Attachment L

Effluent Data

- Phosphorus and BOD_5 Data
- TKN Data
- Hardness Data
- pH Data
- Temperature Data
- PCB Data
- Summary of Quantifiable Effluent Data
- Water Quality Standards Monitoring Lab Data Sheets

Western Virginia Water Authority WPCP
VA0025020 (Outfall 001)

Due Date	Phosphorus				BOD_5				Flow	
	Quantity Average (kg/d)	Quantity Max (kg/d)	Conc Average (mg/L)	Conc Max (mg/L)	Quantity Average (kg/d)	Quantity Max (kg/d)	Conc Average (mg/L)	Conc Max (mg/L)	Quantity Average (MGD)	Quantity Max (MGD)
42 MGD Limits	**32**	**48**	**0.20**	**0.30**	**795**	**1192**	**5.0**	**7.5**	**42**	--
10-Apr-04	8	9	0.06	0.07	372	463	2.6	3.2	37.79	43.53
10-May-04	9	12.79	0.06	0.07	129	323.5	0.8	2.4	**42.04**	50.19
10-Jun-04	7	9	0.05	0.07	267	500	1.9	3.6	37.14	43.72
10-Jul-04	6	9	0.04	0.06	691	945	4.5	6.3	40.97	50.39
10-Aug-04	7	11	0.05	0.08	**889**	986	**6.5**	**7.6**	36.3	41.32
10-Sep-04	5	12	0.04	0.09	**1207**	**1588**	**9.1**	11	34.08	42.4
10-Oct-04	5	8	0.03	0.05	688	906	4.5	5.5	39.72	49.57
10-Nov-04	7	10	0.06	0.06	132	306	1.5	2	39.88	46.38
10-Dec-04	12	16	0.07	0.09	144	408	0.8	2.4	**45.58**	52.65
10-Jan-05	15	20	0.08	0.11	75	64	0.4	0.3	**48.61**	52.27
10-Feb-05	4	8	0.02	0.04	220	409	1.3	2.3	**43.07**	53.61
10-Mar-05	2	3	0.01	0.02	212	291	1.3	1.7	**45.28**	50.21
10-Apr-05	9	17	0.05	0.09	416	656	2.3	3.6	**47.75**	52.89
10-May-05	31	**50**	0.17	0.29	**915**	**1280**	**5.1**	7.5	48.3	57.78
10-Jun-05	31	**60**	**0.21**	**0.41**	602	1002	4	6.8	39.34	48.37
10-Jul-05	**81**	**166**	**0.51**	**1.01**	**1894**	**3068**	**11.7**	**18**	40.56	49.26
10-Aug-05	27	43	0.17	**0.32**	613	**1224**	3.7	7.1	41.6	50.16
10-Sep-05	28	30	0.2	0.22	79	163	0.6	1.3	36.54	45.22
10-Oct-05	7	8	0.06	0.07	70	96	0.5	0.8	30.61	33.85
10-Nov-05	10	15	0.08	0.12	53	179	0.4	1.6	35.24	51.88
10-Dec-05	6	7	0.05	0.06	70	160	0.6	1	31.41	51.41
10-Jan-06	8	10	0.05	0.06	197	407	1.2	2.4	39.17	53.95
10-Feb-06	10	21	0.05	0.11	421	840	2.4	4.3	41.02	60.39
10-Mar-06	5	7	0.04	0.04	53	111	0.4	0.8	35.83	46.68
10-Apr-06	7	7	0.06	0.06	32	0	0.3	<QL	29.6	32.86
10-May-06	11	12	0.09	0.1	359	488	2.9	4.1	32.72	46.6
10-Jun-06	17	18	0.14	0.15	368	448	3.1	3.8	30.19	48.35
10-Jul-06	24	18	0.17	0.18	0	0	<QL	<QL	33.66	66.6
10-Aug-06	17	29	0.13	0.24	0	0	<QL	<QL	36.67	57.3
10-Sep-06	17	21	0.15	0.2	63	94	0.4	0.8	28.96	49.2
10-Oct-06	13	22	0.1	0.14	<QL	<QL	<QL	<QL	34.04	56.17
10-Nov-06	17	20	0.11	0.14	<QL	<QL	<QL	<QL	37.37	64.61
10-Dec-06	16	24	0.09	0.12	82	352	0.4	1.7	**43.11**	65.59
10-Jan-07	6	14	0.03	0.07	44	193	0.2	0.8	37.91	59.55
10-Feb-07	17	27	0.09	0.12	294	1163	2.1	7.4	**47.56**	77.49
10-Mar-07	21	18	0.14	0.13	411	541	3	3.7	38.56	57.77
10-Apr-07	11	16	0.06	0.08	373	833	1.8	4.8	**45.69**	64.37
10-May-07	4	10	0.03	0.06	55	235	0.3	1.4	41.01	55.08
10-Jun-07	4	8	0.03	0.06	52	113	0.4	0.8	34.04	43.7
10-Jul-07	7	10	0.06	0.08	493	800	4.4	5.8	32.03	47.86
10-Aug-07	17	25	0.15	0.21	28	124	0.2	1	30.16	35.48
10-Sep-07	10	12	0.09	0.1	<QL	<QL	<QL	<QL	29.31	35.8
10-Oct-07	12	15	0.11	0.14	<QL	<QL	<QL	<QL	28.76	44.68
10-Nov-07	18	35	0.16	**0.36**	<QL	<QL	<QL	<QL	32.95	85.28
10-Dec-07	3	2	0.02	0.02	<QL	<QL	<QL	<QL	28.23	31.39
10-Jan-08	9	17	0.08	0.16	<QL	<QL	<QL	<QL	29.47	38.93
10-Feb-08	12	20	0.11	0.18	<QL	<QL	<QL	<QL	29.74	33.75
10-Mar-08	6	11	0.05	0.09	<QL	<QL	<QL	<QL	31.7	52.17

Exceedances of limits in bold
Permittee under consent order during upgrade to 55 MGD facility.

Western Virginia Water Authority WPCP
VA0025020
Outfall 001

Month	Phosphorus				BOD_5			
	Quantity Monthly Average (kg/d)	Quantity Weekly Average (kg/d)	Conc Monthly Average (mg/L)	Conc Weekly Average (mg/L)	Quantity Monthly Average (kg/d)	Quantity Weekly Average (kg/d)	Conc Monthly Average (mg/L)	Conc Weekly Average (mg/L)
55 MGD Limits	41	62	0.20	0.30	1040	1561	5.0	7.5
Mar. 2008	7	10	0.06	0.08	50	220	0.4	1.8
Apr. 2008	14	13	0.07	0.07	88	<QL	0.3	<QL
May 2008	6	9	0.05	0.08	<QL	<QL	<QL	<QL
Jun 2008	9	25	0.09	0.23	<QL	<QL	<QL	<QL
Jul. 2008	8	12	0.07	0.1	<QL	<QL	<QL	<QL
Aug. 2008	10	12	0.09	0.12	47	206	0.4	1.7
Sep 2008	8	16	0.07	0.15	<QL	<QL	<QL	<QL

Western Virginia Water Authority WPCP
VA0025020 (Outfall 001)

Due Date	TKN				BOD_5				Flow	
	Quantity Average (kg/d)	Quantity Max (kg/d)	Conc Average (mg/L)	Conc Max (mg/L)	Quantity Average (kg/d)	Quantity Max (kg/d)	Conc Average (mg/L)	Conc Max (mg/L)	Quantity Average (MGD)	Quantity Max (MGD)
42 MGD Limits	318/636*	477/795*	2.0/4.0*	3.0/5.0*	795	1192	5.0	7.5	42	--
10-Apr-04	218	387	1.5	2.6	372	463	2.6	3.2	37.79	43.53
10-May-04	83	145.73	0.5	1.1	129	323.5	0.8	2.4	**42.04**	50.19
10-Jun-04	150	225	1.1	1.6	267	500	1.9	3.6	37.14	43.72
10-Jul-04	256	359	1.7	2.4	691	945	4.5	6.3	40.97	50.39
10-Aug-04	938	1260	6.9	9.7	889	986	6.5	7.6	36.3	41.32
10-Sep-04	646	874	5	6.9	1207	1588	9.1	11	34.08	42.4
10-Oct-04	432	388	2.9	2.6	688	906	4.5	5.5	39.72	49.57
10-Nov-04	242	347	2.2	2.3	132	306	1.5	2	39.88	46.38
10-Dec-04	40	111	0.2	0.7	144	408	0.8	2.4	**45.58**	52.65
10-Jan-05	28	0	0.1	<QL	75	64	0.4	0.3	**48.61**	52.27
10-Feb-05	79	172	0.5	1	220	409	1.3	2.3	**43.07**	53.61
10-Mar-05	127	253	0.7	1.4	212	291	1.3	1.7	**45.28**	50.21
10-Apr-05	159	259	0.9	1.5	416	656	2.3	3.6	**47.75**	52.89
10-May-05	229	344	1.3	2	915	1280	5.1	7.5	48.3	57.78
10-Jun-05	219	333	1.5	2.3	602	1002	4	6.8	39.34	48.37
10-Jul-05	487	799	3.1	4.9	1894	3068	11.7	18	40.56	49.26
10-Aug-05	189	514	1.1	2.9	613	1224	3.7	7.1	41.6	50.16
10-Sep-05	0	0	<QL	<QL	79	163	0.6	1.3	36.54	45.22
10-Oct-05	13	22	0.1	0.2	70	96	0.5	0.8	30.61	33.85
10-Nov-05	58	110	0.4	0.8	53	179	0.4	1.6	35.24	51.88
10-Dec-05	54	126	0.5	1.2	70	160	0.6	1	31.41	51.41
10-Jan-06	0	0	<QL	<QL	197	407	1.2	2.4	39.17	53.95
10-Feb-06	25	43	0.1	0.3	421	840	2.4	4.3	41.02	60.39
10-Mar-06	11	21	0.1	0.1	53	111	0.4	0.8	35.83	46.68
10-Apr-06	23	16	0.2	0.1	32	0	0.3	<QL	29.6	32.86
10-May-06	245	422	2	3.5	359	488	2.9	4.1	32.72	46.6
10-Jun-06	99	83	0.8	0.7	368	448	3.1	3.8	30.19	48.35
10-Jul-06	94	97	0.6	0.9	0	0	<QL	<QL	33.66	66.6
10-Aug-06	28	38	0.2	0.3	0	0	<QL	<QL	36.67	57.3
10-Sep-06	48	86	0.5	0.8	63	94	0.4	0.8	28.96	49.2
10-Oct-06	16	66	0.1	0.4	<QL	<QL	<QL	<QL	34.04	56.17
10-Nov-06	16	38	0.1	0.2	<QL	<QL	<QL	<QL	37.37	64.61
10-Dec-06	82	167	0.5	0.9	82	352	0.4	1.7	**43.11**	65.59
10-Jan-07	10	<QL	0.1	<QL	44	193	0.2	0.8	37.91	59.55
10-Feb-07	51	62	0.2	0.3	294	1163	2.1	7.4	**47.56**	77.49
10-Mar-07	122	161	0.8	1.1	411	541	3	3.7	38.56	57.77
10-Apr-07	204	361	1.2	2.1	373	833	1.8	4.8	**45.69**	64.37
10-May-07	89	185	0.6	1.1	55	235	0.3	1.4	41.01	55.08
10-Jun-07	44	95	0.3	0.7	52	113	0.4	0.8	34.04	43.7
10-Jul-07	125	206	1	1.8	493	800	4.4	5.8	32.03	47.86
10-Aug-07	34	54	0.3	0.4	28	124	0.2	1	30.16	35.48
10-Sep-07	14	40	0.1	0.4	<QL	<QL	<QL	<QL	29.31	35.8
10-Oct-07	11	34	0.1	0.3	<QL	<QL	<QL	<QL	28.76	44.68
10-Nov-07	12	33	0.1	0.3	<QL	<QL	<QL	<QL	32.95	85.28
10-Dec-07	4	<QL	0.05	<QL	<QL	<QL	<QL	<QL	28.23	31.39
10-Jan-08	<QL	<QL	<QL	<QL	<QL	<QL	<QL	<QL	29.47	38.93
10-Feb-08	<QL	<QL	<QL	<QL	<QL	<QL	<QL	<QL	29.74	33.75
10-Mar-08	2	19	0.04	0.2	<QL	<QL	<QL	<QL	31.7	52.17

* tiered limits (Apr. - Sep./Oct. - Mar.) Dates associated with first tier bolded.
Exceedances of limits in bold
Permittee under consent order during upgrade to 55 MGD facility.

Western Virginia Water Authority WPCP
VA0025020
Outfall 001

Month	TKN			
	Quantity Monthly Average (kg/d)	Quantity Weekly Average (kg/d)	Conc Monthly Average (mg/L)	Conc Weekly Average (mg/L)
55 MGD Limits (Apr. - Sep.)	**318**	**477**	**2.0**	**3.0**
Apr. 2008	72	38	0.3	0.3
May 2008	19	37	0.1	0.3
Jun. 2008	<QL	<QL	<1.0	<1.0
Jul. 2008	32	143	0.3	1.2
Aug. 2008	8	17	0.1	0.2
Sep. 2008	<QL	<QL	<1.0	<1.0

Due Date	TKN			
	Quantity Monthly Average (kg/d)	Quantity Weekly Average (kg/d)	Conc Monthly Average (mg/L)	Conc Weekly Average (mg/L)
55 MGD Limits (Oct. - Mar.)	**636**	**795**	**2.0**	**3.0**
Mar. 2008	<QL	<QL	<1.0	<1.0
Oct. 2008	<QL	<QL	<1.0	<1.0

Western Virginia Water Authority WPCP
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Effluent Hardness Composite

Date	mg/L as $CaCO_3$
06/07/04	168
06/08/04	188
06/09/04	180
06/10/04	176
06/11/04	168
10/18/04	210
10/19/04	140
10/20/04	180
10/21/04	190
10/22/04	180
12/13/04	180
12/14/04	180
12/15/04	180
12/16/04	180
12/17/04	180
02/14/05	170
02/15/05	150
02/16/05	180
02/17/05	170
02/18/05	190
10/31/05	176
11/01/05	184
11/02/05	184
11/03/05	196
11/04/05	252
06/20/06	168
06/21/06	168
06/22/06	168
06/23/06	164
06/24/06	160
06/05/07	168
06/06/07	164
06/07/07	160
06/08/07	168
06/09/07	180
04/03/08	188
05/22/08	188
06/26/08	192
07/29/08	188
07/30/08	192
07/31/08	180
08/01/08	204
09/08/08	180
09/10/08	184
09/12/08	188
Mean	180

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Effluent pH (S.U.)

Due Date	Minimum	Maximum
10-Apr-04	6.5	7.1
10-May-04	6.6	7
10-Jun-04	6	7
10-Jul-04	6.8	7.3
10-Aug-04	6.8	7.2
10-Sep-04	6	7
10-Oct-04	6.5	7
10-Nov-04	6.6	7
10-Dec-04	6.5	7.6
10-Jan-05	6.6	7.1
10-Feb-05	6.5	7.1
10-Mar-05	6.5	7.1
10-Apr-05	6.5	6.9
10-May-05	6.5	7.1
10-Jun-05	6.7	7.4
10-Jul-05	6.7	7.2
10-Aug-05	6.7	7.1
10-Sep-05	6.6	7.4
10-Oct-05	6.9	7.3
10-Nov-05	6.7	7.3
10-Dec-05	7	7.5
10-Jan-06	6.7	7.2
10-Feb-06	6.6	7.2
10-Mar-06	6.7	7.3
10-Apr-06	6.7	7.3
10-May-06	6.9	7.2
10-Jun-06	6.9	7.3
10-Jul-06	6.6	7.3
10-Aug-06	6.8	7.1
10-Sep-06	6.8	7.1
10-Oct-06	6.8	7.2
10-Nov-06	6.7	7.3
10-Dec-06	6.8	7.3
10-Jan-07	6.8	7.3
10-Feb-07	6.8	7.3
10-Mar-07	6.8	7.4
10-Apr-07	7	7.4
10-May-07	7	7.4
10-Jun-07	7	7.3
10-Jul-07	6.9	7.3
10-Aug-07	6.8	7.4
10-Sep-07	6.9	7.3
10-Oct-07	6.8	7.4
10-Nov-07	6.8	7.5
10-Dec-07	6.9	7.7
10-Jan-08	6.5	7.2
10-Feb-08	6.6	7.4
10-Mar-08	6.8	7.6
10-Apr-08	6.7	7.3

90th Percentile pH	7.5 S.U.
10th Percentile pH	6.5 S.U.

Western Virginia Water Authority WPCP
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Effluent pH (S.U.)

Due Date	Minimum	Maximum
10-May-08	6.6	7.4
10-Jun-08	6.7	7.2
10-Jul-08	6.5	7.3
10-Aug-08	6.7	7.6
10-Sep-08	6.7	7.5
10-Oct-08	6.7	7.5

WVWA WPCP
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Effluent Temperature

Date	°C
2/12/2004	16.2
2/13/2004	15.8
2/14/2004	14.7
2/15/2004	13.7
2/16/2004	16.3
2/13/2005	13.6
2/14/2005	14.1
2/15/2005	14.6
2/16/2005	13.6
2/17/2005	12.4
10/30/2005	18.7
10/31/2005	18.6
11/1/2005	18.4
11/2/2005	17.0
11/3/2005	18.1
6/19/2006	21.2
6/20/2006	21.5
6/21/2006	21.9
6/22/2006	22.7
6/23/2006	22.3
11/26/2007	14.4
11/27/2007	15.1
11/28/2007	15.2
11/29/2007	14.2
5/4/2008	17.4
5/5/2008	17.7
5/6/2008	17.8
5/7/2008	17.8
5/8/2008	18.4
7/28/2008	23.1
7/29/2008	23.3
7/30/2008	23.7
7/31/2008	23.8
8/1/2008	23.6
9/8/2008	23.0
9/10/2008	22.0
9/12/2008	21.7

90th Percentile Temperature	23.2 °C
90th Percentile Temperature (Jan.-May)	17.8 °C

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Summary of Effluent Application Data (Metals)

Date	Hg, TR (ug/L) C	Ni, TR (ug/L) C	Se, TR (ug/L) C	CN, Total (ug/L) Dis G	Cr VI, Dis (ug/L) G
3/4/2008	<0.2	<5	**2**	<5	<2
3/5/2008	<0.2	<5	**3**	<5	<2
4/8/2008	<0.2	<5	<2	<5	<2
4/9/2008	<0.2	<5	<2	<5	<2
5/6/2008	<0.2	<5	<2	<5	<2
5/7/2008	<0.2	<5	<2	<5	<2
6/3/2008	<0.2	<5	<2	<5	2
6/4/2008	<0.2	<5	<2	<5	<2
7/8/2008	<0.2	<5	<2	<5	**4**
7/9/2008	<0.2	<5	<2	<5	**2**
8/5/2008	<0.2	<5	<2	<5	<2
8/6/2008	<0.2	<5	<2	<5	<2
9/9/2008	<0.2	<5	<2	**5**	<2
9/10/2008	<0.2	<5	<2	<5	<2

Date	Ag, TR (µg/L) C	As, TR (µg/L) C	Cd, TR (µg/L) C	Cr, TR (µg/L) C	Cu, TR (µg/L) C	Pb, TR (µg/L) C	Sn, TR (µg/L) C	Zn, TR (µg/L) C
4/3/2008	<5.0	<20	<1.0	<5.0	8.4	<10.0	<20	30.3
5/22/2008	<5.0	<20	<1.0	<5.0	8.4	<10.0	<20	25
6/24/2008	<5.0	<20	<1.0	<5.0	8.4	<10.0	<20	25.0

* Dissolved copper and dissolved zinc collected later using clean sampling techniques.
G= grab
C= composite
TR= total recoverable
Dis = dissolved

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Composite Chloride Data

Date	mg/L
8/9/2007*	102
10/30/2008	111
10/31/2008	106
11/1/2008	104
11/2/2008	104
11/3/2008	82.5
11/4/2008	88
11/5/2008	96
11/6/2008	95.5
11/7/2008	94.5

* grab sample

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Composite Clean Metals Sampling

Date	Copper, Dissolved (µg/L)	Zinc, Dissolved (µg/L)
10/29/2008	4.7	15.8
10/30/2008	4.9	16.3
10/31/2008	5.5	19.5
11/1/2008	5.3	23.6
11/2/2008	5.7	20.7
11/3/2008	5.8	17.7
11/4/2008	6.1	18.4
11/5/2008	6.4	23.3
11/6/2008	6.3	22.4
11/7/2008	6.6	20.6

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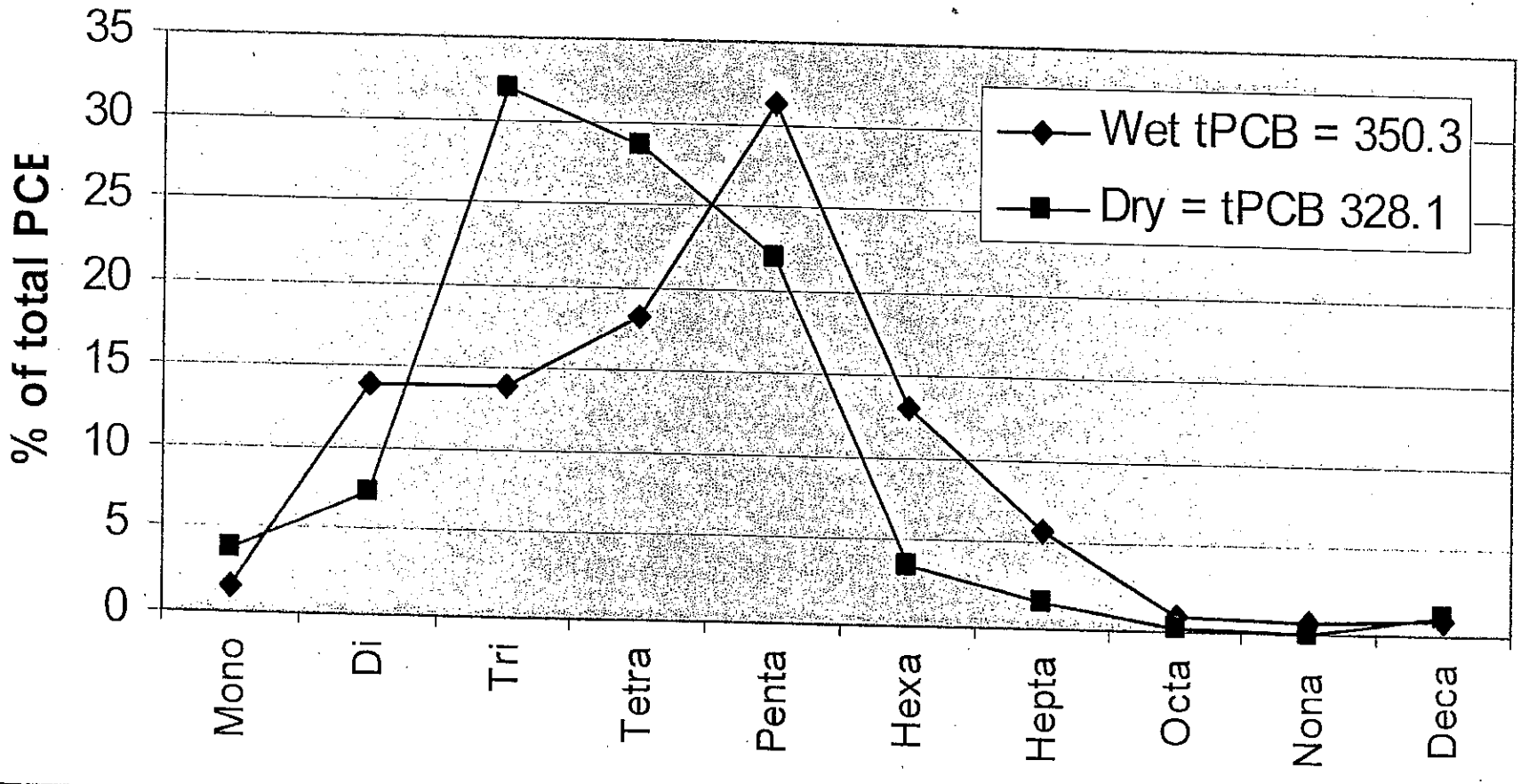
Summary of Quantifiable Effluent Application Data (Outfall 001)

Parameter (µg/L)	8/9/07	4/3/08	5/22/08	6/24/08
Copper, Dissolved	11			
Copper, Total Recoverable		8.4	8.5	9.1
Chloride (mg/L)	102			
Zinc, Dissolved	42			
Zinc, Total Recoverable		30.3	25	25.0
Chloroform		9.8	12.2	16.0
Nitrogen, Nitrate-nitrite (mg/L)			11.9	10.2
Total Dissolved Solids (mg/L)			393	410
Bis(2-ethylhexyl) Phthalate*			29.2	

*analyte detected in associated method blank (14.0 ug/L) on 5/22/08

PCB Homolog distribution from Effluent Collected at the Western VA Sewage Authority under Wet & Dry Flows



Precipitation	"WET"		"DRY"	
Client Sample ID	Roanoke STP Outfall		Roanoke STP Outfall	
Sample Descriptor			Western VA Water Authorit y Roanoke STP Effluent	
Original Sample				
GERG ID	C59374		C59031	
Sample Type	SAMP		SAMP	
SDG	I4612		I3601	
Dry Weight				
Wet Weight	3.84		3.92	
Sample Size Units	Grams		Grams	
Matrix	Water		Water	
% solid				
% Lipid				
Reporting Units	pg/L		pg/g	
Calculation Basis (Dry/Wet)	Wet		Wet	
QC Batch ID	M3549		M3544	
Method	GC/MS		GC/MS	
Collection Date	4/7/2008		3/3/2008	
Receive Date	4/10/2008		3/5/2008	
Extraction Date	7/29/2008		6/14/2008	
Analysis Date	10/3/2028		9/23/2008	
Surrogate Compounds	**% Recovery**		**% Recovery**	
13C-PCB-1	65.6		65.4	
13C-PCB-3	76.1		72.8	
13C-PCB-4	78.5		66.8	
13C-PCB-15	83.8		54.5	
13C-PCB-19	93.5		71.2	
13C-PCB-37	88.7		75.4	
13C-PCB-54	2.0	Q	47.3	
13C-PCB-77	52.4		80.3	
13C-PCB-81	84.5		22.9	Q
13C-PCB-104	80.3		65.0	
13C-PCB-105	87.5		69.9	
13C-PCB-114	82.3		81.7	
13C-PCB-118	107.0		62.5	
13C-PCB-123	125.8		68.6	
13C-PCB-126	99.1		72.8	
13C-PCB-155	89.6		56.8	
13C-PCB-156	88.6		67.3	
13C-PCB-157	102.1		67.7	
13C-PCB-167	95.9		65.9	
13C-PCB-169	101.5		73.7	
13C-PCB-188	78.7		54.5	

13C-PCB-189	102.5		198.7	Q
13C-PCB-202	94.2		50.2	
13C-PCB-205	77.7		57.4	
13C-PCB-206	82.3		54.8	
13C-PCB-208	77.8		60.5	
13C-PCB-209	82.1		46.1	

Analytes	Concentration		Concentration	
Chlorination 1				
PCB-1	0.0	ND	0.0	ND
PCB-2	0.0	ND	0.0	ND
PCB-3	5.5		12.6	
Chlorination 2				
PCB-4/10	19.5		24.1	
PCB-5/8	8.2		0.0	ND
PCB-6	0.0	ND	0.0	ND
PCB 7/9	0.0	ND	0.0	ND
PCB-11	11.5		0.0	ND
PCB-12	0.0	ND	0.0	ND
PCB-13	0.0	ND	0.0	ND
PCB-14	0.0	ND	0.0	ND
PCB-15	9.5		0.0	ND
Chlorination 3				
PCB-16/32	14.2		0.0	ND
PCB-17	0.0	ND	22.4	
PCB-18/30	0.3	J	0.0	ND
PCB-19	3.7	J	3.3	J
PCB-20/21/33	0.0	B	0.0	ND
PCB-22	11.7		10.6	
PCB-23/34	0.0	ND	0.0	ND
PCB-24/27	0.0	ND	0.0	ND
PCB-25	5.1	J	0.0	ND
PCB-26	0.0	ND	0.0	ND
PCB-28/31	0.0	B	62.7	
PCB-29	0.0	ND	0.0	ND
PCB-35	4.7	J	0.0	ND
PCB-36	1.2	J	0.0	ND
PCB-37	7.4		5.7	
PCB-38	0.0	ND	0.0	ND
PCB-39	0.0	ND	0.0	ND
Chlorination 4				
PCB-40	1.4		2.3	J
PCB-41/68	7.5		10.2	
PCB-42	0.0	ND	0.0	ND
PCB-43/52	16.6		27.2	
PCB-44	9.7		14.2	
PCB-45	0.0	ND	0.0	ND
PCB-46	0.0	ND	1.4	J
PCB-47/48/65/75	5.3		7.4	
PCB-49	7.3		10.9	
PCB-50	0.2		0.0	ND

PCB-51	0.0	ND	0.0	ND
PCB-53	2.0		4.0	J
PCB-54	0.0	ND	0.0	ND
PCB-55	0.0	ND	0.0	ND
PCB-56	0.0	ND	2.5	J
PCB-57	0.0	ND	0.0	ND
PCB-58	0.0	ND	1.7	J
Analytes	**Concentration**			
Chlorination 4 (cont.)				
PCB-59	2.3		3.2	J
PCB-60/64/69	0.0	ND	0.0	ND
PCB-61	0.1	J	4.3	J
PCB-62	0.0	ND	0.0	ND
PCB-63	0.0	ND	0.0	ND
PCB-66/80	0.0	ND	0.0	ND
PCB-67	2.5		0.0	ND
PCB-70/76	0.2		0.0	ND
PCB-71/72	7.5		4.5	J
PCB-73	0.0	ND	0.0	ND
PCB-74	0.0	ND	0.0	ND
PCB-77	1.1	J	0.0	ND
PCB-78	0.0	ND	0.0	ND
PCB-79	0.0	ND	0.0	ND
PCB-81	0.0	ND	0.0	ND
Chlorination 5				
PCB-82/107	0.0	ND	0.0	ND
PCB-83/112	0.0	ND	0.0	ND
PCB-84	5.2	J	4.4	J
PCB-85/120	3.1	J	0.0	ND
PCB-86/97/125	6.2		4.5	J
PCB-87/115	3.4	J	4.2	J
PCB-88	0.0	ND	0.0	ND
PCB-89/90/101	21.8		14.5	
PCB-91	2.7	J	2.0	J
PCB-92	3.9	J	0.0	ND
PCB-93	0.2	J	0.0	ND
PCB-94	0.0	ND	0.0	ND
PCB-95/121	0.0	ND	0.0	ND
PCB-96	0.0	ND	0.0	ND
PCB-98/102	0.3	J	0.0	ND
PCB-99	8.0		6.9	
PCB-100	1.0	J	0.0	ND
PCB-103	0.9	J	0.0	ND
PCB-104	0.0	ND	1.1	J
PCB-105	7.1		3.2	J
PCB-106/118	12.4		5.8	
PCB-108	2.2	J	0.0	ND
PCB-109	0.0	ND	1.6	J
PCB-110	28.4		20.3	
PCB-111/116/117	0.5	J	0.0	ND
PCB-113	0.0	ND	0.0	ND
PCB-114	0.0	ND	0.4	J

PCB-119	0.0	ND	0.0	ND
PCB-122	0.2	J	0.0	ND
PCB-123	0.0	ND	0.0	ND
PCB-124	1.1	J	0.0	ND
PCB-126	0.8	J	0.0	ND
PCB-127	0.0	ND	3.0	J
Analytes	**Concentration**			
Chlorination 6				
PCB-128	1.9	J	0.0	ND
PCB-129	0.3	J	0.0	ND
PCB-130	0.0	ND	0.0	ND
PCB-131/142/165	0.0	ND	0.0	ND
PCB-132	2.2	J	1.9	J
PCB-133	0.0	ND	0.0	ND
PCB-134	0.0	ND	0.0	ND
PCB-135	0.8	J	0.0	ND
PCB-136	1.1	J	0.7	J
PCB-137	0.0	ND	0.0	ND
PCB-138/158/160	8.7		0.0	B
PCB-139/140/149	4.9	J	2.9	J
PCB 141	1.1	J	0.0	ND
PCB-143	0.3	J	0.0	ND
PCB-144	0.0	ND	0.0	ND
PCB-145	0.0	ND	0.0	ND
PCB-146/161	1.2	J	0.8	J
PCB-147	0.0	ND	0.0	ND
PCB-148	0.0	ND	0.0	ND
PCB-150	0.0	ND	0.0	ND
PCB-151	1.4	J	1.5	J
PCB-152	0.0	ND	0.0	ND
PCB-153/168	10.8		0.0	B
PCB-154	0.0	ND	0.0	ND
PCB-155	4.1	J	2.3	J
PCB-156	1.7	J	0.0	ND
PCB-157	0.5	J	0.0	ND
PCB-159	0.0	ND	0.0	ND
PCB-162	0.0	ND	0.0	ND
PCB-163/164	3.6	J	1.5	J
PCB-166	0.1	J	0.0	ND
PCB-167	0.8	J	0.0	ND
PCB-169	0.0	ND	0.0	ND
Chlorination 7				
PCB-170/190	2.3	J	1.4	J
PCB-171	0.5	J	0.0	ND
PCB-172/191	0.0	ND	0.0	ND
PCB-173	0.0	ND	0.0	ND
PCB-174/181	1.8	J	0.9	J
PCB-175	0.0	ND	0.0	ND
PCB-176	0.4	J	0.0	ND
PCB-177	0.9	J	0.4	J
PCB-178	0.0	ND	0.0	ND
PCB-179	1.2	J	0.5	J

PCB-180/193	5.8		0.0	B
PCB-182/187	2.8	J	0.0	B
PCB-183	1.1	J	0.7	J
PCB-184	3.3	J	1.3	J
PCB-185	0.0	ND	0.0	ND
Analytes	**Concentration**			
Chlorination 7 (cont.)				
PCB-186	0.0	ND	0.0	ND
PCB-188	0.2	J	0.0	ND
PCB-189	0.0	ND	0.0	ND
PCB-192	0.0	ND	0.0	ND
Chlorination 8				
PCB-194	0.9	J	0.9	J
PCB-195	0.4	J	0.0	ND
PCB-196/203	1.0	J	0.0	ND
PCB-197	0.0	ND	0.0	ND
PCB-198	0.8	J	0.0	ND
PCB-199	0.0	ND	0.0	ND
PCB-200/201	0.2	J	0.0	ND
PCB-202	0.0	ND	0.0	ND
PCB-204	0.0	ND	0.0	ND
PCB-205	0.0	ND	0.0	ND
Chlorination 9				
PCB-206	1.4	J	0.0	ND
PCB-207	0.0	ND	0.0	ND
PCB-208	0.6	J	0.0	ND
Chlorination 10				
PCB-209	3.4	J	3.3	J
Blank Adjusted tPCB Congeners	350.3		328.1	

PCB Homologs by Chlorination Level	**Concentration**	**Concentration**	
Chlorination 1	5.5	12.6	
Chlorination 2	48.7	24.1	
Chlorination 3	48.3	104.7	
Chlorination 4	63.9	93.8	
Chlorination 5	109.4	71.9	
Chlorination 6	45.5	11.6	
Chlorination 7	20.3	5.2	
Chlorination 8	3.3	0.9	
Chlorination 9	2.0	0.0	ND
Chlorination 10	3.4	3.3	

PROCHEM Analytical Incorporated

Final Report

Report Date: 8/22/2007

PCA Order No.: 414918
Client: Western VA. Water Authority Wastewater Division
Project: 5-Year Plant Effluent

Sample Number: 414918-01
Date Collected: 8/9/2007
Time Collected: 08:25

Description: Plant Effluent
Matrix: Wastewater
Sample Type: Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Copper, Dissolved	0.011	0.005	mg/L	8/14/2007	16:53	CDM	EPA 200.7
Zinc, Dissolved	0.042	0.005	mg/L	8/14/2007	16:53	CDM	EPA 200.7
Kepone	< 10.0	10.0	µg/L	8/17/2007	18:29	DKF	SW-846 8270C
gamma-BHC	< 0.125	0.125	µg/L	8/17/2007	20:27	WAL	EPA 608

Sample extracted 8/14/07.

Sample Number: 414918-02
Date Collected: 8/9/2007
Time Collected: 07:21 - 07:40

Description: Plant Effluent
Matrix: Wastewater
Sample Type: Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Tributyltin	< 40.0	40.0	ng/L	8/13/2007	00:00	SUB	NBSIR-85-3295
Chloride	102	5.00	mg/L	8/15/2007	08:20	MLS	EPA 300.0

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Level II QC Summary Report

Surrogate Recovery Data

PCA Order No. **414918** **Report Date:** **8/22/2007**

Client Name: **Western VA. Water Authority Wastewater D**

Ms. Janis Richardson

Project ID: **5-Year Plant Effluent**

Method: EPA 608 **QC Batch ID:** P2398M

Lab Sample ID	Parameter	Units	Sample Result	Spike Added	% Rec	Acceptance Criteria
414918-01	DCB	µg/L	23.8	100	23.8	30.- 140%
	DCB recovery low. TCMX meets acceptance criteria.					
	TCMX	µg/L	49.7	100	49.7	30 - 140%

REI Consultants, Inc. Analytical Results Date: 30-Apr-08

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0804349
Client Sample ID:	FEB 2008-COMP	Lab ID:	0804349-01A
Project:	FIRST SCAN FOR THE VPDES APP	Collection Date:	4/3/2008 7:35:00 AM
Site ID:	WPCP OUTFALL 001	Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
METALS BY ICP			E200.7			Analyst: JD
Antimony	ND	mg/L		0.00500	0.0200	4/7/2008 12:22:00 PM
Arsenic	ND	mg/L		0.00500	0.0200	4/7/2008 12:22:00 PM
Cadmium	ND	mg/L		0.00020	0.0010	4/7/2008 12:22:00 PM
Chromium	ND	mg/L		0.00100	0.0050	4/7/2008 12:22:00 PM
Copper	0.0084	mg/L		0.00200	0.0050	4/7/2008 12:22:00 PM
Lead	ND	mg/L		0.00300	0.0100	4/7/2008 12:22:00 PM
Silver	ND	mg/L		0.00100	0.0050	4/7/2008 12:22:00 PM
Zinc	0.0303	mg/L		0.00300	0.0200	4/7/2008 12:22:00 PM
HARDNESS			SM2340 B			Analyst: JD
Hardness, Total (As CaCO3)	188	mg/L		1.00	1.00	4/7/2008 12:22:00 PM
SEMIVOLATILE ORGANIC COMPOUNDS			E625			Analyst: CLS
Acenaphthene	ND	mg/L		0.00047	0.0134	4/9/2008 2:12:00 AM
Anthracene	ND	mg/L		0.00070	0.0134	4/9/2008 2:12:00 AM
Benzidine	ND	mg/L		0.00191	0.0134	4/9/2008 2:12:00 AM
Benzo(a)anthracene	ND	mg/L		0.00060	0.0134	4/9/2008 2:12:00 AM
Benzo(a)pyrene	ND	mg/L		0.00202	0.0134	4/9/2008 2:12:00 AM
Benzo(k)fluoranthene	ND	mg/L		0.00215	0.0134	4/9/2008 2:12:00 AM
Bis(2-chloroethyl)ether	ND	mg/L		0.00059	0.0134	4/9/2008 2:12:00 AM
Bis(2-chloroisopropyl)ether	ND	mg/L		0.00026	0.0134	4/9/2008 2:12:00 AM
Bis(2-ethylhexyl)phthalate	ND	mg/L		0.00807	0.0134	4/9/2008 2:12:00 AM
Butyl benzyl phthalate	ND	mg/L		0.00062	0.0134	4/9/2008 2:12:00 AM
2-Chloronaphthalene	ND	mg/L		0.00066	0.0134	4/9/2008 2:12:00 AM
2-Chlorophenol	ND	mg/L		0.00132	0.0134	4/9/2008 2:12:00 AM
Chrysene	ND	mg/L		0.00042	0.0134	4/9/2008 2:12:00 AM
Dibenzo(a,h)anthracene	ND	mg/L		0.00051	0.0134	4/9/2008 2:12:00 AM
Di-n-butyl phthalate	ND	mg/L		0.00403	0.0134	4/9/2008 2:12:00 AM
1,2-Dichlorobenzene	ND	mg/L		0.00065	0.0134	4/9/2008 2:12:00 AM
1,3-Dichlorobenzene	ND	mg/L		0.00070	0.0134	4/9/2008 2:12:00 AM
1,4-Dichlorobenzene	ND	mg/L		0.00050	0.0134	4/9/2008 2:12:00 AM
3,3'-Dichlorobenzidine	ND	mg/L		0.00065	0.0134	4/9/2008 2:12:00 AM
2,4-Dichlorophenol	ND	mg/L		0.00214	0.0134	4/9/2008 2:12:00 AM
Diethyl phthalate	ND	mg/L		0.00039	0.0134	4/9/2008 2:12:00 AM
Dimethyl phthalate	ND	mg/L		0.00062	0.0134	4/9/2008 2:12:00 AM
2,4-Dimethylphenol	ND	mg/L		0.00133	0.0134	4/9/2008 2:12:00 AM
2,4-Dinitrophenol	ND	mg/L		0.00229	0.0134	4/9/2008 2:12:00 AM
2,4-Dinitrotoluene	ND	mg/L		0.00067	0.0134	4/9/2008 2:12:00 AM

Key:

MCL	Maximum Contaminant Level	J	Analyte detected below quantitation limits
MDL	Minimum Detection Limit	B	Analyte detected in the associated Method Blank
NA	Not Applicable	E	Estimated Value above quantitation range
ND	Not Detected at the PQL or MDL	H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitation Limit	S	Spike/Surrogate Recovery outside accepted recovery limits
TIC	Tentatively Identified Compound, Estimated Concentration	*	Value exceeds Maximum Contaminant Level

REI Consultants, Inc. Analytical Results Date: 30-Apr-08

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0804349
Client Sample ID:	FEB 2008-COMP	Lab ID:	0804349-01A
Project:	FIRST SCAN FOR THE VPDES APP	Collection Date:	4/3/2008 7:35:00 AM
Site ID:	WPCP OUTFALL 001	Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS			E625			Analyst: CLS
1,2-Diphenylhydrazine	ND	mg/L		0.00032	0.0134	4/9/2008 2:12:00 AM
Fluoranthene	ND	mg/L		0.00056	0.0134	4/9/2008 2:12:00 AM
Fluorene	ND	mg/L		0.00051	0.0134	4/9/2008 2:12:00 AM
Hexachlorobenzene	ND	mg/L		0.00117	0.0134	4/9/2008 2:12:00 AM
Hexachlorobutadiene	ND	mg/L		0.00079	0.0134	4/9/2008 2:12:00 AM
Hexachlorocyclopentadiene	ND	mg/L		0.00077	0.0134	4/9/2008 2:12:00 AM
Hexachloroethane	ND	mg/L		0.00040	0.0134	4/9/2008 2:12:00 AM
Indeno(1,2,3-cd)pyrene	ND	mg/L		0.00046	0.0134	4/9/2008 2:12:00 AM
Isophorone	ND	mg/L		0.00058	0.0134	4/9/2008 2:12:00 AM
Naphthalene	ND	mg/L		0.00055	0.0134	4/9/2008 2:12:00 AM
Nitrobenzene	ND	mg/L		0.00044	0.0134	4/9/2008 2:12:00 AM
N-Nitrosodimethylamine	ND	mg/L		0.00067	0.0134	4/9/2008 2:12:00 AM
N-Nitrosodiphenylamine	ND	mg/L		0.00078	0.0134	4/9/2008 2:12:00 AM
N-Nitrosodi-n-propylamine	ND	mg/L		0.00065	0.0134	4/9/2008 2:12:00 AM
Pentachlorophenol	ND	mg/L		0.00393	0.0134	4/9/2008 2:12:00 AM
Phenol	ND	mg/L		0.00104	0.0134	4/9/2008 2:12:00 AM
Pyrene	ND	mg/L		0.00055	0.0134	4/9/2008 2:12:00 AM
1,2,4-Trichlorobenzene	ND	mg/L		0.00058	0.0134	4/9/2008 2:12:00 AM
2,4,6-Trichlorophenol	ND	mg/L		0.00085	0.0134	4/9/2008 2:12:00 AM
Surr: 2-Fluorophenol	56.7	%REC			21-110	4/9/2008 2:12:00 AM
Surr: Phenol-d5	39.8	%REC			10-110	4/9/2008 2:12:00 AM
Surr: 2,4,6-Tribromophenol	121	%REC			10-123	4/9/2008 2:12:00 AM
Surr: Nitrobenzene-d5	103	%REC			35-114	4/9/2008 2:12:00 AM
Surr: 2-Fluorobiphenyl	91.2	%REC			43-116	4/9/2008 2:12:00 AM
Surr: 4-Terphenyl-d14	84.9	%REC			33-141	4/9/2008 2:12:00 AM

NOTES:

The CCV for 2,4-Dinitrophenol exceeded REIC control limits indicating a high bias. Since the analyte result was ND, this exceedance does not adversely impact data usability.

ANIONS BY ION CHROMATOGRAPHY			SM4110B			Analyst: SB
Nitrogen, Nitrate-Nitrite	9.13	mg/L		0.030	0.10	4/8/2008 6:19:00 PM
AMMONIA NITROGEN			E350.1			Analyst: BA
Nitrogen, Ammonia (As N)	0.31	mg/L		0.030	0.10	4/9/2008 10:00:00 AM
TOTAL DISSOLVED SOLIDS			SM2540 C			Analyst: GV
Total Dissolved Solids	451	mg/L		1.0	1	4/4/2008 8:30:00 AM

Key:				
	MCL	Maximum Contaminant Level	J	Analyte detected below quantitation limits
	MDL	Minimum Detection Limit	B	Analyte detected in the associated Method Blank
	NA	Not Applicable	E	Estimated Value above quantitation range
	ND	Not Detected at the PQL or MDL	H	Holding times for preparation or analysis exceeded
	PQL	Practical Quantitation Limit	S	Spike/Surrogate Recovery outside accepted recovery limits
	TIC	Tentatively Identified Compound, Estimated Concentration	*	Value exceeds Maximum Contaminant Level

REI Consultants, Inc. **Analytical Results** Date: *30-Apr-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0804349
Client Sample ID:	FEB 2008-GRAB	Lab ID:	0804349-02A
Project:	FIRST SCAN FOR THE VPDES APP	Collection Date:	4/3/2008 7:40:00 AM
Site ID:	WPCP OUTFALL 001	Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			E624			Analyst: AS
Benzene	ND	µg/L		2.88	5.00	4/4/2008 1:35:00 PM
Acrolein	ND	µg/L		45.3	50.0	4/4/2008 1:35:00 PM
Acrylonitrile	ND	µg/L		34.1	50.0	4/4/2008 1:35:00 PM
Bromoform	ND	µg/L		4.65	5.00	4/4/2008 1:35:00 PM
Bromomethane	ND	µg/L		2.48	5.00	4/4/2008 1:35:00 PM
Carbon tetrachloride	ND	µg/L		2.30	5.00	4/4/2008 1:35:00 PM
Chlorobenzene	ND	µg/L		4.53	5.00	4/4/2008 1:35:00 PM
Chloroform	9.80	µg/L		3.01	5.00	4/4/2008 1:35:00 PM
Dibromochloromethane	ND	µg/L		4.98	5.00	4/4/2008 1:35:00 PM
1,2-Dichloroethane	ND	µg/L		3.62	5.00	4/4/2008 1:35:00 PM
1,1-Dichloroethene	ND	µg/L		0.935	5.00	4/4/2008 1:35:00 PM
trans-1,2-Dichloroethene	ND	µg/L		1.94	5.00	4/4/2008 1:35:00 PM
1,2-Dichloropropane	ND	µg/L		3.93	5.00	4/4/2008 1:35:00 PM
cis-1,3-Dichloropropene	ND	µg/L		3.75	5.00	4/4/2008 1:35:00 PM
trans-1,3-Dichloropropene	ND	µg/L		4.55	5.00	4/4/2008 1:35:00 PM
Ethylbenzene	ND	µg/L		4.16	5.00	4/4/2008 1:35:00 PM
Methylene chloride	ND	µg/L		1.93	5.00	4/4/2008 1:35:00 PM
Tetrachloroethene	ND	µg/L		3.22	5.00	4/4/2008 1:35:00 PM
Toluene	ND	µg/L		3.84	5.00	4/4/2008 1:35:00 PM
1,1,2-Trichloroethane	ND	µg/L		4.50	5.00	4/4/2008 1:35:00 PM
Trichloroethene	ND	µg/L		3.42	5.00	4/4/2008 1:35:00 PM
Vinyl chloride	ND	µg/L		1.98	5.00	4/4/2008 1:35:00 PM
Surr: Dibromofluoromethane	101	%REC			80-120	4/4/2008 1:35:00 PM
Surr: 1,2-Dichloroethane-d4	97.7	%REC			80-120	4/4/2008 1:35:00 PM
Surr: Toluene-d8	97.8	%REC			88-110	4/4/2008 1:35:00 PM
Surr: 4-Bromofluorobenzene	98.1	%REC			86-115	4/4/2008 1:35:00 PM
OIL AND GREASE			E1664			Analyst: JL
Oil & Grease	ND	mg/L		2.00	5.0	4/11/2008 12:00:00 PM

Key:				
	MCL	Maximum Contaminant Level	J	Analyte detected below quantitation limits
	MDL	Minimum Detection Limit	B	Analyte detected in the associated Method Blank
	NA	Not Applicable	E	Estimated Value above quantitation range
	ND	Not Detected at the PQL or MDL	H	Holding times for preparation or analysis exceeded
	PQL	Practical Quantitation Limit	S	Spike/Surrogate Recovery outside accepted recovery limits
	TIC	Tentatively Identified Compound, Estimated Concentration	*	Value exceeds Maximum Contaminant Level

REI Consultants, Inc. Analytical Results

Date: *30-May-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0805F39
Client Sample ID:	OUTFALL 001 COMP	Lab ID:	0805F39-01A
Project:	SECOND SCAN FOR VPDES	Collection Date:	5/22/2008 7:15:00 AM
Site ID:	WPCP OUTFALL 001	Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
METALS BY ICP			**E200.7**			Analyst: **JD**
Antimony	ND	mg/L		0.0050	0.020	5/27/2008 2:59:00 PM
Arsenic	ND	mg/L		0.0050	0.020	5/27/2008 2:59:00 PM
Cadmium	ND	mg/L		0.00020	0.0010	5/27/2008 2:59:00 PM
Chromium	ND	mg/L		0.0010	0.0050	5/27/2008 2:59:00 PM
Copper	0.0085	mg/L		0.0020	0.0050	5/27/2008 2:59:00 PM
Lead	ND	mg/L		0.0030	0.010	5/27/2008 2:59:00 PM
Silver	ND	mg/L		0.0010	0.0050	5/27/2008 2:59:00 PM
Zinc	0.025	mg/L		0.0030	0.020	5/27/2008 2:59:00 PM

NOTES:

The LCS for [Sb] exceeded REIC control limits indicating a high bias. Since the analyte result was ND, this exceedance does not adversely impact data usability.

HARDNESS			**SM2340 B**			Analyst: **JD**
Hardness, Total (As CaCO3)	188	mg/L		1.00	1.00	5/27/2008 2:59:00 PM
SEMIVOLATILE ORGANIC COMPOUNDS			**E625**			Analyst: **CLS**
Acenaphthene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Anthracene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Benzidine	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Benzo(a)anthracene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Benzo(a)pyrene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Benzo(k)fluoranthene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Bis(2-chloroethyl)ether	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Bis(2-chloroisopropyl)ether	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Bis(2-ethylhexyl)phthalate	0.0292	mg/L	B	0.00628	0.0105	5/28/2008 7:36:00 AM
Butyl benzyl phthalate	ND	mg/L		0.00523	0.0105	5/28/2008 7:36:00 AM
2-Chloronaphthalene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
2-Chlorophenol	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Chrysene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Dibenzo(a,h)anthracene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Di-n-butyl phthalate	0.0032	mg/L	JB	0.00314	0.0105	5/28/2008 7:36:00 AM
1,2-Dichlorobenzene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
1,3-Dichlorobenzene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
1,4-Dichlorobenzene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
3,3'-Dichlorobenzidine	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
2,4-Dichlorophenol	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Diethyl phthalate	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Dimethyl phthalate	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM

Key:				
	MCL	Maximum Contaminant Level	J	Analyte detected below quantitation limits
	MDL	Minimum Detection Limit	B	Analyte detected in the associated Method Blank
	NA	Not Applicable	E	Estimated Value above quantitation range
	ND	Not Detected at the PQL or MDL	H	Holding times for preparation or analysis exceeded
	PQL	Practical Quantitation Limit	S	Spike/Surrogate Recovery outside accepted recovery limits
	TIC	Tentatively Identified Compound, Estimated Concentration	*	Value exceeds Maximum Contaminant Level

REI Consultants, Inc. **Analytical Results** Date: *30-May-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0805F39
Client Sample ID:	OUTFALL 001 COMP	Lab ID:	0805F39-01A
Project:	SECOND SCAN FOR VPDES	Collection Date:	5/22/2008 7:15:00 AM
Site ID:	WPCP OUTFALL 001	Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS			E625			Analyst: CLS
2,4-Dimethylphenol	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
2,4-Dinitrophenol	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
2,4-Dinitrotoluene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
1,2-Diphenylhydrazine	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Fluoranthene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Fluorene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Hexachlorobenzene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Hexachlorobutadiene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Hexachlorocyclopentadiene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Hexachloroethane	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Indeno(1,2,3-cd)pyrene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Isophorone	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Naphthalene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Nitrobenzene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
N-Nitrosodimethylamine	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
N-Nitrosodiphenylamine	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
N-Nitrosodi-n-propylamine	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Pentachlorophenol	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Phenol	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Pyrene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
1,2,4-Trichlorobenzene	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
2,4,6-Trichlorophenol	ND	mg/L		0.00209	0.0105	5/28/2008 7:36:00 AM
Surr: 2-Fluorophenol	55.8	%REC			21-110	5/28/2008 7:36:00 AM
Surr: Phenol-d5	36.2	%REC			10-110	5/28/2008 7:36:00 AM
Surr: 2,4,6-Tribromophenol	107	%REC			10-123	5/28/2008 7:36:00 AM
Surr: Nitrobenzene-d5	101	%REC			35-114	5/28/2008 7:36:00 AM
Surr: 2-Fluorobiphenyl	87.2	%REC			43-116	5/28/2008 7:36:00 AM
Surr: 4-Terphenyl-d14	87.7	%REC			33-141	5/28/2008 7:36:00 AM
ANIONS BY ION CHROMATOGRAPHY			SM4110B			Analyst: SB
Nitrogen, Nitrate-Nitrite	11.9	mg/L		0.030	0.10	5/28/2008 11:58:00 AM
AMMONIA NITROGEN			E350.1			Analyst: BA
Nitrogen, Ammonia (As N)	ND	mg/L		0.030	0.10	5/29/2008 12:45:00 PM
TOTAL DISSOLVED SOLIDS			SM2540 C			Analyst: GV
Total Dissolved Solids	393	mg/L		1.0	1	5/23/2008 6:05:00 AM

Key:				
	MCL	Maximum Contaminant Level	J	Analyte detected below quantitation limits
	MDL	Minimum Detection Limit	B	Analyte detected in the associated Method Blank
	NA	Not Applicable	E	Estimated Value above quantitation range
	ND	Not Detected at the PQL or MDL	H	Holding times for preparation or analysis exceeded
	PQL	Practical Quantitation Limit	S	Spike/Surrogate Recovery outside accepted recovery limits
	TIC	Tentatively Identified Compound, Estimated Concentration	*	Value exceeds Maximum Contaminant Level

REI Consultants, Inc. **Analytical Results** Date: *30-May-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0805F39
Client Sample ID:	OUTFALL 001 GRAB	Lab ID:	0805F39-02A
Project:	SECOND SCAN FOR VPDES	Collection Date:	5/22/2008 7:15:00 AM
Site ID:	WPCP OUTFALL 001	Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			E624			Analyst: AS
Benzene	ND	µg/L		2.88	5.00	5/23/2008 5:41:00 PM
Acrolein	ND	µg/L		45.3	50.0	5/23/2008 5:41:00 PM
Acrylonitrile	ND	µg/L		34.1	50.0	5/23/2008 5:41:00 PM
Bromoform	ND	µg/L		4.65	5.00	5/23/2008 5:41:00 PM
Bromomethane	ND	µg/L		2.48	5.00	5/23/2008 5:41:00 PM
Carbon tetrachloride	ND	µg/L		2.30	5.00	5/23/2008 5:41:00 PM
Chlorobenzene	ND	µg/L		4.53	5.00	5/23/2008 5:41:00 PM
Chloroform	12.2	µg/L		3.01	5.00	5/23/2008 5:41:00 PM
Dibromochloromethane	ND	µg/L		4.98	5.00	5/23/2008 5:41:00 PM
1,2-Dichloroethane	ND	µg/L		3.62	5.00	5/23/2008 5:41:00 PM
1,1-Dichloroethene	ND	µg/L		0.935	5.00	5/23/2008 5:41:00 PM
trans-1,2-Dichloroethene	ND	µg/L		1.94	5.00	5/23/2008 5:41:00 PM
1,2-Dichloropropane	ND	µg/L		3.93	5.00	5/23/2008 5:41:00 PM
cis-1,3-Dichloropropene	ND	µg/L		3.75	5.00	5/23/2008 5:41:00 PM
trans-1,3-Dichloropropene	ND	µg/L		4.55	5.00	5/23/2008 5:41:00 PM
Ethylbenzene	ND	µg/L		4.16	5.00	5/23/2008 5:41:00 PM
Methylene chloride	ND	µg/L		1.93	5.00	5/23/2008 5:41:00 PM
Tetrachloroethene	ND	µg/L		3.22	5.00	5/23/2008 5:41:00 PM
Toluene	ND	µg/L		3.84	5.00	5/23/2008 5:41:00 PM
1,1,2-Trichloroethane	ND	µg/L		4.50	5.00	5/23/2008 5:41:00 PM
Trichloroethene	ND	µg/L		3.42	5.00	5/23/2008 5:41:00 PM
Vinyl chloride	ND	µg/L		1.98	5.00	5/23/2008 5:41:00 PM
Surr: Dibromofluoromethane	111	%REC			80-120	5/23/2008 5:41:00 PM
Surr: 1,2-Dichloroethane-d4	107	%REC			80-120	5/23/2008 5:41:00 PM
Surr: Toluene-d8	100	%REC			88-110	5/23/2008 5:41:00 PM
Surr: 4-Bromofluorobenzene	96.7	%REC			86-115	5/23/2008 5:41:00 PM
OIL AND GREASE			E1664			Analyst: JL
Oil & Grease	ND	mg/L		2.00	5.0	5/29/2008 2:00:00 PM

Key:				
	MCL	Maximum Contaminant Level	J	Analyte detected below quantitation limits
	MDL	Minimum Detection Limit	B	Analyte detected in the associated Method Blank
	NA	Not Applicable	E	Estimated Value above quantitation range
	ND	Not Detected at the PQL or MDL	H	Holding times for preparation or analysis exceeded
	PQL	Practical Quantitation Limit	S	Spike/Surrogate Recovery outside accepted recovery limits
	TIC	Tentatively Identified Compound, Estimated Concentration	*	Value exceeds Maximum Contaminant Level

REI Consultants, Inc. Analytical Results

Date: *11-Jul-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0806H13
Client Sample ID:	001-SCAN 3 COMP	Lab ID:	0806H13-01A
Project:	THIRD SCAN FOR VPDES	Collection Date:	6/24/2008 9:19:00 AM
Site ID:	WPCP OUTFALL 001	Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
METALS BY ICP			E200.7			Analyst: JD
Antimony	0.0056	mg/L	J	0.00500	0.0200	6/27/2008 1:26:00 PM
Arsenic	ND	mg/L		0.00500	0.0200	6/26/2008 1:23:00 PM
Cadmium	ND	mg/L		0.00020	0.0010	6/26/2008 1:23:00 PM
Chromium	ND	mg/L		0.00100	0.0050	6/26/2008 1:23:00 PM
Copper	0.0091	mg/L		0.00200	0.0050	6/26/2008 1:23:00 PM
Lead	ND	mg/L		0.00300	0.0100	6/26/2008 1:23:00 PM
Silver	ND	mg/L		0.00100	0.0050	6/26/2008 1:23:00 PM
Zinc	0.0250	mg/L		0.00300	0.0200	6/26/2008 1:23:00 PM
HARDNESS			SM2340 B			Analyst: JD
Hardness, Total (As CaCO3)	192	mg/L		1.00	1.00	6/26/2008 1:23:00 PM
SEMIVOLATILE ORGANIC COMPOUNDS			E625			Analyst: CLS
Acenaphthene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Anthracene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Benzidine	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Benzo(a)anthracene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Benzo(a)pyrene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Benzo(k)fluoranthene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Bis(2-chloroethyl)ether	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Bis(2-chloroisopropyl)ether	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Bis(2-ethylhexyl)phthalate	ND	mg/L		0.00660	0.0110	7/2/2008 12:10:00 AM
Butyl benzyl phthalate	ND	mg/L		0.00550	0.0110	7/2/2008 12:10:00 AM
2-Chloronaphthalene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
2-Chlorophenol	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Chrysene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Dibenzo(a,h)anthracene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Di-n-butyl phthalate	ND	mg/L		0.00330	0.0110	7/2/2008 12:10:00 AM
1,2-Dichlorobenzene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
1,3-Dichlorobenzene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
1,4-Dichlorobenzene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
3,3'-Dichlorobenzidine	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
2,4-Dichlorophenol	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Diethyl phthalate	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Dimethyl phthalate	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
2,4-Dimethylphenol	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
2,4-Dinitrophenol	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
2,4-Dinitrotoluene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM

Key:

MCL	Maximum Contaminant Level	J	Analyte detected below quantitation limits
MDL	Minimum Detection Limit	B	Analyte detected in the associated Method Blank
NA	Not Applicable	E	Estimated Value above quantitation range
ND	Not Detected at the PQL or MDL	H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitation Limit	S	Spike/Surrogate Recovery outside accepted recovery limits
TIC	Tentatively Identified Compound, Estimated Concentration	*	Value exceeds Maximum Contaminant Level

REI Consultants, Inc. **Analytical Results** Date: *11-Jul-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0806H13
Client Sample ID:	001-SCAN 3 COMP	Lab ID:	0806H13-01A
Project:	THIRD SCAN FOR VPDES	Collection Date:	6/24/2008 9:19:00 AM
Site ID:	WPCP OUTFALL 001	Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS			E625			Analyst: CLS
1,2-Diphenylhydrazine	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Fluoranthene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Fluorene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Hexachlorobenzene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Hexachlorobutadiene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Hexachlorocyclopentadiene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Hexachloroethane	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Indeno(1,2,3-cd)pyrene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Isophorone	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Naphthalene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Nitrobenzene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
N-Nitrosodimethylamine	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
N-Nitrosodiphenylamine	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
N-Nitrosodi-n-propylamine	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Pentachlorophenol	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Phenol	0.0042	mg/L	J	0.00220	0.0110	7/2/2008 12:10:00 AM
Pyrene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
1,2,4-Trichlorobenzene	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
2,4,6-Trichlorophenol	ND	mg/L		0.00220	0.0110	7/2/2008 12:10:00 AM
Surr: 2-Fluorophenol	46.0	%REC			21-110	7/2/2008 12:10:00 AM
Surr: Phenol-d5	32.5	%REC			10-110	7/2/2008 12:10:00 AM
Surr: 2,4,6-Tribromophenol	84.6	%REC			10-123	7/2/2008 12:10:00 AM
Surr: Nitrobenzene-d5	73.9	%REC			35-114	7/2/2008 12:10:00 AM
Surr: 2-Fluorobiphenyl	75.2	%REC			43-116	7/2/2008 12:10:00 AM
Surr: 4-Terphenyl-d14	76.5	%REC			33-141	7/2/2008 12:10:00 AM
ANIONS BY ION CHROMATOGRAPHY			SM4110B			Analyst: SB
Nitrogen, Nitrate-Nitrite	10.2	mg/L		0.030	0.10	7/1/2008 5:28:00 PM
AMMONIA NITROGEN			E350.1			Analyst: BA
Nitrogen, Ammonia (As N)	ND	mg/L		0.030	0.10	6/27/2008 9:00:00 AM
TOTAL DISSOLVED SOLIDS			SM2540 C			Analyst: GV
Total Dissolved Solids	410	mg/L		1.0	1	6/26/2008 6:35:00 AM

Key:				
	MCL	Maximum Contaminant Level	J	Analyte detected below quantitation limits
	MDL	Minimum Detection Limit	B	Analyte detected in the associated Method Blank
	NA	Not Applicable	E	Estimated Value above quantitation range
	ND	Not Detected at the PQL or MDL	H	Holding times for preparation or analysis exceeded
	PQL	Practical Quantitation Limit	S	Spike/Surrogate Recovery outside accepted recovery limits
	TIC	Tentatively Identified Compound, Estimated Concentration	*	Value exceeds Maximum Contaminant Level

REI Consultants, Inc. Analytical Results

Date: *11-Jul-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0806H13
Client Sample ID:	001-SCAN 3 GRAB	Lab ID:	0806H13-02A
Project:	THIRD SCAN FOR VPDES	Collection Date:	6/25/2008 9:16:00 AM
Site ID:	WPCP OUTFALL 001	Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			E624			Analyst: SDG
Benzene	ND	µg/L		2.88	5.00	6/26/2008 1:23:00 PM
Acrolein	ND	µg/L		45.3	50.0	6/26/2008 1:23:00 PM
Acrylonitrile	ND	µg/L		34.1	50.0	6/26/2008 1:23:00 PM
Bromoform	ND	µg/L		4.65	5.00	6/26/2008 1:23:00 PM
Bromomethane	ND	µg/L		2.48	5.00	6/26/2008 1:23:00 PM
Carbon tetrachloride	ND	µg/L		2.30	5.00	6/26/2008 1:23:00 PM
Chlorobenzene	ND	µg/L		4.53	5.00	6/26/2008 1:23:00 PM
Chloroform	16.0	µg/L		3.01	5.00	6/26/2008 1:23:00 PM
Dibromochloromethane	ND	µg/L		4.98	5.00	6/26/2008 1:23:00 PM
1,2-Dichloroethane	ND	µg/L		3.62	5.00	6/26/2008 1:23:00 PM
1,1-Dichloroethene	ND	µg/L		0.935	5.00	6/26/2008 1:23:00 PM
trans-1,2-Dichloroethene	ND	µg/L		1.94	5.00	6/26/2008 1:23:00 PM
1,2-Dichloropropane	ND	µg/L		3.93	5.00	6/26/2008 1:23:00 PM
cis-1,3-Dichloropropene	ND	µg/L		3.75	5.00	6/26/2008 1:23:00 PM
trans-1,3-Dichloropropene	ND	µg/L		4.55	5.00	6/26/2008 1:23:00 PM
Ethylbenzene	ND	µg/L		4.16	5.00	6/26/2008 1:23:00 PM
Methylene chloride	ND	µg/L		1.93	5.00	6/26/2008 1:23:00 PM
Tetrachloroethene	ND	µg/L		3.22	5.00	6/26/2008 1:23:00 PM
Toluene	ND	µg/L		3.84	5.00	6/26/2008 1:23:00 PM
1,1,2-Trichloroethane	ND	µg/L		4.50	5.00	6/26/2008 1:23:00 PM
Trichloroethene	ND	µg/L		3.42	5.00	6/26/2008 1:23:00 PM
Vinyl chloride	ND	µg/L		1.98	5.00	6/26/2008 1:23:00 PM
Surr: Dibromofluoromethane	115	%REC			80-120	6/26/2008 1:23:00 PM
Surr: 1,2-Dichloroethane-d4	111	%REC			80-120	6/26/2008 1:23:00 PM
Surr: Toluene-d8	104	%REC			88-110	6/26/2008 1:23:00 PM
Surr: 4-Bromofluorobenzene	102	%REC			86-115	6/26/2008 1:23:00 PM
OIL AND GREASE			E1664			Analyst: JL
Oil & Grease	ND	mg/L		2.00	5.0	7/2/2008 8:30:00 AM

Key:				
	MCL	Maximum Contaminant Level	J	Analyte detected below quantitation limits
	MDL	Minimum Detection Limit	B	Analyte detected in the associated Method Blank
	NA	Not Applicable	E	Estimated Value above quantitation range
	ND	Not Detected at the PQL or MDL	H	Holding times for preparation or analysis exceeded
	PQL	Practical Quantitation Limit	S	Spike/Surrogate Recovery outside accepted recovery limits
	TIC	Tentatively Identified Compound, Estimated Concentration	*	Value exceeds Maximum Contaminant Level

PROCHEM Analytical Incorporated

Final Report

PCA Order No.: 418041
Report Date: 3/21/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 418041-01
Date Collected: 3/3/2008 - 3/4/2008
Time Collected: 07:50 - 07:50
Description: WVWA FAS
Matrix: Wastewater
Sample Type: Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	3/7/2008	08:59	CDM	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Selenium, Total Recoverable	0.002	0.002	mg/L	3/19/2008	15:59	MLS	EPA 200.9

Sample Number: 418041-02
Date Collected: 3/4/2008
Time Collected: 07:50
Description: WVWA FAS
Matrix: Wastewater
Sample Type: Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	3/6/2008	09:30	ASB	SM 4500CN,E
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	3/4/2008	15:00	JNH	ASTM D1687

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Final Report

PCA Order No.: 418074 **Report Date:** 3/21/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 418074-01 **Description:** WVWA FAS
Date Collected: 3/4/2008 - 3/5/2008 **Matrix:** Wastewater
Time Collected: 07:50 - 07:30 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	3/12/2008	14:33	CDM	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	3/5/2008	16:45	CDM	EPA 200.7
Selenium, Total Recoverable	0.003	0.002	mg/L	3/19/2008	15:59	MLS	EPA 200.9

Sample Number: 418074-02 **Description:** WVWA FAS
Date Collected: 3/5/2008 **Matrix:** Wastewater
Time Collected: 07:30 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	3/11/2008	10:00	ASB	SM 4500CN,E
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	3/5/2008	12:45	JNH	ASTM D1687

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Final Report

PCA Order No.: 418599 **Report Date:** 4/18/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 418599-01 **Description:** WVWA FAS
Date Collected: 4/7/2008 - 4/8/2008 **Matrix:** Wastewater
Time Collected: 07:45 - 07:45 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	4/11/2008	09:01	CDM	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	4/9/2008	16:07	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	4/16/2008	11:46	MLS	EPA 200.9

Sample Number: 418599-02 **Description:** WVWA FAS
Date Collected: 4/8/2008 **Matrix:** Wastewater
Time Collected: 07:45 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	4/14/2008	09:00	ASB	SM 4500CN,E
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	4/8/2008	12:00	ASB	ASTM D1687

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Final Report

PCA Order No.: 418624 **Report Date:** 4/18/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 418624-01 **Description:** WVWA FAS
Date Collected: 4/8/2008 - 4/9/2008 **Matrix:** Wastewater
Time Collected: 07:45 - 07:45 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	4/11/2008	09:01	CDM	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	4/10/2008	14:00	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	4/16/2008	11:46	MLS	EPA 200.9

Sample Number: 418624-02 **Description:** WVWA FAS
Date Collected: 4/9/2008 **Matrix:** Wastewater
Time Collected: 07:45 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	4/14/2008	09:00	ASB	SM 4500CN,E
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	4/9/2008	09:00	JNH	ASTM D1687

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Final Report

PCA Order No.: 418972 **Report Date:** 6/2/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 418972-01 **Description:** WVWA FAS
Date Collected: 5/5/2008 - 5/6/2008 **Matrix:** Wastewater
Time Collected: 07:52 - 07:48 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	5/9/2008	11:54	KNB	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	5/7/2008	09:04	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	6/2/2008	12:28	MLS	EPA 200.9

Sample Number: 418972-02 **Description:** WVWA FAS
Date Collected: 5/6/2008 **Matrix:** Wastewater
Time Collected: 07:48 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	5/15/2008	10:10	ASB	SM 4500CN,E
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	5/6/2008	13:15	JNH	ASTM D1687

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Final Report

PCA Order No.: 419011 **Report Date:** 6/2/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 419011-01 **Description:** WVWA FAS
Date Collected: 5/6/2008 - 5/7/2008 **Matrix:** Wastewater
Time Collected: 07:48 - 07:44 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	5/9/2008	11:54	KNB	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	5/8/2008	16:30	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	6/2/2008	12:28	MLS	EPA 200.9

Sample Number: 419011-02 **Description:** WVWA FAS
Date Collected: 5/7/2008 **Matrix:** Wastewater
Time Collected: 07:44 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	5/19/2008	10:00	ASB	SM 4500CN,E
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	5/7/2008	09:30	JNH	ASTM D1687

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Final Report

PCA Order No.: 419358 **Report Date:** 6/17/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 419358-01 **Description:** WVWA FAS
Date Collected: 6/2/2008 - 6/3/2008 **Matrix:** Wastewater
Time Collected: 07:34 - 07:19 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	6/12/2008	18:48	KNB	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	6/9/2008	12:15	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	6/13/2008	02:15	EAD	EPA 200.9

Sample Number: 419358-02 **Description:** WVWA FAS
Date Collected: 6/3/2008 **Matrix:** Wastewater
Time Collected: 09:37 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	6/5/2008	13:45	ASB	SM 4500CN,E
Hexavalent Chromium, Dissolved	0.002	0.002	mg/L	6/3/2008	11:30	ASB	ASTM D1687

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Final Report

PCA Order No.: 419389 **Report Date:** 6/19/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 419389-01 **Description:** WVWA FAS
Date Collected: 6/3/2008 - 6/4/2008 **Matrix:** Wastewater
Time Collected: 07:19 - 07:23 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	6/12/2008	18:48	KNB	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	6/9/2008	12:15	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	6/17/2008	13:08	MLS	EPA 200.9

Sample Number: 419389-02 **Description:** WVWA FAS
Date Collected: 6/4/2008 **Matrix:** Wastewater
Time Collected: 12:05 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	6/4/2008	14:15	ASB	ASTM D1687

Sample Number: 419389-03 **Description:** WVWA FAS
Date Collected: 6/4/2008 **Matrix:** Wastewater
Time Collected: 07:23 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	6/9/2008	13:45	ASB	SM 4500CN,E

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Final Report

PCA Order No.: 419812 **Report Date:** 7/17/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 419812-01 **Description:** WVWA FAS
Date Collected: 7/7/2008 - 7/8/2008 **Matrix:** Wastewater
Time Collected: 07:27 - 07:29 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	7/11/2008	11:10	KNB	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	7/10/2008	09:55	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	7/15/2008	13:22	MLS	EPA 200.9

Sample Number: 419812-02 **Description:** WVWA FAS
Date Collected: 7/8/2008 **Matrix:** Wastewater
Time Collected: 07:29 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	7/9/2008	13:00	ASB	SM 4500CN,E
Hexavalent Chromium, Dissolved	0.004	0.002	mg/L	7/8/2008	09:00	ASB	ASTM D1687

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Final Report

PCA Order No.: 419845 **Report Date:** 7/17/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 419845-01 **Description:** WVWA FAS
Date Collected: 7/8/2008 - 7/9/2008 **Matrix:** Wastewater
Time Collected: 07:29 - 07:27 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	7/11/2008	11:10	KNB	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	7/11/2008	07:24	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	7/15/2008	13:22	MLS	EPA 200.9

Sample Number: 419845-02 **Description:** WVWA FAS
Date Collected: 7/9/2008 **Matrix:** Wastewater
Time Collected: 07:27 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	7/10/2008	14:00	ASB	SM 4500CN,E
Hexavalent Chromium, Dissolved	0.002	0.002	mg/L	7/9/2008	11:00	ASB	ASTM D1687

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Final Report

PCA Order No.: 420138 **Report Date:** 9/2/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 420138-01 **Description:** WVWA FAS
Date Collected: 8/4/2008 - 8/5/2008 **Matrix:** Wastewater
Time Collected: 07:29 - 07:40 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	8/7/2008	14:33	CDM	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	8/11/2008	09:12	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	8/28/2008	11:44	MLS	EPA 200.9

Sample Number: 420138-02 **Description:** WVWA FAS
Date Collected: 8/5/2008 **Matrix:** Wastewater
Time Collected: 08:55 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	8/12/2008	14:30	KBJ	SM 4500CN,E
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	8/5/2008	09:30	KNB	ASTM D1687

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ANALYTICAL REPORT

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Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Sample Number:	888920
Project Code:	WVWA
Sample Point:	FNE
Sample Date:	09/09/08

Analyte	Method	Unit	Result	Report Limit[1]	Regulatory Report Limit[2]	Analyst	Analysis Date	Analysis Time
Cr+6	SM3500CR	ug/L	< 5	5	7.1	SWILLI	09/15/08	0855

Notes
[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *Regulatory Report Limit is the quantification level listed in VPDES permit # VA0025020.*

Authorization: Robin Parnell Date: 9/25/08

PROCHEM Analytical Incorporated

Final Report

PCA Order No.: 420465 **Report Date:** 9/22/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 420465-01 **Description:** WVWA FAS
Date Collected: 9/8/2008 - 9/9/2008 **Matrix:** Wastewater
Time Collected: 07:48 - 07:26 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	9/19/2008	11:35	KNB	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	9/10/2008	15:45	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	9/15/2008	16:20	EAD	EPA 200.9

Result reported by Method of Standard Additions.

Sample Number: 420465-02 **Description:** WVWA FAS
Date Collected: 9/9/2008 **Matrix:** Wastewater
Time Collected: 07:26 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	0.005	0.005	mg/L	9/16/2008	11:03	SUB	SM 4500CN,E
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	9/9/2008	14:00	KNB	ASTM D1687

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PROCHEM Analytical Incorporated

Final Report

PCA Order No.: 420483 **Report Date:** 9/17/2008
Client: Western VA. Water Authority Wastewater Division
Project: Monthly - WVWA FAS

Sample Number: 420483-01 **Description:** WVWA FAS
Date Collected: 9/9/2008 - 9/10/2008 **Matrix:** Wastewater
Time Collected: 07:26 - 07:20 **Sample Type:** Composite

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Mercury, Total Recoverable	< 0.0002	0.0002	mg/L	9/12/2008	15:22	KNB	EPA 245.1
Nickel, Total Recoverable	< 0.005	0.005	mg/L	9/10/2008	15:45	CDM	EPA 200.7
Selenium, Total Recoverable	< 0.002	0.002	mg/L	9/12/2008	14:15	EAD	EPA 200.9

Sample Number: 420483-02 **Description:** WVWA FAS
Date Collected: 9/10/2008 **Matrix:** Wastewater
Time Collected: 07:20 **Sample Type:** Grab

Analysis	Result	Reporting Limit	Units	Date Analyzed	Time Analyzed	Analyst	Method
Cyanide, Total	< 0.005	0.005	mg/L	9/16/2008	11:30	SUB	SM 4500CN,E
Hexavalent Chromium, Dissolved	< 0.002	0.002	mg/L	9/10/2008	10:45	KNB	ASTM D1687

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ANALYTICAL REPORT

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Project: Western Virginia Water Authority
Customer Sample ID: Final Effluent
Sample Number: 888921
Project Code: WVWA
Sample Point: FNE
Sample Date: 09/10/08

Analyte	Method	Unit	Result	Report Limit[1]	Regulatory Report Limit[2]	Analyst	Analysis Date	Analysis Time
Cr+6	SM3500CR	ug/L	< 5	5	7.1	SWILLI	09/15/08	0855

Notes
[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *Regulatory Report Limit is the quantification level listed in VPDES permit # VA0025020.*

Authorization: Robin Parnell Date: 9/25/08

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ANALYTICAL REPORT

RECEIVED
OCT 24 2008
DEQ-WCRO

Project: Western Virginia Water Authority
Customer Sample ID: Final Effluent
Sample Number: 888920
Project Code: WVWA
Sample Point: FNE
Sample Date: 09/09/08

Analyte	Method	Unit	Result	Report Limit[1]	Regulatory Report Limit[2]	Analyst	Analysis Date	Analysis Time
Cr+6	SM3500CR	ug/L	< 5	5	7.1	SWILLI	09/15/08	0855

Notes
[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
[2] *Regulatory Report Limit is the quantification level listed in VPDES permit # VA0025020.*

Authorization: Robin Parnell **Date:** 9/25/08

WESTERN VIRGINIA
WATER AUTHORITY

WASTEWATER OPERATIONS

Pretreatment ■ SSE/R ■ Utility Maintenance ■ WPCP Operations

RECEIVED
OCT 24 2008
DEQ-WCRO

October 24, 2008

Ms. Cathy D. Kibler
Commonwealth of Virginia
Dept. of Environmental Quality
3019 Peters Creek Road
Roanoke, VA 24019

Dear Ms. Kibler:

Attached you will find a revised copy of the municipal discharge monitoring report for September 2008. The revised copy shows the correct average and maximum concentration for Hexavalent Chromium and Cyanide.

We did additional sampling for hexavalent chromium but did not receive the test results until October 14, 2008. Those test results are enclosed. The original cyanide result was reported as 2.5 ug/L but should have been reported as <QL.

If you have any questions please call me at 853-5274.

Sincerely,

Martin E. Sensabaugh
Operations Manager

Enclosure

C File

Western Virginia Water Authority
1502 Brownlee Avenue
Roanoke, VA 24014

Telephone: (540) 853-5274
Fax: (540) 853-1307

REI Consultants, Inc. **Analytical Results** Date: 13-Nov-08

CLIENT: WESTERN VA WATER WWTP
Client Sample ID: WPCP FINAL EFFLUENT
Project: CHLORIDES
Site ID:

WorkOrder: 0810L42 Lab ID 0810L42-01
DateReceived: 10/31/2008
Collection Date: 10/30/2008 9:00:00 AM
Matrix: WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			E300.0			Analyst: CC
Chloride	111	mg/L		NA	5.00	11/5/2008 2:39:00 PM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentrati
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery outside accepted recovery limit
- * Value exceeds Maximum Contaminant Level

REI Consultants, Inc. **Analytical Results** Date: *13-Nov-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0810L42 Lab ID 0810L42-02
Client Sample ID:	WPCP FINAL EFFLUENT	DateReceived:	10/31/2008
Project:	CHLORIDES	Collection Date:	10/31/2008 9:02:00 AM
Site ID:		Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			E300.0			Analyst: CC
Chloride	106	mg/L		NA	5.00	11/5/2008 2:58:00 PM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentrati
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery outside accepted recovery limit
- * Value exceeds Maximum Contaminant Level

REI Consultants, Inc. **Analytical Results** Date: *25-Nov-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0811289 Lab ID 0811289-04A
Client Sample ID:	WPCP-FINAL EFFLUENT	DateReceived:	11/5/2008
Project:	CHLORIDES	Collection Date:	11/1/2008 9:06:00 AM
Site ID:		Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			E300.0			Analyst: CC
Chloride	104	mg/L		NA	5.00	11/7/2008 7:17:00 AM

NOTES:
Matrix spike recoveries were not within method criteria due to matrix interference. LCS recoveries indicate method was in control.

Key:

MCL	Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
MDL	Minimum Detection Limit	E	Estimated Value above quantitation range
NA	Not Applicable	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the PQL or MDL	S	Spike/Surrogate Recovery outside accepted recovery limit
PQL	Practical Quantitation Limit	*	Value exceeds Maximum Contaminant Level
TIC	Tentatively Identified Compound. Estimated Concentrati		

REI Consultants, Inc. **Analytical Results** Date: *25-Nov-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0811289	Lab ID	0811289-08A
Client Sample ID:	WPCP-FINAL EFFLUENT	DateReceived:	11/5/2008		
Project:	CHLORIDES	Collection Date:	11/2/2008 9:05:00 AM		
Site ID:		Matrix:	WASTE WATER		

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			E300.0			Analyst: CC
Chloride	104	mg/L		NA	5.00	11/10/2008 6:53:00 PM

Key:

MCL	Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
MDL	Minimum Detection Limit	E	Estimated Value above quantitation range
NA	Not Applicable	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the PQL or MDL	S	Spike/Surrogate Recovery outside accepted recovery limit
PQL	Practical Quantitation Limit	*	Value exceeds Maximum Contaminant Level
TIC	Tentatively Identified Compound, Estimated Concentration		

REI Consultants, Inc. **Analytical Results** Date: *25-Nov-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0811284 Lab ID 0811284-04A
Client Sample ID:	WPCP-FINAL EFFLUENT	DateReceived:	11/5/2008
Project:	CHLORIDES	Collection Date:	11/3/2008 8:53:00 AM
Site ID:		Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			E300.0			Analyst: CC
Chloride	82.5	mg/L		NA	5.00	11/7/2008 3:09:00 AM

Key:

MCL	Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
MDL	Minimum Detection Limit	E	Estimated Value above quantitation range
NA	Not Applicable	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the PQL or MDL	S	Spike/Surrogate Recovery outside accepted recovery limit
PQL	Practical Quantitation Limit	*	Value exceeds Maximum Contaminant Level
TIC	Tentatively Identified Compound, Estimated Concentration		

REI Consultants, Inc. **Analytical Results** Date: 25-Nov-08

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0811284 Lab ID 0811284-08A
Client Sample ID:	WPCP-FINAL EFFLUENT	DateReceived:	11/5/2008
Project:	CHLORIDES	Collection Date:	11/4/2008 8:53:00 AM
Site ID:		Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			E300.0			Analyst: CC
Chloride	88.0	mg/L		NA	5.00	11/7/2008 6:01:00 AM

NOTES:

Matrix spike recoveries were not within method criteria due to matrix interference. LCS recoveries indicate method was in control.

Key:

- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound. Estimated Concentrati
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery outside accepted recovery limit
- * Value exceeds Maximum Contaminant Level

REI Consultants, Inc. **Analytical Results** Date: 25-Nov-08

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0811353	Lab ID	0811353-04A
Client Sample ID:	WPCP FINAL EFFLUENT	DateReceived:	11/6/2008		
Project:	CHLORIDES	Collection Date:	11/5/2008 8:50:00 AM		
Site ID:		Matrix:	LIQUID		

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			E300.0			Analyst: CC
Chloride	96.0	mg/L		NA	5.00	11/7/2008 3:07:00 PM

Key:

MCL	Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
MDL	Minimum Detection Limit	E	Estimated Value above quantitation range
NA	Not Applicable	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the PQL or MDL	S	Spike/Surrogate Recovery outside accepted recovery limit
PQL	Practical Quantitation Limit	*	Value exceeds Maximum Contaminant Level
TIC	Tentatively Identified Compound, Estimated Concentrati		

REI Consultants, Inc. **Analytical Results** Date: *18-Nov-08*

CLIENT:	WESTERN VA WATER WWTP	WorkOrder:	0811918 · Lab ID 0811918-01A
Client Sample ID:	FINAL EFFLUENT	DateReceived:	11/13/2008
Project:	CHLORIDES	Collection Date:	11/6/2008
Site ID:		Matrix:	WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			E300.0			Analyst: CC
Chloride	95.5	mg/L		NA	5.00	11/15/2008 1:23:00 AM

Key:

MCL	Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
MDL	Minimum Detection Limit	E	Estimated Value above quantitation range
NA	Not Applicable	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the PQL or MDL	S	Spike/Surrogate Recovery outside accepted recovery limit
PQL	Practical Quantitation Limit	*	Value exceeds Maximum Contaminant Level
TIC	Tentatively Identified Compound. Estimated Concentrati		

REI Consultants, Inc. **Analytical Results** Date: *18-Nov-08*

CLIENT: WESTERN VA WATER WWTP
Client Sample ID: FINAL EFFLUENT
Project: CHLORIDES
Site ID:

WorkOrder: 0811774 Lab ID 0811774-01A
DateReceived: 11/12/2008
Collection Date: 11/7/2008 8:48:00 AM
Matrix: WASTE WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			E300.0			Analyst: CC
Chloride	94.5	mg/L		NA	5.00	11/14/2008 2:10:00 AM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentrat
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery outside accepted recovery limit
- * Value exceeds Maximum Contaminant Level

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ANALYTICAL REPORT

Project: Western Virginia Water Authority
Customer Sample ID: Field Blank
Sample Number: 910381
Project Code: WVWA
Sample Point: FB
Sample Date: 10/29/08

Analyte	Method	Units	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/17/08	1039
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/17/08	1034
Zinc Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/16/08	1247
Zinc Total	EPA200.8	ug/L	0.8	0.5	CBATO	11/17/08	1034

Notes

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

Authorization: PRhie

Date: 11/9/08

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ANALYTICAL REPORT

Project: Western Virginia Water Authority
Customer Sample ID: Final Effluent
Sample Number: 910382
Project Code: WVWA
Sample Point: FNE
Sample Date: 10/29/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	4.7	0.5	CBATO	11/17/08	1132
Copper Total	EPA200.8	ug/L	4.9	0.5	CBATO	11/17/08	1110
Zinc Dissolved	EPA200.8	ug/L	15.8	0.5	CBATO	11/16/08	1449
Zinc Total	EPA200.8	ug/L	16.3	0.5	CBATO	11/16/08	1431

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

Authorization: PRhue Date: 11/19/08

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Field Blank
Sample Number:	908975
Project Code:	WVWA
Sample Point:	FB
Sample Date:	10/30/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/17/08	1048
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/17/08	1043
Zinc Dissolved	EPA200.8	ug/L	0.6	0.5	CBATO	11/17/08	1048
Zinc Total	EPA200.8	ug/L	0.7	0.5	CBATO	11/17/08	1043

Notes

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

Authorization: PR Lee

Date: 111908

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ANALYTICAL REPORT

Project: Western Virginia Water Authority
Customer Sample ID: Final Effluent
Sample Number: 908976
Project Code: WVWA
Sample Point: FNE
Sample Date: 10/30/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	4.9	0.5	CBATO	11/17/08	1142
Copper Total	EPA200.8	ug/L	5.2	0.5	CBATO	11/17/08	1137
Zinc Dissolved	EPA200.8	ug/L	16.3	0.5	CBATO	11/16/08	1512
Zinc Total	EPA200.8	ug/L	15.9	0.5	CBATO	11/16/08	1454

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

Authorization: PRhe Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Field Blank
Sample Number:	908961
Project Code:	WVWA
Sample Point:	FB
Sample Date:	10/31/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/17/08	1057
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/17/08	1052
Zinc Dissolved*	EPA200.8	ug/L	1.6	0.5	CBATO	11/17/08	1057
Zinc Total*	EPA200.8	ug/L	1.2	0.5	CBATO	11/17/08	1052

Notes

[1] *Report Limit is lowest concentration at which quantitation is demonstrated.*
ZINC DISSOLVED: Value verified by redigestion and analysis of sample.
ZINC TOTAL: Value verified by redigestion and analysis of sample.

Authorization: PR Lee Date: 11/19/08

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Sample Number:	908977
Project Code:	WVWA
Sample Point:	FNE
Sample Date:	10/31/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	5.5	0.5	CBATO	11/17/08	1153
Copper Total	EPA200.8	ug/L	5.7	0.5	CBATO	11/17/08	1148
Zinc Dissolved	EPA200.8	ug/L	19.5	0.5	CBATO	11/18/08	1555
Zinc Total	EPA200.8	ug/L	22.2	0.5	CBATO	11/18/08	1550

Notes

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

Authorization: PRhee

Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Field Blank
Sample Number:	908962
Project Code:	WVWA
Sample Point:	FB
Sample Date:	11/01/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1121
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/17/08	1158
Zinc Dissolved	EPA200.8	ug/L	0.8	0.5	CBATO	11/16/08	1323
Zinc Total	EPA200.8	ug/L	0.6	0.5	CBATO	11/16/08	1318

Notes

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

Authorization: PRLee

Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Sample Number:	908978
Project Code:	WVWA
Sample Point:	FNE
Sample Date:	11/01/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	5.3	0.5	CBATO	11/18/08	1144
Copper Total	EPA200.8	ug/L	5.6	0.5	CBATO	11/18/08	1157
Zinc Dissolved	EPA200.8	ug/L	23.6	0.5	CBATO	11/16/08	1544
Zinc Total	EPA200.8	ug/L	22.6	0.5	CBATO	11/16/08	1526

Notes

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

Authorization: PRhee

Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Field Blank
Sample Number:	908963
Project Code:	WVWA
Sample Point:	FB
Sample Date:	11/02/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1130
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1126
Zinc Dissolved	EPA200.8	ug/L	1.4	0.5	CBATO	11/16/08	1332
Zinc Total	EPA200.8	ug/L	0.6	0.5	CBATO	11/16/08	1328

Notes

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

Authorization: PRhee

Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Sample Number:	908979
Project Code:	WVWA
Sample Point:	FNE
Sample Date:	11/02/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	5.7	0.5	CBATO	11/18/08	1220
Copper Total	EPA200.8	ug/L	5.9	0.5	CBATO	11/18/08	1215
Zinc Dissolved	EPA200.8	ug/L	20.7	0.5	CBATO	11/16/08	1553
Zinc Total	EPA200.8	ug/L	21.0	0.5	CBATO	11/16/08	1548

Notes

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

Authorization: PRhee

Date: 111908

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ANALYTICAL REPORT

Project: Western Virginia Water Authority
Customer Sample ID: Field Blank
Sample Number: 908964
Project Code: WVWA
Sample Point: FB
Sample Date: 11/03/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1139
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1135
Zinc Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/16/08	1341
Zinc Total	EPA200.8	ug/L	0.5	0.5	CBATO	11/16/08	1337

Notes

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

Authorization: PR Lee

Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Sample Number:	908980
Project Code:	WVWA
Sample Point:	FNE
Sample Date:	11/03/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	5.8	0.5	CBATO	11/18/08	1355
Copper Total	EPA200.8	ug/L	6.0	0.5	CBATO	11/18/08	1224
Zinc Dissolved	EPA200.8	ug/L	17.7	0.5	CBATO	11/16/08	1611
Zinc Total	EPA200.8	ug/L	19.2	0.5	CBATO	11/16/08	1607

Notes

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

Authorization: PRLee

Date: 11/19/08

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Field Blank
Sample Number:	908965
Project Code:	WVWA
Sample Point:	FB
Sample Date:	11/04/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1314
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1310
Zinc Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/16/08	1350
Zinc Total	EPA200.8	ug/L	0.5	0.5	CBATO	11/16/08	1346

Notes

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

Authorization: PRhee

Date: 11/19/08

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Sample Number:	908981
Project Code:	WVWA
Sample Point:	FNE
Sample Date:	11/04/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	6.1	0.5	CBATO	11/18/08	1417
Copper Total	EPA200.8	ug/L	6.4	0.5	CBATO	11/18/08	1359
Zinc Dissolved	EPA200.8	ug/L	18.4	0.5	CBATO	11/16/08	1634
Zinc Total	EPA200.8	ug/L	21.8	0.5	CBATO	11/16/08	1616

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

Authorization: PRhea Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Field Blank
Sample Number:	908966
Project Code:	WVWA
Sample Point:	FB
Sample Date:	11/05/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1323
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1319
Zinc Dissolved	EPA200.8	ug/L	0.9	0.5	CBATO	11/18/08	1323
Zinc Total	EPA200.8	ug/L	1.5	0.5	CBATO	11/16/08	1355

Notes

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

Authorization: PR Lee

Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Sample Number:	908982
Project Code:	WVWA
Sample Point:	FNE
Sample Date:	11/05/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	6.4	0.5	CBATO	11/18/08	1426
Copper Total	EPA200.8	ug/L	6.7	0.5	CBATO	11/18/08	1422
Zinc Dissolved	EPA200.8	ug/L	23.3	0.5	CBATO	11/16/08	1643
Zinc Total	EPA200.8	ug/L	27.6	0.5	CBATO	11/16/08	1638

Notes

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

Authorization: PRhee

Date: 11/19/08

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ANALYTICAL REPORT

Project: Western Virginia Water Authority
Customer Sample ID: Field Blank
Sample Number: 908971
Project Code: WVWA
Sample Point: FB
Sample Date: 11/06/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1332
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1328
Zinc Dissolved	EPA200.8	ug/L	1.1	0.5	CBATO	11/16/08	1418
Zinc Total	EPA200.8	ug/L	0.9	0.5	CBATO	11/18/08	1328

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

Authorization: PR-hea Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Sample Number:	908972
Project Code:	WVWA
Sample Point:	FNE
Sample Date:	11/06/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	6.3	0.5	CBATO	11/18/08	1445
Copper Total	EPA200.8	ug/L	6.6	0.5	CBATO	11/18/08	1440
Zinc Dissolved	EPA200.8	ug/L	22.4	0.5	CBATO	11/16/08	1701
Zinc Total	EPA200.8	ug/L	31.7	0.5	CBATO	11/16/08	1648

Notes

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

Authorization: PRhee Date: 11/19/08

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Field Blank
Sample Number:	908973
Project Code:	WVWA
Sample Point:	FB
Sample Date:	11/07/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1350
Copper Total	EPA200.8	ug/L	< 0.5	0.5	CBATO	11/18/08	1346
Zinc Dissolved	EPA200.8	ug/L	0.8	0.5	CBATO	11/16/08	1427
Zinc Total	EPA200.8	ug/L	0.6	0.5	CBATO	11/16/08	1422

Notes

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

Authorization: PRhee

Date: 111908

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ANALYTICAL REPORT

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Sample Number:	908974
Project Code:	WVWA
Sample Point:	FNE
Sample Date:	11/07/08

Analyte	Method	Unit	Result	Report Limit[1]	Analyst	Analysis Date	Analysis Time
Copper Dissolved	EPA200.8	ug/L	6.6	0.5	CBATO	11/18/08	1507
Copper Total	EPA200.8	ug/L	6.7	0.5	CBATO	11/18/08	1503
Zinc Dissolved	EPA200.8	ug/L	20.6	0.5	CBATO	11/16/08	1724
Zinc Total	EPA200.8	ug/L	21.7	0.5	CBATO	11/18/08	1503

Notes

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

Authorization: PRLee

Date: 111908

QUALITY ASSURANCE REPORT
Level 1

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Project Code:	WVWA
Sample Point:	FB; FNE (TOTAL AND DISSOLVED)
Sample Date:	10/29/08 - 11/07/08

Analytical Run Information	Cu	Zn
Method	200.8	200.8
Units	ug/L	ug/L
Method Detection Limit (MDL)	0.08	0.15
Report Limit (RL)	0.5	0.5
Average LRB	<0.08	0.41*

Total Metals	Cu	Zn
Sample ID: WVWA FNE 102908		
Matrix Spike Conc.	25.0	50.0
MS Percent Recovery	99%	85%
MSD Percent Recovery	98%	87%
MS/MSD RPD	<1	1
Total Metals	**Cu**	**Zn**
Sample ID: WVWA FNE 110108		
Matrix Spike Conc.	25.0	50.0
MS Percent Recovery	93%	85%
MSD Percent Recovery	87%	84%
MS/MSD RPD	5	<1
Total Metals	**Cu**	**Zn**
Sample ID: WVWA FNE 110408		
Matrix Spike Conc.	25.0	50.0
MS Percent Recovery	92%	86%
MSD Percent Recovery	94%	92%
MS/MSD RPD	2	5

LRB - Laboratory Reagent Blank
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
*Report Limit is lowest concentration at which quantitation is demonstrated. Values below report limit should not be used for compliance determinations due to a high degree of uncertainty.

Validated By: Cynthia Bate

Date: 11/19/08

QUALITY ASSURANCE REPORT
Level 1

Project:	Western Virginia Water Authority
Customer Sample ID:	Final Effluent
Project Code:	WVWA
Sample Point:	FB; FNE
Sample Date:	10/29/08 - 11/07/08

Analytical Run Information	**Cu**	**Zn**
Method	200.8	200.8
Units	ug/L	ug/L
Method Detection Limit (MDL)	0.08	0.15
Report Limit (RL)	0.5	0.5
Average LRB	<0.08	0.53*

Total Metals	**Cu**
Sample ID: WVWA FNE 110308	
Matrix Spike Conc.	25.0
MS Percent Recovery	87%
MSD Percent Recovery	91%
MS/MSD RPD	4

Dissolved Metals	**Cu**	**Zn**
Sample ID: WVWA FNE 110608		
Matrix Spike Conc.	25.0	50.0
MS Percent Recovery	98%	86%
MSD Percent Recovery	91%	92%
MS/MSD RPD	6	5

LRB - Laboratory Reagent Blank
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference

Report Limit is lowest concentration at which quantitation is demonstrated. Values below report limit should not be used for compliance determinations due to a high degree of uncertainty.
*LRB value is <10 % of sample concentration.

Validated By: Cynthia [illegible]

Date: 11/19/08