



THE CITY OF SAN DIEGO

# **NORTH CITY WATER RECLAMATION PLANT**

## **ANNUAL MONITORING REPORT**

# **2015**

(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, 2016

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 2015 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,

Peter S. Vroom, Ph.D.  
Public Utilities Deputy Director  
Environmental Monitoring and Technical Services Division

BGB/caq

Enclosure: PDF file of Report

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

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**Environmental Monitoring and Technical Services Division • Public Utilities**

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## 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	PLE	PLE	PLR	PLR	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  $\pm 100\%$  of the result at or near the MDL. Only at concentrations approximately 5 times the MDL is the confidence interval at  $\pm 20\%$  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.

Alvarado 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 Wastewater Chemistry  
(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 2015

<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	12/31/2017
<u>North City Sr. Operations Supervisor</u>			
Pinto, Elisabete	V	V-10265	06/30/2017
Pruett, Sam	V	V-7791	06/30/2015
<u>North City Operations Supervisors</u>			
Blummer, Bruce	III	III-9347	12/31/2016
Carroll, John C.	III	III-28867	12/31/2016
Cozad, John	III	III-7138	12/31/2017
Relph, Robert	III	III-6742	12/31/2016
<u>North City Operators</u>			
Castillo, Jose	III	III-9849	06/30/2017
Jacques, Richie	III	III-27921	06/30/2016
Tomas, Matthew D.	III	III-29004	12/31/2017
Duhamel, Michael A.	II	II-9444	06/30/2016
Duresseau, Gabriel L.	II	II-28294	06/30/2016
Gonzalez-Bueno, Noemi	II	II-41833	10/31/2016
Gutierrez, Marlene E.	II	II-9636	06/30/2017
Saulog, Noel	II	II-10299	12/31/2016
Wendorf, George P.	II	II-9774	12/31/2017
<u>Trussel Technologies</u>			
Faulkner, Brett W.	III	III-41525	08/14/2016
Pisarenko, Aleksey N.	III	III-41526	10/01/2017
Chen, Elise C.	III	III-42568	11/17/2017
Kolakovsky, Aviv	OIT-1	N/A	10/13/2017

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North City Water Reclamation Plant  
2015 Flows

Monthly Totals - Millions of Gallons

Month	Penas- quitos Influent (MG)	Headworks Flow 36" (MG)	Plant Drain Influent (MG)	Disinfect Final Effluent (MG)	Reclaim Water (MG)	N Return (MG)	FES Filter Effluent (MG)	Primary Effluent (MG)	Primary Sludge (MG)	WAS Hi Cap sludge (MG)	WAS Lo Cap sludge (MG)	Filter Backwash (MG)	Total Sludge Flow to MBC (MG)
01	213.1	285.1	22.4	25.3	85.9	341.94	125.34	481.02	16.28	.00	5.63	4.64	27.51
02	168.5	274.3	12.3	20.9	105.0	296.13	137.50	434.18	19.76	.00	4.86	6.37	24.36
03	236.2	283.2	19.9	23.2	148.2	281.87	190.59	476.38	16.62	.00	5.71	10.94	25.67
04	206.7	295.7	30.5	22.8	197.0	208.30	234.17	458.41	21.91	.00	5.63	11.72	27.28
05	153.4	371.8	17.3	21.2	143.1	294.53	182.24	479.75	17.96	.00	6.20	8.87	28.95
06	146.2	345.4	20.5	22.9	219.5	201.29	253.16	462.64	25.51	.14	5.86	9.58	29.90
07	186.9	336.2	18.1	24.9	213.5	240.88	266.20	502.79	19.16	.00	6.15	14.19	32.01
08	193.5	377.5	19.0	23.2	275.3	225.69	364.73	539.83	26.00	.00	6.02	18.21	28.77
09	193.6	365.6	15.9	19.9	226.8	242.59	321.55	507.70	15.56	.00	6.04	16.75	24.02
10	197.6	331.3	19.9	20.4	171.5	287.45	234.88	492.59	26.03	.00	6.57	10.31	32.40
11	170.0	294.6	18.5	23.8	139.1	279.92	183.13	466.40	19.21	.00	5.72	7.17	31.38
12	196.5	301.4	21.6	23.5	97.6	341.31	162.23	480.92	27.04	.00	6.32	7.50	32.73
Average	188.5	321.8	19.7	22.7	168.5	270.16	221.31	481.88	20.92	.01	5.89	10.52	28.75
Total	2262.3	3862.0	235.9	272.0	2022.3	3241.90	2655.72	5782.61	251.04	.14	70.71	126.25	344.98

Daily Averages - Millions of Gallons

Month	Penas- quitos Influent (MG)	Headworks Flow 36" (MG)	Plant Drain Influent (MG)	Disinfect Final Effluent (MG)	Reclaim Water (MG)	N Return (MG)	FES Filter Effluent (MG)	Primary Effluent (MG)	Primary Sludge (MG)	WAS Hi Cap sludge (MG)	WAS Lo Cap sludge (MG)	Filter Backwash (MG)	Total Sludge Flow to MBC (MG)
01	6.9	9.2	.7	.8	2.8	11.03	4.04	15.52	.53	.00	.18	.15	.89
02	6.0	9.8	.4	.7	3.8	10.58	4.91	15.51	.71	.00	.17	.23	.87
03	7.6	9.1	.6	.7	4.8	9.09	6.15	15.37	.54	.00	.18	.35	.83
04	6.9	9.9	1.0	.8	6.6	6.94	7.81	15.28	.73	.00	.19	.39	.91
05	4.9	12.0	.6	.7	4.6	9.50	5.88	15.48	.58	.00	.20	.29	.93
06	4.9	11.5	.7	.8	7.3	6.71	8.44	15.42	.85	.00	.20	.32	1.00
07	6.0	10.8	.6	.8	6.9	7.77	8.59	16.22	.62	.00	.20	.46	1.03
08	6.2	12.2	.6	.7	8.9	7.28	11.77	17.41	.84	.00	.19	.59	.93
09	6.5	12.2	.5	.7	7.6	8.09	10.72	16.92	.52	.00	.20	.56	.80
10	6.4	10.7	.6	.7	5.5	9.27	7.58	15.89	.84	.00	.21	.33	1.05
11	5.7	9.8	.6	.8	4.6	9.33	6.10	15.55	.64	.00	.19	.24	1.05
12	6.3	9.7	.7	.8	3.1	11.01	5.23	15.51	.87	.00	.20	.24	1.06
Average	6.2	10.6	.6	.7	5.5	8.88	7.27	15.84	.69	.00	.19	.35	.94

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 <sup>1</sup>	Maximum Daily <sup>2</sup>	Time <sup>3</sup>
Operations 2015	Chlorine Residual	Chlorine Residual	CT less than
Date	(mg/L)	(mg/L)	450 mg-min/l (min)
Jan	3.61	4.59	0
Feb	3.84	6.11	0
Mar	3.43	10.21	0
Apr	3.15	7.63	0
May	4.36	7.10	0
Jun	3.65	6.37	0
Jul	3.42	8.40	0
Aug	4.08	7.36	0
Sep	3.26	6.78	0
Oct	1.99	8.82	0
Nov	2.68	5.89	0
Dec	2.24	7.97	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 2015 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 <sup>4</sup>				
	Average Daily	Minimum Daily <sup>1</sup>	Maximum Daily <sup>2</sup>	Time Over <sup>3</sup>
Operations 2015	Turbidity	Turbidity	Turbidity	5 NTU's
Date	(NTU)	(NTU)		(MINUTES)
Jan	0.21	0.17	0.35	0.00
Feb	0.22	0.19	0.48	0.00
Mar	0.31	0.28	0.47	0.00
Apr	0.37	0.33	0.62	0.00
May	0.34	0.29	0.58	0.00
Jun	0.30	0.27	0.42	0.00
Jul	0.39	0.33	0.56	0.00
Aug	0.34	0.30	0.52	0.00
Sep	0.33	0.26	0.89	0.00
Oct	0.42	0.38	0.65	0.00
Nov	0.34	0.31	0.49	0.00
Dec	0.29	0.27	0.45	0.00
Average:	0.32	0.28	0.54 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 (N25AIT673) or (N25AIT674), located at meter room of Area 25 (Tertiary Filter Structures)				

North City Reclamation Plant Monthly Monitoring Report  
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(N34-REC) Reclaimed Water - Daily Parameters

MDL/Units	Biochemical Oxygen Demand 2 MG/L	Total Dissolved Solids 100 MG/L	Total Suspended Solids 2.5 MG/L	Volatile Suspended Solids 2.5 MG/L	pH Grab (pH)
=====	=====	=====	=====	=====	=====
JANUARY -2015	ND	835	ND	ND	7.02
FEBRUARY -2015	<2	854	ND	ND	7.01
MARCH -2015	<2	864	ND	ND	7.01
APRIL -2015	ND	866	ND	ND	6.98
MAY -2015	<2	846	ND	ND	6.94
JUNE -2015	ND	880	ND	ND	7.02
JULY -2015	ND	870	ND	ND	6.98
AUGUST -2015	ND	879	ND	ND	6.96
SEPTEMBER-2015	ND	911	ND	ND	6.90
OCTOBER -2015	<2	900	ND	ND	6.90
NOVEMBER -2015	<2	822	ND	ND	7.00
DECEMBER -2015	<2	839	ND	ND	6.95
=====	=====	=====	=====	=====	=====
Average:	0	864	ND	ND	6.97
Maximum:	0	911	ND	ND	7.02
Minimum:	0	822	ND	ND	6.90

All samples are 24-hour composite, except for pH  
ND= Not Detected  
MDLs listed are the maximum MDL for the past 12 months

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

	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)
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	>426	1190	374	319	162	7.46
FEBRUARY -2015	323	1210	298	263	138	7.42
MARCH -2015	303	1190	276	237	143	7.41
APRIL -2015	319	1190	320	280	149	7.39
MAY -2015	316	1130	290	252	119	7.36
JUNE -2015	343	1110	334	291	127	7.41
JULY -2015	323	1090	293	248	126	7.45
AUGUST -2015	300	1190	310	268	128	7.39
SEPTEMBER-2015	319	1220	316	282	128	7.39
OCTOBER -2015	314	1250	316	280	131	7.41
NOVEMBER -2015	345	1080	318	281	147	7.47
DECEMBER -2015	330	1190	329	289	134	7.40
=====	=====	=====	=====	=====	=====	=====
Average:	330	1170	315	274	136	7.41
Maximum:	426	1250	374	319	162	7.47
Minimum:	300	1080	276	237	119	7.36

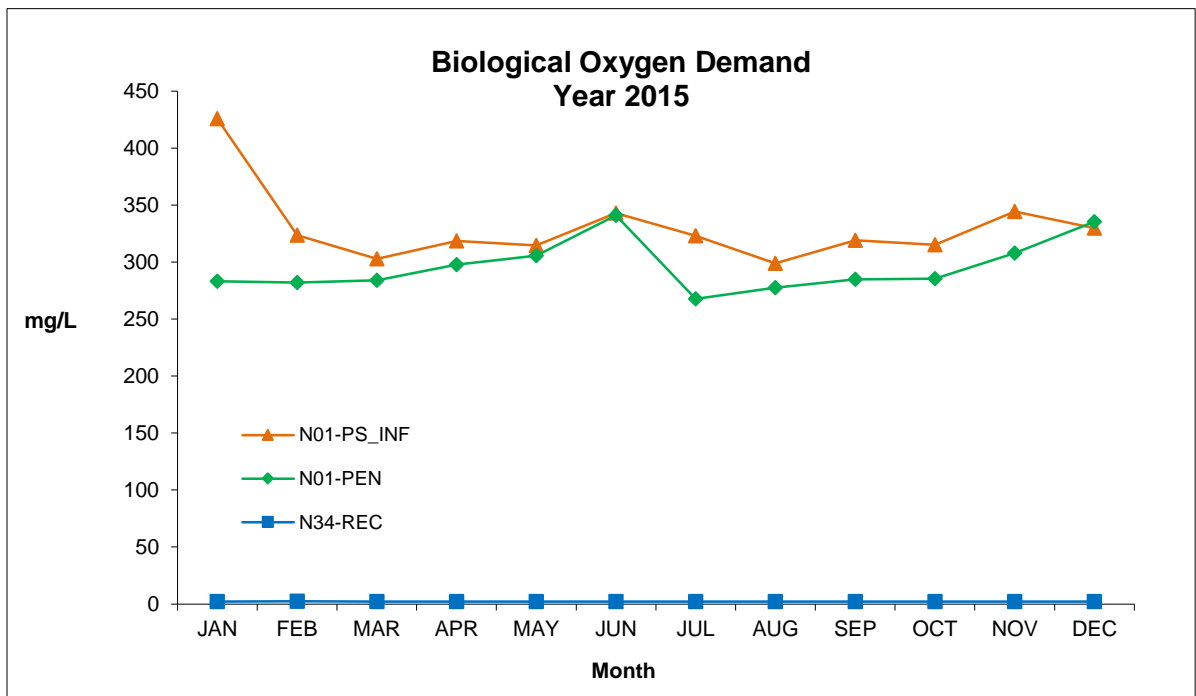
MDLs listed are the maximum MDL for the past 12 months

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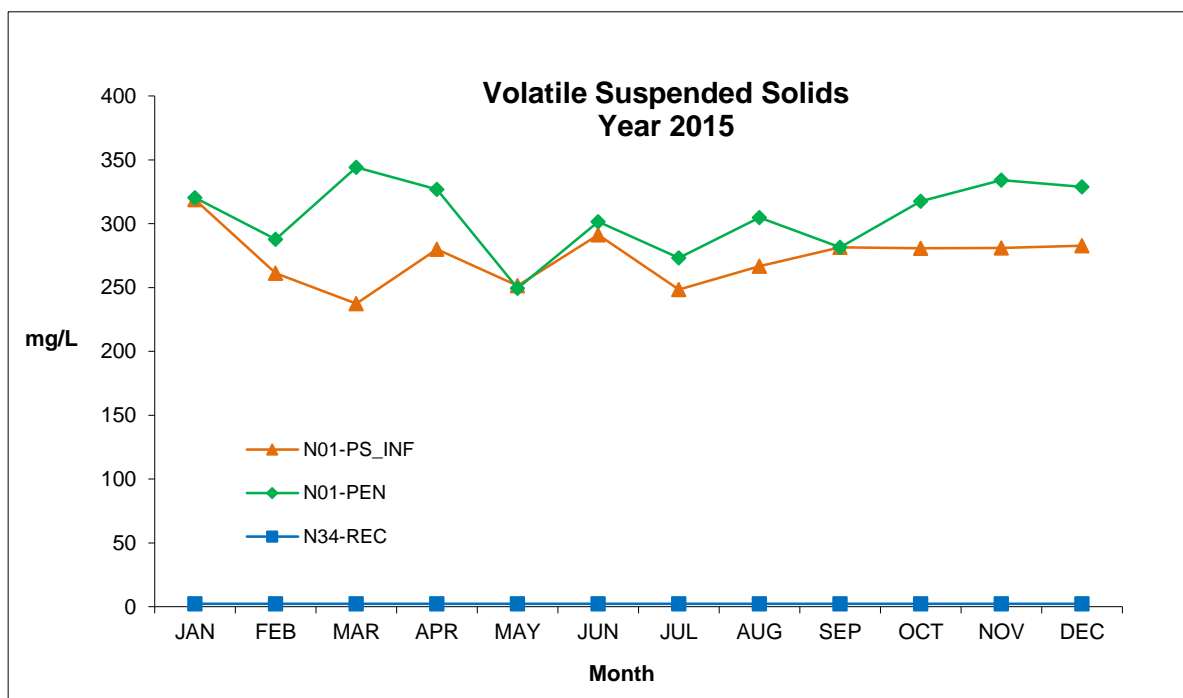
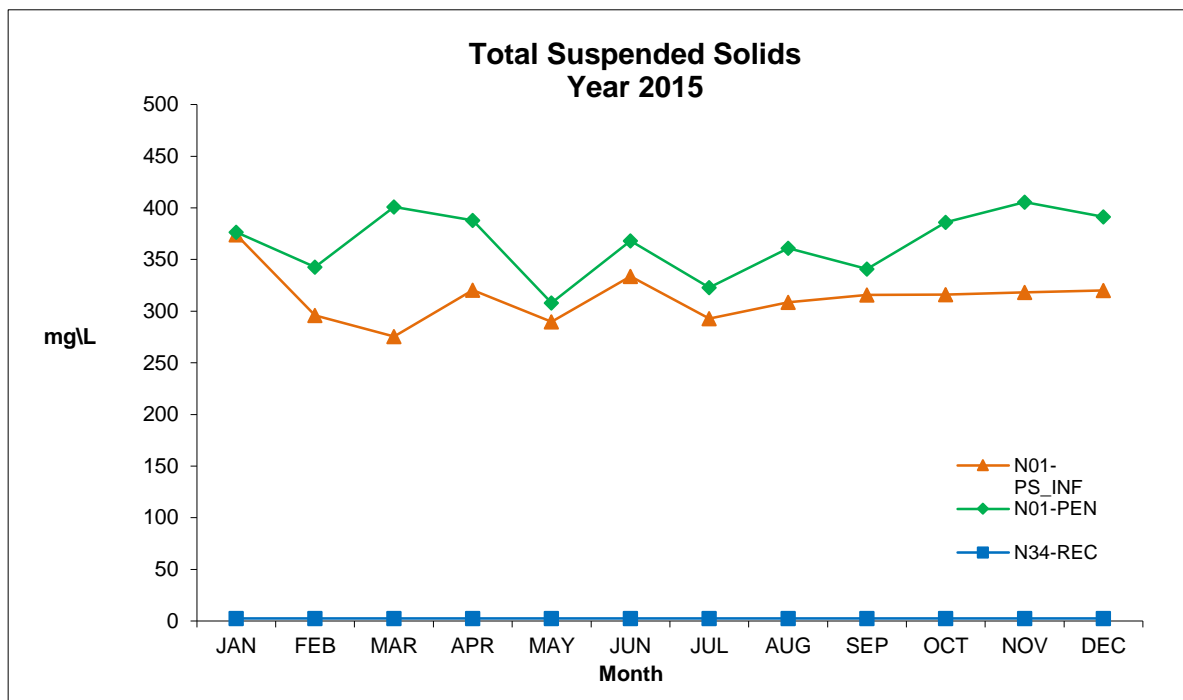
(N01-PEN) Penasquitos Pump Station Influent - Daily Parameters

	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)
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	283	905	377	320	132	7.53
FEBRUARY -2015	286	895	346	291	117	7.48
MARCH -2015	284	888	401	344	119	7.60
APRIL -2015	298	892	388	327	141	7.61
MAY -2015	304	892	311	252	124	7.54
JUNE -2015	341	846	368	302	113	7.51
JULY -2015	268	810	323	273	105	7.59
AUGUST -2015	275	881	356	301	126	7.58
SEPTEMBER-2015	285	911	341	282	120	7.55
OCTOBER -2015	285	899	385	316	140	7.54
NOVEMBER -2015	308	862	405	334	146	7.46
DECEMBER -2015	>335	893	392	329	155	7.44
=====	=====	=====	=====	=====	=====	=====
Average:	296	881	366	306	128	7.54
Maximum:	341	911	405	344	155	7.61
Minimum:	268	810	311	252	105	7.44



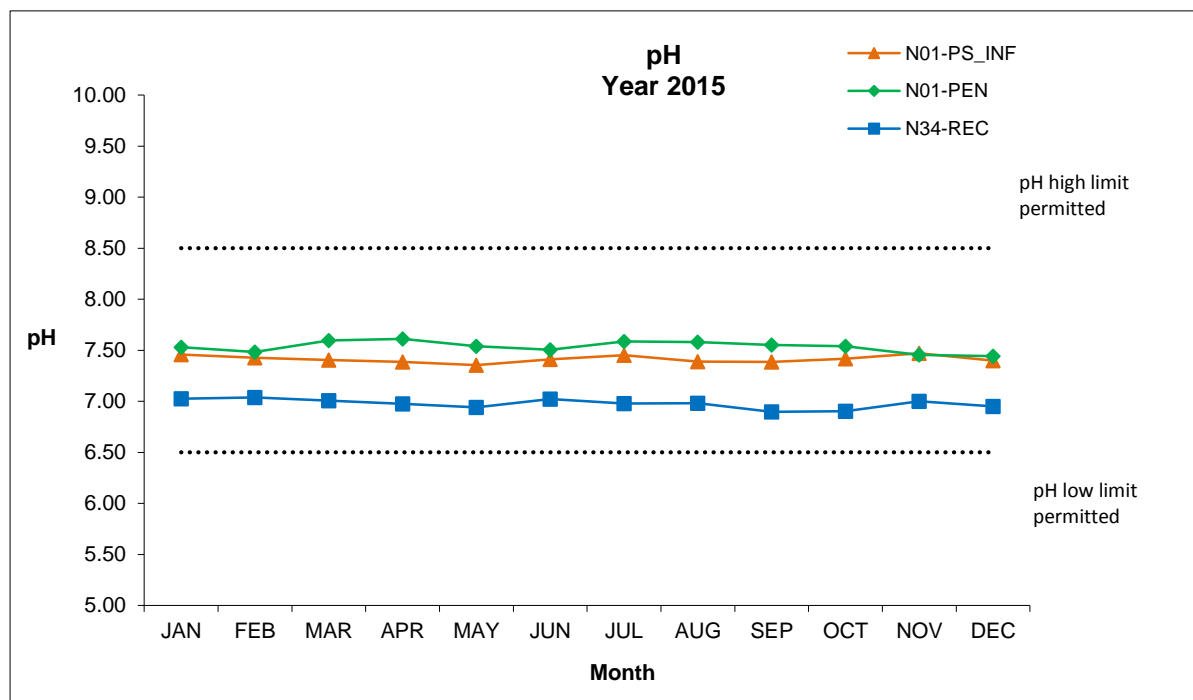
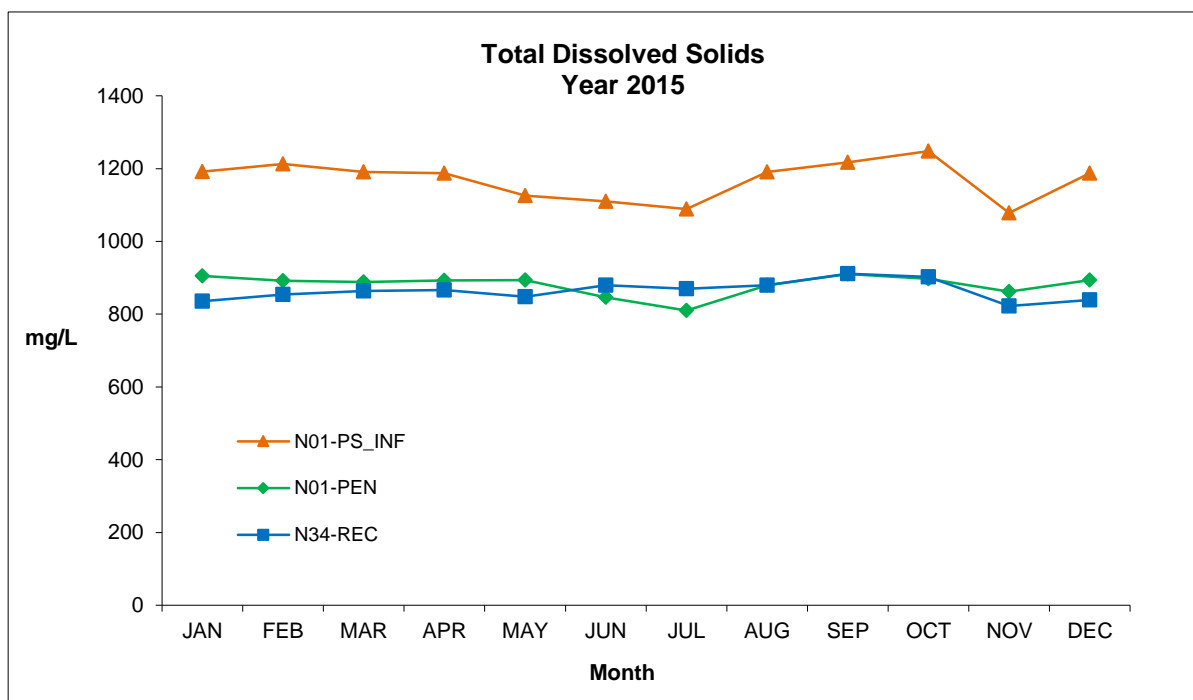
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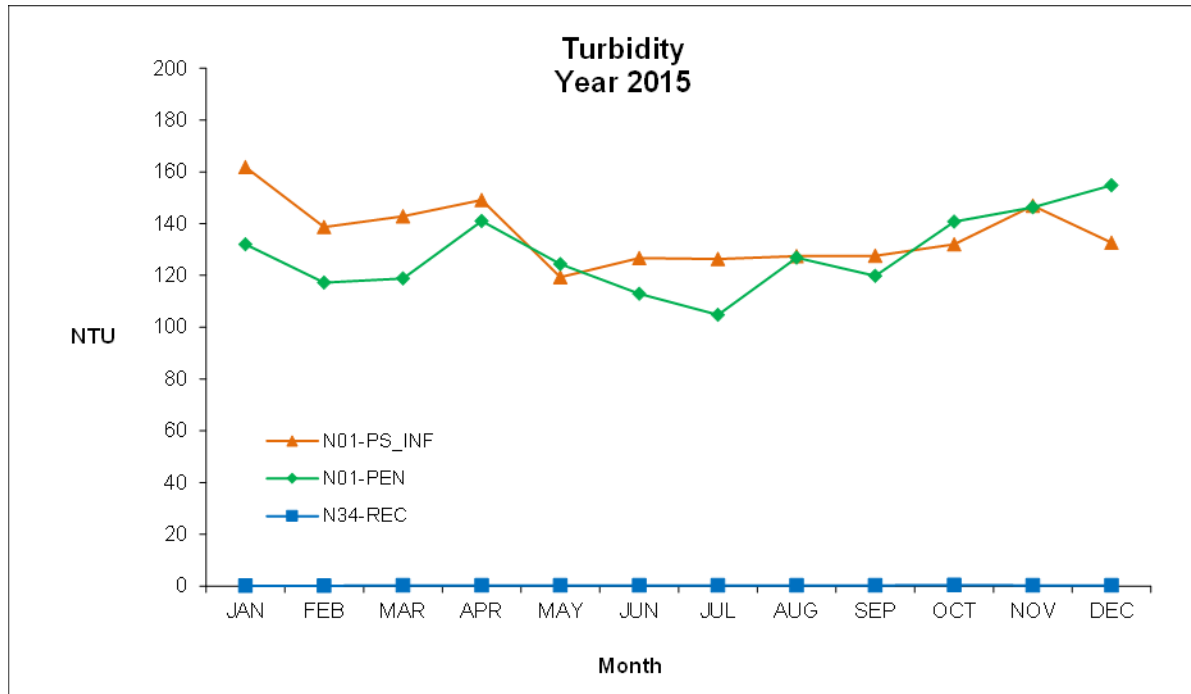
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\* Turbidity average daily results for N34-REC taken from in-plant meter



NORTH CITY WATER RECLAMATION PLANT  
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(N34-REC) Reclaim Water - Monthly/Annual Averages

Analyte:	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
MDL:	23.8	2.44	.06	.7	.05	1.4
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Limit:	1000	6	50	1000	4	750*
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	ND	ND	0.4	25.3	ND	315
FEBRUARY -2015	ND	ND	0.3	25.6	ND	299
MARCH -2015	ND	ND	0.3	25.0	ND	294
APRIL -2015	<24	<2.4	0.3	28.1	ND	321
MAY -2015	ND	ND	0.5	20.2	ND	341
JUNE -2015	30	16.7	0.5	20.2	ND	314
JULY -2015	61	<2.4	0.6	18.2	ND	337
AUGUST -2015	<24	ND	0.7	26.6	ND	328
SEPTEMBER-2015	ND	ND	0.8	23.3	<0.050	314
OCTOBER -2015	28	ND	0.6	22.2	<0.050	346
NOVEMBER -2015	ND	2.5	0.6	21.7	ND	332
DECEMBER -2015	ND	3.3	0.5	22.3	ND	313
=====	=====	=====	=====	=====	=====	=====
Annual Average:	10	1.9	0.5	23.2	0.000	321

Analyte:	Cadmium	Chromium	Cobalt	Copper	Iron	Lead
MDL:	.26	.54	.24	2.16	15.6	1.68
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Limit:	5	50^			300	
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	ND	<0.5	0.56	4.65	64	<1.7
FEBRUARY -2015	ND	<0.5	0.62	<2.16	47	ND
MARCH -2015	<0.26	<0.5	0.64	5.51	70	ND
APRIL -2015	ND	<0.5	0.60	3.10	64	ND
MAY -2015	ND	<0.5	0.78	4.58	49	ND
JUNE -2015	1.52	1.0	1.51	5.38	62	ND
JULY -2015	ND	0.9	0.59	5.66	69	ND
AUGUST -2015	<0.26	ND	ND	5.00	80	ND
SEPTEMBER-2015	<0.26	1.1	0.33	3.25	50	<1.7
OCTOBER -2015	ND	1.2	0.65	4.00	60	<1.7
NOVEMBER -2015	ND	1.6	0.70	4.00	62	<1.7
DECEMBER -2015	ND	2.9	0.60	4.50	78	ND
=====	=====	=====	=====	=====	=====	=====
Annual Average:	0.13	0.7	0.63	4.14	63	0.0

Analyte:	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver
MDL:	.78	.005	.32	.53	.08	.73
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Limit:	100**	2		100	50	
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	106.0	ND	5.10	3.83	0.75	ND
FEBRUARY -2015	82.8	ND	4.80	2.51	0.89	ND
MARCH -2015	75.4	ND	5.37	3.47	0.68	ND
APRIL -2015	70.7	ND	5.69	4.93	0.82	ND
MAY -2015	71.8	0.009	4.55	3.39	0.64	ND
JUNE -2015	68.2	ND	5.21	2.52	0.55	ND
JULY -2015	60.5	ND	5.02	3.29	0.55	ND
AUGUST -2015	79.6	ND	5.55	10.00	0.84	ND
SEPTEMBER-2015	72.8	ND	5.60	6.53	0.48	ND
OCTOBER -2015	75.0	ND	5.05	6.25	0.52	ND
NOVEMBER -2015	68.3	ND^^	5.15	4.60	0.64	ND
DECEMBER -2015	67.5	ND	4.78	4.88	0.73	ND
=====	=====	=====	=====	=====	=====	=====
Annual Average:	74.9	0.001	5.16	4.68	0.67	ND

\*= The Limit in the new permit is 750ug/L, effective on December 16, 2015. Limit in old permit was 700ug/L.

\*\*= The Limit in the new permit is 100ug/L, effective on December 16, 2015. Limit in old permit was 50ug/L.

^= No limit in the new permit, effective on December 16, 2015. Limit in old permit was 50ug/L.

ND= Not Detected.

^^= November result was 0.001ug/L less than the MDL 0.005ug/L, therefore the result is ND.

NORTH CITY WATER RECLAMATION PLANT  
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(N34-REC) Reclaim Water - Monthly/Annual Averages

Analyte:	Thallium	Vanadium	Zinc	Calcium	Lithium	Magnesium
MDL:	.5	.45	4.19	.04	.002	.1
Units:	UG/L	UG/L	UG/L	MG/L	MG/L	MG/L
Limit:	2					
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	ND	<0.45	31.7	70.3	0.043	29.5
FEBRUARY -2015	ND	ND	17.1	69.9	0.045	28.9
MARCH -2015	ND	0.51	25.6	64.7	0.036	27.2
APRIL -2015	ND	1.01	21.7	69.2	0.048	27.8
MAY -2015	ND	1.73	29.1	71.1	0.046	27.9
JUNE -2015	ND	1.78	21.4	65.8	0.041	27.7
JULY -2015	ND	1.69	22.7	59.2	0.038	25.8
AUGUST -2015	ND	ND	22.0	64.7	0.046	27.5
SEPTEMBER-2015	ND	0.90	21.5	61.7	0.034	27.3
OCTOBER -2015	ND	1.55	22.5	60.2	0.038	25.8
NOVEMBER -2015	ND	1.45	19.5	54.3	0.053	22.5
DECEMBER -2015	ND	1.28	22.3	65.0	0.051	28.0
=====	=====	=====	=====	=====	=====	=====
Annual Average:	ND	0.99	23.1	64.7	0.043	27.2

Analyte:	Potassium	Sodium	Calcium Hardness	Magnesium Hardness	Total Hardness	Total Alkalinity
MDL:	.3	1	.1	.412	.512	20
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
Limit:						
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	16.2	179	176	122	298	99
FEBRUARY -2015	15.5	178	175	119	294	107
MARCH -2015	14.4	157	162	112	274	91
APRIL -2015	16.7	176	173	115	287	123
MAY -2015	19.0	192	178	115	293	97
JUNE -2015	18.4	183	165	114	278	92
JULY -2015	17.0	168	148	106	254	90
AUGUST -2015	17.7	187	162	113	275	97
SEPTEMBER-2015	16.1	204	154	112	266	84
OCTOBER -2015	13.7	172	151	106	257	80
NOVEMBER -2015	15.1	168	136	93	229	86
DECEMBER -2015	17.1	186	163	115	278	84
=====	=====	=====	=====	=====	=====	=====
Annual Average:	16.4	179	162	112	274	94

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		.5
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	222	0.44	47.7	219	2.8	0.09
FEBRUARY -2015	238	0.58	41.2	224	2.2	0.08
MARCH -2015	210	0.51	44.9	194	2.7	0.07
APRIL -2015	217	0.58	54.2	214	2.6	0.17
MAY -2015	241	0.52	56.6	207	4.0	0.07
JUNE -2015	260	0.54	59.7	207	4.4	0.06
JULY -2015	239	0.44	52.6	169	6.0	0.04
AUGUST -2015	232	0.46	54.1	191	4.9	0.04
SEPTEMBER-2015	253	0.45	58.9	205	6.4	0.04
OCTOBER -2015	203	0.39	60.3	179	3.8	0.07
NOVEMBER -2015	238	0.43	57.1	185	2.9	ND
DECEMBER -2015	243	0.44	58.2	220	4.0	0.05
=====	=====	=====	=====	=====	=====	=====
Annual Average:	233	0.48	53.8	201	3.9	0.07

ND= Not Detected

NORTH CITY WATER RECLAMATION PLANT  
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(N34-REC) Reclaim Water - Monthly/Annual Averages

Analyte:	Total Organic Carbon	Percent Sodium	Adjusted Sodium Adsorption Ratio	Total Cyanides	Total Dissolved Solids	Total Nitrogen
MDL:	.3			.002	100	.78
Units:	MG/L	PERCENT	Ratio	MG/L	MG/L	MG/L
Limit:		60	6*	0.2	1200	
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	7.1	55	4.5	0.007	835	12.4
FEBRUARY -2015	6.4	55	4.5	0.007	854	8.2
MARCH -2015	5.5	54	4.0	0.005	864	14.6
APRIL -2015	7.7	56	4.5	0.005	866	9.8
MAY -2015	7.7	57	4.8	0.007	846	12.9
JUNE -2015	5.7	56	4.7	0.006	880	15.6
JULY -2015	7.3	59	4.7	0.006	870	14.3
AUGUST -2015	7.6	59	4.7	0.005	879	12.5
SEPTEMBER-2015	6.8	61	5.7	0.007	911	12.7
OCTOBER -2015	6.0	58	4.3	ND	900	13.2
NOVEMBER -2015	5.7	60	4.5	0.033	822	15.3
DECEMBER -2015	6.3	57	4.6	ND	839	15.5
=====	=====	=====	=====	=====	=====	=====
Annual Average:	6.7	57	4.6	0.007	864	13.1

\*= No limit in the new permit, effective on December 16, 2015. Limit in old permit was 6.  
ND= Not Detected

NORTH CITY WATER RECLAMATION PLANT  
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(N01-PS\_INF) Pump Station 64 Influent - Annual Averages

Analyte:	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
MDL:	23.8	2.44	.06	.7	.05	1.4
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	643	<2.4	0.81	156	ND	317
FEBRUARY -2015	576	ND	1.40	115	ND	307
MARCH -2015	401	<2.4	0.90	116	ND	308
APRIL -2015	464	4.7	NR	143	ND	325
MAY -2015	368	ND	0.44	109	ND	335
JUNE -2015	440	<2.4	1.73	105	ND	349
JULY -2015	477	ND	0.67	99	ND	348
AUGUST -2015	580	ND	1.03	127	ND	336
SEPTEMBER-2015	546	2.5	1.05	127	ND	328
OCTOBER -2015	573	3.5	1.47	137	ND	339
NOVEMBER -2015	455	<2.4	1.10	125	ND	332
DECEMBER -2015	589	5.5	1.17	139	ND	321
=====	=====	=====	=====	=====	=====	=====
Annual Average:	509	1.4	1.07	125	ND	329

Analyte:	Cadmium	Chromium	Cobalt	Copper	Iron	Lead
MDL:	.26	.54	.24	2.16	15.6	1.68
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	<0.26	8.8	1.31	170	12500	3.2
FEBRUARY -2015	0.31	5.0	0.91	125	7110	<1.7
MARCH -2015	0.49	4.4	1.08	137	6700	<1.7
APRIL -2015	0.42	6.2	1.13	158	8480	ND
MAY -2015	ND	4.5	1.14	57	6510	ND
JUNE -2015	ND	6.3	0.89	135	7690	<1.7
JULY -2015	ND	5.9	1.06	143	7460	2.0
AUGUST -2015	ND	7.0	ND	203	8640	ND
SEPTEMBER-2015	0.30	7.2	1.15	166	8310	2.0
OCTOBER -2015	0.30	5.6	1.30	166	9210	3.5
NOVEMBER -2015	0.40	5.1	1.10	128	7580	2.5
DECEMBER -2015	<0.26	5.2	1.20	134	8980	<1.7
=====	=====	=====	=====	=====	=====	=====
Annual Average:	0.19	5.9	1.02	144	8264	1.1

Analyte:	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium
MDL:	.002	.78	.013	.32	.53	.08
Units:	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	0.069	177	0.122	9.84	7.42	1.18
FEBRUARY -2015	0.058	154	0.098	9.05	4.69	1.64
MARCH -2015	0.051	147	0.095	8.93	4.83	1.38
APRIL -2015	NR	158	NR	11.30	6.91	NR
MAY -2015	0.061	155	0.061	4.29	6.27	1.15
JUNE -2015	0.058	153	0.061	17.40	5.91	1.94
JULY -2015	0.049	149	0.187	9.42	5.96	1.26
AUGUST -2015	0.058	180	0.089	13.10	12.50	2.02
SEPTEMBER-2015	0.049	139	0.125	15.70	9.15	1.36
OCTOBER -2015	0.053	145	0.023	10.70	11.30	2.06
NOVEMBER -2015	0.066	133	0.157	9.00	6.60	1.40
DECEMBER -2015	0.077	139	0.161	10.30	8.75	2.06
=====	=====	=====	=====	=====	=====	=====
Annual Average:	0.059	152	0.11	10.75	7.52	1.59

ND= Not Detected  
NR= Not Required

NORTH CITY WATER RECLAMATION PLANT  
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(N01-PS\_INF) Pump Station 64 Influent - Annual Averages

Analyte:	Silver	Thallium	Vanadium	Zinc	Calcium	Magnesium
MDL:	.73	3.12	.45	4.19	.04	.1
Units:	UG/L	UG/L	UG/L	UG/L	MG/L	MG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	2.0	ND	1.87	187	101.0	43.0
FEBRUARY -2015	2.0	ND	1.40	149	93.8	40.2
MARCH -2015	0.9	ND	<0.45	151	81.2	34.7
APRIL -2015	ND	ND	0.72	176	NR	NR
MAY -2015	<0.7	ND	1.20	150	97.5	40.0
JUNE -2015	0.9	ND	1.04	157	91.3	39.7
JULY -2015	1.2	ND	1.11	146	85.0	39.0
AUGUST -2015	ND	ND	ND	191	92.2	40.7
SEPTEMBER-2015	ND	ND	3.00	195	97.1	43.7
OCTOBER -2015	<0.7	ND	4.85	197	97.6	43.7
NOVEMBER -2015	ND	ND	3.40	162	83.2	37.7
DECEMBER -2015	ND	ND	4.90	179	89.1	39.3
=====	=====	=====	=====	=====	=====	=====
Annual Average:	0.6	ND	1.96	170	91.7	40.2

Analyte:	Potassium	Sodium	Chloride	Fluoride	Sulfate	Total Dissolved Solids
MDL:	.3	1	7	.05	9	
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	23.4	244	NR	NR	NR	1190
FEBRUARY -2015	22.7	225	320	0.57	286	1210
MARCH -2015	18.0	196	NR	NR	NR	1190
APRIL -2015	NR	NR	NR	NR	NR	1190
MAY -2015	26.2	255	339	0.50	255	1130
JUNE -2015	24.3	235	NR	NR	NR	1110
JULY -2015	24.1	232	NR	NR	NR	1090
AUGUST -2015	24.4	245	337	0.38	252	1190
SEPTEMBER-2015	23.9	279	NR	NR	NR	1220
OCTOBER -2015	21.6	255	329	0.26	261	1250
NOVEMBER -2015	21.8	219	NR	NR	NR	1080
DECEMBER -2015	22.7	223	NR	NR	NR	1190
=====	=====	=====	=====	=====	=====	=====
Annual Average:	23.0	237	331	0.43	264	1170.0

Analyte:	Total Cyanides
MDL:	.002
Units:	MG/L
=====	=====
JANUARY -2015	0.0020
FEBRUARY -2015	0.0020
MARCH -2015	ND
APRIL -2015	NR
MAY -2015	ND
JUNE -2015	ND
JULY -2015	ND
AUGUST -2015	0.0030
SEPTEMBER-2015	ND
OCTOBER -2015	0.0020
NOVEMBER -2015	ND
DECEMBER -2015	ND
=====	=====
Annual Average:	0.0008

ND= Not Detected  
NR= Not Required

NORTH CITY WATER RECLAMATION PLANT  
2015  
(N01-PEN) Penasquitos Influent - Annual Averages

Analyte:	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
MDL:	23.8	2.44	.06	.7	.05	1.4
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	875	3.4	0.93	102	ND	294
FEBRUARY -2015	2080	<2.4	2.92	120	ND	304
MARCH -2015	708	ND	1.40	109	ND	283
APRIL -2015	2850	3.7	2.96	125	ND	303
MAY -2015	1090	ND	1.23	69	ND	352
JUNE -2015	1560	3.7	1.45	108	ND	329
JULY -2015	1940	<2.4	1.75	82	ND	340
AUGUST -2015	1110	ND	1.41	85	ND	310
SEPTEMBER-2015	1840	2.5	1.57	162	ND	297
OCTOBER -2015	1550	<2.4	2.69	115	ND	330
NOVEMBER -2015	1230	4.0	2.38	133	ND	305
DECEMBER -2015	1340	6.5	2.06	117	ND	305
=====	=====	=====	=====	=====	=====	=====
Annual Average:	1514	2.0	1.90	111	ND	313

Analyte:	Cadmium	Chromium	Cobalt	Copper	Iron	Lead
MDL:	.26	.54	.24	2.16	15.6	1.68
Units:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	ND	7.6	1.21	92	14600	2.6
FEBRUARY -2015	ND	10.2	1.34	103	18600	4.3
MARCH -2015	0.33	6.6	1.39	105	14200	2.5
APRIL -2015	ND	7.7	1.31	121	13400	<1.7
MAY -2015	ND	3.2	1.24	10	10100	ND
JUNE -2015	ND	6.3	1.63	98	16700	1.8
JULY -2015	ND	5.4	1.57	100	12300	2.2
AUGUST -2015	ND	5.0	1.20	95	10600	ND
SEPTEMBER-2015	ND	16.4	2.55	147	31000	4.0
OCTOBER -2015	ND	7.9	1.85	106	17600	4.5
NOVEMBER -2015	<0.26	9.4	2.10	107	23800	3.5
DECEMBER -2015	ND	9.0	1.25	99	19800	4.0
=====	=====	=====	=====	=====	=====	=====
Annual Average:	0.03	7.9	1.55	99	16892	2.5

Analyte:	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium
MDL:	.002	.78	.013	.32	.53	.08
Units:	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	0.055	151	0.119	8.33	9.5	0.94
FEBRUARY -2015	0.054	186	0.300	10.50	9.8	1.86
MARCH -2015	0.052	121	0.449	9.26	11.6	1.66
APRIL -2015	0.060	173	0.072	9.22	13.1	1.30
MAY -2015	0.053	189	0.081	3.05	10.7	0.79
JUNE -2015	0.051	157	0.060	8.99	12.2	1.36
JULY -2015	0.045	150	0.050	9.21	9.2	0.92
AUGUST -2015	0.056	338	0.112	9.20	16.5	1.29
SEPTEMBER-2015	0.039	224	0.186	14.20	22.3	2.19
OCTOBER -2015	0.050	200	0.059	11.10	18.7	1.71
NOVEMBER -2015	0.057	189	0.179	11.90	13.3	1.38
DECEMBER -2015	0.066	184	0.116	9.50	13.8	1.72
=====	=====	=====	=====	=====	=====	=====
Annual Average:	0.053	189	0.149	9.54	13.4	1.43

NORTH CITY WATER RECLAMATION PLANT  
2015  
(N01-PEN) Penasquitos Influent - Annual Averages

Analyte:	Silver	Thallium	Vanadium	Zinc	Calcium	Magnesium
MDL:	.73	3.12	.45	4.19	.04	.1
Units:	UG/L	UG/L	UG/L	UG/L	MG/L	MG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	ND	ND	4.82	142	82.6	32.2
FEBRUARY -2015	ND	ND	4.13	157	84.0	32.4
MARCH -2015	<0.73	ND	8.30	154	78.8	32.0
APRIL -2015	ND	ND	8.76	158	84.8	33.1
MAY -2015	ND	ND	13.40	98	79.3	29.8
JUNE -2015	<0.73	ND	17.40	155	77.2	30.3
JULY -2015	ND	ND	16.50	156	68.4	28.4
AUGUST -2015	ND	ND	9.50	135	76.6	30.7
SEPTEMBER-2015	<0.73	ND	15.50	205	81.8	33.4
OCTOBER -2015	0.95	ND	12.20	163	84.2	33.3
NOVEMBER -2015	<0.73	ND	14.10	168	69.9	28.1
DECEMBER -2015	ND	ND	11.90	174	78.6	30.7
=====	=====	=====	=====	=====	=====	=====
Annual Average:	0.08	ND	11.38	155	78.9	31.2

Analyte:	Potassium	Sodium	Chloride	Fluoride	Sulfate	Total Dissolved Solids
MDL:	.3	1	7	.05	9	100
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
=====	=====	=====	=====	=====	=====	=====
JANUARY -2015	19.4	165	NR	NR	NR	905
FEBRUARY -2015	20.7	170	210	0.47	229	895
MARCH -2015	18.3	169	NR	NR	NR	888
APRIL -2015	22.3	192	NR	NR	NR	892
MAY -2015	23.1	174	217	0.45	210	892
JUNE -2015	22.5	171	NR	NR	NR	846
JULY -2015	21.1	155	NR	NR	NR	810
AUGUST -2015	21.9	173	215	0.37	198	881
SEPTEMBER-2015	21.1	195	NR	NR	NR	911
OCTOBER -2015	19.7	180	208	0.29	219	899
NOVEMBER -2015	19.7	155	NR	NR	NR	862
DECEMBER -2015	20.6	173	NR	NR	NR	893
=====	=====	=====	=====	=====	=====	=====
Annual Average:	20.9	173	213	0.40	214	881

Analyte:	Total Cyanides
MDL:	.002
Units:	MG/L
=====	=====
JANUARY -2015	ND
FEBRUARY -2015	ND
MARCH -2015	ND
APRIL -2015	ND
MAY -2015	ND
JUNE -2015	ND
JULY -2015	ND
AUGUST -2015	ND
SEPTEMBER-2015	ND
OCTOBER -2015	ND
NOVEMBER -2015	ND
DECEMBER -2015	ND
=====	=====
Annual Average:	ND

MDL's listed are the maximum MDL for the past 12 months  
 ND= Not Detected  
 NR= Not Required



## Annual Pretreatment Program Sludge Analysis

### 2015 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 2015, 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

NORTH CITY WATER RECLAMATION PLANT  
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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:		03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
Sample ID:	MDL Units	P755949	P778653	P795078	P807279
=====	=====	=====	=====	=====	=====
Aluminum	23.8 UG/L	742	337	628	692
Antimony	2.44 UG/L	ND	ND	ND	3
Arsenic	.06 UG/L	1.4	0.4	1.0	1.5
Barium	.7 UG/L	122	108	138	148
Beryllium	.05 UG/L	ND	ND	ND	ND
Boron	1.4 UG/L	310	355	347	329
Cadmium	.26 UG/L	0.29	ND	ND	0.30
Chromium	.54 UG/L	5.4	3.6	8.0	6.5
Cobalt	.24 UG/L	0.94	1.18	ND	1.40
Copper	2.16 UG/L	119	12	224	184
Iron	15.6 UG/L	7380	6290	9710	10600
Lead	1.68 UG/L	2	ND	ND	4
Manganese	.78 UG/L	144	161	192	146
Mercury	.013 UG/L	0.098	0.061	0.089	0.023
Molybdenum	.32 UG/L	9.55	1.86	14.2	11.0
Nickel	.53 UG/L	5.26	5.51	17.0	11.8
Selenium	.08 UG/L	1.64	1.15	2.02	2.06
Silver	.73 UG/L	1.8	ND	ND	0.8
Thallium	3.12 UG/L	ND	ND	ND	ND
Vanadium	.45 UG/L	1.65	1.02	ND	5.70
Zinc	4.19 UG/L	149	141	191	237
Total Kjeldahl Nitrogen	1.6 MG/L	66.0	58.6	48.7	47.7
=====	=====	=====	=====	=====	=====
Calcium	.04 MG/L	93.8	97.5	92.2	97.6
Lithium	.002 MG/L	0.058	0.061	0.058	0.053
Magnesium	.1 MG/L	40.2	40.0	40.7	43.7
Potassium	.3 MG/L	22.7	26.2	24.4	21.6
Sodium	1 MG/L	225	255	245	255
=====	=====	=====	=====	=====	=====
Calcium Hardness	.1 MG/L	234	243	230	244
Magnesium Hardness	.412 MG/L	165	165	167	180
Total Hardness	.512 MG/L	399	408	397	424
=====	=====	=====	=====	=====	=====
Bromide	.1 MG/L	0.4	0.5	0.5	0.5
Chloride	7 MG/L	320	339	337	329
Fluoride	.05 MG/L	0.57	0.50	0.38	0.26
Nitrate	.04 MG/L	0.09	0.17	ND	ND
Ortho Phosphate (as P04)	.2 MG/L	6.5	7.7	6.7	7.7
Sulfate	9 MG/L	286	255	252	261
=====	=====	=====	=====	=====	=====
Cyanide, Total	.002 MG/L	0.002	ND	0.003	0.002
Sulfides-Total	.4 MG/L	3.3	3.1	3.9	5.2
Ammonia-N	.3 MG/L	36.4	37.2	33.7	29.2

ND= Not Detected

N01-PS\_INF = North City Pump Station Influent (PS #64)

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

Source:		N01-PEN	N01-PEN	N01-PEN	N01-PEN
Date:		03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
Sample ID:	MDL Units	P755954	P778658	P795083	P807284
=====	=====	=====	=====	=====	=====
Aluminum	23.8 UG/L	2740	1720	764	2250
Antimony	2.44 UG/L	ND	ND	ND	ND
Arsenic	.06 UG/L	2.9	1.2	1.4	2.7
Barium	.7 UG/L	143	71.5	56.1	127
Beryllium	.05 UG/L	ND	ND	ND	ND
Boron	1.4 UG/L	332	367	321	307
Cadmium	.26 UG/L	ND	ND	ND	ND
Chromium	.54 UG/L	11.9	3.1	3.0	7.9
Cobalt	.24 UG/L	1.56	1.38	1.10	1.90
Copper	2.16 UG/L	105	11	68	109
Iron	15.6 UG/L	22000	9970	6660	18000
Lead	1.68 UG/L	4	ND	ND	5
Manganese	.78 UG/L	194	214	506	233
Mercury	.013 UG/L	0.300	0.081	0.112	0.059
Molybdenum	.32 UG/L	12.5	2.40	7.10	11.8
Nickel	.53 UG/L	10.7	10.4	16.0	17.7
Selenium	.08 UG/L	1.86	0.79	1.29	1.71
Silver	.73 UG/L	ND	ND	ND	1.0
Thallium	3.12 UG/L	ND	ND	ND	ND
Vanadium	.45 UG/L	4.00	11.6	8.00	10.3
Zinc	4.19 UG/L	176	92.7	65.0	181
Total Kjeldahl Nitrogen	1.6 MG/L	59.6	60.0	47.6	53.6
=====	=====	=====	=====	=====	=====
Calcium	.04 MG/L	84.0	79.3	76.6	84.2
Lithium	.002 MG/L	0.054	0.053	0.056	0.050
Magnesium	.1 MG/L	32.4	29.8	30.7	33.3
Potassium	.3 MG/L	20.7	23.1	21.9	19.7
Sodium	1 MG/L	170	174	173	180
=====	=====	=====	=====	=====	=====
Calcium Hardness	.1 MG/L	210	198	191	210
Magnesium Hardness	.412 MG/L	134	123	127	137
Total Hardness	.512 MG/L	344	321	318	347
=====	=====	=====	=====	=====	=====
Bromide	.1 MG/L	0.1	0.1	0.1	0.1
Chloride	7 MG/L	210	217	215	208
Fluoride	.05 MG/L	0.47	0.45	0.37	0.29
Nitrate	.04 MG/L	0.08	ND	0.07	0.30
Ortho Phosphate (as P04)	.2 MG/L	0.8	1.1	3.7	1.9
Sulfate	9 MG/L	229	210	198	219
=====	=====	=====	=====	=====	=====
Cyanide, Total	.002 MG/L	ND	ND	ND	ND
Sulfides-Total	.4 MG/L	10.9	5.4	5.3	4.7
Ammonia-N	.3 MG/L	33.1	35.7	35.6	23.5

ND= Not Detected

N01-PEN = Penasquitos Pump Station Influent

NORTH CITY WATER RECLAMATION PLANT  
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2015

(Metals from Digestion and Ions from Supernatant)

Source:		N10-EFF	N10-EFF	N10-EFF	N10-EFF
Date:		03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
Sample ID:	MDL Units	P755959	P778663	P795088	P807289
=====	=====	=====	=====	=====	=====
Aluminum	23.8 UG/L	535	366	160	153
Antimony	2.44 UG/L	ND	ND	ND	ND
Arsenic	.06 UG/L	1.3	0.7	0.9	1.2
Barium	.7 UG/L	94.3	76.3	67.7	56.2
Beryllium	.05 UG/L	ND	ND	ND	ND
Boron	1.4 UG/L	320	361	324	287
Cadmium	.26 UG/L	ND	ND	ND	ND
Chromium	.54 UG/L	3.7	2.5	3.0	1.7
Cobalt	.24 UG/L	0.80	1.34	ND	0.45
Copper	2.16 UG/L	75	5	65	36
Iron	15.6 UG/L	6370	4760	3430	2850
Lead	1.68 UG/L	ND	ND	ND	3
Manganese	.78 UG/L	143.0	160.0	248.0	119.0
Mercury	.013 UG/L	0.066	0.029	0.021	0.013
Molybdenum	.32 UG/L	9.13	2.17	8.20	6.50
Nickel	.53 UG/L	4.76	6.01	14.00	10.70
Selenium	.08 UG/L	1.65	1.10	1.24	1.10
Silver	.73 UG/L	ND	ND	ND	ND
Thallium	3.12 UG/L	ND	ND	ND	ND
Vanadium	.45 UG/L	1.19	3.81	ND	2.25
Zinc	4.19 UG/L	97.2	67.9	54.0	68.5
Total Kjeldahl Nitrogen	1.6 MG/L	58.6	57.6	45.3	46.5
=====	=====	=====	=====	=====	=====
Calcium	.04 MG/L	92.3	88.1	86.0	93.2
Lithium	.002 MG/L	0.056	0.057	0.060	0.052
Magnesium	.1 MG/L	38.3	34.8	37.1	40.1
Potassium	.3 MG/L	22.0	24.5	23.8	20.9
Sodium	1 MG/L	214	218	221	234
=====	=====	=====	=====	=====	=====
Calcium Hardness	.1 MG/L	230	220	215	233
Magnesium Hardness	.412 MG/L	158	143	153	165
Total Hardness	.512 MG/L	388	363	368	398
=====	=====	=====	=====	=====	=====
Bromide	.1 MG/L	0.4	0.4	0.4	0.4
Chloride	7 MG/L	297	295	299	293
Fluoride	.05 MG/L	0.57	0.49	0.41	0.26
Nitrate	.04 MG/L	0.08	ND	ND	ND
Ortho Phosphate (as P04)	.2 MG/L	5.2	5.7	5.8	6.0
Sulfate	9 MG/L	276	242	235	251
=====	=====	=====	=====	=====	=====
Cyanide, Total	.002 MG/L	ND	ND	ND	ND
Sulfides-Total	.4 MG/L	3.7	0.6	1.3	1.2
Ammonia-N	.3 MG/L	33.8	37.2	34.2	27.8

ND= Not Detected

N10-EFF = Primary Effluent

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:		03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
Sample ID:	MDL Units	P755964	P778668	P795093	P807294
=====	=====	=====	=====	=====	=====
Aluminum	23.8 UG/L	ND	ND	41	29
Antimony	2.44 UG/L	ND	ND	ND	ND
Arsenic	.06 UG/L	0.3	0.5	0.7	0.6
Barium	.7 UG/L	24.0	21.9	24.2	22.4
Beryllium	.05 UG/L	ND	ND	ND	0.052
Boron	1.4 UG/L	302	376	343	342
Cadmium	.26 UG/L	ND	ND	0.50	ND
Chromium	.54 UG/L	ND	ND	ND	1.1
Cobalt	.24 UG/L	0.63	0.94	ND	0.60
Copper	2.16 UG/L	3	4	4	5
Iron	15.6 UG/L	47	59	76	47
Lead	1.68 UG/L	ND	ND	ND	2
Manganese	.78 UG/L	76.7	90.1	73.2	71.0
Mercury	.005 UG/L	ND	0.009	ND	ND
Molybdenum	.32 UG/L	5.02	5.16	4.70	4.80
Nickel	.53 UG/L	2.67	4.08	11.0	6.30
Selenium	.08 UG/L	0.89	0.64	0.84	0.52
Silver	.73 UG/L	ND	ND	ND	ND
Thallium	3.12 UG/L	ND	ND	ND	ND
Vanadium	.45 UG/L	ND	2.15	ND	1.30
Zinc	4.19 UG/L	14.8	40.2	22.0	22.0
Total Kjeldahl Nitrogen	1.6 MG/L	ND	ND	ND	ND
=====	=====	=====	=====	=====	=====
Calcium	.04 MG/L	69.9	71.1	60.8	60.2
Lithium	.002 MG/L	0.045	0.046	0.043	0.038
Magnesium	.1 MG/L	28.9	27.9	26.4	25.8
Potassium	.3 MG/L	15.5	19.0	17.1	13.7
Sodium	1 MG/L	178	192	183	172
=====	=====	=====	=====	=====	=====
Calcium Hardness	.1 MG/L	175	178	152	151
Magnesium Hardness	.412 MG/L	119	115	109	106
Total Hardness	.512 MG/L	294	293	261	257
=====	=====	=====	=====	=====	=====
Bromide	.1 MG/L	ND	ND	ND	ND
Chloride	7 MG/L	238	241	232	203
Fluoride	.05 MG/L	0.58	0.52	0.46	0.39
Nitrate	.04 MG/L	35.4	60.9	55.1	60.7
Ortho Phosphate (as P04)	.2 MG/L	2.2	4.0	4.9	3.8
Sulfate	9 MG/L	224	207	191	179
=====	=====	=====	=====	=====	=====
Cyanide, Total	.002 MG/L	0.007	0.007	0.005	ND
=====	=====	=====	=====	=====	=====
Adjusted Sodium Adsorption	MG/L	4.5	4.8	4.7	4.3
Percent Sodium	PERCENT	55.2	56.8	58.5	57.8
Total Organic Carbon	.3 MG/L	6.4	7.7	7.6	6.0
Sulfides-Total	.4 MG/L	ND	ND	ND	ND
Ammonia-N	.3 MG/L	ND	ND	ND	ND

ND= Not Detected

N34-REC WATER = NCWRP Reclaimed Water after Mixing

NORTH CITY WATER RECLAMATION PLANT  
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Radioactivity

Source	Sample Date	Sample	Units	Gross Alpha Radiation	Gross Beta Radiation
=====	=====	=====	=====	=====	=====
N10-EFF	03-FEB-2015	P755959	pCi/L	10.4±7.8	31.2±10.0
N10-EFF	05-MAY-2015	P778663	pCi/L	7.3±6.4	27.9±5.9
N10-EFF	04-AUG-2015	P795088	pCi/L	2.3±4.6	24.2±5.4
N10-EFF	06-OCT-2015	P807289	pCi/L	2.4±4.6	26.2±5.1
N01-PS_INF	03-FEB-2015	P755949	pCi/L	4.2±8.2	34.3±12.0
N01-PS_INF	05-MAY-2015	P778653	pCi/L	-6.8±5.8	27.1±5.3
N01-PS_INF	04-AUG-2015	P795078	pCi/L	5.8±6.8	23.9±5.8
N01-PS_INF	06-OCT-2015	P807279	pCi/L	3.6±5.4	20.6±4.9
N01-PEN	03-FEB-2015	P755954	pCi/L	4.2±4.9	26.8±5.7
N01-PEN	05-MAY-2015	P778658	pCi/L	4.5±4.4	24.7±4.7
N01-PEN	04-AUG-2015	P795083	pCi/L	-1.2±4.6	19.0±4.1
N01-PEN	06-OCT-2015	P807284	pCi/L	1.2±3.0	21.6±4.3
N34-REC WATER	03-FEB-2015	P755964	pCi/L	7.3±9.1	26.7±11.0
N34-REC WATER	05-MAY-2015	P778668	pCi/L	1.2±4.1	21.7±4.3
N34-REC WATER	04-AUG-2015	P795093	pCi/L	3.0±4.7	16.2±3.7
N34-REC WATER	06-OCT-2015	P807294	pCi/L	0.4±2.6	16.9±3.4

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	03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
=====	=====	=====	=====	=====	=====
Ammonia-N	.3 MG/L	36.4	37.2	33.7	29.2
BOD (Biochemical Oxygen Demand)	2 MG/L	309	351	320	286
Hexane Extractable Material	1.2 MG/L	32.8	45.0	60.6	29.0
Chemical Oxygen Demand	18 MG/L	783	720	715	417
Conductivity	10 UMHOS/CM	2130	2110	2250	2250
MBAS (Surfactants)	.03 MG/L	5.33	4.99	4.51	4.68
pH (grab)	PH	7.1	7.0	7.0	6.9
Total Alkalinity (bicarbonate)	20 MG/L	300	327	294	295
Total Dissolved Solids	28 MG/L	1190	1110	1130	1250
Total Suspended Solids	2.5 MG/L	356	304	344	312
Volatile Suspended Solids	2.5 MG/L	300	268	304	240
Total Kjeldahl Nitrogen	1.6 MG/L	66.0	58.6	48.7	47.7
Turbidity	.13 NTU	107	123	148	112
Sulfides-Total	.4 MG/L	3.3	3.1	3.9	5.2

Source:		N01-PEN	N01-PEN	N01-PEN	N01-PEN
Date:	MDL Units	03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
=====	=====	=====	=====	=====	=====
Ammonia-N	.3 MG/L	33.1	35.7	35.6	23.5
BOD (Biochemical Oxygen Demand)	2 MG/L	376	255	202	257
Hexane Extractable Material	1.2 MG/L	86.9	72.6	48.7	61.1
Chemical Oxygen Demand	18 MG/L	787	620	464	372
Conductivity	10 UMHOS/CM	1560	1760	1770	1790
MBAS (Surfactants)	.03 MG/L	6.51	4.68	4.11	3.94
pH (grab)	PH	7.0	7.3	7.1	7.3
Total Alkalinity (bicarbonate)	20 MG/L	310	322	319	314
Total Dissolved Solids	28 MG/L	968	836	900	932
Total Suspended Solids	2.5 MG/L	440	376	208	340
Volatile Suspended Solids	2.5 MG/L	364	312	176	280
Total Kjeldahl Nitrogen	1.6 MG/L	59.6	60.0	47.6	53.6
Turbidity	.13 NTU	124	119	86.1	116
Sulfides-Total	.4 MG/L	10.9	5.4	5.3	4.7



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Physical Parameters

Source:		N10-EFF	N10-EFF	N10-EFF	N10-EFF
Date:	MDL Units	03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
=====	=====	=====	=====	=====	=====
Ammonia-N	.3 MG/L	33.8	37.2	34.2	27.8
BOD (Biochemical Oxygen Demand)	2 MG/L	229	161	150	120
Hexane Extractable Material	1.2 MG/L	37.4	38.7	25.6	32.2
Chemical Oxygen Demand	18 MG/L	637	393	318	312
Conductivity	10 UMHOS/CM	2000	2000	2070	2080
MBAS (Surfactants)	.03 MG/L	5.74	4.37	4.70	4.53
pH (grab)	PH	7.3	7.2	7.2	7.3
Total Alkalinity (bicarbonate)	20 MG/L	309	306	303	295
Total Dissolved Solids	28 MG/L	1160	992	1120	1170
Total Suspended Solids	2.5 MG/L	248	124	84.0	82.0
Volatile Suspended Solids	2.5 MG/L	212	100	74.0	72.0
Total Kjeldahl Nitrogen	1.6 MG/L	58.6	57.6	45.3	46.5
Turbidity	.13 NTU	128	78.0	55.9	62.5
Sulfides-Total	.4 MG/L	3.7	0.6	1.3	1.2

Source:		N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
Date:	MDL Units	03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
=====	=====	=====	=====	=====	=====
Ammonia-N	.3 MG/L	ND	ND	ND	ND
BOD (Biochemical Oxygen Demand)	2 MG/L	ND	ND	ND	ND
Hexane Extractable Material	1.2 MG/L	1.7	ND	1.9	2.2
Chemical Oxygen Demand	18 MG/L	20	21	90	20
Conductivity	10 UMHOS/CM	1450	1450	1490	1340
MBAS (Surfactants)	.03 MG/L	0.08	0.07	0.04	0.07
pH (grab)	PH	7.0	6.9	6.8	6.8
Total Alkalinity (bicarbonate)	20 MG/L	107	97	93	74
Total Dissolved Solids	28 MG/L	842	804	874	832
Total Suspended Solids	2.5 MG/L	ND	ND	ND	ND
Volatile Suspended Solids	2.5 MG/L	ND	ND	ND	ND
Total Kjeldahl Nitrogen	1.6 MG/L	ND	ND	ND	ND
Total Nitrogen	.78 MG/L	8.2	12.9	13.0	13.2
Total Organic Carbon	.3 MG/L	6.4	7.7	7.6	6.0
Turbidity	.13 NTU	1.30	1.10	0.74	1.18
Sulfides-Total	.4 MG/L	ND	ND	ND	ND

ND= Not Detected

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Organo - Tins

Source:			N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
Date:			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
Sample ID:	MDL Units		P755949	P778653	P795078	P807279
=====	=== =====		=====	=====	=====	=====
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:			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
Sample ID:	MDL Units		P755954	P778658	P795083	P807284
=====	=== =====		=====	=====	=====	=====
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:			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
Sample ID:	MDL Units		P755959	P778663	P795088	P807289
=====	=== =====		=====	=====	=====	=====
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:			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
Sample ID:	MDL Units		P755964	P778668	P795093	P807294
=====	=== =====		=====	=====	=====	=====
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

NORTH CITY WATER RECLAMATION PLANT  
ANNUAL MONITORING REPORT  
2015  
Chlorinated Pesticides

Analyte	MDL	Units	N01-PS_INF 03-FEB-2015 P755949	N01-PS_INF 05-MAY-2015 P778653	N01-PS_INF 04-AUG-2015 P795078	N01-PS_INF 06-OCT-2015 P807279
=====						
Aldrin	4	NG/L	ND	ND	ND	ND
BHC, Alpha isomer	.2	NG/L	ND	ND	ND	ND
BHC, Beta isomer	2	NG/L	ND	ND	ND	ND
BHC, Delta isomer	2	NG/L	ND	ND	ND	ND
BHC, Gamma isomer	.34	NG/L	ND	ND	ND	ND
Alpha (cis) Chlordane	1.4	NG/L	ND	ND	ND	ND
Gamma (trans) Chlordane	1.3	NG/L	ND	ND	ND	ND
Alpha Chlordene	0	NG/L	NA	NA	NA	NA
Gamma Chlordene	0	NG/L	NA	NA	NA	NA
Cis Nonachlor	4	NG/L	ND	ND	ND	ND
Dieldrin	4.3	NG/L	ND	ND	ND	ND
Endosulfan Sulfate	7	NG/L	ND	ND	ND	ND
Alpha Endosulfan	1.5	NG/L	ND	ND	ND	ND
Beta Endosulfan	3.1	NG/L	ND	ND	ND	ND
Endrin	6	NG/L	ND	ND	ND	ND
Endrin aldehyde	5.4	NG/L	ND	ND	ND	ND
Heptachlor	.6	NG/L	ND	ND	ND	ND
Heptachlor epoxide	9.4	NG/L	ND	ND	ND	ND
Methoxychlor	20	NG/L	ND	ND	ND	ND
Mirex	2.3	NG/L	ND	ND	ND	ND
o,p-DDD	4	NG/L	ND	ND	ND	ND
o,p-DDE	2	NG/L	ND	ND	ND	ND
o,p-DDT	2.4	NG/L	ND	ND	ND	ND
Oxychlordane	2	NG/L	ND	ND	ND	ND
PCB 1016	250	NG/L	ND	ND	ND	ND
PCB 1221	2000	NG/L	ND	ND	ND	ND
PCB 1232	750	NG/L	ND	ND	ND	ND
PCB 1242	250	NG/L	ND	ND	ND	ND
PCB 1248	250	NG/L	ND	ND	ND	ND
PCB 1254	500	NG/L	ND	ND	ND	ND
PCB 1260	500	NG/L	ND	ND	ND	ND
PCB 1262	500	NG/L	ND	ND	ND	ND
p,p-DDD	4	NG/L	ND	ND	ND	ND
p,p-DDE	1.4	NG/L	ND	ND	ND	ND
p,p-DDT	3	NG/L	ND	ND	ND	ND
Toxaphene	250	NG/L	ND	ND	ND	ND
Trans Nonachlor	1.1	NG/L	ND	ND	ND	ND
=====						
Heptachlors	9.4	NG/L	0	0	0	0
Endosulfans	7	NG/L	0	0	0	0
Polychlorinated biphenyls	2000	NG/L	0	0	0	0
Chlordane + related cmpds.	4	NG/L	0	0	0	0
DDT and derivatives	4	NG/L	0	0	0	0
Hexachlorocyclohexanes	2	NG/L	0	0	0	0
Aldrin + Dieldrin	4.3	NG/L	0	0	0	0
=====						
Chlorinated Hydrocarbons	2000	NG/L	0	0	0	0

NA= Not Analyzed  
ND= Not Detected

NORTH CITY WATER RECLAMATION PLANT  
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Chlorinated Pesticides

Analyte	MDL	Units	N01-PEN 03-FEB-2015 P755954	N01-PEN 05-MAY-2015 P778658	N01-PEN 04-AUG-2015 P795083	N01-PEN 06-OCT-2015 P807284
			=====	=====	=====	=====
Aldrin	4	NG/L	ND	ND	ND	ND
BHC, Alpha isomer	.2	NG/L	ND	ND	ND	ND
BHC, Beta isomer	2	NG/L	ND	ND	ND	ND
BHC, Delta isomer	2	NG/L	ND	ND	ND	ND
BHC, Gamma isomer	.34	NG/L	ND	ND	ND	ND
Alpha (cis) Chlordane	1.4	NG/L	ND	ND	ND	ND
Gamma (trans) Chlordane	1.3	NG/L	ND	ND	ND	ND
Alpha Chlordene	0	NG/L	NA	NA	NA	NA
Gamma Chlordene	0	NG/L	NA	NA	NA	NA
Cis Nonachlor	4	NG/L	ND	ND	ND	ND
Dieldrin	4.3	NG/L	ND	ND	ND	ND
Endosulfan Sulfate	7	NG/L	ND	ND	ND	ND
Alpha Endosulfan	1.5	NG/L	ND	ND	ND	ND
Beta Endosulfan	3.1	NG/L	ND	ND	ND	ND
Endrin	6	NG/L	ND	ND	ND	ND
Endrin aldehyde	5.4	NG/L	ND	ND	ND	ND
Heptachlor	.6	NG/L	ND	ND	ND	ND
Heptachlor epoxide	9.4	NG/L	ND	ND	ND	ND
Methoxychlor	20	NG/L	ND	ND	ND	ND
Mirex	2.3	NG/L	ND	ND	ND	ND
o,p-DDD	4	NG/L	ND	ND	ND	ND
o,p-DDE	2	NG/L	ND	ND	ND	ND
o,p-DDT	2.4	NG/L	ND	ND	ND	ND
Oxychlordane	2	NG/L	ND	ND	ND	ND
PCB 1016	250	NG/L	ND	ND	ND	ND
PCB 1221	2000	NG/L	ND	ND	ND	ND
PCB 1232	750	NG/L	ND	ND	ND	ND
PCB 1242	250	NG/L	ND	ND	ND	ND
PCB 1248	250	NG/L	ND	ND	ND	ND
PCB 1254	500	NG/L	ND	ND	ND	ND
PCB 1260	500	NG/L	ND	ND	ND	ND
PCB 1262	500	NG/L	ND	ND	ND	ND
p,p-DDD	4	NG/L	ND	ND	ND	ND
p,p-DDE	1.4	NG/L	ND	ND	ND	ND
p,p-DDT	3	NG/L	ND	ND	ND	ND
Toxaphene	250	NG/L	ND	ND	ND	ND
Trans Nonachlor	1.1	NG/L	ND	ND	ND	ND
=====	=====	=====	=====	=====	=====	=====
Heptachlors	9.4	NG/L	0	0	0	0
Endosulfans	7	NG/L	0	0	0	0
Polychlorinated biphenyls	2000	NG/L	0	0	0	0
Chlordane + related cmpds.	4	NG/L	0	0	0	0
DDT and derivatives	4	NG/L	0	0	0	0
Hexachlorocyclohexanes	2	NG/L	0	0	0	0
Aldrin + Dieldrin	4.3	NG/L	0	0	0	0
=====	=====	=====	=====	=====	=====	=====
Chlorinated Hydrocarbons	2000	NG/L	0	0	0	0

NA= Not Analyzed  
ND= Not Detected

NORTH CITY WATER RECLAMATION PLANT  
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Chlorinated Pesticides

Analyte	MDL	Units	N10-EFF	N10-EFF	N10-EFF	N10-EFF
			03-FEB-2015 P755959	05-MAY-2015 P778663	04-AUG-2015 P795088	06-OCT-2015 P807289
=====	=====		=====	=====	=====	=====
Aldrin	4	NG/L	ND	ND	ND	ND
BHC, Alpha isomer	.2	NG/L	ND	ND	ND	ND
BHC, Beta isomer	2	NG/L	ND	ND	ND	ND
BHC, Delta isomer	2	NG/L	ND	ND	ND	ND
BHC, Gamma isomer	.34	NG/L	ND	ND	ND	ND
Alpha (cis) Chlordane	1.4	NG/L	ND	ND	ND	ND
Gamma (trans) Chlordane	1.3	NG/L	ND	ND	ND	ND
Alpha Chlordene	0	NG/L	NA	NA	NA	NA
Gamma Chlordene	0	NG/L	NA	NA	NA	NA
Cis Nonachlor	4	NG/L	ND	ND	ND	ND
Dieldrin	4.3	NG/L	ND	ND	ND	ND
Endosulfan Sulfate	7	NG/L	ND	ND	ND	ND
Alpha Endosulfan	1.5	NG/L	ND	ND	ND	ND
Beta Endosulfan	3.1	NG/L	ND	ND	ND	ND
Endrin	6	NG/L	ND	ND	ND	ND
Endrin aldehyde	5.4	NG/L	ND	ND	ND	ND
Heptachlor	.6	NG/L	ND	ND	ND	ND
Heptachlor epoxide	9.4	NG/L	ND	ND	ND	ND
Methoxychlor	20	NG/L	ND	ND	ND	ND
Mirex	2.3	NG/L	ND	ND	ND	ND
o,p-DDD	4	NG/L	ND	ND	ND	ND
o,p-DDE	2	NG/L	ND	ND	ND	ND
o,p-DDT	2.4	NG/L	ND	ND	ND	ND
Oxychlordane	2	NG/L	ND	ND	ND	ND
PCB 1016	250	NG/L	ND	ND	ND	ND
PCB 1221	2000	NG/L	ND	ND	ND	ND
PCB 1232	750	NG/L	ND	ND	ND	ND
PCB 1242	250	NG/L	ND	ND	ND	ND
PCB 1248	250	NG/L	ND	ND	ND	ND
PCB 1254	500	NG/L	ND	ND	ND	ND
PCB 1260	500	NG/L	ND	ND	ND	ND
PCB 1262	500	NG/L	ND	ND	ND	ND
p,p-DDD	4	NG/L	ND	ND	ND	ND
p,p-DDE	1.4	NG/L	ND	ND	ND	ND
p,p-DDT	3	NG/L	ND	ND	ND	ND
Toxaphene	250	NG/L	ND	ND	ND	ND
Trans Nonachlor	1.1	NG/L	ND	ND	ND	ND
=====	=====		=====	=====	=====	=====
Heptachlors	9.4	NG/L	0	0	0	0
Endosulfans	7	NG/L	0	0	0	0
Polychlorinated biphenyls	2000	NG/L	0	0	0	0
Chlordane + related cmpds.	4	NG/L	0	0	0	0
DDT and derivatives	4	NG/L	0	0	0	0
Hexachlorocyclohexanes	2	NG/L	0	0	0	0
Aldrin + Dieldrin	4.3	NG/L	0	0	0	0
=====	=====		=====	=====	=====	=====
Chlorinated Hydrocarbons	2000	NG/L	0	0	0	0

NA= Not Analyzed  
ND= Not Detected

NORTH CITY WATER RECLAMATION PLANT  
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Chlorinated Pesticides

Analyte	MDL	Units	N34-REC WATER	N34-REC WATER	N34-REC WATER	N34-REC WATER
			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
			P755964	P778668	P795093	P807294
=====			=====	=====	=====	=====
Aldrin	4	NG/L	ND	ND	ND	ND
BHC, Alpha isomer	.2	NG/L	ND	ND	ND	ND
BHC, Beta isomer	2	NG/L	ND	ND	ND	ND
BHC, Delta isomer	2	NG/L	ND	ND	ND	ND
BHC, Gamma isomer	.34	NG/L	ND	ND	ND	ND
Alpha (cis) Chlordane	1.4	NG/L	ND	ND	ND	ND
Gamma (trans) Chlordane	1.3	NG/L	ND	ND	ND	ND
Alpha Chlordene	0	NG/L	NA	NA	NA	NA
Gamma Chlordene	0	NG/L	NA	NA	NA	NA
Cis Nonachlor	4	NG/L	ND	ND	ND	ND
Dieldrin	4.3	NG/L	ND	ND	ND	ND
Endosulfan Sulfate	7	NG/L	ND	ND	ND	ND
Alpha Endosulfan	1.5	NG/L	ND	ND	ND	ND
Beta Endosulfan	3.1	NG/L	ND	ND	ND	ND
Endrin	6	NG/L	ND	ND	ND	ND
Endrin aldehyde	5.4	NG/L	ND	ND	ND	ND
Heptachlor	.6	NG/L	ND	ND	ND	ND
Heptachlor epoxide	9.4	NG/L	ND	ND	ND	ND
Methoxychlor	20	NG/L	ND	ND	ND	ND
Mirex	2.3	NG/L	ND	ND	ND	ND
o,p-DDD	4	NG/L	ND	ND	ND	ND
o,p-DDE	2	NG/L	ND	ND	ND	ND
o,p-DDT	2.4	NG/L	ND	ND	ND	ND
Oxychlordane	2	NG/L	ND	ND	ND	ND
PCB 1016	250	NG/L	ND	ND	ND	ND
PCB 1221	2000	NG/L	ND	ND	ND	ND
PCB 1232	750	NG/L	ND	ND	ND	ND
PCB 1242	250	NG/L	ND	ND	ND	ND
PCB 1248	250	NG/L	ND	ND	ND	ND
PCB 1254	500	NG/L	ND	ND	ND	ND
PCB 1260	500	NG/L	ND	ND	ND	ND
PCB 1262	500	NG/L	ND	ND	ND	ND
p,p-DDD	4	NG/L	ND	ND	ND	ND
p,p-DDE	1.4	NG/L	ND	ND	ND	ND
p,p-DDT	3	NG/L	ND	ND	ND	ND
Toxaphene	250	NG/L	ND	ND	ND	ND
Trans Nonachlor	1.1	NG/L	ND	ND	ND	ND
=====			=====	=====	=====	=====
Heptachlors	9.4	NG/L	0	0	0	0
Endosulfans	7	NG/L	0	0	0	0
Polychlorinated biphenyls	2000	NG/L	0	0	0	0
Chlordane + related cmpds.	4	NG/L	0	0	0	0
DDT and derivatives	4	NG/L	0	0	0	0
Hexachlorocyclohexanes	2	NG/L	0	0	0	0
Aldrin + Dieldrin	4.3	NG/L	0	0	0	0
=====			=====	=====	=====	=====
Chlorinated Hydrocarbons	2000	NG/L	0	0	0	0

NA= Not Analyzed  
ND= Not Detected

NORTH CITY WATER RECLAMATION PLANT  
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Base/Neutral Compounds

Analyte	MDL	Units	N01-PS_INF 03-FEB-2015 P755949	N01-PS_INF 05-MAY-2015 P778653	N01-PS_INF 04-AUG-2015 P795078	N01-PS_INF 06-OCT-2015 P807279
			=====	=====	=====	=====
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	3.7	5.6
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	16.9	21.0	11.9	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	2.9	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	16.9	23.9	15.6	5.60

Additional analytes determined

Analyte	MDL	Units				
			=====	=====	=====	=====
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	4.5	ND

ND= Not Detected



NORTH CITY WATER RECLAMATION PLANT  
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Base/Neutral Compounds

Analyte	MDL	Units	N01-PEN 03-FEB-2015 P755954	N01-PEN 05-MAY-2015 P778658	N01-PEN 04-AUG-2015 P795083
			=====	=====	=====
1,2,4-Trichlorobenzene	1.52	UG/L	ND	ND	ND
1,2-Diphenylhydrazine	1.37	UG/L	ND	ND	ND
2,4-Dinitrotoluene	1.36	UG/L	ND	ND	ND
2,6-Dinitrotoluene	1.53	UG/L	ND	ND	ND
Dibenzo(a,h)anthracene	1.01	UG/L	ND	ND	ND
Diethyl phthalate	3.05	UG/L	3.3	4.2	4.6
Dimethyl phthalate	1.44	UG/L	ND	ND	ND
Di-n-butyl phthalate	3.96	UG/L	ND	ND	ND
Di-n-octyl phthalate	1	UG/L	ND	ND	ND
2-Chloronaphthalene	1.87	UG/L	ND	ND	ND
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND
3,4-Benzo(b)fluoranthene	1.35	UG/L	ND	ND	ND
4-Bromophenyl phenyl ether	1.4	UG/L	ND	ND	ND
4-Chlorophenyl phenyl ether	1.57	UG/L	ND	ND	ND
Hexachloroethane	1.32	UG/L	ND	ND	ND
Hexachlorobenzene	1.48	UG/L	ND	ND	ND
Hexachlorobutadiene	1.64	UG/L	ND	ND	ND
Hexachlorocyclopentadiene	1.25	UG/L	ND	ND	ND
Acenaphthene	1.8	UG/L	ND	ND	ND
Acenaphthylene	1.77	UG/L	ND	ND	ND
Anthracene	1.29	UG/L	ND	ND	ND
Bis-(2-chloroisopropyl) ether	1.16	UG/L	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	8.96	UG/L	25.4	10.2	15.9
Benzidine	1.52	UG/L	ND	ND	ND
Benzo[a]anthracene	1.1	UG/L	ND	ND	ND
Benzo[a]pyrene	1.25	UG/L	ND	ND	ND
Benzo[g,h,i]perylene	1.09	UG/L	ND	ND	ND
Benzo[k]fluoranthene	1.49	UG/L	ND	ND	ND
Bis-(2-chloroethoxy) methane	1.01	UG/L	ND	ND	ND
Bis-(2-chloroethyl) ether	1.38	UG/L	ND	ND	ND
Butyl benzyl phthalate	2.84	UG/L	ND	7.6	ND
Chrysene	1.16	UG/L	ND	ND	ND
Fluoranthene	1.33	UG/L	ND	ND	ND
Fluorene	1.61	UG/L	ND	ND	ND
Indeno(1,2,3-CD)pyrene	1.14	UG/L	ND	ND	ND
Isophorone	1.53	UG/L	ND	ND	ND
Naphthalene	1.65	UG/L	ND	ND	ND
Nitrobenzene	1.6	UG/L	ND	ND	ND
N-nitrosodimethylamine	1.27	UG/L	ND	ND	ND
N-nitrosodiphenylamine	3.48	UG/L	ND	ND	ND
N-nitrosodi-n-propylamine	1.16	UG/L	ND	ND	ND
Phenanthrene	1.34	UG/L	ND	ND	ND
Pyrene	1.43	UG/L	ND	ND	ND
=====	=====	=====	=====	=====	=====
Polynuc. Aromatic Hydrocarbons	1.77	UG/L	0.0	0.0	0.0
Base/Neutral Compounds	8.96	UG/L	28.7	22.0	20.5

Additional analytes determined

Analyte	MDL	Units	=====		
			=====	=====	=====
1-Methylnaphthalene	2.18	UG/L	ND	ND	ND
2-Methylnaphthalene	2.14	UG/L	ND	ND	ND
2,6-Dimethylnaphthalene	2.16	UG/L	ND	ND	ND
2,3,5-Trimethylnaphthalene	2.18	UG/L	ND	ND	ND
1-Methylphenanthrene	1.46	UG/L	ND	ND	ND
Benzo[e]pyrene	1.44	UG/L	ND	ND	ND
Perylene	1.41	UG/L	ND	ND	ND
Biphenyl	2.29	UG/L	ND	ND	ND
Pyridine	3.33	UG/L	ND	ND	4.1

NA= Not Analyzed

ND= Not Detected

NORTH CITY WATER RECLAMATION PLANT  
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Base/Neutral Compounds

Analyte	MDL	Units	N10-EFF 03-FEB-2015 P755959	N10-EFF 05-MAY-2015 P778663	N10-EFF 04-AUG-2015 P795088	N10-EFF 06-OCT-2015 P807289
			=====	=====	=====	=====
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	3.6	3.2	8.3	42.5
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	16.5	ND	ND	9.6
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	20.1	3.20	8.30	52.1
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	5.3	3.4

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
			03-FEB-2015 P755964	05-MAY-2015 P778668	04-AUG-2015 P795093	06-OCT-2015 P807294
=====	=====	=====	=====	=====	=====	=====
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	12.0
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	9.5	159	146	17.5
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	9.5	159	146	29.5
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 05-MAY-2015 P778653	N01-PS_INF 06-OCT-2015 P807279	N01-PEN 05-MAY-2015 P778658	N01-PEN 06-OCT-2015 P807284
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	0.000	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 05-MAY-2015 P778663	N10-EFF 06-OCT-2015 P807289	N34-REC WATER 05-MAY-2015 P778668	N34-REC WATER 06-OCT-2015 P807294
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	0.000	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

ND= Not Detected

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Benzidines

Source:			N01-PS_INF	N01-PS_INF	N01-PS_INF	N01-PS_INF
Date:			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
	MDL	Units	P755949	P778653	P795078	P807279
=====	=====	=====	=====	=====	=====	=====
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:			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
	MDL	Units	P755954	P778658	P795083	P807284
=====	=====	=====	=====	=====	=====	=====
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	NA
Benzidine	1.52	UG/L	ND	ND	ND	NA

Source:			N10-EFF	N10-EFF	N10-EFF	N10-EFF
Date:			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
	MDL	Units	P755959	P778663	P795088	P807289
=====	=====	=====	=====	=====	=====	=====
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:			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
	MDL	Units	P755964	P778668	P795093	P807294
=====	=====	=====	=====	=====	=====	=====
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND

ND= Not Detected

NORTH CITY WATER RECLAMATION PLANT  
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Phenolic Compounds

Analyte	MDL	Units	N01-PS_INF 03-FEB-2015 P755949	N01-PS_INF 05-MAY-2015 P778653	N01-PS_INF 04-AUG-2015 P795078	N01-PS_INF 06-OCT-2015 P807279
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	29.3	29.5	26.1	25.8
=====						
Total Non-Chlorinated Phenols	2.16	UG/L	29.3	29.5	26.1	25.8
Total Chlorinated Phenols	1.67	UG/L	0.00	0.00	0.00	0.00
=====						
Phenols	2.16	UG/L	29.3	29.5	26.1	25.8
Additional compounds						
=====						
2-Methylphenol	2.15	UG/L	ND	ND	3.33	ND
3-Methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA
4-Methylphenol(3-MP is unresolved)	2.11	UG/L	79.0	73.1	73.8	ND
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	ND

Analyte	MDL	Units	N01-PEN 03-FEB-2015 P755954	N01-PEN 05-MAY-2015 P778658	N01-PEN 04-AUG-2015 P795083	N01-PEN 06-OCT-2015 P807284
2,4,6-Trichlorophenol	1.65	UG/L	ND	ND	ND	NA
2,4-Dichlorophenol	1.01	UG/L	ND	ND	ND	NA
2,4-Dimethylphenol	2.01	UG/L	ND	ND	ND	NA
2,4-Dinitrophenol	2.16	UG/L	ND	ND	ND	NA
2-Methyl-4,6-dinitrophenol	1.52	UG/L	ND	ND	ND	NA
2-Chlorophenol	1.32	UG/L	ND	ND	ND	NA
2-Nitrophenol	1.55	UG/L	ND	ND	ND	NA
4-Chloro-3-methylphenol	1.67	UG/L	ND	ND	ND	NA
4-Nitrophenol	1.14	UG/L	ND	ND	ND	NA
Pentachlorophenol	1.12	UG/L	ND	ND	ND	NA
Phenol	1.76	UG/L	31.5	17.8	5.88	NA
=====						
Total Non-Chlorinated Phenols	2.16	UG/L	31.5	17.8	5.88	*
Total Chlorinated Phenols	1.67	UG/L	0.00	0.00	0.00	*
=====						
Phenols	2.16	UG/L	31.50	17.80	5.88	*
Additional compounds						
=====						
2-Methylphenol	2.15	UG/L	ND	ND	ND	NA
3-Methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA
4-Methylphenol(3-MP is unresolved)	2.11	UG/L	64.0	33.8	6.51	NA
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	NA

ND= not detected  
NA= Not Analyzed

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Phenolic Compounds

Analyte	MDL	Units	N10-EFF 03-FEB-2015 P755959	N10-EFF 05-MAY-2015 P778663	N10-EFF 04-AUG-2015 P795088	N10-EFF 06-OCT-2015 P807289
			=====	=====	=====	=====
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	23.4	26.9	21.0	ND
=====	=====	=====	=====	=====	=====	=====
Total Non-Chlorinated Phenols	2.16	UG/L	23.4	26.9	21.0	0.00
Total Chlorinated Phenols	1.67	UG/L	0.00	0.00	0.00	0.00
=====	=====	=====	=====	=====	=====	=====
Phenols	2.16	UG/L	23.4	26.9	21.0	0.00

Additional compounds

Analyte	MDL	Units	N10-EFF 03-FEB-2015 P755959	N10-EFF 05-MAY-2015 P778663	N10-EFF 04-AUG-2015 P795088	N10-EFF 06-OCT-2015 P807289
			=====	=====	=====	=====
2-Methylphenol	2.15	UG/L	ND	ND	2.20	ND
3-Methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA
4-Methylphenol(3-MP is unresolved)	2.11	UG/L	56.2	49.1	48.7	32.3
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	ND

Analyte	MDL	Units	N34-REC WATER 03-FEB-2015 P755964	N34-REC WATER 05-MAY-2015 P778668	N34-REC WATER 04-AUG-2015 P795093	N34-REC WATER 06-OCT-2015 P807294
			=====	=====	=====	=====
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 compounds

Analyte	MDL	Units	N34-REC WATER 03-FEB-2015 P755964	N34-REC WATER 05-MAY-2015 P778668	N34-REC WATER 04-AUG-2015 P795093	N34-REC WATER 06-OCT-2015 P807294
			=====	=====	=====	=====
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 03-FEB-2015 P755952	N01-PS_INF 05-MAY-2015 P778656	N01-PS_INF 04-AUG-2015 P795081	N01-PS_INF 06-OCT-2015 P807282
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	4.4	3.0	DNQ1.9	DNQ0.5*
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	1.8	1.8	2.5	DNQ2.0
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	DNQ1.0	2.6	DNQ1.6	2.8
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
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.0
Purgeable Compounds	1.3	UG/L	7.2	7.4	6.0	4.8

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	399	446	316	582
Carbon disulfide	.6	UG/L	2.9	DNQ2.2	3.7	3.8
2-Butanone	6.3	UG/L	ND	DNQ8.3	DNQ8.1	ND
Methyl tert-butyl ether	.4	UG/L	ND	ND	ND	ND

ND= Not Detected

DNQ=Detected but not quantified. Sample result is less than Minimum Level but greater than or equal to MDL.

\*=The Response factor RSD of 59.5% is above 15% calibration criteria limit; result is not included in averages.



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Priority Pollutants Purgeable Compounds, EPA Method 8260B

Analyte	MDL	Units	N01-PEN 03-FEB-2015 P755957	N01-PEN 05-MAY-2015 P778661	N01-PEN 04-AUG-2015 P795086	N01-PEN 06-OCT-2015 P807287
			=====	=====	=====	=====
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	2.4	ND	DNQ0.7	DNQ0.36*
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	1.8	1.7	DNQ1.4	DNQ1.5
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	DNQ0.6	DNQ0.6	DNQ0.6	DNQ0.8
Ethylbenzene	.3	UG/L	ND	DNQ0.6	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	DNQ0.5
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
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.5
Purgeable Compounds	1.3	UG/L	4.8	2.9	2.7	2.3

Additional analytes determined

Analyte	MDL	Units	=====	=====	=====	=====
			=====	=====	=====	=====
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	2.6	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	DNQ0.9	ND	ND
Acetone	4.5	UG/L	141	289	300	197
Carbon disulfide	.6	UG/L	4.6	DNQ1.5	2.6	2.5
2-Butanone	6.3	UG/L	ND	DNQ9.5	ND	ND
Methyl tert-butyl ether	.4	UG/L	ND	ND	ND	ND

ND= Not Detected

DNQ=Detected but not quantified. Sample result is less than Minimum Level but greater than or equal to MDL.

\*=The Response factor RSD of 59.5% is above 15% calibration criteria limit; result is not included in averages.

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Priority Pollutants Purgeable Compounds, EPA Method 8260B

Analyte	MDL	Units	N10-EFF 03-FEB-2015 P755962	N10-EFF 05-MAY-2015 P778666	N10-EFF 04-AUG-2015 P795091	N10-EFF 06-OCT-2015 P807292
			=====	=====	=====	=====
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	1.5	DNQ1.6	DNQ0.54*
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	1.2	2.2	DNQ1.7	2.6
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	1.6	DNQ1.0	2.5
Ethylbenzene	.3	UG/L	ND	DNQ0.4	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
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.0
Purgeable Compounds	1.3	UG/L	1.2	5.7	4.3	5.1

Additional analytes determined

Analyte	MDL	Units	=====	=====	=====	=====
			=====	=====	=====	=====
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	DNQ1.0	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	258	439	592	338
Carbon disulfide	.6	UG/L	1.7	DNQ2.8	2.2	2.2
2-Butanone	6.3	UG/L	ND	DNQ7.2	DNQ7.7	DNQ7.4
Methyl tert-butyl ether	.4	UG/L	ND	ND	ND	ND

ND= Not Detected

DNQ=Detected but not quantified. Sample result is less than Minimum Level but greater than or equal to MDL.

\*=The Response factor RSD of 59.5% is above 15% calibration criteria limit; result is not included in averages.

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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
			03-FEB-2015	05-MAY-2015	04-AUG-2015	06-OCT-2015
			P755967	P778671	P795096	P807297
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	DNQ1.9	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	50.9	45.5	56.1	41.8
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	39.1	34.2	36.1	35.1
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	23.3	22.1	17.9	19.9
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	3.0	2.5	DNQ1.6	2.1
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	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	65.4	58.8	55.6	57.1
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.0
Purgeable Compounds	1.3	UG/L	116.3	104.3	113.6	98.9

Additional analytes determined

Analyte	MDL	Units				
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	15	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

DNQ=Detected but not quantified. Sample result is less than Minimum Level but greater than or equal to MDL.

\*\*=The internal check and spikes results for these analytes in this batch were outside the acceptance range. The results are not used in the average.