Toxaphene	EPA 608	ug/L	ND	5.00	CCURRY	05/12/11	06:57

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

ND - Sample concentration non-detectable.

Authorization: Robin Parnell
CEL Manager/QA Manager

Date: 6/7/11

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Volatiles							
Acrolein	EPA 624	ug/L	<10.0	10.0	IGERAS	05/06/11	14:05
Acrylonitrile	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Benzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Bromoform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Carbon Tetrachloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Chlorodibromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Chloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
2-Chloro-ethylvinyl Ether	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Chloroform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Dichlorobromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,2 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,3 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,4 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,1-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,2-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,1-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Trans-1,2-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,2-Dichloropropane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,3 Dichloropropylene[2]	EPA 624	ug/L	<20.0	20.0	SLOPEZ	05/09/11	15:25
Ethylbenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Methyl Bromide	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Methyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Methylene Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Monochlorobenzene (Chlorobenzene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Tetrachloro-ethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Toluene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,1,1-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
1,1,2-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Trichloroethylene (Trichloroethene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25
Vinyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	15:25

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,3-Dichloropropylene is the total of cis-1,3-Dichloropropylene and trans-1,3-Dichloropropylene.*

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Acid Extractable Compounds							
p-Chloro-m-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
2-Chlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
2,4 Dichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
2,4 Dimethylphenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
4,6-Dinitro-o-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
2,4-Dinitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
2-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
4-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Pentachlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Phenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
2,4,6 Trichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Base Neutral Compounds							
Acenaphthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Acenapthylene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Benzo(a)anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Benzo(a)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
3,4 Benzo-Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Benzo(GHI)Perylene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Benzo(k)fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Benzidine	EPA 625	ug/L	<10.0	10.0	SLOPEZ	05/27/11	18:23
Bis-(2-Chloroethoxy) Methane	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Bis-(2-chloroethyl)-Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Bis-2-(Chloroisopropyl) Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Bis-2-ethyl hexyl phthalate	EPA 625	ug/L	<10.0	10.0	SLOPEZ	05/27/11	18:23
4-Bromophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Base Neutral Compounds - Continued							
Butyl benzyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
2-Chloronaphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
4-Chlorophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Chrysene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Dibenzo(a,h) anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Dibutyl phthalate (Di-n-butyl phthalate)	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Di-n-octyl phthalate	EPA 625	ug/L	<10.0	10.0	SLOPEZ	05/27/11	18:23
3,3-Dichlorobenzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Diethyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Dimethyl Phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
2,4-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
2,6-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
1,2-Diphenylhydrazine[2, Δ]	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Fluorene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Hexachlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Hexachlorobutadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Hexachlorocyclopentadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Hexachloroethane	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Isophorone	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Naphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Nitrobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
N-Nitrosodi-n-propyl amine	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
N-Nitrosodimethylamine	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
N-Nitrosodiphenylamine[3]	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Phenanthrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
Pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24
1,2,4 Trichlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:24

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*
[3] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*
[Δ] *Parameter is not included in VELAP scope of accreditation.*

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Pesticides & PCB's							
Aldrin	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
Chlordane	EPA 608	ug/L	<0.20	0.20	CCURRY	05/12/11	06:16
DDD	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
DDE	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
DDT	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
Dieldrin	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
Endosulfan I	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
Endosulfan II	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
Endrin	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
Heptachlor	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
Lindane	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	20:46
Methoxychlor	EPA 8081B	ug/L	<0.05	0.05	CCURRY	05/19/11	23:00
Mirex	EPA 8081B	ug/L	<0.05	0.05	CCURRY	05/19/11	23:00
PCB 1016	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:16
PCB 1221	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:16
PCB 1232	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:16
PCB 1242	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:16
PCB 1248	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:16
PCB 1254	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:16
PCB 1260	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:16
PCB Total	EPA 608	ug/L	ND	7.00	CCURRY	05/12/11	06:16
Toxaphene	EPA 608	ug/L	ND	5.00	CCURRY	05/12/11	06:16

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

ND - Sample concentration non-detectable.

Authorization: Robin Parnell
CEL Manager/QA Manager

Date: 6/7/11

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Wet Chemistry							
Cyanide	EPA 335.4	ug/L	<10	10	JRICKS	05/12/11	13:02
Oil and Grease	EPA 1664A	mg/L	<5.0	5.0	JRICKS	05/11/11	07:45
Total Phenol	EPA 420.4	mg/L	<0.05	0.05	JRICKS	05/19/11	15:38
Volatiles							
Acrolein	EPA 624	ug/L	<50.0	50.0	IGERAS	05/06/11	16:05
Acrylonitrile	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Benzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Bromoform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Carbon Tetrachloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Chlorodibromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Chloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
2-Chloro-ethylvinyl Ether	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Chloroform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Dichlorobromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,2 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,3 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,4 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,1-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,2-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,1-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Trans-1,2-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,2-Dichloropropane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,3 Dichloropropylene[2]	EPA 624	ug/L	<20.0	20.0	SLOPEZ	05/09/11	17:24
Ethylbenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Methyl Bromide	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Methyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Methylene Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Monochlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Tetrachloro-ethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Toluene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,1,1-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
1,1,2-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Trichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24
Vinyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	05/09/11	17:24

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,3-Dichloropropylene is the total of cis-1,3-Dichloropropylene and trans-1,3-Dichloropropylene.*

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Acid Extractable Compounds							
p-Chloro-m-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
2-Chlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
2,4 Dichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
2,4 Dimethylphenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
4,6-Dinitro-o-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
2,4-Dinitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
2-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
4-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Pentachlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Phenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
2,4,6 Trichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Base Neutral Compounds							
Acenaphthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Acenapthylene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Benzo(a)anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Benzo(a)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
3,4 Benzo-Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Benzo(GHI)Perylene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Benzo(k)fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Benzidine	EPA 625	ug/L	<10.0	10.0	SLOPEZ	05/27/11	18:56
Bis-(2-Chloroethoxy) Methane	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Bis-(2-chloroethyl)-Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Bis-2-(Chloroisopropyl) Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Bis-2-ethyl hexyl phthalate	EPA 625	ug/L	<10.0	10.0	SLOPEZ	05/27/11	18:56
4-Bromophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Base Neutral Compounds- Continued							
Butyl benzyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
2-Chloronaphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
4-Chlorophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Chrysene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Dibenzo(a,h) anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Dibutyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Di-n-octyl phthalate	EPA 625	ug/L	<10.0	10.0	SLOPEZ	05/27/11	18:56
3,3-Dichlorobenzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Diethyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Dimethyl Phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
2,4-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
2,6-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
1,2-Diphenylhydrazine[2, Δ]	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Fluorene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Hexachlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Hexachlorobutadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Hexachlorocyclopentadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Hexachloroethane	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Isophorone	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Naphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Nitrobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
N-Nitrosodi-n-propyl amine	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
N-Nitrosodimethylamine	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
N-Nitrosodiphenylamine[3]	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Phenanthrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
Pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57
1,2,4 Trichlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	05/14/11	00:57

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*
[3] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*
[Δ] *Parameter is not included in VELAP scope of accreditation.*

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CENTRAL ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 05/05/11

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Pesticides & PCB's							
Aldrin	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
Chlordane	EPA 608	ug/L	<0.20	0.20	CCURRY	05/12/11	06:37
DDD	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
DDE	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
DDT	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
Dieldrin	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
Endosulfan I	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
Endosulfan II	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
Endrin	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
Heptachlor	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
Lindane	EPA 608	ug/L	<0.05	0.05	CCURRY	05/11/11	21:07
Methoxychlor	EPA 8081B	ug/L	<0.05	0.05	CCURRY	05/19/11	23:20
Mirex	EPA 8081B	ug/L	<0.05	0.05	CCURRY	05/19/11	23:20
PCB 1016	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:37
PCB 1221	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:37
PCB 1232	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:37
PCB 1242	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:37
PCB 1248	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:37
PCB 1254	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:37
PCB 1260	EPA 608	ug/L	ND	1.00	CCURRY	05/12/11	06:37
PCB Total	EPA 608	ug/L	ND	7.00	CCURRY	05/12/11	06:37
Toxaphene	EPA 608	ug/L	ND	5.00	CCURRY	05/12/11	06:37

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

ND - Sample concentration non-detectable

Authorization: Robin Parnell **Date:** 6/7/11
CEL Manager/QA Manager

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CENTRAL ENVIRONMENTAL LABORATORY
QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 05/05/11

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Wet Chemistry						
Cyanide	EPA 335.4	ug/L	50	102	104	94
Oil and Grease	EPA 1664A	mg/L	40.0	93	89	86
Total Phenol	EPA 420.4	mg/L	0.10	84	84	99
Volatiles						
Acrolein	EPA 624	ug/L	40.0	72	59	71
Acrylonitrile	EPA 624	ug/L	40.0	98	88	99
Benzene	EPA 624	ug/L	20.0	107	92	111
Bromoform	EPA 624	ug/L	20.0	94	84	94
Carbon Tetrachloride	EPA 624	ug/L	20.0	101	87	103
Chlorodibromomethane	EPA 624	ug/L	20.0	96	83	100
Chloroethane	EPA 624	ug/L	20.0	86	68	87
2-Chloroethylvinyl ether	EPA 624	ug/L	20.0	98	86	101
Chloroform	EPA 624	ug/L	20.0	103	84	111
Dichlorobromomethane	EPA 624	ug/L	20.0	99	85	104
1,2 Dichlorobenzene	EPA 624	ug/L	20.0	103	88	102
1,3 Dichlorobenzene	EPA 624	ug/L	20.0	104	89	106
1,4 Dichlorobenzene	EPA 624	ug/L	20.0	102	89	103
1,1-Dichloroethane	EPA 624	ug/L	20.0	108	91	108
1,2-Dichloroethane	EPA 624	ug/L	20.0	103	90	108
trans-1,2-Dichloroethylene	EPA 624	ug/L	20.0	106	91	110
1,1-Dichloroethylene	EPA 624	ug/L	20.0	108	92	112
1,2-Dichloropropane	EPA 624	ug/L	20.0	105	90	108
cis-1,3-Dichloropropene	EPA 624	ug/L	20.0	100	85	102
trans-1,3-Dichloropropene	EPA 624	ug/L	20.0	97	85	101
Ethylbenzene	EPA 624	ug/L	20.0	106	91	109
Methyl bromide	EPA 624	ug/L	20.0	100	82	90
Methyl chloride	EPA 624	ug/L	20.0	103	87	102
Methylene chloride	EPA 624	ug/L	20.0	102	90	110
Monochlorobenzene(Chlorobenzene)	EPA 624	ug/L	20.0	104	90	108
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	20.0	105	91	105
Tetrachloroethylene	EPA 624	ug/L	20.0	100	87	103

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CENTRAL ENVIRONMENTAL LABORATORY
QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 05/05/11

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Volatiles - Continued						
Toluene	EPA 624	ug/L	20.0	106	93	109
1,1,1-Trichloroethane	EPA 624	ug/L	20.0	105	87	106
1,1,2-Trichloroethane	EPA 624	ug/L	20.0	104	90	107
Trichlorethylene	EPA 624	ug/L	20.0	101	89	104
Vinyl chloride	EPA 624	ug/L	20.0	108	89	112
Acid Extractable Compounds						
p-chloro-m-cresol	EPA 625	ug/L	100	83	84	78
2-Chlorophenol	EPA 625	ug/L	100	69	70	62
2,4-Dichlorophenol	EPA 625	ug/L	100	75	78	68
2,4-Dimethylphenol	EPA 625	ug/L	100	93	94	70
4,6-Dinitro-o-cresol	EPA 625	ug/L	100	103	102	98
2,4-Dinitrophenol	EPA 625	ug/L	100	97	98	89
2-Nitrophenol	EPA 625	ug/L	100	76	78	69
4-Nitrophenol	EPA 625	ug/L	100	107	101	101
Pentachlorophenol	EPA 625	ug/L	100	96	98	90
Phenol	EPA 625	ug/L	100	69	67	63
2,4,6-Trichlorophenol	EPA 625	ug/L	100	82	82	76
Base Neutral Compounds						
Acenaphthene	EPA 625	ug/L	100	83	82	79
Acenaphthylene	EPA 625	ug/L	100	87	84	82
Anthracene	EPA 625	ug/L	100	91	89	89
Benzidine	EPA 625	ug/L	100	34	15	50
Benzo(a)anthracene	EPA 625	ug/L	100	99	93	93
Benzo(ghi)perylene	EPA 625	ug/L	100	106	103	105
Benzo(a)pyrene	EPA 625	ug/L	100	104	109	112
3,4 Benzo-fluoranthene	EPA 625	ug/L	100	113	110	109
Benzo(k)fluoranthene	EPA 625	ug/L	100	97	93	96
Bis(2-chloroethoxy)methane	EPA 625	ug/L	100	82	83	75
Bis(2-chloroethyl)ether	EPA 625	ug/L	100	79	77	72
Bis(2-chloroisopropyl)ether	EPA 625	ug/L	100	78	76	70
Bis(2-ethylhexyl)phthalate	EPA 625	ug/L	100	96	97	95
4-Bromophenyl phenyl ether	EPA 625	ug/L	100	88	86	85

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CENTRAL ENVIRONMENTAL LABORATORY
QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 05/05/11

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Base Neutral Compounds - Continued						
Butyl benzyl phthalate	EPA 625	ug/L	100	100	98	92
2-Chloronaphthalene	EPA 625	ug/L	100	84	83	77
4-Chlorophenyl phenyl ether	EPA 625	ug/L	100	87	86	82
Chrysene	EPA 625	ug/L	100	87	82	83
Di-n-butyl phthalate	EPA 625	ug/L	100	96	93	92
Di-n-octyl phthalate	EPA 625	ug/L	100	102	102	100
Dibenzo(a,h)anthracene	EPA 625	ug/L	100	91	88	88
3,3-Dichlorobenzidine	EPA 625	ug/L	100	109	86	108
Diethyl phthalate	EPA 625	ug/L	100	87	83	84
Dimethyl phthalate	EPA 625	ug/L	100	82	80	81
2,4-Dinitrotoluene	EPA 625	ug/L	100	95	94	89
2,6 Dinitrotoluene	EPA 625	ug/L	100	97	97	93
1,2-Diphenylhydrazine[2, Δ]	EPA 625	ug/L	100	91	87	89
Fluoranthene	EPA 625	ug/L	100	92	89	90
Fluorene	EPA 625	ug/L	100	89	87	85
Hexachlorobenzene	EPA 625	ug/L	100	88	87	85
Hexachlorobutadiene	EPA 625	ug/L	100	78	79	64
Hexachlorocyclopentadiene	EPA 625	ug/L	100	58	10	49
Hexachloroethane	EPA 625	ug/L	100	72	74	60
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	100	88	82	80
Isophorone	EPA 625	ug/L	100	87	88	80
Naphthalene	EPA 625	ug/L	100	82	83	72
Nitrobenzene	EPA 625	ug/L	100	82	83	73
n-Nitrosodi-n-propylamine	EPA 625	ug/L	100	85	83	79
n-Nitrosodi methylamine	EPA 625	ug/L	100	78	78	70
n-Nitrosodi phenylamine[2]	EPA 625	ug/L	100	107	106	104
Phenanthrene	EPA 625	ug/L	100	86	85	84
Pyrene	EPA 625	ug/L	100	93	89	90
1,2,4-Trichlorobenzene	EPA 625	ug/L	100	81	81	69

NOTES

[1] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*

[2] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*

[Δ] *Parameter is not included in VELAP scope of accreditation.*

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CENTRAL ENVIRONMENTAL LABORATORY
QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 05/05/11

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Pesticides & PCB's						
Aldrin	EPA 608	ug/L	2.00	93	106	105
DDD	EPA 608	ug/L	2.00	97	107	106
DDE	EPA 608	ug/L	2.00	95	109	107
DDT	EPA 608	ug/L	2.00	97	107	106
Dieldren	EPA 608	ug/L	2.00	92	106	104
Endosulfan I	EPA 608	ug/L	2.00	92	105	103
Endosulfan II	EPA 608	ug/L	2.00	94	106	105
Endrin	EPA 608	ug/L	2.00	98	112	89
Heptachlor	EPA 608	ug/L	2.00	104	106	103
Lindane	EPA 608	ug/L	2.00	93	107	103
Methoxychlor	EPA 8081B	ug/L	2.00	89	100	99
Mirex	EPA 8081B	ug/L	2.00	87	100	98
PCB-1016	EPA 608	ug/L	3.00	102	113	104
PCB-1260	EPA 608	ug/L	3.00	94	103	103

Authorization: Robin Parnell **Date:** 6/7/11

CENTRAL ENVIRONMENTAL LABORATORY
EQUIPMENT BLANK REPORT

Project: UOSA
Project Code: UO
Sample Point: EB
Sample Date: 4/19/2011

Volatile 624 Scan Compounds	MDL	QL	Unit	Result	Analyst	Analysis Date	Analysis Time
DICHLORODIFLUOROMETHANE	0.20	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
CHLOROMETHANE	0.19	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
BROMOMETHANE	0.26	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
VINYL CHLORIDE	0.23	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
CHLOROETHANE	0.22	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
TRICHLOROFULOROMETHANE	0.17	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
ACROLEIN	3.78	10.0	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,1-DICHLOROETHENE	0.28	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
ACRYLONITRILE	0.24	10.0	ug/L	ND	SLOPEZ	4/22/2011	13:35
METHYLENE CHLORIDE	0.81	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
MTBE	0.19	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
trans-1,2-DICHLOROETHENE	0.15	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,1-DICHLOROETHANE	0.17	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
2-BUTANONE	0.72	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
cis-1,2-DICHLOROETHENE	0.19	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
CHLOROFORM	0.19	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
2,2-DICHLOROPROPANE	0.35	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,2-DICHLOROETHANE	0.22	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,1,1-TRICHLOROETHANE	0.18	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,1-DICHLOROPROPENE	0.23	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
CARBON TETRACHLORIDE	0.24	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
BENZENE	0.16	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
DIBROMOMETHANE	0.19	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,2-DICHLOROPROPANE	0.15	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
TRICHLOROETHENE	0.33	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
BROMODICHLOROMETHANE	0.20	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
2-CEVE	0.12	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
cis-1,3-DICHLOROPROPENE	0.14	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
4-METHYL-2-PENTANONE	1.20	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
trans-1,3-DICHLOROPROPENE	0.13	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,1,2-TRICHLOROETHANE	0.18	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35

Volatile 624 Scan Compounds	MDL	QL	Unit	Result	Analyst	Analysis Date	Analysis Time
TOLUENE	0.13	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,3-DICHLOROPROPANE	0.12	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,2-DIBROMOETHANE	0.09	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
DIBROMOCHLOROMETHANE	0.24	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
TETRACHLOROETHENE	0.26	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,1,1,2-TETRACHLOROETHANE	0.34	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
CHLOROBENZENE	0.12	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
ETHYLBENZENE	0.14	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
p/m XYLENE	0.28	10.0	ug/L	ND	SLOPEZ	4/22/2011	13:35
0-XYLENE	0.14	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
BROMOFORM	0.26	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
STYRENE	0.12	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
ISOPROPYLBENZENE	0.12	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
BROMOBENZENE	0.13	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
PROPYLBENZENE	0.13	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,1,2,2-TETRACHLOROETHANE	0.16	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
2-CHLOROTOLUENE	0.15	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,2,3-TRICHLOROPROPANE	0.52	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,3,5-TRIMETHYLBENZENE	0.09	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
4-CHLOROTOLUENE	0.12	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
TERT-BUTYLBENZENE	0.19	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,2,4-TRIMETHYLBENZENE	0.11	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
SEC-BUTYLBENZENE	0.11	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
P-ISOPROPYLTOLUENE	0.14	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,2-DICHLOROBENZENE	0.07	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,3-DICHLOROBENZENE	0.15	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,4-DICHLOROBENZENE	0.15	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
N-BUTYLBENZENE	0.15	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,2-DIBROMO-3-CHLOROPROPANE	0.53	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35
1,2,3-TRICHLOROBENZENE	0.27	5.00	ug/L	ND	SLOPEZ	4/22/2011	13:35

Validated By: _____ **Date:** 060311

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CENTRAL ENVIRONMENTAL LABORATORY
EQUIPMENT BLANK REPORT

Project: UOSA
Project Code: UO
Sample Point: EB
Sample Date: 4/19/2011

Semi-Volatile 625 Scan Compounds	MDL	QL	Unit	Result	Analyst	Analysis Date	Analysis Time
N-NITROSODIMETHYLAMINE	0.63	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
PHENOL	0.23	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BIS (2-CHLOROETHYL) ETHER	0.87	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
2-CHLOROPHENOL	0.47	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BIS (2-CHLOROISOPROPYL) ETHER	0.54	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
N-NITROSO-DI-N-PROPYLAMINE	0.71	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
HEXACHLOROETHANE	0.46	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
NITROBENZENE	0.41	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
ISOPHORONE	0.46	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
2-NITROPHENOL	0.16	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
2,4-DIMETHYLPHENOL	0.68	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BIS (2-CHLOROETHOXY) METHANE	0.25	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
2,4-DICHLOROPHENOL	0.34	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
1,2,4-TRICHLOROBENZENE	0.38	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
NAPHTHALENE	0.31	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
HEXACHLOROBUTADIENE	0.59	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
4-CHLORO-3-METHYLPHENOL	0.52	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
HEXACHLOROCYCLOPENTADIENE	0.43	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
2,4,6-TRICHLOROPHENOL	0.49	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
2-CHLORONAPHTHALENE	0.27	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
DIMETHYLPHTHALATE	0.3	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
2,6-DINITROTOLUENE	0.63	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
ACENAPHTHYLENE	0.26	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
ACENAPHTHENE	0.44	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
2,4-DINITROPHENOL	2.38	10.0	ug/L	ND	IGERAS	4/28/2011	11:52
4-NITROPHENOL	3.47	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
2,4-DINITROTOLUENE	0.73	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
DIETHYLPHTHALATE	0.87	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
4-CHLOROPHENYL PHENYL ETHER	0.38	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
FLUORENE	0.36	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
4,6-DINITRO-2-METHYLPHENOL	1.55	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
N-NITROSODIPHENYLAMINE	0.39	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
AZOBENZENE/1,2-DIPHENYLHYDRAZINE	0.17	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
4-BROMOPHENYL PHENYL ETHER	0.32	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
HEXACHLOROBENZENE	0.61	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
PENTACHLOROPHENOL	2.79	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
PHENANTHRENE	0.36	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
ANTHRACENE	0.37	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
DI-N-BUTYLPHTHALATE	0.62	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
FLUORANTHENE	0.31	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BENZIDINE	1.72	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
PYRENE	0.19	5.00	ug/L	ND	IGERAS	4/28/2011	11:52

Semi-Volatile 625 Scan Compounds	MDL	QL	Unit	Result	Analyst	Analysis Date	Analysis Time
BUTYLBENZYLPHTHALATE	0.24	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
3,3-DICHLOROBENZIDINE	0.76	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BENZO (A) ANTHRACENE	0.34	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BIS (2-ETHYLHEXYL) PHTHALATE	0.48	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
CHRYSENE	0.38	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
DI-N-OCTYLPHTHALATE	0.58	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BENZO (B) FLUORANTHENE	0.22	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BENZO (K) FLUORANTHENE	0.3	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BENZO (A) PYRENE	0.78	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
INDENO (1,2,3-CD)PYRENE	0.26	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
DIBENZO (AH) ANTHRACENE	0.27	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BENZO (GHI) PERYLENE	0.23	5.00	ug/L	ND	IGERAS	4/28/2011	11:52

Pesticide Compounds 608 (GC-MS screening)	MDL	QL	Unit	Result	Analyst	Analysis Date	Analysis Time
ALPHA BHC	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
BETA BHC	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
GAMMA BHC	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
DELTA BHC	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
HEPTACHLOR	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
ALDRIN	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
HEPTACHLOR EPOXIDE	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
ENDOSULFAN I	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
4,4'-DDE	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
DIELDRIN	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
ENDRIN	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
4,4'-DDD	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
ENDOSULFAN II	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
4,4'-DDT	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52
ENDOSULFAN SULFATE	NA	5.00	ug/L	ND	IGERAS	4/28/2011	11:52

Validated By: _____ **Date:** 060311

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1432 AIR RAIL AVENUE
VIRGINIA BEACH, VA 23455
TEL: 757-460-4214
FAX: 757-460-6586

CHAIN OF CUSTODY

PROJECT NAME/CODE: UOSA VPDES 2A

ANALYSES REQUESTED, CGN & NUMBER OF CONTAINERS

Project in Lims? Yes ____ No ✓

CUSTOMER SAMPLE ID	HRSD Use Only: PROJECT CODE	HRSD Use Only: SAMPLE POINT	DATE	TIME	SAMPLED BY	Circle One: MATRIX	Circle One: SAMPLE TYPE	VOA (10...10B)	VOA (10...10E)	Total Phenol (3)	Oil & Grease (9...8C)	Cyanide (4)	Semi Vol Organics (9...9C)	Semi Vol Organics (9...9J)					HRSD Use Only: Presv'd Checked	HRSD Use Only: CONT. COUNT
Field Blank	UO	FB	050511	1140	MW	L	C						4 ✓						✓	4
Field Blank	UO	FB	050511	0945	MW	L	G	3 ✓											✓	3
Final Effluent	UO	FNE	050511	1140	MW	L	C							11 ✓					✓	11
Final Effluent	UO	FNE	050511	0945	MW	L	G		6 ✓										✓	6
Final Effluent	UO	FNE	050511	1000	MW	L	G			1 ✓									✓	1
Final Effluent	UO	FNE	050511	1010	MW	L	G				4 ✓								✓	4
Final Effluent	UO	FNE	050511	1000	MW	L	G					1 ✓							✓	1

COMMENTS:

For Ground Water Use Only
Temp. Blank 1 ____ °C
Temp. Blank 2 ____ °C

Relinquished by / Signature	Date/Time 050511/1715	
Received by / Signature	Date/Time 050511/1720	
Relinquished by / Signature	Date/Time 050611/0724	
Received by / Signature	Date/Time 050611@0724	
Relinquished by / Signature	Date/Time	
Received by / Signature	Date/Time	
Relinquished by / Signature	Date/Time	
Received by / Signature	Date/Time	

Temp. Requirement

Where required, submitted samples were transported in coolers maintained at ≤ 6 °C.

Yes ✓ No ____

Int MW

***Preservatives**

- *Hg, Metals (pH<2 - HNO3) (Clean metals check in section)
- *O&G (pH<2 - HCl, check in section) & store ≤ 6 °C
- CN^- (pH>12 - NaOH) & store ≤ 6 °C
- *Sulfide (pH>9 - NaOH+ZnAc) & store ≤ 6 °C
- *Micro ($Na_3S_2O_3$ + EDTA) & store < 10 °C
- *COD, NUT, Phenols, ____ (pH<2 - H_2SO_4) & store ≤ 6 °C
- *TOC (pH<2 - H_3PO_4) & store ≤ 6 °C
- *BOD, TSS, TVSS, Turbidity, Surfactant, Sulfate store ≤ 6 °C
- *NUT: Non-Acidified, Conductivity, Organics store ≤ 6 °C
- *Cr+4 (I) (pH 9.3 - 9.7 - $(NH_4)_2SO_4$) & store ≤ 6 °C

All sample(s) met proper *preservation requirements. Yes ✓ No ____ Int

Sample Type: C=Composite, G=Grab Matrix: L= Liquid , S = Solid CGN: Container Group Number

NOTE: ALL APPLICABLE INFORMATION MUST BE COMPLETED PRIOR TO ACCEPTANCE.

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VIRGINIA BEACH, VA 23455
TEL: 757-460-4214
FAX: 757-460-6586

CHAIN OF CUSTODY

PROJECT NAME/CODE: UOSA VPDES 2A

ANALYSES REQUESTED, CGN & NUMBER OF CONTAINERS

Project In Lims? Yes ____ No ✓

CUSTOMER SAMPLE ID	HRSD Use Only: PROJECT CODE	HRSD Use Only: SAMPLE POINT	DATE	TIME	SAMPLED BY	Circle One: MATRIX	Circle One: SAMPLE TYPE	VOA (10...10E)	Total Phenol (3)	Oil & Grease (8...8C)	Cyanide (4)	Semi Vol Organics (9...9J)							HRSD Use Only: Presv'd Checked	HRSD Use Only: CONT. COUNT
~~Final Effluent~~ *	UO	INF	050511	1008	APB	L	G C					11✓							✓	11
~~Final Effluent~~ *	UO	INF		1008	APB	L	G C	6✓											✓	60
~~Final Effluent~~ *	UO	INF		1022	APB	L	G C		1✓										✓	1
~~Final Effluent~~ *	UO	INF		1022	APB	L	G C			4✓									✓	4
~~Final Effluent~~ *	UO	INF	✓	1022	APB	L	G C				1✓								✓	1
* Influent																				

COMMENTS:

~~For Ground Water Use Only~~
~~Temp Blank 1 ____ °C~~
~~Temp Blank 2 ____ °C~~

Relinquished by / Signature	APBullock	Date/Time 050511 1210
Received by / Signature	[illegible]	Date/Time 050511 1210
Relinquished by / Signature	[illegible]	Date/Time 050511 1715
Received by / Signature	[illegible]	Date/Time 050511 1720
Relinquished by / Signature	[illegible]	Date/Time 050611 0720
Received by / Signature	[illegible]	Date/Time 050611 0720
Relinquished by / Signature		Date/Time 050611 [illegible]
Received by / Signature		Date/Time 050611

Temp. Requirement

Where required, submitted samples were transported in coolers maintained at ≤ 6 °C.

Yes ✓ No ____

Int MW

***Preservatives**

- *Hg, Metals (pH<2 - HNO3) (Clean metals check in section)
- *O&G (pH<2 - HCl, check in section) & store ≤ 6 °C
- CN^- (pH>12 - NaOH) & store ≤ 6 °C
- *Sulfide (pH>9 - NaOH+ZnAc) & store ≤ 6 °C
- *Micro ($Na_3S_2O_3$ + EDTA) & store < 10 °C
- *COD, NUT, Phenols (pH≤2 - H_2SO_4) & store ≤ 6 °C
- *TOC (pH<2 - H_3PO_4) & store ≤ 6 °C
- *BOD, TSS, TVSS, Turbidity, Surfactant, Sulfate store ≤ 6 °C
- *NUT Non Acidified, Conductivity, Organics store ≤ 6 °C
- *Cr (VI) (pH 9.3 - 9.7 - $(NH_4)_2SO_4$) & store ≤ 6 °C

All sample(s) met proper *preservation requirements. Yes ✓ No ____ Int [illegible]

Sample Type: C=Composite, G=Grab Matrix: L= Liquid , S = Solid CGN: Container Group Number

NOTE: ALL APPLICABLE INFORMATION MUST BE COMPLETED PRIOR TO ACCEPTANCE.

FIELD RECORD (S)

UOSA VPDES Field Sheet

Information To Be Checked Before The Start of Each Sampling Event

1. Does the Final Effluent have any abnormal characteristics (odor, color)? Y / (N)

   If the answer to the above questions is NO proceed to the next section. Please contact a supervisor if the answer is YES.

2. A. Average Plant flow for the last five days: ~ 31.6 MGD
   B. Expected Plant flow for the next 24 hours: ~31 MGD

3. List the last three days of Final Effluent TSS with the most recent last: 0.2 mg/L, -0.1 mg/L, 0.1 mg/L

4. Contact Closure: (Expected Flow 31 MGD / 10,000 / 30) 103 Pulses per sample. 16.52 30

5. Samplers for Final Effluent & FB calibrated at 550 ml per sample. (Desired volume/ # samples)
   Final Effluent Start Time / Date: 1140 / 050411 Calibrated to: 550
   FB Start Time / Date: 1140 / 050411 Calibrated to: 550

The above information has been completed prior to the beginning of the sampling event. Int. MW

Sampling personnel: M. Wiggins, A. Keisel, _____

Information Check At The End Of The Sampling Event

1. Are all lids, compression assemblies and caps secure? (Y) / N
2. Final Effluent TSS for the sampling period: 0.1 mg/L (05/04), 0.1 mg/L (05/05)
3. Plant flow for the sampling period 28.24 MGD, 32.84 MGD
4. Number of samples collected in each Final Effluent & FB composite container:
   Final Effluent: 32
   FB: 32
5. Final Effluent & FB composite end time and date:
   Final Effluent End Time / Date: 1140 / 050511
   FB End Time / Date: 1140 / 050511
6. Is Temperature in collection container at the end of sampling <6° C? (Y) / N
7. Are sample volumes equal in all composite containers? (Y) / N
8. Grab times and dates:
   FB VOA: 0945 / 050511 FNE VOA: 0945 / 050511
   Oil & Grease: 1000 / 050511 Cyanide: 1000 / 050511
   Total Phenol: 1000 / 050511

Sampling personnel: M. Wiggins, A. Keisel, _____

Please contact project lead with any problems incurred during the sampling event.

Record any other information that could affect sample results:

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LABORATORY REPORT

RECEIVED
JUL 1 1 2011
VA DEQ - NRO

This report contains 6 pages.
(including the cover page)

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

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Batch #: 1027

Entered into LINS by: APB 060811

Reviewed by: gm 6/8/11

rec'd 060611
APB

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110 S. Hill Street, South Bend, IN 46617-2701 USA
T: 800.332.4345 / P: 574.233.8267 / W: ul.com

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NELAC NARRATIVE PAGE

Client: Upper Occoquan Sewage Authority

Report #: 261895NP

Underwriters Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAC standards, unless otherwise noted.

UL contact person: Jessie Varab

NELAC requires complete reporting of deviations from method requirements, regardless of the suspected impact on the data. Quality control failures not reported within the report summary are noted here.

Note: In the Method 300.0 analysis from site Fin EFF, the Bromide recoveries in the MS and MSD at 250 ug/L (both 89%) were outside the acceptance limits of 90-110%.

There were no additional quality control failures.

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Jessie Varab — Senior Project Manager — 5-11-11

Authorized By — Title — Date

Underwriters Laboratories Inc.
110 S. Hill Street, South Bend, IN 46617-2702 USA
T:: 800.332.4345 / F:: 574.233.8207 / W:: ul.com

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Underwriters Laboratories

Laboratory Report

Client: Upper Occoquan Sewage Authority

Attn: Anne Payne Bullock
14631 Compton Road
Centreville, VA 20121

Report: 261895
Priority: Standard Written
Status: Final
PWS ID: Not Supplied

Copies to: None

Sample Information

UL ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
2444639	Raw INF	300.0	05/03/11 09:00	Client	05/05/11 09:00
2444640	Fin EFF	300.0	05/03/11 10:47	Client	05/05/11 09:00

Report Summary

Note: See attached page for additional comments.

Project: PA/PT 11-1

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Jessie Varab at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from Underwriters Laboratories (UL).
UL is accredited by the National Environmental Laboratory Accreditation Program (NELAP).

Jessie Varab — Senior Project Manager — 5-11-11
Authorized Signature — Title — Date

Client Name: Upper Occoquan Sewage Authority
Report #: 261895

Underwriters Laboratories Inc.
110 S. Hill Street, South Bend, IN 46617-2702 USA
T:: 800.332.4345 / F:: 574.233.8207 / W:: ul.com

: 00093

Client Name: Upper Occoquan Sewage Authority

Report #: 261895

Sampling Point: Raw INF

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
24959-67-9	Bromide	300.0	---	0.010	**0.053**	mg/L	---	05/06/11 20:14	2444639

Sampling Point: Fin EFF

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
24959-67-9	Bromide	300.0	---	0.010	**0.043**	mg/L	---	05/06/11 21:25	2444640

† UL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The LTB container follows the collection bottles to and from the collection site, but the LTB is not opened at any time during the trip. LTB is not exposed to site conditions or pumping and collection equipment. The LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Matrix Duplicate (LFD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix.

Matrix Spike Sample (MS) / Laboratory Fortified Matrix (LFM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.

the standard in safety

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 574.233.8207

Order # 208054
Batch # 261895

www.ul.com/water
Shaded area for UL use only

CHAIN OF CUSTODY RECORD

Page 1 of 1

REPORT TO: Anne Payne Bullock

SAMPLER (Signature): APBullock

STATE (of sample origin): Va

PWS ID#:

PROJECT NAME: APB050411 PT 11-1 PA/PT 11-1

PO#: 71508

BILL TO: UOSA 14631 Compton Rd Centreville Va 20121

COMPLIANCE MONITORING: Yes / No

POPULATION SERVED:

SOURCE WATER:

	LAB Number	COLLECTION DATE	TIME	AM	PM	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED YES	CHLORINATED NO	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
1	2444639	050311	0900	X		Raw INF	Bromide			X	1	WW	
2	2444640	050311	1047	X		FIN EFF	Bromide			X	1	WW	
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME
APBullock	050411	1200 AM ~~PM~~			AM PM
RELINQUISHED BY:(Signature)	DATE	TIME AM PM	RECEIVED BY:(Signature)	DATE	TIME AM PM
RELINQUISHED BY:(Signature)	DATE	TIME AM PM	RECEIVED FOR LABORATORY BY: Keeie Dequis 5-5-11	DATE	TIME 0900 AM PM

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

LAB COMMENTS:

CONDITIONS UPON RECEIPT (check one): ___ Iced: Wet / Blue X Ambient ___ °C Upon Receipt X N/A

MATRIX CODES:

DW-DRINKING WATER
RW-REAGENT WATER
GW-GROUND WATER
EW-EXPOSURE WATER
SW-SURFACE WATER
PW-POOL WATER
WW-WASTE WATER

TURN-AROUND TIME (TAT) - SURCHARGES

SW = Standard Written: (15 working days) **0%**
RV* = Rush Verbal: (5 working days) **50%**
RW* = Rush Written: (5 working days) **75%**
*Please call. Expedited service not available for all testing

IV* = Immediate Verbal: (3 working days) **100%**
IW* = Immediate Written: (3 working days) **125%**
SP* = Weekend, Holiday **CALL**
STAT* = Less than 48 hours **CALL**

UL-SBN-SHIP-F-002-09 Effective Date: 05/08/2009

Samples received unannounced less than 48 hours holding time remaining may be subject to additional charges.

Sample analysis will be provided according to the standard UL GSA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agree to in writing by UL.

UNIVERSAL LABORATORIES

REPORT OF ANALYSIS

Order ID: **1104245**

(REPORT DATE)
17-May-11

TO: UPPER OCCOQUAN SEWAGE AUTHORITY
14631 COMPTON ROAD

CENTREVILLE VA 20121-2
ATTN: Anne Payne Bullock

FaxNumber: (703)830-5934
E-MAIL

This report contains the analytical results for Project Id N/A
designated as UL Order Id **1104245** and received on *Friday, May 06, 2011*
The results contained in this report relate only to the samples identified on this order. The analytical results meet all requirements of NELAC unless specifically stated. This report shall not be reproduced except in full.

Project ID: PA/PT 11-1, Note: run Field Blank if the Effluent has a detectable result.

The data in this report has been reviewed and validated by:

Carol Kleemeier — Signature
Carol Kleemeier — Name
Pres/Technical Director — Title

rec'd 052411 APB

ANALYTICAL DATA REPORT

UL ORDER ID **1104245**

UL Sample Number **1104245-001**

Grab Date/Time: N/A N/A

Composite Start: 05/03/11 09:00

Composite Stop: 05/04/11 07:00

Collected By: client

Sample Site: **Influent**

Client Sample ID: Influent

Sample Matrix: Wastewater

Parameter	Test Result	Units	RL	Analysis Date/Time	Analyst	Comment
TBT Tributyltin	**80**	ng/l	30	5/13/2011 19:18:00	BD	

Comments for 1104245-001

No comments

ANALYTICAL DATA REPORT

UL ORDER ID 1104245

UL Sample Number 1104245-002

Grab Date/Time: N/A N/A

Composite Start: 05/03/11 10:47

Composite Stop: 05/04/11 10:47

Collected By: client

Sample Site: Effluent

Client Sample ID: Effluent

Sample Matrix: Wastewater

Parameter	Test Result	Units	RL	Analysis Date/Time	Analyst	Comment
TBT Tributyltin	**<30**	ng/l	30	5/13/2011 19:46:00	BD	

Comments for 1104245-002

No comments

ANALYTICAL DATA REPORT

UL ORDER ID 1104245

UL Sample Number 1104245-003

Grab Date/Time: N/A N/A
Composite Start: 05/03/11 10:47
Composite Stop: 05/04/11 10:47
Collected By: client

Sample Site: Effluent Dupe
Client Sample ID: Effluent Dupe
Sample Matrix: Wastewater

Parameter	Test Result	Units	RL	Analysis Date/Time	Analyst	Comment
TBT Tributyltin	**<30**	ng/l	30	5/13/2011 20:14:00	BD	

Comments for 1104245-003
No comments

ANALYTICAL DATA REPORT

UL ORDER ID **1104245**

Analytical Methods Reference

VDEH Lab# 00030 (Hampton) VDEH Lab# 00065 (Fredricksburg) NCWW Lab # 543 (Hampton)
NCDW Lab # 51706 (Hampton) VELAP ID 460036 (Hampton)

Description:	*Prep Method:*	*Method*	*Reference*	*accredited/status*
Wastewater				
TBT Tributyltin	liq/liq	GC/FPD		

NOTE: Analysis is performed according to Universal Laboratories Standard Operating Procedures which are based on the analytical methods referenced above

GLOSSARY OF TERMS AND ABBREVIATIONS

RL (Reporting Limit): The minimum levels, concentrations, or quantities of target analyte that can be reported with a specified degreee of confidence.Generally this number is near or equal to the lowest calibration standard run with the analytical batch.

MDL (Method Detection Limit): The constituent concentration that, when processed through the complete method, produces a signal with a 99% probability that it is different from the blank.

LCS (Laboratory Control Sample): is a sample matrix free from the analytes of interest, spiked with verified amounts of analytes.

MS (Matrix Spike): a sample prepared by adding a known mass of target analyte to a specific amount of sample for which an independant estimate of target analyte concentration is available.

MSD (Matrix Spike Duplicate): is a replicate matrix spike prepared in the laboratory and anlyzed to obtain a measure of the precision recovery for each analtye.

Surrogate is a substance with properties that mimic the analyte of interest.It is unlikely to be found in environmental samples and is added to them for quality control purposes

IS (Internal Standard): is a known amount of standard added to a test portion of the sample as a reference for evaluation and controlling the precsion and bias of the applied analytical method.
RPD (Relative Percent Difference) is the difference between a set of sample duplicates or sample spike duplicates

ICV (Initial Calibration Verification) CCV (Continuing Calibration Verification) FCV (Final Calibration Verification)

Method Blank is a sample matrix smilar to the batch of associated samples that is free from analytes of interest and is processed simultaneously with and under the same conditions as samples.

Trip Blank is a sample of analyte free media collected in the same type of container that is required for the analytical test, taken from the laboratory to the sampling site and returned to the laboratory unopened. A trip blank is used to document contamination attributable to shipping and field handling procedures

Holding Time is the maximum times that samples may be held prior to analysis and still be considered valid or not compromised

ug/L=ppb ug/kg=ppb mg/kg=ppm mg/L=ppm

QC Flag	Description
B	Analyte found in method blank
H	Holding time exceeded
L	LCS outside acceptable limits
V	ICV/CCV/FCV outside acceptable limits
D	RPD outside acceptable limits
MS	Matrix spike recovery outside acceptable limits
J	Result above calibration curve approximate value
QC	Method QC Critera not met
MI	Matrix Interference
S	Surrogate outside acceptable limits
IS	Internal standard outside acceptable limits

Universal Laboratories
20 Research Drive Hampton, Va.
Phone: (757)-865-0880 Fax: (757) 865-8014

EXPRESS LOG-IN CHAIN OF CUSTODY

UL ORDER ID 1104245

Order Comment:

Pre-Log Date: Wednesday, April 13, 2011

Samples Must Be Received on or Before:

*APB050411

UOSA UPPER OCCOQUAN SEWAGE AUTHORITY
14631 COMPTON ROAD
CENTREVILLE VA 20121-250

ProjectID: ~~PT 11-1~~ * PA/PT 11-1

Project Notes:

QuoteID: Q1101004
Permit Number:
ProjectLocation:

Customer Contact: Anne Payne Bullock
Phone Number:
FaxNumber: (703)830-5934

1104245-001	**Influent**	**Sample Date/Time**	05 / 03 / 11 09:00	05 / 04 / 11 07:00	**Sampler Initials**	APB	
		Field Reading					
Wastewater	TBT TBT Tributyltin				**Container Type**	**Preservative**	
					Polycarbonate	HCL pH< 2/4C	
1104245-002	**Effluent**	**Sample Date/Time**	05 / 03 / 11 10:47	05/04 / 11 10:47	**Sampler Initials**	APB	
		Field Reading					
Wastewater	TBT TBT Tributyltin				**Container Type**	**Preservative**	
					Polycarbonate	HCL pH< 2/4C	
1104245-003	**Effluent**	**Sample Date/Time**	05 / 03 / 11 10:47	05 / 04 / 11 10:47	**Sampler Initials**	APB	
		Field Reading					
Wastewater	TBT TBT Tributyltin				**Container Type**	**Preservative**	
					Polycarbonate	HCL pH< 2/4C	
1104245-004	**Effluent**	**Sample Date/Time**	05 / 03 / 11 10:47	05 /04 / 11 10:47	**Sampler Initials**	APB	
		Field Reading					
Wastewater	TBT TBT Tributyltin				**Container Type**	**Preservative**	
					Polycarbonate	HCL pH< 2/4C	
1104245-005		**Sample Date/Time**	/ / :	/ / :	**Sampler Initials**		
		Field Reading					
Field Services	SHIP Shipping charges				**Container Type**	**Preservative**	
					N/A	N/A	
1104245-006	**Field Blank**	**Sample Date/Time**	/ / :	05 /03 / 11 09:20	**Sampler Initials**	APB	
		Field Reading					
Wastewater	TBT TBT Tributyltin				**Container Type**	**Preservative**	
					Polycarbonate	HCL pH< 2/4C	

UOSA UPPER OCCOQUAN SEWAGE AUTHORITY **ProjectID:**

14631 COMPTON ROAD
CENTREVILLE VA 20121-250

Project Notes:

QuoteID: Q1101004
Permit Number:
ProjectLocation:

Customer Contact: Anne Payne Bullock

Phone Number:
FaxNumber: (703)830-5934

Comments: only analyze Field Blank if Effluent has a TBT hit. Thanks!

Cooler Temp @ Log-in 4°C
Preservation <2

CN int check | Phenol in check | NH3 int check | BOD int check

Relinquished By Signature: A.P. Bullock	***Company:*** UOSA	***Date/Time:*** 050511 1245
Received By Signature: [signature]	***Company:*** UL	***Date/Time:*** 5/6/11 1120
Relinquished By Signature:	***Company:***	***Date/Time:***
Received By Signature:	***Company:***	***Date/Time:***
Relinquished By Signature:	***Company:***	***Date/Time:***
Received By Signature:	***Company:***	***Date/Time:***

Universal Laboratories

Quality Control Summary
QC Batch ID 110513008
Order ID: 1104245

Spike Summary

		Tributyltin		
	True Value	Obtained	% Recovery	RPD
ICV	100ng/L	81.254	81%	
ICV DUP	100ng/L	87.806	88%	8%
Blank	0.0ng/L	<30		
Prep LCS	100ng/L	115.186	116%	
LCS DUP	100ng/L	109.707	110%	5%
FCV	100ng/L	81.045	81%	

Surrogate Summary

		Tripentyltin		
	True Value	Obtained	% Recovery	RPD
ICV	100ng/L	102.135	102%	
Prep Blank	100ng/L	85.911	85%	
Prep LCS	100ng/L	116.186	117%	
LCS DUP	100ng/L	122.163	122%	
1104245-001	100ng/L	119.088	119%	
1104245-002	100ng/L	79.954	80%	
1104245-003	100ng/L	80.860	81%	
1104245-004	100ng/L	84.710	85%	
FCV	100ng/L	99.081	99%	

Quality Director_____

5/25/11

Upper Occoquan Service Authority

Leader in Water Reclamation and Reuse

14631 COMPTON ROAD, CENTREVILLE, VIRGINIA 20121-2506 (703) 830-2200

Charles P. Boepple
Executive Director

Michael D. Reach
Deputy Executive Director

March 8, 2010

Ms. Rebecca Vice
Attention: Compliance Auditor
Northern Regional Office
Department of Environmental Quality
13901 Crown Court
Woodbridge, Virginia 22193

MAR 10 2010

RE: VPDES Permit No. VA0024988 and Nutrient General Permit No. VAN10019

Dear Ms. Vice:

The UOSA VPDES Discharge Monitoring Report (DMR), the Nutrient General Permit DMR and plant performance data for February 2010 are enclosed. Performance during February was excellent.

With this report, we have included analyses data in support of the UOSA Permit Application and Pretreatment Program.

Sincerely,

Charles P. Boepple

Charles P. Boepple
Executive Director

CPB/jm
Enclosures 4

Facility Name:	**Upper Occoquan Sewage Authority**	**Report Date:**	**03/05/10**
Report:	**2012 Permit Application Metals Results -- First of Three Events**	**Outfall No.:**	**001**
Sampling Date:	**01/13/10**	**Site ID:**	**Final Effluent**

Metal	**Method Reference [1]**	**Reporting Units**	**Final Effluent Concentration**		**Sample Type [5]**	**Quantification Level [6]**
			Total Recoverable (Fin Eff 54 TM)	**Dissolved (Fin Eff 54 DM)**		
Antimony, Sb	EPA 200.9	µg/L	< 10.0		c	10.0
Arsenic, As	EPA 200.9	µg/L	< 10.0		c	10.0
Barium, Ba	SM 3111 [2]	µg/L	< 500		c	500
Beryllium, Be	SM 3113 B [2]	µg/L	< 0.5		c	0.5
Cadmium, Cd	EPA 200.9	µg/L	< 0.5		c	0.5
Calcium, Ca	SM 3111 [2]	**mg/L**	70.7		c	0.5
Chromium, Hexavalent, Cr^{6+}	SM 3500-Cr D. [2]	µg/L		< 6.3 [4]	g	5.0
Chromium,Total, Cr	EPA 200.9	µg/L	< 5.0		c	5.0
Copper, Cu	EPA 200.9	µg/L	< 6.0		c	6.0
Lead, Pb	EPA 200.9	µg/L	< 6.0		c	6.0
Magnesium, Mg	SM 3111 [2]	**mg/L**	6.0		c	0.05
Mercury, Hg	EPA 245.1 [3]	µg/L	< 0.3		c	0.3
Molybdenum, Mo	SM 3113 B [2]	µg/L	< 5.0		c	5.0
Nickel, Ni	EPA 200.9	µg/L	< 10.0		c	10.0
Selenium, Se	EPA 200.9	µg/L	< 2.0		c	2.0
Silver, Ag	EPA 200.9	µg/L	< 1.0		c	1.0
Sodium, Na	SM 3111 [2]	**mg/L**	74.1		c	0.5
Thallium, Tl	EPA 200.9	µg/L	< 10.0		c	10.0
Zinc, Zn	SM 3111 [2]	µg/L	< 50.0		c	50.0

[1] *EPA Method 200.9, Revision 2.2: Determination of Trace Elements By Stabilized Temperature Graphite Furnace Atomic Absorption*; Environmental Protection Agency, Office of Research and Development, May 1994.

[2] *Standard Methods for the Examination of Water and Wastewater*, 18th Edition, APHA, AWWA, WEF; 1992.

[3] *EPA Method 245.1, version 3: Determination of Mercury in Water by Cold Vapor Atomic Absorption Spectrometry;* Environmental Protection Agency Office of Research and Development, May 1994.

[4] Sample was diluted 4+1 (for a dilution factor of 1.25) to reduce matrix interference.

[5] c = composite sample; g = grab sample.

[6] Quantification level is defined as the lowest calibration standard.

Prepared by / Date: Patricia Kordas 3/5/10 Reviewed by / Date: [illegible] 3/5/10

REPORT OF ANALYSIS

CLIENT: Upper Occoquan Sewage Authority
ATTN: Anne Payne Bullock
ADDRESS: 14631 Compton Road
Centreville, VA 20121-2506
PHONE: (703) 830-2200
FAX: (703) 266-4064

Special Notes:
RE: PA/PT 10-1

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 1/13/10 Time: 0950
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: FEDERAL EXPRESS
SAMPLE RECEIPT:
Date: 1/15/10 Time: 1110
NUMBER OF CONTAINERS: 2
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)

SAMPLE ID: FIELD BLANK
SAMPLE NO: 10-00794

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Xylenes	8021B	0.2	< 0.2	ug/L	DLL	1/20/10	0553

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

Reproduction of this report is not permitted, except in full, without written approval from James R Reed & Associates.

RESPECTFULLY SUBMITTED

Elaine Claiborne

Elaine Claiborne
Laboratory Director
Date: 21-Jan-10

recd 012710 APB

REPORT OF ANALYSIS

CLIENT: Upper Occoquan Sewage Authority
ATTN: Anne Payne Bullock
ADDRESS: 14631 Compton Road
Centreville, VA 20121-2506
PHONE: (703) 830-2200
FAX: (703) 266-4064

Special Notes:
RE: PA/PT 10-1

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 1/13/10 Time: 0950
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: FEDERAL EXPRESS
SAMPLE RECEIPT:
Date: 1/15/10 Time: 1110
NUMBER OF CONTAINERS: 3
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)

SAMPLE ID: FINAL EFFLUENT MS/MSD
SAMPLE NO: 10-00795

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Xylenes	8021B	0.2	< 0.2	ug/L	DLL	1/20/10	0823

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

Reproduction of this report is not permitted, except in full, without written approval from James R Reed & Associates.

RESPECTFULLY SUBMITTED

Elaine Claiborne

Elaine Claiborne
Laboratory Director
Date: 21-Jan-10

recd 011210 AMB

REPORT OF ANALYSIS

CLIENT: Upper Occoquan Sewage Authority
ATTN: Cecilia Vernaci
ADDRESS: 14631 Compton Road
Centreville, VA 20121-2506
PHONE: (703) 830-2200
FAX: (703) 266-4064

Special Notes:
RE: PA/PT 10-1

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 1/13/10 Time: 0955
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: FEDERAL EXPRESS
SAMPLE RECEIPT:
Date: 1/15/10 Time: 1110
NUMBER OF CONTAINERS: 3
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)

SAMPLE ID: RAW INFLUENT
SAMPLE NO: 10-00793

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Xylenes	8021B	0.2	0.2	ug/L	DLL	1/20/10	0643

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

Reproduction of this report is not permitted, except in full, without written approval from James R Reed & Associates.

EPA 8021 (Xylenes): m,p-xylenes detected. Result confirmed by GC-MS.

RESPECTFULLY SUBMITTED

Elaine Claiborne

Elaine Claiborne
Laboratory Director
Date: 21-Jan-10

rec'd 012710 KPB

CHAIN OF CUSTODY

Company Name: Upper Occoquan Sewage Authority
Company Contact: Cecilia Vernaci Telephone: 703-830-2200
Results To: Cecilia Vernaci Fax: 703-266-4064
Address: 14631 Compton Road
Centreville, VA 20121
Project ID: PA/PT 10-1

ANALYSES REQUESTED

Bottle I.D	A
Preserv.	1,11

JRA ID # 10	Sample Type*	Sample Location	Composite Start Date	Composite Start Time	Composite End Date	Composite End Time	Grab Date	Grab Time	Total # of cont.	Xylenes (8021B)
~~X~~	~~—~~	~~Field Blank~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~3~~	~~X~~
00793	WW	Raw Influent	~~X 1/13/10~~	~~0955~~	~~—~~	~~—~~	1/13/10	0955	3	X
~~X~~	~~—~~	~~Final Effluent MS/MSD~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~3~~	~~X~~

*WW= Wastewater, GW = Groundwater, DW - Drinking Water, HW - Hazardous Waste, OTHERS

Sampled By: B. P. Quarles Date/Time: 1/13/10 / 1009
Relinquished By: B. P. Quarles Date/Time: 1/13/10 1009
Received By: AP Bullock Date/Time: 01/13/10 1010
Relinquished By: AP Bullock Date/Time: 01/14/10 1300
Received By: Date/Time:

Fed Ex 1-15-10 1110
___for Compliance
___Not for Compliance
Andrew Hilley 1-15-10 1110

VOA Chlorine Check: POS___NEG___ By:_____
Dechlorinated:_____Yes

Preservatives:

1 = <6°C	6 = $Na_2S_2O_3$ + HCl	10=Ascorbic Acid + HCl
2 = HNO_3	7 = NaOH + ZnOAc	11=HCl
3 = H_2SO_4	8 = H_2SO_4 + FAS	12=Zinc Acetate + NaOH
4 = NaOH	9 = NH_4Cl	13=Na_2SO_3 + HCl
5 = $Na_2S_2O_3$		14=Na_2SO_3 + H_2SO_4

CN Interference Check: Positive Negative
Sulfide: _____ _____
Oxidizing Agent: _____ _____

Arrival Temp: 4.0 °C

* APB 011310

JAMES R. REED and ASSOCIATES (757) 873-4703; FAX (757) 873-1498
770 Pilot House Drive, Newport News, VA 23606

rec'd 01/27/10 WB

CHAIN OF CUSTODY

Company Name: Upper Occoquan Sewage Authority
Company Contact: Anne Payne Bullock Telephone: 703-830-2200
Results To: Anne Payne Bullock Fax: 703-266-4064
Address: 14631 Compton Road, Centerville, VA 20121-2506

Project ID: PA/PT 10-1

ANALYSES REQUESTED

JRA ID # 10	Sample Type*	Sample Location	Composite Start Date	Composite Start Time	Composite End Date	Composite End Time	Grab Date	Grab Time	Total # of cont.	Preserv. i, ii	A Xylenes (8021B)
00794	Others	Field Blank					011310	0950	*3/2		X
00795	WW	Final Effluent MS/MSD					011310	0950	(11) 3		X

*WW= Wastewater, GW = Groundwater, DW - Drinking Water, HW - Hazardous Waste, OTHERS

Sampled By:	Mike Wiggins	Date/Time:	011310 / 1156
Relinquished By:	Mike Wiggins	Date/Time:	011310 / 1156
Received By:	AP Bullock	Date/Time:	011310 / 1157
Relinquished By:	AP Bullock	Date/Time:	011410 1300
Received By:		Date/Time:	
___for Compliance	Fed Ex		1-15-10 1110
___Not for Compliance	Andrew Hilley		1-15-10 1110

Preservatives:
1 = <4°C 6 = $Na_2S_2O_3$ + HCl 10=Ascorbic Acid + HCl
2 = HNO_3 7 = NaOH + ZnOAc 11=HCl
3 = H_2SO_4 8 = H_2SO_4 + FAS 12=Zinc Acetate + NaOH
4 = NaOH 9 = NH_4Cl 13=Na_2SO_3 + HCl
5 = $Na_2S_2O_3$ 14=Na_2SO_3 + H_2SO_4

CN Interference Check: Positive Negative
Sulfide: ____ ____
Oxidizing Agent: ____ ____

Arrival Temp: 4.0 °C

* 1 container used to obtain arrival temp ag

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770 Pilot House Drive, Newport News, VA 23606

Recd 012710 AGB

the standard in safety

Underwriters Laboratories

Laboratory Report

Client:	Upper Occoquan Sewage Authority	Report:	239705
Attn:	Cecilia Vernaci 14631 Compton Road Centreville, VA 20121	Priority:	Standard Written
		Status:	Final
		PWS ID:	Not Supplied

Copies to: None

Sample Information

UL ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
2207670	Fin Eff 54	300.0	01/12/10 08:50	Client	01/14/10 08:45
2207671	Raw Inf	300.0	01/12/10 11:00	Client	01/14/10 08:45

Report Summary

Project: PA/PT 10-1

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Jessie Varab at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from Underwriters Laboratories (UL).

Jessie Varab — Authorized Signature

PM — Title

1-24-10 — Date

Client Name: Upper Occoquan Sewage Authority
Report #: 239705

Underwriters Laboratories Inc.
110 S. Hill Street, South Bend, IN 46617-2702 USA
T:: 800.332.4345 / F:: 574.233.8207 / W:: ul.com

Client Name: Upper Occoquan Sewage Authority

Report #: 239705

Sampling Point: Fin Eff 54

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
24959-67-9	Bromide	300.0	---	0.010	**0.056**	mg/L	---	01/20/10 01:57	2207670

Sampling Point: Raw Inf

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
24959-67-9	Bromide	300.0	---	0.010	**0.079**	mg/L	---	01/20/10 02:23	2207671

† UL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

Lab Definitions

Continuing Calibration Check Standard (CCC), Continuing Calibration Verification (CCV) - is a single level, working standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. The CCC is used to validate the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of the check standard may be varied, when prescribed by the reference method, so that the entire linear range of the calibration curve is validated on a regular basis.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The LTB container follows the collection bottles to and from the collection site, but the LTB is not opened at any time during the trip. LTB is not exposed to site conditions or pumping and collection equipment. The LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Matrix Duplicate (LFD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix.

Matrix Spike Sample (MS) / Laboratory Fortified Matrix (LFM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.

rec'd 020110
ARB

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South Bend, IN 46617
(800) 332-4345
fax (574) 233-8207

Please print legibly. batch 239705

Order # 181259

www.ul.com/water

Shaded area for lab use only

CHAIN OF CUSTODY RECORD

REPORT TO:	SAMPLER (Signature)	STATE (of sample origin)	PWS ID#	PROJECT NAME	PO#
Upper Occuquan Service Authority	dPBullock	VA		PA/PT 1C-1	09160

BILL TO:	COMPLIANCE MONITORING	Yes	No	POPULATION SERVED	SOURCE WATER
same			X	NA	NA

	LAB Number	COLLECTION DATE	TIME	AM	PM	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED YES	CHLORINATED NO	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
1	2207670	011210	0850	X		Fin Eff 59	Bromide DW/300.0		x		1	WW	
2	2207671	011210	1100	X		Raw Inf	Bromide DW/300.0		x		1	WW	
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME
dPBullock	011310	1100 AM PM			AM PM
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME
		AM PM			AM PM
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
		AM PM	SPeyson 1-14-10		0845 AM PM

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

LAB COMMENTS

CONDITIONS UPON RECEIPT (check one): ____ Iced: Wet / Blue ___X___ Ambient ____ °C Upon Receipt ___X___ N/A

Temperature:

MATRIX CODES:
DW-DRINKING WATER
RW-REAGENT WATER
GW-GROUND WATER
EW-EXPOSURE WATER
SW-SURFACE WATER
PW-POOL WATER
WW-WASTE WATER

TURN-AROUND TIME (TAT) - SURCHARGES

SW = Standard Written: (15 working days)	0%	**IV*** = Immediate Verbal: (3 working days)	100%
RV* = Rush Verbal: (5 Working days)	50%	**IW*** = Immediate Written: (3 working days)	125%
RW* = Rush Written: (5 working days)	75%	**SP*** = Weekend, Holiday	CALL
		STAT* = Less than 48 hours	CALL

*-Please call, Expedited service not available for all testing

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges

Shipping
UL-SBN-SHIP-F-002-05
Effective Date: 03/09/05

rec'd back to lab 020110 APD

01/13/10 & 01/20/10 (CN only)
UOSA - Upper Occoquan Sewage Authority
Permit Application
Subcontracted TBT results included
This Analytical report contains 25 pages

Cecilia Vernaci
UOSA
14631 Compton Road
Centreville, VA 20121-2506

cc: Danny Barker, TSD, HRSD

Date Sent: 02/09/10

rec'd 021610
APB

HRSD is in the process of obtaining VELAP/NELAC accreditation from DCLS, the Division of Consolidated Laboratory Services. Analytical test results for methods listed on the laboratory's accreditation scope meet all requirements of VELAP/NELAC unless otherwise noted under the individual analysis.

Test results relate only to the sample tested. Clients should be aware that a critical step in chemical or microbiological analysis is the collection of the sample.

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If you have any questions concerning this report, please do not hesitate to call Danny Barker, TSD Environmental Scientist at (757) 460-4247, Robin Parnell, CEL Laboratory Manager at (757) 460-4203 or Cindi Reno, CEL Administrative Assistant at (757) 460-4205.

SUBMITTED BY:
Hampton Roads Sanitation District / HRSD
Central Environmental Laboratory / CEL
1432 Air Rail Avenue
Virginia Beach, VA 23455-3002

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Volatiles							
Acrolein	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Acrylonitrile	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Benzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Bromoform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Carbon Tetrachloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Chlorodibromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Chloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
2-Chloro-ethylvinyl Ether	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Chloroform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Dichlorobromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,2 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,3 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,4 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,1-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,2-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,1-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Trans-1,2-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,2-Dichloropropane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,3 Dichloropropylene[2]	EPA 624	ug/L	<20.0	20.0	SLOPEZ	01/15/10	14:08
Ethylbenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Methyl Bromide	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Methyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Methylene Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Monochlorobenzene (Chlorobenzene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Tetrachloro-ethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Toluene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,1,1-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
1,1,2-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Trichloroethylene (Trichloroethene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08
Vinyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	14:08

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,3-Dichloropropylene is the total of cis-1,3-Dichloropropylene and trans-1,3-Dichloropropylene.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Acid Extractable Compounds							
p-Chloro-m-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
2-Chlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
2,4 Dichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
2,4 Dimethylphenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
4,6-Dinitro-o-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
2,4-Dinitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
2-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
4-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Pentachlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Phenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
2,4,6 Trichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Base Neutral Compounds							
Acenaphthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Acenapthylene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Benzo(a)anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Benzo(a)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
3,4 Benzo-Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Benzo(GHI)Perylene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Benzo(k)fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Benzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/22/10	01:27
Bis-(2-Chloroethoxy) Methane	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Bis-(2-chloroethyl)-Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Bis-2-(Chloroisopropyl) Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Bis-2-ethyl hexyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
4-Bromophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Base Neutral Compounds - Continued							
Butyl benzyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
2-Chloronaphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
4-Chlorophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Chrysene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Dibenzo(a,h) anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Dibutyl phthalate (Di-n-butyl phthalate)	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Di-n-octyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
3,3-Dichlorobenzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Diethyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Dimethyl Phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
2,4-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
2,6-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
1,2-Diphenylhydrazine[2]	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Fluorene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Hexachlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Hexachlorobutadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Hexachlorocyclopentadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Hexachloroethane	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Isophorone	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Naphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Nitrobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
N-Nitrosodi-n-propyl amine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
N-Nitrosodimethylamine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
N-Nitrosodiphenylamine[3]	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Phenanthrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
Pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58
1,2,4 Trichlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	06:58

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*

[3] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Pesticides & PCB's							
Aldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
Chlordane	EPA 608	ug/L	ND	0.20	SLOPEZ	01/27/10	00:14
DDD	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
DDE	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
DDT	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
Dieldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
Endosulfan I	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
Endosulfan II	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
Endrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
Heptachlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
Lindane	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
Methoxychlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
Mirex	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:14
PCB 1016	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:14
PCB 1221	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:14
PCB 1232	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:14
PCB 1242	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:14
PCB 1248	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:14
PCB 1254	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:14
PCB 1260	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:14
PCB Total	EPA 608	ug/L	ND	7.00	SLOPEZ	01/27/10	00:14
Toxaphene	EPA 608	ug/L	ND	5.00	SLOPEZ	01/27/10	00:14

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

ND - Sample concentration non-detectable.

Authorization: Robin Parnell **Date:** 2/5/10

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 01/13/10
Sample Date: 01/20/10 (Cyanide Only)

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Wet Chemistry							
Cyanide	EPA 335.4	ug/L	<10	10	AMOORE	01/29/10	09:51
Oil and Grease	EPA 1664A	mg/L	40.2	5.0	RMORGA	01/27/10	07:23
Total Phenol	EPA 420.4	mg/L	<0.05	0.05	AMOORE	01/22/10	09:50
Volatiles							
Acrolein	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Acrylonitrile	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Benzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Bromoform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Carbon Tetrachloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Chlorodibromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Chloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
2-Chloro-ethylvinyl Ether	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Chloroform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Dichlorobromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,2 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,3 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,4 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,1-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,2-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,1-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Trans-1,2-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,2-Dichloropropane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,3 Dichloropropylene[2]	EPA 624	ug/L	<20.0	20.0	SLOPEZ	01/15/10	16:36
Ethylbenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Methyl Bromide	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Methyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Methylene Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Monochlorobenzene (Chlorobenzene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Tetrachloro-ethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Toluene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,1,1-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
1,1,2-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Trichloroethylene (Trichloroethene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36
Vinyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:36

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,3-Dichloropropylene is the total of cis-1,3-Dichloropropylene and trans-1,3-Dichloropropylene.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 01/13/10
Sample Date: 01/20/10 (Cyanide Only)

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Acid Extractable Compounds							
p-Chloro-m-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
2-Chlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
2,4 Dichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
2,4 Dimethylphenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
4,6-Dinitro-o-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
2,4-Dinitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
2-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
4-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Pentachlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Phenol	EPA 625	ug/L	16.5	10.0	IGERAS	01/21/10	09:14
2,4,6 Trichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Base Neutral Compounds							
Acenaphthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Acenapthylene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Benzo(a)anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Benzo(a)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
3,4 Benzo-Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Benzo(GHI)Perylene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Benzo(k)fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Benzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/22/10	03:43
Bis-(2-Chloroethoxy) Methane	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Bis-(2-chloroethyl)-Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Bis-2-(Chloroisopropyl) Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Bis-2-ethyl hexyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
4-Bromophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14

Notes
[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 01/13/10
Sample Date: 01/20/10 (Cyanide Only)

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Base Neutral Compounds - Continued							
Butyl benzyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
2-Chloronaphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
4-Chlorophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Chrysene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Dibenzo(a,h) anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Dibutyl phthalate (Di-n-butyl phthalate)	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Di-n-octyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
3,3-Dichlorobenzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Diethyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Dimethyl Phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
2,4-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
2,6-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
1,2-Diphenylhydrazine[2]	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Fluorene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Hexachlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Hexachlorobutadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Hexachlorocyclopentadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Hexachloroethane	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Isophorone	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Naphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Nitrobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
N-Nitrosodi-n-propyl amine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
N-Nitrosodimethylamine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
N-Nitrosodiphenylamine[3]	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Phenanthrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
Pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14
1,2,4 Trichlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	09:14

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*
[3] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 01/13/10
Sample Date: 01/20/10 (Cyanide Only)

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Pesticides & PCB's							
Aldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
Chlordane	EPA 608	ug/L	ND	0.20	SLOPEZ	01/27/10	03:24
DDD	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
DDE	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
DDT	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
Dieldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
Endosulfan I	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
Endosulfan II	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
Endrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
Heptachlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
Lindane	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
Methoxychlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
Mirex	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	03:24
PCB 1016	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	03:24
PCB 1221	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	03:24
PCB 1232	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	03:24
PCB 1242	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	03:24
PCB 1248	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	03:24
PCB 1254	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	03:24
PCB 1260	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	03:24
PCB Total	EPA 608	ug/L	ND	7.00	SLOPEZ	01/27/10	03:24
Toxaphene	EPA 608	ug/L	ND	5.00	SLOPEZ	01/27/10	03:24

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

ND - Sample concentration non-detectable.

Authorization: Robin Parnell **Date:** 2/5/10

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Wet Chemistry							
Cyanide	EPA 335.4	ug/L	<10	10	AMOORE	01/20/10	10:34
Oil and Grease	EPA 1664A	mg/L	<5.0	5.0	RMORGA	02/02/10	09:23
Total Phenol	EPA 420.4	mg/L	<0.05	0.05	AMOORE	01/22/10	09:49
Volatiles							
Acrolein[3]	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Acrylonitrile	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Benzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Bromoform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Carbon Tetrachloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Chlorodibromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Chloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
2-Chloro-ethylvinyl Ether	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Chloroform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Dichlorobromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,2 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,3 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,4 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,1-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,2-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,1-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Trans-1,2-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,2-Dichloropropane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,3 Dichloropropylene[2]	EPA 624	ug/L	<20.0	20.0	SLOPEZ	01/15/10	16:06
Ethylbenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Methyl Bromide	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Methyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Methylene Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Monochlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Tetrachloro-ethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Toluene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,1,1-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
1,1,2-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Trichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06
Vinyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	01/15/10	16:06

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,3-Dichloropropylene is the total of cis-1,3-Dichloropropylene and trans-1,3-Dichloropropylene.*

[3] *The recovery of Acrolein in the sample matrix spike and matrix spike duplicate was outside the acceptable limit due to a possible matrix effect. However, the recovery of Acrolein in the Laboratory Fortified Blank was within acceptable limit. The recovery of all other QC check standards were also within acceptable limits.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Acid Extractable Compounds							
p-Chloro-m-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
2-Chlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
2,4 Dichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
2,4 Dimethylphenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
4,6-Dinitro-o-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
2,4-Dinitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
2-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
4-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Pentachlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Phenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
2,4,6 Trichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Base Neutral Compounds							
Acenaphthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Acenapthylene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Benzo(a)anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Benzo(a)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
3,4 Benzo-Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Benzo(GHI)Perylene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Benzo(k)fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Benzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/22/10	02:01
Bis-(2-Chloroethoxy) Methane	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Bis-(2-chloroethyl)-Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Bis-2-(Chloroisopropyl) Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Bis-2-ethyl hexyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
4-Bromophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

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www.hrsd.com

ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Base Neutral Compounds- Continued							
Butyl benzyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
2-Chloronaphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
4-Chlorophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Chrysene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Dibenzo(a,h) anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Dibutyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Di-n-octyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
3,3-Dichlorobenzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Diethyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Dimethyl Phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
2,4-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
2,6-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
1,2-Diphenylhydrazine[2]	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Fluorene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Hexachlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Hexachlorobutadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Hexachlorocyclopentadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Hexachloroethane	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Isophorone	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Naphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Nitrobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
N-Nitrosodi-n-propyl amine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
N-Nitrosodimethylamine	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
N-Nitrosodiphenylamine[3]	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Phenanthrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
Pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31
1,2,4 Trichlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	01/21/10	07:31

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*
[3] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Pesticides & PCB's							
Aldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
Chlordane	EPA 608	ug/L	ND	0.20	SLOPEZ	01/27/10	00:29
DDD	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
DDE*	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
DDT*	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
Dieldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
Endosulfan I	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
Endosulfan II	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
Endrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
Heptachlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
Lindane	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
Methoxychlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
Mirex	EPA 608	ug/L	<0.05	0.05	SLOPEZ	01/27/10	00:29
PCB 1016	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:29
PCB 1221	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:29
PCB 1232	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:29
PCB 1242	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:29
PCB 1248	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:29
PCB 1254	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:29
PCB 1260	EPA 608	ug/L	ND	1.00	SLOPEZ	01/27/10	00:29
PCB Total	EPA 608	ug/L	ND	7.00	SLOPEZ	01/27/10	00:29
Toxaphene	EPA 608	ug/L	ND	5.00	SLOPEZ	01/27/10	00:29

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

ND - Sample concentration non-detectable

* *The recoveries of DDE and DDT in the sample matrix spike and sample matrix spike duplicate were* ***above*** *the acceptable limits due to possible matrix interferences. However, the recoveries of DDE and DDT in the Laboratory Fortified Blank were within acceptable limits. These compounds* ***were not detected*** *in the samples. The recovery of all other QC check standards were all within acceptable limits.*

Authorization: Robin Parnell **Date:** 2/5/10

QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 01/13/10

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Wet Chemistry						
Cyanide	EPA 335.4	ug/L	38	102	102	100
Oil and Grease	EPA 1664A	mg/L	40.0	89	91	85
Total Phenol	EPA 420.4	mg/L	0.10	104	94	97
Volatiles						
Acrolein	EPA 624	ug/L	40.0	0*	0*	92
Acrylonitrile	EPA 624	ug/L	40.0	91	100	91
Benzene	EPA 624	ug/L	20.0	101	111	108
Bromoform	EPA 624	ug/L	20.0	97	96	93
Carbon Tetrachloride	EPA 624	ug/L	20.0	97	102	100
Chlorodibromomethane	EPA 624	ug/L	20.0	101	103	101
Chloroethane	EPA 624	ug/L	20.0	83	88	83
2-Chloroethylvinyl ether	EPA 624	ug/L	20.0	91	102	95
Chloroform	EPA 624	ug/L	20.0	100	102	103
Dichlorobromomethane	EPA 624	ug/L	20.0	98	103	97
1,2 Dichlorobenzene	EPA 624	ug/L	20.0	100	106	103
1,3 Dichlorobenzene	EPA 624	ug/L	20.0	102	106	108
1,4 Dichlorobenzene	EPA 624	ug/L	20.0	101	107	107
1,1-Dichloroethane	EPA 624	ug/L	20.0	101	110	106
1,2-Dichloroethane	EPA 624	ug/L	20.0	94	104	99
trans-1,2-Dichloroethylene	EPA 624	ug/L	20.0	100	107	103
1,1-Dichloroethylene	EPA 624	ug/L	20.0	101	110	116
1,2-Dichloropropane	EPA 624	ug/L	20.0	101	101	102
cis-1,3-Dichloropropene	EPA 624	ug/L	20.0	103	101	103
trans-1,3-Dichloropropene	EPA 624	ug/L	20.0	99	101	100
Ethylbenzene	EPA 624	ug/L	20.0	102	104	104
Methyl bromide	EPA 624	ug/L	20.0	100	108	92
Methyl chloride	EPA 624	ug/L	20.0	102	113	102
Methylene chloride	EPA 624	ug/L	20.0	98	108	102
Monochlorobenzene(Chlorobenzene)	EPA 624	ug/L	20.0	101	102	100
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	20.0	103	105	104
Tetrachloroethylene	EPA 624	ug/L	20.0	106	110	111

NOTES

The recovery of Acrolein in the sample matrix spike and matrix spike duplicate was outside the acceptable limit due to a possible matrix effect. However, the recovery of Acrolein in the Laboratory Fortified Blank was within acceptable limit. The recovery of all other QC check standards were also within acceptable limits.

QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 01/13/10

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Base Neutral Compounds - Continued						
Butyl benzyl phthalate	EPA 625	ug/L	100	116	111	102
2-Chloronaphthalene	EPA 625	ug/L	100	90	86	80
4-Chlorophenyl phenyl ether	EPA 625	ug/L	100	102	99	92
Chrysene	EPA 625	ug/L	100	98	94	91
Di-n-butyl phthalate	EPA 625	ug/L	100	107	102	97
Di-n-octyl phthalate	EPA 625	ug/L	100	123	119	108
Dibenzo(a,h)anthracene	EPA 625	ug/L	100	102	99	95
3,3-Dichlorobenzidine	EPA 625	ug/L	100	104	96	107
Diethyl phthalate	EPA 625	ug/L	100	103	99	94
Dimethyl phthalate	EPA 625	ug/L	100	99	95	92
2,4-Dinitrotoluene	EPA 625	ug/L	100	100	99	89
2,6 Dinitrotoluene	EPA 625	ug/L	100	103	101	93
1,2 Diphenylhydrazine[1]	EPA 625	ug/L	100	100	94	92
Fluoranthene	EPA 625	ug/L	100	99	94	90
Fluorene	EPA 625	ug/L	100	96	93	87
Hexachlorobenzene	EPA 625	ug/L	100	93	90	86
Hexachlorobutadiene	EPA 625	ug/L	100	82	78	70
Hexachlorocyclopentadiene	EPA 625	ug/L	100	72	66	63
Hexachloroethane	EPA 625	ug/L	100	74	73	62
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	100	108	104	101
Isophorone	EPA 625	ug/L	100	87	83	79
Naphthalene	EPA 625	ug/L	100	89	84	79
Nitrobenzene	EPA 625	ug/L	100	89	83	80
N-Nitrosodi-n-propylamine	EPA 625	ug/L	100	101	96	87
N-Nitrosodi methylamine	EPA 625	ug/L	100	90	86	80
N-Nitrosodi phenylamine[2]	EPA 625	ug/L	100	124	118	110
Phenanthrene	EPA 625	ug/L	100	96	92	87
Pyrene	EPA 625	ug/L	100	100	97	93
1,2,4-Trichlorobenzene	EPA 625	ug/L	100	84	78	72

NOTES

1 1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.

2 n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.

QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 01/13/10

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Pesticides & PCB's						
Aldrin	EPA 608	ug/L	2.00	98	98	79
DDD	EPA 608	ug/L	2.00	105	111	89
DDE	EPA 608	ug/L	2.00	118*	121*	120
DDT	EPA 608	ug/L	2.00	126*	119*	119
Dieldren	EPA 608	ug/L	2.00	97	101	82
Endosulfan I	EPA 608	ug/L	2.00	89	91	76
Endosulfan II	EPA 608	ug/L	2.00	100	102	83
Endrin	EPA 608	ug/L	2.00	102	110	84
Heptachlor	EPA 608	ug/L	2.00	98	100	85
Lindane	EPA 608	ug/L	2.00	99	101	79
Methoxychlor	EPA 608	ug/L	2.00	103	108	86
Mirex	EPA 608	ug/L	2.00	103	106	85
PCB-1016	EPA 608	ug/L	3.00	145	114	113
PCB-1260	EPA 608	ug/L	3.00	107	113	107

NOTES

The recoveries of DDE and DDT in the sample matrix spike and sample matrix spike duplicate were ***above*** *the acceptable limits due to possible matrix interferences. However, the recoveries of DDE and DDT in the Laboratory Fortified Blank were within acceptable limits. These compounds* ***were not detected*** *in the samples. The recovery of all other QC check standards were all within acceptable limits.*

Authorization: Robin Parnell **Date:** 2/5/10

HAMPTON ROADS SANITATION DISTRICT

CENTRAL ENVIRONMENTAL LABORATORY
1432 AIR RAIL AVENUE
VIRGINIA BEACH, VA 23455
TEL: 757-460-4214
FAX: 757-460-6586

CHAIN OF CUSTODY

PROJECT NAME/CODE: UOSA VPDES 2A

ANALYSES REQUESTED, CGN & NUMBER OF CONTAINERS

Project in Lims? Yes ____ No ✓

CUSTOMER SAMPLE ID	HRSD Use Only: PROJECT CODE	SAMPLE POINT	DATE	TIME	SAMPLED BY	Circle One: MATRIX	Circle One: SAMPLE TYPE	VOA (10...10B)	VOA (10...10E)	Total Phenol (3)	Oil & Grease (8...8A)	Cyanide (4)	Semi Vol Organics (9...9C)	Semi Vol Organics (9...9K)					HRSD Use Only: Presv'd Checked	CONT. COUNT
Field Blank	UO	FB	011310	1245	MW	L	C						4 ✓						✓	4
Field Blank	UO	FB	011310	0950	MW	L	G	3 ✓											✓	3
Final Effluent	UO	FNE	011310	1245	MW	L	C							12 ✓					✓	12
Final Effluent	UO	FNE	011310	0950	MW	L	G		6 ✓										✓	6
Final Effluent	UO	FNE	011310	1010	MW	L	G			1 ✓									✓	1
Final Effluent	UO	FNE	011310	1015	MW	L	G				2 ✓								✓	2
Final Effluent	UO	FNE	011310	1020	MW	L	G				2 ✓								✓	2
Final Effluent	UO	FNE	011310	1010	MW	L	G					1 ✓							✓	1

COMMENTS:

For Ground Water Use Only
Temp. Blank 1 ____ °C
Temp. Blank 2 ____ °C

Relinquished by / Signature	Date/Time 011410	0900
Received by / Signature	Date/Time 1/14/10	0900
Relinquished by / Signature	Date/Time	
Received by / Signature	Date/Time	
Relinquished by / Signature	Date/Time	
Received by / Signature	Date/Time	
Relinquished by / Signature	Date/Time	
Received by / Signature	Date/Time	

Temp. Requirement

Where required, submitted samples were transported in coolers maintained at ≤ 6 °C.

Yes ✓ No ____

Int MW

***Preservatives**

- *Hg, Metals (pH<2 - HNO3) (Clean metals check in section)
- *O&G (pH<2 - HCl, check in section) & store ≤ 6 °C
- CN^- (pH>12 - NaOH) & store ≤ 6 °C
- *Sulfide (pH>9 - NaOH+ZnAc) & store ≤ 6 °C
- *Micro ($Na_3S_2O_3$ + EDTA) & store < 10 °C
- *COD, NUT, Phenols (pH<2 - H_2SO_4) & store ≤ 6 °C
- *TOC (pH<2 - H_3PO_4) & store ≤ 6 °C
- *BOD, TSS, TVSS, Turbidity, Surfactant, Sulfate store ≤ 6 °C
- *NUT Non Acidified, Conductivity, Organics store ≤ 6 °C
- *Cr (VI) (pH 9.3 - 9.7 - $(NH_4)_2SO_4$) & store ≤ 6 °C

All sample(s) met proper *preservation requirements. Yes ✓ No ____ Int GH-11

Sample Type: C=Composite, G=Grab Matrix: L= Liquid ; S = Solid CGN: Container Group Number

NOTE: ALL APPLICABLE INFORMATION MUST BE COMPLETED PRIOR TO ACCEPTANCE.

HAMPTON ROADS SANITATION DISTRICT

CENTRAL ENVIRONMENTAL LABORATORY
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VIRGINIA BEACH, VA 23455
TEL: 757-460-4214
FAX: 757-460-6586

CHAIN OF CUSTODY

PROJECT NAME/CODE: UOSA VPDES 2A

Project in Lims? Yes ____ No X

ANALYSES REQUESTED, CGN & NUMBER OF CONTAINERS

CUSTOMER SAMPLE ID	HRSD Use Only: PROJECT CODE	HRSD Use Only: SAMPLE POINT	DATE	TIME	SAMPLED BY	MATRIX (Circle One)	SAMPLE TYPE (Circle One)	VOA (10...10E)	Total Phenol (3)	Oil & Grease (B...8A)	Cyanide (4)	Semi Vol Organics (9...9K)							HRSD Use Only: Presv'd Checked	HRSD Use Only: CONT. COUNT
~~Final Effluent~~ (*)	UO	INF	1/13/10	0941	BPC	L	G C	~~0955~~				12							✓	62
~~Final Effluent~~ (*)	UO	INF	1/13/10	0955	BPC	L	G C	6											✓	6
~~Final Effluent~~ (*)	UO	INF	1/13/10	0951	BPC	L	G C		1										✓	1
~~Final Effluent~~ (*)	UO	INF	1/13/10	0951	BPC	L	G C			2									✓	2
~~Final Effluent~~ (*)	UO	INF	1/13/10	0951	BPC	L	G C				(+)								✓	1

COMMENTS:

(+) pH not L12 - GH 1/14/10 - Will resample (*) Influent - GH 1/14/10

For Ground Water Use Only
Temp Blank: °C
Temp Blank: °C

Relinquished by / Signature	B-P-Carter	Date/Time	1/13/10 1012
Received by / Signature	A P Bullock	Date/Time	01 13 10 1012
Relinquished by / Signature	A P Bullock	Date/Time	01 13 10 1155
Received by / Signature	[illegible]	Date/Time	01 13 10 1156
Relinquished by / Signature	[illegible]	Date/Time	01 14 10 0925
Received by / Signature	[illegible]	Date/Time	1/14/10 0925
Relinquished by / Signature		Date/Time	
Received by / Signature		Date/Time	

Temp. Requirement

Where required, submitted samples were transported in coolers maintained at ≤ 6 °C.

Yes ✓ No ____

Int MW

***Preservatives**

- *Hg, Metals (pH<2 - HNO3) (Clean metals check in section)
- *O&G (pH<2 - HCl, check in section) & store ≤ 6 °C
- CN^- (pH>12 - NaOH) & store ≤ 6 °C
- *Sulfide (pH>9 - NaOH+ZnAc) & store ≤ 6 °C
- *Micro ($Na_3S_2O_3$ + EDTA) & store < 10 °C
- *COD, NUT, Phenols (pH<2 - H_2SO_4) & store ≤ 6 °C
- *TOC (pH<2 - H_3PO_4) & store ≤ 6 °C
- *BOD, TSS, TVSS, Turbidity, Surfactant, Sulfate store ≤ 6 °C
- *NUT Non Acidified, Conductivity, Organics store ≤ 6 °C
- *Cr (VI) (pH 9.3 - 9.7 - $(NH_4)_2SO_4$) & store ≤ 6 °C

All sample(s) met proper *preservation requirements. Yes ✓ No ____ Int GH

Sample Type: C=Composite, G=Grab Matrix: L= Liquid , S = Solid CGN: Container Group Number

NOTE: ALL APPLICABLE INFORMATION MUST BE COMPLETED PRIOR TO ACCEPTANCE.

CENTRAL ENVIRONMENTAL LAB.
1432 AIR RAIL AVENUE
VIRGINIA BEACH, VA 23455
TEL: 757-460-4214
FAX: 757-460-6586

SAMPLE CHAIN OF CUSTODY

PROJECT NAME/CODE: HOSA VPDES 2A
PROJECT NUMBER:

HO INF

CONTAINERS (NUMBER): Cyanide (4)

SAMPLE SOURCE CODE/SAMPLING POINT	DATE	TIME	SAMPLED BY	MATRIX **	SAMPLE TYPE *	# CONT. REC'D.	SPLIT IN LAB?	Pres'v Check *	CONT. COUNT
HO RAW INF	1/20/10	0953	BPC	L	B C (G)	1	Y (N)	✓	1
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		
					B C G		Y N		

Relinquished by / Signature B. P. Cantrell	Date/Time 1/20/10 0958	COMMENTS
Received by / Signature AP Bullock	Date/Time 01 20 10 0958	Delivered via "Fedex" GHill 1/21/10
Relinquished by / Signature AP Bullock	Date/Time 01 20 10 1250	
Received by / Signature [illegible]	Date/Time 1/20/10 GHill 1035	
Relinquished by / Signature	Date/Time 1/21/10	Where required, Submitted Samples were transported in Coolers maintained at ≤ 6° C Yes ✓ GHill 1/21/10
Received by / Signature	Date/Time	

Preservatives

*Hg, Metals	(pH<2 - HNO_3)
**Clean Metals (pH<2-HNO_3,check in section)	
*CN	(pH>12 - NaOH)
*COD,NOX, O&G	(pH<2 - H_2SO_4)
*TKN,TP, Phenols	(pH<2 - H_2SO_4)
*BOD, TSS, Cl, ClS, Micro	Store at 4° C
*Organics	Store at 4° C
*Turbidity, Surfactant	Store at 4° C

* Sample Type: B=Batch, C=Composite, G=Grab

** Matrix: WW-Wastewater, GW=Groundwater, SUR=Surface Water, STO=Stormwater, SAL=Saline Water, Other (i.e grit,biosolids,soil, hazardous waste, crops)

NOTE: ALL APPLICABLE INFORMATION MUST BE COMPLETED PRIOR TO ACCEPTANCE.

SUBCONTRACTED DATA

01/12/10 & 01/13/10 - UOSA

Upper Occoquan Sewage Authority - Permit Application

Re-released Subcontracted TBT results (Clearer Copy of results)

This Analytical report contains 5 pages

Cecilia Vernaci
UOSA
14631 Compton Road
Centreville, VA 20121-2506

cc: Danny Barker, TSD, HRSD

Date Sent: 02/19/10

HRSD is in the process of obtaining VELAP/NELAC accreditation from DCLS, the Division of Consolidated Laboratory Services. Analytical test results for methods listed on the laboratory's accreditation scope meet all requirements of VELAP/NELAC unless otherwise noted under the individual analysis.

Test results relate only to the sample tested. Clients should be aware that a critical step in chemical or microbiological analysis is the collection of the sample.

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SUBMITTED BY:
Hampton Roads Sanitation District / HRSD
Central Environmental Laboratory / CEL
1432 Air Rail Avenue
Virginia Beach, VA 23455-3002

Virginia Institute of Marine Science
Department of Environmental and Aquatic Animal Health
Route 1208 Greate Road
Gloucester Point VA 23062
804-684-7654

ANALYTICAL REPORT

Project Code: UO
Sample Point: INF
Sample Date: 01/12/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
TBT	Unger	ng/L	<30	30	ET	01/29/10	9:59

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

Authorization: Ellen Travelstead Ellen Travelstead **Date:** 02/02/2010

Virginia Institute of Marine Science
Department of Environmental and Aquatic Animal Health
Route 1208 Greate Road
Gloucester Point VA 23062
804-684-7654

ANALYTICAL REPORT

Project Code: UO
Sample Point: FNE
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
TBT	Unger	ng/L	<30	30	ET	01/29/10	10:26

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

Authorization: Ellen Travelstead Ellen Travelstead **Date:** 02/02/2010

Virginia Institute of Marine Science
Department of Environmental and Aquatic Animal Health
Route 1208 Greate Road
Gloucester Point VA 23062
804-684-7654

ANALYTICAL REPORT

Project Code: UO
Sample Point: FNE+MS(40)
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
TBT	Unger	ng/L	40	30	ET	01/29/10	10:49

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

Authorization: Ellen Travelstead **Date:** 02/02/2010

Virginia Institute of Marine Science
Department of Environmental and Aquatic Animal Health
Route 1208 Greate Road
Gloucester Point VA 23062
804-684-7654

ANALYTICAL REPORT

Project Code: UO
Sample Point: FNE+MSD(40)
Sample Date: 01/13/10

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
TBT	Unger	ng/L	41	30	ET	01/29/10	11:13

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

Authorization: Ellen Travelstead **Date:** 02/02/2010

FIELD RECORD (S)

UOSA VPDES Field Sheet

Information To Be Checked Before The Start of Each Sampling Event

1. Does the Final Effluent have any abnormal characteristics (odor, color)? Y / (N)

If the answer to the above questions is NO proceed to the next section. Please contact a supervisor if the answer is YES.

2. A. Average Plant flow for the last five days: 31.9 MGD
   B. Expected Plant flow for the next 24 hours: ~ 32.0 MGD

3. List the last three days of Final Effluent TSS with the most recent last: < 0.3 mg/L, 0.4 mg/L, < 0.3 mg/L

4. Contact Closure: (~~Expected Flow~~ 32.0 MGD / 100000130) 107 Pulses per sample.

5. Samplers for Final Effluent & FB calibrated at 575 (Org) / 225 (TBT) ml per sample. (Desired volume/ # samples)
   Final Effluent Start Time / Date: 1245 011210 Calibrated to: 575 / 225 mL
   FB Start Time / Date: 1245 011210 Calibrated to: 575 / 225 mL

The above information has been completed prior to the beginning of the sampling event. Int. [illegible]

Sampling personnel: M. Wiggins, G. Thompson, _____

Information Check At The End Of The Sampling Event

1. Are all lids, compression assemblies and caps secure? (Y) / N
2. Final Effluent TSS for the sampling period: <0.3, 0.6 mg/L
3. Plant flow for the sampling period 28.72, 30.23 MGD
4. Number of samples collected in each Final Effluent & FB composite container:
   Final Effluent: 27
   FB: 27
5. Final Effluent & FB composite end time and date:
   Final Effluent End Time / Date: 1245 011310
   FB End Time / Date: 1245 011310
6. Is Temperature in collection container at the end of sampling <6° C? (Y) / N
7. Are sample volumes equal in all composite containers? (Y) / N
8. Grab times and dates:
   FB VOA: 0950 011310 FNE VOA: 0950 011310
   Oil & Grease: 1015 / 1020 011310 Cyanide: 1010 011310
   Total Phenol: 1010 011310

Sampling personnel: M. Wiggins, G. Thompson, _____

Please contact project lead with any problems incurred during the sampling event.

Record any other information that could affect sample results:

VA0024988

08/05/09 - UOSA - Upper Occoquan Sewage Authority
Permit Application
Subcontracted TBT results included

RECEIVED
OCT 13 2009
DEPT. OF ENVIRONMENTAL QUALITY-NRO

Cecilia Vernaci
UOSA
14631 Compton Road
Centreville, VA 20121-2506

Batch #: HRSD 1054 APB 090909

Reviewed by: am 9/9/09

cc: Danny Barker, TSD, HRSD

Date Sent: 09/02/09

HRSD is in the process of obtaining VELAP/NELAC accreditation from DCLS, the Division of Consolidated Laboratory Services. Analytical test results for methods listed on the laboratory's accreditation scope meet all requirements of VELAP/NELAC unless otherwise noted under the individual analysis.

Test results relate only to the sample tested. Clients should be aware that a critical step in chemical or microbiological analysis is the collection of the sample.

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SUBMITTED BY:
Hampton Roads Sanitation District / HRSD
Central Environmental Laboratory / CEL
1432 Air Rail Avenue
Virginia Beach, VA 23455-3002

HAMPTON ROADS SANITATION DISTRICT

add: a/s/m/n/d

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Wet Chemistry							
Cyanide	EPA 335.4	ug/L	12	10	AMOORE	08/12/09	10:52
Oil and Grease	EPA 1664A	mg/L	20.7	5.0	JRICKS	08/12/09	07:40
Total Phenol	EPA 420.4	mg/L	0.05	0.05	AMOORE	08/12/09	13:52
Volatiles							
Acrolein	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Acrylonitrile	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Benzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Bromoform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Carbon Tetrachloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Chlorodibromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Chloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
2-Chloro-ethylvinyl Ether	EPA 624	ug/L	<20.0	20.0	SLOPEZ	08/07/09	18:57
Chloroform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Dichlorobromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,2 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,3 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,4 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,1-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,2-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,1-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Trans-1,2-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,2-Dichloropropane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,3 Dichloropropylene[2]	EPA 624	ug/L	<20.0	20.0	SLOPEZ	08/07/09	18:57
Ethylbenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Methyl Bromide	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Methyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Methylene Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Monochlorobenzene (Chlorobenzene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Tetrachloro-ethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Toluene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,1,1-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
1,1,2-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Trichloroethylene (Trichloroethene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57
Vinyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	18:57

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,3-Dichloropropylene is the total of cis-1,3-Dichloropropylene and trans-1,3-Dichloropropylene.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Acid Extractable Compounds							
p-Chloro-m-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
2-Chlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
2,4 Dichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
2,4 Dimethylphenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
4,6-Dinitro-o-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
2,4-Dinitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
2-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
4-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Pentachlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Phenol	EPA 625	ug/L	17.8	10.0	IGERAS	08/13/09	19:21
2,4,6 Trichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Base Neutral Compounds							
Acenaphthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Acenapthylene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Benzo(a)anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Benzo(a)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
3,4 Benzo-Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Benzo(GHI)Perylene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Benzo(k)fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Benzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Bis-(2-Chloroethoxy) Methane	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Bis-(2-chloroethyl)-Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Bis-2-(Chloroisopropyl) Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Bis-2-ethyl hexyl phthalate	EPA 625	ug/L	10.8	10.0	IGERAS	08/13/09	19:21
4-Bromophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21

Notes
[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Base Neutral Compounds - Continued							
Butyl benzyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
2-Chloronaphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
4-Chlorophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Chrysene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Dibenzo(a,h) anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Dibutyl phthalate (Di-n-butyl phthalate)	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Di-n-octyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
3,3-Dichlorobenzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Diethyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Dimethyl Phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
2,4-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
2,6-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
1,2-Diphenylhydrazine[2]	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Fluorene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Hexachlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Hexachlorobutadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Hexachlorocyclopentadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Hexachloroethane	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Isophorone	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Naphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Nitrobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
N-Nitrosodi-n-propyl amine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
N-Nitrosodimethylamine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
N-Nitrosodiphenylamine[3]	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Phenanthrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
Pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21
1,2,4 Trichlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	19:21

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*
[3] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Raw Influent
Project Code: UO
Sample Point: INF
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Pesticides & PCB's							
Aldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
Chlordane	EPA 608	ug/L	ND	0.20	SLOPEZ	08/12/09	21:10
DDD	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
DDE	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
DDT	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
Dieldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
Endosulfan I	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
Endosulfan II	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
Endrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
Heptachlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
Lindane	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
Methoxychlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
Mirex	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/24/09	00:50
PCB 1016	EPA 608	ug/L	ND	1.00	SLOPEZ	08/24/09	00:50
PCB 1221	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	21:10
PCB 1232	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	21:10
PCB 1242	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	21:10
PCB 1248	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	21:10
PCB 1254	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	21:10
PCB 1260	EPA 608	ug/L	ND	1.00	SLOPEZ	08/24/09	00:50
PCB Total	EPA 608	ug/L	ND	7.00	SLOPEZ	08/12/09	21:10
Toxaphene	EPA 608	ug/L	ND	5.00	SLOPEZ	08/12/09	21:10

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

ND - Sample concentration non-detectable.

Authorization: Robin Parnell **Date:** 8/27/09

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Volatiles							
Acrolein	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Acrylonitrile	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Benzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Bromoform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Carbon Tetrachloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Chlorodibromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Chloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
2-Chloro-ethylvinyl Ether	EPA 624	ug/L	<20.0	20.0	SLOPEZ	08/07/09	16:34
Chloroform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Dichlorobromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,2 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,3 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,4 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,1-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,2-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,1-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Trans-1,2-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,2-Dichloropropane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,3 Dichloropropylene[2]	EPA 624	ug/L	<20.0	20.0	SLOPEZ	08/07/09	16:34
Ethylbenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Methyl Bromide	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Methyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Methylene Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Monochlorobenzene (Chlorobenzene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Tetrachloro-ethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Toluene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,1,1-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
1,1,2-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Trichloroethylene (Trichloroethene)	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34
Vinyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	16:34

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,3-Dichloropropylene is the total of cis-1,3-Dichloropropylene and trans-1,3-Dichloropropylene.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Acid Extractable Compounds							
p-Chloro-m-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
2-Chlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
2,4 Dichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
2,4 Dimethylphenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
4,6-Dinitro-o-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
2,4-Dinitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
2-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
4-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Pentachlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Phenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
2,4,6 Trichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Base Neutral Compounds							
Acenaphthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Acenapthylene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Benzo(a)anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Benzo(a)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
3,4 Benzo-Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Benzo(GHI)Perylene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Benzo(k)fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Benzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Bis-(2-Chloroethoxy) Methane	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Bis-(2-chloroethyl)-Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Bis-2-(Chloroisopropyl) Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Bis-2-ethyl hexyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
4-Bromophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Base Neutral Compounds - Continued							
Butyl benzyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
2-Chloronaphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
4-Chlorophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Chrysene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Dibenzo(a,h) anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Dibutyl phthalate (Di-n-butyl phthalate)	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Di-n-octyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
3,3-Dichlorobenzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Diethyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Dimethyl Phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
2,4-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
2,6-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
1,2-Diphenylhydrazine[2]	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Fluorene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Hexachlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Hexachlorobutadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Hexachlorocyclopentadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Hexachloroethane	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Isophorone	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Naphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Nitrobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
N-Nitrosodi-n-propyl amine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
N-Nitrosodimethylamine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
N-Nitrosodiphenylamine[3]	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Phenanthrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
Pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08
1,2,4 Trichlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:08

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*
[3] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Field Blank
Project Code: UO
Sample Point: FB
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Pesticides & PCB's							
Aldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
Chlordane	EPA 608	ug/L	ND	0.20	SLOPEZ	08/12/09	18:45
DDD	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
DDE	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
DDT	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
Dieldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
Endosulfan I	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
Endosulfan II	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
Endrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
Heptachlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
Lindane	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
Methoxychlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
Mirex	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	21:42
PCB 1016	EPA 608	ug/L	ND	1.00	SLOPEZ	08/23/09	21:42
PCB 1221	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	18:45
PCB 1232	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	18:45
PCB 1242	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	18:45
PCB 1248	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	18:45
PCB 1254	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	18:45
PCB 1260	EPA 608	ug/L	ND	1.00	SLOPEZ	08/23/09	21:42
PCB Total	EPA 608	ug/L	ND	7.00	SLOPEZ	08/12/09	18:45
Toxaphene	EPA 608	ug/L	ND	5.00	SLOPEZ	08/12/09	18:45

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

ND - Sample concentration non-detectable.

Authorization: Robin Parnell **Date:** 8/27/09

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Wet Chemistry							
Cyanide	EPA 335.4	ug/L	<10	10	AMOORE	08/12/09	10:49
Oil and Grease	EPA 1664A	mg/L	<5.0	5.0	RMORGA	08/07/09	07:35
Total Phenol	EPA 420.4	mg/L	<0.05	0.05	AMOORE	08/12/09	13:50
Volatiles							
Acrolein*	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Acrylonitrile	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Benzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Bromoform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Carbon Tetrachloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Chlorodibromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Chloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
2-Chloro-ethylvinyl Ether	EPA 624	ug/L	<20.0	20.0	SLOPEZ	08/07/09	17:03
Chloroform	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Dichlorobromo-methane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,2 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,3 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,4 Dichlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,1-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,2-Dichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,1-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Trans-1,2-Dichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,2-Dichloropropane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,3 Dichloropropylene[2]	EPA 624	ug/L	<20.0	20.0	SLOPEZ	08/07/09	17:03
Ethylbenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Methyl Bromide	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Methyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Methylene Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Monochlorobenzene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Tetrachloro-ethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Toluene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,1,1-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
1,1,2-Trichloroethane	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Trichloroethylene	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03
Vinyl Chloride	EPA 624	ug/L	<10.0	10.0	SLOPEZ	08/07/09	17:03

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

[2] *1,3-Dichloropropylene is the total of cis-1,3-Dichloropropylene and trans-1,3-Dichloropropylene.*

* - *% Recovery of Acrolein in the matrix spike (MS) and matrix spike duplicate (MSD) was not within the acceptable limits due to possible matrix interference. However, the % Recovery of this analyte in the laboratory fortified blank (LFB) was within acceptable limits.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Acid Extractable Compounds							
p-Chloro-m-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
2-Chlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
2,4 Dichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
2,4 Dimethylphenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
4,6-Dinitro-o-cresol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
2,4-Dinitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
2-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
4-Nitrophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Pentachlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Phenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
2,4,6 Trichlorophenol	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Base Neutral Compounds							
Acenaphthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Acenapthylene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Benzo(a)anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Benzo(a)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
3,4 Benzo-Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Benzo(GHI)Perylene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Benzo(k)fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Benzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Bis-(2-Chloroethoxy) Methane	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Bis-(2-chloroethyl)-Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Bis-2-(Chloroisopropyl) Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Bis-2-ethyl hexyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
4-Bromophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Base Neutral Compounds- Continued							
Butyl benzyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
2-Chloronaphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
4-Chlorophenyl Phenyl Ether	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Chrysene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Dibenzo(a,h) anthracene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Dibutyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Di-n-octyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
3,3-Dichlorobenzidine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Diethyl phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Dimethyl Phthalate	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
2,4-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
2,6-Dinitrotoluene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
1,2-Diphenylhydrazine[2]	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Fluoranthene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Fluorene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Hexachlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Hexachlorobutadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Hexachlorocyclopentadiene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Hexachloroethane	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Isophorone	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Naphthalene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Nitrobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
N-Nitrosodi-n-propyl amine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
N-Nitrosodimethylamine	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
N-Nitrosodiphenylamine[3]	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Phenanthrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
Pyrene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42
1,2,4 Trichlorobenzene	EPA 625	ug/L	<10.0	10.0	IGERAS	08/13/09	05:42

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*
[3] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*

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ANALYTICAL REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Pesticides & PCB's							
Aldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
Chlordane	EPA 608	ug/L	ND	0.20	SLOPEZ	08/12/09	20:53
DDD	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
DDE	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
DDT	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
Dieldrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
Endosulfan I	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
Endosulfan II	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
Endrin	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
Heptachlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
Lindane	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
Methoxychlor	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
Mirex	EPA 608	ug/L	<0.05	0.05	SLOPEZ	08/23/09	23:32
PCB 1016	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	20:53
PCB 1221	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	20:53
PCB 1232	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	20:53
PCB 1242	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	20:53
PCB 1248	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	20:53
PCB 1254	EPA 608	ug/L	ND	1.00	SLOPEZ	08/12/09	20:53
PCB 1260	EPA 608	ug/L	ND	1.00	SLOPEZ	08/23/09	23:32
PCB Total	EPA 608	ug/L	ND	7.00	SLOPEZ	08/12/09	20:53
Toxaphene	EPA 608	ug/L	ND	5.00	SLOPEZ	08/12/09	20:53

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

ND - Sample concentration non-detectable

Authorization: Robin Parnell **Date:** 8/27/09

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QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 08/05/09

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Wet Chemistry						
Cyanide	EPA 335.4	ug/L	39	100	103	100
Oil and Grease	EPA 1664A	mg/L	40.0	94		102
Total Phenol	EPA 420.4	mg/L	0.10	96	88	95
Volatiles						
Acrolein*	EPA 624	ug/L	40.0	0*	2*	91
Acrylonitrile	EPA 624	ug/L	40.0	98	95	94
Benzene	EPA 624	ug/L	20.0	108	98	98
Bromoform	EPA 624	ug/L	20.0	94	93	89
Carbon Tetrachloride	EPA 624	ug/L	20.0	106	92	99
Chlorodibromomethane	EPA 624	ug/L	20.0	110	101	93
Chloroethane	EPA 624	ug/L	20.0	144	125	126
2-Chloroethylvinyl ether	EPA 624	ug/L	20.0	107	105	105
Chloroform	EPA 624	ug/L	20.0	102	92	96
Dichlorobromomethane	EPA 624	ug/L	20.0	103	92	96
1,2 Dichlorobenzene	EPA 624	ug/L	20.0	99	97	98
1,3 Dichlorobenzene	EPA 624	ug/L	20.0	100	99	99
1,4 Dichlorobenzene	EPA 624	ug/L	20.0	103	98	99
1,1-Dichloroethane	EPA 624	ug/L	20.0	109	98	100
1,2-Dichloroethane	EPA 624	ug/L	20.0	105	94	97
trans-1,2-Dichloroethylene	EPA 624	ug/L	20.0	107	94	99
1,1-Dichloroethylene	EPA 624	ug/L	20.0	105	96	94
1,2-Dichloropropane	EPA 624	ug/L	20.0	103	96	101
cis-1,3-Dichloropropene	EPA 624	ug/L	20.0	101	94	94
trans-1,3-Dichloropropene	EPA 624	ug/L	20.0	98	92	92
Ethylbenzene	EPA 624	ug/L	20.0	106	96	98
Methyl bromide	EPA 624	ug/L	20.0	111	91	98
Methyl chloride	EPA 624	ug/L	20.0	116	100	89
Methylene chloride	EPA 624	ug/L	20.0	106	95	100
Monochlorobenzene(Chlorobenzene)	EPA 624	ug/L	20.0	104	98	98
1,1,2,2-Tetrachloroethane	EPA 624	ug/L	20.0	100	98	96
Tetrachloroethylene	EPA 624	ug/L	20.0	99	95	95

NOTES

** - The recovery of acrolein in the MS and MSD was outside of the acceptable limit due to possible matrix interference.*

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QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 08/05/09

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Volatiles - Continued						
Toluene	EPA 624	ug/L	20.0	105	99	98
1,1,1-Trichloroethane	EPA 624	ug/L	20.0	108	97	100
1,1,2-Trichloroethane	EPA 624	ug/L	20.0	102	95	100
Trichlorethylene	EPA 624	ug/L	20.0	106	98	99
Vinyl chloride	EPA 624	ug/L	20.0	108	93	99
Acid Extractable Compounds						
p-chloro-m-cresol	EPA 625	ug/L	100	91	80	79
2-Chlorophenol	EPA 625	ug/L	100	82	67	67
2,4-Dichlorophenol	EPA 625	ug/L	100	85	74	73
2,4-Dimethylphenol	EPA 625	ug/L	100	90	75	70
4,6-Dinitro-o-cresol	EPA 625	ug/L	100	110	98	95
2,4-Dinitrophenol	EPA 625	ug/L	100	90	80	78
2-Nitrophenol	EPA 625	ug/L	100	88	76	74
4-Nitrophenol	EPA 625	ug/L	100	98	81	88
Pentachlorophenol	EPA 625	ug/L	100	112	103	95
Phenol	EPA 625	ug/L	100	81	64	69
2,4,6-Trichlorophenol	EPA 625	ug/L	100	87	77	77
Base Neutral Compounds						
Acenaphthene	EPA 625	ug/L	100	94	88	84
Acenaphthylene	EPA 625	ug/L	100	90	84	81
Anthracene	EPA 625	ug/L	100	93	88	86
Benzidine	EPA 625	ug/L	100	15	28	49
Benzo(a)anthracene	EPA 625	ug/L	100	92	89	84
Benzo(ghi)perylene	EPA 625	ug/L	100	104	98	93
Benzo(a)pyrene	EPA 625	ug/L	100	104	99	94
3,4 Benzo-fluoranthene	EPA 625	ug/L	100	102	97	89
Benzo(k)fluoranthene	EPA 625	ug/L	100	106	101	88
Bis(2-chloroethoxy)methane	EPA 625	ug/L	100	104	95	90
Bis(2-chloroethyl)ether	EPA 625	ug/L	100	102	89	85
Bis(2-chloroisopropyl)ether	EPA 625	ug/L	100	101	90	86
Bis(2-ethylhexyl)phthalate	EPA 625	ug/L	100	119	115	114
4-Bromophenyl phenyl ether	EPA 625	ug/L	100	127	119	115

NOTES

None.

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QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 08/05/09

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Base Neutral Compounds - Continued						
Butyl benzyl phthalate	EPA 625	ug/L	100	120	114	126
2-Chloronaphthalene	EPA 625	ug/L	100	92	85	80
4-Chlorophenyl phenyl ether	EPA 625	ug/L	100	105	98	95
Chrysene	EPA 625	ug/L	100	98	94	90
Di-n-butyl phthalate	EPA 625	ug/L	100	106	99	95
Di-n-octyl phthalate	EPA 625	ug/L	100	125	120	126
Dibenzo(a,h)anthracene	EPA 625	ug/L	100	104	99	94
3,3-Dichlorobenzidine	EPA 625	ug/L	100	78	75	106
Diethyl phthalate	EPA 625	ug/L	100	110	102	100
Dimethyl phthalate	EPA 625	ug/L	100	108	97	98
2,4-Dinitrotoluene	EPA 625	ug/L	100	102	96	91
2,6 Dinitrotoluene	EPA 625	ug/L	100	98	94	87
1,2 Diphenylhydrazine[1]	EPA 625	ug/L	100	95	89	88
Fluoranthene	EPA 625	ug/L	100	97	92	89
Fluorene	EPA 625	ug/L	100	92	87	83
Hexachlorobenzene	EPA 625	ug/L	100	95	90	87
Hexachlorobutadiene	EPA 625	ug/L	100	86	76	73
Hexachlorocyclopentadiene	EPA 625	ug/L	100	62	38	57
Hexachloroethane	EPA 625	ug/L	100	82	69	69
Indeno(1,2,3-cd)pyrene	EPA 625	ug/L	100	106	99	92
Isophorone	EPA 625	ug/L	100	93	85	82
Naphthalene	EPA 625	ug/L	100	86	80	77
Nitrobenzene	EPA 625	ug/L	100	92	83	81
n-Nitrosodi-n-propylamine	EPA 625	ug/L	100	104	97	91
n-Nitrosodi methylamine	EPA 625	ug/L	100	98	82	82
n-Nitrosodi phenylamine[2]	EPA 625	ug/L	100	112	105	102
Phenanthrene	EPA 625	ug/L	100	94	88	85
Pyrene	EPA 625	ug/L	100	98	93	91
1,2,4-Trichlorobenzene	EPA 625	ug/L	100	88	79	74

NOTES

[1] *1,2-Diphenylhydrazine gets converted to Azobenzene in extraction process.*

[2] *n-Nitrosodiphenylamine decomposes in the injection port to Diphenylamine.*

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QUALITY ASSURANCE REPORT

Project: UOSA - Permit Application
Customer Sample ID: Final Effluent
Project Code: UO
Sample Point: FNE
Sample Date: 08/05/09

Analyte	Method	Unit	Spike Conc.	MS % Recovery	MSD % Recovery	LFB % Recovery
Pesticides & PCB's						
Aldrin	EPA 608	ug/L	2.00	90	83	92
DDD	EPA 608	ug/L	2.00	93	86	94
DDE	EPA 608	ug/L	2.00	90	75	93
DDT	EPA 608	ug/L	2.00	97	69	91
Dieldren	EPA 608	ug/L	2.00	92	86	94
Endosulfan I	EPA 608	ug/L	2.00	85	78	90
Endosulfan II	EPA 608	ug/L	2.00	85	78	92
Endrin	EPA 608	ug/L	2.00	111	104	97
Heptachlor	EPA 608	ug/L	2.00	92	83	89
Lindane	EPA 608	ug/L	2.00	90	84	94
Methoxychlor	EPA 608	ug/L	2.00	98	92	93
Mirex	EPA 608	ug/L	2.00	90	79	94
PCB-1016	EPA 608	ug/L	3.00	95	105	107
PCB-1260	EPA 608	ug/L	3.00	107	116	105

NOTES

None.

Authorization: Robin Parnell **Date:** 8/27/09

UOSA VPDES Field Sheet

Information To Be Checked Before The Start of Each Sampling Event

1. Does the Final Effluent have any abnormal characteristics (odor, color)? Y (N)

If the answer to the above questions is NO proceed to the next section. Please contact a supervisor if the answer is YES.

2. A. Average Plant flow for the last five days: 26.9
   B. Expected Plant flow for the next 24 hours: 26 mgd
3. List the last three days of Final Effluent TSS with the most recent last: <0.3, <0.3, <0.3
4. Contact Closure: (Expected Flow / 10000 / 30) 87 Pulses per sample.
5. Samplers for Final Effluent & FB calibrated at 575 ml per sample. (Desired volume/~~10000~~ 30)
   Final Effluent Start Time / Date: 16:53 / 8/4/09 Calibrated to: 575
   FB Start Time / Date: 1653 / 8/4/09 Calibrated to: 575
   TBT / FB 230mL / sample - 1653 / 8/4/09

The above information has been completed prior to the beginning of the sampling event. Int. [illegible]

Sampling personnel: L Grimmer, M Rowe, _____

Information Check At The End Of The Sampling Event

1. Are all lids, compression assemblies and caps secure? (Y) / N
2. Final Effluent TSS for the sampling period: 0.6
3. Plant flow for the sampling period 24.56
4. Number of samples collected in each Final Effluent & FB composite container:
   Final Effluent: 28 TBT 28
   FB: 28 TBT FB 28
5. Final Effluent & FB composite end time and date:
   Final Effluent End Time / Date: 1653 8/5/09
   FB End Time / Date: 1653 8/5/09
6. Is Temperature in collection container at the end of sampling <6° C? (Y) / N
7. Are sample volumes equal in all composite containers? (Y) / N
8. Grab times and dates:
   FB VOA: 8/5/09 1504 FNE VOA: 8/5/09 1458
   Oil & Grease: 8/5/09 1512 Cyanide: 8/5/09 1518
   Total Phenol: 8/5/09 1516

Sampling personnel: L Grimmer, M Rowe, _____

Please contact project lead with any problems incurred during the sampling event.

Record any other information that could affect sample results:

CENTRAL ENVIRONMENTAL LABORATORY
1432 AIR RAIL AVENUE
VIRGINIA BEACH, VA 23455
TEL: 757-460-4214
FAX: 757-460-6586

CHAIN OF CUSTODY

PROJECT NAME/CODE: UOSA VPDES 2A

ANALYSES REQUESTED, CGN & NUMBER OF CONTAINERS

Project in Lims? Yes ____ No ✓

CUSTOMER SAMPLE ID	HRSD Use Only: PROJECT CODE	HRSD Use Only: SAMPLE POINT	DATE	TIME	SAMPLED BY	Circle One: MATRIX	Circle One: SAMPLE TYPE	VOA (10...10C)	VOA (10...10F)	Total Phenol (3)	Oil & Grease (8...8C)	Cyanide (4)	Semi Vol Organics (9...9B)	Semi Vol Organics (9...9K)					HRSD Use Only: Presv'd Checked	HRSD Use Only: CONT. COUNT
Field Blank	UO	FB	8/5/2009	1653	LG	L	C						3 ✓						✓	3
Field Blank	UO	FB	8/5/2009	1504	LG	L	G	4 ✓											✓	4
Final Effluent	UO	FNE	8/5/2009	1653	LG	L	C							12 ✓					✓	12
Final Effluent	UO	FNE	8/5/2009	1458	LG	L	G		7 ✓										✓	7
Final Effluent	UO	FNE	8/5/2009	1516	LG	L	G			1 ✓									✓	1
Final Effluent	UO	FNE	8/5/2009	1512	LG	L	G				4 ✓								✓	4
Final Effluent	UO	FNE	8/5/2009	1518	LG	L	G					1 ✓							✓	1

COMMENTS:

For Grounds Planet Use Only
Temp. Blank: ____ °C
Temp. Blank: ____ °C

Relinquished by / Signature: Lawyer Brookner	Date/Time: 8/10/09 @ 1009
Received by / Signature: Greg Hall	Date/Time: 8/10/09 1009
Relinquished by / Signature	Date/Time
Received by / Signature	Date/Time
Relinquished by / Signature	Date/Time
Received by / Signature	Date/Time
Relinquished by / Signature	Date/Time
Received by / Signature	Date/Time

Temp. Requirement

Where required, submitted samples were transported in coolers maintained at ≤ 6 °C.

Yes ✓ No ____

Int ____

***Preservatives**

- *Hg, Metals (pH<2 - HNO3) (Clean metals check in section)
- *O&G (pH<2 - HCl, check in section) & store ≤ 6 °C
- CN^- (pH>12 - NaOH) & store ≤ 6 °C
- *Sulfide (pH>9 - NaOH+ZnAc) & store ≤ 6 °C
- *Micro ($Na_2S_2O_3$ + EDTA) & store < 10 °C
- *COD, NUT, Phenols (pH<2 - H_2SO_4) & store ≤ 6 °C
- *TOC (pH<2 - H_3PO_4) & store ≤ 6 °C
- *BOD, TSS, TVSS, Turbidity, Surfactant, Sulfate store ≤ 6 °C
- *NUT Non Acidified, Conductivity, Organics store ≤ 6 °C
- *Cr (VI) (pH 9.3 - 9.7 - $(NH_4)_2SO_4$) & store ≤ 6 °C

All sample(s) met proper *preservation requirements. Yes ✓ No ____ Int ____

Sample Type: C=Composite, G=Grab Matrix: L= Liquid , S = Solid CGN: Container Group Number

NOTE: ALL APPLICABLE INFORMATION MUST BE COMPLETED PRIOR TO ACCEPTANCE.

CENTRAL ENVIRONMENTAL LABORATORY
1432 AIR RAIL AVENUE
VIRGINIA BEACH, VA 23455
TEL: 757-460-4214
FAX: 757-460-6586

CHAIN OF CUSTODY

PROJECT NAME/CODE: UOSA

ANALYSES REQUESTED, CGN & NUMBER OF CONTAINERS

Project in Lims? Yes ____ No X

CUSTOMER SAMPLE ID	HRSD Use Only: PROJECT CODE	HRSD Use Only: SAMPLE POINT	DATE	TIME	SAMPLED BY	Circle One: MATRIX	Circle One: SAMPLE TYPE	CYANIDE (4)	1664-O&G (8 - 8A)	Phenols (3)	608 (33)	625 (9 - 9A)	624 (10 -10B)	TBT (31)	HRSD Use Only: Presv'd Checked	HRSD Use Only: CONT. COUNT
Raw Influent	UO	INF	8/5/09	10:00	BPC	L S	C G	1	2	1	1	2	3		✓	10
	UO	INF	8/9/09	09:00	KOSA	L S	C G							1	✓	1
						L S	C G									
						L S	C G									
						L S	C G									
						L S	C G									
						L S	C G									
						L S	C G									
						L S	C G									
						L S	C G									
						L S	C G									

COMMENTS: CN sample tested negative for interferences CAV 8/5/09

For Ground Water Use Only
Temp. Blank 1 ____ °C
Temp. Blank 2 ____ °C

Relinquished by / Signature	B. P. Costi	Date/Time 8/5/09 1025
Received by / Signature	Cecilia A Vernaci	Date/Time 8/5/09 1025
Relinquished by / Signature	Cecilia A Vernaci	Date/Time 8/5/09 2:05
Received by / Signature	[illegible]	Date/Time 8/5/09 @ 1405
Relinquished by / Signature	Kaiser Kaufman	Date/Time 8/6/09 @ 1009
Received by / Signature	[illegible]	Date/Time 8/6/09 1009
Relinquished by / Signature		Date/Time
Received by / Signature		Date/Time

Temp. Requirement

Where required, submitted samples were transported in coolers maintained at ≤ 6 °C.

Yes ✓ No ____

Int [illegible]

***Preservatives**

- *Hg, Metals (pH<2 - HNO3) (Clean metals check in section)
- *O&G (pH<2 - HCl, check in section) & store ≤ 6 °C
- CN^- (pH>12 - NaOH) & store ≤ 6 °C
- *Sulfide (pH>9 - NaOH+ZnAc) & store ≤ 6 °C
- *Micro ($Na_3S_2O_3$ + EDTA) & store < 10 °C
- *COD, NUT, Phenols (pH<2 - H_2SO_4) & store ≤ 6 °C
- *TOC (pH<2 - H_3PO_4) & store ≤ 6 °C
- *BOD, TSS, TVSS, Turbidity, Surfactant, Sulfate store ≤ 6 °C
- *NUT Non Acidified, Conductivity, Organics store ≤ 6 °C
- *Cr (VI) (pH 9.3 - 9.7 - $(NH_4)_2SO_4$) & store ≤ 6 °C

All sample(s) met proper *preservation requirements. Yes ✓ No ____ Int [illegible]

Sample Type: C=Composite, G=Grab Matrix: L= Liquid , S = Solid CGN: Container Group Number

NOTE: ALL APPLICABLE INFORMATION MUST BE COMPLETED PRIOR TO ACCEPTANCE.

Virginia Institute of Marine Science
Department of Environmental and Aquatic Animal Health
Route 1208 Greate Road
Gloucester Point VA 23062
804-684-7654

ANALYTICAL REPORT

Project: HRSD FBT
Project Code: FO
Sample Point: INF
Sample Date: 08/04/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
HBI	Unger	ng/L	38	30	ET	08/24/09	9:46

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

Authorization: ET Ellen Travelstead

Date: 8-25-09

Virginia Institute of Marine Science
Department of Environmental and Aquatic Animal Health
Route 1208 Greate Road
Gloucester Point VA 23062
804-684-7654

ANALYTICAL REPORT

Project: HRSD TBT
Project Code: UO
Sample Point: FNE
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
TBT	Unger	ng/L	<30	30	ET	08/24/09	10:11

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

Authorization: ET Ellen Trawlstead Date: 8-25-09

Virginia Institute of Marine Science
Department of Environmental and Aquatic Animal Health
Route 1208 Greate Road
Gloucester Point VA 23062
804-684-7654

ANALYTICAL REPORT

Project: HRSD TBT
Project Code: UO
Sample Point: FNE+MS(40)
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
TBT	Unger	ng/L	41	30	ET	08/24/09	10:57

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

Authorization: ET Ellen Travelstead

Date: 8-25-09

Virginia Institute of Marine Science
Department of Environmental and Aquatic Animal Health
Route 1208 Greate Road
Gloucester Point VA 23062
804-684-7654

ANALYTICAL REPORT

Project: HRSD TBT
Project Code: UO
Sample Point: FNE+MSD(40)
Sample Date: 08/05/09

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
TBT	Unger	ng/L	40	30	ET	08/24/09	11:02

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*

Authorization: ET Ellen Trackshead

Date: 8-25-09

CENTRAL ENVIRONMENTAL LABORATORY
1432 AIR RAIL AVENUE
VIRGINIA BEACH, VA 23455
TEL: 757-460-4214
FAX: 757-460-6586

CHAIN OF CUSTODY

PROJECT NAME/CODE: UOSA VPDES 2A

ANALYSES REQUESTED, CGN & NUMBER OF CONTAINERS

Project in Lims? Yes ____ No X

CUSTOMER SAMPLE ID	HRSD Use Only: PROJECT CODE	HRSD Use Only: SAMPLE POINT	DATE	TIME	SAMPLED BY	Circle One: MATRIX	Circle One: SAMPLE TYPE	TBT (31...31A)									HRSD Use Only: Presv'd Checked	HRSD Use Only: CONT. COUNT
	UO	FNE	8/5/09	1653	LG	L	C	2									✓	2
						L S	C G											
						L S	C G											
						L S	C G											
						L S	C G											
						L S	C G											
						L S	C G											
						L S	C G											
						L S	C G											
						L S	C G											
						L S	C G											

COMMENTS:

Relinquished by / Signature	Date/Time 8/6/09 @ 1009	
Received by / Signature	Date/Time 8/6/09 1009	
Relinquished by / Signature	Date/Time	
Received by / Signature	Date/Time	
Relinquished by / Signature	Date/Time	
Received by / Signature	Date/Time	
Relinquished by / Signature	Date/Time	
Received by / Signature	Date/Time	

Temp. Requirement

Where required, submitted samples were transported in coolers maintained at ≤ 6 °C.

Yes ✓ No ____

Int ____

***Preservatives**

- *Hg, Metals (pH<2 - HNO3) (Clean metals check in section)
- *O&G (pH<2 - HCl, check in section) & store ≤ 6 °C
- CN^- (pH>12 - NaOH) & store ≤ 6 °C
- *Sulfide (pH>9 - NaOH+ZnAc) & store ≤ 6 °C
- *Micro ($Na_2S_2O_3$ + EDTA) & store < 10 °C
- *COD, NUT, Phenols
- *TOC (pH<2 - H_3PO_4) & store ≤ 6 °C
- *BOD, TSS, TVSS, Turbidity, Surfactant, Sulfate store ≤ 6 °C
- *NUT Non Acidified, Conductivity, Organics store ≤ 6 °C
- *Cr (VI) (pH 9.3 - 9.7 - $(NH_4)_2SO_4$) & store ≤ 6 °C

All sample(s) met proper *preservation requirements. Yes ✓ No ____ Int GH

Sample Type: C=Composite, G=Grab Matrix: L= Liquid , S = Solid CGN: Container Group Number

NOTE: ALL APPLICABLE INFORMATION MUST BE COMPLETED PRIOR TO ACCEPTANCE.

HRSD CENTRAL ENVIRONMENTAL LAB.
1432 AIR RAIL AVENUE
VIRGINIA BEACH, VA 23455
TEL: 757-460-4214 FAX: 757-460-6586

LSO/PO #: 374193

SAMPLE CHAIN OF CUSTODY

(FOR CONTRACT LAB)

CONTRACT LAB INFORMATION

Lab Name: VIMS
Address: Route 1208
Greate Road
Gloucester Point, VA 23063

TEL: 804-684-7187

PROJECT NAME/CODE:_____ UO INF & FNE

ANALYSES REQUIRED & NUMBER OF CONTAINERS

SAMPLE ID	PROJECT CODE	SAMPLE POINT	DATE	TIME	SAMPLED BY	Circle One MATRIX	Circle One SAMPLE TYPE	TBT (31)							Contract Lab Use Only: Pres'v' Checked	Contract Lab Use Only: CONT. COUNT
	UO	INF	8/4/2009	0900	UOSA	L	G	1							✓	1
	UO	FNE	8/5/2009	1653	LG	L	G	2							✓	2

Relinquished by / Signature	Rolin Parnell	Date/Time	8-13-09 4:27 PM
Received by / Signature	Michael Gher	Date/Time	8-13-09 4:27 PM
Relinquished by / Signature		Date/Time	
Received by / Signature		Date/Time	

Preservatives
HCL <2

COMMENTS: UO FNE MS and UO FNE MSD for Matrix Spike and Matrix Spike Duplicate QC Analysis

Sample Type: B=Batch, C=Composite, G=Grab
Matrix: L= Liquid , S = Solid

rec'd 090109 APB

REPORT OF ANALYSIS

CLIENT: Upper Occoquan Sewage Authority
ATTN: Cecilia Vernaci
ADDRESS: 14631 Compton Road
Centreville, VA 20121-2506
PHONE: (703) 830-2200
FAX: (703) 266-4064

Special Notes:

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 8/11/09 Time: 1327
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: FEDERAL EXPRESS
SAMPLE RECEIPT:
Date: 8/12/09 Time: 1340
NUMBER OF CONTAINERS: 3
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)

SAMPLE ID: FIELD BLANK
SAMPLE NO: 09-13410

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Xylenes	8021B	0.2	< 0.2	ug/L	DLL	8/24/09	1708

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

Reproduction of this report is not permitted, except in full, without written approval from James R Reed & Associates.

RESPECTFULLY SUBMITTED

Elaine Claiborne

Elaine Claiborne
Laboratory Director
Date: 25-Aug-09

REPORT OF ANALYSIS

CLIENT: Upper Occoquan Sewage Authority
ATTN: Cecilia Vernaci
ADDRESS: 14631 Compton Road
Centreville, VA 20121-2506
PHONE: (703) 830-2200
FAX: (703) 266-4064

Special Notes:

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 8/11/09 Time: 1317
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: FEDERAL EXPRESS
SAMPLE RECEIPT:
Date: 8/12/09 Time: 1340
NUMBER OF CONTAINERS: 3
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)

SAMPLE ID: RAW INFLUENT
SAMPLE NO: 09-13411

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Xylenes	8021B	0.2	0.3	ug/L	DLL	8/24/09	1622

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

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Method 8021B: Result verified by GC-MS.

RESPECTFULLY SUBMITTED

Elaine Claiborne

Elaine Claiborne
Laboratory Director
Date: 25-Aug-09

REPORT OF ANALYSIS

CLIENT: Upper Occoquan Sewage Authority
ATTN: Cecilia Vernaci
ADDRESS: 14631 Compton Road
Centreville, VA 20121-2506
PHONE: (703) 830-2200
FAX: (703) 266-4064

Special Notes:

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 8/11/09 Time: 1327
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: FEDERAL EXPRESS
SAMPLE RECEIPT:
Date: 8/12/09 Time: 1340
NUMBER OF CONTAINERS: 3
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)

SAMPLE ID: FINAL EFFLUENT
SAMPLE NO: 09-13412

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Xylenes	8021B	0.2	< 0.2	ug/L	DLL	8/24/09	1536

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

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RESPECTFULLY SUBMITTED

Elaine Claiborne

Elaine Claiborne
Laboratory Director
Date: 25-Aug-09

YEC A 090104

QA/ QC Summary
Upper Occoquan Sewage Authority

JRA ID #: 09-13410 through 09-13412

Method SW- 846 8021B - Xylenes

Regulatory Holding Time

Collection Date: 08/11/09

Analysis Date: 08/24/09 — 14 days from collection

Initial Calibration: Performed 08/21/09

	Correlation Coefficient	Acceptance Range
m,p-xylene	0.9999	0.99x or better
o-xylene	1.000	

The calibration curve consists of ten standards in the range of 0.1ug/L to 20.0 ug/L.

Sample ID	Surrogate Recovery %	Acceptance Range %
Beginning Calib Check	106	80 – 120
LFB (Second Source)	108	80 – 120
Method Blank	88	80 – 120
09-13412	91	70 – 130
09-13411	105	70 – 130
09-13410	101	70 – 130
Ending Calib. Check	108	80 - 120

Beginning Calibration Verification:

	True Value	Recovery %	Acceptance Range %
m,p- xylene	20 ug/L	98	85 - 115
o-xylene	10 ug/L	108	85 - 115

Lab Fortified Blank (SX020209-2)

	True Value	Recovery %	Acceptance Range %
m,p- xylene	20 ug/L	108	85 - 115
o-xylene	10 ug/L	108	85 - 115

Ending Calibration Verification:

	True Value	Recovery %	Acceptance Range %
m,p- xylene	20 ug/L	98	85 - 115
o-xylene	10 ug/L	108	85 - 115

QC Notes:
A second source standard was analyzed instead of matrix and matrix spike duplicate due to insufficient sample volume. Samples were analyzed by M.8260 first not realizing client required analysis by M 8021, thereby, sample verification by GCMS was also fulfilled.

Fe P. Estoesta
Q/QC Director

CHAIN OF CUSTODY

Company Name: Upper Occoquan Sewage Authority
Company Contact: Cecilia Vernaci Telephone: 703-227-0310
Results To: Cecilia Vernaci FAX: 703-266-4064
Address: 14631 Compton Rd.
Centreville, VA 20121-0310
Project ID:

ANALYSES REQUESTED

Bottle ID	A
Preserv.	1,11

JRA ID # 09	Sample Type*	Sample Location	Composite Start Date	Composite Start Time	Composite End Date	Composite End Time	Grab Date	Grab Time	Total # of cont.	Xylenes
13410	OTHER	Field Blank					081109	1327	3	X
13411	WW	Raw Influent						1317	3	X
13412	WW	Final Effluent						1327	3	X

*WW= Wastewater, GW = Groundwater, DW - Drinking Water, HW - Hazardous Waste, OTHERS

Sampled By: [signature] Date/Time: 8/11/09 1327
Relinquished By: [signature] Date/Time: 8/11/09 1341
Received By: [signature] Date/Time: 081109 1341
Relinquished By: [signature] Date/Time: 081209 1340
Received By: Date/Time:

Fed Ex 8-13-09

___for Compliance
___Not for Compliance

Phenol interference check: Pos.____
Neg. ____

[signature] 8-13-09

Preservatives:
1 = <6°C 6 = $Na_2S_2O_3$ + HCl 10=Ascorbic Acid + HCl
2 = HNO_3 7 = NaOH + ZnOAc 11=HCl
3 = H_2SO_4 8 = H_2SO_4 + FAS 12=Zinc Acetate + NaOH
4 = NaOH 9 = NH_4Cl
5 = $Na_2S_2O_3$

CN Interference Check: Positive Negative
Sulfide: ____ ____
Oxidizing Agent: ____ ____

Arrival Temp: 10.4 °C

JAMES R. REED and ASSOCIATES (757) 873-4703; FAX (757) 873-1498
770 Pilot House Drive, Newport News, VA 23606

LABORATORY REPORT

This report contains 4 pages.
(including the cover page)

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

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Batch #: UL 1015

Reviewed by: gm 8/24/09

APB 082409

Underwriters Laboratories Inc.
110 S. Hill Street, South Bend, IN 46617-2702 USA
T.: 800.332.4345 / F.: 574.233.8207 / W.: ul.com

[illegible] 8/21/09 [illegible]

the standard in safety

Underwriters Laboratories

Laboratory Report

Client:	Upper Occoquan Sewage Authority	Report:	230954
		Priority:	Standard Written
Attn:	Cecilia Vernaci 14631 Compton Road Centreville, VA 20121	Status:	Final
		PWS ID:	Not Supplied

Copies to: None

Sample Information

UL ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
2120202	Fin Eff	300.0	08/04/09 08:52	Client	08/06/09 09:15
2120203	Raw Inf	300.0	08/04/09 09:00	Client	08/06/09 09:15

Report Summary

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Jessie Varab at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from Underwriters Laboratories (UL).

Jessie Varab — Authorized Signature

PM — Title

8/17/09 — Date

Client Name: Upper Occoquan Sewage Authority
Report #: 230954

Underwriters Laboratories Inc.
110 S. Hill Street, South Bend, IN 46617-2702 USA
T:: 800.332.4345 / F:: 574.233.8207 / W:: ul.com

Client Name: Upper Occoquan Sewage Authority

Report #: 230954

Sampling Point: Fin Eff

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
24959-67-9	Bromide	300.0	---	0.010	**0.019**	mg/L	---	08/07/09 14:16	2120202

Sampling Point: Raw Inf

PWS ID: Not Supplied

General Chemistry									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	UL ID #
24959-67-9	Bromide	300.0	---	0.010	**0.13**	mg/L	---	08/07/09 14:41	2120203

† UL has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

Underwriters Laboratories Inc.
110 S. Hill Street
South Bend, IN 46617
(800) 332-4345
fax (574) 233-8207
www.ul.com/water

Please print legibly.

Batch 230954

Order # 181258

Shaded area for lab use only

CHAIN OF CUSTODY RECORD

REPORT TO:	SAMPLER (Signature)	STATE (of sample origin)	PWS ID#	PROJECT NAME	PO#
Upper Occuquan Service Authority	UOSA	VA			68289

BILL TO:	COMPLIANCE MONITORING	Yes	No	POPULATION SERVED	SOURCE WATER
same			X	NA	NA

	LAB Number	COLLECTION DATE	TIME	AM	PM	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED YES	CHLORINATED NO	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
1	2120202	8/4/09	08:52	X		Fin Eff	Bromide 300.0		x		1	WW	
2	2120203	8/4/09	09:00	X		Raw Inf	Bromide 300.0		~~x~~	X	1	WW	
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME
Cecilia Wornacai	8/5/09	9:05 AM PM			AM PM
RELINQUISHED BY:(Signature)	DATE	TIME AM PM	RECEIVED BY:(Signature)	DATE	TIME AM PM
RELINQUISHED BY:(Signature)	DATE	TIME AM PM	RECEIVED FOR LABORATORY BY: Amartis	DATE 8/6/09	TIME 09:15 AM PM

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

LAB COMMENTS

CONDITIONS UPON RECEIPT (check one): ____ Iced: Wet / Blue X Ambient

Temperature: ____ °C Upon Receipt X N/A

MATRIX CODES:
DW-DRINKING WATER
RW-REAGENT WATER
GW-GROUND WATER
EW-EXPOSURE WATER
SW-SURFACE WATER
PW-POOL WATER
WW-WASTE WATER

TURN-AROUND TIME (TAT) - SURCHARGES

SW = Standard Written: (15 working days)	0%	IV* = Immediate Verbal: (3 working days)	100%
RV* = Rush Verbal: (5 Working days)	50%	IW* = Immediate Written: (3 working days)	125%
RW* = Rush Written: (5 working days)	75%	SP* = Weekend, Holiday	CALL
		STAT* = Less than 48 hours	CALL

*-Please call, Expedited service not available for all testing

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges

Shipping
UL-SBN-SHIP-F-002-05
Effective Date:
03/09/05

UOSA Monthly Report

Sample Month: September 2009
Report Date: 10/6/09 10:24 AM

Sample Date	Flow (MGD)	TKN (mg/L)	NO3-N+NO2-N (mg/L)	TP (mg/L)	OP (mg/L)
09/01	26.05	0.53	21.20	<0.10	<0.10
09/02	24.36	<0.50	25.40	<0.10	<0.10
09/03	25.88	<0.50	27.02	<0.10	<0.10
09/04	25.85	<0.50	30.62	<0.10	<0.10
09/05	26.69	0.52	28.44	<0.10	<0.10
09/06	25.61	<0.50	21.22	<0.10	CX
09/07	27.32	<0.50	20.64	<0.10	<0.10
09/08	27.24	<0.50	22.40	<0.10	<0.10
09/09	24.36	0.51	23.70	<0.10	<0.10
09/10	25.34	<0.50	26.92	<0.10	<0.10
09/11	26.86	<0.50	29.38	<0.10	<0.10
09/12	25.31	<0.50	25.86	<0.10	<0.10
09/13	27.81	<0.50	22.36	<0.10	<0.10
09/14	24.11	<0.50	20.84	<0.10	<0.10
09/15	24.32	0.50	23.20	<0.10	<0.10
09/16	25.21	<0.50	27.52	<0.10	<0.10
09/17	25.55	<0.50	28.72	<0.10	<0.10
09/18	25.11	<0.50	26.48	<0.10	<0.10
09/19	27.36	0.50	25.22	<0.10	<0.10
09/20	24.68	<0.50	21.22	<0.10	<0.10
09/21	25.16	0.52	18.80	<0.10	<0.10
09/22	25.88	<0.50	20.60	<0.10	<0.10
09/23	24.76	<0.50	23.06	<0.10	<0.10
09/24	26.01	<0.50	23.94	<0.10	<0.10
09/25	28.57	<0.50	23.26	<0.10	<0.10
09/26	30.67	<0.50	15.29	<0.10	<0.10
09/27	34.42	<0.50	8.62	<0.10	<0.10
09/28	31.04	<0.50	7.00	<0.10	<0.10
09/29	24.26	<0.50	9.85	<0.10	<0.10
09/30	26.66	<0.50	13.63	<0.10	<0.10
Average	26.42	0.30	22.08	0.05	0.05

* Data was not used to calculate the average because it did not meet quality specifications defined in the 'UOSA Data Averaging Policy for Permitted Parameters.'

- Final effluent samples may be reanalyzed when results fall outside statisical control limits for precision, accuracy, trend, and calibration curve linearity (correlation coefficient) as well as when results exceed VPDES permit limits, when analytical problems occur, and when results contradict other data (e.g., orthophosphate > total phosphorus).

- Final Effluent is Total Reactive Orthophosphate.

- The monthly average is calculated where daily concentration data below the quantification level (QL) for the analytical method is treated as half the QL. Daily concentration data equal to or above the QL for the analytical method used is treated as it is reported.

UOSA Monthly Report

Sample Month: September 2009
Report Date: 10/6/09 10:24 AM

Repetitive Analysis - Fin Eff

Sample Date	TKN (mg/L) 1	2	3	4	5	6	7	8	9	Reported Result
09/01	0.53									0.53
09/02	<0.50									<0.50
09/03	<0.50									<0.50
09/04	<0.50									<0.50
09/05	0.52									0.52
09/06	<0.50									<0.50
09/07	<0.50									<0.50
09/08	<0.50									<0.50
09/09	0.51									0.51
09/10	<0.50	<0.50*								<0.50
09/11	<0.50									<0.50
09/12	<0.50	0.53*								<0.50
09/13	<0.50									<0.50
09/14	<0.50									<0.50
09/15	0.50									0.50
09/16	<0.50									<0.50
09/17	<0.50									<0.50
09/18	<0.50									<0.50
09/19	0.50									0.50
09/20	<0.50									<0.50
09/21	0.52									0.52
09/22	<0.50									<0.50
09/23	<0.50									<0.50
09/24	<0.50									<0.50
09/25	<0.50									<0.50
09/26	<0.50									<0.50
09/27	<0.50									<0.50
09/28	<0.50									<0.50
09/29	<0.50									<0.50
09/30	<0.50									<0.50

Repetitive Analysis - Fin Eff

Sample Date	NO3-N+NO2-N (mg/L) 1	2	3	4	5	6	7	8	9	Reported Result
09/01	21.20									21.20
09/02	25.40									25.40
09/03	27.02									27.02
09/04	30.62									30.62
09/05	28.44									28.44
09/06	21.22									21.22
09/07	20.64									20.64
09/08	22.40									22.40
09/09	23.70									23.70
09/10	26.92									26.92
09/11	29.38									29.38
09/12	25.86									25.86
09/13	22.36	22.82*								22.36
09/14	20.84									20.84
09/15	23.20									23.20
09/16	27.52									27.52
09/17	28.72									28.72
09/18	26.48									26.48
09/19	25.22									25.22
09/20	21.22									21.22
09/21	18.80									18.80
09/22	20.60									20.60
09/23	23.06									23.06
09/24	23.94									23.94
09/25	23.26									23.26
09/26	15.29									15.29
09/27	8.62									8.62
09/28	7.00									7.00
09/29	9.85									9.85
09/30	13.63									13.63

UOSA Monthly Report

Sample Month: September 2009
Report Date: 10/6/09 10:24 AM

Repetitive Analysis - Fin Eff

Sample Date	TP (mg/L) 1	2	3	4	5	6	7	8	9	Reported Result
09/01	<0.10									<0.10
09/02	<0.10									<0.10
09/03	<0.10									<0.10
09/04	<0.10									<0.10
09/05	<0.10									<0.10
09/06	<0.10									<0.10
09/07	<0.10									<0.10
09/08	<0.10									<0.10
09/09	<0.10									<0.10
09/10	<0.10	<0.10*								<0.10
09/11	<0.10									<0.10
09/12	<0.10									<0.10
09/13	<0.10									<0.10
09/14	<0.10									<0.10
09/15	<0.10									<0.10
09/16	<0.10									<0.10
09/17	<0.10									<0.10
09/18	<0.10									<0.10
09/19	<0.10									<0.10
09/20	<0.10									<0.10
09/21	<0.10									<0.10
09/22	<0.10									<0.10
09/23	<0.10									<0.10
09/24	<0.10	<0.10*								<0.10
09/25	<0.10									<0.10
09/26	<0.10									<0.10
09/27	<0.10									<0.10
09/28	<0.10									<0.10
09/29	<0.10									<0.10
09/30	<0.10									<0.10

Repetitive Analysis - Fin Eff

Sample Date	OP (mg/L) 1	2	3	4	5	6	7	8	9	Reported Result
09/01	<0.10									<0.10
09/02	<0.10									<0.10
09/03	<0.10									<0.10
09/04	<0.10									<0.10
09/05	<0.10									<0.10
09/06	CX									CX
09/07	<0.10									<0.10
09/08	<0.10									<0.10
09/09	<0.10									<0.10
09/10	<0.10									<0.10
09/11	<0.10									<0.10
09/12	<0.10									<0.10
09/13	<0.10									<0.10
09/14	<0.10									<0.10
09/15	<0.10									<0.10
09/16	<0.10									<0.10
09/17	<0.10									<0.10
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09/20	<0.10									<0.10
09/21	<0.10									<0.10
09/22	<0.10									<0.10
09/23	<0.10									<0.10
09/24	<0.10	<0.10*								<0.10
09/25	<0.10									<0.10
09/26	<0.10									<0.10
09/27	<0.10									<0.10
09/28	<0.10									<0.10
09/29	<0.10									<0.10
09/30	<0.10									<0.10