



THE CITY OF SAN DIEGO

NORTH CITY WATER RECLAMATION PLANT

ANNUAL MONITORING REPORT 2013

(SDRWQCB Order No. 97-03)



Environmental Monitoring and Technical Services
Public Utilities Department
2392 Kincaid Road • Mail Station 45A • San Diego, CA 92101
Tel (619) 758-2300 Fax (619) 758-2309





THE CITY OF SAN DIEGO

January 30, 2014

Mr. David W. Gibson, Executive Officer
California Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attn: Ground Water Unit

Dear Mr. Gibson:

Enclosed is the Annual Monitoring report for 2013 for the City of San Diego North City Water Reclamation Plant, as is specified in Monitoring and Reporting Program No. 97-03 for the production and purveyance of reclaimed water.

In addition, results of analyses performed on North City samples, as part of the Metropolitan Wastewater system-wide Quarterly Sludge Project, a portion of the City's Pretreatment Program, have also been included.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Robert Mulvey
Assistant Public Utilities Director
Water Quality Branch

BGB/caq

Enclosure: CD containing PDF file of Report

cc: EPA Region 9
San Diego County Department of Environmental Health,
Distribution
File



INTRODUCTION:

The purpose of this document is to both meet the requirements of Monitoring and Reporting Program and to provide a reference source and resource tools for both regulatory agencies and City staff and their consultants. To this end, the past year’s data is presented in tabular and graphical form. To make this document more useful we have included operational data and background analyses.

Notes on data conventions and analyses:

It should be noted that for averaging purposes "less than" and "not detected" (nd) values were treated as zeros. In many parts of the report zero values are found. Our computer system reads "less than" values as zero for summaries, as well as in computing averages. In those areas where zeros are found, the reader can find appropriate Method Detection Limit (MDL) in the table of data. Because "less than" values are averaged as zero, a number in the summary table values may be lower than the detection limits.

The data tables may also contain values expressed as a <X (less than) with some number X. For example, the Diazinon value for PLE on March 10, 1998 (in the table below) is reported as <2.4 ug/L (see the below table); this indicates that one or more, of two or more, determinations was above the MDL, while the average was below the MDL. This value is still treated as a zero for averaging and other summary calculations. Note also, that sub-totals and totals consisting of multiple analytes (see below) are also reported as “<X”, where the “X” value is the highest MDL for the particular group of analytes. This has the same significance as a “ND” or not detected.

Organophosphorus Pesticides

	MDL	Units	PLE			PLR		
			10-MAR-1998	27-APR-1998	10-SEP-1998	10-MAR-1998	27-APR-1998	10-SEP-1998
			0311980006	0428980006	9809107494	0311980007	0428980007	9809107515
Demeton O	1.69	UG/L	ND	ND	ND	ND	ND	ND
Demeton S	1.82	UG/L	ND	ND	ND	ND	ND	ND
Diazinon	2.41	UG/L	<2.4	ND	ND	<2.4	ND	ND
Guthion	7.1	UG/L	ND	ND	ND	ND	ND	ND
Malathion	2.98	UG/L	ND	ND	ND	ND	ND	ND
Parathion	2.83	UG/L	ND	ND	ND	ND	ND	ND
Thiophosphorus Pesticides			<7.1	<7.1	<7.1	<7.1	<7.1	<7.1
Demeton -O, -S			<1.8	<0.2	<0.2	<1.8	<0.2	<0.2
Total Organophosphorus Pesticides			<7.1	<7.1	<7.1	<7.1	<7.1	<7.1

A further limitation, that the user of this data should note, is that confidence in the results of an analysis is heavily dependent upon the concentration relative to the Method Detection Limit (MDL). For the most part our detection limits have been established using the procedure in 40 CFR, part 136. This statistical basis for the MDL results in a defined statistical confidence (at the 99% Confidence Interval) of essentially ±100% of the result at or near the MDL. Only at concentrations approximately 5 times the MDL is the confidence interval at ±20% relative. While the precision of our methods generally ranges from 2-3 significant figures, the above limitations of confidence should always be considered.

Laboratories Contributing Results used in this report.

Metropolitan Wastewater Chemistry Laboratory
(EPA Lab Code: CA00380,
ELAP Certificate: 1609)
5530 Kiowa Drive
La Mesa, CA 91942
(619)668-3212
All results except those listed below.

Point Loma Wastewater Chemistry Laboratory
(EPA Lab Code: CA01435,
ELAP Certificate: 2474)
1902 Gatchell Road
San Diego, CA 92106
(619)221-8765

Process control analyses and wet methods for the plant.

North City Wastewater Chemistry Laboratory
(EPA Lab Code: CA01436,
ELAP Certificate: 2477)
4949 Eastgate Mall
San Diego, CA 92121
(858)824-6009

Process control analyses and wet methods for the plant.

Metro Biosolids Center Chemistry Laboratory
(EPA Lab Code: CA01437,
ELAP Certificate: 2478)
5240 Convoy Street
San Diego, CA 92111
(858)614-5834

Process control analyses and wet methods for the plant.

South Bay Water Reclamation Plant
(EPA Lab Code: CA01460,
ELAP Certificate: 2539)
2411 Dairy Mart Road
San Diego, CA 92173
(619)428-7349

Process control analyses and wet methods for the plant.

City of San Diego - Water Quality Laboratory
(EPA Lab Code: CA00080,
ELAP Certificate: 1058)
5530 Kiowa Drive
La Mesa, CA 91942
(619)668-3237

Totals of Organic Carbon, Nitrogen, Thallium, and Phosphorus in Wastewater

City of San Diego - Marine Microbiology and Vector Management (EPA LabCode: CA01393, ELAP Certificate: 2185)
2392 Kincaid Road
San Diego, CA 92101
(619)758-2312

Microbiology

Test America Richland (EPA Lab Code: WA00023,
ELAP Certificate: 2425)
2800 George Washington Way
Richland, WA 99354-1613
(509)375-3131

Gross Alpha/Beta Radioactivity

Graphs:

Graphs of monthly averages show the arithmetic mean of the determinations made in the calendar month without weighting for variation in frequency or number of determinations. If the mean is less than the MDL (i.e. 'nd' or '<X'), the expressed graphical value is zero (0).

Terms:

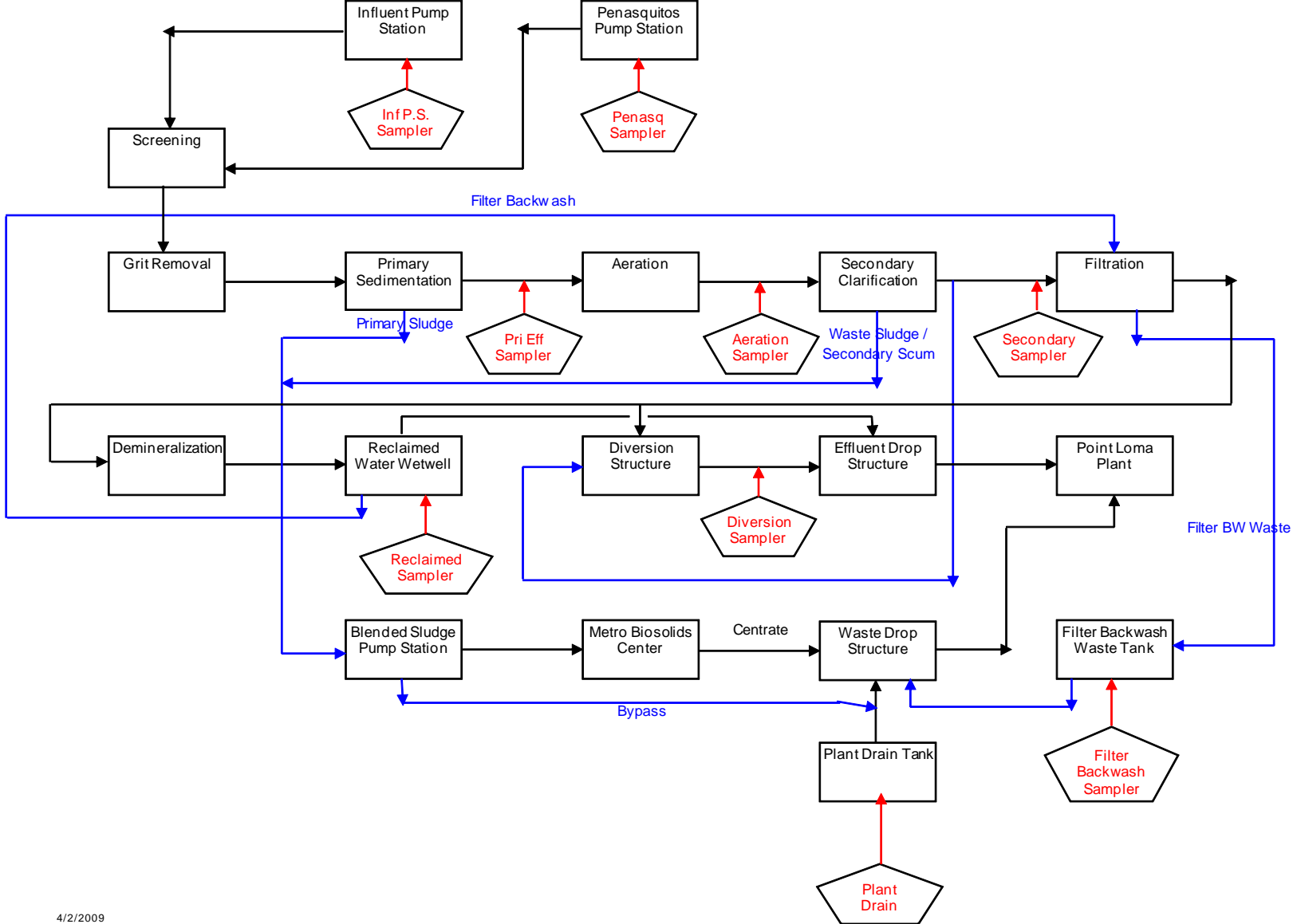
North City Water Reclamation Plant Source Codes

N01-PEN	Penasquitos Influent Pump Station
N01 PS_INF	Pump Station 64 Influent
N30-DFE	Disinfected Final Effluent
N15 AE	Aeration Effluent
N34 REC WATER	Compliance point. Reclaimed water distributed to customers, downstream of EDR unit.
N25 FES	Filter Effluent Structure
N10 EFF	Primary Effluent
N10-PSP COMB	Combined Primary Sludge Pump
N15-WAS HCP	Waste Activated Sludge (High Capacity Pump)
N15-WAS LCP	Waste Activated Sludge (Low Capacity Pump)

North City Water Reclamation Plant Operator Certification 2013

<u>Name</u>	<u>Grade</u>	<u>Cert. No.</u>	<u>Expiration Date</u>
<u>North City Plant Superintendent</u>			
Molas, Ernesto	V	V-7227	12/31/2015
<u>North City Sr. Operations Supervisor</u>			
Pruett, Sam	V	V-7791	06/30/2015
<u>North City Operations Supervisors</u>			
Cozad, John	III	III-7138	12/31/2015
Relph, Robert	III	III-6742	12/31/2014
Bruce Blumer	III	III-9347	12/31/2014
<u>North City Operators</u>			
Castillo, Jose	III	III-9849	06/30/2015
Jacques, Richie	III	III-27921	06/30/2014
Saulog, Noel	II	II-10299	12/31/2014
Daniel Bois	II	II-5678	06/30/2014
Michael A. Duhamel	II	II-9444	06/30/2014
Gabriel L. Duresseau	II	II-28294	06/30/2014
James F. Decarolis	I	I-38421	12/31/2014
<u>North City Operator in Training</u>			
Aleksey N. Pisarenko	OIT I	NA	12/31/2014
Brett W Faulkner	OIT I	NA	12/31/2014

NCWRP Sampling Schematic



4/2/2009

North City Water Reclamation Plant
2013 Flows

Monthly Totals

Month	Penas- quitos Influent (MGD)	Headworks Flow 36" (MGD)	Plant Drain Influent (MGD)	Disinfect Final Effluent (MGD)	Reclaim Water (MGD)	N Return (MGD)	FES Filter Effluent (MGD)	Primary Effluent (MGD)	Primary Sludge (MGD)	WAS Hi Cap sludge (MGD)	WAS Lo Cap sludge (MGD)	Filter Backwash (MGD)	Total Sludge Flow to MBC (MGD)
01	231.2	257.6	19.6	36.9	62.5	365.74	126.08	479.16	23.88	.10	4.34	5.29	23.22
02	206.1	242.1	23.2	35.6	70.7	291.97	123.94	430.96	21.48	.00	3.48	5.65	23.02
03	239.2	257.2	23.1	38.5	131.7	284.69	178.56	479.42	23.39	.00	3.67	6.59	26.52
04	237.6	258.5	21.7	34.9	170.7	214.82	220.27	461.52	22.71	.00	3.71	8.00	24.99
05	247.1	273.7	32.1	39.0	210.7	198.09	260.67	478.44	23.36	.00	4.21	8.43	25.33
06	233.7	285.9	44.1	35.4	255.3	123.79	302.00	466.60	22.66	.00	4.19	8.20	19.24
07	211.6	284.6	25.1	37.4	280.1	138.14	328.77	478.29	24.26	.00	4.21	10.00	27.57
08	157.6	275.2	27.4	35.8	308.2	93.58	356.95	479.47	24.17	.00	4.17	9.74	28.12
09	143.9	267.0	26.4	33.2	277.1	127.37	319.70	464.76	23.07	.00	4.20	8.48	25.82
10	157.9	273.9	22.8	35.7	183.8	214.27	227.76	479.87	22.73	.00	4.27	7.39	27.99
11	160.7	263.0	18.7	28.6	114.7	305.81	153.52	465.19	22.82	.00	4.26	5.14	24.24
12	170.5	265.0	17.8	27.3	116.8	308.52	154.64	479.51	23.14	.00	4.73	6.29	19.95
Average	199.7	267.0	25.2	34.8	181.9	222.23	229.41	470.27	23.14	.01	4.12	7.43	24.67
Total	2397.0	3203.5	301.8	418.1	2182.2	2666.79	2752.86	5643.19	277.67	.10	49.44	89.20	296.01

Daily Averages

Month	Penas- quitos Influent (MGD)	Headworks Flow 36" (MGD)	Plant Drain Influent (MGD)	Disinfect Final Effluent (MGD)	Reclaim Water (MGD)	N Return (MGD)	FES Filter Effluent (MGD)	Primary Effluent (MGD)	Primary Sludge (MGD)	WAS Hi Cap sludge (MGD)	WAS Lo Cap sludge (MGD)	Filter Backwash (MGD)	Total Sludge Flow to MBC (MGD)
01	7.5	8.3	.6	1.2	2.3	11.80	4.07	15.46	.77	.01	.14	.17	.75
02	7.4	8.6	.8	1.3	2.7	10.43	4.43	15.39	.77	.00	.12	.20	.82
03	7.7	8.3	.7	1.2	4.2	9.18	5.76	15.47	.75	.00	.12	.21	.86
04	7.9	8.6	.7	1.2	5.7	7.16	7.34	15.38	.76	.00	.12	.27	.83
05	8.0	8.8	1.0	1.3	6.8	6.39	8.41	15.43	.75	.00	.14	.27	.82
06	7.8	9.5	1.5	1.2	8.5	4.13	10.07	15.55	.76	.00	.14	.27	.64
07	6.8	9.2	.8	1.2	9.0	4.46	10.61	15.43	.78	.00	.14	.32	.89
08	5.1	8.9	.9	1.2	9.9	3.02	11.51	15.47	.78	.00	.13	.31	.91
09	4.8	8.9	.9	1.1	9.2	4.25	10.66	15.49	.77	.00	.14	.28	.86
10	5.1	8.8	.7	1.2	5.9	6.91	7.35	15.48	.73	.00	.14	.24	.90
11	5.4	8.8	.6	1.0	3.8	10.19	5.12	15.51	.76	.00	.14	.17	.81
12	5.5	8.5	.6	.9	3.8	9.95	4.99	15.47	.75	.00	.15	.20	.64
Average	6.6	8.8	.8	1.1	6.0	7.32	7.53	15.46	.76	.00	.14	.24	.81

Reclaim Water = Distribution Water

North City Water Reclamation Plant			
(N34-REC WATER) Recycled Water Chlorine Report			
N34-REC WATER is compliance point for reclaimed water			
	Minimum Daily ¹	Maximum Daily ²	Time ³
Operations 2013	Chlorine Residual	Chlorine Residual	CT less than
Date	(mg/L)	(mg/L)	450 mg-min/l (min)
Jan	4.76	7.03	0
Feb	4.22	8.76	0
Mar	6.22	9.79	0
Apr	2.97	9.99	0
May	4.39	7.45	0
Jun	3.61	6.29	0
Jul	4.41	7.91	0
Aug	4.51	7.26	0
Sep	5.28	6.39	0
Oct	4.71	6.90	0
Nov	4.11	6.12	0
Dec	4.01	5.59	0
		Total:	0
¹ Minimum Daily value is the average recorded for the month.			
² Maximum Daily value is the average recorded value for the month.			
³ Total time for the month.			

**North City Water Reclamation Plant
Recycled Water Coliform Report**

Operations 2013 Date	Tot. Coliform (7-day median) (MPN)
Jan	<1.8
Feb	<1.8
Mar	<1.8
Apr	<1.8
May	<1.8
Jun	<1.8
Jul	<1.8
Aug	<1.8
Sep	<1.8
Oct	<1.8
Nov	<1.8
Dec	<1.8

North City Water Reclamation Plant				
Recycled Water Turbidity Report				
Data from in-plant meter ⁴				
	Average Daily	Minimum Daily ¹	Maximum Daily ²	Time Over ³
Operations 2013	Turbidity	Turbidity	Turbidity	5 NTU's
Date	(NTU)	(NTU)	(NTU)	(MINUTES)
Jan	0.29	0.23	0.72	0.00
Feb	0.31	0.26	1.02	0.00
Mar	0.38	0.31	0.93	0.00
Apr	0.33	0.25	0.70	0.00
May	0.31	0.21	0.62	0.00
Jun	0.31	0.27	0.63	0.00
Jul	0.38	0.31	0.86	0.00
Aug	0.26	0.22	0.40	0.00
Sep	0.17	0.16	0.25	0.00
Oct	0.17	0.15	0.19	0.00
Nov	0.18	0.17	0.23	0.00
Dec	0.17	0.16	0.49	0.00
Average:	0.27		Total:	0.00
1 Minimum Daily value is the average recorded for the month.				
2 Maximum Daily value is the average recorded value for the month.				
3 Total time for the month.				
4 Compliance monitoring point, values taken from the combined filter effluent turbidity meter (N25A11673) or (N25A11674), located at meter room of Area 25 (Tertiary Filter Structures)				

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(N34-REC) Reclaimed Water - Daily Parameters

Analyte:	Biochemical Oxygen Demand	Total Dissolved Solids	Total Suspended Solids	Volatile Suspended Solids	pH Grab
MDL/Units:	2 MG/L	28 MG/L	1.4 MG/L	1.6 MG/L	(pH)
JANUARY -2013	<2	740	ND	ND	6.86
FEBRUARY -2013	ND	781	ND	ND	6.88
MARCH -2013	ND	780	ND	ND	6.89
APRIL -2013	ND	824	ND	ND	6.99
MAY -2013	ND	839	ND	ND	6.99
JUNE -2013	ND	842	ND	ND	6.98
JULY -2013	ND	865	ND	ND	7.06
AUGUST -2013	ND	886	ND	ND	7.02
SEPTEMBER-2013	ND	867	ND	ND	6.98
OCTOBER -2013	ND	854	ND	ND	6.97
NOVEMBER -2013	<2	828	<1.4	<1.6	6.99
DECEMBER -2013	<2	829	ND	ND	6.95
Average:	0	828	0	0	6.96
Maximum:	0	886	0	0	7.06
Minimum:	0	740	0	0	6.86

(N01-PS-INF) Pump Station 64 Influent - Daily Parameters

Analyte:	Biochemical Oxygen Demand	Total Dissolved Solids	Total Suspended Solids	Volatile Suspended Solids	Turbidity	pH COMPOSITE
Units:	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(NTU)	(pH)
JANUARY -2013	269	965	260	226	114	7.35
FEBRUARY -2013	276	957	282	253	123	7.31
MARCH -2013	283	985	279	244	128	7.38
APRIL -2013	313	1090	278	241	133	7.36
MAY -2013	309	1100	286	251	121	7.45
JUNE -2013	286	1070	290	250	121	7.39
JULY -2013	282	1100	275	239	130	7.46
AUGUST -2013	293	1120	274	232	124	7.40
SEPTEMBER-2013	273	1080	280	243	121	7.40
OCTOBER -2013	287	1120	294	256	120	7.41
NOVEMBER -2013	282	1130	290	248	127	7.43
DECEMBER -2013	295	1100	286	245	132	7.35
Average:	287	1068	281	244	125	7.39
Maximum:	313	1130	294	256	133	7.46
Minimum:	269	957	260	226	114	7.31

All samples are 24-hour composite.
NA= Not Analyzed
NS= Not Sampled
ND= Not Detected

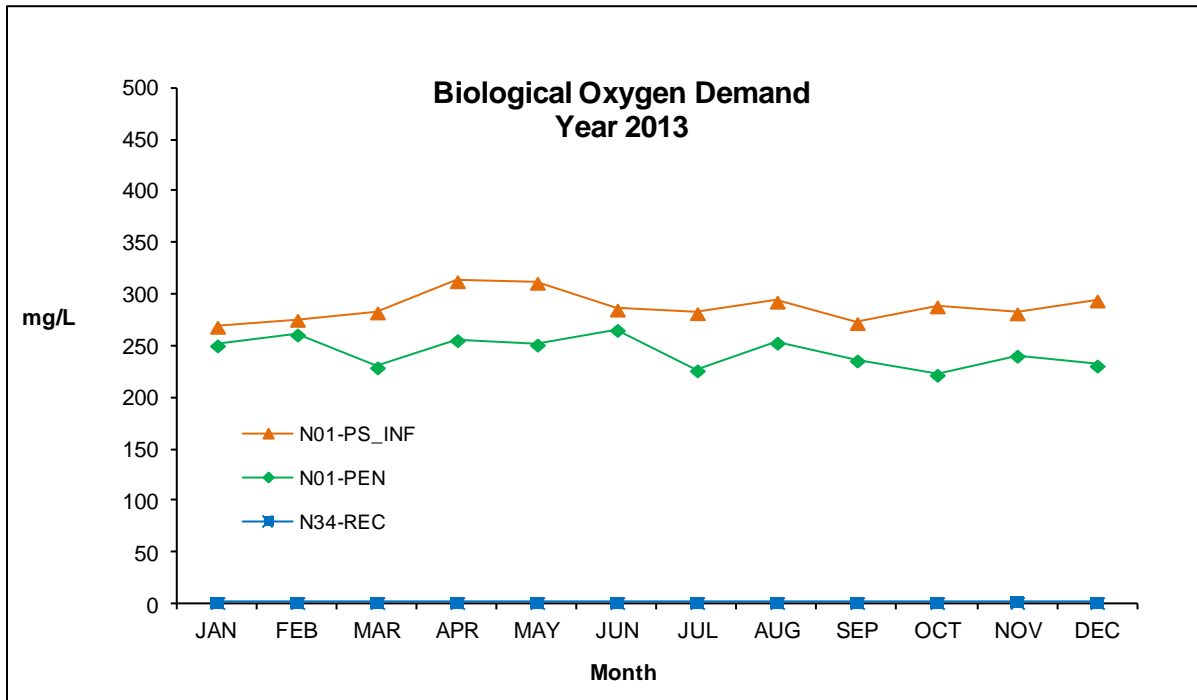
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(N01-PEN) Penasquitos Pump Station Influent - Daily Parameters

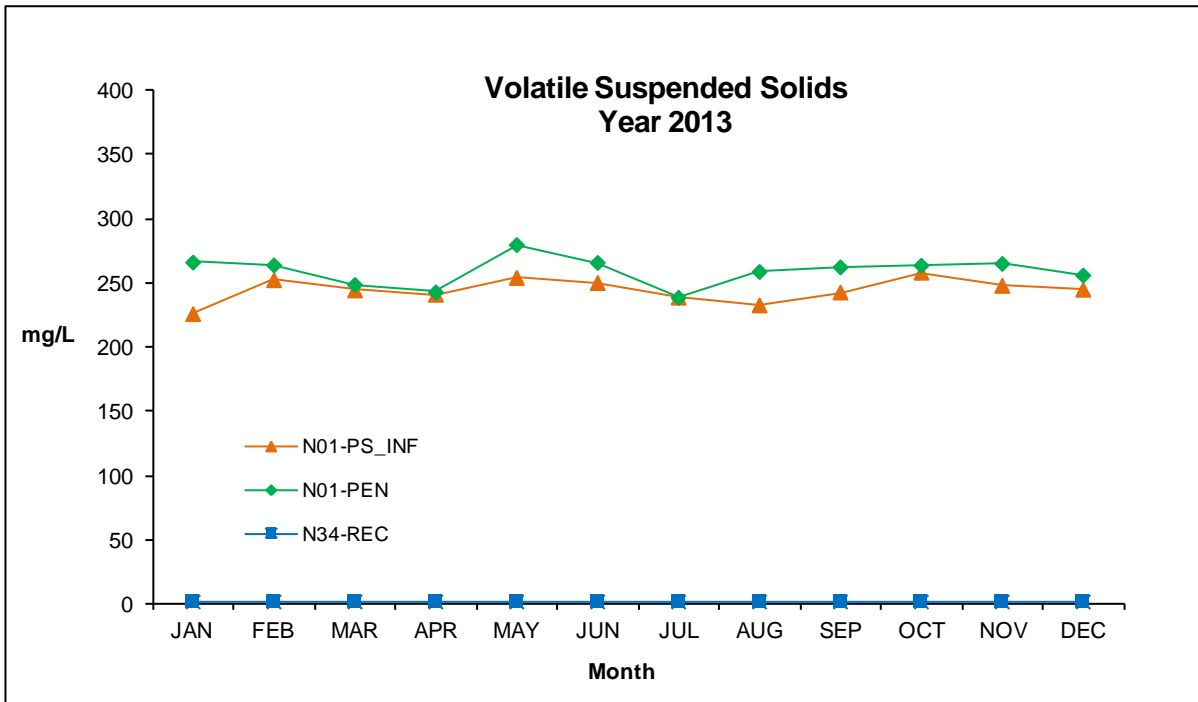
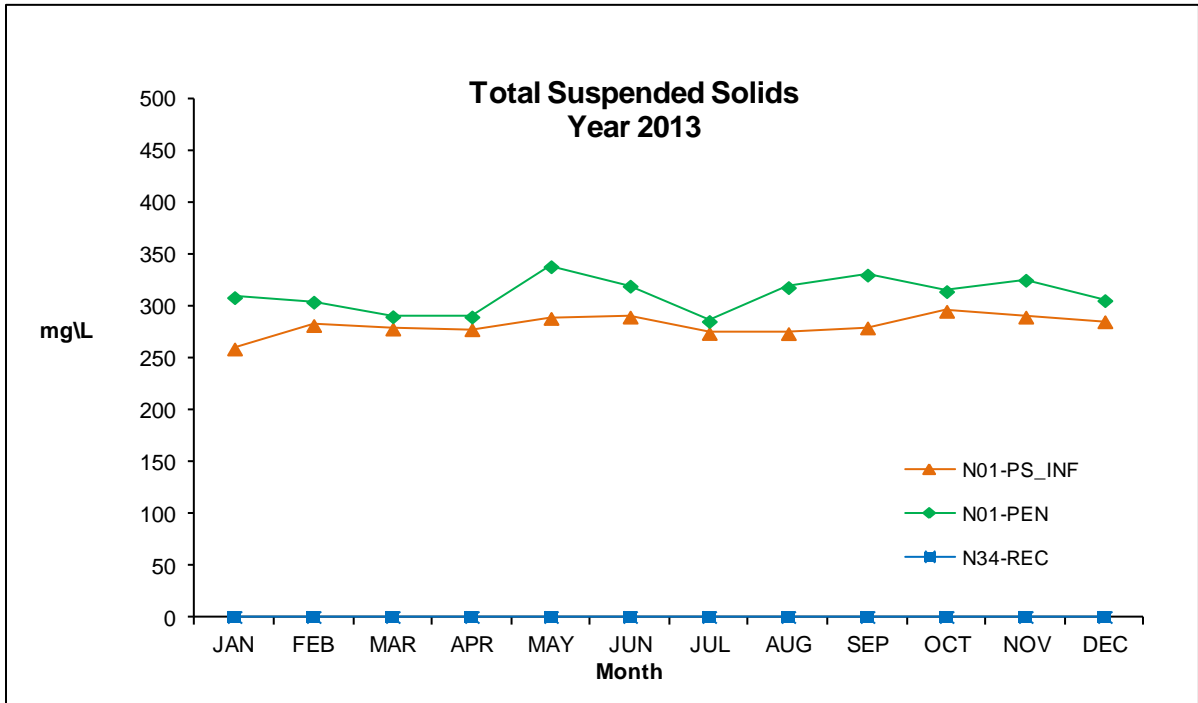
Analyte:	Biochemical Oxygen Demand (mg/L)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Volatile Suspended Solids (mg/L)	Turbidity (NTU)	pH COMPOSITE (pH)
Units:						
JANUARY -2013	251	680	309	266	111	7.43
FEBRUARY -2013	262	722	305	265	110	7.46
MARCH -2013	230	751	291	249	116	7.48
APRIL -2013	256	817	291	243	102	7.50
MAY -2013	252	834	336	277	107	7.53
JUNE -2013	266	826	320	266	108	7.49
JULY -2013	227	828	286	239	116	7.54
AUGUST -2013	252	825	321	261	114	7.52
SEPTEMBER-2013	237	795	331	262	107	7.49
OCTOBER -2013	220	787	311	261	107	7.53
NOVEMBER -2013	241	812	326	265	111	7.62
DECEMBER -2013	232	807	306	256	110	7.50
Average:	244	790	311	259	110	7.51
Maximum:	266	834	336	277	116	7.62
Minimum:	220	680	286	239	102	7.43

All samples are 24-hour composite.
 NA= Not Analyzed
 NS= Not Sampled
 ND= Not Detected



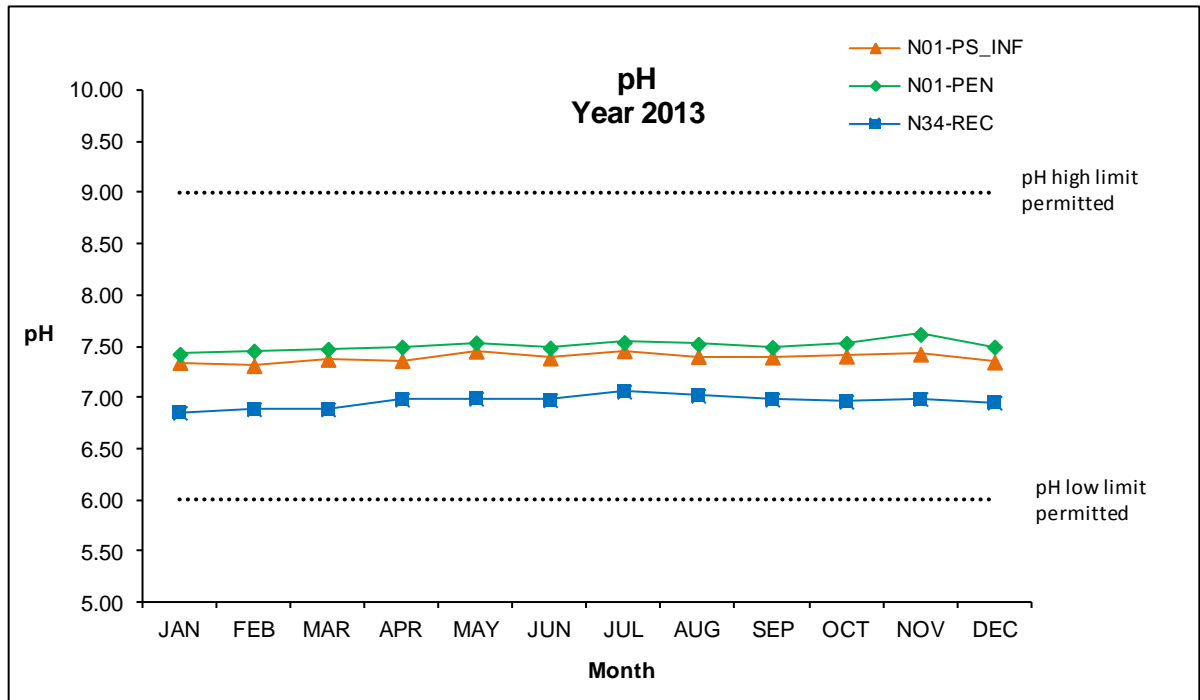
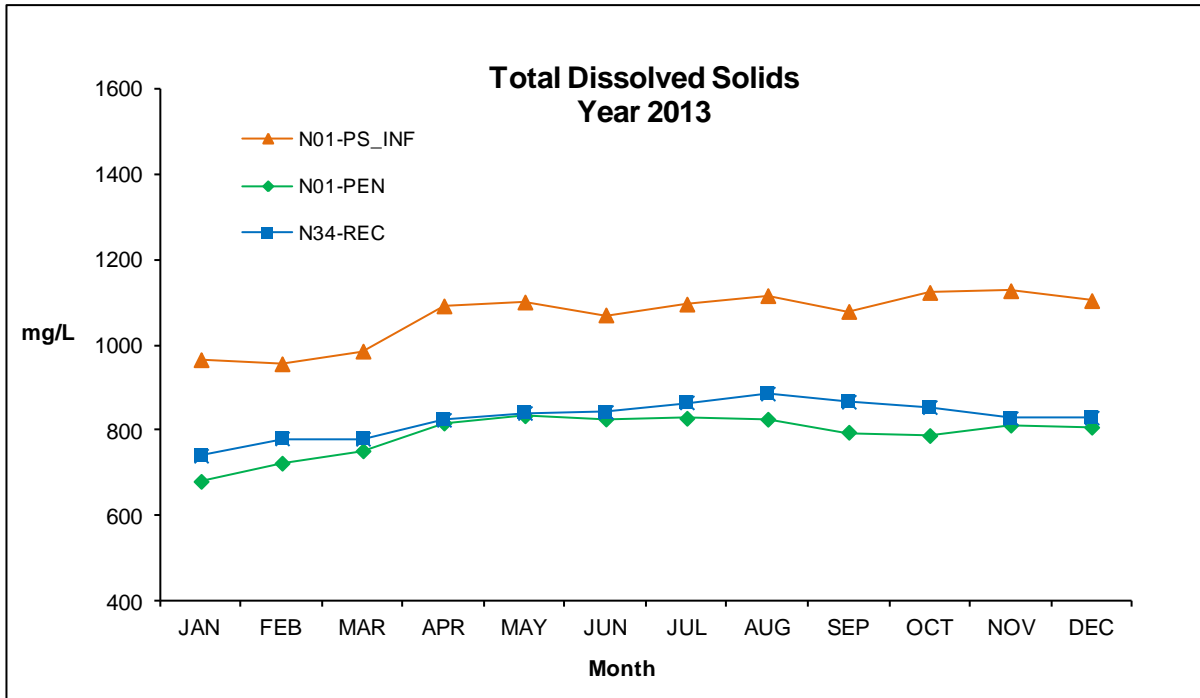
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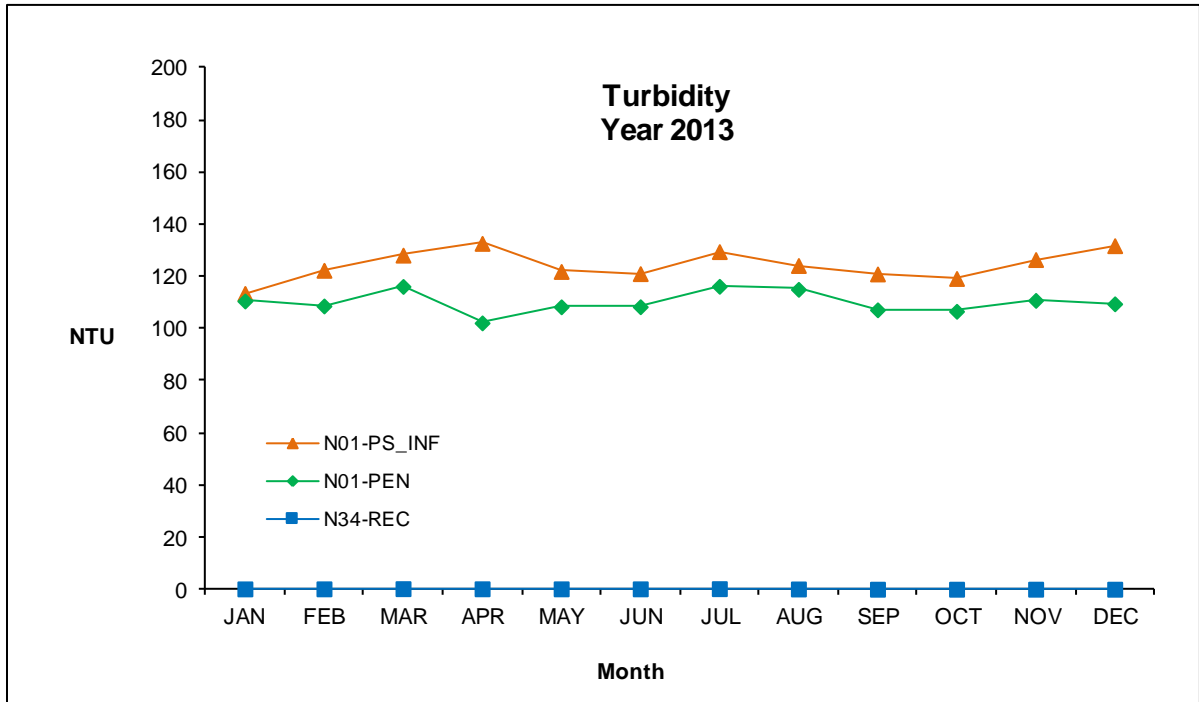
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* Turbidity average daily results taken from in-plant meter

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(N34-REC) Reclaim Water - Monthly/Annual Averages

Analyte:	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
MDL:	47	2.9	.4	.039	.022	7
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Limit:	1000	6	50	1000	4	700
=====						
JANUARY -2013	55	ND	0.4	9.1	ND	289
FEBRUARY -2013	69	ND	ND	12.2	ND	301
MARCH -2013	<47	ND	0.5	13.9	ND	300
APRIL -2013	ND	ND	<0.4	18.3	ND	311
MAY -2013	182	3.3	0.6	20.9	ND	348
JUNE -2013	<47	ND	0.5	20.1	ND	334
JULY -2013	109	ND	0.7	18.5	ND	321
AUGUST -2013	109	ND	0.6	20.8	ND	337
SEPTEMBER-2013	<47	ND	0.4	27.1	ND	335
OCTOBER -2013	ND	<2.9	0.4	19.7	ND	305
NOVEMBER -2013	ND	4.0	0.6	19.8	ND	282
DECEMBER -2013	ND	ND	<0.4	21.6	ND	301
=====						
Annual Average:	44	0.6	0.4	18.5	ND	314

Analyte:	Cadmium	Chromium	Cobalt	Copper	Iron	Lead
MDL:	.53	1.2	.85	2	37	2
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Limit:	5	50			300	
=====						
JANUARY -2013	ND	ND	ND	5	123	ND
FEBRUARY -2013	ND	ND	ND	2	88	ND
MARCH -2013	ND	ND	<0.85	<2	ND	ND
APRIL -2013	ND	ND	ND	5	44	ND
MAY -2013	ND	ND	ND	3	116	<2.0
JUNE -2013	ND	2.9	1.27	<2	<37	ND
JULY -2013	ND	ND	ND	4	46	ND
AUGUST -2013	ND	<1.2	ND	2	81	ND
SEPTEMBER-2013	ND	<1.2	ND	3	72	ND
OCTOBER -2013	ND	2.2	<0.85	<2	71	ND
NOVEMBER -2013	1.90	10.0	ND	ND	76	3.0
DECEMBER -2013	ND	ND	ND	2	71	ND
=====						
Annual Average:	0.16	1.3	0.11	2	66	0.3

Analyte:	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver
MDL:	.24	.005	.89	.53	.28	.4
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Limit:	50	2		100	50	
=====						
JANUARY -2013	77.1	ND	3.23	5.20	0.54	ND
FEBRUARY -2013	70.6	ND	4.68	6.12	0.47	ND
MARCH -2013	79.2	ND	4.33	4.82	0.55	ND
APRIL -2013	88.7	ND	5.38	6.82	0.85	ND
MAY -2013	86.7	ND	7.95	7.63	1.08	ND
JUNE -2013	71.6	ND	6.41	10.90	0.83	ND
JULY -2013	74.9	ND	7.94	5.74	0.87	ND
AUGUST -2013	72.5	ND	7.37	7.58	0.72	ND
SEPTEMBER-2013	79.0	0.076	8.15	13.60	0.66	ND
OCTOBER -2013	83.2	ND	4.39	6.89	0.54	ND
NOVEMBER -2013	81.2	ND	11.70	15.50	0.59	<0.4
DECEMBER -2013	64.0	ND	4.29	8.05	0.61	0.5
=====						
Annual Average:	77.4	0.006	6.32	8.24	0.69	0.0

ND= Not Detected

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(N34-REC) Reclaim Water - Monthly/Annual Averages

Analyte:	Thallium	Vanadium	Zinc	Calcium	Lithium	Magnesium
MDL:	.5	.64	2.5	.04	.002	.1
Units:	UG/L	UG/L	UG/L	MG/L	MG/L	MG/L
Limit:	2					
JANUARY -2013	ND	0.82	27.6	52.8	0.023	26.1
FEBRUARY -2013	ND	0.91	25.1	57.0	0.024	28.3
MARCH -2013	ND	<0.64	74.2	61.4	0.027	30.4
APRIL -2013	ND	ND	29.5	66.2	0.031	30.1
MAY -2013	ND	ND	48.8	58.8	0.033	25.9
JUNE -2013	ND	2.18	27.8	67.0	0.036	28.5
JULY -2013	ND	1.30	27.1	62.9	0.036	26.5
AUGUST -2013	ND	2.83	29.0	66.1	0.037	27.5
SEPTEMBER-2013	ND	2.28	29.0	64.8	0.034	26.7
OCTOBER -2013	ND	3.35	25.9	62.1	0.037	26.0
NOVEMBER -2013	ND	3.15	20.3	67.0	0.033	28.0
DECEMBER -2013	ND	2.25	24.5	54.3	0.035	23.4
Annual Average:	ND	1.59	32.4	61.7	0.032	27.3

Analyte:	Potassium	Sodium	Calcium Hardness	Magnesium Hardness	Total Hardness	Total Alkalinity
MDL:	.3	1	.1	.4	.4	20
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
Limit:						
JANUARY -2013	16.5	166	132	107	239	87
FEBRUARY -2013	15.9	163	143	116	259	86
MARCH -2013	20.0	189	153	125	279	84
APRIL -2013	18.7	184	165	124	289	96
MAY -2013	15.4	164	164	126	280	91
JUNE -2013	17.0	175	167	118	285	100
JULY -2013	16.2	164	157	109	266	98
AUGUST -2013	17.4	167	165	113	278	116
SEPTEMBER-2013	15.1	155	162	110	272	95
OCTOBER -2013	15.9	164	155	107	262	105
NOVEMBER -2013	15.6	164	167	116	283	97
DECEMBER -2013	13.8	150	136	97	232	93
Annual Average:	16.5	167	156	114	269	96

Analyte:	Chloride	Fluoride	Nitrate	Sulfate	Ortho Phosphate	MBAS (Surfactants)
MDL:	7	.05	.04	9	.2	.03
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
Limit:	300	1		300		
JANUARY -2013	232	0.55	57.1	127	2.9	0.10
FEBRUARY -2013	239	0.59	59.9	145	1.9	0.09
MARCH -2013	263	0.62	56.4	147	3.4	0.10
APRIL -2013	249	0.63	52.2	169	2.5	0.04
MAY -2013	224	0.62	49.3	172	3.2	0.04*
JUNE -2013	236	0.64	55.0	184	3.2	0.04
JULY -2013	234	0.66	55.6	189	3.6	0.04
AUGUST -2013	236	0.68	57.2	190	4.0	0.04
SEPTEMBER-2013	236	0.65	54.0	196	0.9	0.05
OCTOBER -2013	239	0.59	54.5	183	1.8	0.04
NOVEMBER -2013	241	0.57	56.2	189	3.1	0.08
DECEMBER -2013	219	0.52	48.8	178	2.3	0.07
Annual Average:	237	0.61	54.7	172	2.7	0.06

* The method blank result of 0.04 mg/L was above the MDL. This value was not used in the calculation of the annual average.

ND= Not Detected

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(N34-REC) Reclaim Water - Monthly/Annual Averages

Analyte:	Total Organic Carbon	Percent Sodium	Sodium Adsorption Calculated	Total Cyanides	Total Dissolved Solids	Total Nitrogen
MDL:				.002	28	.78
Units:	MG/L	Percent	Percent	MG/L	MG/L	MG/L
Limit:				0.2	1200	
JANUARY -2013	6.8	58	4.3*	0.004	740	19.3
FEBRUARY -2013	6.4	56	4.2	ND	781	15.3
MARCH -2013	6.7	58	4.7	0.006	780	15.8
APRIL -2013	6.4	56	4.7	0.003	824	13.5
MAY -2013	7.6	57	4.3	0.006	839	13.9
JUNE -2013	6.3	56	4.5	0.005	842	14.5
JULY -2013	6.7	56	4.3	0.004	865	16.1
AUGUST -2013	7.6	55	4.3	0.002	886	10.2#
SEPTEMBER-2013	6.0	54	4.0	0.006	867	13.0
OCTOBER -2013	6.3	56	4.3	0.004	854	10.4
NOVEMBER -2013	6.1	54	4.1	0.003	828	11.6
DECEMBER -2013	5.8	56	4.0	0.002	829	10.8
Annual Average:	6.6	56	4.3	0.004	828	14.0

* Data for Alkalinity and Conductivity needed to compute Sodium Adsorption was not available for the Jan. 9, 2013 sample. Average Alkalinity and Conductivity values based on results over the last 12 months were substituted. This value was not used in the calculation of the annual average.

Sample analyzed out of holding time.

ND= Not Detected

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(N01-PS_INF) Pump Station 64 Influent - Annual Averages

Analyte:	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
MDL:	47	2.9	.4	.039	.022	7
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
JANUARY -2013	409	ND	0.68	52	ND	315
FEBRUARY -2013	444	ND	0.83	59	ND	302
MARCH -2013	385	ND	0.80	62	ND	310
APRIL -2013	469	<2.9	0.89	94	ND	350
MAY -2013	929	ND	1.16	105	ND	334
JUNE -2013	510	ND	0.97	101	ND	325
JULY -2013	770	ND	1.20	91	ND	305
AUGUST -2013	688	ND	1.20	114	ND	318
SEPTEMBER-2013	540	ND	1.37	101	ND	342
OCTOBER -2013	484	5.5	1.29	112	0.04	332
NOVEMBER -2013	352	ND	1.65	115	ND	301
DECEMBER -2013	414	ND	0.98	109	0.05	317
Annual Average:	533	0.5	1.09	93	0.01	321

Analyte:	Cadmium	Chromium	Cobalt	Copper	Iron	Lead
MDL:	.53	1.2	.85	2	37	2
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
JANUARY -2013	ND	3.6	ND	101	5850	ND
FEBRUARY -2013	ND	5.4	ND	96	6520	2.5
MARCH -2013	ND	3.2	<0.85	108	5850	4.0
APRIL -2013	ND	5.1	ND	139	6850	ND
MAY -2013	ND	4.7	ND	131	7910	<2.0
JUNE -2013	ND	6.2	2.05	125	7110	2.5
JULY -2013	ND	2.9	<0.85	137	6640	<2.0
AUGUST -2013	ND	2.4	1.53	146	11000	<2.0
SEPTEMBER-2013	ND	3.5	<0.85	200	7290	<2.0
OCTOBER -2013	<0.53	5.2	1.40	192	9130	6.3
NOVEMBER -2013	ND	8.5	1.75	151	10400	3.5
DECEMBER -2013	ND	5.3	1.16	137	8400	<2.0
Annual Average:	0.00	4.7	0.66	139	7746	1.6

Analyte:	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium
MDL:	.002	.24	.005	.89	.53	.28
Units:	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L
JANUARY -2013	0.030	134	0.202	5.34	4.91	0.85
FEBRUARY -2013	0.034	134	0.014	5.71	6.63	1.03
MARCH -2013	0.035	133	0.079	6.37	6.63	1.36
APRIL -2013	0.040	175	0.116	8.69	9.25	1.43
MAY -2013	0.046	182	0.168	9.43	8.98	1.90
JUNE -2013	0.052	151	0.128	11.2	16.8	2.04
JULY -2013	0.051	139	0.084	9.56	7.79	1.67
AUGUST -2013	0.049	146	0.311	10.1	9.61	1.87
SEPTEMBER-2013	0.046	142	0.078	12.1	14.6	1.51
OCTOBER -2013	0.052	150	0.102	9.55	12.5	1.72
NOVEMBER -2013	0.043	140	0.012	16.2	19.6	1.65
DECEMBER -2013	0.055	156	0.150	8.65	8.57	1.77
Annual Average:	0.044	149	0.12	9.41	10.5	1.57

ND= Not Detected

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(N01-PS_INF) Pump Station 64 Influent - Annual Averages

Analyte:	Silver	Thallium	Vanadium	Zinc	Calcium	Magnesium
MDL:	.4	3.9	.64	2.5	.04	.1
Units:	UG/L	UG/L	UG/L	UG/L	MG/L	MG/L
JANUARY -2013	1.3	ND	1.20	125	67.1	34.7
FEBRUARY -2013	1.3	<3.9	1.03	134	71.5	36.9
MARCH -2013	0.7	<3.9	<0.64	191	68.9	35.7
APRIL -2013	0.9	ND	0.96	159	78.4	37.9
MAY -2013	0.6	ND	1.48	213	83.2	38.8
JUNE -2013	0.7	<3.9	7.10	169	90.0	40.2
JULY -2013	<0.4	4.7	6.30	174	81.0	35.9
AUGUST -2013	0.6	ND	7.85	194	80.4	36.3
SEPTEMBER-2013	3.3	<3.9	8.85	199	79.0	35.2
OCTOBER -2013	1.6	6.6	13.10	200	76.4	34.0
NOVEMBER -2013	1.2	ND	9.85	187	82.3	36.0
DECEMBER -2013	1.6	<3.9	2.61	161	77.4	35.0
Annual Average:	1.2	0.9	5.03	176	78.0	36.4

Analyte:	Potassium	Sodium	Chloride	Fluoride	Sulfate	Total Dissolved Solids
MDL:	.3	1	7	.05	9	28
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
JANUARY -2013	20.3	197	NR	NR	NR	965
FEBRUARY -2013	21.5	212	313	0.66	172	957
MARCH -2013	23.7	218	NR	NR	NR	985
APRIL -2013	22.7	218	NR	NR	NR	1090
MAY -2013	22.7	223	313	0.27	215	1100
JUNE -2013	24.1	242	NR	NR	NR	1070
JULY -2013	21.8	207	NR	NR	NR	1100
AUGUST -2013	23.2	214	322	0.68	230	1120
SEPTEMBER-2013	20.1	193	NR	NR	NR	1080
OCTOBER -2013	20.9	196	315	0.46	212	1120
NOVEMBER -2013	19.8	200	NR	NR	NR	1130
DECEMBER -2013	19.8	204	NR	NR	NR	1100
Annual Average:	21.7	210	316	0.52	207	1068

Analyte:	Total Cyanides
MDL:	.002 MG/L
Units:	MG/L
JANUARY -2013	ND
FEBRUARY -2013	0.0020
MARCH -2013	ND
APRIL -2013	ND
MAY -2013	ND
JUNE -2013	ND
JULY -2013	ND
AUGUST -2013	0.0020
SEPTEMBER-2013	ND
OCTOBER -2013	0.0020
NOVEMBER -2013	ND
DECEMBER -2013	ND
Annual Average:	0.001

ND= Not Detected
NR= Not Required

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(N01-PEN) Penasquitos Influent - Annual Averages

Analyte:	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
MDL:	47	2.9	.4	.039	.022	7
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====						
JANUARY -2013	1290	ND	0.66	66	ND	280
FEBRUARY -2013	585	ND	0.57	48	ND	265
MARCH -2013	2220	<2.9	2.19	54	ND	278
APRIL -2013	2160	ND	2.48	82	ND	277
MAY -2013	3140	5.5	1.19	113	ND	332
JUNE -2013	2690	ND	3.31	94	ND	318
JULY -2013	2170	<2.9	2.63	89	ND	318
AUGUST -2013	3580	ND	3.39	97	ND	295
SEPTEMBER-2013	1640	ND	2.12	97	ND	310
OCTOBER -2013	978	7.0	2.13	79	0.05	287
NOVEMBER -2013	343	ND	1.38	82	ND	222
DECEMBER -2013	380	<2.9	1.05	80	ND	306
=====						
Annual Average:	1770	1.0	1.93	82	0.00	291

Analyte:	Cadmium	Chromium	Cobalt	Copper	Iron	Lead
MDL:	.53	1.2	.85	2	37	2
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====						
JANUARY -2013	ND	6.9	<0.85	85	15600	2.5
FEBRUARY -2013	ND	7.2	<0.85	83	9500	2.5
MARCH -2013	ND	6.6	1.04	86	8780	6.5
APRIL -2013	ND	9.5	1.79	123	11500	<2.0
MAY -2013	ND	12.1	<0.85	142	18000	ND
JUNE -2013	ND	12.9	2.12	101	11800	2.5
JULY -2013	ND	27.2	1.41	88	15900	3.0
AUGUST -2013	ND	11.3	2.42	106	15900	2.5
SEPTEMBER-2013	ND	6.5	<0.85	126	15400	3.5
OCTOBER -2013	ND	8.5	<0.85	109	14300	4.6
NOVEMBER -2013	ND	7.0	<0.85	78	11900	4.5
DECEMBER -2013	ND	5.2	1.48	83	12600	ND
=====						
Annual Average:	ND	10.1	0.86	101	13400	2.7

Analyte:	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium
MDL:	.002	.24	.005	.89	.53	.28
Units:	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====						
JANUARY -2013	0.022	112	0.117	7.00	8.2	0.61
FEBRUARY -2013	0.028	91	0.013	5.39	10.9	0.78
MARCH -2013	0.030	98	0.009	6.53	11.2	0.99
APRIL -2013	0.038	125	0.112	8.07	19.6	1.17
MAY -2013	0.040	187	0.149	12.50	26.4	1.92
JUNE -2013	0.044	180	0.094	8.37	24.2	1.90
JULY -2013	0.044	194	0.167	8.10	70.4	1.33
AUGUST -2013	0.041	181	0.081	10.80	17.8	1.40
SEPTEMBER-2013	0.039	138	0.087	10.70	22.3	0.46
OCTOBER -2013	0.043	104	0.194	5.79	14.0	1.30
NOVEMBER -2013	0.036	70	0.012	7.30	16.6	1.04
DECEMBER -2013	0.039	93	0.124	4.91	12.7	1.53
=====						
Annual Average:	0.037	131	0.097	7.96	21.2	1.20

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(N01-PEN) Penasquitos Influent - Annual Averages

Analyte:	Silver	Thallium	Vanadium	Zinc	Calcium	Magnesium
MDL:	.4	3.9	.64	2.5	.04	.1
Units:	UG/L	UG/L	UG/L	UG/L	MG/L	MG/L
JANUARY -2013	0.75	4.55	4.13	135	49.6	26.3
FEBRUARY -2013	<0.40	ND	6.55	132	57.8	28.9
MARCH -2013	<0.40	<3.90	4.25	602	61.5	30.8
APRIL -2013	0.60	ND	4.77	183	68.9	31.6
MAY -2013	1.25	ND	5.88	266	72.5	31.1
JUNE -2013	1.30	ND	5.30	171	75.3	31.0
JULY -2013	ND	ND	8.80	212	70.5	28.3
AUGUST -2013	0.65	ND	14.20	182	62.1	26.9
SEPTEMBER-2013	0.85	ND	16.20	180	65.3	25.9
OCTOBER -2013	0.56	<3.90	18.20	153	59.7	23.9
NOVEMBER -2013	0.90	ND	10.80	128	68.2	26.6
DECEMBER -2013	ND	ND	13.20	123	59.7	24.4
Annual Average:	0.57	0.38	9.36	206	64.3	28.0

Analyte:	Potassium	Sodium	Chloride	Fluoride	Sulfate	Total Dissolved Solids
MDL:	.3	1	7	.05	9	28
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
JANUARY -2013	18.5	142	NR	NR	NR	680
FEBRUARY -2013	18.1	153	203	0.58	134	722
MARCH -2013	20.4	166	NR	NR	NR	751
APRIL -2013	19.9	164	NR	NR	NR	817
MAY -2013	19.0	162	215	0.54	188	834
JUNE -2013	20.5	166	NR	NR	NR	826
JULY -2013	18.3	155	NR	NR	NR	828
AUGUST -2013	20.3	145	201	0.53	168	825
SEPTEMBER-2013	16.0	134	NR	NR	NR	795
OCTOBER -2013	16.9	140	198	0.44	162	787
NOVEMBER -2013	16.1	142	NR	NR	NR	812
DECEMBER -2013	15.4	139	NR	NR	NR	807
Annual Average:	18.3	151	204	0.52	163	790

Analyte:	Total Cyanides
MDL:	.002
Units:	MG/L
JANUARY -2013	ND
FEBRUARY -2013	ND
MARCH -2013	ND
APRIL -2013	0.002
MAY -2013	ND
JUNE -2013	ND
JULY -2013	ND
AUGUST -2013	ND
SEPTEMBER-2013	ND
OCTOBER -2013	0.003
NOVEMBER -2013	ND
DECEMBER -2013	ND
Annual Average:	0.000

ND= Not Detected
NR= Not Required

Annual Pretreatment Program Sludge Analysis

2012 Annual Pretreatment Program Sludge Analysis (QUARTERLY SLUDGE PROJECT)

POINT LOMA WASTEWATER TREATMENT PLANT ORDER NO. R9-2009-001 NPDES PERMIT NO. CA0107409

The Quarterly Sludge Project is part of the Pt. Loma WWTP NPDES (Permit No. CA0107409/Order No. R9-2010-001) monitoring requirements. The sampling plan is designed so as to provide a “snapshot” of all of the physical and chemical characteristics monitored of the wastewater treatment waste streams for a short interval of time (1-2 days). This is conducted quarterly.

The Quarterly Sludge Project was conducted 4 times during 2012, composite and grab samples were taken in February, May, August, and October.

The North City Reclamation Water Plant is included in the Pre-treatment monitoring program and data from that aspect of the program is reported in the following section. The plant primary influents (N01-PS_INF and N01-PEN), Primary effluent (N10-EFF), and reclaimed water (N34-REC WATER) were sampled. For influent and effluent samples, automatic refrigerated samplers are composited over a 24 hour period.

Grease & Oils, pH, temperature, and conductivity are determined from grab samples.

Abbreviations:

NCWRP	North City Water Reclamation Plant
N01-PS_INF	NCWRP influent from pump station 64
N01-PEN	NCWRP Penasquitos influent
N34-REC WATER	NCWRP reclaimed water.
N10-EFF	NCWRP Primary effluent

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(Metals from Digestion and Ions from Supernatant)

Source:		N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
Date:		05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
Sample ID:	MDL Units	P649623	P661100	P671098	P677647
Aluminum	47 UG/L	425	1290	613	571
Antimony	2.9 UG/L	ND	ND	ND	6
Arsenic	.4 UG/L	0.8	1.2	1.2	1.3
Barium	.039 UG/L	57.2	107.0	118.0	126.0
Beryllium	.022 UG/L	ND	ND	ND	0.040
Boron	7 UG/L	317	324	307	338
Cadmium	.53 UG/L	ND	ND	ND	ND
Chromium	1.2 UG/L	5.4	4.9	2.3	6.4
Cobalt	.85 UG/L	ND	ND	1.78	1.75
Copper	2 UG/L	98	124	149	227
Iron	37 UG/L	6650	9050	12200	11300
Lead	2 UG/L	3	3	ND	5
Manganese	.24 UG/L	133.0	190.0	138.0	159.0
Mercury	.005 UG/L	0.014	0.168	0.311	0.102
Molybdenum	.89 UG/L	6.06	8.66	11.20	10.30
Nickel	.53 UG/L	6.35	9.39	9.69	14.40
Selenium	.28 UG/L	1.03	1.90	1.87	1.72
Silver	.4 UG/L	1.7	0.8	0.7	2.0
Thallium	3.9 UG/L	ND	ND	ND	7.4
Vanadium	.64 UG/L	0.85	2.95	7.60	14.50
Zinc	2.5 UG/L	141.0	248.0	181.0	232.0
Total Kjeldahl Nitrogen	1.6 MG/L	54.5	55.6	60.3	61.4
Calcium	.04 MG/L	71.5	83.2	80.4	76.4
Lithium	.002 MG/L	0.034	0.046	0.049	0.052
Magnesium	.1 MG/L	36.9	38.8	36.3	34.0
Potassium	.3 MG/L	21.5	22.7	23.2	20.9
Sodium	1 MG/L	212	223	214	196
Calcium Hardness	.1 MG/L	179	223	201	191
Magnesium Hardness	.4 MG/L	152	147	149	140
Total Hardness	.4 MG/L	330	319	350	331
Bromide	.1 MG/L	0.6	0.5	0.5	0.4
Chloride	7 MG/L	313	313	322	315
Fluoride	.05 MG/L	0.66	0.27	0.68	0.46
Nitrate	.04 MG/L	ND	0.10	ND	ND
Ortho Phosphate	.2 MG/L	3.7	8.2	4.9	6.2
Sulfate	9 MG/L	172	215	230	212
Cyanide, Total	.002 MG/L	0.002	ND	0.002	0.002
Sulfides-Total	.4 MG/L	1.1	3.6	5.0	6.2
Ammonia-N	.3 MG/L	39.0	37.3	38.1	41.9

ND= Not Detected
NR= Not Required

N34-REC WATER = NCWRP Reclaimed Water After Mixing
 N10-EFF = Primary Effluent
 N01-PS_INF = North City Pump Station Influent (PS #64)
 N01-PEN = Penasquitos Pump Station Influent

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(Metals from Digestion and Ions from Supernatant)

Source:		N01-PEN	N01-PEN	N01-PEN	N01-PEN
Date:		05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
Sample ID:	MDL Units	P649628	P661105	P671103	P677652
Aluminum	47 UG/L	496	975	3310	1480
Antimony	2.9 UG/L	ND	4	ND	7
Arsenic	.4 UG/L	0.6	1.2	3.4	2.1
Barium	.039 UG/L	48.1	108.0	93.5	84.9
Beryllium	.022 UG/L	ND	ND	ND	0.040
Boron	7 UG/L	259	319	305	282
Cadmium	.53 UG/L	ND	ND	ND	ND
Chromium	1.2 UG/L	6.1	13.7	17.1	12.3
Cobalt	.85 UG/L	1.14	1.00	3.47	1.46
Copper	2 UG/L	77	157	114	126
Iron	37 UG/L	9480	18000	15800	15600
Lead	2 UG/L	3	ND	2	5
Manganese	.24 UG/L	86.6	151.0	188.0	109.0
Mercury	.005 UG/L	0.013	0.149	0.081	0.194
Molybdenum	.89 UG/L	4.99	10.10	10.80	6.57
Nickel	.53 UG/L	11.40	30.40	24.80	17.10
Selenium	.28 UG/L	0.78	1.92	1.40	1.30
Silver	.4 UG/L	ND	1.6	ND	1.1
Thallium	3.9 UG/L	ND	ND	ND	4.4
Vanadium	.64 UG/L	7.69	5.62	14.70	21.30
Zinc	2.5 UG/L	132.0	305.0	191.0	177.0
Total Kjeldahl Nitrogen	1.6 MG/L	49.3	45.1	54.3	50.9
Calcium	.04 MG/L	57.8	72.5	62.1	59.7
Lithium	.002 MG/L	0.028	0.040	0.041	0.043
Magnesium	.1 MG/L	28.9	31.1	26.9	23.9
Potassium	.3 MG/L	18.1	19.0	20.3	16.9
Sodium	1 MG/L	153	162	145	140
Calcium Hardness	.1 MG/L	144	162	155	149
Magnesium Hardness	.4 MG/L	119	127	111	98
Total Hardness	.4 MG/L	264	280	266	247
Bromide	.1 MG/L	0.3	0.2	0.2	ND
Chloride	7 MG/L	203	215	201	198
Fluoride	.05 MG/L	0.58	0.54	0.53	0.44
Nitrate	.04 MG/L	0.22	0.12	0.07	0.05
Ortho Phosphate	.2 MG/L	1.6	2.2	2.8	1.2
Sulfate	9 MG/L	134	188	168	162
Cyanide, Total	.002 MG/L	ND	ND	ND	0.003
Sulfides-Total	.4 MG/L	2.1	4.5	4.7	6.4
Ammonia-N	.3 MG/L	36.0	36.9	35.1	33.9

ND= Not Detected
NR= Not Required

N34-REC WATER = NCWRP Reclaimed Water After Mixing
N10-EFF = Primary Effluent
N01-PS_INF = North City Pump Station Influent (PS #64)
N01-PEN = Penasquitos Pump Station Influent

NORTH CITY WATER RECLAMATION PLANT
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(Metals from Digestion and Ions from Supernatant)

Source:		N10-EFF	N10-EFF	N10-EFF	N10-EFF
Date:		05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
Sample ID:	MDL Units	P649633	P661110	P671108	P677657
=====					
Aluminum	47 UG/L	423	858	632	436
Antimony	2.9 UG/L	ND	ND	ND	6
Arsenic	.4 UG/L	0.9	1.2	1.4	1.2
Barium	.039 UG/L	36.4	82.4	76.0	67.0
Beryllium	.022 UG/L	ND	ND	ND	0.050
Boron	7 UG/L	273	329	317	321
Cadmium	.53 UG/L	ND	ND	ND	ND
Chromium	1.2 UG/L	3.1	5.6	3.2	4.1
Cobalt	.85 UG/L	ND	ND	1.30	ND
Copper	2 UG/L	47	95	85	89
Iron	37 UG/L	5080	9050	8560	6940
Lead	2 UG/L	ND	ND	ND	3
Manganese	.24 UG/L	102.0	155.0	130.0	122.0
Mercury	.005 UG/L	0.006	0.076	0.015	0.071
Molybdenum	.89 UG/L	4.67	7.73	10.70	7.49
Nickel	.53 UG/L	6.59	11.40	9.95	11.00
Selenium	.28 UG/L	0.96	1.95	1.29	1.19
Silver	.4 UG/L	<0.4	0.5	ND	ND
Thallium	3.9 UG/L	ND	ND	ND	5.6
Vanadium	.64 UG/L	2.68	2.78	7.50	10.50
Zinc	2.5 UG/L	67.5	164.0	121.0	99.9
Total Kjeldahl Nitrogen	1.6 MG/L	48.1	50.2	51.5	51.1
=====					
Calcium	.04 MG/L	64.8	78.3	71.9	68.0
Lithium	.002 MG/L	0.030	0.045	0.049	0.045
Magnesium	.1 MG/L	32.9	34.7	32.2	29.5
Potassium	.3 MG/L	19.9	20.7	22.1	19.2
Sodium	1 MG/L	182	190	183	173
=====					
Calcium Hardness	.1 MG/L	162	190	180	170
Magnesium Hardness	.4 MG/L	136	150	133	121
Total Hardness	.4 MG/L	297	330	312	291
=====					
Bromide	.1 MG/L	0.4	0.4	0.4	0.3
Chloride	7 MG/L	260	268	267	267
Fluoride	.05 MG/L	0.56	0.58	0.60	0.45
Nitrate	.04 MG/L	0.07	0.07	0.07	ND
Ortho Phosphate	.2 MG/L	2.8	2.8	4.3	3.3
Sulfate	9 MG/L	156	208	203	194
=====					
Cyanide, Total	.002 MG/L	ND	ND	ND	ND
Sulfides-Total	.4 MG/L	0.6	2.7	2.1	2.2
Ammonia-N	.3 MG/L	38.0	37.3	38.2	38.8

ND= Not Detected
NR= Not Required

N34-REC WATER = NCWRP Reclaimed Water After Mixing
N10-EFF = Primary Effluent
N01-PS_INF = North City Pump Station Influent (PS #64)
N01-PEN = Penasquitos Pump Station Influent

NORTH CITY WATER RECLAMATION PLANT
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(Metals from Digestion and Ions from Supernatant)

Source:		N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
Date:		05-FEB-2013	07-MAY-2013	09-MAY-2013	06-AUG-2013
Sample ID:	MDL Units	P649638	P661115	P661353	P671113
=====					
Aluminum	47 UG/L	86	NR	235	123
Antimony	2.9 UG/L	ND	NR	7	ND
Arsenic	.4 UG/L	ND	NR	0.6	0.6
Barium	.039 UG/L	11.6	NR	19.8	20.2
Beryllium	.022 UG/L	ND	NR	ND	ND
Boron	7 UG/L	304	NR	346	350
Cadmium	.53 UG/L	ND	NR	ND	ND
Chromium	1.2 UG/L	ND	NR	ND	<1.2
Cobalt	.85 UG/L	ND	NR	ND	ND
Copper	2 UG/L	3	NR	2	3
Iron	37 UG/L	97	NR	92	91
Lead	2 UG/L	ND	NR	3	ND
Manganese	.24 UG/L	67.5	NR	83.8	65.7
Mercury	.005 UG/L	ND	NR	ND	ND
Molybdenum	.89 UG/L	4.94	NR	8.59	7.61
Nickel	.53 UG/L	6.20	NR	9.14	6.89
Selenium	.28 UG/L	0.47	NR	1.08	0.72
Silver	.4 UG/L	ND	NR	ND	ND
Thallium	3.9 UG/L	ND	NR	ND	ND
Vanadium	.64 UG/L	1.06	NR	ND	2.90
Zinc	2.5 UG/L	25.2	NR	61.7	29.0
Total Kjeldahl Nitrogen	1.6 MG/L	ND	NR	ND	ND
=====					
Calcium	.04 MG/L	57.0	58.8	NR	66.1
Lithium	.002 MG/L	0.024	0.033	NR	0.037
Magnesium	.1 MG/L	28.3	25.9	NR	27.5
Potassium	.3 MG/L	15.9	15.4	NR	17.4
Sodium	1 MG/L	163	164	NR	167
=====					
Calcium Hardness	.1 MG/L	143	164	NR	165
Magnesium Hardness	.4 MG/L	116	126	NR	113
Total Hardness	.4 MG/L	259	280	NR	278
=====					
Bromide	.1 MG/L	ND	ND	NR	ND
Chloride	7 MG/L	239	224	NR	236
Fluoride	.05 MG/L	0.59	0.62	NR	0.68
Nitrate	.04 MG/L	59.00	58.50	NR	43.40
Ortho Phosphate	.2 MG/L	1.9	3.2	NR	4.0
Sulfate	9 MG/L	145	172	NR	190
=====					
Cyanide, Total	.002 MG/L	ND	NR	0.006	0.002
Adjusted Sodium Adsorption	MG/L	4.2	4.3	NR	4.3
Percent Sodium	PERCENT	55.9	56.6	NR	54.5
Total Organic Carbon	MG/L	6.4	7.6	NR	7.6
Sulfides-Total	.4 MG/L	ND	NR	ND	ND
Ammonia-N	.3 MG/L	ND	0.7	NR	ND

ND= Not Detected
NR= Not Required

N34-REC WATER = NCWRP Reclaimed Water After Mixing
N10-EFF = Primary Effluent
N01-PS_INF = North City Pump Station Influent (PS #64)
N01-PEN = Penasquitos Pump Station Influent

NORTH CITY WATER RECLAMATION PLANT
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(Metals from Digestion and Ions from Supernatant)

Source:		N34-REC WATER
Date:		01-OCT-2013
Sample ID:		P677662
	MDL Units	
=====	=====	=====
Aluminum	47 UG/L	ND
Antimony	2.9 UG/L	3
Arsenic	.4 UG/L	0.4
Barium	.039 UG/L	19.6
Beryllium	.022 UG/L	ND
Boron	7 UG/L	310
Cadmium	.53 UG/L	ND
Chromium	1.2 UG/L	2.1
Cobalt	.85 UG/L	ND
Copper	2 UG/L	ND
Iron	37 UG/L	68
Lead	2 UG/L	ND
Manganese	.24 UG/L	86.5
Mercury	.005 UG/L	ND
Molybdenum	.89 UG/L	4.53
Nickel	.53 UG/L	6.79
Selenium	.28 UG/L	0.54
Silver	.4 UG/L	ND
Thallium	3.9 UG/L	ND
Vanadium	.64 UG/L	2.98
Zinc	2.5 UG/L	24.1
Total Kjeldahl Nitrogen	1.6 MG/L	ND
=====	=====	=====
Calcium	.04 MG/L	62.1
Lithium	.002 MG/L	0.037
Magnesium	.1 MG/L	26.0
Potassium	.3 MG/L	15.9
Sodium	1 MG/L	164
=====	=====	=====
Calcium Hardness	.1 MG/L	155
Magnesium Hardness	.4 MG/L	107
Total Hardness	.4 MG/L	262
=====	=====	=====
Bromide	.1 MG/L	ND
Chloride	7 MG/L	239
Fluoride	.05 MG/L	0.59
Nitrate	.04 MG/L	50.50
Ortho Phosphate	.2 MG/L	1.8
Sulfate	9 MG/L	183
=====	=====	=====
Cyanide, Total	.002 MG/L	0.004
Adjusted Sodium Adsorption	MG/L	4.3
Percent Sodium	PERCENT	55.9
Total Organic Carbon	MG/L	6.3
Sulfides-Total	.4 MG/L	0.6
Ammonia-N	.3 MG/L	ND

ND= Not Detected
NR= Not Required

N34-REC WATER = NCWRP Reclaimed Water After Mixing
 N10-EFF = Primary Effluent
 N01-PS_INF = North City Pump Station Influent (PS #64)
 N01-PEN = Penasquitos Pump Station Influent

NORTH CITY WATER RECLAMATION PLANT
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Radioactivity

Source	Sample Date	Sample	Units	Gross Alpha Radiation	Gross Beta Radiation
=====	=====	=====	=====	=====	=====
N10-EFF	05-FEB-2013	P649633	pCi/L	3.8±3.5	18.1±4.7
N10-EFF	07-MAY-2013	P661110	pCi/L	-2.7±4.9	24.6±8.2
N10-EFF	06-AUG-2013	P671108	pCi/L	2.7±5.8	20.2±6.5
N10-EFF	01-OCT-2013	P677657	pCi/L	0.7±4.2	25.7±6.7
N01-PS_INF	05-FEB-2013	P649623	pCi/L	5.9±4.8	18.7±6.1
N01-PS_INF	07-MAY-2013	P661100	pCi/L	4.7±7.7	31.5±9.9
N01-PS_INF	06-AUG-2013	P671098	pCi/L	-2.5±4.9	25.1±7.2
N01-PS_INF	01-OCT-2013	P677647	pCi/L	7.2±6.3	19.3±5.9
N01-PEN	05-FEB-2013	P649628	pCi/L	0.7±4.2	14.1±4.4
N01-PEN	07-MAY-2013	P661105	pCi/L	2.0±7.3	19.9±9.6
N01-PEN	06-AUG-2013	P671103	pCi/L	12.6±5.2	24.5±6.3
N01-PEN	01-OCT-2013	P677652	pCi/L	1.1±4.5	20.5±5.0
N34-REC WATER	05-FEB-2013	P649638	pCi/L	-1.2±2.3	16.0±3.5
N34-REC WATER	09-MAY-2013	P661353	pCi/L	1.5±4.3	19.1±5.0
N34-REC WATER	06-AUG-2013	P671113	pCi/L	-1.0±5.0	21.1±5.4
N34-REC WATER	01-OCT-2013	P677662	pCi/L	0.3±3.8	16.8±5.2

ND= Not Detected
NR= Not Required

Units in picocuries per Liter (pCi/L)

N34-REC WATER = NCWRP Reclaimed Water After Mixing
N10-EFF = Primary Effluent
N01-PS_INF = North City Pump Station Influent (PS #64)
N01-PEN = Penasquitos Pump Station Influent

NORTH CITY WATER RECLAMATION PLANT
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Physical Parameters

Source:		N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
Date:	MDL Units	05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
Ammonia-N	.3 MG/L	39.0	37.3	38.1	41.9
BOD (Biochemical Oxygen Demand)	2 MG/L	273*	243	275	235
Hexane Extractable Material	1.2 MG/L	28.0	34.4	55.7	38.6
Chemical Oxygen Demand	18 MG/L	623	612	657	757
Conductivity	10 UMHOS/CM	1940	2030	2080	2020
MBAS (Surfactants)	.03 MG/L	6.81	NR	5.92	6.68
pH (grab)	PH	7.0	7.1	7.0	7.1
Total Alkalinity (bicarbonate)	20 MG/L	270	281	299	310
Total Dissolved Solids	28 MG/L	996	1070	1130	1080
Total Suspended Solids	1.4 MG/L	284	180	253	232
Volatile Suspended Solids	1.6 MG/L	256	156	213	200
Total Kjeldahl Nitrogen	1.6 MG/L	54.5	55.6	60.3	61.4
Turbidity	.13 NTU	130	95	110	140
Sulfides-Total	.4 MG/L	1.1	3.6	5.0	6.2

Source:		N01-PEN	N01-PEN	N01-PEN	N01-PEN
Date:	MDL Units	05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
Ammonia-N	.3 MG/L	36.0	36.9	35.1	33.9
BOD (Biochemical Oxygen Demand)	2 MG/L	266*	244	212	160
Hexane Extractable Material	1.2 MG/L	57.3	56.6	60.7	62.5
Chemical Oxygen Demand	18 MG/L	522	548	633	640
Conductivity	10 UMHOS/CM	1500	1680	1610	1570
MBAS (Surfactants)	.03 MG/L	5.78	NR	5.43	3.88
pH (grab)	PH	7.1	7.2	7.2	7.1
Total Alkalinity (bicarbonate)	20 MG/L	280	292	302	288
Total Dissolved Solids	28 MG/L	716	848	804	784
Total Suspended Solids	1.4 MG/L	308	252	385	200
Volatile Suspended Solids	1.6 MG/L	280	208	340	168
Total Kjeldahl Nitrogen	1.6 MG/L	49.3	45.1	54.3	50.9
Turbidity	.13 NTU	130	75	90	110
Sulfides-Total	.4 MG/L	2.1	4.5	4.7	6.4

* The acceptance range for the external check is 167.5-228.5 mg/L with a true value of 198 mg/L. The result value for the external check in this batch was 236 mg/L.

ND= Not Detected
ND= Not Required

NORTH CITY WATER RECLAMATION PLANT
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Physical Parameters

Source:		N10-EFF	N10-EFF	N10-EFF	N10-EFF
Date:	MDL Units	05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
=====					
Ammonia-N	.3 MG/L	38.0	37.3	38.2	38.8
BOD (Biochemical Oxygen Demand)	2 MG/L	181*	280	196	163
Hexane Extractable Material	1.2 MG/L	41.9	29.4	41.6	39.6
Chemical Oxygen Demand	18 MG/L	352	482	446	401
Conductivity	10 UMHOS/CM	1730	1870	1890	1680
MBAS (Surfactants)	.03 MG/L	6.66	NR	5.67	5.32
pH (grab)	PH	7.2	7.3	7.2	7.2
Total Alkalinity (bicarbonate)	20 MG/L	270	284	309	307
Total Dissolved Solids	28 MG/L	836	980	1040	984
Total Suspended Solids	1.4 MG/L	144	216	195	150
Volatile Suspended Solids	1.6 MG/L	122	174	163	124
Total Kjeldahl Nitrogen	1.6 MG/L	48.1	50.2	51.5	51.1
Turbidity	.13 NTU	100	100	95	90
Sulfides-Total	.4 MG/L	0.6	2.7	2.1	2.2

Source:		N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
Date:	MDL Units	05-FEB-2013	07-MAY-2013	09-MAY-2013	06-AUG-2013
=====					
Ammonia-N	.3 MG/L	ND	0.7	NR	ND
BOD (Biochemical Oxygen Demand)	2 MG/L	ND*	ND	ND	ND
Hexane Extractable Material	1.2 MG/L	3.9	ND	NR	2.6
Chemical Oxygen Demand	18 MG/L	30	ND	NR	23
Conductivity	10 UMHOS/CM	1370	1370	NR	1520
MBAS (Surfactants)	.03 MG/L	0.09	NR	NR	0.04
pH (grab)	PH	6.7	6.8	NR	7.0
Total Alkalinity (bicarbonate)	20 MG/L	86	88	NR	116
Total Dissolved Solids	28 MG/L	802	818	854	886
Total Suspended Solids	1.4 MG/L	ND	ND	ND	ND
Volatile Suspended Solids	1.6 MG/L	ND	ND	ND	ND
Total Kjeldahl Nitrogen	1.6 MG/L	ND	NR	NR	ND
Total Nitrogen	.78 MG/L	15.3	13.9	NR	10.2**
Total Organic Carbon	MG/L	6.4	7.6	NR	7.6
Turbidity	.13 NTU	1.1	1.1	NR	1.1
Sulfides-Total	.4 MG/L	ND	NR	ND	ND

* The acceptance range for the external check is 167.5-228.5 mg/L with a true value of 198 mg/L. The result value for the external check in this batch was 236 mg/L.

** Sample analyzed out of holding time.

ND= Not Detected

ND= Not Required

NORTH CITY WATER RECLAMATION PLANT
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Physical Parameters

Source:		N34-REC WATER
Date:	MDL Units	01-OCT-2013
=====	====	=====
Ammonia-N	.3 MG/L	ND
BOD (Biochemical Oxygen Demand)	2 MG/L	ND
Hexane Extractable Material	1.2 MG/L	ND
Chemical Oxygen Demand	18 MG/L	21
Conductivity	10 UMHOS/CM	1420
MBAS (Surfactants)	.03 MG/L	0.04
pH (grab)	PH	7.0
Total Alkalinity (bicarbonate)	20 MG/L	105
Total Dissolved Solids	28 MG/L	854
Total Suspended Solids	1.4 MG/L	ND
Volatile Suspended Solids	1.6 MG/L	ND
Total Kjeldahl Nitrogen	1.6 MG/L	ND
Total Nitrogen	.78 MG/L	10.4
Total Organic Carbon	MG/L	6.3
Turbidity	.13 NTU	1.1
Sulfides-Total	.4 MG/L	0.6

Source:		N01-PS_INF	N01-PEN	N10-EFF	N34-REC WATER
Date:	MDL Units	25-JUN-2013	25-JUN-2013	25-JUN-2013	25-JUN-2013
=====	====	=====	=====	=====	=====
MBAS (Surfactants)	.03 MG/L	4.62	3.39	3.96	0.04

ND= Not Detected
ND= Not Required

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Organo - Tins

Source:			N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
Date:			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
Sample ID:	MDL Units		P649623	P661100	P671098	P677647
Tributyltin	2 UG/L		ND	ND	ND	ND
Dibutyltin	7 UG/L		ND	ND	ND	ND
Monobutyltin	16 UG/L		ND	ND	ND	ND

Source:			N01-PEN	N01-PEN	N01-PEN	N01-PEN
Date:			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
Sample ID:	MDL Units		P649628	P661105	P671103	P677652
Tributyltin	2 UG/L		ND	ND	ND	ND
Dibutyltin	7 UG/L		ND	ND	ND	ND
Monobutyltin	16 UG/L		ND	ND	ND	ND

Source:			N10-EFF	N10-EFF	N10-EFF	N10-EFF
Date:			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
Sample ID:	MDL Units		P649633	P661110	P671108	P677657
Tributyltin	2 UG/L		ND	ND	ND	ND
Dibutyltin	7 UG/L		ND	ND	ND	ND
Monobutyltin	16 UG/L		ND	ND	ND	ND

Source:			N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
Date:			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
Sample ID:	MDL Units		P649638	P661115	P671113	P677662
Tributyltin	2 UG/L		ND	ND	ND	ND
Dibutyltin	7 UG/L		ND	ND	ND	ND
Monobutyltin	16 UG/L		ND	ND	ND	ND

ND= Not Detected

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Chlorinated Pesticides

Analyte	MDL	Units	N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
			P649623	P661100	P671098	P677647
Aldrin	8	NG/L	ND	ND	ND	ND
BHC, Alpha isomer	13	NG/L	ND	ND	ND	ND
BHC, Beta isomer	20	NG/L	ND	ND	ND	ND
BHC, Delta isomer	18	NG/L	ND	ND	ND	ND
BHC, Gamma isomer	15	NG/L	ND	ND	ND	ND
Alpha (cis) Chlordane	2	NG/L	ND	ND	ND	ND
Gamma (trans) Chlordane	2	NG/L	ND	ND	ND	ND
Alpha Chlordene		NG/L	NA	NA	NA	NA
Gamma Chlordene		NG/L	NA	NA	NA	NA
Cis Nonachlor	5	NG/L	ND	ND	NA	ND
Dieldrin	10	NG/L	ND	ND	ND	ND
Endosulfan Sulfate	15	NG/L	ND	ND	ND	ND
Alpha Endosulfan	15	NG/L	ND	ND	ND	ND
Beta Endosulfan	15	NG/L	ND	ND	ND	ND
Endrin	10	NG/L	20	ND	ND	ND
Endrin aldehyde	10	NG/L	ND	ND	ND	ND
Heptachlor	15	NG/L	ND	ND	ND	ND
Heptachlor epoxide	13	NG/L	ND	ND	ND	ND
Methoxychlor	18	NG/L	ND	ND	ND	ND
Mirex	10	NG/L	ND	ND	ND	ND
o,p-DDD	100	NG/L	ND	ND	ND	ND
o,p-DDE	100	NG/L	ND	ND	ND	ND
o,p-DDT	100	NG/L	ND	ND	ND	ND
Oxychlordane	3	NG/L	ND	ND	NA	ND
PCB 1016	1300	NG/L	ND	ND	ND	ND
PCB 1221	1300	NG/L	ND	ND	ND	ND
PCB 1232	1300	NG/L	ND	ND	ND	ND
PCB 1242	1300	NG/L	ND	ND	ND	ND
PCB 1248	1300	NG/L	ND	ND	ND	ND
PCB 1254	1300	NG/L	ND	ND	ND	ND
PCB 1260	1300	NG/L	ND	ND	ND	ND
PCB 1262	1300	NG/L	ND	ND	ND	ND
p,p-DDD	20	NG/L	ND	ND	ND	ND
p,p-DDE	15	NG/L	ND	DNQ 3	ND	DNQ 3
p,p-DDT	20	NG/L	ND	ND	ND	ND
Toxaphene	1300	NG/L	ND	ND	ND	ND
Trans Nonachlor	3	NG/L	ND	ND	NA	ND
Heptachlors	15	NG/L	0	0	0	0
Endosulfans	15	NG/L	0	0	0	0
Polychlorinated biphenyls	1300	NG/L	0	0	0	0
Chlordane + related cmpds.	5	NG/L	0	0	0	0
DDT and derivatives	100	NG/L	0	0	0	0
Hexachlorocyclohexanes	20	NG/L	0	0	0	0
Aldrin + Dieldrin	10	NG/L	0	0	0	0
Chlorinated Hydrocarbons	1300	NG/L	20	0	0	0

MDLs listed are the maximum MDL for the past 12 months

NA= Not Analyzed

ND= Not Detected

DNQ= Detected but not quantified. Sample results were less than Minimum Level (ML), but greater than or equal to the MDL

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Chlorinated Pesticides

Analyte	MDL	Units	N01-PEN	N01-PEN	N01-PEN	N01-PEN
			05-FEB-2013 P649628	07-MAY-2013 P661105	06-AUG-2013 P671103	01-OCT-2013 P677652
Aldrin	8	NG/L	ND	ND	ND	ND
BHC, Alpha isomer	13	NG/L	ND	ND	ND	ND
BHC, Beta isomer	20	NG/L	ND	ND	ND	ND
BHC, Delta isomer	18	NG/L	ND	ND	ND	ND
BHC, Gamma isomer	15	NG/L	ND	ND	ND	ND
Alpha (cis) Chlordane	2	NG/L	ND	ND	ND	ND
Gamma (trans) Chlordane	2	NG/L	ND	ND	ND	ND
Alpha Chlordene		NG/L	NA	NA	NA	NA
Gamma Chlordene		NG/L	NA	NA	NA	NA
Cis Nonachlor	5	NG/L	ND	ND	NA	ND
Dieldrin	10	NG/L	ND	ND	ND	ND
Endosulfan Sulfate	15	NG/L	ND	ND	ND	ND
Alpha Endosulfan	15	NG/L	ND	ND	ND	ND
Beta Endosulfan	15	NG/L	ND	ND	ND	ND
Endrin	10	NG/L	17	ND	ND	ND
Endrin aldehyde	10	NG/L	ND	ND	ND	ND
Heptachlor	15	NG/L	ND	ND	ND	ND
Heptachlor epoxide	13	NG/L	ND	ND	ND	ND
Methoxychlor	18	NG/L	ND	ND	ND	ND
Mirex	10	NG/L	ND	ND	ND	ND
o,p-DDD	100	NG/L	ND	ND	ND	ND
o,p-DDE	100	NG/L	ND	ND	ND	ND
o,p-DDT	100	NG/L	ND	ND	ND	ND
Oxychlordane	3	NG/L	ND	ND	NA	ND
PCB 1016	1300	NG/L	ND	ND	ND	ND
PCB 1221	1300	NG/L	ND	ND	ND	ND
PCB 1232	1300	NG/L	ND	ND	ND	ND
PCB 1242	1300	NG/L	ND	ND	ND	ND
PCB 1248	1300	NG/L	ND	ND	ND	ND
PCB 1254	1300	NG/L	ND	ND	ND	ND
PCB 1260	1300	NG/L	ND	ND	ND	ND
PCB 1262	1300	NG/L	ND	ND	ND	ND
p,p-DDD	20	NG/L	ND	ND	ND	ND
p,p-DDE	15	NG/L	ND	ND	ND	DNQ 4
p,p-DDT	20	NG/L	ND	ND	ND	ND
Toxaphene	1300	NG/L	ND	ND	ND	ND
Trans Nonachlor	3	NG/L	ND	ND	NA	ND
=====						
Heptachlors	15	NG/L	0	0	0	0
Endosulfans	15	NG/L	0	0	0	0
Polychlorinated biphenyls	1300	NG/L	0	0	0	0
Chlordane + related cmpds.	5	NG/L	0	0	0	0
DDT and derivatives	100	NG/L	0	0	0	0
Hexachlorocyclohexanes	20	NG/L	0	0	0	0
Aldrin + Dieldrin	10	NG/L	0	0	0	0
=====						
Chlorinated Hydrocarbons	1300	NG/L	17	0	0	0

MDLs listed are the maximum MDL for the past 12 months

NA= Not Analyzed

ND= Not Detected

DNQ= Detected but not quantified. Sample results were less than Minimum Level (ML), but greater than or equal to the MDL

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Chlorinated Pesticides

Analyte	MDL	Units	N10-EFF	N10-EFF	N10-EFF	N10-EFF
			05-FEB-2013 P649633	07-MAY-2013 P661110	06-AUG-2013 P671108	01-OCT-2013 P677657
Aldrin	8	NG/L	ND	ND	ND	ND
BHC, Alpha isomer	13	NG/L	ND	ND	ND	ND
BHC, Beta isomer	20	NG/L	ND	ND	ND	ND
BHC, Delta isomer	18	NG/L	ND	ND	ND	ND
BHC, Gamma isomer	15	NG/L	ND	ND	ND	ND
Alpha (cis) Chlordane	2	NG/L	ND	ND	ND	ND
Gamma (trans) Chlordane	2	NG/L	ND	ND	ND	ND
Alpha Chlordene		NG/L	NA	NA	NA	NA
Gamma Chlordene		NG/L	NA	NA	NA	NA
Cis Nonachlor	5	NG/L	ND	ND	NA	ND
Dieldrin	10	NG/L	ND	ND	ND	ND
Endosulfan Sulfate	15	NG/L	ND	ND	ND	ND
Alpha Endosulfan	15	NG/L	ND	ND	ND	ND
Beta Endosulfan	15	NG/L	ND	ND	ND	ND
Endrin	10	NG/L	ND	ND	ND	ND
Endrin aldehyde	10	NG/L	ND	ND	ND	ND
Heptachlor	15	NG/L	ND	ND	ND	ND
Heptachlor epoxide	13	NG/L	ND	ND	ND	ND
Methoxychlor	18	NG/L	ND	ND	ND	ND
Mirex	10	NG/L	ND	ND	ND	ND
o,p-DDD	100	NG/L	ND	ND	ND	ND
o,p-DDE	100	NG/L	ND	ND	ND	ND
o,p-DDT	100	NG/L	ND	ND	ND	ND
Oxychlordane	3	NG/L	ND	ND	NA	ND
PCB 1016	1300	NG/L	ND	ND	ND	ND
PCB 1221	1300	NG/L	ND	ND	ND	ND
PCB 1232	1300	NG/L	ND	ND	ND	ND
PCB 1242	1300	NG/L	ND	ND	ND	ND
PCB 1248	1300	NG/L	ND	ND	ND	ND
PCB 1254	1300	NG/L	ND	ND	ND	ND
PCB 1260	1300	NG/L	ND	ND	ND	ND
PCB 1262	1300	NG/L	ND	ND	ND	ND
p,p-DDD	20	NG/L	ND	ND	ND	ND
p,p-DDE	15	NG/L	ND	ND	ND	ND
p,p-DDT	20	NG/L	ND	ND	ND	ND
Toxaphene	1300	NG/L	ND	ND	ND	ND
Trans Nonachlor	3	NG/L	ND	ND	NA	ND
=====						
Heptachlors	15	NG/L	0	0	0	0
Endosulfans	15	NG/L	0	0	0	0
Polychlorinated biphenyls	1300	NG/L	0	0	0	0
Chlordane + related cmpds.	5	NG/L	0	0	0	0
DDT and derivatives	100	NG/L	0	0	0	0
Hexachlorocyclohexanes	20	NG/L	0	0	0	0
Aldrin + Dieldrin	10	NG/L	0	0	0	0
=====						
Chlorinated Hydrocarbons	1300	NG/L	0	0	0	0

MDLs listed are the maximum MDL for the past 12 months

NA= Not Analyzed
ND= Not Detected

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Chlorinated Pesticides

Analyte	MDL	Units	N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
			05-FEB-2013 P649638	07-MAY-2013 P661115	06-AUG-2013 P671113	01-OCT-2013 P677662
Aldrin	8	NG/L	ND	ND	ND	ND
BHC, Alpha isomer	13	NG/L	ND	ND	ND	ND
BHC, Beta isomer	20	NG/L	ND	ND	ND	ND
BHC, Delta isomer	18	NG/L	ND	ND	ND	ND
BHC, Gamma isomer	15	NG/L	ND	ND	ND	ND
Alpha (cis) Chlordane	2	NG/L	ND	ND	ND	ND
Gamma (trans) Chlordane	2	NG/L	ND	ND	ND	ND
Alpha Chlordene		NG/L	NA	NA	NA	NA
Gamma Chlordene		NG/L	NA	NA	NA	NA
Cis Nonachlor	5	NG/L	ND	ND	NA	ND
Dieldrin	10	NG/L	ND	ND	ND	ND
Endosulfan Sulfate	15	NG/L	ND	ND	ND	ND
Alpha Endosulfan	15	NG/L	ND	ND	ND	ND
Beta Endosulfan	15	NG/L	ND	ND	ND	ND
Endrin	10	NG/L	ND	ND	ND	ND
Endrin aldehyde	10	NG/L	ND	ND	ND	ND
Heptachlor	15	NG/L	ND	ND	ND	ND
Heptachlor epoxide	13	NG/L	ND	ND	ND	ND
Methoxychlor	18	NG/L	ND	ND	ND	ND
Mirex	10	NG/L	ND	ND	ND	ND
o,p-DDD	100	NG/L	ND	ND	ND	ND
o,p-DDE	100	NG/L	ND	ND	ND	ND
o,p-DDT	100	NG/L	ND	ND	ND	ND
Oxychlordane	3	NG/L	ND	ND	NA	ND
PCB 1016	1300	NG/L	ND	ND	ND	ND
PCB 1221	1300	NG/L	ND	ND	ND	ND
PCB 1232	1300	NG/L	ND	ND	ND	ND
PCB 1242	1300	NG/L	ND	ND	ND	ND
PCB 1248	1300	NG/L	ND	ND	ND	ND
PCB 1254	1300	NG/L	ND	ND	ND	ND
PCB 1260	1300	NG/L	ND	ND	ND	ND
PCB 1262	1300	NG/L	ND	ND	ND	ND
p,p-DDD	20	NG/L	ND	ND	ND	ND
p,p-DDE	15	NG/L	ND	ND	ND	ND
p,p-DDT	20	NG/L	ND	ND	ND	ND
Toxaphene	1300	NG/L	ND	ND	ND	ND
Trans Nonachlor	3	NG/L	ND	ND	NA	ND
=====						
Heptachlors	15	NG/L	0	0	0	0
Endosulfans	15	NG/L	0	0	0	0
Polychlorinated biphenyls	1300	NG/L	0	0	0	0
Chlordane + related cmpds.	5	NG/L	0	0	0	0
DDT and derivatives	100	NG/L	0	0	0	0
Hexachlorocyclohexanes	20	NG/L	0	0	0	0
Aldrin + Dieldrin	10	NG/L	0	0	0	0
=====						
Chlorinated Hydrocarbons	1300	NG/L	0	0	0	0

MDLs listed are the maximum MDL for the past 12 months

NA= Not Analyzed
ND= Not Detected

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Base/Neutral Compounds

Analyte	MDL	Units	N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
			P649623	P661100	P671098	P677647
1,2,4-Trichlorobenzene	1.52	UG/L	ND	ND	ND	ND
1,2-Diphenylhydrazine	1.37	UG/L	ND	ND	ND	ND
2,4-Dinitrotoluene	1.36	UG/L	ND	ND	ND	ND
2,6-Dinitrotoluene	1.53	UG/L	ND	ND	ND	ND
Dibenzo(a,h)anthracene	1.01	UG/L	ND	ND	ND	ND
Diethyl phthalate	3.05	UG/L	3.7	3.6	3.6	4.5
Dimethyl phthalate	1.44	UG/L	ND	ND	ND	ND
Di-n-butyl phthalate	3.96	UG/L	ND	ND	ND	ND
Di-n-octyl phthalate	1	UG/L	ND	ND	ND	ND
2-Chloronaphthalene	1.87	UG/L	ND	ND	ND	ND
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	1.35	UG/L	ND	ND	ND	ND
4-Bromophenyl phenyl ether	1.4	UG/L	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	1.57	UG/L	ND	ND	ND	ND
Hexachloroethane	1.32	UG/L	ND	ND	ND	ND
Hexachlorobenzene	1.48	UG/L	ND	ND	ND	ND
Hexachlorobutadiene	1.64	UG/L	ND	ND	ND	ND
Hexachlorocyclopentadiene	1.25	UG/L	ND	ND	ND	ND
Acenaphthene	1.8	UG/L	ND	ND	ND	ND
Acenaphthylene	1.77	UG/L	ND	ND	ND	ND
Anthracene	1.29	UG/L	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	1.16	UG/L	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	8.96	UG/L	ND	ND	16.1	20.5
Benzidine	1.52	UG/L	ND	ND	ND	ND
Benzo[a]anthracene	1.1	UG/L	ND	ND	ND	ND
Benzo[a]pyrene	1.25	UG/L	ND	ND	ND	ND
Benzo[g,h,i]perylene	1.09	UG/L	ND	ND	ND	ND
Benzo[k]fluoranthene	1.49	UG/L	ND	ND	ND	ND
Bis-(2-chloroethoxy) methane	1.01	UG/L	ND	ND	ND	ND
Bis-(2-chloroethyl) ether	1.38	UG/L	ND	ND	ND	ND
Butyl benzyl phthalate	2.84	UG/L	ND	ND	ND	ND
Chrysene	1.16	UG/L	ND	ND	ND	ND
Fluoranthene	1.33	UG/L	ND	ND	ND	ND
Fluorene	1.61	UG/L	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	1.14	UG/L	ND	ND	ND	ND
Isophorone	1.53	UG/L	ND	ND	ND	ND
Naphthalene	1.65	UG/L	ND	ND	ND	ND
Nitrobenzene	1.6	UG/L	ND	ND	ND	ND
N-nitrosodimethylamine	1.27	UG/L	ND	ND	ND	ND
N-nitrosodiphenylamine	3.48	UG/L	ND	ND	ND	ND
N-nitrosodi-n-propylamine	1.16	UG/L	ND	ND	ND	ND
Phenanthrene	1.34	UG/L	ND	ND	ND	ND
Pyrene	1.43	UG/L	ND	ND	ND	ND
Polynuc. Aromatic Hydrocarbons	1.77	UG/L	0.0	0.0	0.0	0.0
Base/Neutral Compounds	8.96	UG/L	3.70	3.60	19.70	25.00

Additional analytes determined

1-Methylnaphthalene	2.18	UG/L	ND	ND	ND	ND
2-Methylnaphthalene	2.14	UG/L	ND	ND	ND	ND
2,6-Dimethylnaphthalene	2.16	UG/L	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	2.18	UG/L	ND	ND	ND	ND
1-Methylphenanthrene	1.46	UG/L	ND	ND	ND	ND
Benzo[e]pyrene	1.44	UG/L	ND	ND	ND	ND
Perylene	1.41	UG/L	ND	ND	ND	ND
Biphenyl	2.29	UG/L	ND	ND	ND	ND
Pyridine	3.33	UG/L	ND	ND	ND	ND

ND= Not Detected

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Base/Neutral Compounds

Analyte	MDL	Units	N01-PEN	N01-PEN	N01-PEN	N01-PEN
			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
			P649628	P661105	P671103	P677652
1,2,4-Trichlorobenzene	1.52	UG/L	ND	ND	ND	ND
1,2-Diphenylhydrazine	1.37	UG/L	ND	ND	ND	ND
2,4-Dinitrotoluene	1.36	UG/L	ND	ND	ND	ND
2,6-Dinitrotoluene	1.53	UG/L	ND	ND	ND	ND
Dibenzo(a,h)anthracene	1.01	UG/L	ND	ND	ND	ND
Diethyl phthalate	3.05	UG/L	ND	3.6	4.2	5.0
Dimethyl phthalate	1.44	UG/L	ND	ND	ND	ND
Di-n-butyl phthalate	3.96	UG/L	ND	ND	ND	ND
Di-n-octyl phthalate	1	UG/L	ND	ND	ND	ND
2-Chloronaphthalene	1.87	UG/L	ND	ND	ND	ND
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	1.35	UG/L	ND	ND	ND	ND
4-Bromophenyl phenyl ether	1.4	UG/L	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	1.57	UG/L	ND	ND	ND	ND
Hexachloroethane	1.32	UG/L	ND	ND	ND	ND
Hexachlorobenzene	1.48	UG/L	ND	ND	ND	ND
Hexachlorobutadiene	1.64	UG/L	ND	ND	ND	ND
Hexachlorocyclopentadiene	1.25	UG/L	ND	ND	ND	ND
Acenaphthene	1.8	UG/L	ND	ND	ND	ND
Acenaphthylene	1.77	UG/L	ND	ND	ND	ND
Anthracene	1.29	UG/L	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	1.16	UG/L	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	8.96	UG/L	ND	13.1	10.2	13.0
Benzidine	1.52	UG/L	ND	ND	ND	ND
Benzo[a]anthracene	1.1	UG/L	ND	ND	ND	ND
Benzo[a]pyrene	1.25	UG/L	ND	ND	ND	ND
Benzo[g,h,i]perylene	1.09	UG/L	ND	ND	ND	ND
Benzo[k]fluoranthene	1.49	UG/L	ND	ND	ND	ND
Bis-(2-chloroethoxy) methane	1.01	UG/L	ND	ND	ND	ND
Bis-(2-chloroethyl) ether	1.38	UG/L	ND	ND	ND	ND
Butyl benzyl phthalate	2.84	UG/L	ND	ND	5.9	ND
Chrysene	1.16	UG/L	ND	ND	ND	ND
Fluoranthene	1.33	UG/L	ND	ND	ND	ND
Fluorene	1.61	UG/L	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	1.14	UG/L	ND	ND	ND	ND
Isophorone	1.53	UG/L	ND	ND	ND	ND
Naphthalene	1.65	UG/L	ND	ND	ND	ND
Nitrobenzene	1.6	UG/L	ND	ND	ND	ND
N-nitrosodimethylamine	1.27	UG/L	ND	ND	ND	ND
N-nitrosodiphenylamine	3.48	UG/L	ND	ND	ND	ND
N-nitrosodi-n-propylamine	1.16	UG/L	ND	ND	ND	ND
Phenanthrene	1.34	UG/L	ND	ND	ND	ND
Pyrene	1.43	UG/L	ND	ND	ND	ND
Polynuc. Aromatic Hydrocarbons	1.77	UG/L	0.0	0.0	0.0	0.0
Base/Neutral Compounds	8.96	UG/L	0.00	16.70	20.30	18.00

Additional analytes determined

1-Methylnaphthalene	2.18	UG/L	ND	ND	ND	ND
2-Methylnaphthalene	2.14	UG/L	ND	ND	ND	ND
2,6-Dimethylnaphthalene	2.16	UG/L	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	2.18	UG/L	ND	ND	ND	ND
1-Methylphenanthrene	1.46	UG/L	ND	ND	ND	ND
Benzo[e]pyrene	1.44	UG/L	ND	ND	ND	ND
Perylene	1.41	UG/L	ND	ND	ND	ND
Biphenyl	2.29	UG/L	ND	ND	ND	ND
Pyridine	3.33	UG/L	ND	ND	5.5	ND

ND= Not Detected

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Base/Neutral Compounds

Analyte	MDL	Units	N10-EFF	N10-EFF	N10-EFF	N10-EFF
			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
			P649633	P661110	P671108	P677657
1,2,4-Trichlorobenzene	1.52	UG/L	ND	ND	ND	ND
1,2-Diphenylhydrazine	1.37	UG/L	ND	ND	ND	ND
2,4-Dinitrotoluene	1.36	UG/L	ND	ND	ND	ND
2,6-Dinitrotoluene	1.53	UG/L	ND	ND	ND	ND
Dibenzo(a,h)anthracene	1.01	UG/L	ND	ND	ND	ND
Diethyl phthalate	3.05	UG/L	4.5	4.1	4.1	4.6
Dimethyl phthalate	1.44	UG/L	ND	ND	ND	ND
Di-n-butyl phthalate	3.96	UG/L	ND	ND	ND	ND
Di-n-octyl phthalate	1	UG/L	ND	ND	ND	ND
2-Chloronaphthalene	1.87	UG/L	ND	ND	ND	ND
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	1.35	UG/L	ND	ND	ND	ND
4-Bromophenyl phenyl ether	1.4	UG/L	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	1.57	UG/L	ND	ND	ND	ND
Hexachloroethane	1.32	UG/L	ND	ND	ND	ND
Hexachlorobenzene	1.48	UG/L	ND	ND	ND	ND
Hexachlorobutadiene	1.64	UG/L	ND	ND	ND	ND
Hexachlorocyclopentadiene	1.25	UG/L	ND	ND	ND	ND
Acenaphthene	1.8	UG/L	ND	ND	ND	ND
Acenaphthylene	1.77	UG/L	ND	ND	ND	ND
Anthracene	1.29	UG/L	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	1.16	UG/L	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	8.96	UG/L	ND	13.8	ND	20.0
Benzidine	1.52	UG/L	ND	ND	ND	ND
Benzo[a]anthracene	1.1	UG/L	ND	ND	ND	ND
Benzo[a]pyrene	1.25	UG/L	ND	ND	ND	ND
Benzo[g,h,i]perylene	1.09	UG/L	ND	ND	ND	ND
Benzo[k]fluoranthene	1.49	UG/L	ND	ND	ND	ND
Bis-(2-chloroethoxy) methane	1.01	UG/L	ND	ND	ND	ND
Bis-(2-chloroethyl) ether	1.38	UG/L	ND	ND	ND	ND
Butyl benzyl phthalate	2.84	UG/L	ND	ND	ND	ND
Chrysene	1.16	UG/L	ND	ND	ND	ND
Fluoranthene	1.33	UG/L	ND	ND	ND	ND
Fluorene	1.61	UG/L	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	1.14	UG/L	ND	ND	ND	ND
Isophorone	1.53	UG/L	ND	ND	ND	ND
Naphthalene	1.65	UG/L	ND	ND	ND	ND
Nitrobenzene	1.6	UG/L	ND	ND	ND	ND
N-nitrosodimethylamine	1.27	UG/L	ND	ND	ND	ND
N-nitrosodiphenylamine	3.48	UG/L	ND	ND	ND	ND
N-nitrosodi-n-propylamine	1.16	UG/L	ND	ND	ND	ND
Phenanthrene	1.34	UG/L	ND	ND	ND	ND
Pyrene	1.43	UG/L	ND	ND	ND	ND
Polynuc. Aromatic Hydrocarbons	1.77	UG/L	0.0	0.0	0.0	0.0
Base/Neutral Compounds	8.96	UG/L	4.50	17.90	4.10	24.60

Additional analytes determined

1-Methylnaphthalene	2.18	UG/L	ND	ND	ND	ND
2-Methylnaphthalene	2.14	UG/L	ND	ND	ND	ND
2,6-Dimethylnaphthalene	2.16	UG/L	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	2.18	UG/L	ND	ND	ND	ND
1-Methylphenanthrene	1.46	UG/L	ND	ND	ND	ND
Benzo[e]pyrene	1.44	UG/L	ND	ND	ND	ND
Perylene	1.41	UG/L	ND	ND	ND	ND
Biphenyl	2.29	UG/L	ND	ND	ND	ND
Pyridine	3.33	UG/L	ND	ND	ND	5.0

ND = Not Detected

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Base/Neutral Compounds

Analyte	MDL	Units	N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
			P649638	P661115	P671113	P677662
1,2,4-Trichlorobenzene	1.52	UG/L	ND	ND	ND	ND
1,2-Diphenylhydrazine	1.37	UG/L	ND	ND	ND	ND
2,4-Dinitrotoluene	1.36	UG/L	ND	ND	ND	ND
2,6-Dinitrotoluene	1.53	UG/L	ND	ND	ND	ND
Dibenzo(a,h)anthracene	1.01	UG/L	ND	ND	ND	ND
Diethyl phthalate	3.05	UG/L	ND	ND	ND	ND
Dimethyl phthalate	1.44	UG/L	ND	ND	ND	ND
Di-n-butyl phthalate	3.96	UG/L	ND	ND	ND	ND
Di-n-octyl phthalate	1	UG/L	ND	ND	ND	ND
2-Chloronaphthalene	1.87	UG/L	ND	ND	ND	ND
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	1.35	UG/L	ND	ND	ND	ND
4-Bromophenyl phenyl ether	1.4	UG/L	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	1.57	UG/L	ND	ND	ND	ND
Hexachloroethane	1.32	UG/L	ND	ND	ND	ND
Hexachlorobenzene	1.48	UG/L	ND	ND	ND	ND
Hexachlorobutadiene	1.64	UG/L	ND	ND	ND	ND
Hexachlorocyclopentadiene	1.25	UG/L	ND	ND	ND	ND
Acenaphthene	1.8	UG/L	ND	ND	ND	ND
Acenaphthylene	1.77	UG/L	ND	ND	ND	ND
Anthracene	1.29	UG/L	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	1.16	UG/L	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	8.96	UG/L	26.5	17.4	13.7	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND
Benzo[a]anthracene	1.1	UG/L	ND	ND	ND	ND
Benzo[a]pyrene	1.25	UG/L	ND	ND	ND	ND
Benzo[g,h,i]perylene	1.09	UG/L	ND	ND	ND	ND
Benzo[k]fluoranthene	1.49	UG/L	ND	ND	ND	ND
Bis-(2-chloroethoxy) methane	1.01	UG/L	ND	ND	ND	ND
Bis-(2-chloroethyl) ether	1.38	UG/L	ND	ND	ND	ND
Butyl benzyl phthalate	2.84	UG/L	ND	ND	ND	ND
Chrysene	1.16	UG/L	ND	ND	ND	ND
Fluoranthene	1.33	UG/L	ND	ND	ND	ND
Fluorene	1.61	UG/L	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	1.14	UG/L	ND	ND	ND	ND
Isophorone	1.53	UG/L	ND	ND	ND	ND
Naphthalene	1.65	UG/L	ND	ND	ND	ND
Nitrobenzene	1.6	UG/L	ND	ND	ND	ND
N-nitrosodimethylamine	1.27	UG/L	ND	ND	ND	ND
N-nitrosodiphenylamine	3.48	UG/L	ND	ND	ND	ND
N-nitrosodi-n-propylamine	1.16	UG/L	ND	ND	ND	ND
Phenanthrene	1.34	UG/L	ND	ND	ND	ND
Pyrene	1.43	UG/L	ND	ND	ND	ND
Polynuc. Aromatic Hydrocarbons	1.77	UG/L	0.0	0.0	0.0	0.0
Base/Neutral Compounds	8.96	UG/L	26.50	17.40	13.70	0.00

Additional analytes determined

1-Methylnaphthalene	2.18	UG/L	ND	ND	ND	ND
2-Methylnaphthalene	2.14	UG/L	ND	ND	ND	ND
2,6-Dimethylnaphthalene	2.16	UG/L	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	2.18	UG/L	ND	ND	ND	ND
1-Methylphenanthrene	1.46	UG/L	ND	ND	ND	ND
Benzo[e]pyrene	1.44	UG/L	ND	ND	ND	ND
Perylene	1.41	UG/L	ND	ND	ND	ND
Biphenyl	2.29	UG/L	ND	ND	ND	ND
Pyridine	3.33	UG/L	ND	ND	ND	ND

ND= Not Detected

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Organophosphorous Pesticides

Analyte	MDL Units	N01-PS_INF	N01-PS_INF	N01-PEN	N01-PEN
		07-MAY-2013 P661100	01-OCT-2013 P677647	07-MAY-2013 P661105	01-OCT-2013 P677652
Demeton O	.15 UG/L	ND	ND	ND	ND
Demeton S	.08 UG/L	ND	ND	ND	ND
Diazinon	.03 UG/L	ND	ND	ND	ND
Guthion	.15 UG/L	ND	ND	ND	ND
Malathion	.03 UG/L	DNQ 0.080	ND	ND	ND
Parathion	.03 UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.080	0.000	0.000	0.000
Demeton -O, -S	.15 UG/L	0.000	0.000	0.000	0.000
Total Organophosphorus Pesticides	.15 UG/L	0.080	0.000	0.000	0.000
Dichlorvos	.05 UG/L	ND	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND	ND
Dimethoate	.04 UG/L	ND	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND	ND
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND

Analyte	MDL Units	N10-EFF	N10-EFF	N34-REC WATER	N34-REC WATER
		07-MAY-2013 P661110	01-OCT-2013 P677657	07-MAY-2013 P661115	01-OCT-2013 P677662
Demeton O	.15 UG/L	ND	ND	ND	ND
Demeton S	.08 UG/L	ND	ND	ND	ND
Diazinon	.03 UG/L	ND	ND	ND	ND
Guthion	.15 UG/L	ND	ND	ND	ND
Malathion	.03 UG/L	ND	ND	ND	ND
Parathion	.03 UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.000	0.000	0.000	0.000
Demeton -O, -S	.15 UG/L	0.000	0.000	0.000	0.000
Total Organophosphorus Pesticides	.15 UG/L	0.140	0.000	0.000	0.000
Dichlorvos	.05 UG/L	ND	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND	ND
Dimethoate	.04 UG/L	DNQ 0.140	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND	ND
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND

ND = Not Detected

DNQ = Detected but not quantified. Sample results were less than Minimum Level (ML), but greater than or equal to the MDL

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Benzidines

Source:			N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
Date:			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
	MDL	Units	P649623	P661100	P671098	P677647
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND

Source:			N01-PEN	N01-PEN	N01-PEN	N01-PEN
Date:			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
	MDL	Units	P649628	P661105	P671103	P677652
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND

Source:			N10-EFF	N10-EFF	N10-EFF	N10-EFF
Date:			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
	MDL	Units	P649633	P661110	P671108	P677657
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND

Source:			N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
Date:			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
	MDL	Units	P649638	P661115	P671113	P677662
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND

ND= Not Detected

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Phenolic Compounds

Analyte	MDL	Units	N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
			05-FEB-2013 P649623	07-MAY-2013 P661100	06-AUG-2013 P671098	01-OCT-2013 P677647
2,4,6-Trichlorophenol	1.65	UG/L	ND	ND	ND	ND
2,4-Dichlorophenol	1.01	UG/L	ND	ND	ND	ND
2,4-Dimethylphenol	2.01	UG/L	ND	ND	ND	ND
2,4-Dinitrophenol	2.16	UG/L	ND	ND	ND	ND
2-Methyl-4,6-dinitrophenol	1.52	UG/L	ND	ND	ND	ND
2-Chlorophenol	1.32	UG/L	ND	ND	ND	ND
2-Nitrophenol	1.55	UG/L	ND	ND	ND	ND
4-Chloro-3-methylphenol	1.67	UG/L	ND	ND	ND	ND
4-Nitrophenol	1.14	UG/L	ND	ND	ND	ND
Pentachlorophenol	1.12	UG/L	ND	ND	ND	ND
Phenol	1.76	UG/L	24.60	30.30	26.70	31.30
=====						
Total Non-Chlorinated Phenols	2.16	UG/L	24.60	30.30	26.70	31.30
Total Chlorinated Phenols	1.67	UG/L	0.00	0.00	0.00	0.00
=====						
Phenols	2.16	UG/L	24.60	30.30	26.70	31.30

Additional analytes determined

2-Methylphenol	2.15	UG/L	ND	ND	ND	ND
3-Methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA
4-Methylphenol(3-MP is unresolved)	2.11	UG/L	65.90	69.00	58.90	106.00
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	ND

Analyte	MDL	Units	N01-PEN	N01-PEN	N01-PEN	N01-PEN
			05-FEB-2013 P649628	07-MAY-2013 P661105	06-AUG-2013 P671103	01-OCT-2013 P677652
2,4,6-Trichlorophenol	1.65	UG/L	ND	ND	ND	ND
2,4-Dichlorophenol	1.01	UG/L	ND	ND	ND	ND
2,4-Dimethylphenol	2.01	UG/L	ND	ND	ND	ND
2,4-Dinitrophenol	2.16	UG/L	ND	ND	ND	ND
2-Methyl-4,6-dinitrophenol	1.52	UG/L	ND	ND	ND	ND
2-Chlorophenol	1.32	UG/L	ND	ND	ND	ND
2-Nitrophenol	1.55	UG/L	ND	ND	ND	ND
4-Chloro-3-methylphenol	1.67	UG/L	ND	ND	ND	ND
4-Nitrophenol	1.14	UG/L	ND	ND	ND	ND
Pentachlorophenol	1.12	UG/L	ND	ND	ND	ND
Phenol	1.76	UG/L	9.50	8.56	5.32	8.89
=====						
Total Non-Chlorinated Phenols	2.16	UG/L	9.50	8.56	5.32	8.89
Total Chlorinated Phenols	1.67	UG/L	0.00	0.00	0.00	0.00
=====						
Phenols	2.16	UG/L	9.50	8.56	5.32	8.89

Additional analytes determined

2-Methylphenol	2.15	UG/L	ND	ND	ND	ND
3-Methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA
4-Methylphenol(3-MP is unresolved)	2.11	UG/L	16.70	14.90	6.78	14.40
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	ND

ND= Not Detected
NA= Not Analyzed

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Phenolic Compounds

Analyte	MDL	Units	N10-EFF	N10-EFF	N10-EFF	N10-EFF
			05-FEB-2013 P649633	07-MAY-2013 P661110	06-AUG-2013 P671108	01-OCT-2013 P677657
2,4,6-Trichlorophenol	1.65	UG/L	ND	ND	ND	ND
2,4-Dichlorophenol	1.01	UG/L	ND	ND	ND	ND
2,4-Dimethylphenol	2.01	UG/L	ND	ND	ND	ND
2,4-Dinitrophenol	2.16	UG/L	ND	ND	ND	ND
2-Methyl-4,6-dinitrophenol	1.52	UG/L	ND	ND	ND	ND
2-Chlorophenol	1.32	UG/L	ND	ND	ND	ND
2-Nitrophenol	1.55	UG/L	ND	ND	ND	ND
4-Chloro-3-methylphenol	1.67	UG/L	ND	ND	ND	ND
4-Nitrophenol	1.14	UG/L	ND	ND	ND	ND
Pentachlorophenol	1.12	UG/L	ND	ND	ND	ND
Phenol	1.76	UG/L	18.20	15.10	9.29	15.60
=====						
Total Non-Chlorinated Phenols	2.16	UG/L	18.20	15.10	9.29	15.60
Total Chlorinated Phenols	1.67	UG/L	0.00	0.00	0.00	0.00
=====						
Phenols	2.16	UG/L	18.20	15.10	9.29	15.60

Additional analytes determined

Analyte	MDL	Units	N10-EFF	N10-EFF	N10-EFF	N10-EFF
			05-FEB-2013 P649633	07-MAY-2013 P661110	06-AUG-2013 P671108	01-OCT-2013 P677657
2-Methylphenol	2.15	UG/L	ND	ND	ND	ND
3-Methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA
4-Methylphenol(3-MP is unresolved)	2.11	UG/L	30.20	29.40	18.20	39.20
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	ND

Analyte	MDL	Units	N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
			05-FEB-2013 P649638	07-MAY-2013 P661115	06-AUG-2013 P671113	01-OCT-2013 P677662
2,4,6-Trichlorophenol	1.65	UG/L	ND	ND	ND	ND
2,4-Dichlorophenol	1.01	UG/L	ND	ND	ND	ND
2,4-Dimethylphenol	2.01	UG/L	ND	ND	ND	ND
2,4-Dinitrophenol	2.16	UG/L	ND	ND	ND	ND
2-Methyl-4,6-dinitrophenol	1.52	UG/L	ND	ND	ND	ND
2-Chlorophenol	1.32	UG/L	ND	ND	ND	ND
2-Nitrophenol	1.55	UG/L	ND	ND	ND	ND
4-Chloro-3-methylphenol	1.67	UG/L	ND	ND	ND	ND
4-Nitrophenol	1.14	UG/L	ND	ND	ND	ND
Pentachlorophenol	1.12	UG/L	ND	ND	ND	ND
Phenol	1.76	UG/L	ND	ND	ND	ND
=====						
Total Non-Chlorinated Phenols	2.16	UG/L	0.00	0.00	0.00	0.00
Total Chlorinated Phenols	1.67	UG/L	0.00	0.00	0.00	0.00
=====						
Phenols	2.16	UG/L	0.00	0.00	0.00	0.00

Additional analytes determined

Analyte	MDL	Units	N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
			05-FEB-2013 P649638	07-MAY-2013 P661115	06-AUG-2013 P671113	01-OCT-2013 P677662
2-Methylphenol	2.15	UG/L	ND	ND	ND	ND
3-Methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA
4-Methylphenol(3-MP is unresolved)	2.11	UG/L	ND	ND	ND	ND
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	ND

ND= Not Detected
NA= Not Analyzed

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Priority Pollutants Purgeable Compounds, EPA Method 8260B

Analyte	MDL	Units	N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
			05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
			P649626	P661103	P671101	P677650
=====	===	=====	=====	=====	=====	=====
Chloromethane	.5	UG/L	ND	ND	ND	ND
Bromomethane	.7	UG/L	ND	ND	ND	ND
Vinyl chloride	.4	UG/L	ND	ND	ND	ND
Chloroethane	.9	UG/L	ND	ND	ND	ND
1,1-Dichloroethane	.4	UG/L	ND	ND	ND	ND
Trichlorofluoromethane	.3	UG/L	ND	ND	ND	ND
Methylene chloride	.3	UG/L	ND	ND	1.3	1.3
1,1-Dichloroethene	.4	UG/L	ND	ND	ND	ND
trans-1,2-dichloroethene	.6	UG/L	ND	ND	ND	ND
Chloroform	.2	UG/L	1.1	1.7	1.5	1.8
1,2-Dichloroethane	.5	UG/L	ND	ND	ND	ND
1,1,1-Trichloroethane	.4	UG/L	ND	ND	ND	ND
Carbon tetrachloride	.4	UG/L	ND	ND	ND	ND
Bromodichloromethane	.5	UG/L	DNQ 0.5	ND	ND	ND
1,2-Dichloropropane	.3	UG/L	ND	ND	ND	ND
trans-1,3-dichloropropene	.5	UG/L	ND	ND	ND	ND
Trichloroethene	.7	UG/L	ND	ND	ND	ND
Benzene	.4	UG/L	ND	ND	ND	ND
Dibromochloromethane	.6	UG/L	ND	ND	ND	ND
1,1,2-Trichloroethane	.5	UG/L	ND	ND	ND	ND
cis-1,3-dichloropropene	.3	UG/L	ND	ND	ND	ND
2-Chloroethylvinyl ether	1.1	UG/L	ND	ND	ND	ND
Bromoform	.5	UG/L	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	.5	UG/L	ND	ND	ND	ND
Tetrachloroethene	1.1	UG/L	ND	ND	ND	ND
Chlorobenzene	.4	UG/L	ND	ND	ND	ND
Toluene	.4	UG/L	7.2	2.1	5.0	9.9
Ethylbenzene	.3	UG/L	ND	ND	ND	DNQ 0.5
Acrylonitrile	.7	UG/L	ND	ND	ND	ND
Acrolein	1.3	UG/L	ND	ND	ND	ND
1,2-Dichlorobenzene	.4	UG/L	ND	ND	ND	ND
1,4-Dichlorobenzene	.4	UG/L	3.3*	ND	DNQ 0.9	DNQ 0.9
1,3-Dichlorobenzene	.5	UG/L	ND	ND	ND	ND
Dichlorodifluoromethane	.66	UG/L	ND	ND	ND	ND
=====	===	=====	=====	=====	=====	=====
Halomethane Purgeable Cmpnds	.7	UG/L	0.5	0.0	0.0	0.0
Purgeable Compounds	1.3	UG/L	8.8	3.8	7.8	13.5
=====	===	=====	=====	=====	=====	=====
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.9	0.9

* This analyte was found in blanks with values >5% of the sample value. Value was not used in calculation total.

ND= Not Detected

DNQ= Detected but not quantified. Sample results were less than Minimum Level (ML), but greater than or equal to the MDL

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Priority Pollutants Purgeable Compounds, EPA Method 8260B

Additional analytes	MDL Units	N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
		05-FEB-2013	07-MAY-2013	06-AUG-2013	01-OCT-2013
		P649626	P661103	P671101	P677650
=====	====	=====	=====	=====	=====
Allyl chloride	.6 UG/L	ND	ND	ND	ND
4-Methyl-2-pentanone	1.3 UG/L	ND	ND	ND	ND
meta,para xylenes	.6 UG/L	ND	ND	ND	ND
Styrene	.3 UG/L	ND	ND	ND	ND
1,2,4-Trichlorobenzene	.7 UG/L	ND	ND	ND	ND
Methyl Iodide	.6 UG/L	ND	ND	ND	ND
Chloroprene	.4 UG/L	ND	ND	ND	ND
Methyl methacrylate	.8 UG/L	ND	ND	ND	ND
2-Nitropropane	12 UG/L	ND	ND	ND	ND
1,2-Dibromoethane	.3 UG/L	ND	ND	ND	ND
Isopropylbenzene	.3 UG/L	ND	ND	ND	ND
Benzyl chloride	1.1 UG/L	ND	ND	ND	ND
ortho-xylene	.4 UG/L	ND	ND	ND	ND
Acetone	4.5 UG/L	967	1190	1680	1260
Carbon disulfide	.6 UG/L	DNQ 0.9	1.5	2.5	3.1
2-Butanone	6.3 UG/L	ND	ND	DNQ 7.3	ND
Methyl tert-butyl ether	.4 UG/L	ND	ND	ND	ND

ND= Not Detected

DNQ= Detected but not quantified. Sample results were less than Minimum Level (ML), but greater than or equal to the MDL

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Priority Pollutants Purgeable Compounds, EPA Method 8260B

Analyte	MDL	Units	N01-PEN	N01-PEN	N01-PEN	N01-PEN
			05-FEB-2013 P649631	07-MAY-2013 P661108	06-AUG-2013 P671106	01-OCT-2013 P677655
Chloromethane	.5	UG/L	ND	ND	ND	ND
Bromomethane	.7	UG/L	ND	ND	ND	ND
Vinyl chloride	.4	UG/L	ND	ND	ND	ND
Chloroethane	.9	UG/L	ND	ND	ND	ND
1,1-Dichloroethane	.4	UG/L	ND	ND	ND	ND
Trichlorofluoromethane	.3	UG/L	ND	ND	ND	ND
Methylene chloride	.3	UG/L	ND	ND	DNQ 0.7	1.1
1,1-Dichloroethene	.4	UG/L	ND	ND	ND	ND
trans-1,2-dichloroethene	.6	UG/L	ND	ND	ND	ND
Chloroform	.2	UG/L	1.5	2.1	1.7	2.0
1,2-Dichloroethane	.5	UG/L	ND	ND	ND	ND
1,1,1-Trichloroethane	.4	UG/L	ND	ND	ND	ND
Carbon tetrachloride	.4	UG/L	ND	ND	ND	ND
Bromodichloromethane	.5	UG/L	ND	ND	ND	ND
1,2-Dichloropropane	.3	UG/L	ND	ND	ND	ND
trans-1,3-dichloropropene	.5	UG/L	ND	ND	ND	ND
Trichloroethene	.7	UG/L	ND	ND	ND	ND
Benzene	.4	UG/L	ND	ND	ND	ND
Dibromochloromethane	.6	UG/L	ND	ND	ND	ND
1,1,2-Trichloroethane	.5	UG/L	ND	ND	ND	ND
cis-1,3-dichloropropene	.3	UG/L	ND	ND	ND	ND
2-Chloroethylvinyl ether	1.1	UG/L	ND	ND	ND	ND
Bromoform	.5	UG/L	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	.5	UG/L	ND	ND	ND	ND
Tetrachloroethene	1.1	UG/L	ND	ND	ND	ND
Chlorobenzene	.4	UG/L	ND	ND	ND	ND
Toluene	.4	UG/L	ND	DNQ 0.5	ND	ND
Ethylbenzene	.3	UG/L	ND	ND	ND	ND
Acrylonitrile	.7	UG/L	ND	ND	ND	ND
Acrolein	1.3	UG/L	ND	ND	ND	ND
1,2-Dichlorobenzene	.4	UG/L	ND	ND	ND	ND
1,4-Dichlorobenzene	.4	UG/L	ND	ND	ND	ND
1,3-Dichlorobenzene	.5	UG/L	ND	ND	ND	ND
Dichlorodifluoromethane	.66	UG/L	ND	ND	ND	ND
Halomethane Purgeable Cmpnds	.7	UG/L	0.0	0.0	0.0	0.0
Purgeable Compounds	1.3	UG/L	1.5	2.6	2.4	3.1
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.0
Additional analytes determined						
Allyl chloride	.6	UG/L	ND	ND	ND	ND
4-Methyl-2-pentanone	1.3	UG/L	ND	ND	ND	ND
meta,para xylenes	.6	UG/L	ND	ND	ND	ND
Styrene	.3	UG/L	ND	ND	ND	ND
1,2,4-Trichlorobenzene	.7	UG/L	ND	ND	ND	ND
Methyl Iodide	.6	UG/L	ND	ND	ND	ND
Chloroprene	.4	UG/L	ND	ND	ND	ND
Methyl methacrylate	.8	UG/L	ND	ND	ND	ND
2-Nitropropane	12	UG/L	ND	ND	ND	ND
1,2-Dibromoethane	.3	UG/L	ND	ND	ND	ND
Isopropylbenzene	.3	UG/L	ND	ND	ND	ND
Benzyl chloride	1.1	UG/L	ND	ND	ND	ND
ortho-xylene	.4	UG/L	ND	ND	ND	ND
Acetone	4.5	UG/L	305	240	386	490
Carbon disulfide	.6	UG/L	DNQ 0.7	1.0	1.3	2.3
2-Butanone	6.3	UG/L	DNQ 7.7	DNQ 7.4	ND	ND
Methyl tert-butyl ether	.4	UG/L	ND	ND	ND	ND

ND= Not Detected

DNQ= Detected but not quantified. Sample results were less than Minimum Level (ML), but greater than or equal to the MDL

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Priority Pollutants Purgeable Compounds, EPA Method 8260B

Analyte	MDL	Units	N10-EFF	N10-EFF	N10-EFF	N10-EFF
			05-FEB-2013 P649636	07-MAY-2013 P661113	06-AUG-2013 P671111	01-OCT-2013 P677660
Chloromethane	.5	UG/L	ND	ND	ND	ND
Bromomethane	.7	UG/L	ND	ND	ND	ND
Vinyl chloride	.4	UG/L	ND	ND	ND	ND
Chloroethane	.9	UG/L	ND	ND	ND	ND
1,1-Dichloroethane	.4	UG/L	ND	ND	ND	ND
Trichlorofluoromethane	.3	UG/L	ND	ND	ND	ND
Methylene chloride	.3	UG/L	ND	ND	DNQ0.9	5.0
1,1-Dichloroethene	.4	UG/L	ND	ND	ND	ND
trans-1,2-dichloroethene	.6	UG/L	ND	ND	ND	ND
Chloroform	.2	UG/L	2.2	3.0	1.6	2.1
1,2-Dichloroethane	.5	UG/L	ND	ND	ND	ND
1,1,1-Trichloroethane	.4	UG/L	ND	ND	ND	ND
Carbon tetrachloride	.4	UG/L	ND	ND	ND	ND
Bromodichloromethane	.5	UG/L	DNQ0.8	DNQ0.8	ND	ND
1,2-Dichloropropane	.3	UG/L	ND	ND	ND	ND
trans-1,3-dichloropropene	.5	UG/L	ND	ND	ND	ND
Trichloroethene	.7	UG/L	ND	ND	ND	ND
Benzene	.4	UG/L	ND	ND	ND	ND
Dibromochloromethane	.6	UG/L	ND	ND	ND	ND
1,1,2-Trichloroethane	.5	UG/L	ND	ND	ND	ND
cis-1,3-dichloropropene	.3	UG/L	ND	ND	ND	ND
2-Chloroethylvinyl ether	1.1	UG/L	ND	ND	ND	ND
Bromoform	.5	UG/L	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	.5	UG/L	ND	ND	ND	ND
Tetrachloroethene	1.1	UG/L	ND	ND	ND	ND
Chlorobenzene	.4	UG/L	ND	ND	ND	ND
Toluene	.4	UG/L	7.8	3.6	8.2	12.0
Ethylbenzene	.3	UG/L	ND	ND	ND	ND
Acrylonitrile	.7	UG/L	ND	ND	ND	ND
Acrolein	1.3	UG/L	ND	ND	ND	ND
1,2-Dichlorobenzene	.4	UG/L	ND	ND	ND	ND
1,4-Dichlorobenzene	.4	UG/L	ND	DNQ0.8	1.3	DNQ0.8
1,3-Dichlorobenzene	.5	UG/L	ND	ND	ND	ND
Dichlorodifluoromethane	.66	UG/L	ND	ND	ND	ND
Halomethane Purgeable Cmpnds	.7	UG/L	0.8	0.8	0.0	0.0
Purgeable Compounds	1.3	UG/L	10.8	7.4	10.7	19.1
Total Dichlorobenzenes	.5	UG/L	0.0	0.8	1.3	0.8
Additional analytes determined						
Allyl chloride	.6	UG/L	ND	ND	ND	ND
4-Methyl-2-pentanone	1.3	UG/L	ND	ND	ND	ND
meta,para xylenes	.6	UG/L	ND	ND	ND	ND
Styrene	.3	UG/L	ND	ND	ND	ND
1,2,4-Trichlorobenzene	.7	UG/L	ND	ND	ND	ND
Methyl Iodide	.6	UG/L	ND	ND	ND	ND
Chloroprene	.4	UG/L	ND	ND	ND	ND
Methyl methacrylate	.8	UG/L	ND	ND	ND	ND
2-Nitropropane	12	UG/L	ND	ND	ND	ND
1,2-Dibromoethane	.3	UG/L	ND	ND	ND	ND
Isopropylbenzene	.3	UG/L	ND	ND	ND	ND
Benzyl chloride	1.1	UG/L	ND	ND	ND	ND
ortho-xylene	.4	UG/L	ND	ND	ND	ND
Acetone	4.5	UG/L	771	352	396	975
Carbon disulfide	.6	UG/L	1.4	1.5	2.3	3.4
2-Butanone	6.3	UG/L	12.0	13.6	11.1	ND
Methyl tert-butyl ether	.4	UG/L	ND	ND	ND	ND

ND= Not Detected, NA= not analyzed, NS= not sampled
DNQ= Detected but not quantified. Sample results were less than Minimum Level (ML), but greater than or equal to the MDL

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Priority Pollutants Purgeable Compounds, EPA Method 8260B

Analyte	MDL	Units	N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
			05-FEB-2013 P649641	07-MAY-2013 P661118	06-AUG-2013 P671116	01-OCT-2013 P677665
Chloromethane	.5	UG/L	ND	ND	ND	ND
Bromomethane	.7	UG/L	ND	ND	ND	ND
Vinyl chloride	.4	UG/L	ND	ND	ND	ND
Chloroethane	.9	UG/L	ND	ND	ND	ND
1,1-Dichloroethane	.4	UG/L	ND	ND	ND	ND
Trichlorofluoromethane	.3	UG/L	ND	ND	ND	ND
Methylene chloride	.3	UG/L	ND	ND	ND	ND
1,1-Dichloroethene	.4	UG/L	ND	ND	ND	ND
trans-1,2-dichloroethene	.6	UG/L	ND	ND	ND	ND
Chloroform	.2	UG/L	22.3	39.0	49.3	42.0
1,2-Dichloroethane	.5	UG/L	ND	ND	ND	ND
1,1,1-Trichloroethane	.4	UG/L	ND	ND	ND	ND
Carbon tetrachloride	.4	UG/L	ND	ND	ND	ND
Bromodichloromethane	.5	UG/L	31.1	39.5	42.9	36.3
1,2-Dichloropropane	.3	UG/L	ND	ND	ND	ND
trans-1,3-dichloropropene	.5	UG/L	ND	ND	ND	ND
Trichloroethene	.7	UG/L	ND	ND	ND	ND
Benzene	.4	UG/L	ND	ND	ND	ND
Dibromochloromethane	.6	UG/L	29.3	25.6	26.1	23.1
1,1,2-Trichloroethane	.5	UG/L	ND	ND	ND	ND
cis-1,3-dichloropropene	.3	UG/L	ND	ND	ND	ND
2-Chloroethylvinyl ether	1.1	UG/L	ND	ND	ND	ND
Bromoform	.5	UG/L	5.2	3.2	2.5	2.7
1,1,2,2-Tetrachloroethane	.5	UG/L	ND	ND	ND	ND
Tetrachloroethene	1.1	UG/L	ND	ND	ND	ND
Chlorobenzene	.4	UG/L	ND	ND	ND	ND
Toluene	.4	UG/L	ND	ND	ND	ND
Ethylbenzene	.3	UG/L	ND	ND	ND	ND
Acrylonitrile	.7	UG/L	ND	ND	ND	ND
Acrolein	1.3	UG/L	ND	ND	ND	ND
1,2-Dichlorobenzene	.4	UG/L	ND	ND	ND	ND
1,4-Dichlorobenzene	.4	UG/L	0.47*	ND	ND	ND
1,3-Dichlorobenzene	.5	UG/L	ND	ND	ND	ND
Dichlorodifluoromethane	.66	UG/L	ND	ND	ND	ND
Halomethane Purgeable Cmpnds	.7	UG/L	65.6	68.3	71.5	62.1
Purgeable Compounds	1.3	UG/L	87.9	107.3	120.8	104.1
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.0

* This analyte was found in blanks with values >5% of the sample value. Value was not used in calculation total.

ND= Not Detected, NA= not analyzed, NS= not sampled
DNQ= Detected but not quantified. Sample results were less than Minimum Level (ML), but greater than or equal to the MDL

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Priority Pollutants Purgeable Compounds, EPA Method 8260B

Additional analytes	MDL	Units	N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
			05-FEB-2013 P649641	07-MAY-2013 P661118	06-AUG-2013 P671116	01-OCT-2013 P677665
Allyl chloride	.6	UG/L	ND	ND	ND	ND
4-Methyl-2-pentanone	1.3	UG/L	ND	ND	ND	ND
meta,para xylenes	.6	UG/L	ND	ND	ND	ND
Styrene	.3	UG/L	ND	ND	ND	ND
1,2,4-Trichlorobenzene	.7	UG/L	ND	ND	ND	ND
Methyl Iodide	.6	UG/L	ND	ND	ND	ND
Chloroprene	.4	UG/L	ND	ND	ND	ND
Methyl methacrylate	.8	UG/L	ND	ND	ND	ND
2-Nitropropane	12	UG/L	ND	ND	ND	ND
1,2-Dibromoethane	.3	UG/L	ND	ND	ND	ND
Isopropylbenzene	.3	UG/L	ND	ND	ND	ND
Benzyl chloride	1.1	UG/L	ND	ND	ND	ND
ortho-xylene	.4	UG/L	ND	ND	ND	ND
Acetone	4.5	UG/L	ND	ND	ND	ND
Carbon disulfide	.6	UG/L	ND	ND	ND	ND
2-Butanone	6.3	UG/L	ND	ND	ND	ND
Methyl tert-butyl ether	.4	UG/L	ND	ND	ND	ND

ND= Not Detected, NA= not analyzed, NS= not sampled
DNQ= Detected but not quantified. Sample results were less than Minimum Level (ML), but greater than or equal to the MDL