APPENDIX D
California Stormwater Quality Data Compilation and Statistical Analysis

GeoSystems Analysis, Inc.
Innovations in Hydrology

June 12, 2019

Adam Questad, P.E.
Senior Principal Water Resources Engineer
Geosyntec Consultants
924 Anacapa Street, Suite 4A,
Santa Barbara, CA, 93101

Re: California Stormwater Quality Data Compilation and Statistical Analysis Addendum: Summary of Selected Parameter Land-Use Pairs

Dear Adam,

Please find attached a summary of the statistical analyses classified by land-use pairs.

If you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

Michael Milczarek
Program Director

DRAFT

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STATISTICAL SUMMARY OF SELECTED PARAMETER LAND-USE PAIRS

As requested by Geosyntec Consultants (Geosyntec) on June 10, 2019, GeoSystems Analysis, Inc. (GSA) has generated a revised set of summary statistics from the combined-source data set developed for a previously submitted data report (GSA, 2019). The data set includes records of California stormwater quality test results from seven database sources, for chemical or other parameters having U.S. Environmental Protection Agency Maximum Contaminant Levels (MCLs). Each of the data records includes a landuse designation associated with the sampling location for each test result (GSA, 2019).

This Addendum includes an additional presentation (Appendix A) as a revision to Appendix C in GSA (2019), to include non-detect (ND) results in plots and in quantile and means and standard deviations tables, and to include the MCL on the plots. As per Geosyntec's instructions, results for the ND records were revised to equal the value in the Minimum Detectable Limit (MDL) field in the same record and these results are included in the plots and tables.

This revised presentation also includes only those parameter-landuse pairs determined by Geosyntec to have a statistically sufficient number of results for a valid interpretation (Table 1). To assist Geosyntec with identifying these pairs, GSA generated tables showing the number of results, mean, standard deviation, and coefficient of variation (CV) for all of the parameter-landuse pairs present in the dataset (Appendix B). Appendix A includes statistical summaries for these selected parameter land-use pairs based on the CV tables (Appendix B).

Data were processed using Microsoft Excel®. Statistical analyses were run using Excel® and JMP (SAS, ver. 9.01).

REFERENCES

GeoSystems Analysis, Inc., 2019. Draft California Stormwater Data Quality Compilation and Analysis (includes four appendices). Submitted to GeoSyntec Consultants, May 30, 2019.

Table 1. Parameter land-use pairs selected for revised statistical summary

Parameter	Land-use
Radionuclides	
Gross Alpha particle activity (excluding radon and uranium)	Industrial
Gross Beta particle activity	Industrial
Organics	
1,1,2-Trichloro-1,2,2-Tri	Industrial
Di(2-ethylhexyl)phthalate	Residential
	Transportation/Highway
Dichloromethane	Industrial
Inorganics	
Aluminum, Dissolved	Institutional
Aluminum, Total	Industrial
	Institutional
	Residential
	Transportation/Highway
Antimony, Dissolved	Industrial
Arsenic, Total	Agricultural
	Industrial
Barium, Dissolved	Commercial
	Industrial
	Institutional
	Residential
	Transportation/Highway
	Vacant/Open
Barium, Total	Institutional
	Residential
	Transportation/Highway
	Vacant/Open
Cadmium, Dissolved	Industrial
Cadmium, Total	Transportation/Highway
Chromium, Dissolved	Vacant/Open
Chromium, Total	Agricultural
	Residential
	Transportation/Highway
Fluoride	Industrial
	Vacant/Open

Table 1. Parameter land-use pairs selected for revised statistical summary (continued)

Parameter	Land-use
Inorganics	
Lead, Total	Commercial
	Residential
	Transportation/Highway
Nickel, Dissolved	Industrial
	Transportation/Highway
Nickel, Total	Agricultural
	Commercial
	Transportation/Highway
Nitrate + Nitrite as N	Agricultural
	Commercial
	Industrial
	Residential
	Vacant/Open
Nitrate as N	Commercial
	Institutional
	Residential
	Transportation/Highway
	Vacant/Open
Nitrate as NO3	Industrial
Nitrite as N	Commercial
	Institutional
	Residential
	Transportation/Highway

APPENDIX A
Statistical Summary of Combined-Source Results: Selected Parameter- Landuse Pairs

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Legend

o Data point

Quantiles

Mean

Standard Deviation

Maximum Contaminant Level

A-1
Radionuclides

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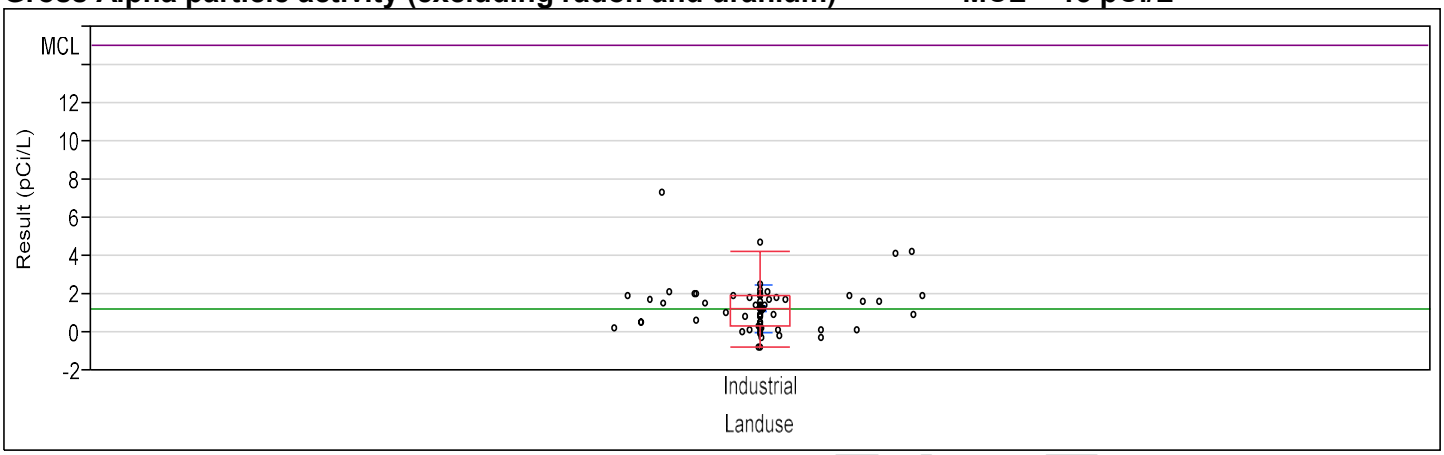
Gross Alpha particle activity (excluding radon and uranium) MCL = 15 pCi/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	-0.802	-0.04496	0.3325	1.2	1.8975	2.117	7.34

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	70	1.2	1.3	0.2	0.9	1.6

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	46	24	70	0	0

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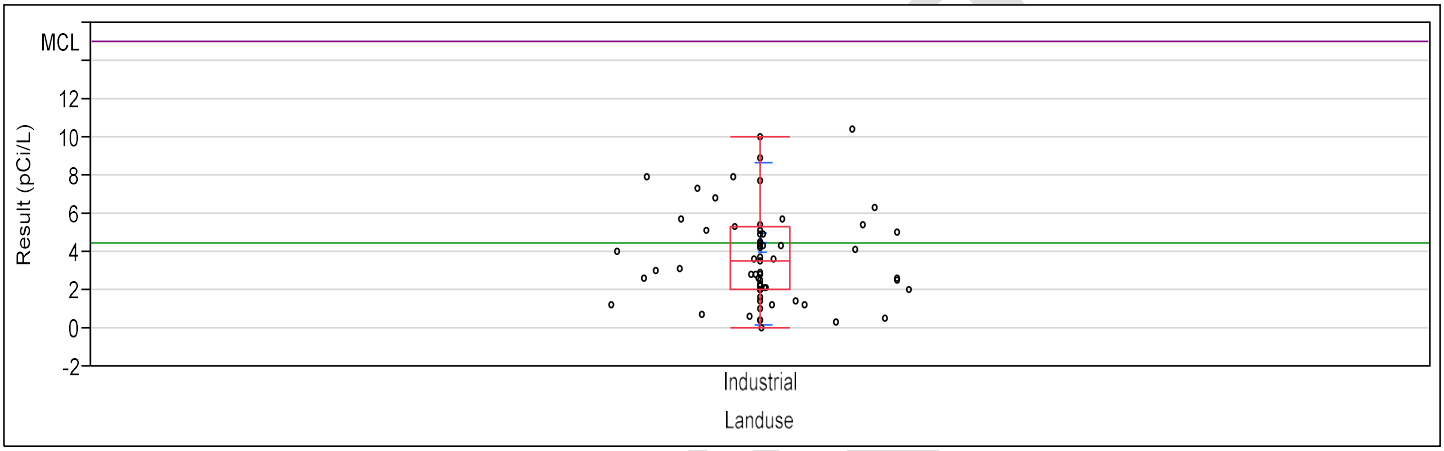
Gross Beta particle activity

MCL = 4 millirem/yr



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	-0.00549	0.679	2.02	3.52	5.34	8.86	22.4

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	69	4.5	4.3	0.5	3.5	5.5

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	60	9	69	31	45

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A-2
Organic Chemicals

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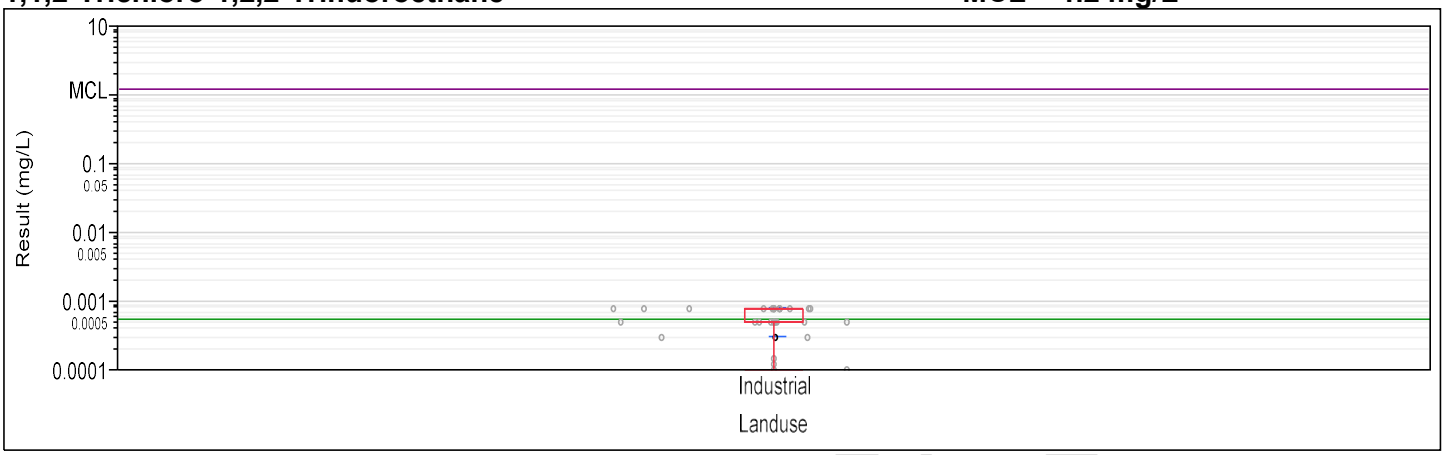
1,1,2-Trichloro-1,2,2-Trifluoroethane MCL = 1.2 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.0001	0.000128	0.0005	0.0005	0.00078	0.00078	0.00078

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	32	0.0006	0.0002	0.00004	0.0005	0.0006

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	19	13	32	0	0

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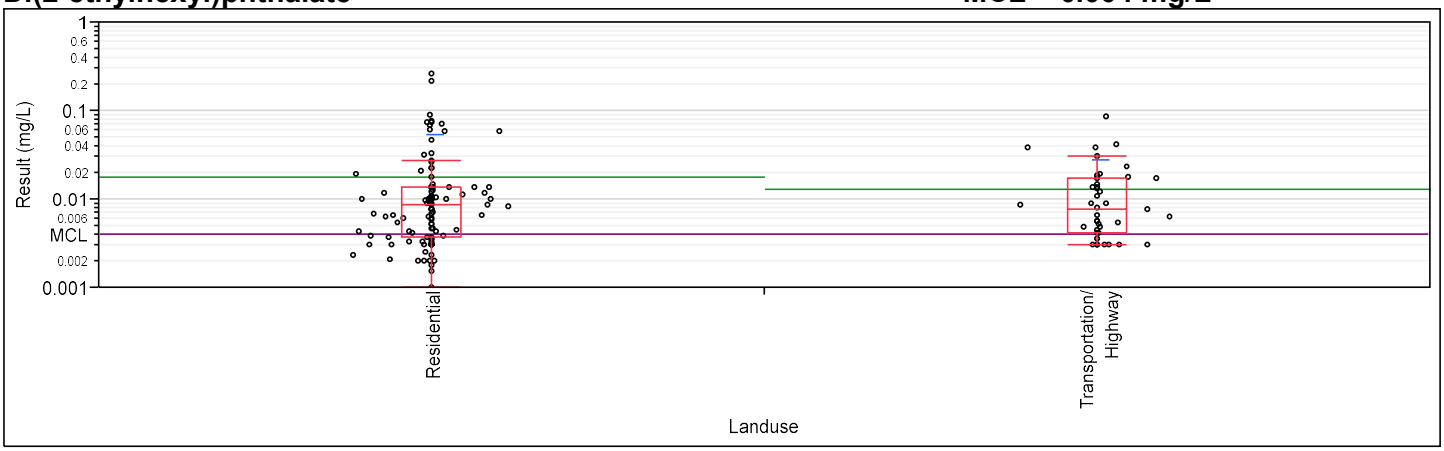
Di(2-ethylhexyl)phthalate

MCL = 0.004 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Residential	0.001	0.002629	0.0037	0.0087	0.0134	0.05614
Transportation/Highway	0.003	0.003	0.0041	0.0077	0.0172	0.03556

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Residential	111	0.02	0.04	0.003	0.011	0.02
Transportation/Highway	42	0.01	0.02	0.002	0.008	0.02

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Residential	103	8	111	80	72
Transportation/Highway	35	7	42	33	79

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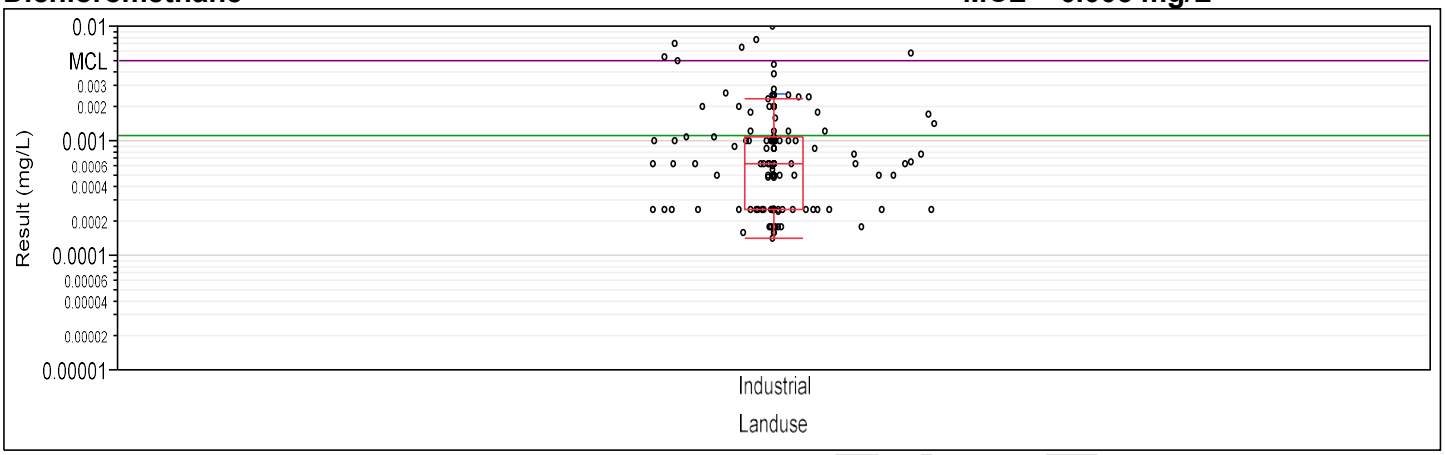
Dichloromethane

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.00014	0.00025	0.00025	0.00064	0.0011	0.0025	0.01

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	149	0.001	0.002	0.0001	0.0009	0.001

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	75	74	149	6	4

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A-3
Inorganic Chemicals

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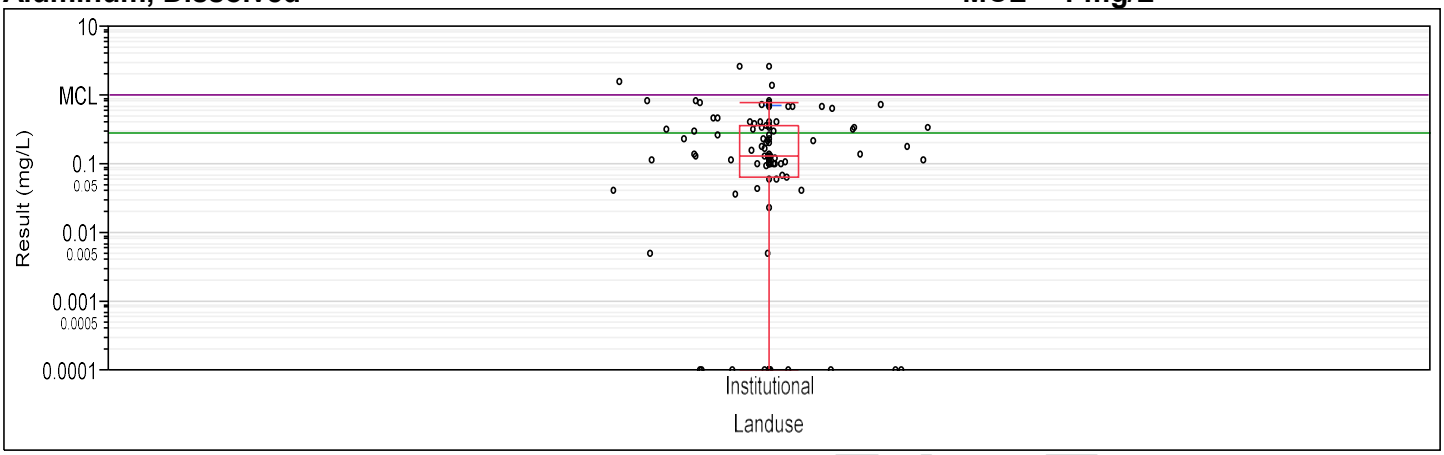
Aluminum, Dissolved

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Institutional	0.0001	0.0001	0.064	0.132	0.35225	0.7227	2.53

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Institutional	106	0.3	0.4	0.04	0.2	0.4

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Institutional	78	28	106	0	0

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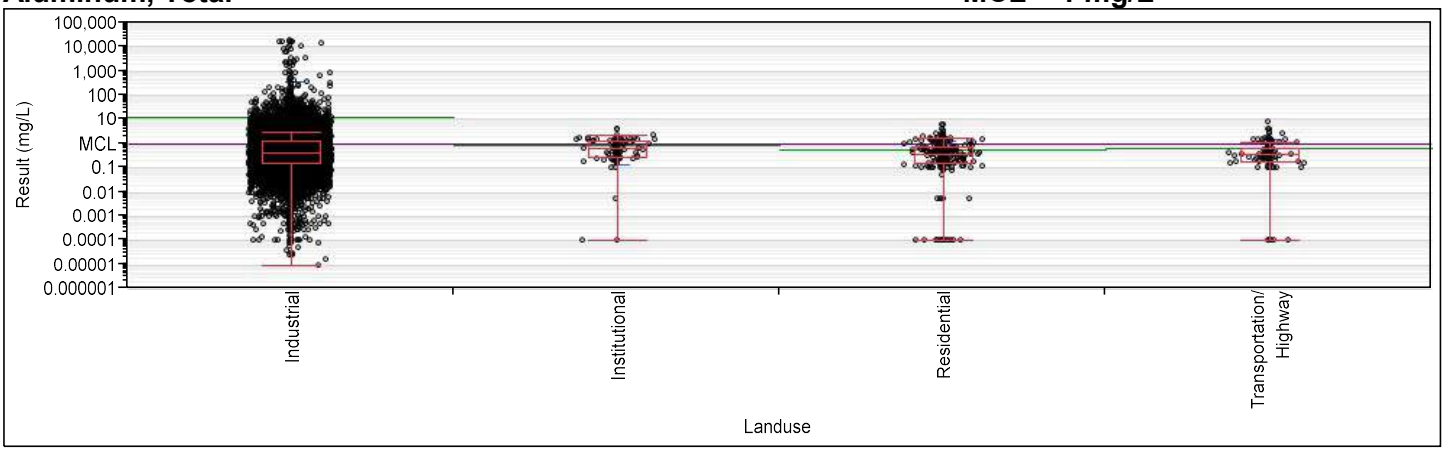
Aluminum, Total

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Industrial	9.5e-6	0.05	0.147	0.441	1.3	3.89
Institutional	0.0001	0.16645	0.286	0.61	1.349	1.55
Residential	0.0001	0.08218	0.149	0.375	0.735	1.3562
Transportation/Highway	0.0001	0.1	0.183	0.3445	0.6185	1.501

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	25291	11.6	337.2	2.12	7.5	15.8
Institutional	104	0.8	0.7	0.07	0.7	1.0
Residential	383	0.6	0.7	0.04	0.5	0.6
Transportation/Highway	126	0.6	0.9	0.08	0.5	0.8

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	24346	945	25291	7387	29
Institutional	97	7	104	5	5
Residential	336	47	383	25	7
Transportation/Highway	106	20	126	0	0

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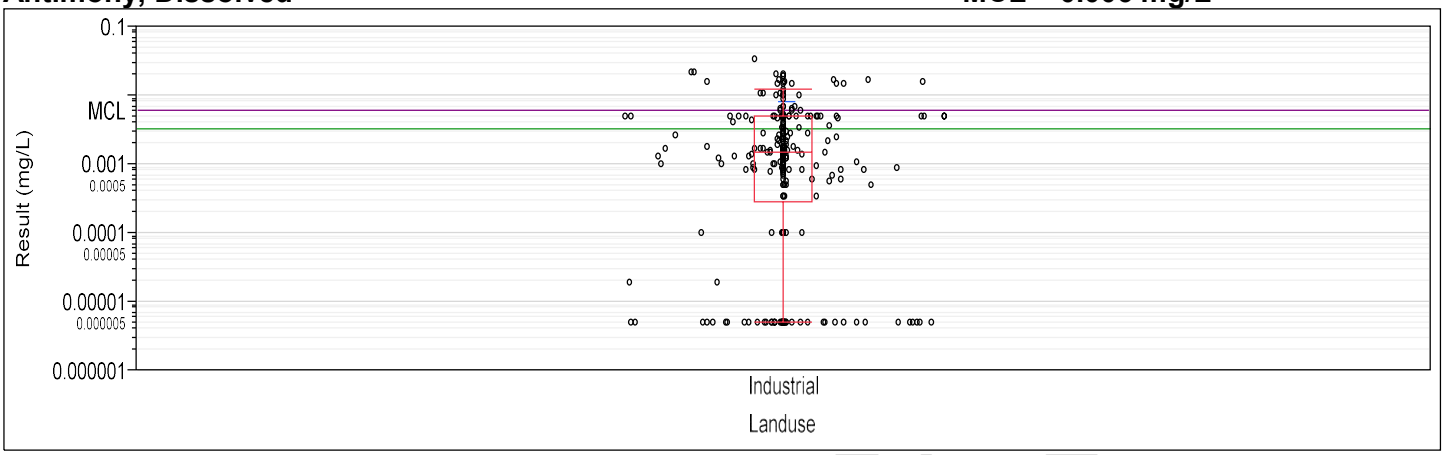
Antimony, Dissolved

MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000005	0.000005	0.00028	0.0015	0.005	0.00986	0.0328

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	290	0.003	0.005	0.0003	0.003	0.004

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	156	134	290	28	10

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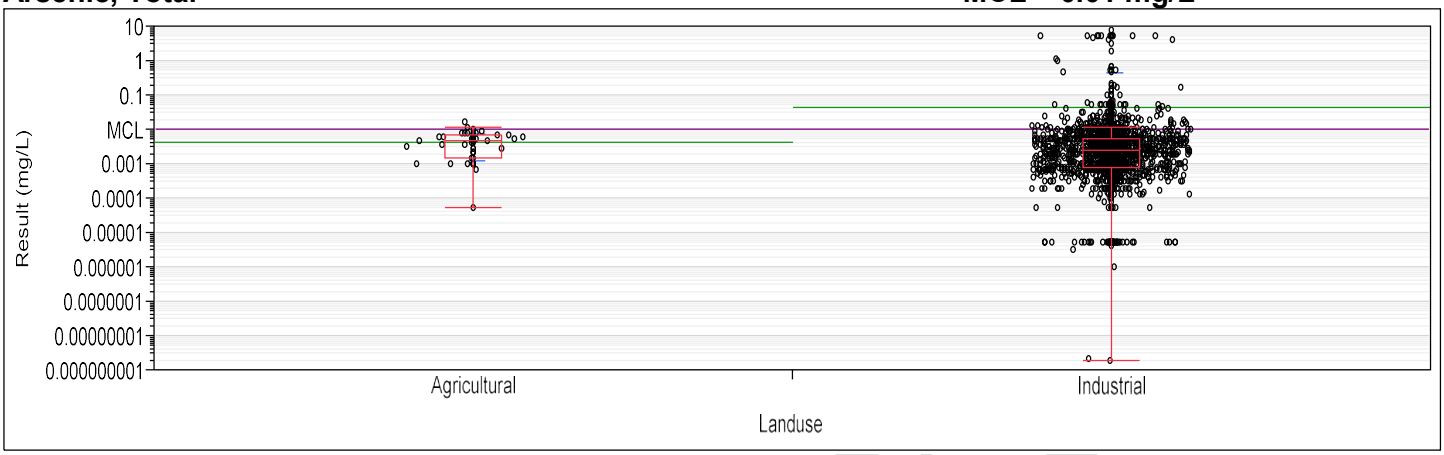
Arsenic, Total

MCL = 0.01 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.00005	0.001	0.00139	0.0045	0.00659	0.008172	0.01639
Industrial	1.9e-9	0.000386	0.00082	0.0026	0.0052	0.011	7.8

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	51	0.004	0.003	0.0005	0.004	0.005
Industrial	2487	0.047	0.441	0.0088	0.029	0.064

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	41	10	51	3	6
Industrial	1640	847	2487	220	9

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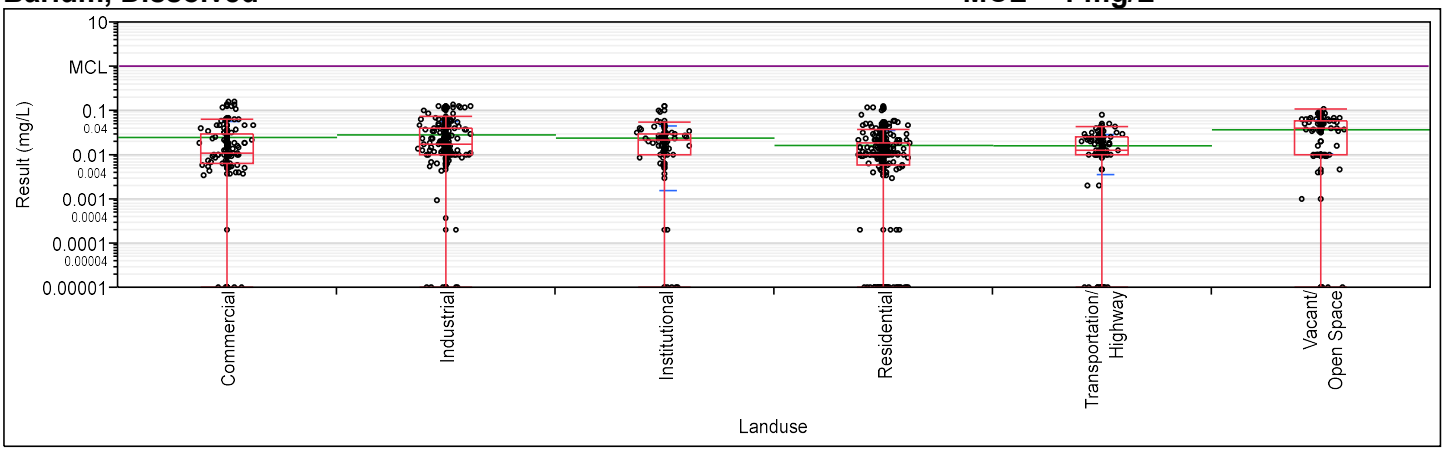
Barium, Dissolved

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Commercial	0.00001	0.00354	0.0062	0.0107	0.0301	0.0621
Industrial	0.00001	0.00548	0.01	0.0169	0.0387	0.0666
Institutional	0.00001	0.00454	0.010225	0.021	0.0288	0.04346
Residential	0.00001	0.00001	0.0057	0.0101	0.0185	0.03886
Transportation/Highway	0.00001	0.00001	0.01	0.013	0.0242	0.03215
Vacant/Open Space	0.00001	0.00407	0.01	0.03845	0.05985	0.0722

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	151	0.03	0.03	0.003	0.02	0.03
Industrial	237	0.03	0.03	0.002	0.03	0.03
Institutional	106	0.02	0.02	0.002	0.02	0.03
Residential	363	0.02	0.02	0.001	0.01	0.02
Transportation/Highway	134	0.02	0.01	0.001	0.01	0.02
Vacant/Open Space	100	0.04	0.03	0.003	0.03	0.04

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	119	32	151	0	0
Industrial	200	37	237	0	0
Institutional	92	14	106	0	0
Residential	248	115	363	0	0
Transportation/Highway	93	41	134	0	0
Vacant/Open Space	76	24	100	0	0

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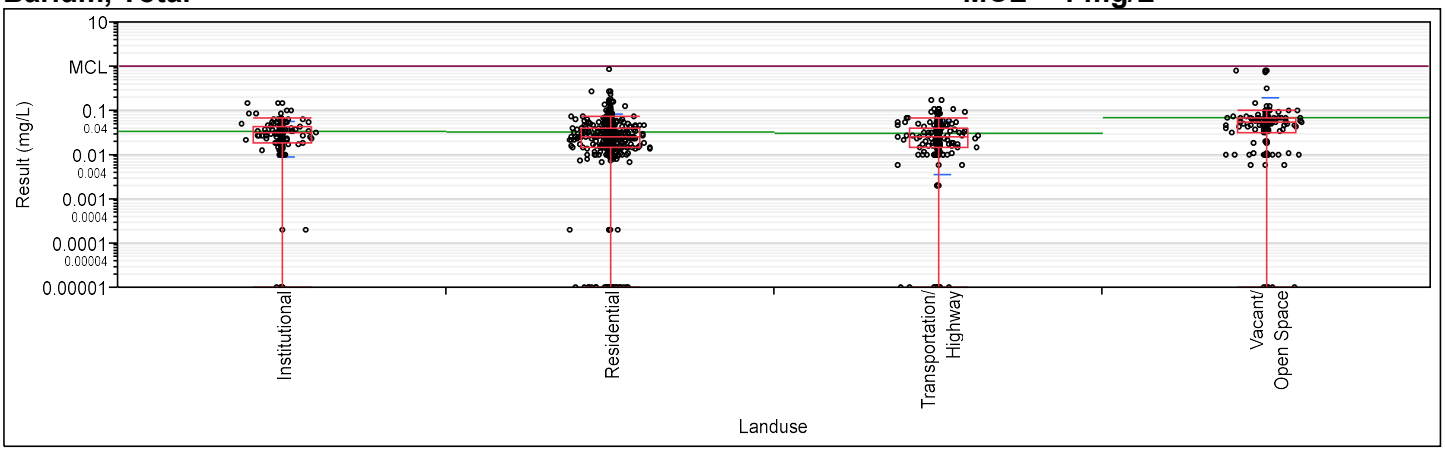
Barium, Total

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Institutional	0.00001	0.01101	0.0186	0.031	0.04295	0.063
Residential	0.00001	0.007364	0.014175	0.0243	0.0392	0.06343
Transportation/Highway	0.00001	0.006	0.01465	0.0243	0.040775	0.0606
Vacant/Open Space	0.00001	0.01	0.0312	0.053	0.06735	0.0993

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Institutional	152	0.04	0.03	0.002	0.03	0.04
Residential	502	0.03	0.05	0.002	0.03	0.04
Transportation/Highway	198	0.03	0.03	0.002	0.03	0.04
Vacant/Open Space	149	0.07	0.13	0.010	0.05	0.09

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Institutional	138	14	152	0	0
Residential	425	77	502	0	0
Transportation/Highway	168	30	198	0	0
Vacant/Open Space	125	24	149	0	0

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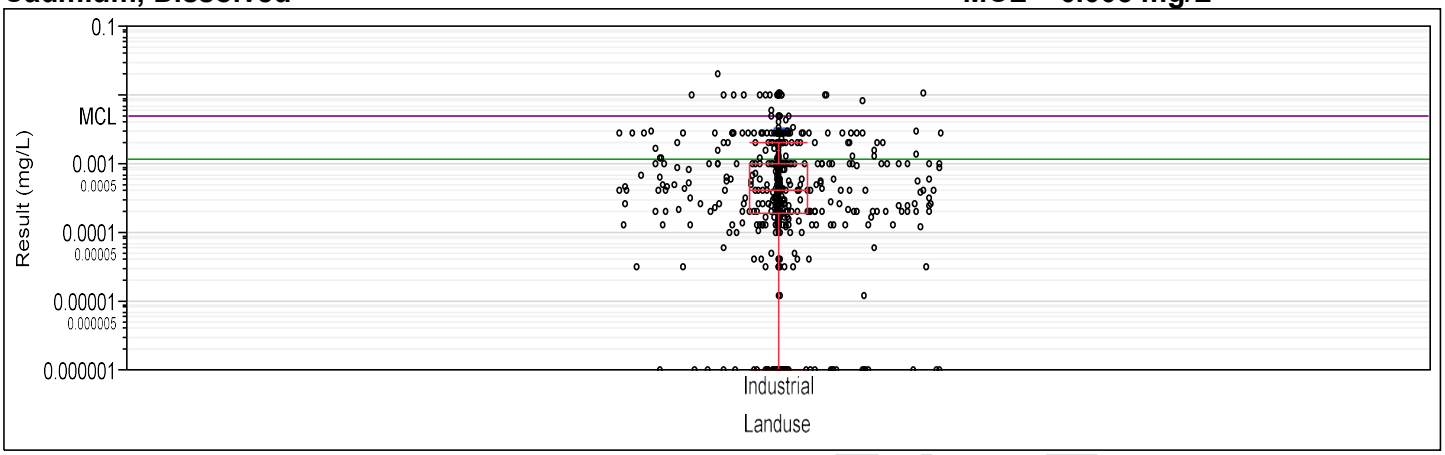
Cadmium, Dissolved

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000001	0.000012	0.00019	0.0004	0.001	0.0028	0.02

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	605	0.001	0.002	0.00009	0.001	0.001

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	310	295	605	26	4

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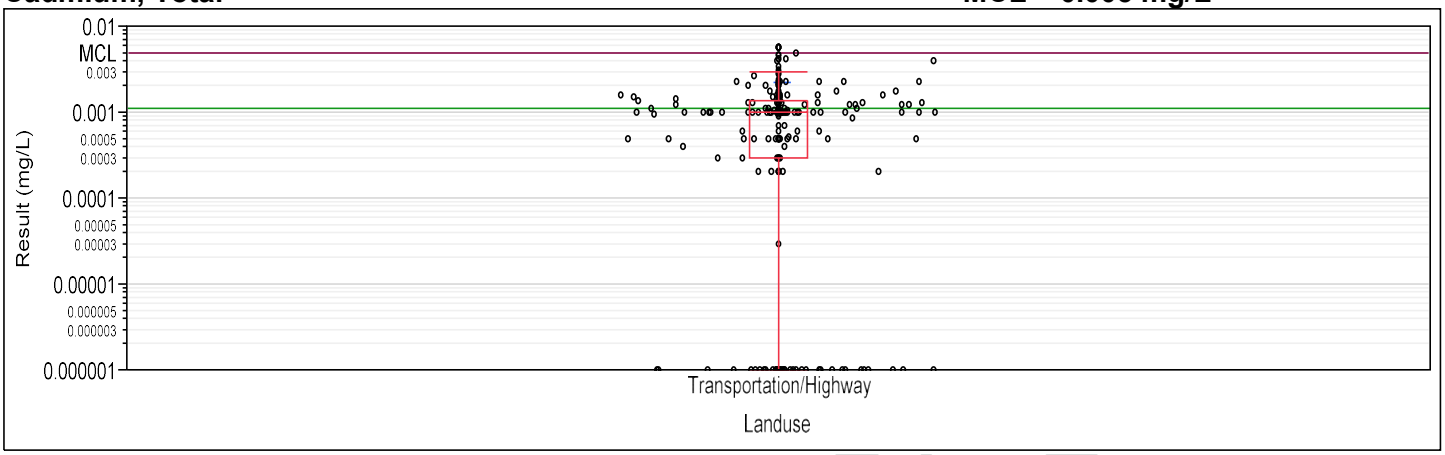
Cadmium, Total

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Transportation/Highway	0.000001	0.000001	0.0003	0.001	0.00138	0.0023

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Transportation/Highway	232	0.001	0.001	0.00008	0.001	0.001

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Transportation/Highway	136	96	232	5	2

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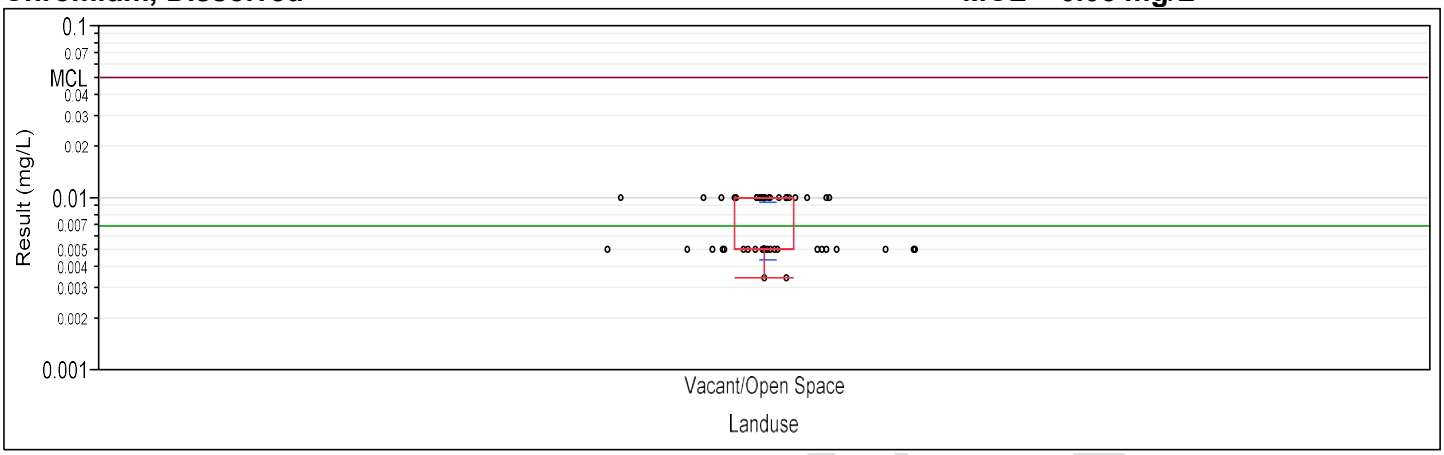
Chromium, Dissolved

MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Max
Vacant/Open Space	0.0034	0.005	0.005	0.005	0.01	0.01	

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Vacant/Open Space	81	0.007	0.003	0.0003	0.006	0.007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Vacant/Open Space	2	79	81	0	0

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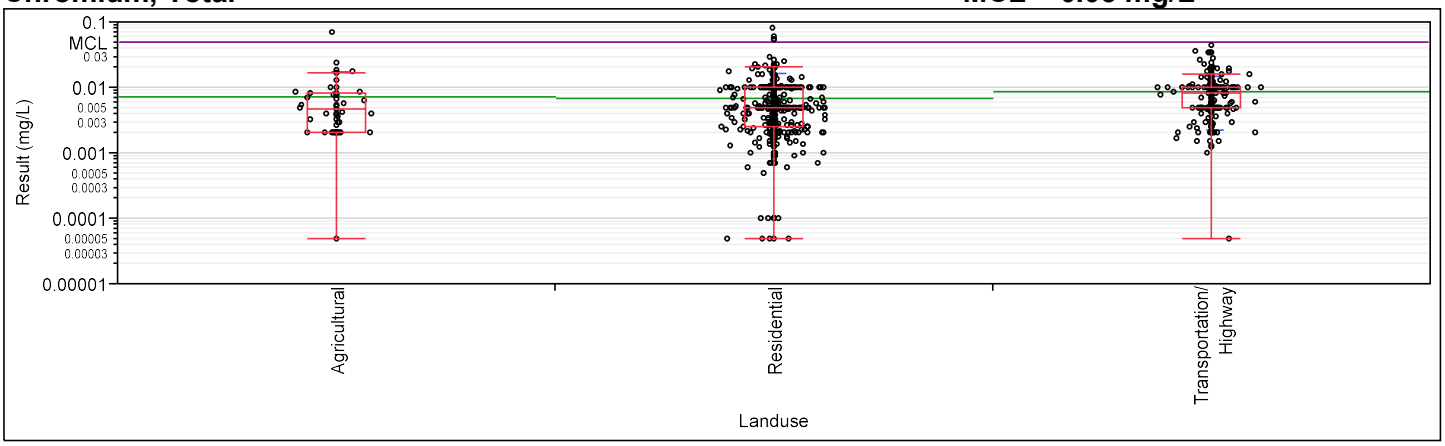
Chromium, Total MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Agricultural	0.00005	0.002	0.002	0.00459	0.00806	0.017
Residential	0.00005	0.00164	0.002535	0.005	0.01	0.01012
Transportation/Highway	0.00005	0.00244	0.005	0.0081	0.01	0.016

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	51	0.007	0.010	0.0014	0.004	0.010
Residential	493	0.007	0.010	0.0004	0.006	0.008
Transportation/Highway	223	0.009	0.007	0.0004	0.008	0.010

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	37	14	51	1	2
Residential	280	213	493	5	1
Transportation/Highway	128	95	223	0	0

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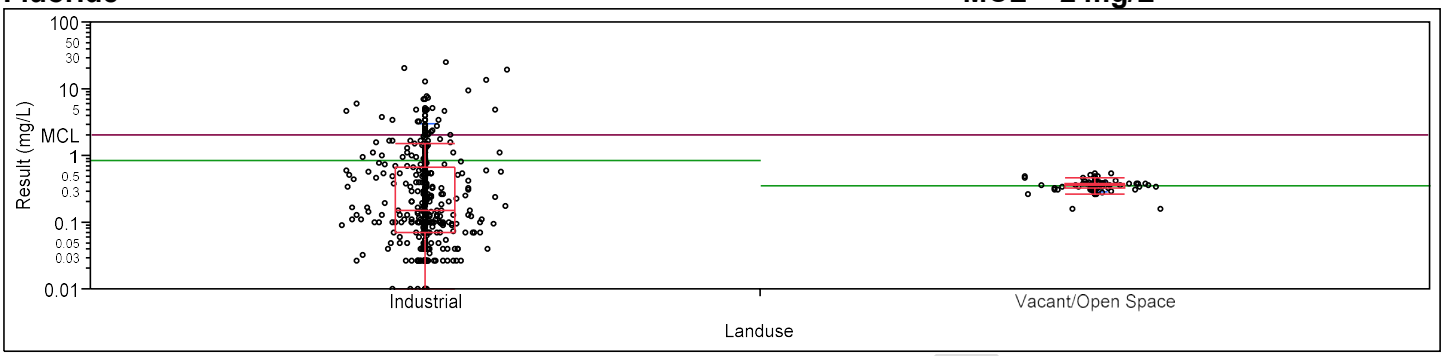
Fluoride

MCL = 2 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Max
Industrial	0.01	0.026	0.07	0.15	0.66	2.048	
Vacant/Open Space	0.161	0.29	0.32425	0.36	0.3815	0.46	

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	443	0.9	2.29	0.11	0.6	1.1
Vacant/Open Space	96	0.4	0.06	0.01	0.3	0.4

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	302	141	443	42	9
Vacant/Open Space	96	0	96	0	0

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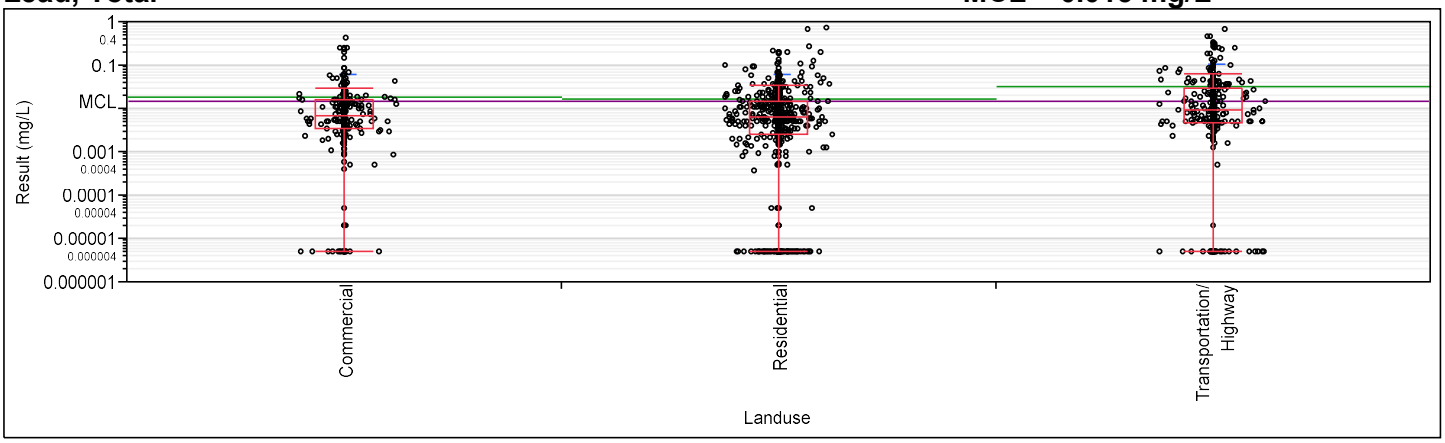
Lead, Total

MCL = 0.015 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Commercial	0.000005	0.00059	0.003323	0.007	0.015433	0.037128
Residential	0.000005	0.000005	0.00245	0.0062	0.01468	0.0344
Transportation/Highway	0.000005	0.000005	0.0048	0.0094	0.029	0.0764

Means and Std Deviations

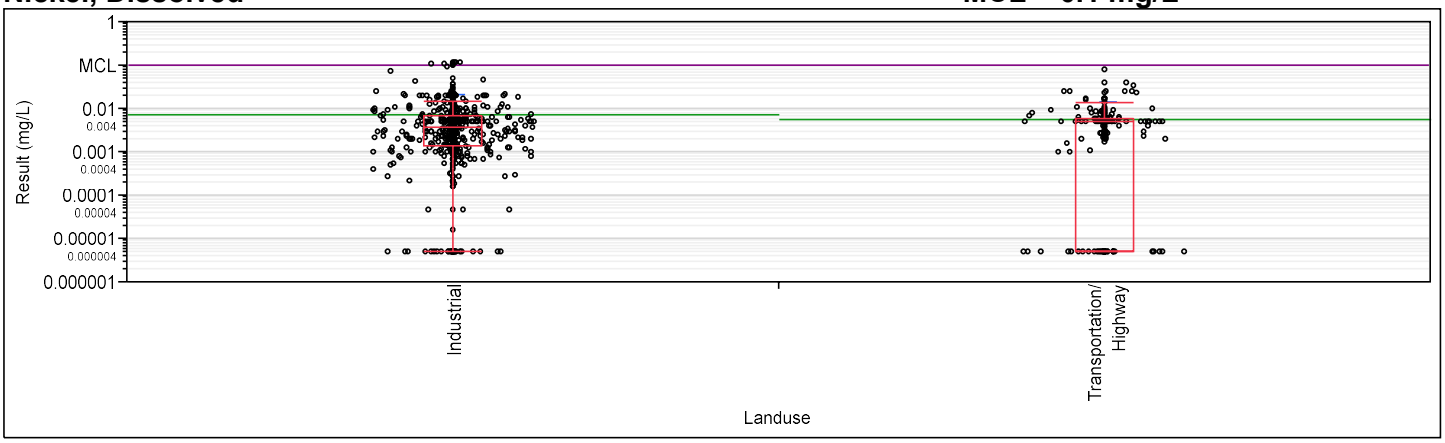
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	258	0.02	0.05	0.003	0.01	0.02
Residential	609	0.02	0.05	0.002	0.01	0.02
Transportation/Highway	307	0.03	0.07	0.004	0.03	0.04

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	215	43	258	63	24
Residential	458	151	609	142	23
Transportation/Highway	242	65	307	114	37

DRAFT

Nickel, Dissolved

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Industrial	0.000005	0.0005	0.0014	0.00355	0.0068	0.01797
Transportation/Highway	0.000005	0.000005	0.000005	0.005	0.005925	0.0103

Means and Std Deviations

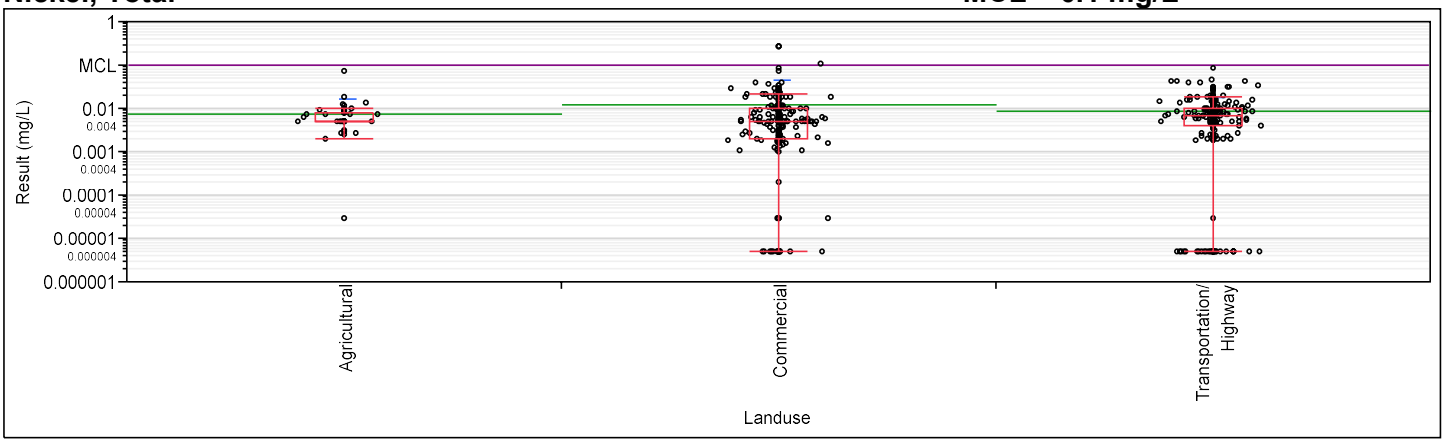
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	662	0.007	0.015	0.0006	0.006	0.009
Transportation/Highway	210	0.006	0.008	0.0006	0.005	0.007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	512	150	662	8	1
Transportation/Highway	107	103	210	0	0

DRAFT

Nickel, Total

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Agricultural	0.00003	0.002848	0.005	0.00519	0.00769	0.0116
Commercial	0.000005	0.000005	0.002	0.005	0.01	0.023
Transportation/Highway	0.000005	0.000005	0.004	0.006696	0.01015	0.01852

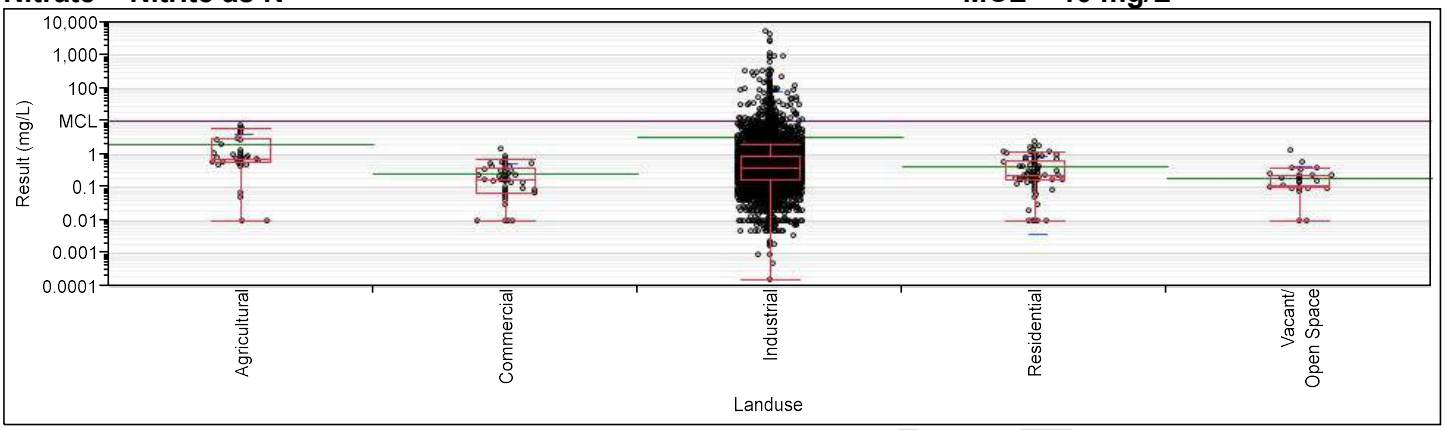
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	51	0.008	0.010	0.0014	0.005	0.01
Commercial	220	0.013	0.034	0.0023	0.008	0.02
Transportation/Highway	253	0.009	0.010	0.0006	0.008	0.01

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	33	18	51	0	0
Commercial	173	47	220	2	1
Transportation/Highway	205	48	253	0	0

DRAFT

Nitrate + Nitrite as N **MCL = 10 mg/L**



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Max
Agricultural	0.01	0.292	0.57	0.77	3	6.21	
Commercial	0.01	0.01	0.07	0.18	0.41	0.634	
Industrial	0.00017	0.083	0.18	0.39	0.92	2.21	
Residential	0.01	0.0803	0.18	0.245	0.645	1.087	
Vacant/Open Space	0.01	0.08	0.1	0.12	0.23	0.388	

Means and Std Deviations

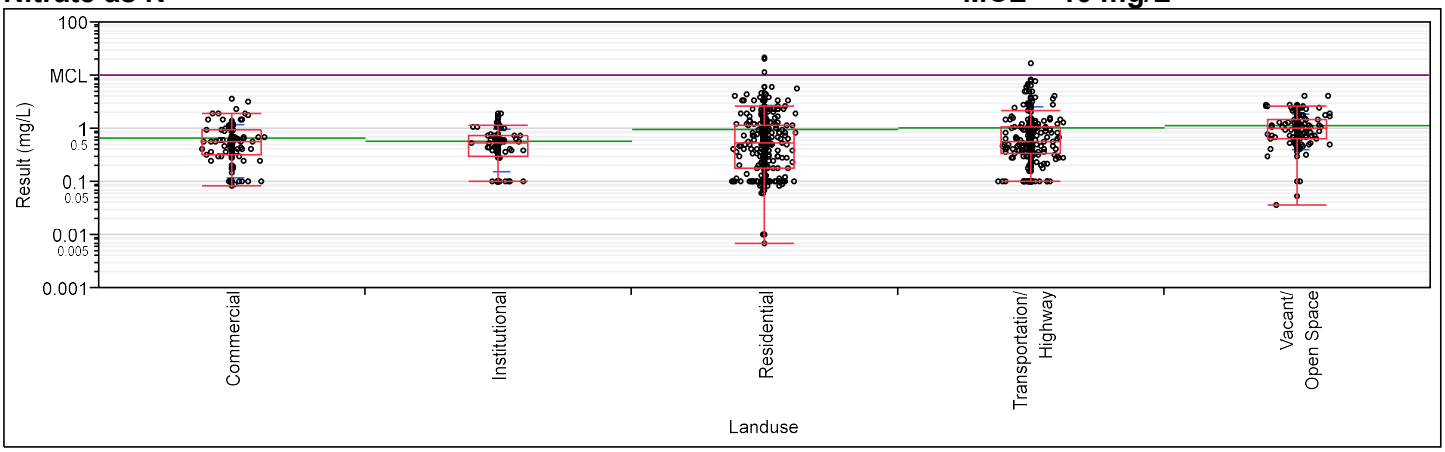
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	45	2.0	2.4	0.35	1.3	2.7
Commercial	57	0.3	0.3	0.04	0.2	0.3
Industrial	13378	3.3	74.7	0.65	2.1	4.6
Residential	100	0.5	0.5	0.05	0.4	0.5
Vacant/Open Space	35	0.2	0.2	0.04	0.1	0.3

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	43	2	45	0	0
Commercial	51	6	57	0	0
Industrial	12349	1029	13378	266	2
Residential	94	6	100	0	0
Vacant/Open Space	33	2	35	0	0

DRAFT

Nitrate as N

MCL = 10 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Commercial	0.08	0.1	0.312	0.555	0.95	1.309
Institutional	0.1	0.1	0.299	0.54	0.705	1.33
Residential	0.006774	0.1	0.18	0.5385	1.1625	2.257
Transportation/Highway	0.1	0.1	0.32925	0.58	1.075	2.4
Vacant/Open Space	0.036	0.47	0.632	1.02	1.496	2.378

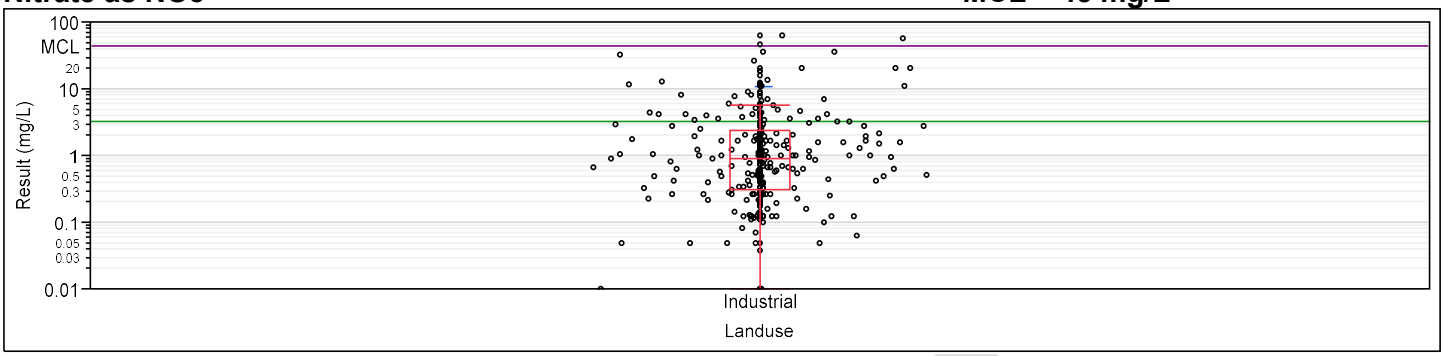
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	127	0.68	0.6	0.05	0.58	0.8
Institutional	117	0.59	0.4	0.04	0.51	0.7
Residential	442	0.98	1.8	0.08	0.82	1.1
Transportation/Highway	290	1.05	1.6	0.09	0.86	1.2
Vacant/Open Space	171	1.15	0.7	0.06	1.04	1.3

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	113	14	127	0	0
Institutional	93	24	117	0	0
Residential	363	79	442	3	1
Transportation/Highway	260	30	290	1	0
Vacant/Open Space	169	2	171	0	0

DRAFT

Nitrate as NO3 MCL = 45 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.01	0.12	0.305	0.91	2.425	7.8	64

Means and Std Deviations

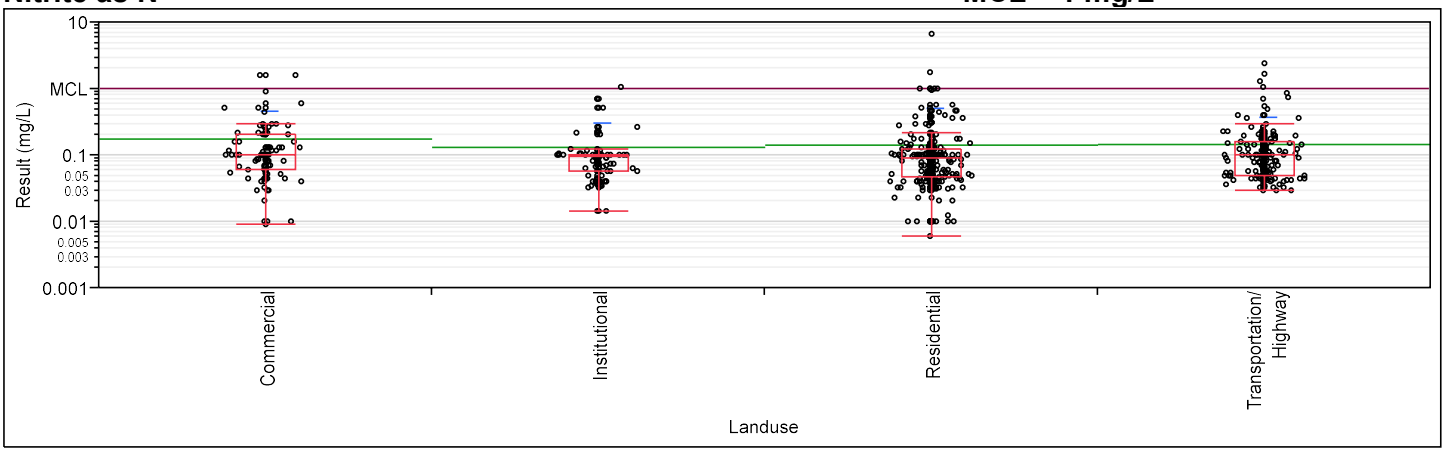
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	309	3	8	0.5	2	4

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	267	42	309	4	1

DRAFT

Nitrite as N

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Commercial	0.009	0.039	0.06	0.1	0.203	0.289
Institutional	0.014	0.036	0.058	0.097	0.1	0.2465
Residential	0.006	0.033	0.046	0.089	0.122	0.282
Transportation/Highway	0.03	0.043	0.05	0.1	0.16	0.225

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	113	0.2	0.3	0.03	0.1	0.2
Institutional	114	0.1	0.2	0.02	0.1	0.2
Residential	374	0.1	0.4	0.02	0.1	0.2
Transportation/Highway	242	0.1	0.2	0.01	0.1	0.2

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	95	18	113	3	3
Institutional	87	27	114	2	2
Residential	298	76	374	2	1
Transportation/Highway	222	20	242	4	2

DRAFT

Appendix B
Parameter-Landuse Means with Coefficient of Variation

Inorganic

Param_Source_Rev	Attribute	Agricultural	Commercial	Industrial	Institutional	Recreational	Residential	Transp/Highway	Vacant/Open
Aluminum, Dissolved	N(Landuse)	3	131	606	106	0	362	124	82
Aluminum, Dissolved	Mean(Landuse)	0.03	0.14	28.73	0.29		0.10	0.14	0.16
Aluminum, Dissolved	SD(Landuse)	0.01	0.55	389.00	0.42		0.27	0.19	0.45
Aluminum, Dissolved	CV(Landuse	43.28	382.08	1354.20	145.38		263.25	133.54	279.32
Aluminum, Total	N(Landuse)	3	127	25291	104	0	383	126	82
Aluminum, Total	Mean(Landuse)	2.03	2.39	11.61	0.82		0.57	0.63	1.69
Aluminum, Total	SD(Landuse)	0.67	14.19	337.18	0.70		0.71	0.94	8.89
Aluminum, Total	CV(Landuse	32.75	592.43	2903.75	84.55		124.79	149.19	524.57
Antimony, Dissolved	N(Landuse)	2	150	290	95	0	347	135	100
Antimony, Dissolved	Mean(Landuse)	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Antimony, Dissolved	SD(Landuse)	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Antimony, Dissolved	CV(Landuse	0.00	114.90	143.45	142.86		133.87	143.15	104.39
Antimony, Total	N(Landuse)	2	151	863	99	0	381	146	100
Antimony, Total	Mean(Landuse)	0.00	0.00	0.03	0.00		0.00	0.00	0.00
Antimony, Total	SD(Landuse)	0.00	0.00	0.31	0.00		0.00	0.00	0.00
Antimony, Total	CV(Landuse	0.00	121.99	1146.10	137.19		120.59	155.33	104.39
Arsenic, Dissolved	N(Landuse)	2	134	392	106	0	354	171	100
Arsenic, Dissolved	Mean(Landuse)	0.00	0.01	0.02	0.00		0.00	0.00	0.00
Arsenic, Dissolved	SD(Landuse)	0.00	0.03	0.31	0.01		0.02	0.00	0.00
Arsenic, Dissolved	CV(Landuse	28.28	297.82	1342.26	335.19		356.40	115.26	104.39
Arsenic, Total	N(Landuse)	51	216	2487	106	22	520	196	138
Arsenic, Total	Mean(Landuse)	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
Arsenic, Total	SD(Landuse)	0.00	0.01	0.44	0.00	0.00	0.00	0.00	0.01
Arsenic, Total	CV(Landuse	72.06	303.46	948.34	136.86	32.62	167.65	103.77	270.04
Asbestos	N(Landuse)	0	0	20	0	0	0	0	0
Asbestos	Mean(Landuse)			1.08					
Asbestos	SD(Landuse)			0.69					
Asbestos	CV(Landuse			64.12					
Barium, Dissolved	N(Landuse)	0	151	237	106	0	363	134	100
Barium, Dissolved	Mean(Landuse)		0.03	0.03	0.02		0.02	0.02	0.04
Barium, Dissolved	SD(Landuse)		0.03	0.03	0.02		0.02	0.01	0.03
Barium, Dissolved	CV(Landuse		132.89	106.52	93.34		125.59	77.37	71.44
Barium, Total	N(Landuse)	0	174	637	152	0	502	198	149
Barium, Total	Mean(Landuse)		0.07	0.17	0.04		0.03	0.03	0.07
Barium, Total	SD(Landuse)		0.20	1.73	0.03		0.05	0.03	0.13
Barium, Total	CV(Landuse		292.79	1030.94	72.93		146.38	88.72	178.40
Beryllium, Dissolved	N(Landuse)	0	137	280	80	0	281	106	76
Beryllium, Dissolved	Mean(Landuse)		0.01	0.01	0.00		0.00	0.00	0.00
Beryllium, Dissolved	SD(Landuse)		0.03	0.03	0.02		0.02	0.00	0.00
Beryllium, Dissolved	CV(Landuse		383.13	474.65	574.32		539.75	121.32	105.89
Beryllium, Total	N(Landuse)	0	147	749	104	0	380	134	102
Beryllium, Total	Mean(Landuse)		0.00	0.00	0.00		0.00	0.00	0.00
Beryllium, Total	SD(Landuse)		0.00	0.02	0.00		0.00	0.00	0.00
Beryllium, Total	CV(Landuse		177.51	847.70	133.39		127.78	116.39	150.73
Cadmium, Dissolved	N(Landuse)	5	157	605	111	0	376	166	100
Cadmium, Dissolved	Mean(Landuse)	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Cadmium, Dissolved	SD(Landuse)	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Cadmium, Dissolved	CV(Landuse	83.26	239.02	181.98	212.81		254.38	116.24	104.39
Cadmium, Total	N(Landuse)	50	227	3414	112	22	515	232	134
Cadmium, Total	Mean(Landuse)	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
Cadmium, Total	SD(Landuse)	0.00	0.00	3.44	0.00	0.00	0.00	0.00	0.00
Cadmium, Total	CV(Landuse	123.82	115.89	5250.97	110.18	12.82	143.50	104.44	407.51
Chromium, Dissolved	N(Landuse)	2	139	452	70	0	290	190	81
Chromium, Dissolved	Mean(Landuse)	0.00	0.01	0.14	0.01		0.01	0.01	0.01
Chromium, Dissolved	SD(Landuse)	0.00	0.02	1.15	0.02		0.02	0.00	0.00
Chromium, Dissolved	CV(Landuse	0.00	219.62	823.19	161.89		191.83	59.55	36.10
Chromium, Total	N(Landuse)	51	235	3187	89	22	493	223	125
Chromium, Total	Mean(Landuse)	0.01	0.01	0.06	0.01	0.01	0.01	0.01	0.01
Chromium, Total	SD(Landuse)	0.01	0.05	1.41	0.00	0.01	0.01	0.01	0.02
Chromium, Total	CV(Landuse	140.71	482.51	2420.80	57.86	48.72	136.65	74.36	196.25
Cyanide	N(Landuse)	0	8	1324	0	0	7	4	21
Cyanide	Mean(Landuse)		0.01	0.21			0.03	0.01	0.01
Cyanide	SD(Landuse)		0.00	0.92			0.03	0.00	0.01
Cyanide	CV(Landuse		0.00	436.57			124.89	0.00	80.87
Fluoride	N(Landuse)	0	68	443	80	0	217	131	96
Fluoride	Mean(Landuse)		0.16	0.86	0.17		0.15	0.14	0.36
Fluoride	SD(Landuse)		0.08	2.29	0.16		0.12	0.09	0.06
Fluoride	CV(Landuse		52.44	265.31	92.47		77.21	64.78	17.93
Lead, Dissolved	N(Landuse)	5	165	1152	108	0	391	185	100
Lead, Dissolved	Mean(Landuse)	0.00	0.01	0.04	0.00		0.01	0.00	0.00
Lead, Dissolved	SD(Landuse)	0.00	0.03	0.45	0.02		0.02	0.01	0.00
Lead, Dissolved	CV(Landuse	64.08	277.97	1023.25	357.44		309.38	214.86	104.39
Lead, Total	N(Landuse)	54	258	18511	117	22	609	307	144
Lead, Total	Mean(Landuse)	0.01	0.02	0.13	0.01	0.01	0.02	0.03	0.01
Lead, Total	SD(Landuse)	0.02	0.05	3.96	0.01	0.01	0.05	0.07	0.02
Lead, Total	CV(Landuse	244.70	245.59	3072.56	118.03	52.95	287.09	219.67	292.74
Mercury, Dissolved	N(Landuse)	0	81	309	80	0	238	131	94
Mercury, Dissolved	Mean(Landuse)		0.00	0.00	0.00		0.00	0.00	0.00
Mercury, Dissolved	SD(Landuse)		0.00	0.00	0.00		0.00	0.00	0.00
Mercury, Dissolved	CV(Landuse		102.71	201.78	136.75		128.17	115.90	104.69

(continued)

Inorganic

Param_Source_Rev	Attribute	Agricultural	Commercial	Industrial	Institutional	Recreational	Residential	Transp/Highway	Vacant/Open
Mercury, Total	N(Landuse)	0	99	3037	80	0	303	135	97
Mercury, Total	Mean(Landuse)		0.00	0.00	0.00		0.00	0.00	0.01
Mercury, Total	SD(Landuse)		0.00	0.03	0.00		0.01	0.01	0.03
Mercury, Total	CV(Landuse		99.10	2133.60	136.75		710.65	433.89	513.22
Nickel, Dissolved	N(Landuse)	2	158	662	109	0	383	210	100
Nickel, Dissolved	Mean(Landuse)	0.00	0.01	0.01	0.00		0.01	0.01	0.00
Nickel, Dissolved	SD(Landuse)	0.00	0.02	0.01	0.01		0.02	0.01	0.00
Nickel, Dissolved	CV(Landuse	10.88	266.42	199.93	318.55		298.58	148.27	104.39
Nickel, Total	N(Landuse)	51	220	4871	101	22	479	253	107
Nickel, Total	Mean(Landuse)	0.01	0.01	0.19	0.00	0.02	0.01	0.01	0.01
Nickel, Total	SD(Landuse)	0.01	0.03	6.75	0.00	0.01	0.01	0.01	0.03
Nickel, Total	CV(Landuse	130.62	271.02	3612.23	101.95	37.87	129.97	109.68	233.82
Nitrate + Nitrite as N	N(Landuse)	45	57	13378	0	22	100	23	35
Nitrate + Nitrite as N	Mean(Landuse)	2.04	0.27	3.33		0.96	0.46	0.20	0.20
Nitrate + Nitrite as N	SD(Landuse)	2.35	0.28	74.70		0.86	0.46	0.35	0.23
Nitrate + Nitrite as N	CV(Landuse	115.61	102.93	2246.08		89.89	99.15	175.63	115.27
Nitrate as N	N(Landuse)	36	127	2013	117	23	442	290	171
Nitrate as N	Mean(Landuse)	1.66	0.68	1.81	0.59	0.98	0.98	1.05	1.15
Nitrate as N	SD(Landuse)	5.59	0.56	33.92	0.43	0.51	1.75	1.60	0.73
Nitrate as N	CV(Landuse	337.23	82.28	1873.33	73.32	51.63	178.55	152.68	63.57
Nitrate as NO3	N(Landuse)	3	3	309	0	0	5	0	0
Nitrate as NO3	Mean(Landuse)	12.99	2.21	3.32			2.24		
Nitrate as NO3	SD(Landuse)	0.68	1.36	8.03			1.41		
Nitrate as NO3	CV(Landuse	5.21	61.29	241.91			62.89		
Nitrite as N	N(Landuse)	11	113	1501	114	0	374	242	119
Nitrite as N	Mean(Landuse)	0.01	0.18	0.28	0.13		0.14	0.15	0.08
Nitrite as N	SD(Landuse)	0.01	0.28	2.79	0.18		0.38	0.23	0.04
Nitrite as N	CV(Landuse	56.39	155.09	1000.36	133.61		260.25	157.39	50.15
Perchlorate	N(Landuse)	0	0	15	0	0	3	0	0
Perchlorate	Mean(Landuse)			0.00			0.00		
Perchlorate	SD(Landuse)			0.01			0.00		
Perchlorate	CV(Landuse			194.96			0.00		
Selenium, Dissolved	N(Landuse)	2	136	331	102	0	342	134	100
Selenium, Dissolved	Mean(Landuse)	0.00	0.01	0.01	0.00		0.00	0.00	0.00
Selenium, Dissolved	SD(Landuse)	0.00	0.02	0.02	0.01		0.02	0.00	0.00
Selenium, Dissolved	CV(Landuse	0.00	308.43	362.44	404.43		393.02	116.39	104.39
Selenium, Total	N(Landuse)	2	142	2367	101	0	380	138	102
Selenium, Total	Mean(Landuse)	0.00	0.00	0.02	0.00		0.00	0.00	0.00
Selenium, Total	SD(Landuse)	0.00	0.00	0.12	0.00		0.00	0.00	0.00
Selenium, Total	CV(Landuse	9.43	133.52	633.75	146.66		162.15	123.31	114.46
Thallium, Dissolved	N(Landuse)	0	151	273	106	0	363	134	100
Thallium, Dissolved	Mean(Landuse)		0.01	0.01	0.00		0.00	0.00	0.00
Thallium, Dissolved	SD(Landuse)		0.02	0.02	0.02		0.02	0.00	0.00
Thallium, Dissolved	CV(Landuse		331.35	398.96	444.69		428.42	116.39	104.39
Thallium, Total	N(Landuse)	0	143	702	104	0	383	134	100
Thallium, Total	Mean(Landuse)		0.00	0.00	0.00		0.00	0.00	0.00
Thallium, Total	SD(Landuse)		0.00	0.01	0.00		0.00	0.00	0.00
Thallium, Total	CV(Landuse		142.50	363.50	154.53		162.60	116.39	104.39

Secondary

Parameter_MCL	Attribute	Agricultural	Commercial	Industrial	Institutional	Recreational	Residential	Transp/Highway	Vacant/Open
Chloride	N(Landuse)	2	115	941	128	0	378	206	172
Chloride	Mean(Landuse)	160.00	46.31	110.15	35.98		15.85	6.52	10.14
Chloride	SD(Landuse)	28.28	59.71	549.06	94.85		38.85	9.11	13.29
Chloride	CV(Landuse)	17.68	128.92	498.45	263.60		245.10	139.59	131.09
Copper	N(Landuse)	59	484	18218	308	22	1234	656	286
Copper	Mean(Landuse)	0.03	0.03	0.16	0.02	0.03	0.02	0.04	0.01
Copper	SD(Landuse)	0.05	0.04	2.93	0.03	0.01	0.03	0.05	0.03
Copper	CV(Landuse)	190.22	141.10	1843.80	141.66	40.92	132.56	124.89	304.60
Foaming Agents (MBAS)	N(Landuse)	0	58	841	76	0	219	117	72
Foaming Agents (MBAS)	Mean(Landuse)		0.15	0.25	0.06		0.07	2.25	0.05
Foaming Agents (MBAS)	SD(Landuse)		0.23	0.51	0.02		0.06	16.52	0.00
Foaming Agents (MBAS)	CV(Landuse)		149.26	200.27	27.56		91.26	733.13	0.00
Iron	N(Landuse)	57	433	32743	295	22	1057	438	305
Iron	Mean(Landuse)	2.71	1.94	47.52	1.44	11.52	0.85	0.99	1.92
Iron	SD(Landuse)	4.04	14.69	2038.88	5.95	6.30	2.09	2.27	10.67
Iron	CV(Landuse)	149.30	758.81	4290.97	412.91	54.69	246.62	229.87	556.65
Manganese	N(Landuse)	4	292	736	210	0	747	268	200
Manganese	Mean(Landuse)	0.12	0.08	1.01	0.05		0.05	0.05	0.10
Manganese	SD(Landuse)	0.14	0.25	12.05	0.11		0.06	0.05	0.33
Manganese	CV(Landuse)	118.10	315.89	1194.21	196.72		121.94	106.72	316.64
Silver	N(Landuse)	46	360	2509	210	22	851	291	234
Silver	Mean(Landuse)	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Silver	SD(Landuse)	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
Silver	CV(Landuse)	112.33	185.33	765.37	200.59	105.54	289.42	113.20	291.56
Specific Conductance	N(Landuse)	0	179	7722	149	0	505	280	157
Specific Conductance	Mean(Landuse)		265.66	244.01	221.41		160.56	111.20	461.23
Specific Conductance	SD(Landuse)		298.61	1039.52	305.05		242.78	108.86	274.73
Specific Conductance	CV(Landuse)		112.40	426.01	137.77		151.21	97.89	59.56
Sulfate	N(Landuse)	2	68	495	80	0	219	131	96
Sulfate	Mean(Landuse)	295.00	34.73	95.27	16.19		11.18	9.76	16.64
Sulfate	SD(Landuse)	56.57	40.72	246.20	20.99		17.58	12.48	5.50
Sulfate	CV(Landuse)	19.18	117.23	258.43	129.62		157.34	127.93	33.09
Total Dissolved Solids	N(Landuse)	2	125	1944	129	0	416	289	157
Total Dissolved Solids	Mean(Landuse)	982.50	203.82	242.35	143.57		109.44	74.49	287.76
Total Dissolved Solids	SD(Landuse)	208.60	200.92	858.04	185.77		168.85	66.89	187.37
Total Dissolved Solids	CV(Landuse)	21.23	98.58	354.05	129.40		154.28	89.80	65.11
Turbidity	N(Landuse)	0	175	1194	155	0	503	237	166
Turbidity	Mean(Landuse)		32.10	113.85	54.60		29.93	33.76	70.76
Turbidity	SD(Landuse)		25.58	245.35	58.71		35.38	38.89	213.92
Turbidity	CV(Landuse)		79.67	215.50	107.52		118.22	115.19	302.31
Zinc	N(Landuse)	59	492	32966	291	22	1183	622	254
Zinc	Mean(Landuse)	0.22	0.26	3.65	0.12	0.12	0.13	0.25	0.04
Zinc	SD(Landuse)	0.36	0.31	111.13	0.18	0.05	0.18	0.27	0.07
Zinc	CV(Landuse)	165.82	120.51	3044.72	145.19	41.28	135.47	110.00	181.76

Radionuclides

Parameter_MCL	Attribute	Value
Gross Alpha particle activity (excluding radon and uranium)	N(Industrial)	70
Gross Alpha particle activity (excluding radon and uranium)	Mean(Industrial)	1.246025714
Gross Alpha particle activity (excluding radon and uranium)	Std Dev(Industrial)	1.281411238
Gross Alpha particle activity (excluding radon and uranium)	CV(Industrial)	102.8398711
Gross Beta particle activity	N(Industrial)	69
Gross Beta particle activity	Mean(Industrial)	4.489021884
Gross Beta particle activity	Std Dev(Industrial)	4.254139618
Gross Beta particle activity	CV(Industrial)	94.76762929
Tritium	N(Industrial)	73
Tritium	Mean(Industrial)	196.9239726
Tritium	Std Dev(Industrial)	378.9295213
Tritium	CV(Industrial)	192.4242723

Synthetic Organic Chemicals

Parameter_MCL	Attribute	Agricultural	Commercial	Industrial	Institutional	Recreational	Residential	Transp/Highway	Vacant/Open
1,2,3-Trichloropropane	N(Landuse)	0	0	45	0	0	0	0	0
1,2,3-Trichloropropane	Mean(Landuse)			0.000434511					
1,2,3-Trichloropropane	SD(Landuse)			0.000306747					
1,2,3-Trichloropropane	CV(Landuse)			70.595974					
2,3,7,8-TCDD (Dioxin)	N(Landuse)	0	0	85	0	0	0	0	0
2,3,7,8-TCDD (Dioxin)	Mean(Landuse)			7.25267E-10					
2,3,7,8-TCDD (Dioxin)	SD(Landuse)			1.51116E-09					
2,3,7,8-TCDD (Dioxin)	CV(Landuse)			208.3590951					
2,4,5-TP (Silvex)	N(Landuse)	0	17	22	24	0	76	37	28
2,4,5-TP (Silvex)	Mean(Landuse)		0.001	0.001	0.001		0.001	0.001	0.001
2,4,5-TP (Silvex)	SD(Landuse)		0	0	0		0	0	0
2,4,5-TP (Silvex)	CV(Landuse)		0	0	0		0	0	0
2,4-D	N(Landuse)	0	17	27	24	0	77	37	28
2,4-D	Mean(Landuse)		0.01	0.00822517	0.01		0.009872727	0.01	0.01
2,4-D	SD(Landuse)		0	0.00379847	0		0.001116814	0	0
2,4-D	CV(Landuse)		0	46.18105503	0		11.31210879	0	0
Alachlor	N(Landuse)	0	0	2	0	0	0	0	0
Alachlor	Mean(Landuse)			0.000225					
Alachlor	SD(Landuse)			3.53553E-05					
Alachlor	CV(Landuse)			15.71348403					
Atrazine	N(Landuse)	2	31	35	27	0	82	51	42
Atrazine	Mean(Landuse)	0.00003	0.002	0.001905714	0.002		0.001951463	0.002	0.002
Atrazine	SD(Landuse)	2.82843E-05	0	0.000388771	0		0.000308861	0	0
Atrazine	CV(Landuse)	94.28090416	0	20.40027511	0		15.82716822	0	0
Bentazon	N(Landuse)	0	17	22	24	0	76	37	28
Bentazon	Mean(Landuse)		0.002	0.002	0.002		0.002	0.002	0.002
Bentazon	SD(Landuse)		0	0	0		0	0	0
Bentazon	CV(Landuse)		0	0	0		0	0	0
Benzo(a)pyrene	N(Landuse)	27	79	711	23	12	184	64	46
Benzo(a)pyrene	Mean(Landuse)	4.60407E-05	0.001480524	0.001306662	0.001	2.58333E-05	0.001020716	0.000661002	0.000863043
Benzo(a)pyrene	SD(Landuse)	9.89259E-05	0.002936082	0.002946454	0	3.31301E-05	0.002216951	0.000472211	0.000326843
Benzo(a)pyrene	CV(Landuse)	214.8659659	198.3137159	225.4946794	0	128.2456965	217.195732	71.43875792	37.8709313
Carbofuran	N(Landuse)	3	31	39	31	0	95	48	29
Carbofuran	Mean(Landuse)	0.00059	0.004573226	0.004321538	0.005		0.004721474	0.005	0.005
Carbofuran	SD(Landuse)	0	0.001325369	0.001611933	0		0.001078409	0	0
Carbofuran	CV(Landuse)	0	28.98104977	37.2999887	0		22.84051622	0	0
Chlordane	N(Landuse)	0	26	358	22	0	84	40	41
Chlordane	Mean(Landuse)		8.19231E-05	0.000373738	0.00005		7.08929E-05	0.00005	0.00005
Chlordane	SD(Landuse)		0.000187702	0.000428695	0		0.000146187	0	0
Chlordane	CV(Landuse)		229.1201798	114.7046929	0		206.2080722	0	0
Dalapon	N(Landuse)	0	0	4	0	0	5	0	0
Dalapon	Mean(Landuse)			0.01125			0.0092		
Dalapon	SD(Landuse)			0.0035			0.005495453		
Dalapon	CV(Landuse)			31.11111111			59.73318115		
Di(2-ethylhexyl)adipate	N(Landuse)	0	0	7	0	0	0	0	0
Di(2-ethylhexyl)adipate	Mean(Landuse)			0.373357143					
Di(2-ethylhexyl)adipate	SD(Landuse)			0.656286571					
Di(2-ethylhexyl)adipate	CV(Landuse)			175.7798353					
Di(2-ethylhexyl)phthalate	N(Landuse)	0	38	248	23	0	111	42	45
Di(2-ethylhexyl)phthalate	Mean(Landuse)		0.015915789	0.007912532	0.012691304		0.017930757	0.013088095	0.017037778
Di(2-ethylhexyl)phthalate	SD(Landuse)		0.030311683	0.010944719	0.01079566		0.035377341	0.015095472	0.029514244
Di(2-ethylhexyl)phthalate	CV(Landuse)		190.4503888	138.3213238	85.06344309		197.2997647	115.3374234	173.228247
Dibromochloropropane	N(Landuse)	0	10	9	0	0	5	5	15
Dibromochloropropane	Mean(Landuse)		0.00001	0.00001			0.00001	0.00001	0.00001
Dibromochloropropane	SD(Landuse)		0	0			0	0	0
Dibromochloropropane	CV(Landuse)		0	0			0	0	0
Dinoseb	N(Landuse)	0	0	4	0	0	5	0	0
Dinoseb	Mean(Landuse)			0.0019			0.00157		
Dinoseb	SD(Landuse)			0.0012			0.001274559		
Dinoseb	CV(Landuse)			63.15789474			81.18208581		
Endrin	N(Landuse)	15	33	258	22	0	142	40	65
Endrin	Mean(Landuse)	0.000001	9.75455E-05	0.000132211	0.0001		6.31056E-05	1E-04	6.34462E-05
Endrin	SD(Landuse)	0	0.000168268	0.001371582	0		9.29286E-05	0	4.81489E-05
Endrin	CV(Landuse)	0	172.5025574	1037.419218	0		147.2588156	0	75.88934047
Ethylene Dibromide	N(Landuse)	0	0	45	0	0	0	0	0
Ethylene Dibromide	Mean(Landuse)			0.000420289					
Ethylene Dibromide	SD(Landuse)			0.000436677					
Ethylene Dibromide	CV(Landuse)			103.899286					
Glyphosate	N(Landuse)	0	32	47	30	0	93	50	31
Glyphosate	Mean(Landuse)		0.025	0.033451064	0.029666667		0.02483871	0.02562	0.025
Glyphosate	SD(Landuse)		0	0.021991637	0.01650357		0.002690161	0.003212793	0
Glyphosate	CV(Landuse)		0	65.74271472	55.63001056		10.83051631	12.54017683	0
Heptachlor	N(Landuse)	15	29	247	22	0	129	40	65
Heptachlor	Mean(Landuse)	0.000001	3.81724E-05	9.99908E-05	0.00005		3.06279E-05	0.00005	3.19077E-05
Heptachlor	SD(Landuse)	0	2.13392E-05	0.001082481	0		2.40508E-05	0	2.38313E-05
Heptachlor	CV(Landuse)	0	55.90218754	1082.580817	0		78.52560843	0	74.688127
Heptachlor Epoxide	N(Landuse)	9	42	266	22	0	151	40	65
Heptachlor Epoxide	Mean(Landuse)	0.000001	0.003765095	0.000722345	0.00005		0.001033444	0.00005	3.19077E-05
Heptachlor Epoxide	SD(Landuse)	0	0.007544447	0.00351331	0		0.004117385	0	2.38313E-05
Heptachlor Epoxide	CV(Landuse)	0	200.3786402	486.3752649	0		398.4140645	0	74.688127
Hexachlorobenzene	N(Landuse)	9	45	252	23	0	113	42	39
Hexachlorobenzene	Mean(Landuse)	0.000001	0.002055711	0.001942568	0.0005		0.001197611	0.0005	0.0005
Hexachlorobenzene	SD(Landuse)	0	0.00352292	0.003198725	0		0.00264734	0	0
Hexachlorobenzene	CV(Landuse)	0	171.3723074	164.6647033	0		221.0518223	0	0

(continued)

Synthetic Organic Chemicals

Parameter_MCL	Attribute	Agricultural	Commercial	Industrial	Institutional	Recreational	Residential	Transp/Highway	Vacant/Open
Hexachlorocyclopentadiene	N(Landuse)	0	36	236	23	0	92	42	39
Hexachlorocyclopentadiene	Mean(Landuse)		0.004388889	0.004868025	0.003		0.00346087	0.003	0.003
Hexachlorocyclopentadiene	SD(Landuse)		0.00309172	0.006361578	0		0.002454149	0	0
Hexachlorocyclopentadiene	CV(Landuse)		70.44424432	130.6808731	0		70.91134206	0	0
Lindane	N(Landuse)	0	22	22	22	0	78	40	41
Lindane	Mean(Landuse)		0.00005	0.00005	0.00005		0.00005	0.00005	0.00005
Lindane	SD(Landuse)		0	0	0		0	0	0
Lindane	CV(Landuse)		0	0	0		0	0	0
Methoxychlor	N(Landuse)	15	32	242	22	0	141	40	65
Methoxychlor	Mean(Landuse)	0.000001	0.000353344	0.000291264	0.0005		0.000279851	0.0005	0.000315754
Methoxychlor	SD(Landuse)	0	0.000222504	0.003212792	0		0.000246269	0	0.00024269
Methoxychlor	CV(Landuse)	0	62.97097965	1103.053139	0		88.0000592	0	76.86042476
Molinate	N(Landuse)	0	24	28	27	0	77	47	27
Molinate	Mean(Landuse)		0.002	0.002	0.002		0.002	0.002	0.002
Molinate	SD(Landuse)		0	0	0		0	0	0
Molinate	CV(Landuse)		0	0	0		0	0	0
Oxamyl	N(Landuse)	3	3	6	0	0	6	0	0
Oxamyl	Mean(Landuse)	0.00048	0.00048	0.00048			0.00048		
Oxamyl	SD(Landuse)	0	0	0			0		
Oxamyl	CV(Landuse)	0	0	0			0		
Pentachlorophenol	N(Landuse)	0	37	282	23	0	93	42	39
Pentachlorophenol	Mean(Landuse)		0.011432432	0.004229348	0.002		0.00663172	0.002	0.002
Pentachlorophenol	SD(Landuse)		0.018933422	0.009656886	0		0.014307958	0	0
Pentachlorophenol	CV(Landuse)		165.611494	228.3304057	0		215.7503136	0	0
Polychlorinated Biphenyls	N(Landuse)	9	7	171	0	0	19	0	24
Polychlorinated Biphenyls	Mean(Landuse)	0.000001	0.000001	0.000371461			0.000001		0.000001
Polychlorinated Biphenyls	SD(Landuse)	0	0	0.000431907			0		0
Polychlorinated Biphenyls	CV(Landuse)	0	0	116.2724753			0		0
Simazine	N(Landuse)	2	31	33	27	0	82	51	42
Simazine	Mean(Landuse)	0.000235	0.002	0.002	0.002		0.001951463	0.002	0.002
Simazine	SD(Landuse)	0.000318198	0	0	0		0.000308861	0	0
Simazine	CV(Landuse)	135.4034262	0	0	0		15.82716822	0	0
Thiobencarb	N(Landuse)	0	24	28	27	0	77	47	27
Thiobencarb	Mean(Landuse)		0.001	0.001	0.001		0.001	0.001	0.001
Thiobencarb	SD(Landuse)		0	0	0		0	0	0
Thiobencarb	CV(Landuse)		0	0	0		0	0	0
Toxaphene	N(Landuse)	15	32	249	22	0	141	40	65
Toxaphene	Mean(Landuse)	0.00001	0.000699063	0.000787478	0.001		0.000595113	0.001	0.000634462
Toxaphene	SD(Landuse)	0	0.000454109	0.000791831	0		0.000615863	0	0.000481489
Toxaphene	CV(Landuse)	0	64.95975137	100.5527064	0		103.4867196	0	75.88934047

Volatile Organic Chemicals

Parameter_MCL	Attribute	Agricultural	Commercial	Industrial	Institutional	Recreational	Residential	Transp/Highway	Vacant/Open
1,1,1-Trichloroethane	N(Landuse)		10	145	0		5	5	15
1,1,1-Trichloroethane	Mean(Landuse)		0.001	0.000640572			0.001	0.001	0.001
1,1,1-Trichloroethane	SD(Landuse)		0	0.000739808			0	0	0
1,1,1-Trichloroethane	CV(Landuse)		0	115.4917011			0	0	0
1,1,2,2-Tetrachloroethane	N(Landuse)		10	145	0		5	5	15
1,1,2,2-Tetrachloroethane	Mean(Landuse)		0.0005	0.000755469			0.0005	0.0005	0.0005
1,1,2,2-Tetrachloroethane	SD(Landuse)		0	0.002050198			0	0	0
1,1,2,2-Tetrachloroethane	CV(Landuse)		0	271.3808653			0	0	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	N(Landuse)		10	32	0		5	5	15
1,1,2-Trichloro-1,2,2-Trifluoroethane	Mean(Landuse)		0.0005	0.000563719			0.0005	0.0005	0.0005
1,1,2-Trichloro-1,2,2-Trifluoroethane	SD(Landuse)		0	0.000238682			0	0	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	CV(Landuse)		0	42.34057509			0	0	0
1,1,2-Trichloroethane	N(Landuse)		10	145	0		5	5	15
1,1,2-Trichloroethane	Mean(Landuse)		0.001	0.000635055			0.001	0.001	0.001
1,1,2-Trichloroethane	SD(Landuse)		0	0.000908622			0	0	0
1,1,2-Trichloroethane	CV(Landuse)		0	143.077597			0	0	0
1,1-Dichloroethane	N(Landuse)		10	159	0		5	5	15
1,1-Dichloroethane	Mean(Landuse)		0.0005	0.000583509			0.0005	0.0005	0.0005
1,1-Dichloroethane	SD(Landuse)		0	0.000775847			0	0	0
1,1-Dichloroethane	CV(Landuse)		0	132.9621698			0	0	0
1,1-Dichloroethylene	N(Landuse)		10	130	0		5	5	15
1,1-Dichloroethylene	Mean(Landuse)		0.0005	0.000580246			0.0005	0.0005	0.0005
1,1-Dichloroethylene	SD(Landuse)		0	0.000704474			0	0	0
1,1-Dichloroethylene	CV(Landuse)		0	121.4094601			0	0	0
1,2,4-Trichlorobenzene	N(Landuse)		38	285	23		94	42	39
1,2,4-Trichlorobenzene	Mean(Landuse)		0.002434211	0.001703186	0.0005		0.001439149	0.0005	0.0005
1,2,4-Trichlorobenzene	SD(Landuse)		0.003716601	0.002917652	0		0.002844207	0	0
1,2,4-Trichlorobenzene	CV(Landuse)		152.6819834	171.3055615	0		197.6311757	0	0
1,2-Dichlorobenzene	N(Landuse)		33	329	23		88	42	39
1,2-Dichlorobenzene	Mean(Landuse)		0.001833333	0.001183079	0.0005		0.001162273	0.0005	0.0005
1,2-Dichlorobenzene	SD(Landuse)		0.003178705	0.00236916	0		0.002456836	0	0
1,2-Dichlorobenzene	CV(Landuse)		173.3839193	200.2537454	0		211.3820154	0	0
1,2-Dichloroethane	N(Landuse)		0	143	0		0	0	0
1,2-Dichloroethane	Mean(Landuse)			0.000483161					
1,2-Dichloroethane	SD(Landuse)			0.000651467					
1,2-Dichloroethane	CV(Landuse)			134.8344896					
1,2-Dichloropropane	N(Landuse)		10	143	0		5	5	15
1,2-Dichloropropane	Mean(Landuse)		0.0005	0.000616622			0.0005	0.0005	0.0005
1,2-Dichloropropane	SD(Landuse)		0	0.001056252			0	0	0
1,2-Dichloropropane	CV(Landuse)		0	171.2964327			0	0	0
1,3-Dichloropropene	N(Landuse)		0	8	0		0	0	0
1,3-Dichloropropene	Mean(Landuse)			0.0006875					
1,3-Dichloropropene	SD(Landuse)			0.000810093					
1,3-Dichloropropene	CV(Landuse)			117.8316491					
1,4-Dichlorobenzene	N(Landuse)		33	365	23		88	42	39
1,4-Dichlorobenzene	Mean(Landuse)		0.002106061	0.001284023	0.0005		0.001196364	0.0005	0.0005
1,4-Dichlorobenzene	SD(Landuse)		0.003225285	0.003040803	0		0.002475302	0	0
1,4-Dichlorobenzene	CV(Landuse)		153.1430199	236.818436	0		206.9021811	0	0
Benzene	N(Landuse)		10	735	0		5	5	15
Benzene	Mean(Landuse)		0.0005	0.003003938			0.0005	0.0005	0.0005
Benzene	SD(Landuse)		0	0.033907446			0	0	0
Benzene	CV(Landuse)		0	1128.766355			0	0	0
Carbon Tetrachloride	N(Landuse)		10	145	0		5	5	15
Carbon Tetrachloride	Mean(Landuse)		0.0005	0.000537979			0.0005	0.0005	0.0005
Carbon Tetrachloride	SD(Landuse)		0	0.000626119			0	0	0
Carbon Tetrachloride	CV(Landuse)		0	116.3835098			0	0	0
cis-1,2-Dichloroethylene	N(Landuse)		0	93	0		0	0	0
cis-1,2-Dichloroethylene	Mean(Landuse)			0.000450333					
cis-1,2-Dichloroethylene	SD(Landuse)			0.000670387					
cis-1,2-Dichloroethylene	CV(Landuse)			148.864726					
Dichloromethane	N(Landuse)		10	149	0		5	5	15
Dichloromethane	Mean(Landuse)		0.001	0.001132617			0.001	0.001	0.001
Dichloromethane	SD(Landuse)		0	0.001513262			0	0	0
Dichloromethane	CV(Landuse)		0	133.6074968			0	0	0
Ethylbenzene	N(Landuse)		10	702	0		5	5	15
Ethylbenzene	Mean(Landuse)		0.001	0.000947711			0.001	0.001	0.001
Ethylbenzene	SD(Landuse)		0	0.005662293			0	0	0
Ethylbenzene	CV(Landuse)		0	597.4706794			0	0	0
Methyl-tert-butyl ether	N(Landuse)		0	244	0		0	0	0
Methyl-tert-butyl ether	Mean(Landuse)			0.001196899					
Methyl-tert-butyl ether	SD(Landuse)			0.003749549					
Methyl-tert-butyl ether	CV(Landuse)			313.2718983					
Monochlorobenzene	N(Landuse)		10	192	0		5	5	15
Monochlorobenzene	Mean(Landuse)		0.0005	0.000537893			0.0005	0.0005	0.0005
Monochlorobenzene	SD(Landuse)		0	0.000904404			0	0	0
Monochlorobenzene	CV(Landuse)		0	168.1381557			0	0	0
Styrene	N(Landuse)		10	71	0		5	5	15
Styrene	Mean(Landuse)		0.0005	0.000449324			0.0005	0.0005	0.0005
Styrene	SD(Landuse)		0	0.000672668			0	0	0
Styrene	CV(Landuse)		0	149.7067527			0	0	0
Tetrachloroethylene	N(Landuse)		0	94	0		0	0	0
Tetrachloroethylene	Mean(Landuse)			0.0006423					
Tetrachloroethylene	SD(Landuse)			0.000836229					
Tetrachloroethylene	CV(Landuse)			130.1928634					
Toluene	N(Landuse)		12	720	0		6	6	16
Toluene	Mean(Landuse)		0.001125	0.006274803			0.001383333	0.001033333	0.0010625
Toluene	SD(Landuse)		0.000374469	0.090504609			0.000938971	5.16398E-05	0.00025
Toluene	CV(Landuse)		33.28616191	1442.349909			67.87742661	4.997397866	23.52941176
trans-1,2-Dichloroethylene	N(Landuse)		10	112	0		5	5	15
trans-1,2-Dichloroethylene	Mean(Landuse)		0.0005	0.029022439			0.0005	0.0005	0.0005
trans-1,2-Dichloroethylene	SD(Landuse)		0	0.212783256			0	0	0
trans-1,2-Dichloroethylene	CV(Landuse)		0	733.1680629			0	0	0

(continued)

Volatile Organic Chemicals

Parameter_MCL	Attribute	Agricultural	Commercial	Industrial	Institutional	Recreational	Residential	Transp/Highway	Vacant/Open
Trichloroethylene	N(Landuse)		0	148	0		0	0	0
Trichloroethylene	Mean(Landuse)			0.000947703					
Trichloroethylene	SD(Landuse)			0.004582914					
Trichloroethylene	CV(Landuse)			483.5813718					
Trichlorofluoromethane	N(Landuse)		10	111	0		5	5	15
Trichlorofluoromethane	Mean(Landuse)		0.001	0.001186541			0.001	0.001	0.001
Trichlorofluoromethane	SD(Landuse)		0	0.001767302			0	0	0
Trichlorofluoromethane	CV(Landuse)		0	148.9458024			0	0	0
Vinyl Chloride	N(Landuse)		10	180	0		5	5	15
Vinyl Chloride	Mean(Landuse)		0.0005	0.0005097			0.0005	0.0005	0.0005
Vinyl Chloride	SD(Landuse)		0	0.000703137			0	0	0
Vinyl Chloride	CV(Landuse)		0	137.9511837			0	0	0
Xylenes	N(Landuse)		10	488	0		5	5	15
Xylenes	Mean(Landuse)		0.0005	0.005233954			0.0005	0.0005	0.0005
Xylenes	SD(Landuse)		0	0.041590381			0	0	0
Xylenes	CV(Landuse)		0	794.6264233			0	0	0

GeoSystems Analysis, Inc.
Innovations in Hydrology

May 30, 2019

Adam Questad, P.E.
Senior Principal Water Resources Engineer
Geosyntec Consultants
924 Anacapa Street, Suite 4A,
Santa Barbara, CA, 93101

Re: California Stormwater Quality Data Compilation and Statistical Analysis

Dear Adam,

Please find attached a summary of the data compilation methods and analyses performed on the stormwater quality datasets provided by Geosyntec.

If you have any questions, please feel free to contact me.

Sincerely,

Michael Milczarek
Program Director

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DOCUMENT CONTROL SUMMARY

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This is a draft report only and we solicit your review and comments within X weeks of submission. Upon issue of the final report we request that all draft reports be destroyed or returned to GeoSystems *Analysis*, Inc.. This draft report should not be relied upon as a final document and all results should be considered preliminary.

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1.0 INTRODUCTION

In April 2019, GeoSystems Analysis, Inc. (GSA) received files from Geosyntec Consultants (Geosyntec) containing results of laboratory water quality testing on stormwater samples collected from seven data sources:

- Stormwater Multiple Application and Tracking System (SMARTS)
- National Stormwater Quality Database (NSQD)
- Southern California Coastal Water Research Project (SCCWRP)
- Los Angeles County (LA Co)
- Santa Barbara County (SB Co)
- San Diego County (SD Co)
- Ventura County (Ventura Co)

GSA compiled the SMARTS data files into one single spreadsheet and all the source datasets, including SMARTS, into a second spreadsheet in order to generate summary statistics describing the detected lab test results. From the SMARTS and combined-source spreadsheets, results were also tallied to determine the number exceeding the California State Water Resources Control Board Maximum Contaminant Levels (MCLs, Appendix A). Note that not every MCL parameter was identified in the source-provided data.

The detected results in the SMARTS data file were classified into the California Water Board Region in which the test samples were generated. The following regions and sub-regions contributed data:

1 – North Coast
2 – San Francisco Bay
3 – Central Coast
4 – Los Angeles
5F – Central Valley – Fresno
5R – Central Valley – Redding
5S – Central Valley – Sacramento
6A – Lahontan – Victorville
6B – Lahonton – South Lake Tahoe
7 – Colorado River Basin
8 – Santa Ana
9 – San Diego

In the combined-source data file, the detected results were summarized by land use. The source-identified land use categories were mapped to one of the 8 major land use categories identified by Geosyntec:

Agricultural
Commercial
Industrial
Institutional
Recreational
Residential
Transportation/Highway
Vacant/Open Space

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Section 2 of this document briefly describes the methods used to construct input files for the data analysis application used to generate the statistics.

Appendix A contains a list of the California Maximum Contaminant Levels used in the study (not all parameters were identified in the data sets). Appendix B presents the results of the SMARTS detected data summarized by region and Appendix C presents the combined-source detected data summarized by land use. For the detected data, summary statistics generated include quantiles, means and standard deviations, as well as counts of detected and non-detected results, results exceeding MCLs and percentage of results exceeding MCLs by parameter and region or land use. Box and whisker plots and tabular data are presented.

Appendix D contains both the SMARTS and the combined-source data counts of NDs, MDLs > MCLs, and percent MDLs > MCLs by parameter.

2.0 METHODS

2.1 Data Fields

The seven source datasets consisted of varying numbers and types of data fields. The data fields that GSA identified as being necessary for data input files are shown in Table 1. Notes regarding the data process are provided below, using the fields as reference.

GSA added Source and Record ID fields to the source datasets prior to processing and these fields were included in the input file structure to indicate the source of each record and to link the record in the input file back to the original source-provided record, if necessary.

Land use information provided by the source data files, either as a land use indicator field in the dataset or as an additional table providing land use descriptions for sampling sites named in the dataset, were used to categorize each record into one category from the list of eight major land use categories constructed by Geosyntec. These categories were in the Landuse field.

An MCL Group field was added to place each record into one of the MCL categories (Appendix 1) to organize statistical input and output. Note that one of the MCL Group categories, coliforms, was excluded from the analysis because the application of the standard (zero) is not consistent with that of other the parameter and any detected result would therefore exceed the MCL.

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For several of the inorganic and secondary MCL inorganic parameters (metals), both total and dissolved forms were compared to the MCL for each parameter. Source-provided data

Table 1. Data fields included in input files

Field	Description	Source
Source	Name of record's source dataset, e.g. SMARTS	Added by GSA
Record ID	Unique record identifier, indicating name of the source and of the dataset if more than one was provided by that source	Added by GSA
Landuse	8 major land use categories identified by Geosyntec	GSA added based on source-provided land use information for sampling sites
MCL Group	Assignment of parameter named in source dataset to MCL categories of Inorganic, Radionuclide, VOCs, SVOCs, Disinfectant, Coliforms, or Secondary	GSA added based on match between source and MCL parameter name
Parameter, Source	Parameter named in the original source data	From source data set
Parameter, Source Rev	Assignment of parameter named in source dataset into standardized categories	Added by GSA
Parameter, MCL	Match of parameter name in source dataset to name in MCL regulations list (see Table 1)	Added by GSA
MCL	MCL value from MCL regulations list (see Table 1)	Added by GSA
Result Qualifier	Indicator of status of numeric result, most often ND, < or >	From source data set or GSA added or modified
Result	Numeric test measurement	From source data set
Units	Units in which test result is reported	From source data set
Result, MCL units	Test result converted, if necessary, to units for matching MCL parameter as listed in regulation (see Table 1)	Added by GSA
Method	Test method identifier	From source data set if present
MDL	Method Detection Limit	From source data set if present
MDL, Revised	MDL column in input file including both MDLs provided in source dataset and any added by GSA when missing in source dataset but when method was provided	From source data set or added by GSA
MDL, MCL units	MDL converted, if necessary, to units for matching MCL parameter	Added by GSA
Result - MCL	Subtraction of MCL value from Result value to determine if exceedance occurred	Added by GSA
MDL – MCL	Subtraction of MCL value from MDL value to determine if the MDL was greater than the MCL	Added by GSA

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included a range of names for the same parameter. The Parameter, Source Rev field was added to standardize naming of these parameter forms (appearing in the Parameter, Source field). For example, total aluminum might be labeled Aluminum, Total Aluminum, T-Alum or Aluminum Total and all of these records were placed under Aluminum, Total in the Parameter, Source Rev field. The separate comparisons of total and dissolved forms were due to the fact that Total parameter results include constituents that are not dissolved and may be sorbed to, or part of suspended solids that will be removed via the process of infiltrating stormwater into drywells. Therefore, Dissolved parameter results are more indicative of the actual source water quality.

In the Parameter, MCL field each MCL parameter as named in the source dataset was assigned to the name in the MCL list in the regulation and the MCL value field contains the numerical value for the standard (Appendix 1).

A Result Qualifier field was often provided in the source dataset and included, for example, ND, LD, >, <, DNQ, or other descriptors, The Result Qualifier Rev field was included to indicate if the record was to be used in the analysis of detected results (Result) or in the analysis of non-detected results (ND). Note that an ND was placed in the Result Qualifier Rev field if there was an ND in the source-provided Result Qualifier field, even if the source data set included a postive value in the Result field.

The Result and Units fields contain the numeric result from the source dataset and units provided by the source, with units provided either as a field in the dataset or in another table.

In the Result, MCL Units field, the source-provided result value was converted, if necessary, to the units listed in the MCL regulations, most often mg/L (Appendix 1) based on the contents of the Units field.

The Method field contains the test method identifier if provided in the source dataset.

The MDL field contains the method detection limit provided by the source (in the dataset or outside table) and the MDL, Revised field contains those values or, for some records, MDL values added by GSA. For the SMARTS and Ventura County datasets only, GSA added MDLs only to records with NDs; i.e. records needing to be tested to determine if the MDL was greater than the MCL (See Section 2.2.3).

The MDL, MCL Units field contains the MDL, converted if necessary, to the units in the MCL regulations table (Appendix 1) based on the contents of the Units field.

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The Result – MCL field contains the subtraction of the MCL from the result to determine if the result exceeded the MCL.

The MDL – MCL field contains the subtraction of the MCL from the MDL to determine if the MDL was greater than the MCL, indicating a potential for exceedance.

2.2 Data Processing

Data were processed in Microsoft Excel® (Office 365) and statistical analysis was done using SAS JMP® (v.9.02) and in Excel®.

Data processing to prepare the source datasets for inclusion in the input files involved the following tasks, among others.

2.2.1 Matching Parameter Names

The source datasets contained a variety of names for the same MCL parameter and, for the organic chemical MCL parameters especially, it was not always a straight-forward process to link the name of a parameter listed in a source dataset with one in the MCLs. GSA staff used PubChem (https://pubchem.ncbi.nlm.nih.gov/) to search for synonyms for the MCL parameter and searched the source dataset parameter list to identify matches between the source and MCL parameter names. Only the synonyms listed on the PubChem initial display (four or five names) were checked against the source parameter list as there were often over 100 synonyms listed on linked the full synonym list.

For the inorganic parameters, for which results from tests on the total and dissolved forms were to be compared separately to the MCL, some other naming types included in the datasets were grouped into the standardized list as either total or dissolved. Parameters listed as "total recoverable" were included as Total and parameters listed as "filtered" were included as Dissolved. Parameter names with no total or dissolved qualifier were included as Total.

2.2.2 Result Qualifications

In the field in the source datasets denoting qualifications to the numeric result, when present, records with blank cells in this field, and records with "=", "no" or "none", or > or "GR" were counted as detected results.

In this same field, cells with < (referring to less than the MDL) or ND were counted as non-detected results (and ND placed in the Result Qualifier Rev field. Similarly, a < sign

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included with a numeric value in the Result field was treated as an ND. Records with a Result Qualifier of DNQ (Detection Not Quantifiable) or BRL (Below Reporting Limit) were excluded from calculations per Geosyntec.

Some of the source datasets did not include a Result Qualification field and some, even when they did include this field, denoted NDs in the result field instead, so, for the purpose of easily differentiating records to be used for analysis of detected or non-detected result records, the Result Qualifier Rev field was added to put an indicator of ND or Result in a single column in the input files.

2.2.3 MDLs

MDLs were added to ND records under the following conditions when the MDL field in the source dataset was empty or clearly incorrect (e.g. was a test method number, such as 200.8 or other non-MDL value, such as -88):

- When the method was provided and other records in the same source, using the same method for testing the same parameter, listed an MDL, that MDL was copied. Per Geosyntec instruction, when multiple MDL values were given for the same parameter using the same method, a larger-magnitude, reasonable-appearing MDL value was used to fill in missing values.
- When the method was provided and no records with matching methods and parameters in the dataset were identified, GSA located the method text, if available, and copied the estimated MDL value, when present.
- When the method field was also empty or the entry incorrect but the dataset contained other records for the same parameter, the greatest reasonable MDL value from amongst those other records was copied.

2.3 Source Data Sets

The source data sets were in a range of structures, and quality, and sizes, from 1,680 (SB Co) to over 520,000 (SMARTS) before processing. The following are brief descriptions of data set characteristics and potential problems.

2.3.1 SMARTS

The SMARTS data set as received consisted of 48 files, four each for 12 regions or sub-regions and the compiled spreadsheet consisted of over 520,000 records before processing and over 190,000 records after non-MCL parameters and other unusable records (e.g. blank

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cells for the result or NDs with no MDL or method) were excluded. There some problems observed with the results and MDL values in the SMARTS files, which are discussed in section 2.4 below.

2.3.2 NSQD

The NSQD data set as received contained parameters across columns which were unpivoted in Excel® and the Source and Record ID fields were added to the unpivoted file rather than to the original records. The data set did not contain data on test methods or MDLs so NSQD data were not included in the non-detected results analysis.

2.3.3 Los Angeles County

The LA County dataset was received as 11 separate files, all of which required unpivoting of columns containing results data and the Source and Record ID fields were added to the unpivoted file rather than to the original records. One of these files, _900_SemiVol_LU_OC Proc.xlsx, contained abbreviated names for the parameters, some of which, even with help from Geosyntec, could not be identified with certainty and matched to an MCL parameter. Of the 89 original parameters listed, only two (benzo(a)pyrene and di(2-ethylhexyl)phthalate) were included in the data compiled for analysis. A table separate from the received data (4-12TABLE_94-00.xlsx) provided units and MDLs for some of the parameters in the data set.

2.3.4 Santa Barbara County

No concerns were identified with this data set.

2.3.5 San Diego County

This data set was received as five files with varying structures and data were placed into a common structure for processing.

2.3.6 Ventura County

Although this data set contained a test method identification field, more than half of the MDLs were missing. GSA staff added some MDLs by retrieving the MDL from the test method text, if available but many ND records could not be included in the analysis.

2.3.7 SCCWRP

This data set was received as three files containing test result data. Many records with MCL parameters were not included because the sampling station ID did not have a designated land use or because the site was to be excluded, per Geosyntec, e.g. mass emissions stations.

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2.4 Source Data Quality

In the combined source statistics (Appendix A2 and B2), results for non-industrial land uses, where no SMARTS data was included in the analysis, generally had a reasonable range of result values and relatively few instances of the lab result being greater than the MCL or the MDL being greater than the MCL. In the SMARTS data and in the combined source data for industrial land uses, where SMARTS was the primary source, there were frequently very high exceedances of the MCLs, including results which are geochemically impossible due to solubility constraints (i.e. Dissolved Al results > 1000 mg/l in neutral pH solutions).

In the source-provided SMARTS data files, there are inconsistencies with the values provided in the Result and MDL fields. During data processing, GSA staff observed value ranges over several orders of magnitude in the Result and MDL values for the same parameter using the same test method. Test method numbers were also incorrectly entered in the MDL field for many records.

In addition to apparent issues with quality control in the data entry, there appear to have been inconsistencies in unit assignments. Although a Units field was included in the source data sets and, presumably, applied to both the result and MDL values, some values were larger or smaller than the expected range for the units specified. For the purposes of getting all results and MDLs into the same units for processing, GSA staff assumes the units in the Units field to be correct and determined the conversion, if needed, to MCL units (mg/L except for radionuclides, asbestos, specific conductance, and turbidity) based on the data in that field.

Because of the uncertainty of the SMARTS test result and MDL values, results of statistical analyses on the separate SMARTS data set and on the combined-source industrial land use category, which was primarily from SMARTS data, should be interpreted with caution.

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APPENDIX A

California Maximum Contaminant Levels

Table 1. California Maximum Contaminant Levels

Contaminant	MCL	Units
Inorganic Chemicals		
Aluminum	1	mg/L
Antimony	0.006	mg/L
Arsenic	0.01	mg/L
Asbestos	7	* MFL
Barium	1	mg/L
Beryllium	0.004	mg/L
Cadmium	0.005	mg/L
Chromium	0.05	mg/L
Cyanide	0.15	mg/L
Fluoride	2	mg/L
Lead	0.015	mg/L
Mercury	0.002	mg/L
Nickel	0.1	mg/L
Nitrate(as NO3)	45	mg/L
Nitrate (as N)	10	mg/L
Nitrate+Nitrite (sum as N)	10	mg/L
Nitrite (as N)	1	mg/L
Perchlorate	0.006	mg/L
Selenium	0.05	mg/L
Thallium	0.002	mg/L
* MFL=million fibers per liter; MCL for fibers exceeding 10 µm in length		
Radionuclides		
Gross Alpha particle activity (excluding radon and uranium)	15	pCi/L
Gross Beta particle activity	4	millrem/yr
Radium-226 and Radium-228	5	pCi/L
Strontium-90	8	pCi/L
Tritium	20000	pCi/L
Uranium	20	pCi/L

California Maximum Contaminant Levels (continued)

Contaminant	MCL	Units
Organic Chemicals		
(a) Volatile Organic Chemicals (VOCs)		
Benzene	0.001	mg/L
Carbon Tetrachloride	0.0005	mg/L
1,2-Dichlorobenzene	0.6	mg/L
1,4-Dichlorobenzene	0.005	mg/L
1,1-Dichloroethane	0.005	mg/L
1,2-Dichloroethane	0.0005	mg/L
1,1-Dichloroethylene	0.006	mg/L
cis-1,2-Dichloroethylene	0.006	mg/L
trans-1,2-Dichloroethylene	0.01	mg/L
Dichloromethane	0.005	mg/L
1,2-Dichloropropane	0.005	mg/L
1,3-Dichloropropene	0.0005	mg/L
Ethylbenzene	0.3	mg/L
Methyl-tert-butyl ether	0.013	mg/L
Monochlorobenzene	0.07	mg/L
Styrene	0.1	mg/L
1,1,2,2-Tetrachloroethane	0.001	mg/L
Tetrachloroethylene	0.005	mg/L
Toluene	0.15	mg/L
1,2,4-Trichlorobenzene	0.005	mg/L
1,1,1-Trichloroethane	0.2	mg/L
1,1,2-Trichloroethane	0.005	mg/L
Trichloroethylene	0.005	mg/L
Trichlorofluoromethane	0.15	mg/L
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	mg/L
Vinyl Chloride	0.0005	mg/L
Xylenes	1.75	mg/L

California Maximum Contaminant Levels (continued)

Contaminant	MCL	Units
Organic Chemicals		
(b) Synthetic Organic Chemicals (SOCs)		
Alachlor	0.002	mg/L
Atrazine	0.001	mg/L
Bentazon	0.018	mg/L
Benzo(a)pyrene	0.0002	mg/L
Carbofuran	0.018	mg/L
Chlordane	0.0001	mg/L
Dalapon	0.2	mg/L
Dibromochloropropane	0.0002	mg/L
Di(2-ethylhexyl)adipate	0.4	mg/L
Di(2-ethylhexyl)phthalate	0.004	mg/L
2,4-D	0.07	mg/L
Dinoseb	0.007	mg/L
Diquat	0.02	mg/L
Endothall	0.1	mg/L
Endrin	0.002	mg/L
Ethylene Dibromide	0.00005	mg/L
Glyphosate	0.7	mg/L
Heptachlor	0.00001	mg/L
Heptachlor Epoxide	0.00001	mg/L
Hexachlorobenzene	0.001	mg/L
Hexachlorocyclopentadiene	0.05	mg/L
Lindane	0.0002	mg/L
Methoxychlor	0.03	mg/L
Molinate	0.02	mg/L
Oxamyl	0.05	mg/L
Pentachlorophenol	0.001	mg/L
Picloram	0.5	mg/L
Polychlorinated Biphenyls	0.0005	mg/L
Simazine	0.004	mg/L
Thiobencarb	0.07	mg/L
Toxaphene	0.003	mg/L
1,2,3-Trichloropropane	0.000005	mg/L
2,3,7,8-TCDD (Dioxin)	0.00000003	mg/L
2,4,5-TP (Silvex)	0.05	mg/L

California Maximum Contaminant Levels (continued)

Contaminant	MCL	Units
Disinfection Byproduct		
Total Trihalomethanes (TTHM)	0.08	mg/L
Haloacetic acids (five) (HAA5)	0.06	mg/L
Bromate	0.01	mg/L
Chlorite	1	mg/L
Secondary MCLs		
Aluminum	0.2	mg/L
Color	15	mg/L
Copper	1	mg/L
Foaming Agents (MBAS)	0.5	mg/L
Iron	0.3	mg/L
Manganese	0.05	mg/L
Methyl-tert-butyl ether (MTBE)	0.005	mg/L
Odor—Threshold	3	Units
Silver	0.1	mg/L
Thiobencarb	0.001	mg/L
Turbidity	5	NTUs
Zinc	5	mg/L
Secondary MCLs- Recommended Limits		
Total Dissolved Solids	500	mg/L
Specific Conductance	900	uS/cm
Chloride	250	mg/L
Sulfate	250	mg/L

APPENDIX B

Statistical Summary of SMARTS Detected Results by Region

DRAFT

Legend

o Data point

Quantiles

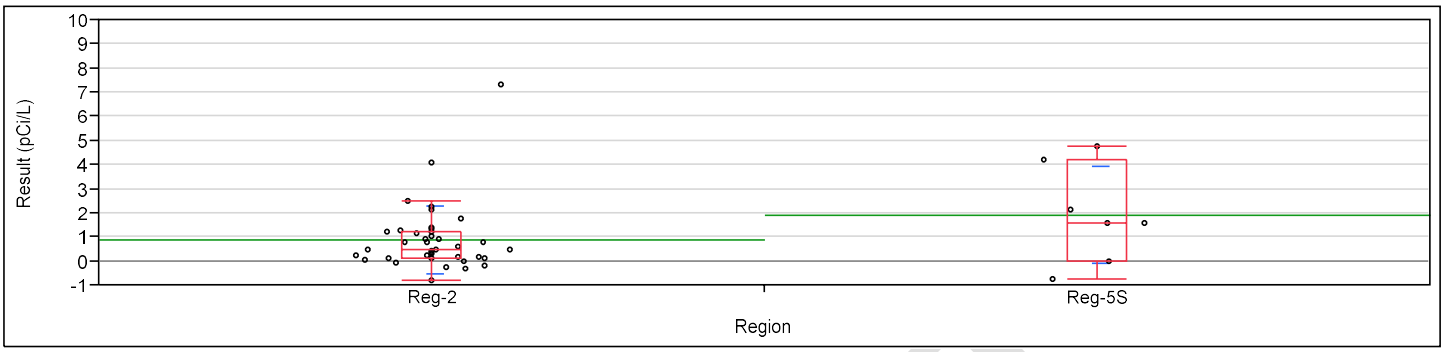
Mean

Standard Deviation

B-1
Radionuclides

DRAFT

Gross Alpha particle activity (excluding radon and uranium) MCL = 15 pCi/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	-0.802	-0.215	0.13	0.495	1.18	2.22	7.34
Reg-5S	-0.76	-0.76	-0.0452	1.59	4.2	4.72	4.72

Means and Std Deviations

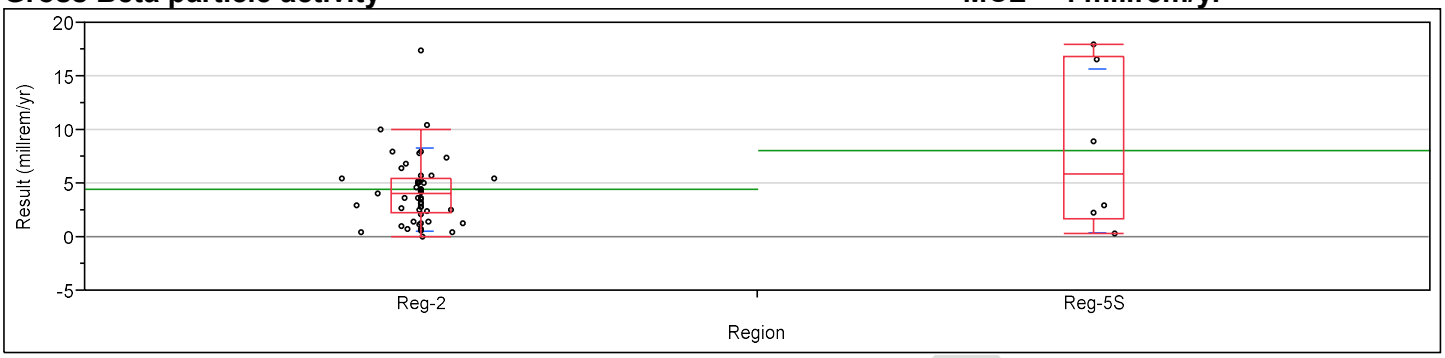
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	39	0.9	1	0.2	0.44	1
Reg-5S	7	1.9	2	0.8	0.05	4

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	39	23	62	0	0
Reg-5S	7	1	8	0	0

DRAFT

Gross Beta particle activity

MCL = 4 millrem/yr



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	-0.00549	0.662	2.26	4.07	5.3925	7.865	22.4
Reg-5S	0.305	0.305	1.71875	5.855	16.85	17.9	17.9

Means and Std Deviations

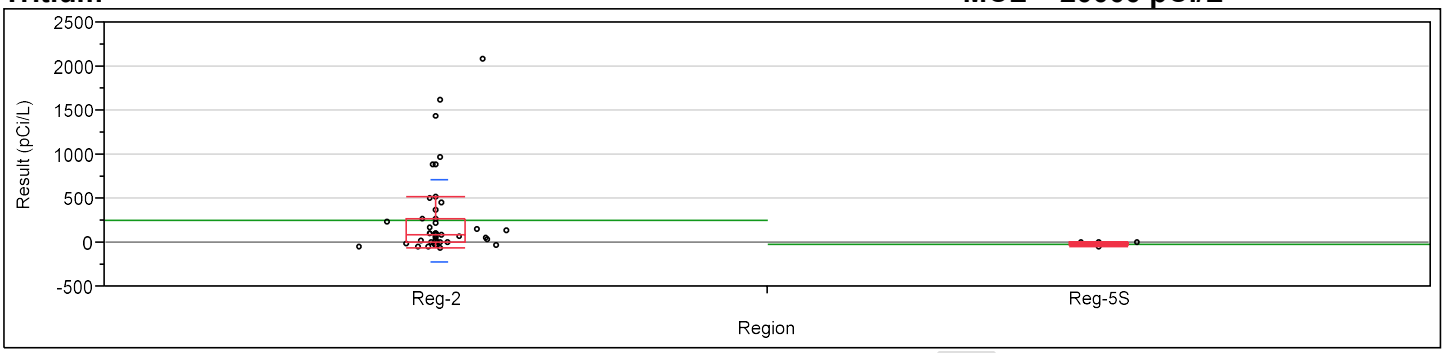
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	54	4	4	0.5	3.4	6
Reg-5S	6	8	8	3.1	0.1	16

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	54	7	61	28	46
Reg-5S	6	2	8	3	38

DRAFT

Tritium

MCL = 20000 pCi/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	-69.4	-39.59	-3.295	82.25	272.25	902.6	2090
Reg-5S	-53.8	-53.8	-32.875	-8.74	-1.3375	2.24	2.24

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	46	256	467	69	118	395
Reg-5S	6	-16	21	8	-38	6

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	46	19	65	0	0
Reg-5S	6	2	8	0	0

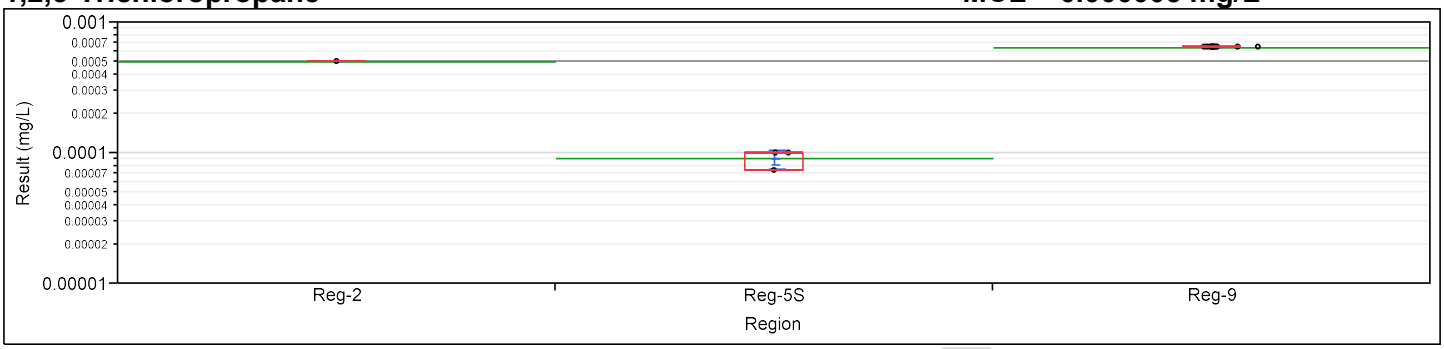
DRAFT

B-2

Synthetic Organic Chemicals (SOCs)

DRAFT

1,2,3-Trichloropropane MCL = 0.000005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-5S	0.000073	0.000073	0.000073	0.0001	0.0001	0.0001	0.0001
Reg-9	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064

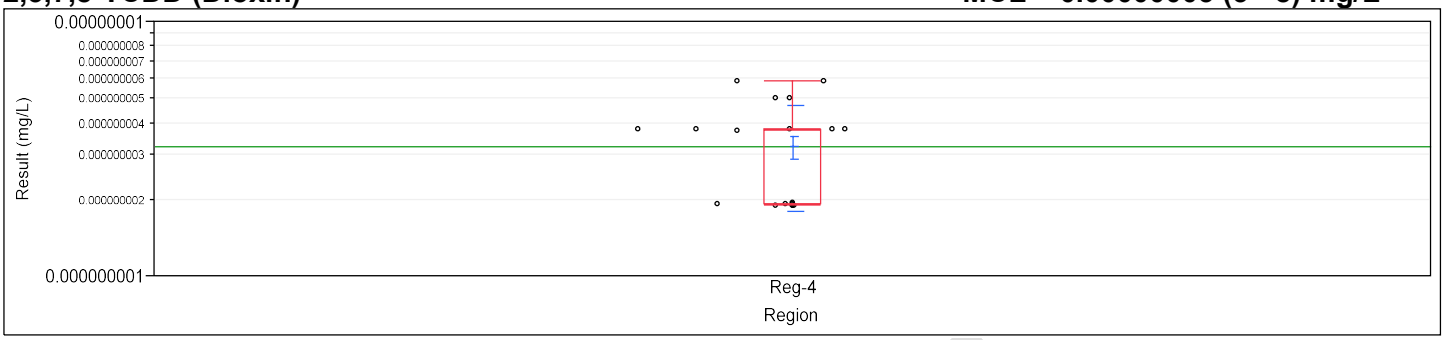
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.00050	.	.	.	.
Reg-5S	3	0.00009	0.00002	0.000009	0.00005	0.0001
Reg-9	15	0.00064	0.00000	0	0.00064	0.0006

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	1	8
Reg-4	0	3	3	0	0
Reg-5S	3	12	15	3	20
Reg-9	15	0	15	15	100

DRAFT

2,3,7,8-TCDD (Dioxin) MCL = 0.00000003 (3^-8) mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-4	1.89e-9	1.9e-9	1.91e-9	3.75e-9	3.8e-9	5.81e-9	5.81e-9

Means and Std Deviations

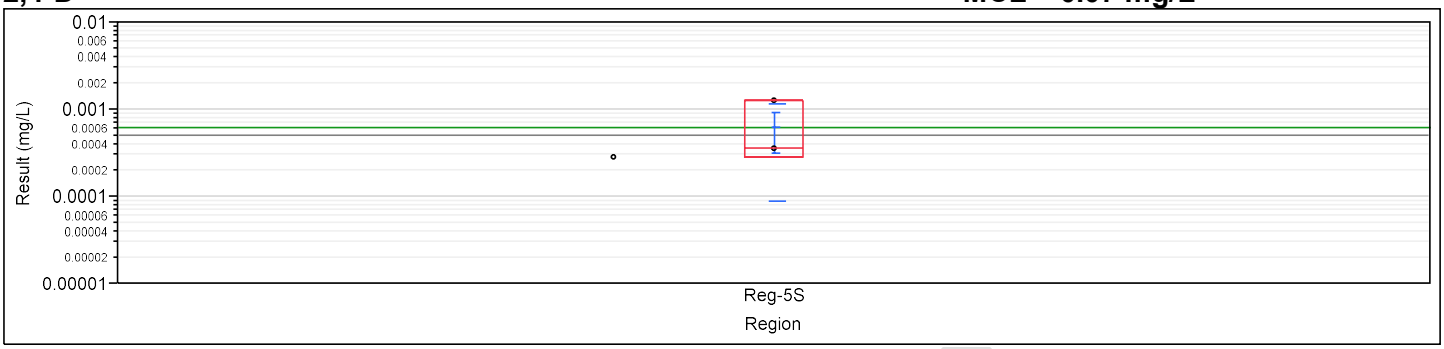
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-4	19	3.239e-9	1.437e-9	3.296e-10	2.5471e-9	3.93e-9

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	0	36	36	0	0
Reg-4	19	30	49	0	0

DRAFT

2,4-D

MCL = 0.07 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-5S	0.000282	0.000282	0.000282	0.000351	0.00124	0.00124	0.00124

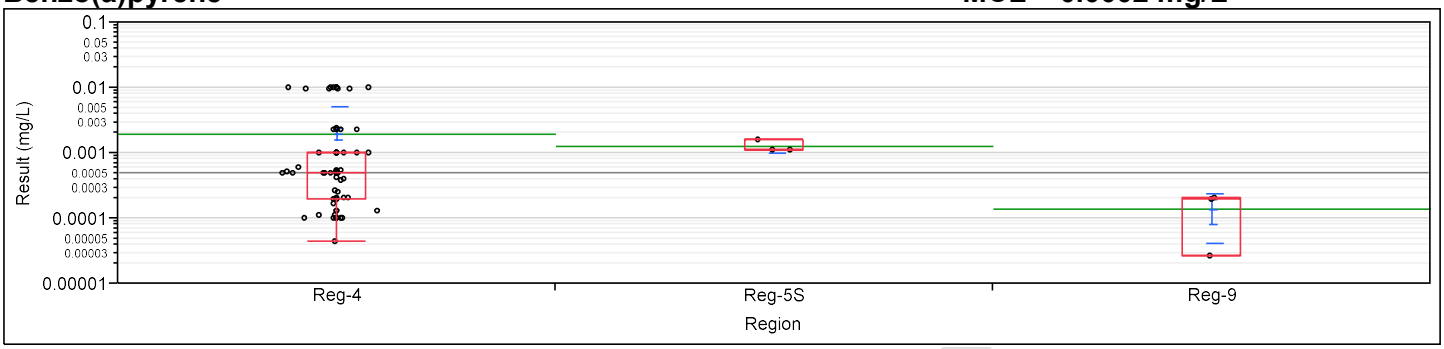
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-5S	3	0.0006	0.0005	0.0003	-0.0007	0.002

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-5S	3	1	4	0	0

DRAFT

Benzo(a)pyrene MCL = 0.0002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-4	0.000045	0.0001	0.00019	0.0005	0.001	0.0097	0.01
Reg-5S	0.0011	0.0011	0.0011	0.0011	0.0016	0.0016	0.0016
Reg-9	0.000027	0.000027	0.000027	0.00019	0.0002	0.0002	0.0002

Means and Std Deviations

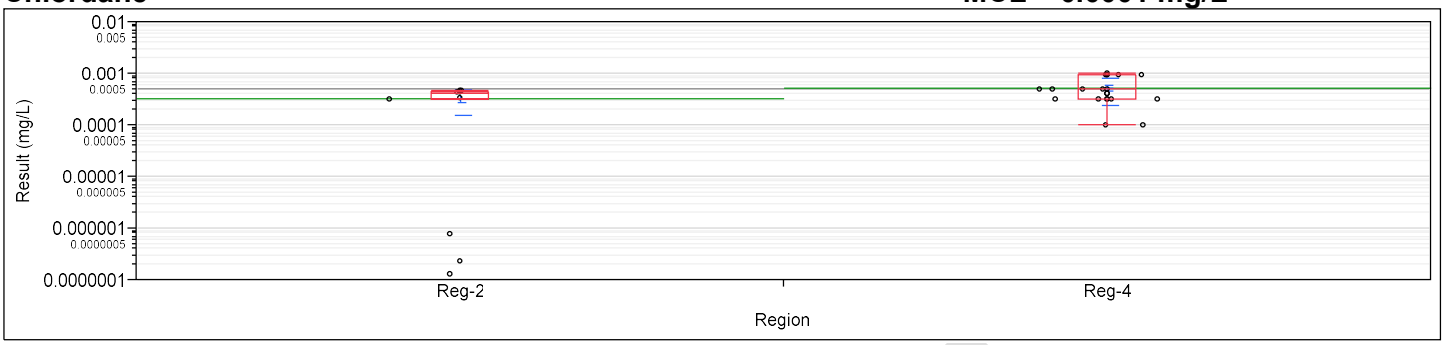
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-4	69	0.0019	0.00332	0.00040	0.0011	0.0027
Reg-5S	3	0.0013	0.00029	0.00017	0.0005	0.0020
Reg-9	3	0.0001	0.00010	0.00006	-0.0001	0.0004

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	0	24	24	0	0
Reg-3	0	26	26	0	0
Reg-4	69	265	334	47	14
Reg-5R	0	34	34	0	0
Reg-5S	3	0	3	3	100
Reg-8	0	4	4	0	0
Reg-9	3	193	196	0	0

DRAFT

Chlordane

MCL = 0.0001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	1.3e-7	1.902e-7	0.00032	0.00042	0.00043	0.00045	0.00045
Reg-4	0.0001	0.000163	0.00032	0.0005	0.00096	0.00096	0.00097

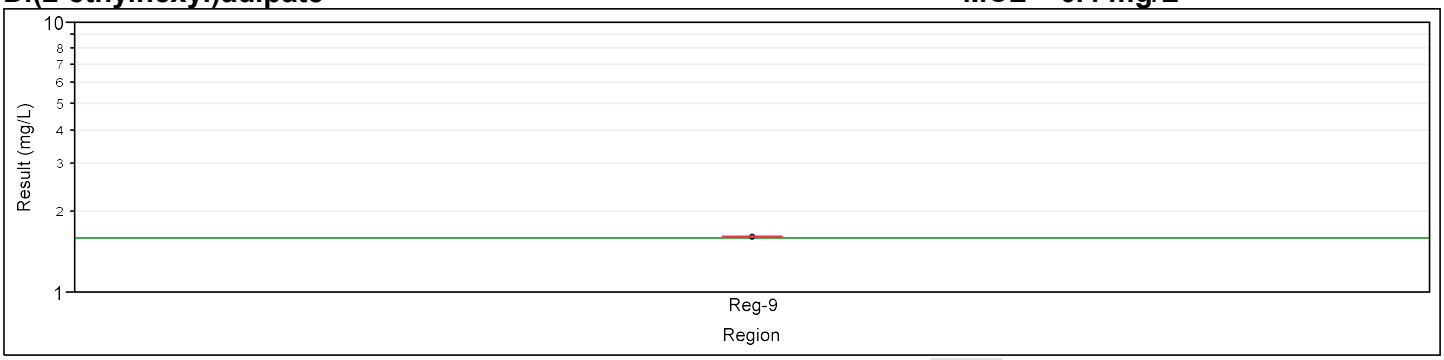
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	15	0.0003	0.0002	0.00004	0.0002	0.0004
Reg-4	22	0.0005	0.0003	0.00006	0.0004	0.0007

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	15	106	121	12	10
Reg-4	22	34	56	20	36
Reg-5S	0	23	23	0	0
Reg-9	0	129	129	0	0

DRAFT

Di(2-ethylhexyl)adipate MCL = 0.4 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-9	1.6	1.6	1.6	1.6	1.6	1.6	1.6

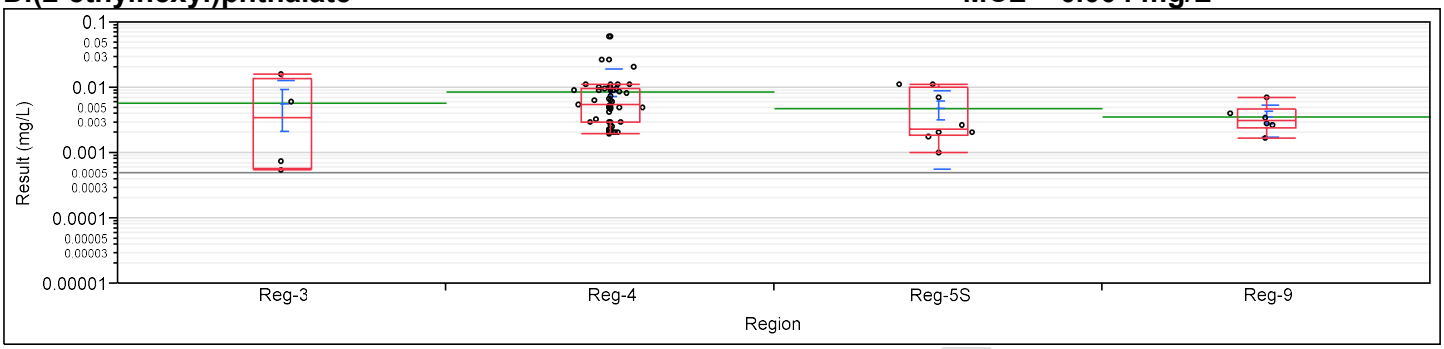
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-9	1	1.6	.	.	.	.

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-3	0	5	5	0	0
Reg-9	1	1	2	1	50

DRAFT

Di(2-ethylhexyl)phthalate MCL = 0.004 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-3	0.00053	0.00053	0.000578	0.00336	0.0135	0.016	0.016
Reg-4	0.0019	0.00208	0.003	0.0053	0.0096	0.013	0.061
Reg-5S	0.001	0.001	0.00185	0.0023	0.01	0.011	0.011
Reg-9	0.0017	0.0017	0.002443	0.003055	0.004698	0.00706	0.00706

Means and Std Deviations

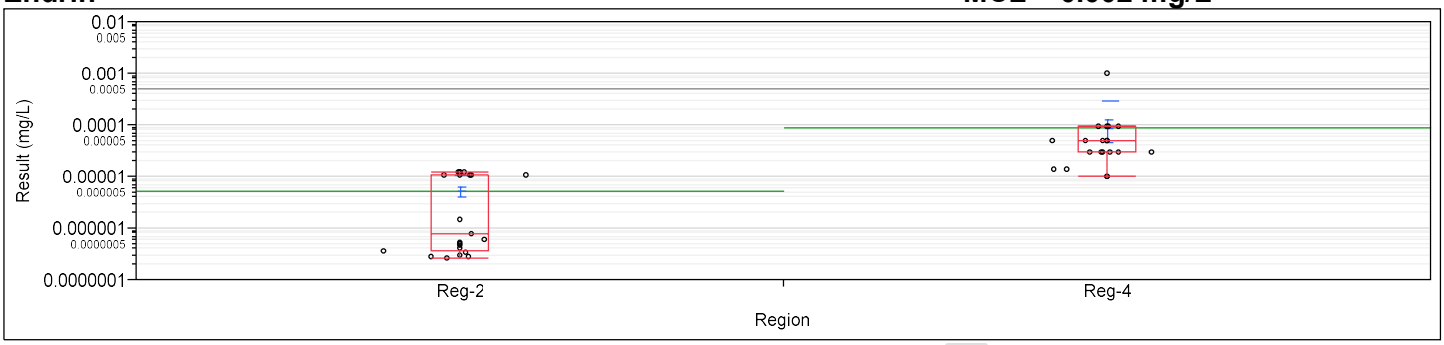
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-3	4	0.006	0.007	0.004	-0.006	0.017
Reg-4	57	0.009	0.011	0.001	0.006	0.012
Reg-5S	8	0.005	0.004	0.001	0.001	0.008
Reg-9	6	0.004	0.002	0.001	0.002	0.006

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-3	4	3	7	2	29
Reg-4	57	81	138	39	28
Reg-5R	0	30	30	0	0
Reg-5S	8	4	12	3	25
Reg-8	0	6	6	0	0
Reg-9	6	3	9	1	11

DRAFT

Endrin

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	2.56e-7	2.742e-7	3.56e-7	7.69e-7	0.000011	0.000012	0.000012
Reg-4	0.00001	1.12e-5	0.000029	0.00005	0.000096	0.000096	0.00097

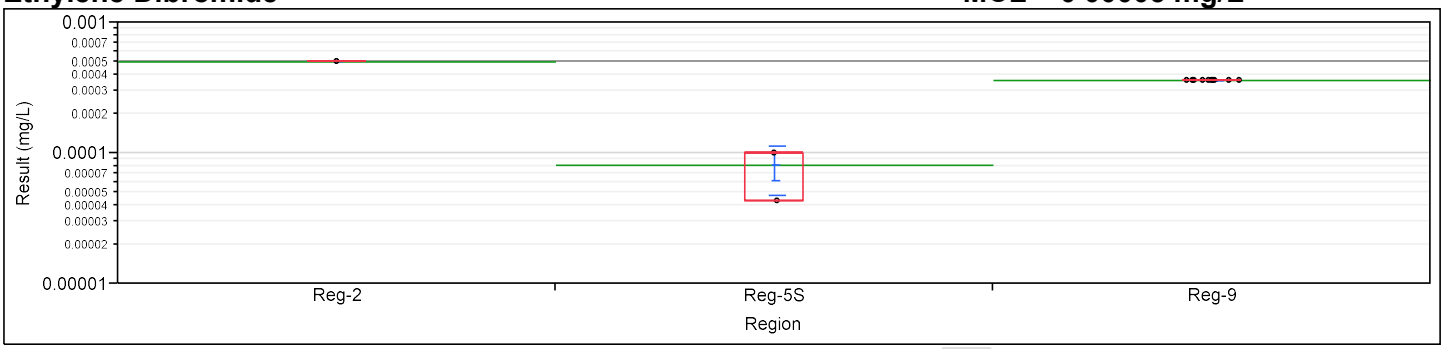
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	23	5.282e-6	5.591e-6	1.17e-6	2.8645e-6	7.7e-6
Reg-4	22	8.968e-5	0.00020	4.24e-5	1.4972e-6	0.00018

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	23	97	120	0	0
Reg-4	22	35	57	0	0
Reg-5S	0	23	23	0	0
Reg-9	0	3	3	0	0

DRAFT

Ethylene Dibromide MCL = 0 00005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-5S	0.000043	0.000043	0.000043	0.0001	0.0001	0.0001	0.0001
Reg-9	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036

Means and Std Deviations

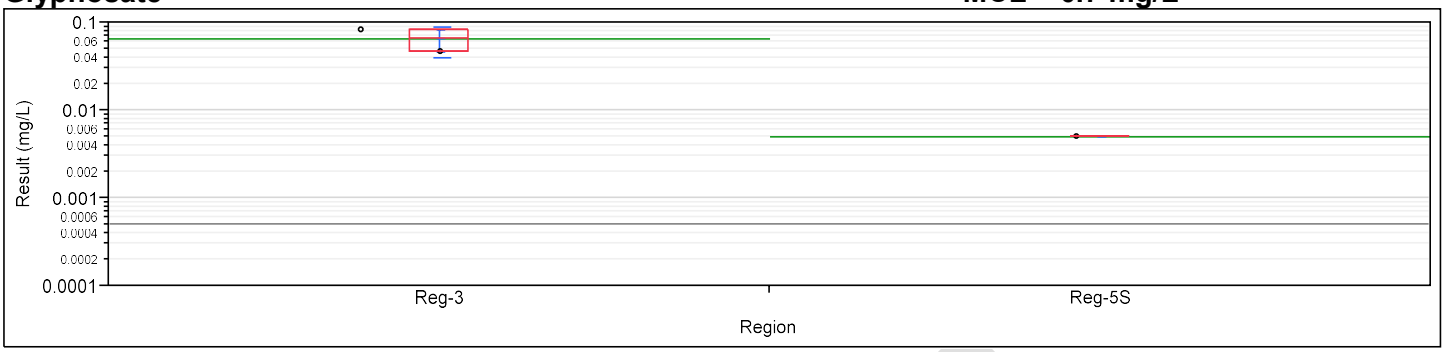
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-5S	3	0.0001	3.291e-5	1.9e-5	-7.5e-7	0.0002
Reg-9	15	0.0004	5.61e-20	1.4e-20	3.6e-4	0.0004

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	1	8
Reg-4	0	3	3	0	0
Reg-5S	3	12	15	2	13
Reg-9	15	0	15	15	100

DRAFT

Glyphosate

MCL = 0.7 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-3	0.0472	0.0472	0.0472	0.0651	0.083	0.083	0.083
Reg-5S	0.005	0.005	0.005	0.005	0.005	0.005	0.005

Means and Std Deviations

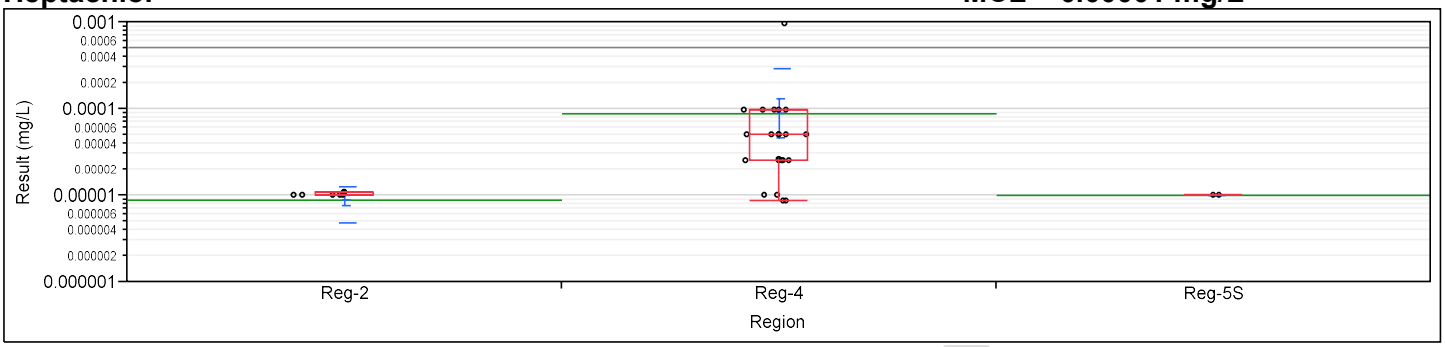
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-3	2	0.065	0.03	0.02	-0.2	0.3
Reg-5S	1	0.005	.	.	.	.

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-3	2	9	11	0	0
Reg-5S	1	0	1	0	0

DRAFT

Heptachlor

MCL = 0.00001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	5e-7	5e-7	0.00001	0.00001	0.000011	0.000011	0.000011
Reg-4	8.5e-6	8.95e-6	0.000025	0.00005	0.000096	0.000096	0.00097
Reg-5S	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001

Means and Std Deviations

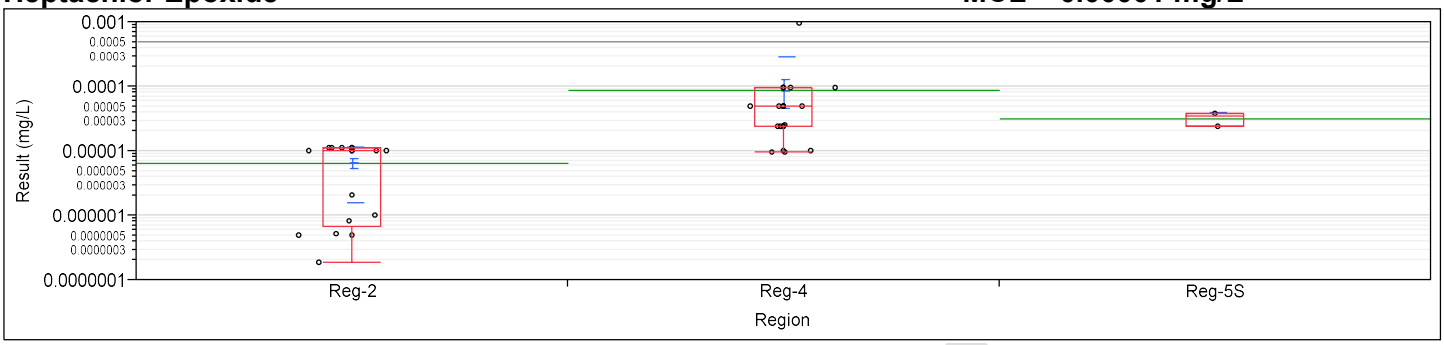
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	12	8.833e-6	3.922e-6	1.13e-6	6.3417e-6	1.13e-5
Reg-4	22	0.000088	0.00020	4.25e-5	-3.413e-7	0.00018
Reg-5S	2	0.00001	7.071e-8	5e-8	9.4147e-6	0.00001

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	12	109	121	5	4
Reg-4	22	35	57	18	32
Reg-5S	2	21	23	1	4
Reg-9	0	3	3	0	0

DRAFT

Heptachlor Epoxide

MCL = 0.00001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	1.82e-7	4.364e-7	6.584e-7	0.00001	0.000011	0.000011	0.000011
Reg-4	9.5e-6	9.65e-6	0.000024	0.00005	0.000096	0.000096	0.00097
Reg-5S	2.42e-5	2.42e-5	2.42e-5	3.37e-5	3.78e-5	3.78e-5	3.78e-5

Means and Std Deviations

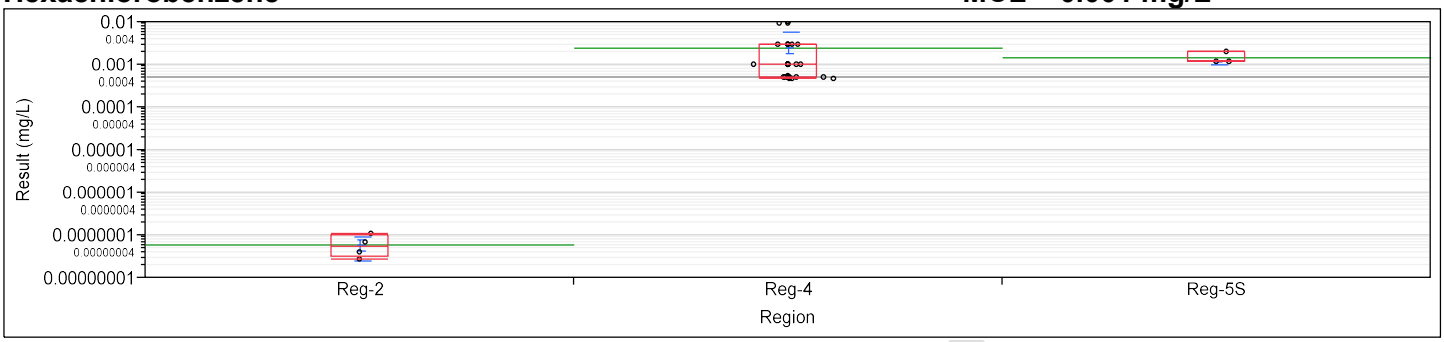
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	17	6.502e-6	4.956e-6	1.2e-6	3.95e-6	0.00001
Reg-4	22	0.000088	0.00020	4.25e-5	-5.5e-7	0.00018
Reg-5S	3	3.19e-5	6.976e-6	4.03e-6	1.46e-5	0.00005

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	17	103	120	5	4
Reg-4	22	35	57	18	32
Reg-5S	3	19	22	3	14
Reg-9	0	3	3	0	0

DRAFT

Hexachlorobenzene

MCL = 0.001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	2.79e-8	2.79e-8	3.097e-8	5.365e-8	9.628e-8	1.06e-7	1.06e-7
Reg-4	0.00048	0.000489	0.000498	0.001	0.003	0.00961	0.0098
Reg-5S	0.0012	0.0012	0.0012	0.0012	0.002	0.002	0.002

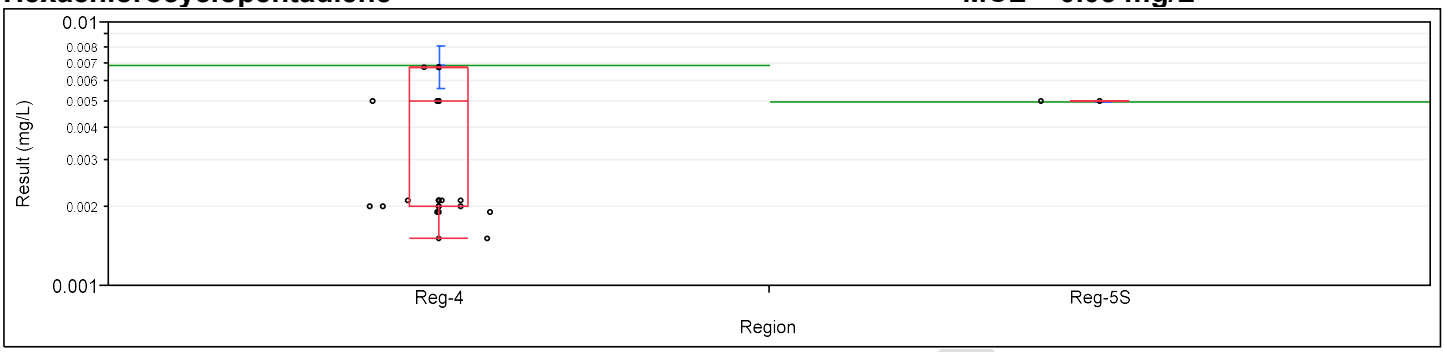
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	4	6.03e-8	3.459e-8	1.73e-8	5.27e-9	1.15e-7
Reg-4	38	2.451e-3	3.292e-3	5.34e-4	1.37e-3	3.53e-3
Reg-5S	3	1.467e-3	4.619e-4	2.67e-4	3.19e-4	2.61e-3

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	4	0	4	0	0
Reg-3	0	5	5	0	0
Reg-4	38	101	139	12	9
Reg-5R	0	34	34	0	0
Reg-5S	3	0	3	3	100
Reg-8	0	6	6	0	0
Reg-9	0	5	5	0	0

DRAFT

Hexachlorocyclopentadiene MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-4	0.0015	0.0019	0.002	0.005	0.0067	0.024	0.025
Reg-5S	0.005	0.005	0.005	0.005	0.005	0.005	0.005

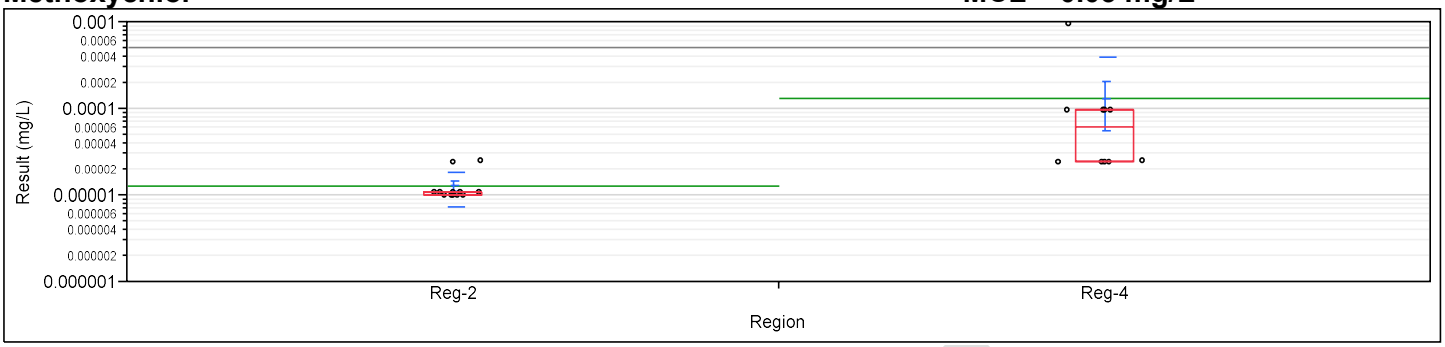
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-4	38	0.007	0.008	0.001	0.004	0.009
Reg-5S	3	0.005	0.000	0.000	0.005	0.005

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-3	0	5	5	0	0
Reg-4	38	101	139	0	0
Reg-5R	0	34	34	0	0
Reg-5S	3	0	3	0	0
Reg-8	0	6	6	0	0
Reg-9	0	5	5	0	0

DRAFT

Methoxychlor MCL = 0.03 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.00001	0.00001	0.00001	0.000011	0.000011	2.47e-5	0.000025
Reg-4	0.000024	0.000024	0.000024	6.05e-5	0.000096	0.000708	0.00097

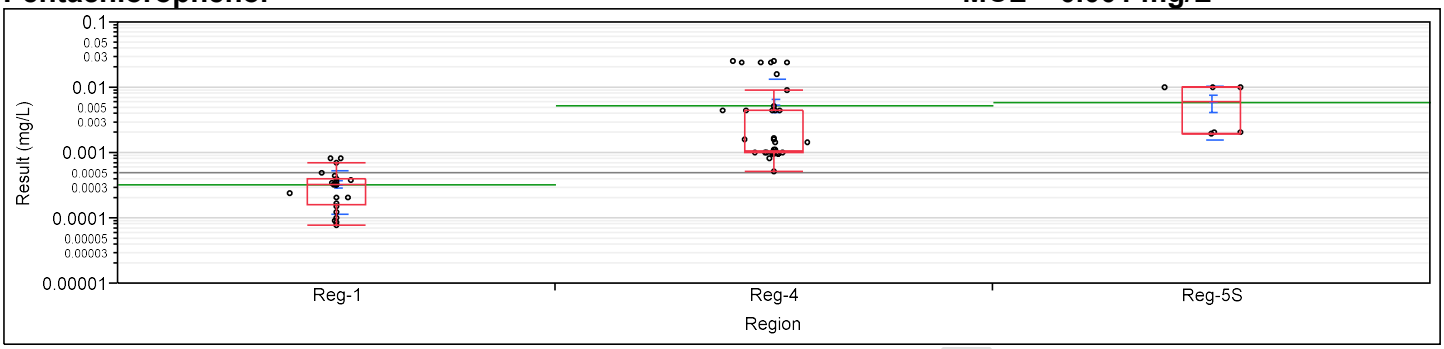
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	12	1.283e-5	5.474e-6	1.58e-6	0.00001	1.63e-5
Reg-4	12	0.00013	0.00027	7.68e-5	-3.6e-5	0.0003

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	12	109	121	0	0
Reg-4	12	36	48	0	0
Reg-5S	0	17	17	0	0
Reg-9	0	3	3	0	0

DRAFT

Pentachlorophenol MCL = 0.001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.000079	0.000086	0.000155	0.00033	0.000408	0.00076	0.00082
Reg-4	0.00052	0.000955	0.000993	0.00105	0.0045	0.024	0.025
Reg-5S	0.0019	0.0019	0.001975	0.00595	0.01	0.01	0.01

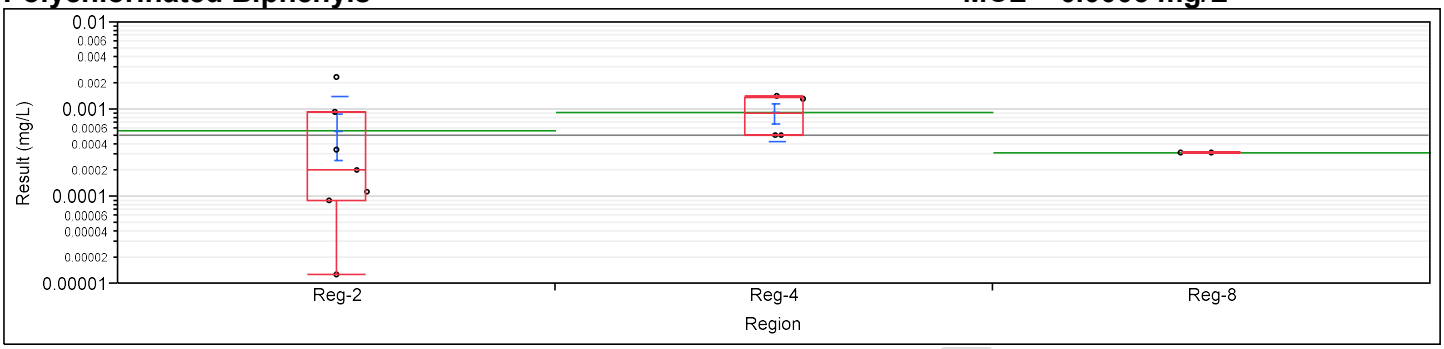
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	24	0.00033	0.00021	4.34e-5	0.00024	0.00042
Reg-4	44	0.00532	0.00811	0.00122	0.00285	0.0078
Reg-5S	6	0.00597	0.00438	0.00179	0.00137	0.0106

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	24	16	40	0	0
Reg-3	0	5	5	0	0
Reg-4	44	91	135	22	16
Reg-5R	0	34	34	0	0
Reg-5S	6	6	12	6	50
Reg-8	0	6	6	0	0
Reg-9	0	4	4	0	0

DRAFT

Polychlorinated Biphenyls MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	1.25e-5	1.25e-5	0.000088	0.000203	0.000915	0.00233	0.00233
Reg-4	0.0005	0.0005	0.0005	0.0009	0.001375	0.0014	0.0014
Reg-8	0.00032	0.00032	0.00032	0.00032	0.00032	0.00032	0.00032

Means and Std Deviations

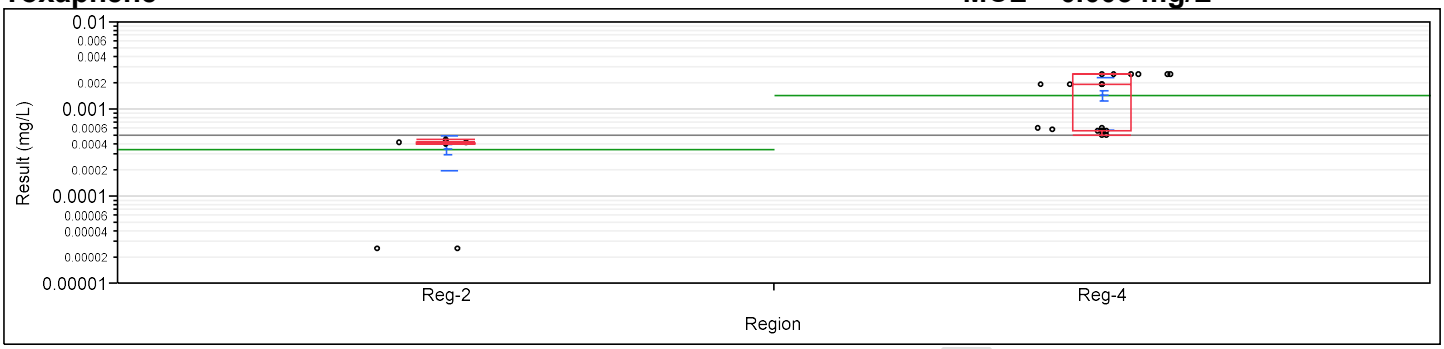
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	7	0.0006	0.0008	0.0003	-0.0002	0.0013
Reg-4	4	0.0009	0.0005	0.0002	0.0001	0.0017
Reg-8	2	0.0003	0.0000	0.0000	0.0003	0.0003

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	7	11	18	2	11
Reg-4	4	77	81	2	2
Reg-5R	0	5	5	0	0
Reg-8	2	18	20	0	0
Reg-9	0	26	26	0	0

DRAFT

Toxaphene

MCL = 0.003 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.000025	0.000025	0.0004	0.00041	0.000418	0.000437	0.00044
Reg-4	0.0005	0.000518	0.00057	0.0019	0.0025	0.0025	0.0025

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	12	0.0003	0.0002	0.00004	0.00025	0.0004
Reg-4	22	0.0015	0.0009	0.00018	0.00107	0.0018

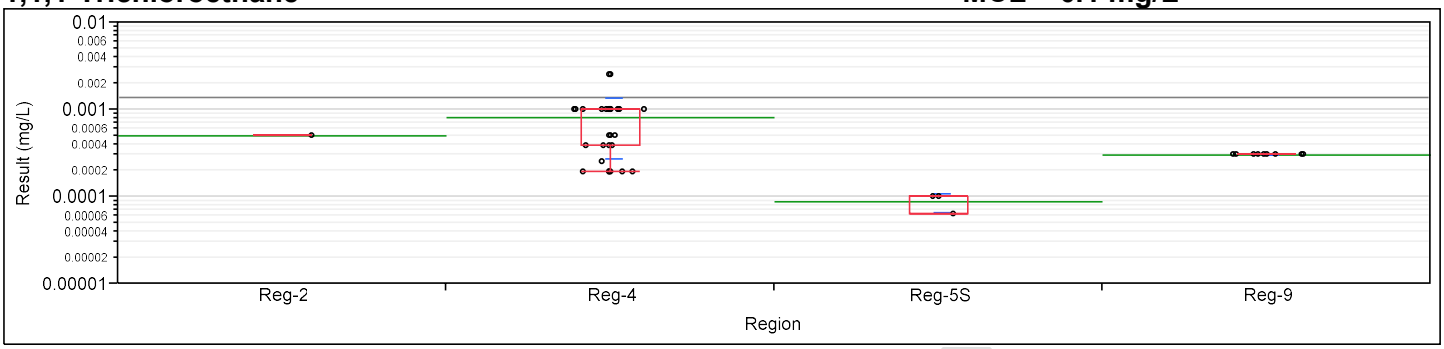
Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	12	96	108	0	0
Reg-4	22	34	56	0	0
Reg-5S	0	17	17	0	0
Reg-7	0	11	11	0	0
Reg-9	0	3	3	0	0

DRAFT

B-3
Volatile Organic Chemicals (VOCs)

DRAFT

1,1,1-Trichloroethane MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00019	0.00019	0.00038	0.001	0.001	0.001	0.0025
Reg-5S	0.000063	0.000063	0.000063	0.0001	0.0001	0.0001	0.0001
Reg-9	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003

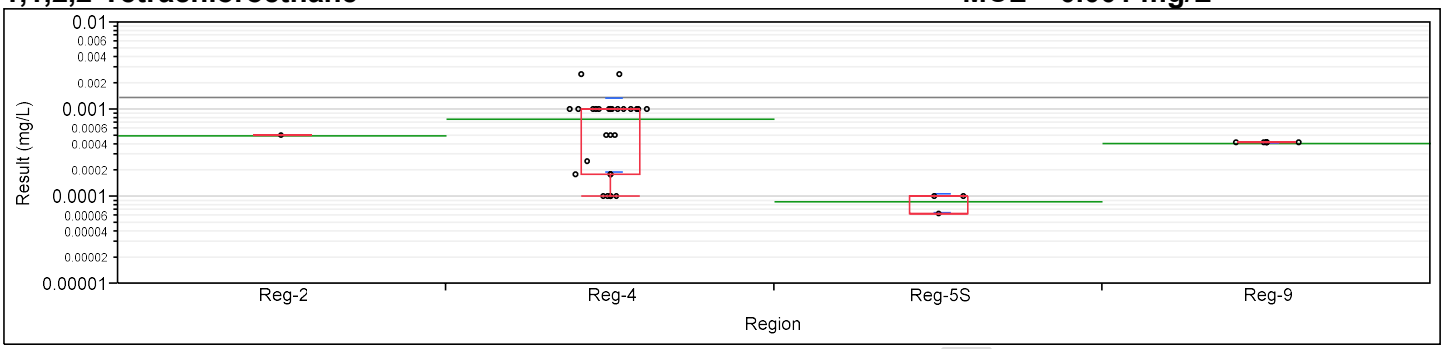
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-4	35	0.0008	0.00054	0.00009	0.00062	0.0010
Reg-5S	3	0.0001	0.00002	0.00001	0.00003	0.0001
Reg-9	15	0.0003	0.00000	0.00000	0.00030	0.0003

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-4	35	51	86	0	0
Reg-5S	3	17	20	0	0
Reg-9	15	3	18	0	0

DRAFT

1,1,2,2-Tetrachloroethane MCL = 0.001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.0001	0.0001	0.00018	0.001	0.001	0.001	0.0025
Reg-5S	0.000063	0.000063	0.000063	0.0001	0.0001	0.0001	0.0001
Reg-9	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041

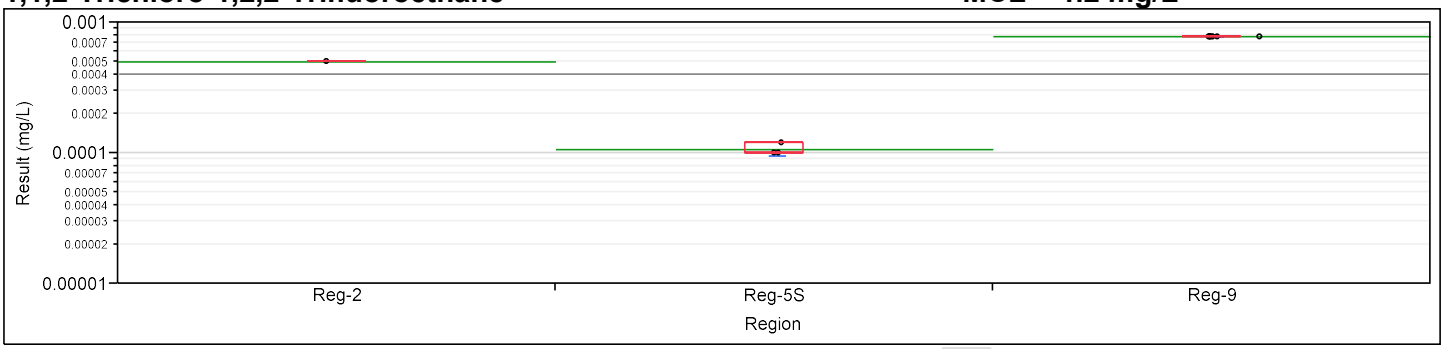
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-4	35	0.0008	5.832e-4	9.86e-5	0.00057	0.0010
Reg-5S	3	0.0001	2.136e-5	1.23e-5	0.00003	0.0001
Reg-9	15	0.0004	1.68e-19	4.3e-20	0.00041	0.0004

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-4	35	51	86	2	2
Reg-5S	3	17	20	0	0
Reg-9	15	3	18	0	0

DRAFT

1,1,2-Trichloro-1,2,2-Trifluoroethane MCL = 1.2 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-5S	0.0001	0.0001	0.0001	0.0001	0.000119	0.000119	0.000119
Reg-9	0.00078	0.00078	0.00078	0.00078	0.00078	0.00078	0.00078

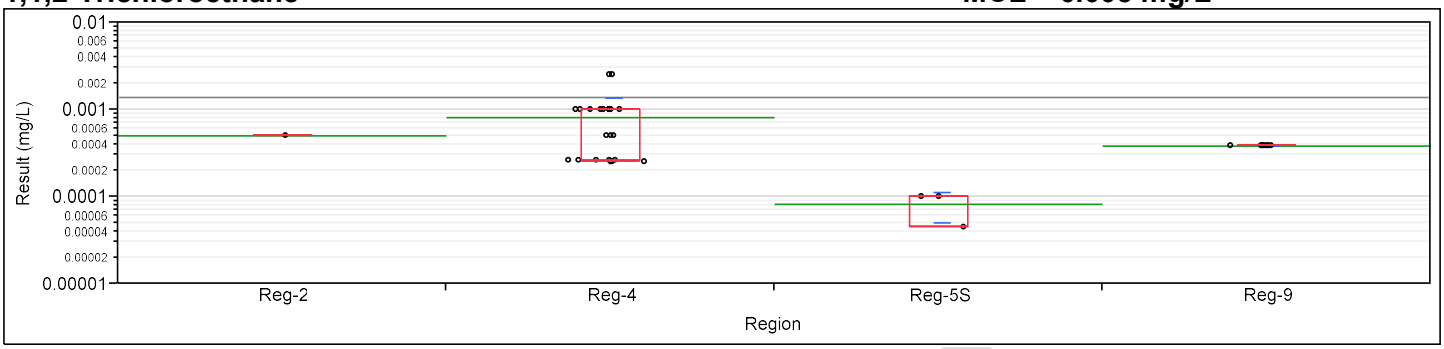
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-5S	3	0.0001	1.097e-5	6.3333e-6	0.00008	0.0001
Reg-9	15	0.0008	1.12e-19	2.898e-20	0.00078	0.0008

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	0	1	0	0
Reg-4	0	3	3	0	0
Reg-5S	3	1	4	0	0
Reg-9	15	0	15	0	0

DRAFT

1,1,2-Trichloroethane MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00025	0.00025	0.00026	0.001	0.001	0.001	0.0025
Reg-5S	0.000045	0.000045	0.000045	0.0001	0.0001	0.0001	0.0001
Reg-9	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038

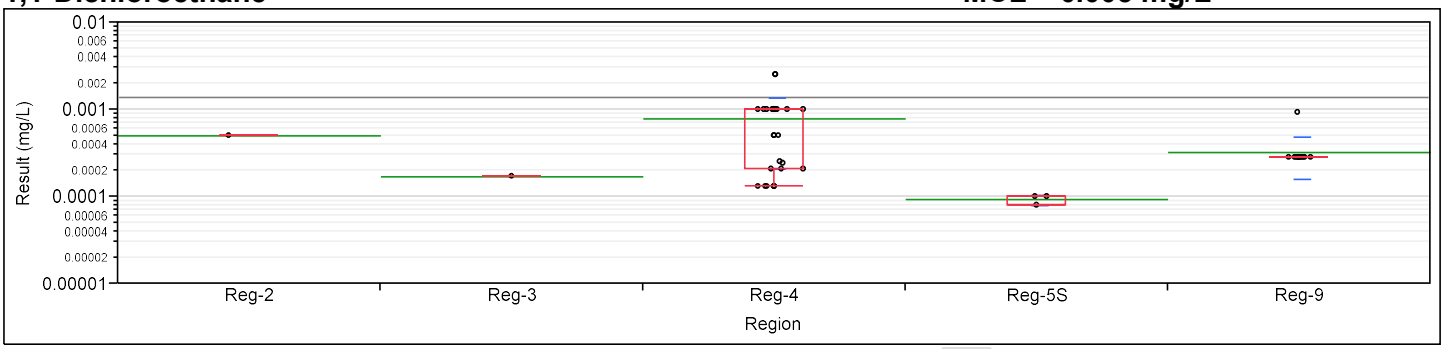
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.00050	.	.	.	.
Reg-4	35	0.00081	5.442e-4	9.2e-5	6.22e-4	0.0010
Reg-5S	3	0.00008	3.175e-5	1.83e-5	2.78e-6	0.0002
Reg-9	15	0.00038	5.61e-20	1.4e-20	3.8e-4	0.0004

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-4	35	51	86	0	0
Reg-5S	3	17	20	0	0
Reg-9	15	3	18	0	0

DRAFT

1,1-Dichloroethane MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-3	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
Reg-4	0.00013	0.00013	0.00021	0.001	0.001	0.001	0.0025
Reg-5S	0.000078	0.000078	0.000078	0.0001	0.0001	0.0001	0.0001
Reg-9	0.00028	0.00028	0.00028	0.00028	0.00028	0.000536	0.00092

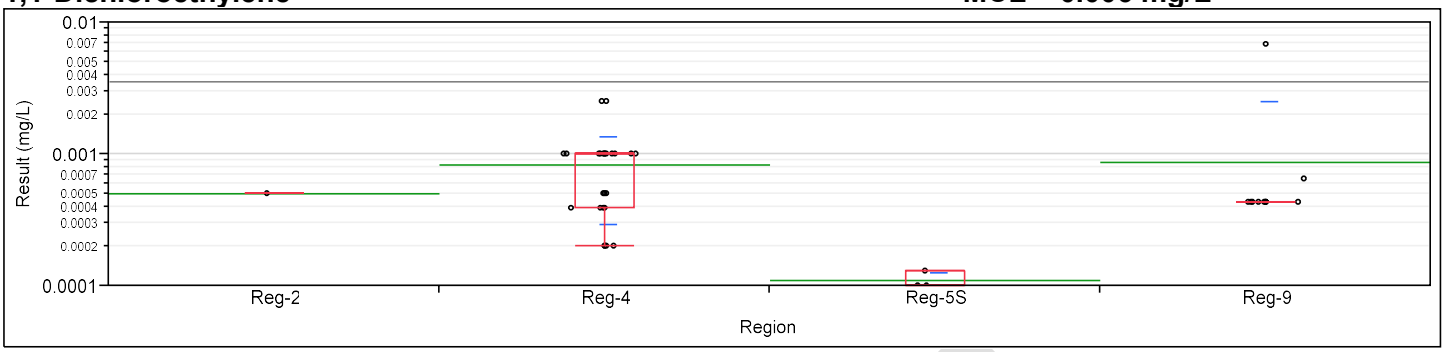
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-3	1	0.0002	.	.	.	.
Reg-4	35	0.0008	0.00057	9.68e-5	0.00059	0.0010
Reg-5S	3	0.0001	0.00001	7.33e-6	0.00006	0.0001
Reg-9	15	0.0003	0.00017	4.27e-5	0.00023	0.0004

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-3	1	6	7	0	0
Reg-4	35	58	93	0	0
Reg-5S	3	17	20	0	0
Reg-9	15	3	18	0	0

DRAFT

1,1-Dichloroethylene MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.0002	0.0002	0.00039	0.001	0.001	0.001	0.0025
Reg-5S	0.0001	0.0001	0.0001	0.0001	0.00013	0.00013	0.00013
Reg-9	0.00043	0.00043	0.00043	0.00043	0.00043	0.00311	0.0068

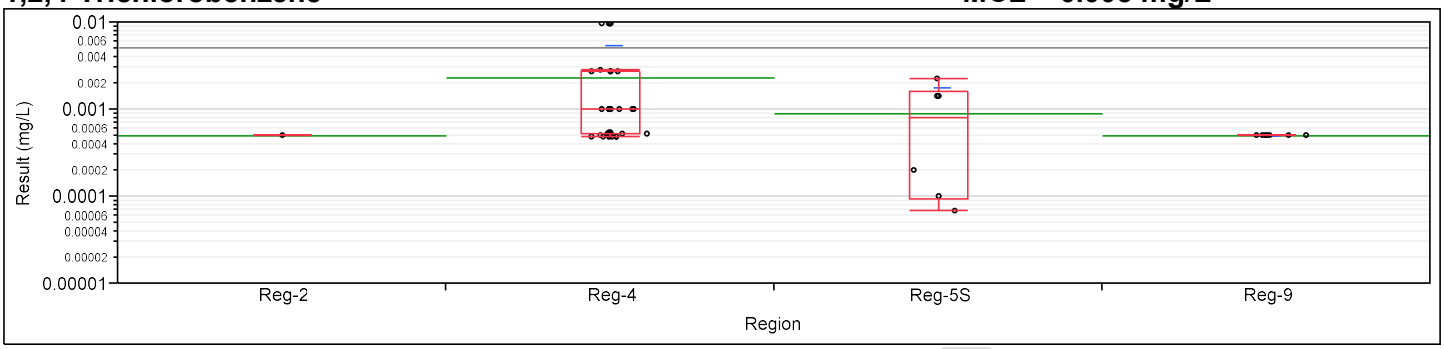
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-4	34	0.0008	0.00054	0.00009	0.00064	0.0010
Reg-5S	3	0.0001	0.00002	0.00001	0.00007	0.0002
Reg-9	15	0.0009	0.00164	0.00042	-0.0000	0.0018

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-4	34	41	75	0	0
Reg-5S	3	16	19	0	0
Reg-9	15	0	15	1	7

DRAFT

1,2,4-Trichlorobenzene MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00048	0.00049	0.000515	0.001	0.0027	0.0096	0.0098
Reg-5S	0.000068	0.000068	0.000092	0.0008	0.0016	0.0022	0.0022
Reg-9	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005

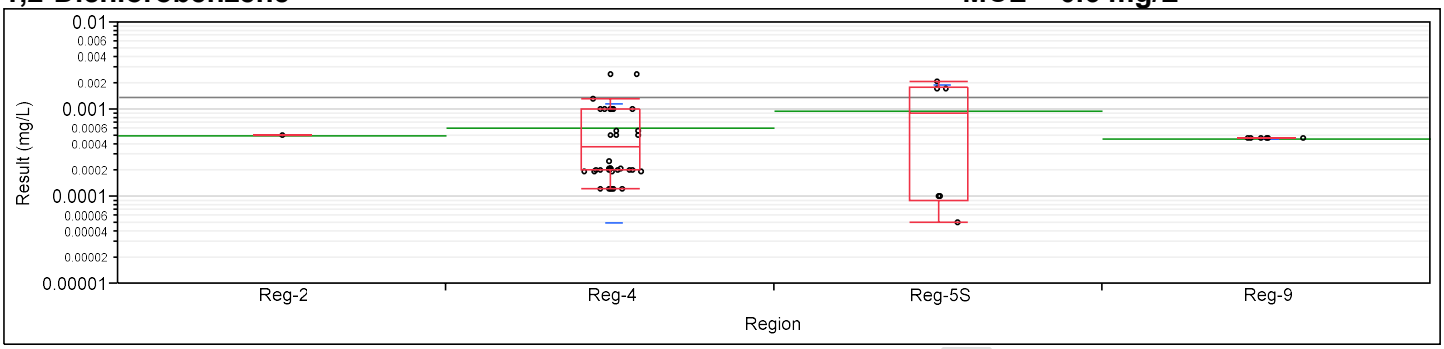
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-4	41	0.0023	3.18e-3	4.97e-4	0.00130	0.0033
Reg-5S	6	0.0009	8.958e-4	3.66e-4	-0.0000	0.0018
Reg-9	15	0.0005	2.24e-19	5.8e-20	0.00050	0.0005

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-3	0	5	5	0	0
Reg-4	41	103	144	6	4
Reg-5R	0	34	34	0	0
Reg-5S	6	12	18	0	0
Reg-8	0	6	6	0	0
Reg-9	15	5	20	0	0

DRAFT

1,2-Dichlorobenzene MCL = 0.6 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00012	0.00012	0.0002	0.000375	0.001	0.001	0.0025
Reg-5S	0.000051	0.000051	8.775e-5	0.0009	0.0018	0.0021	0.0021
Reg-9	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046

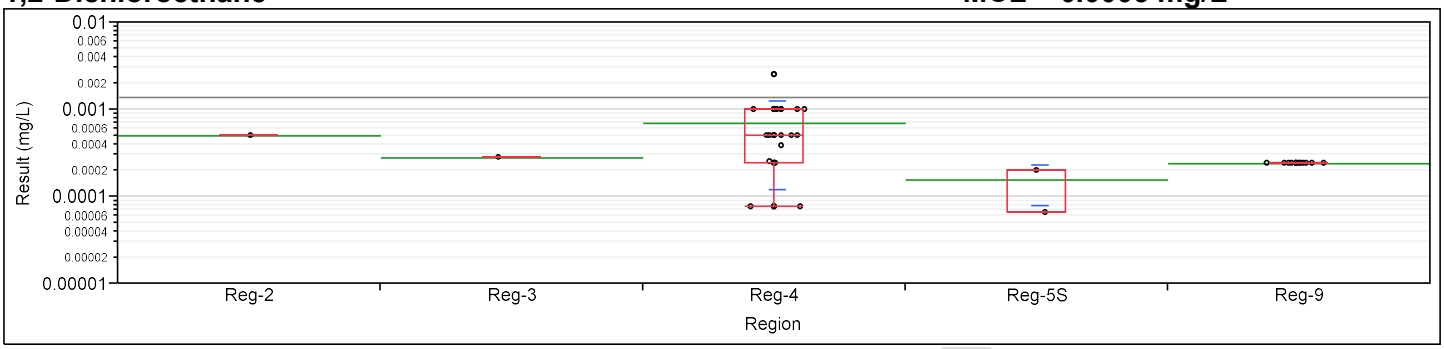
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-4	46	0.0006	5.615e-4	8.28e-5	0.0004	0.0008
Reg-5S	6	0.0010	9.696e-4	3.96e-4	-0.0001	0.0020
Reg-9	15	0.0005	1.12e-19	2.9e-20	0.0005	0.0005

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-3	0	5	5	0	0
Reg-4	46	142	188	0	0
Reg-5R	0	33	33	0	0
Reg-5S	6	17	23	0	0
Reg-9	15	8	23	0	0

DRAFT

1,2-Dichloroethane MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-3	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028
Reg-4	0.000077	0.000077	0.00024	0.0005	0.001	0.001	0.0025
Reg-5S	0.000066	0.000066	0.000066	0.0002	0.0002	0.0002	0.0002
Reg-9	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024

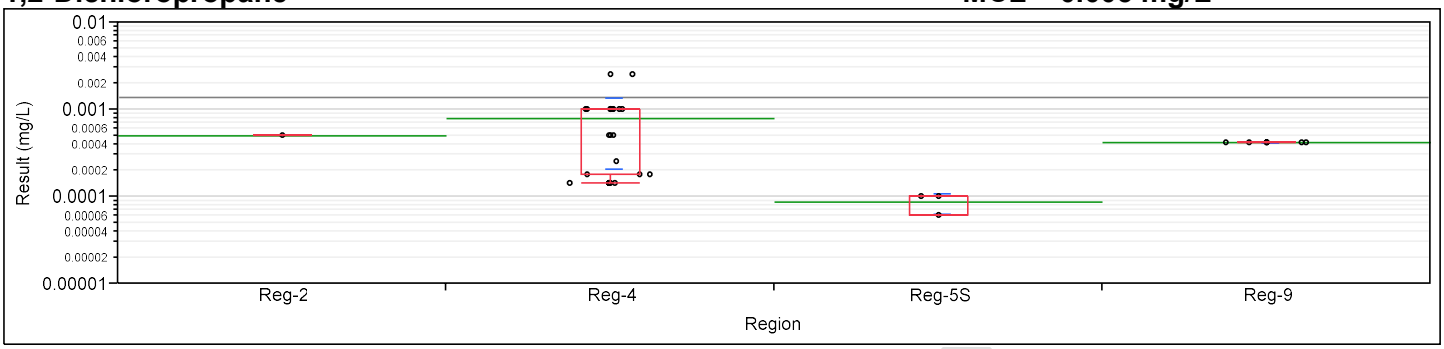
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-3	1	0.0003	.	.	.	.
Reg-4	35	0.0007	5.758e-4	9.73e-5	0.0005	0.0009
Reg-5S	3	0.0002	7.736e-5	4.47e-5	-0.0000	0.0003
Reg-9	15	0.0002	8.42e-20	2.2e-20	0.0002	0.0002

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-3	1	6	7	0	0
Reg-4	35	51	86	15	17
Reg-5S	3	17	20	0	0
Reg-9	15	3	18	0	0

DRAFT

1,2-Dichloropropane MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00014	0.00014	0.00018	0.001	0.001	0.001	0.0025
Reg-5S	0.00006	0.00006	0.00006	0.0001	0.0001	0.0001	0.0001
Reg-9	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042

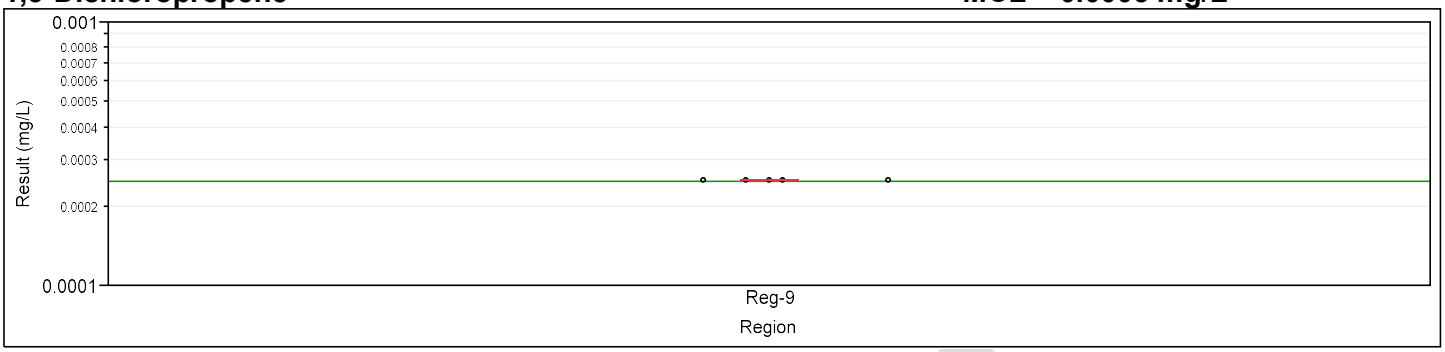
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.00050	.	.	.	.
Reg-4	33	0.00079	5.819e-4	1.01e-4	0.00059	0.0010
Reg-5S	3	0.00009	2.309e-5	1.33e-5	0.00003	0.0001
Reg-9	15	0.00042	1.68e-19	4.3e-20	0.00042	0.0004

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-4	33	51	84	0	0
Reg-5S	3	17	20	0	0
Reg-9	15	3	18	0	0

DRAFT

1,3-Dichloropropene MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-9	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025

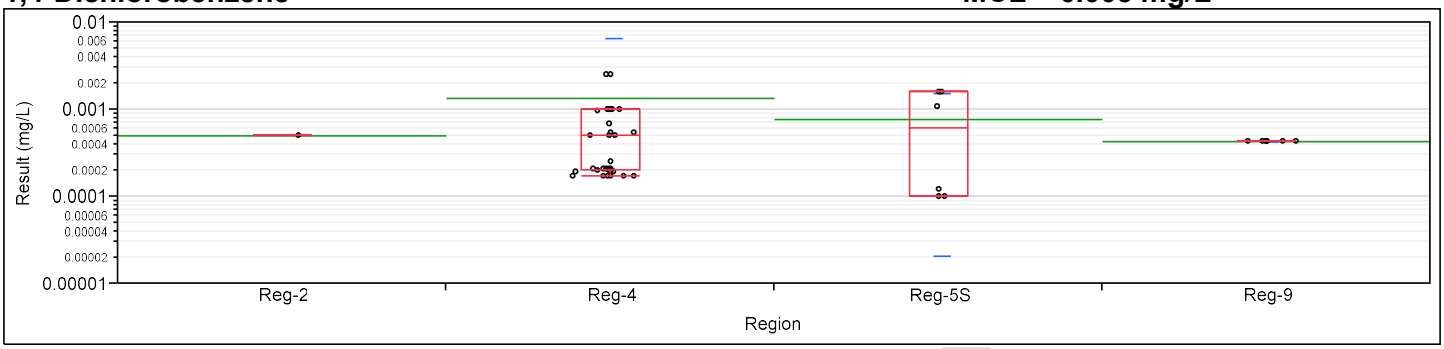
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-9	6	0.00025	0	0	0.00025	0.00025

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-5S	0	2	2	0	0
Reg-9	6	0	6	0	0

DRAFT

1,4-Dichlorobenzene MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00017	0.00017	0.0002	0.0005	0.001	0.001	0.036
Reg-5S	0.0001	0.0001	0.0001	0.00061	0.0016	0.0016	0.0016
Reg-9	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043

Means and Std Deviations

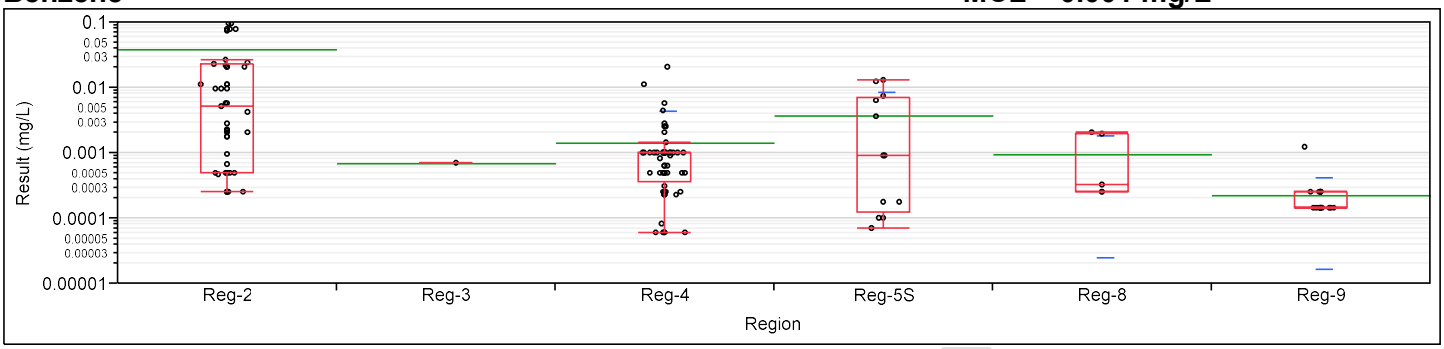
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-4	48	0.0013	5.136e-3	7.41e-4	-0.0001	0.0028
Reg-5S	6	0.0008	7.493e-4	3.06e-4	-0.0000	0.0016
Reg-9	15	0.0004	1.12e-19	2.9e-20	0.00043	0.0004

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-3	0	5	5	0	0
Reg-4	48	188	236	1	0
Reg-5R	0	34	34	0	0
Reg-5S	6	5	11	0	0
Reg-8	0	5	5	0	0
Reg-9	15	8	23	0	0

DRAFT

Benzene

MCL = 0.001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.00025	0.00025	0.0005	0.0052	0.0225	0.094	0.88
Reg-3	0.00069	0.00069	0.00069	0.00069	0.00069	0.00069	0.00069
Reg-4	0.000061	0.000096	0.000358	0.001	0.001	0.0025	0.02
Reg-5S	0.000071	7.97e-5	0.00012	0.0009	0.007025	0.0127	0.013
Reg-8	0.00025	0.00025	0.00025	0.00032	0.00195	0.002	0.002
Reg-9	0.00014	0.00014	0.00014	0.00014	0.00025	0.00025	0.0012

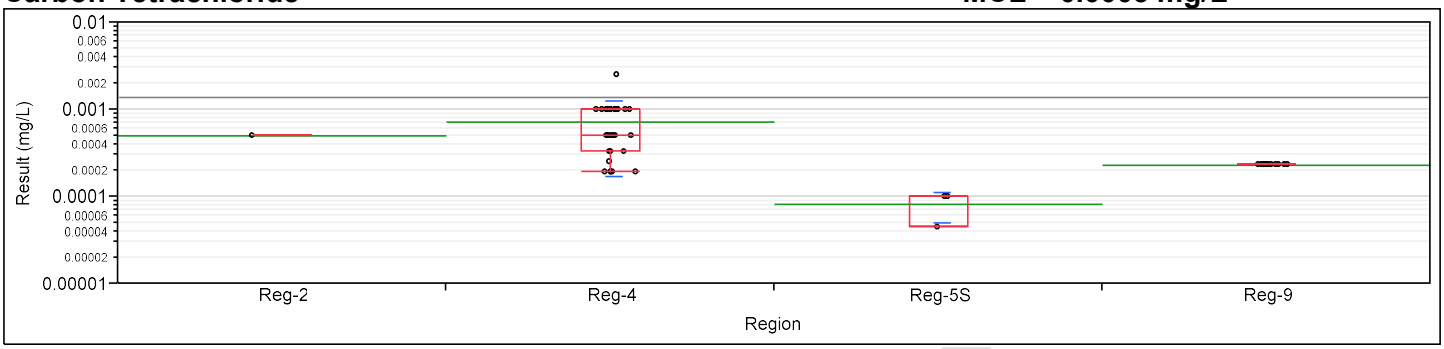
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	49	0.0384	0.1272	0.01818	0.0018	0.0749
Reg-3	1	0.0007	.	.	.	.
Reg-4	60	0.0014	0.0029	0.00038	0.0007	0.0022
Reg-5S	12	0.0037	0.0048	0.00139	0.0007	0.0068
Reg-8	5	0.0009	0.0009	0.00041	-0.0002	0.0021
Reg-9	26	0.0002	0.0002	0.00004	0.0001	0.0003

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-3	0	5	5	0	0
Reg-4	48	188	236	1	0
Reg-5R	0	34	34	0	0
Reg-5S	6	5	11	0	0
Reg-8	0	5	5	0	0
Reg-9	15	8	23	0	0

DRAFT

Carbon Tetrachloride MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00019	0.00019	0.00033	0.0005	0.001	0.001	0.0025
Reg-5S	0.000045	0.000045	0.000045	0.0001	0.0001	0.0001	0.0001
Reg-9	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023

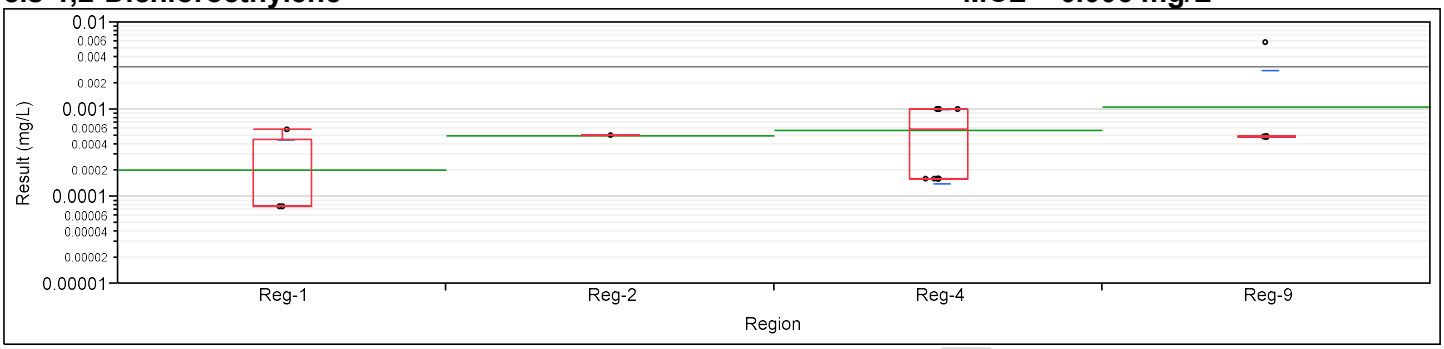
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.00050	.	.	.	.
Reg-4	35	0.00072	5.506e-4	9.31e-5	5.31e-4	0.0009
Reg-5S	3	0.00008	3.175e-5	1.83e-5	2.78e-6	0.0002
Reg-9	15	0.00023	5.61e-20	1.4e-20	2.3e-4	0.0002

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-4	35	51	86	15	17
Reg-5S	3	17	20	0	0
Reg-9	15	3	18	0	0

DRAFT

cis-1,2-Dichloroethylene MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.000076	0.000076	0.000076	0.000076	0.000454	0.00058	0.00058
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00016	0.00016	0.00016	0.00058	0.001	0.001	0.001
Reg-9	0.00048	0.00048	0.00048	0.00048	0.00048	0.0058	0.0058

Means and Std Deviations

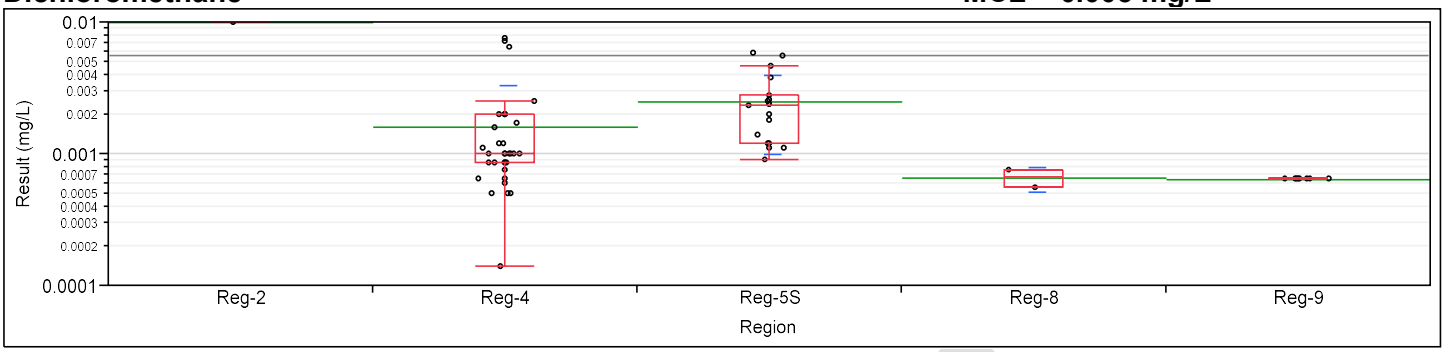
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	4	0.0002	0.0003	0.00013	-0.0002	0.0006
Reg-2	1	0.0005	.	.	.	.
Reg-4	12	0.0006	0.0004	0.00013	0.0003	0.0009
Reg-9	9	0.0011	0.0018	0.00059	-0.0003	0.0024

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	4	12	16	0	0
Reg-2	1	6	7	0	0
Reg-4	12	18	30	0	0
Reg-5S	0	14	14	0	0
Reg-9	9	17	26	0	0

DRAFT

Dichloromethane

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Reg-4	0.00014	0.0005	0.00086	0.001	0.002	0.0029	0.0076
Reg-5S	0.0009	0.0011	0.0012	0.0023	0.0028	0.0055	0.0059
Reg-8	0.00056	0.00056	0.00056	0.00066	0.00076	0.00076	0.00076
Reg-9	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064

Means and Std Deviations

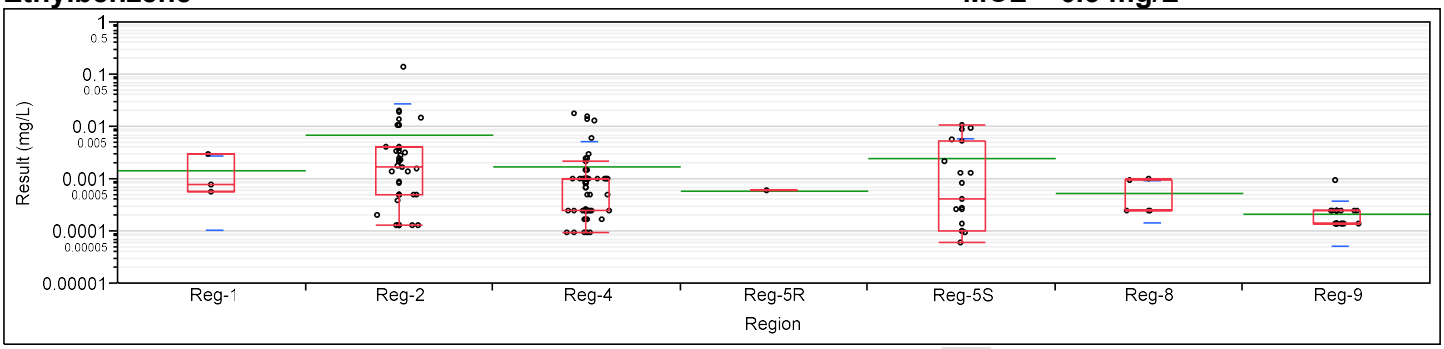
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0100	.	.	.	.
Reg-4	38	0.0016	0.0017	0.0003	0.0010	0.002
Reg-5S	19	0.0025	0.0015	0.0003	0.0018	0.003
Reg-8	2	0.0007	0.0001	0.0001	-0.0006	0.002
Reg-9	15	0.0006	0.0000	0.0000	0.0006	0.001

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	1	8
Reg-4	38	45	83	3	4
Reg-5S	19	6	25	2	8
Reg-8	2	3	5	0	0
Reg-9	15	0	15	0	0

DRAFT

Ethylbenzene

MCL = 0.3 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.00057	0.00057	0.00057	0.00079	0.003	0.003	0.003
Reg-2	0.00013	0.00013	0.0005	0.0017	0.004	0.0146	0.14
Reg-4	0.000096	0.00017	0.00025	0.001	0.001	0.0026	0.018
Reg-5R	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059
Reg-5S	0.000059	0.000091	0.000103	0.000402	0.0052	0.0092	0.011
Reg-8	0.00025	0.00025	0.00025	0.00025	0.00096	0.001	0.001
Reg-9	0.00014	0.00014	0.00014	0.00014	0.00025	0.00025	0.00096

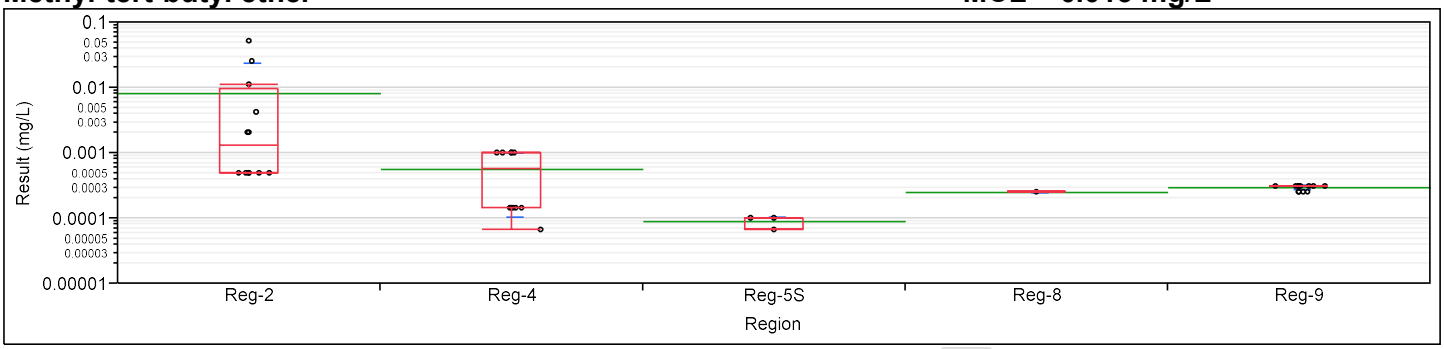
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	3	0.0015	0.0013	0.0008	-0.0019	0.005
Reg-2	43	0.0070	0.0214	0.0033	0.0004	0.014
Reg-4	67	0.0017	0.0036	0.0004	0.0009	0.003
Reg-5R	1	0.0006	.	.	.	.
Reg-5S	19	0.0025	0.0036	0.0008	0.0007	0.004
Reg-8	5	0.0005	0.0004	0.0002	0.0000	0.001
Reg-9	26	0.0002	0.0002	0.0000	0.0001	0.000

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	3	88	91	0	0
Reg-2	43	162	205	0	0
Reg-3	0	4	4	0	0
Reg-4	67	99	166	0	0
Reg-5R	1	38	39	0	0
Reg-5S	19	82	101	0	0
Reg-8	5	32	37	0	0
Reg-9	26	24	50	0	0

DRAFT

Methyl-tert-butyl ether MCL = 0.013 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0013	0.0093	0.0432	0.051
Reg-4	0.000065	8.75e-5	0.00014	0.00057	0.001	0.001	0.001
Reg-5S	0.000068	0.000068	0.000068	0.0001	0.0001	0.0001	0.0001
Reg-8	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Reg-9	0.00025	0.00025	0.00031	0.00031	0.00031	0.00031	0.00031

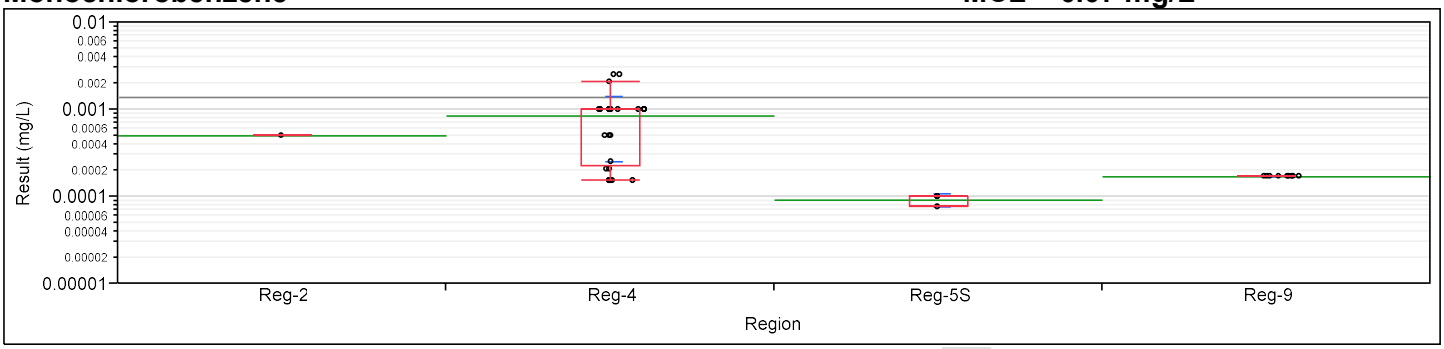
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	12	0.00820	0.01528	4.41e-3	-0.0015	0.0179
Reg-4	12	0.00056	0.00046	1.32e-4	0.00027	0.0009
Reg-5S	3	0.00009	0.00002	1.07e-5	0.00004	0.0001
Reg-8	2	0.00025	0.00000	0e+0	0.00025	0.0003
Reg-9	19	0.00030	0.00003	5.77e-6	0.00029	0.0003

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	0	91	91	0	0
Reg-2	12	59	71	2	3
Reg-3	0	3	3	0	0
Reg-4	12	43	55	0	0
Reg-5S	3	0	3	0	0
Reg-8	2	0	2	0	0
Reg-9	19	0	19	0	0

DRAFT

Monochlorobenzene MCL = 0.07 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00015	0.00015	0.00022	0.001	0.001	0.00133	0.0025
Reg-5S	0.000075	0.000075	0.000075	0.0001	0.0001	0.0001	0.0001
Reg-9	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017

Means and Std Deviations

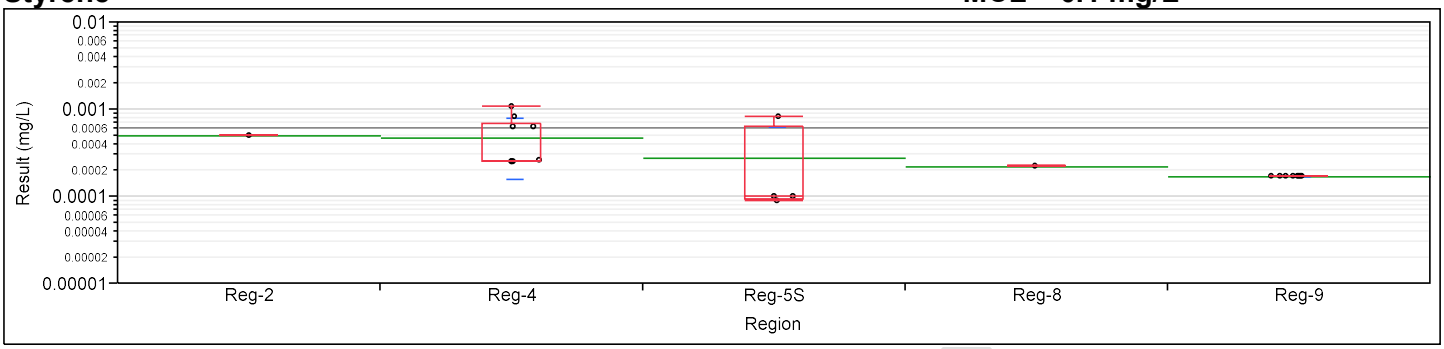
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-4	36	0.0008	0.0006	9.9e-5	0.00064	0.0010
Reg-5S	3	0.0001	0.0000	8.33e-6	0.00006	0.0001
Reg-9	15	0.0002	0.0000	0e+0	0.00017	0.0002

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-4	36	98	134	0	0
Reg-5S	3	16	19	0	0
Reg-9	15	3	18	0	0

DRAFT

Styrene

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00025	0.00025	0.00025	0.000255	0.000683	0.001074	0.0011
Reg-5S	0.000088	0.000088	0.000091	0.0001	0.00064	0.00082	0.00082
Reg-8	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022
Reg-9	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017

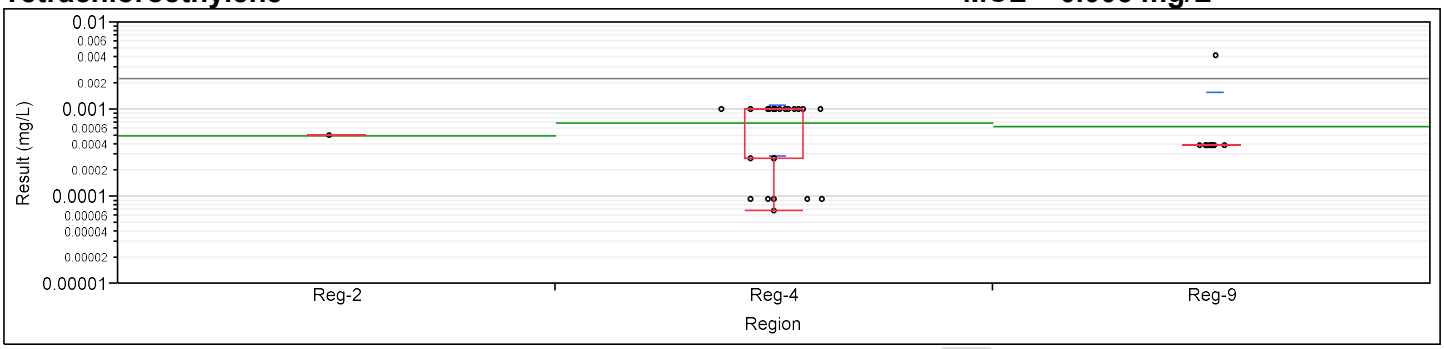
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-4	10	0.0005	0.0003	0.0001	0.0002	0.0007
Reg-5S	4	0.0003	0.0004	0.0002	-0.0003	0.0009
Reg-8	1	0.0002	.	.	.	.
Reg-9	15	0.0002	0.0000	0.0000	0.0002	0.0002

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-4	10	3	13	0	0
Reg-5S	4	13	17	0	0
Reg-8	1	4	5	0	0
Reg-9	15	0	15	0	0

DRAFT

Tetrachloroethylene MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.000068	0.000094	0.00027	0.001	0.001	0.001	0.001
Reg-9	0.00039	0.00039	0.00039	0.00039	0.00039	0.001874	0.0041

Means and Std Deviations

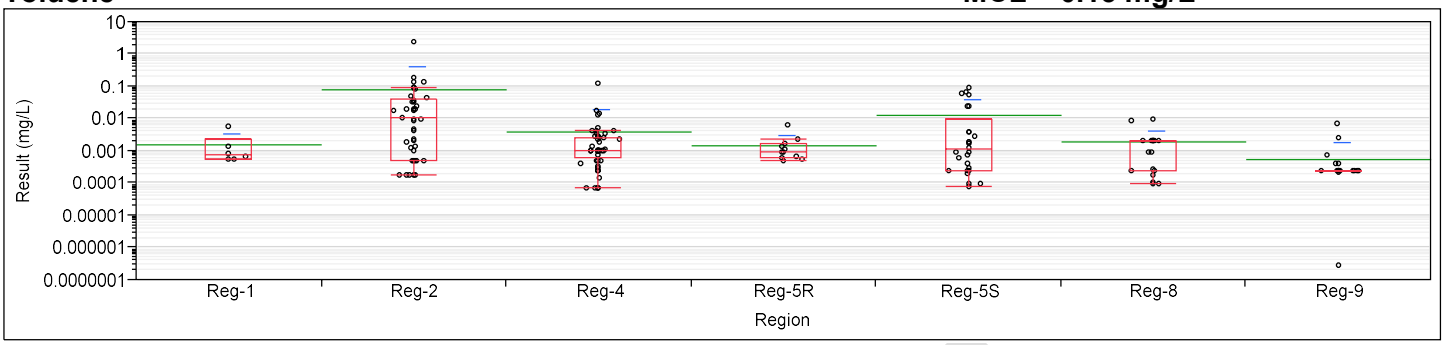
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.0005	.	.	.	.
Reg-4	28	0.0007	0.0004	0.00008	0.0005	0.0009
Reg-9	15	0.0006	0.0010	0.00025	0.0001	0.0012

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	4	5	0	0
Reg-4	28	30	58	0	0
Reg-5S	0	16	16	0	0
Reg-9	15	0	15	0	0

DRAFT

Toluene

MCL = 0.15 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.00052	0.00052	0.000535	0.000745	0.002375	0.0056	0.0056
Reg-2	0.00017	0.00017	0.0005	0.01	0.04	0.1072	2.4
Reg-4	0.000068	0.000162	0.000605	0.001	0.0024	0.00436	0.12
Reg-5R	0.00051	0.000516	0.00057	0.0009	0.0016	0.00532	0.0061
Reg-5S	0.000078	0.0001	0.00025	0.001075	0.0091	0.0641	0.086
Reg-8	0.000093	0.0001	0.00025	0.002	0.002	0.0062	0.0091
Reg-9	2.7e-7	0.00024	0.00024	0.00024	0.00025	0.00071	0.0067

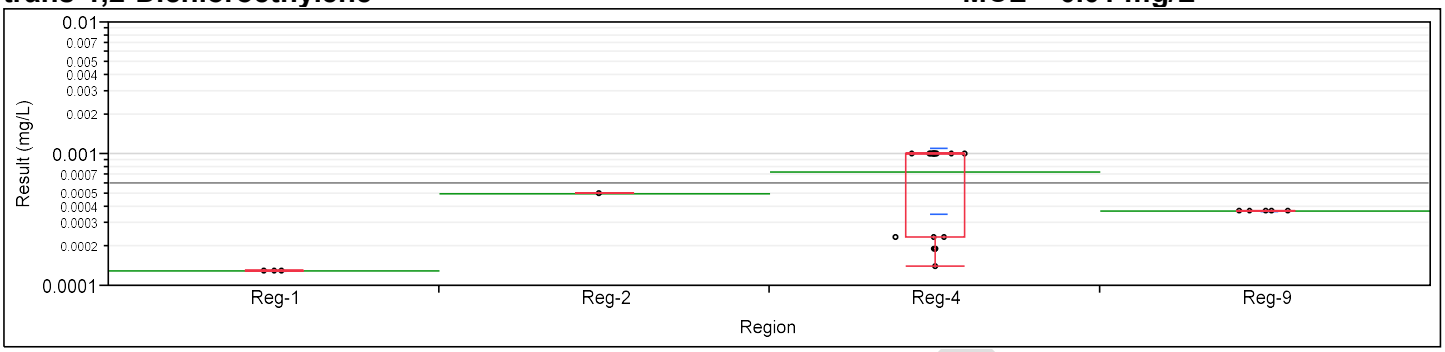
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	6	0.002	0.002	0.0008	-5.2e-4	0.004
Reg-2	45	0.082	0.356	0.0531	-2.5e-2	0.189
Reg-4	61	0.004	0.015	0.0020	-9.3e-6	0.008
Reg-5R	11	0.001	0.002	0.0005	4.1e-4	0.003
Reg-5S	26	0.013	0.025	0.0049	3.03e-3	0.023
Reg-8	23	0.002	0.002	0.0005	9.32e-4	0.003
Reg-9	29	0.001	0.001	0.0002	8.22e-5	0.001

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	6	85	91	0	0
Reg-2	45	154	199	2	1
Reg-3	0	3	3	0	0
Reg-4	61	97	158	0	0
Reg-5R	11	25	36	0	0
Reg-5S	26	67	93	0	0
Reg-8	23	49	72	0	0
Reg-9	29	28	57	0	0

DRAFT

trans-1,2-Dichloroethylene MCL = 0.01 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00014	0.00019	0.00023	0.001	0.001	0.001	0.001
Reg-9	0.00037	0.00037	0.00037	0.00037	0.00037	0.00037	0.00037

Means and Std Deviations

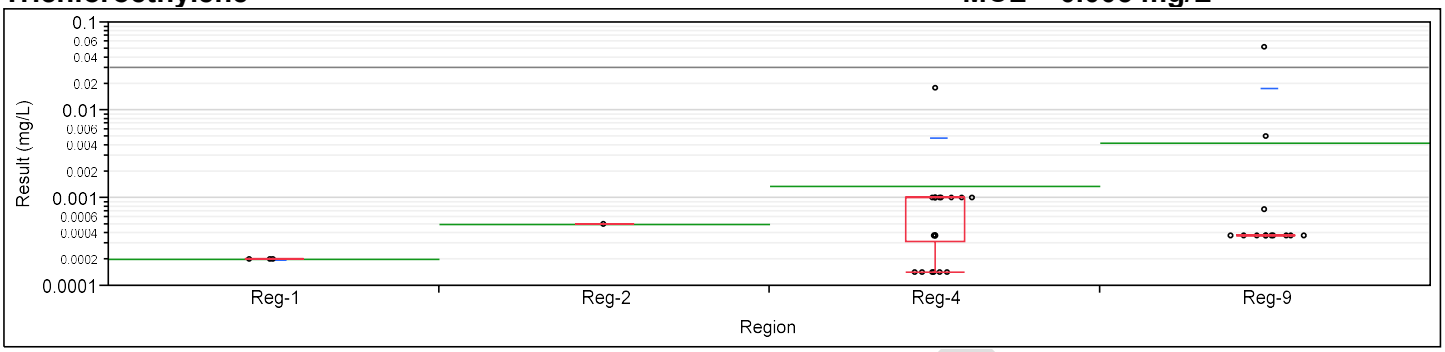
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	3	0.0001	0e+0	0e+0	0.0001	0.0001
Reg-2	1	0.0005	.	.	.	.
Reg-4	27	0.0007	3.857e-4	7.42e-5	0.0006	0.0009
Reg-9	9	0.0004	5.75e-20	1.9e-20	0.0004	0.0004

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	3	13	16	0	0
Reg-2	1	4	5	0	0
Reg-4	27	30	57	0	0
Reg-5S	0	16	16	0	0
Reg-9	9	0	9	0	0

DRAFT

Trichloroethylene

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.00014	0.00014	0.000313	0.001	0.001	0.001	0.018
Reg-9	0.00037	0.00037	0.00037	0.00037	0.00037	0.02426	0.053

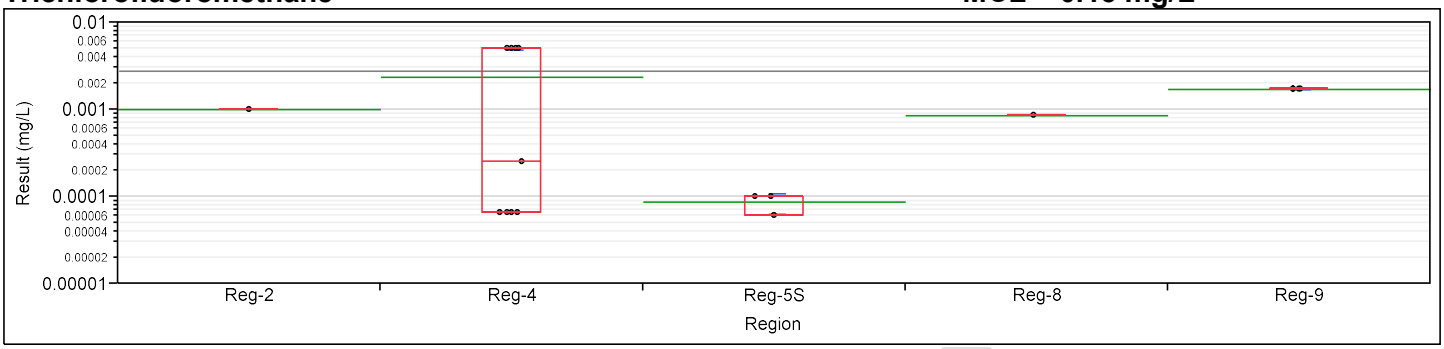
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	3	0.0002	0.000	0.0000	0.00020	0.0002
Reg-2	1	0.0005	.	.	.	.
Reg-4	26	0.0014	0.003	0.0007	-0.0000	0.0027
Reg-9	15	0.0042	0.014	0.0035	-0.0033	0.0117

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	3	13	16	0	0
Reg-2	1	4	5	0	0
Reg-4	26	53	79	1	1
Reg-5S	0	16	16	0	0
Reg-9	15	17	32	2	6

DRAFT

Trichlorofluoromethane MCL = 0.15 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Reg-4	0.000066	0.000066	0.000066	0.00025	0.005	0.005	0.005
Reg-5S	0.00006	0.00006	0.00006	0.0001	0.0001	0.0001	0.0001
Reg-8	0.00085	0.00085	0.00085	0.00085	0.00085	0.00085	0.00085
Reg-9	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017

Means and Std Deviations

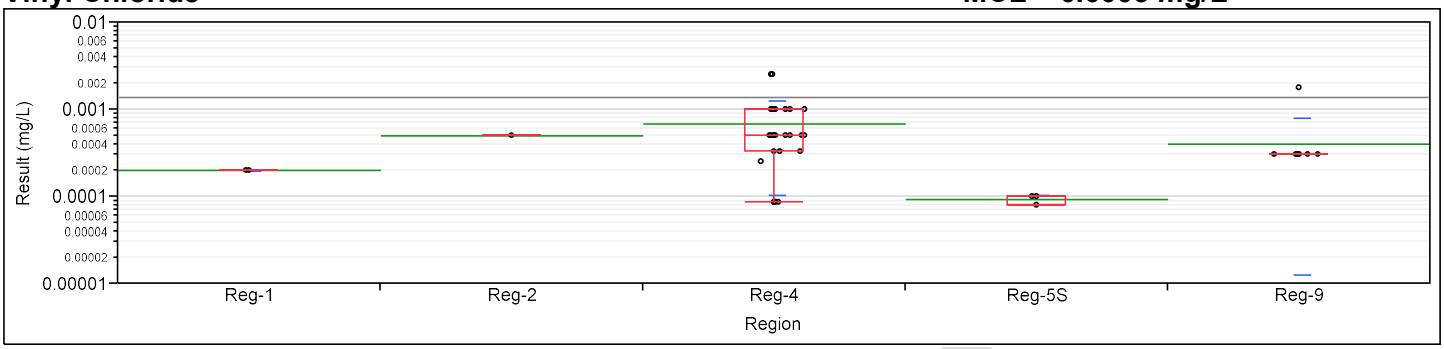
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	1	0.00100	.	.	.	.
Reg-4	13	0.00236	0.00255	0.00071	0.00082	0.0039
Reg-5S	3	0.00009	0.00002	0.00001	0.00003	0.0001
Reg-8	1	0.00085	.	.	.	.
Reg-9	15	0.00170	0.00000	0.00000	0.00170	0.0017

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	1	11	12	0	0
Reg-4	13	43	56	0	0
Reg-5S	3	13	16	0	0
Reg-8	1	0	1	0	0
Reg-9	15	2	17	0	0

DRAFT

Vinyl Chloride

MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Reg-2	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Reg-4	0.000086	0.000086	0.00033	0.0005	0.001	0.001	0.0025
Reg-5S	0.00008	0.00008	0.00008	0.0001	0.0001	0.0001	0.0001
Reg-9	0.0003	0.0003	0.0003	0.0003	0.0003	0.0009	0.0018

Means and Std Deviations

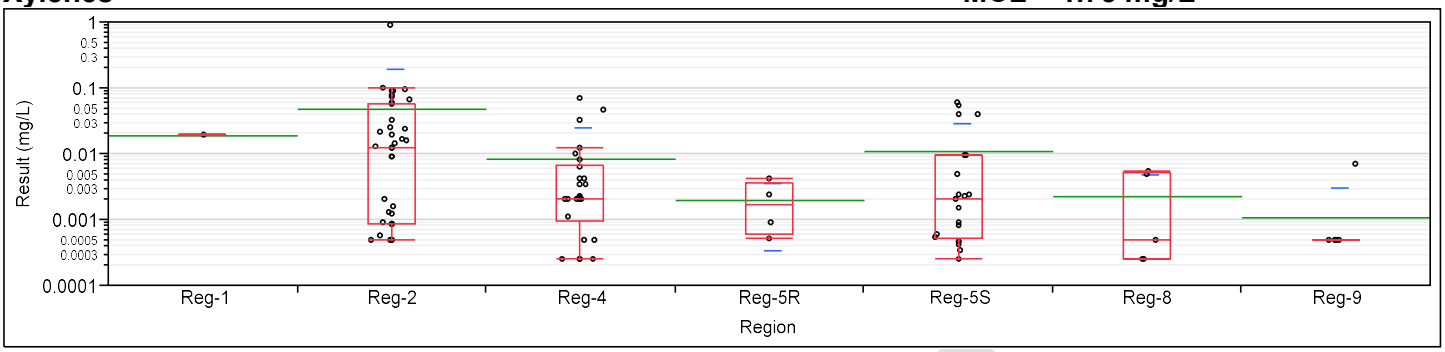
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	3	0.0002	0.0000	0e+0	0.00020	0.0002
Reg-2	1	0.0005	.	.	.	.
Reg-4	33	0.0007	0.0006	1.01e-4	0.00048	0.0009
Reg-5S	3	0.0001	0.0000	6.67e-6	0.00006	0.0001
Reg-9	15	0.0004	0.0004	1e-4	0.00019	0.0006

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	3	13	16	0	0
Reg-2	1	11	12	0	0
Reg-4	33	51	84	13	15
Reg-5S	3	17	20	0	0
Reg-9	15	24	39	1	3

DRAFT

Xylenes

MCL = 1.75 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.019	0.019	0.019	0.019	0.019	0.019	0.019
Reg-2	0.00049	0.00049	0.000868	0.0125	0.05675	0.0916	0.88
Reg-4	0.00025	0.00025	0.00095	0.0021	0.006675	0.0369	0.07
Reg-5R	0.00051	0.00051	0.00061	0.001655	0.003675	0.0041	0.0041
Reg-5S	0.00025	0.000364	0.00051	0.0021	0.009445	0.0518	0.059
Reg-8	0.00025	0.00025	0.00025	0.0005	0.0052	0.0054	0.0054
Reg-9	0.0005	0.0005	0.0005	0.0005	0.0005	0.00562	0.0069

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	1	0.019	.	.	.	.
Reg-2	38	0.048	0.142	0.0231	0.001	0.095
Reg-4	26	0.008	0.016	0.0032	0.002	0.015
Reg-5R	4	0.002	0.002	0.0008	-0.001	0.005
Reg-5S	21	0.011	0.019	0.0041	0.002	0.020
Reg-8	5	0.002	0.003	0.0012	-0.001	0.006
Reg-9	11	0.001	0.002	0.0006	-0.000	0.002

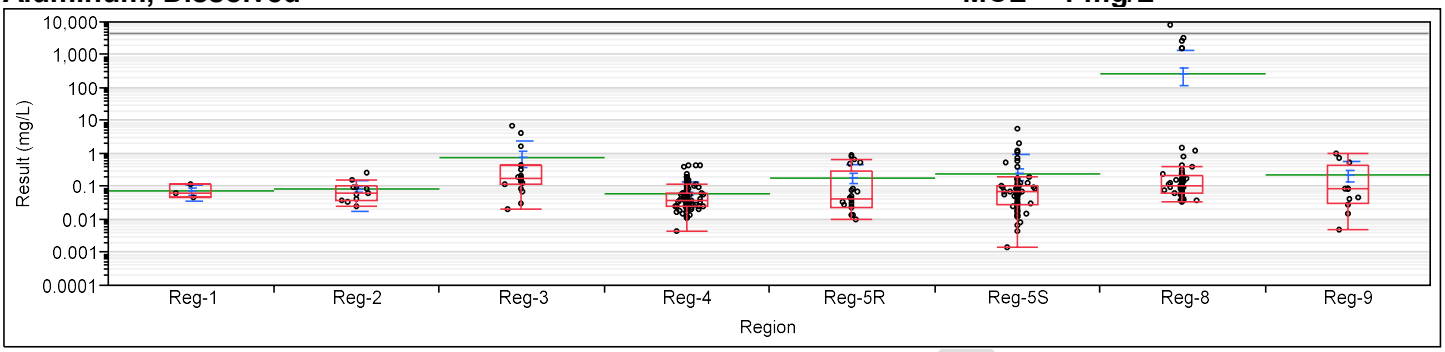
Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	1	41	42	0	0
Reg-2	38	154	192	0	0
Reg-3	0	4	4	0	0
Reg-4	26	40	66	0	0
Reg-5R	4	28	32	0	0
Reg-5S	21	54	75	0	0
Reg-8	5	31	36	0	0
Reg-9	11	21	32	0	0

DRAFT

A1-D
SMARTS Data by Region: Inorganic Chemicals

DRAFT

Aluminum, Dissolved MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.045	0.045	0.045	0.065	0.12	0.12	0.12
Reg-2	0.0264	0.02828	0.037	0.066	0.1	0.24	0.26
Reg-3	0.0209	0.0312	0.111	0.176	0.433	4	6.7
Reg-4	0.0043	0.0192	0.024775	0.03925	0.0648	0.1296	0.446
Reg-5R	0.01	0.013	0.0235	0.041	0.2845	0.7562	0.908
Reg-5S	0.0015	0.013	0.027	0.071	0.11	0.575	5.8
Reg-8	0.034	0.0383	0.06075	0.11	0.2075	1.396	8400
Reg-9	0.005	0.008	0.03175	0.08675	0.44625	0.9369	1.02

Means and Std Deviations

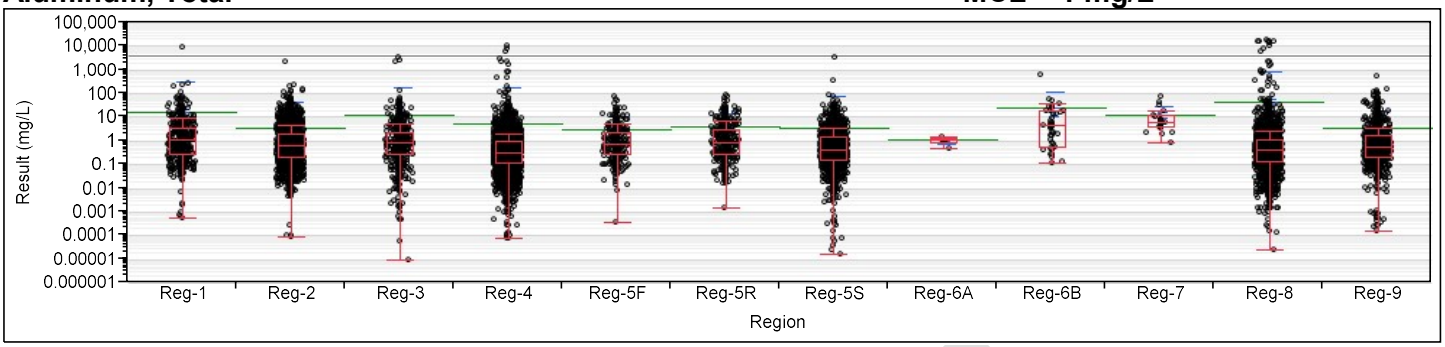
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	3	0.08	0.0	0.02	-0.02	0.2
Reg-2	11	0.09	0.1	0.02	0.04	0.1
Reg-3	19	0.80	1.7	0.39	-0.02	1.6
Reg-4	120	0.06	0.1	0.01	0.05	0.1
Reg-5R	21	0.19	0.3	0.06	0.06	0.3
Reg-5S	64	0.25	0.8	0.10	0.06	0.4
Reg-8	62	279.20	1195.7	151.86	-24.47	582.9
Reg-9	12	0.23	0.3	0.10	0.02	0.5

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	3	1	4	0	0
Reg-2	11	1	12	0	0
Reg-3	19	1	20	3	15
Reg-4	120	54	174	0	0
Reg-5R	21	7	28	0	0
Reg-5S	64	9	73	4	5
Reg-6B	0	1	1	0	0
Reg-8	62	54	116	7	6
Reg-9	12	0	12	1	8

DRAFT

Aluminum, Total

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.00053	0.1	0.27	1.1	3.7	12	8700
Reg-2	0.000095	0.082	0.21	0.63	2	6.42	2400
Reg-3	9.5e-6	0.08182	0.27	0.803	2.4	7.3	3300
Reg-4	0.000083	0.0433	0.12	0.333	0.918	2.2	10200
Reg-5F	0.00036	0.11	0.26	0.71	2.3	7.9	75
Reg-5R	0.0015	0.1068	0.269	0.82	2.95	9.18	93
Reg-5S	0.000017	0.0582	0.16	0.44	1.4	3.85	3600
Reg-6A	0.48	0.48	0.79	1.2	1.35	1.5	1.5
Reg-6B	0.12	0.26	0.59	4.3	18	35	640
Reg-7	0.834	2.008	3.815	5.98	11.5	40.45	74
Reg-8	0.000025	0.0421	0.142	0.429	1.18	3.7	19000
Reg-9	0.00017	0.0862	0.2	0.53	1.6	4.712	530

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	787	16	310.4	11.1	-5.4	38
Reg-2	4347	3	37.4	0.6	2.2	4
Reg-3	867	12	160.7	5.5	1.7	23
Reg-4	8703	5	162.7	1.7	1.8	9
Reg-5F	424	3	7.3	0.4	2.3	4
Reg-5R	571	4	9.5	0.4	3.1	5
Reg-5S	2611	3	70.9	1.4	0.5	6
Reg-6A	5	1	0.4	0.2	0.6	2
Reg-6B	44	25	95.9	14.5	-4.2	54
Reg-7	22	12	17.2	3.7	4.8	20
Reg-8	4149	45	779.5	12.1	21.7	69
Reg-9	1671	3	16.7	0.4	2.4	4

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	787	10	797	405	51
Reg-2	4347	133	4480	1648	37
Reg-3	867	26	893	382	43
Reg-4	8703	458	9161	1922	21
Reg-5F	424	7	431	181	42
Reg-5R	571	1	572	252	44
Reg-5S	2611	112	2723	801	29
Reg-6A	5	0	5	4	80
Reg-6B	44	0	44	31	70

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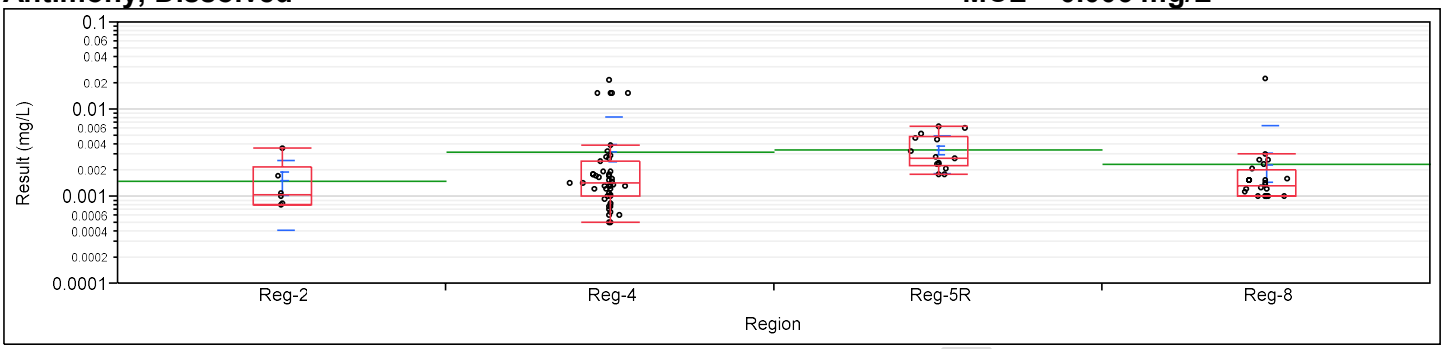
Reg-7	22	0	22	21	95
Reg-8	4149	140	4289	1169	27
Reg-9	1671	41	1712	553	32

DRAFT

Antimony, Dissolved

MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.00079	0.00079	0.000805	0.00105	0.002175	0.0036	0.0036
Reg-4	0.0005	0.000665	0.001008	0.001425	0.00255	0.015	0.0214
Reg-5R	0.0018	0.0018	0.00225	0.00275	0.00485	0.0062	0.0063
Reg-8	0.001	0.001	0.001	0.00133	0.001963	0.00284	0.022

Means and Std Deviations

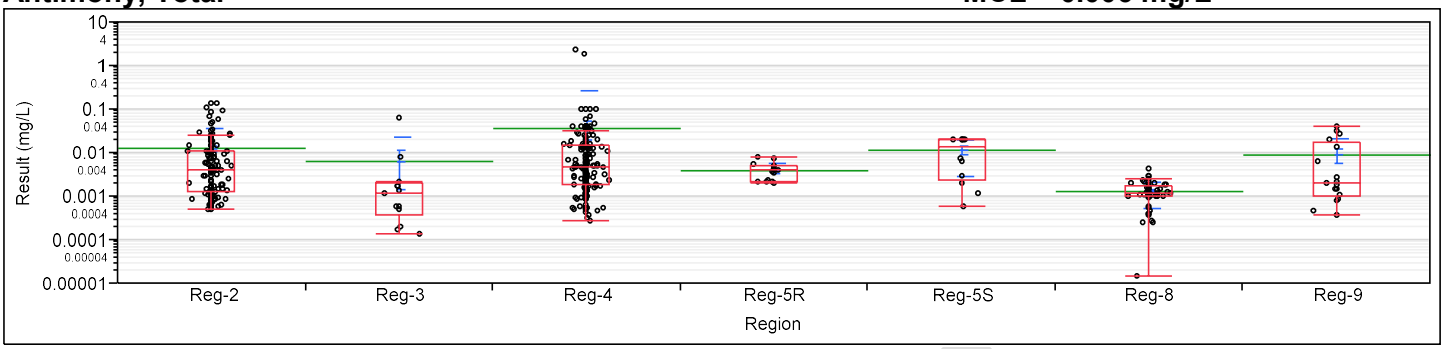
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	6	0.002	0.001	0.0004	0.0004	0.003
Reg-4	50	0.003	0.005	0.0007	0.0019	0.005
Reg-5R	14	0.003	0.002	0.0004	0.0025	0.004
Reg-8	24	0.002	0.004	0.0009	0.0006	0.004

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	6	3	9	0	0
Reg-4	50	4	54	6	11
Reg-5R	14	10	24	2	8
Reg-8	24	10	34	1	3

DRAFT

Antimony, Total

MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.00051	0.00081	0.0013	0.0041	0.011	0.0288	0.14
Reg-3	0.00014	0.000152	0.00036	0.0012	0.00195	0.04228	0.065
Reg-4	0.000263	0.00088	0.001785	0.0046	0.015	0.04	2.3
Reg-5R	0.002	0.00206	0.0022	0.004	0.0051	0.00744	0.0078
Reg-5S	0.00058	0.000766	0.00225	0.01365	0.02	0.02	0.02
Reg-8	0.000015	0.000391	0.001	0.00113	0.00167	0.002222	0.00428
Reg-9	0.00036	0.00044	0.00098	0.002	0.017	0.0336	0.04

Means and Std Deviations

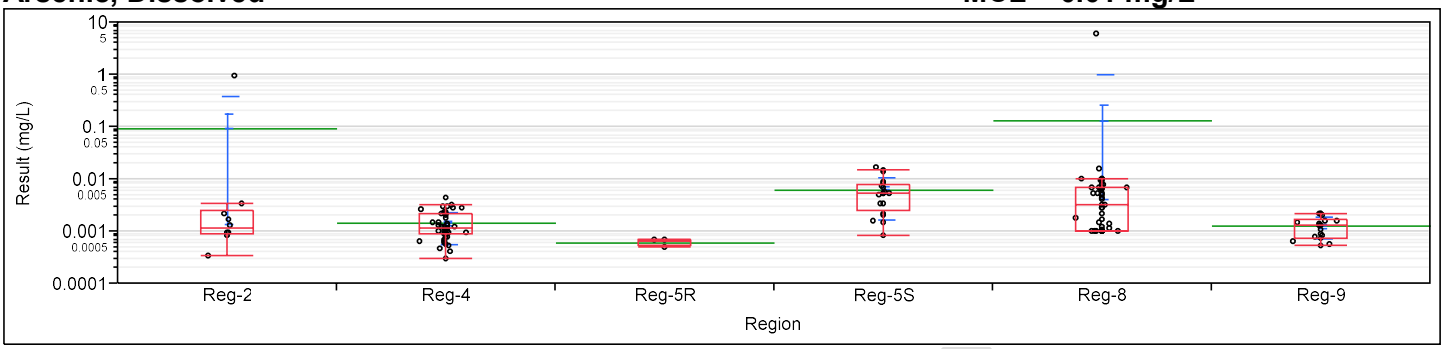
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	125	0.013	0.024	0.0022	0.009	0.017
Reg-3	13	0.006	0.018	0.0049	-0.004	0.017
Reg-4	169	0.037	0.229	0.0176	0.002	0.072
Reg-5R	15	0.004	0.002	0.0005	0.003	0.005
Reg-5S	12	0.012	0.009	0.0026	0.006	0.017
Reg-8	55	0.001	0.001	0.0001	0.001	0.002
Reg-9	17	0.009	0.013	0.0031	0.003	0.016

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	125	137	262	52	20
Reg-3	13	19	32	2	6
Reg-4	169	36	205	70	34
Reg-5R	15	18	33	2	6
Reg-5S	12	13	25	8	32
Reg-8	55	48	103	0	0
Reg-9	17	14	31	6	19

DRAFT

Arsenic, Dissolved

MCL = 0.01 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.00034	0.000386	0.000898	0.001125	0.002475	0.81933	0.91
Reg-4	0.0003	0.000565	0.000863	0.001115	0.0021	0.002846	0.00445
Reg-5R	0.0005	0.0005	0.00052	0.00062	0.000668	0.00067	0.00067
Reg-5S	0.00083	0.00151	0.0025	0.0053	0.00785	0.0149	0.017
Reg-8	0.001	0.001	0.001	0.0032	0.0068	0.00984	6
Reg-9	0.00053	0.000575	0.000745	0.0013	0.0017	0.00211	0.0022

Means and Std Deviations

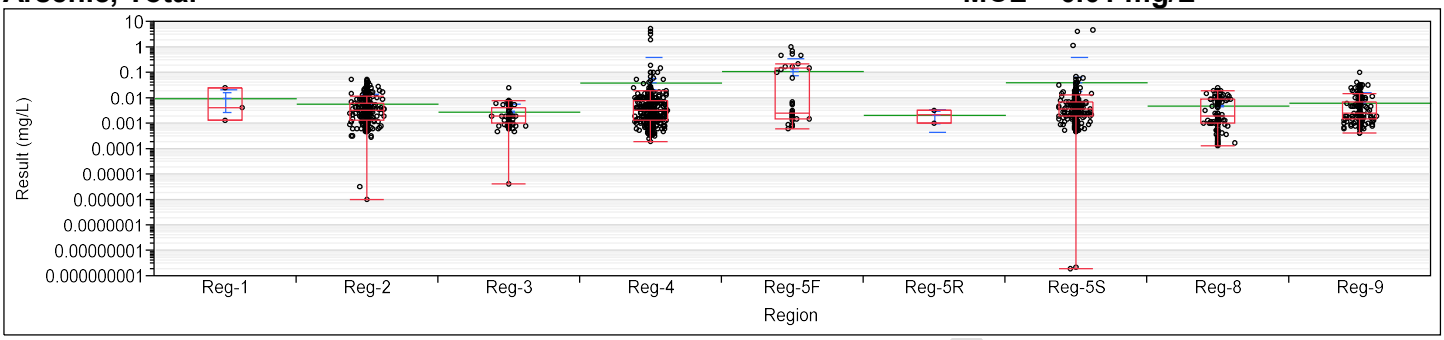
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	10	0.0922	0.28733	0.09086	-0.1133	0.2978
Reg-4	46	0.0014	0.00090	0.00013	0.0012	0.0017
Reg-5R	4	0.0006	0.00008	0.00004	0.0005	0.0007
Reg-5S	20	0.0062	0.00456	0.00102	0.0041	0.0083
Reg-8	47	0.1318	0.87458	0.12757	-0.1250	0.3886
Reg-9	18	0.0013	0.00057	0.00013	0.0010	0.0016

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	10	1	11	1	9
Reg-4	46	6	52	0	0
Reg-5R	4	15	19	0	0
Reg-5S	20	3	23	3	13
Reg-8	47	45	92	2	2
Reg-9	18	0	18	0	0

DRAFT

Arsenic, Total

MCL = 0.01 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0013	0.0013	0.0013	0.0042	0.024	0.024	0.024
Reg-2	0.000001	0.000672	0.0013	0.003	0.0058	0.015	0.056
Reg-3	4.3e-6	0.000647	0.000969	0.002	0.004	0.0064	0.023
Reg-4	0.00019	0.000652	0.0013	0.00318	0.008	0.016	5.4
Reg-5F	0.0006	0.00074	0.00145	0.0026	0.14	0.488	0.99
Reg-5R	0.00097	0.00097	0.00097	0.002135	0.0033	0.0033	0.0033
Reg-5S	1.9e-9	0.000936	0.0019	0.0034	0.0064	0.014	4.7
Reg-8	0.000136	0.000331	0.001	0.0019	0.0089	0.0128	0.025
Reg-9	0.0004	0.000871	0.0014	0.0025	0.006945	0.0173	0.101

Means and Std Deviations

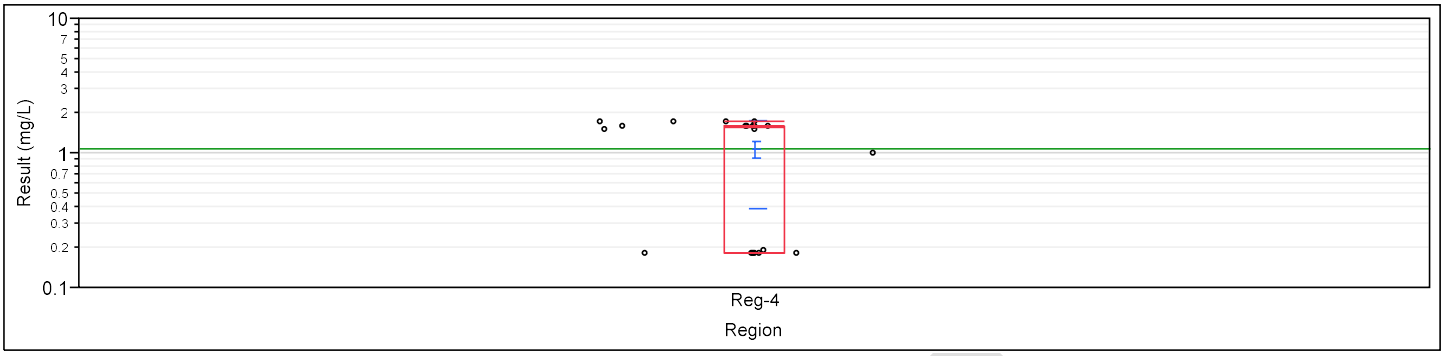
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	3	0.010	0.012	0.0071	-0.021	0.041
Reg-2	311	0.006	0.008	0.0005	0.005	0.007
Reg-3	68	0.003	0.003	0.0004	0.002	0.004
Reg-4	439	0.040	0.362	0.0173	0.006	0.074
Reg-5F	37	0.114	0.229	0.0377	0.038	0.190
Reg-5R	2	0.002	0.002	0.0012	-0.013	0.017
Reg-5S	283	0.042	0.383	0.0228	-0.003	0.086
Reg-8	111	0.005	0.006	0.0005	0.004	0.006
Reg-9	186	0.007	0.010	0.0008	0.005	0.008

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	3	17	20	1	5
Reg-2	311	274	585	42	7
Reg-3	68	39	107	1	1
Reg-4	439	168	607	71	12
Reg-5F	37	16	53	12	23
Reg-5R	2	21	23	0	0
Reg-5S	283	29	312	40	13
Reg-8	111	133	244	18	7
Reg-9	186	42	228	29	13

DRAFT

Asbestos

MCL = 7 MFL



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-4	0.18	0.18	0.18	1.55	1.6	1.7	1.7

Means and Std Deviations

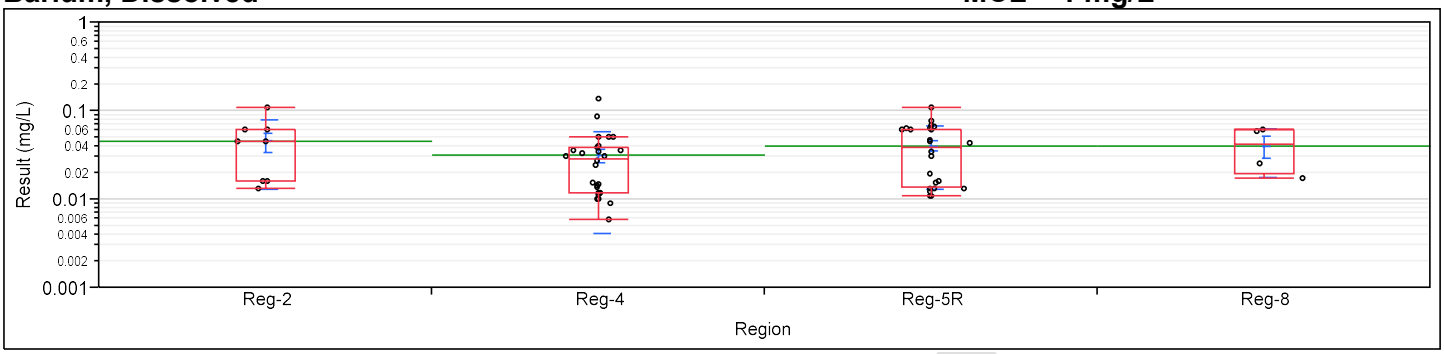
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-4	20	1	0.7	0.2	0.8	1

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-4	20	0	20	0	0

DRAFT

Barium, Dissolved

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.013	0.013	0.016	0.045	0.06075	0.11	0.11
Reg-4	0.00587	0.009673	0.011675	0.02865	0.039025	0.06099	0.134
Reg-5R	0.011	0.0115	0.0135	0.0385	0.06175	0.0725	0.11
Reg-8	0.017	0.017	0.019	0.042	0.05975	0.06	0.06

Means and Std Deviations

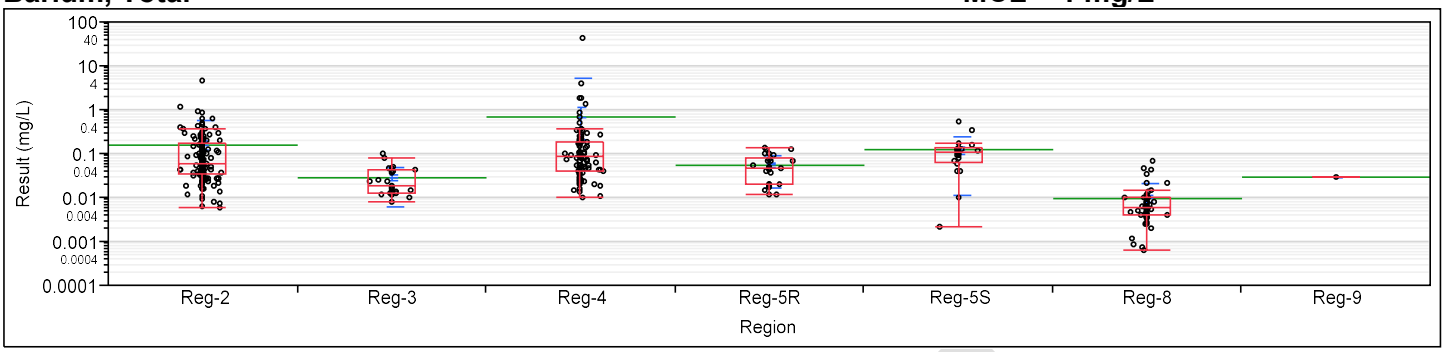
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	8	0.05	0.03	0.012	0.02	0.07
Reg-4	26	0.03	0.03	0.005	0.02	0.04
Reg-5R	24	0.04	0.03	0.006	0.03	0.05
Reg-8	4	0.04	0.02	0.011	0.00	0.08

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	8	0	8	0	0
Reg-4	26	0	26	0	0
Reg-5R	24	2	26	0	0
Reg-8	4	0	4	0	0

DRAFT

Barium, Total

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.0059	0.0206	0.034	0.059	0.17	0.304	4.8
Reg-3	0.00772	0.01078	0.01295	0.019	0.0415	0.0614	0.0985
Reg-4	0.01	0.0214	0.0409	0.085	0.19	0.36	43
Reg-5R	0.012	0.0138	0.02	0.048	0.082	0.13	0.14
Reg-5S	0.0022	0.0187	0.06525	0.11	0.14	0.282	0.55
Reg-8	0.000631	0.002183	0.003955	0.005895	0.0102	0.02157	0.067
Reg-9	0.03	0.03	0.03	0.03	0.03	0.03	0.03

Means and Std Deviations

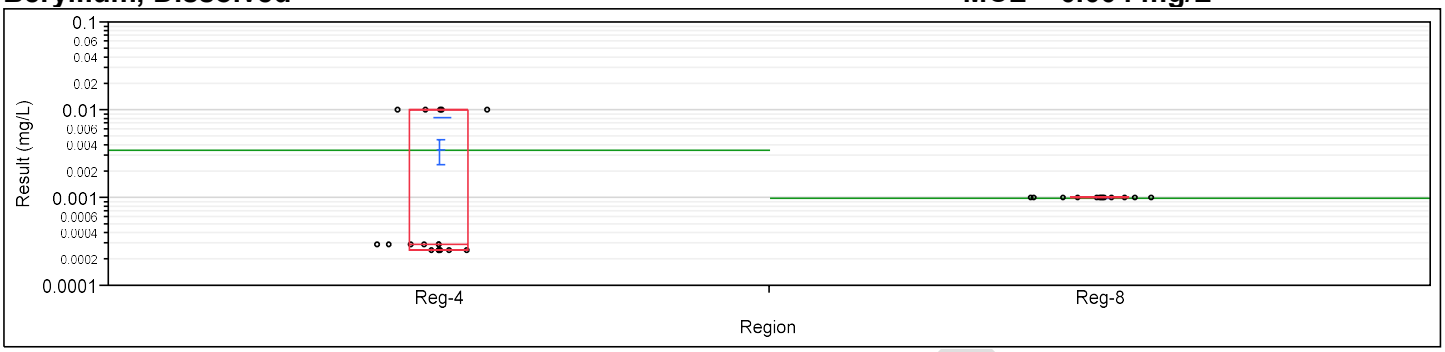
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	155	0.160	0.41	0.033	0.095	0.23
Reg-3	25	0.029	0.02	0.004	0.020	0.04
Reg-4	89	0.704	4.56	0.484	-0.257	1.67
Reg-5R	25	0.056	0.04	0.008	0.040	0.07
Reg-5S	22	0.128	0.12	0.025	0.076	0.18
Reg-8	52	0.010	0.01	0.002	0.006	0.01
Reg-9	1	0.030	.	.	.	.

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	155	40	195	2	1
Reg-3	25	0	25	0	0
Reg-4	89	0	89	5	6
Reg-5R	25	0	25	0	0
Reg-5S	22	2	24	0	0
Reg-8	52	10	62	0	0
Reg-9	1	0	1	0	0

DRAFT

Beryllium, Dissolved

MCL = 0.004 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-4	0.00025	0.00025	0.00025	0.00029	0.01	0.01	0.01
Reg-8	0.001	0.001	0.001	0.001	0.001	0.001	0.001

Means and Std Deviations

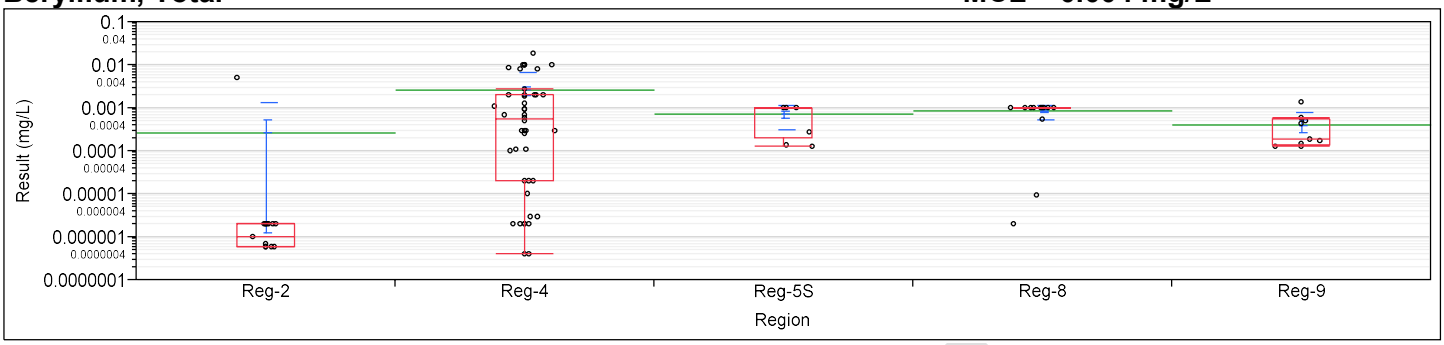
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-4	18	0.004	4.72e-3	1.11e-3	0.001	0.006
Reg-8	16	0.001	4.48e-19	1.1e-19	0.001	0.001

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	0	10	10	0	0
Reg-4	18	38	56	6	11
Reg-8	16	31	47	0	0

DRAFT

Beryllium, Total

MCL = 0.004 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	5.9e-7	5.9e-7	5.9e-7	0.000001	0.000002	0.000002	0.005
Reg-4	3.9e-7	0.000002	0.00002	0.00056	0.002	0.01	0.019
Reg-5S	0.00013	0.00013	0.000205	0.001	0.001	0.001	0.001
Reg-8	0.000002	0.000009	0.001	0.001	0.001	0.001	0.001
Reg-9	0.00013	0.00013	0.00014	0.00019	0.00055	0.0014	0.0014

Means and Std Deviations

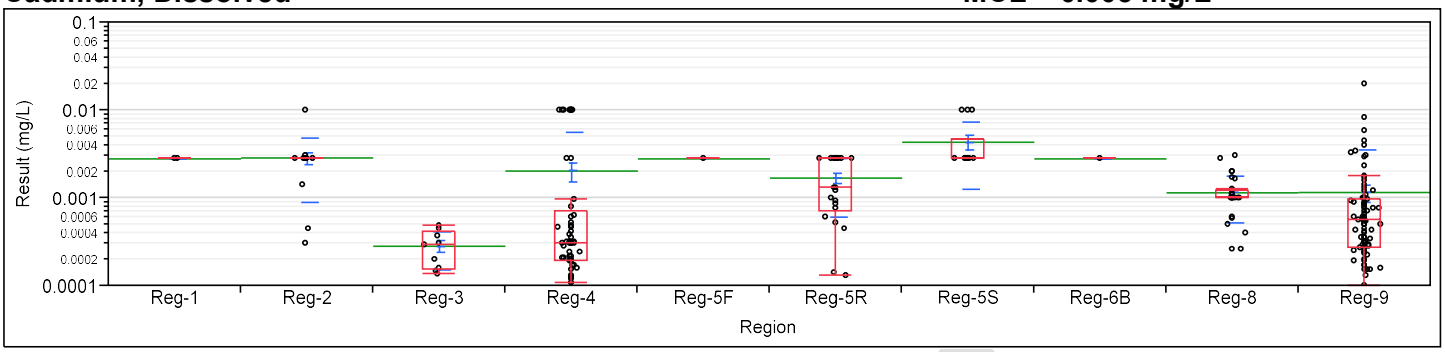
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	19	0.0003	0.0011	0.00026	-0.0003	0.0008
Reg-4	48	0.0027	0.0043	0.00062	0.00141	0.0039
Reg-5S	9	0.0007	0.0004	0.00014	0.00041	0.0010
Reg-8	19	0.0009	0.0003	0.00007	0.00071	0.0010
Reg-9	9	0.0004	0.0004	0.00014	0.00009	0.0007

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	19	188	207	1	0
Reg-3	0	29	29	0	0
Reg-4	48	139	187	10	5
Reg-5S	9	8	17	0	0
Reg-8	19	92	111	0	0
Reg-9	9	18	27	0	0

DRAFT

Cadmium, Dissolved

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028
Reg-2	0.0003	0.000435	0.0028	0.0028	0.0028	0.0037	0.01
Reg-3	0.000136	0.000136	0.000154	0.000298	0.000408	0.00049	0.00049
Reg-4	0.00011	0.000128	0.000193	0.00031	0.000705	0.01	0.01
Reg-5F	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028
Reg-5R	0.00013	0.00023	0.000715	0.0013	0.0028	0.0028	0.0028
Reg-5S	0.0028	0.0028	0.0028	0.0028	0.0046	0.01	0.01
Reg-6B	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028
Reg-8	0.00026	0.000411	0.001	0.001	0.001213	0.001996	0.003
Reg-9	0.0001	0.000169	0.000273	0.000555	0.00098	0.00291	0.02

Means and Std Deviations

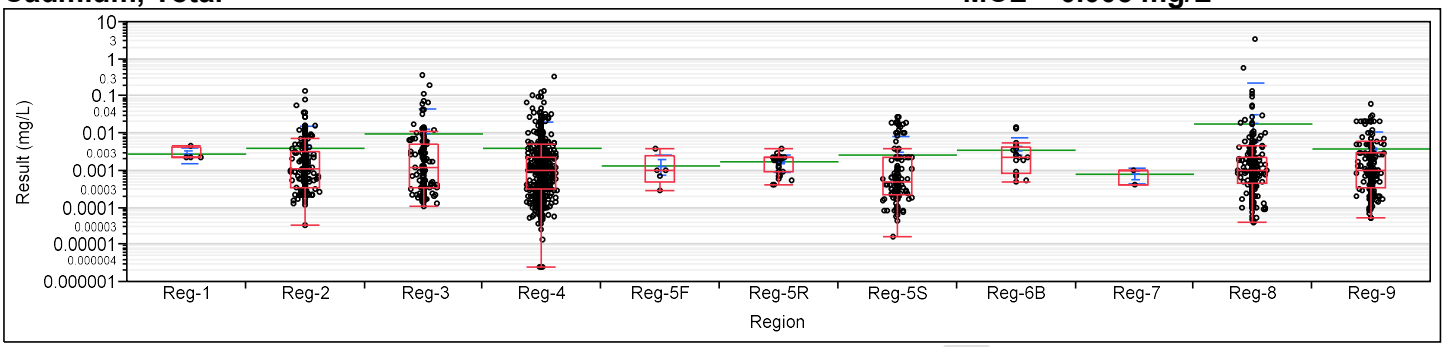
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	3	0.0028	0.0000	0.00000	0.0028	0.003
Reg-2	18	0.0029	0.0020	0.00046	0.0019	0.004
Reg-3	9	0.0003	0.0001	0.00004	0.0002	0.000
Reg-4	53	0.0020	0.0037	0.00050	0.0010	0.003
Reg-5F	1	0.0028	.	.	.	.
Reg-5R	22	0.0017	0.0011	0.00023	0.0012	0.002
Reg-5S	14	0.0043	0.0031	0.00082	0.0026	0.006
Reg-6B	4	0.0028	0.0000	0.00000	0.0028	0.003
Reg-8	30	0.0011	0.0006	0.00012	0.0009	0.001
Reg-9	88	0.0012	0.0024	0.00026	0.0006	0.002

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	3	0	3	0	0
Reg-2	18	2	20	1	5
Reg-3	9	6	15	0	0
Reg-4	53	33	86	9	10
Reg-5F	1	0	1	0	0
Reg-5R	22	16	38	0	0
Reg-5S	14	0	14	3	21
Reg-6B	4	0	4	0	0
Reg-8	30	70	100	0	0
Reg-9	88	30	118	3	3

DRAFT

Cadmium, Total

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0022	0.0022	0.0022	0.0022	0.004	0.0046	0.0046
Reg-2	0.000033	0.00021	0.00035	0.0011	0.00305	0.0081	0.13
Reg-3	0.00011	0.000197	0.000333	0.001155	0.004775	0.01332	0.37
Reg-4	2.5e-6	0.000127	0.0003	0.001	0.0022	0.00666	0.34
Reg-5F	0.00029	0.00029	0.000475	0.001	0.0024	0.0038	0.0038
Reg-5R	0.0004	0.000559	0.000908	0.00215	0.0022	0.00237	0.0037
Reg-5S	0.000016	0.0001	0.000215	0.00048	0.00215	0.01	0.028
Reg-6B	0.00049	0.000514	0.00084	0.0022	0.0041	0.0132	0.014
Reg-7	0.0004	0.0004	0.0004	0.001	0.001	0.001	0.001
Reg-8	0.000038	0.000142	0.00043	0.001	0.002175	0.005198	3.4
Reg-9	0.00005	0.00017	0.000325	0.001	0.00294	0.02	0.062

Means and Std Deviations

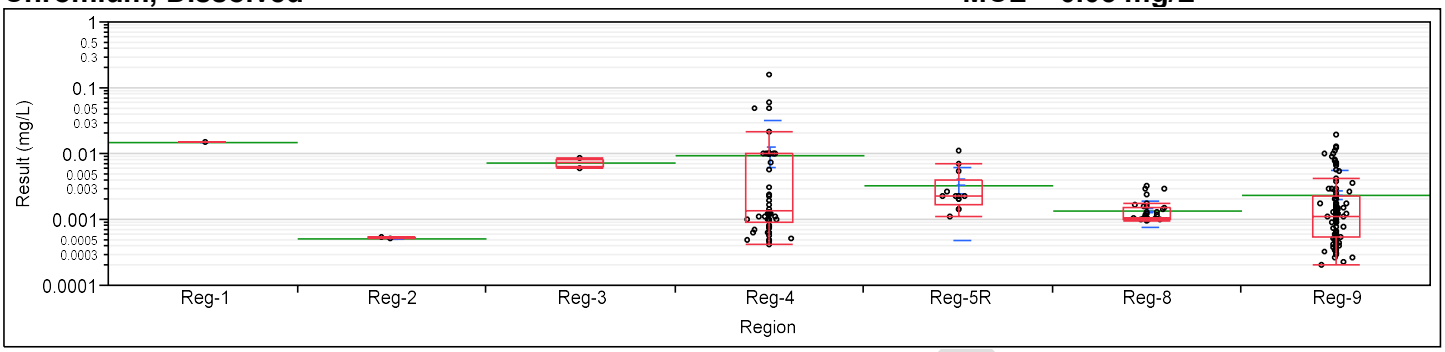
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	4	0.0028	0.0012	0.0006	0.0009	0.005
Reg-2	217	0.0040	0.0119	0.0008	0.0024	0.006
Reg-3	138	0.0098	0.0379	0.0032	0.0034	0.016
Reg-4	775	0.0040	0.0165	0.0006	0.0029	0.005
Reg-5F	5	0.0014	0.0014	0.0006	-0.0004	0.003
Reg-5R	32	0.0017	0.0008	0.0001	0.0014	0.002
Reg-5S	141	0.0026	0.0056	0.0005	0.0017	0.004
Reg-6B	17	0.0036	0.0040	0.0010	0.0015	0.006
Reg-7	3	0.0008	0.0003	0.0002	-0.0001	0.002
Reg-8	272	0.0184	0.2092	0.0127	-0.0066	0.043
Reg-9	249	0.0038	0.0073	0.0005	0.0029	0.005

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	4	15	19	0	0
Reg-2	217	233	450	30	7
Reg-3	138	58	196	33	17
Reg-4	775	352	1127	95	8
Reg-5F	5	26	31	0	0
Reg-5R	32	20	52	0	0
Reg-5S	141	217	358	18	5
Reg-6B	17	2	19	3	16
Reg-7	3	0	3	0	0
Reg-8	272	217	489	28	6
Reg-9	249	103	352	39	11

DRAFT

Chromium, Dissolved

MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Reg-2	0.00051	0.00051	0.00051	0.00052	0.00053	0.00053	0.00053
Reg-3	0.0061	0.0061	0.006325	0.0074	0.008325	0.0085	0.0085
Reg-4	0.00042	0.000565	0.000919	0.00135	0.01	0.0112	0.16
Reg-5R	0.0011	0.00122	0.0017	0.0023	0.00405	0.00944	0.011
Reg-8	0.000969	0.001	0.001	0.00107	0.00152	0.002652	0.00324
Reg-9	0.0002	0.000346	0.00055	0.0011	0.0023	0.0074	0.019

Means and Std Deviations

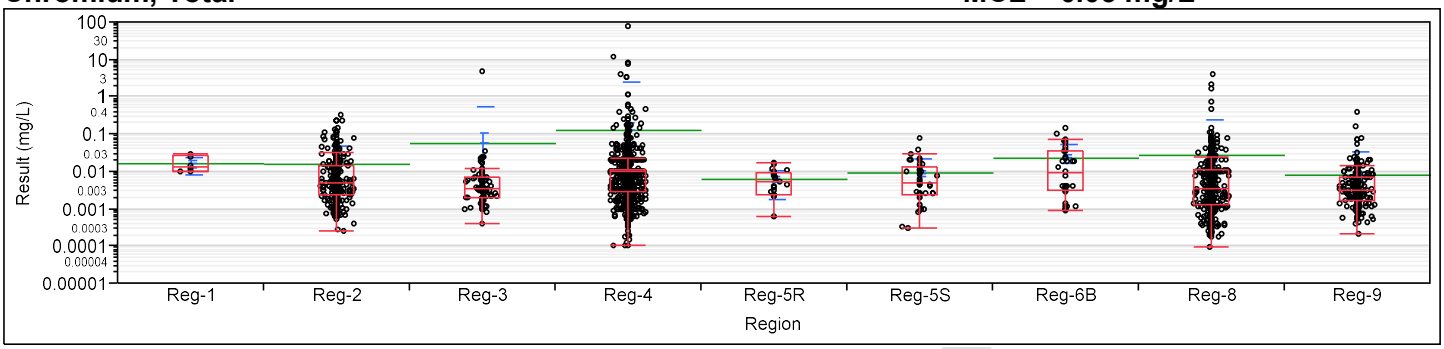
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	1	0.0150	.	.	.	.
Reg-2	2	0.0005	0.00001	0.00001	0.0004	0.0006
Reg-3	4	0.0074	0.00103	0.00052	0.0057	0.0090
Reg-4	58	0.0095	0.02338	0.00307	0.0034	0.0157
Reg-5R	13	0.0033	0.00285	0.00079	0.0016	0.0051
Reg-8	35	0.0014	0.00061	0.00010	0.0012	0.0016
Reg-9	95	0.0024	0.00333	0.00034	0.0017	0.0031

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	1	6	7	0	0
Reg-2	2	5	7	0	0
Reg-3	4	10	14	0	0
Reg-4	58	6	64	2	3
Reg-5R	13	11	24	0	0
Reg-8	35	15	50	0	0
Reg-9	95	19	114	0	0

DRAFT

Chromium, Total

MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.01	0.01	0.01	0.013	0.0255	0.03	0.03
Reg-2	0.00025	0.0011	0.0024	0.0047	0.01475	0.0375	0.313
Reg-3	0.0004	0.0012	0.00194	0.0035	0.00684	0.016	4.7
Reg-4	9.92e-5	0.001155	0.002893	0.00985	0.011	0.03	77
Reg-5R	0.00062	0.001224	0.0023	0.0055	0.009	0.0138	0.017
Reg-5S	0.00029	0.001	0.002408	0.0048	0.013	0.021	0.075
Reg-6B	0.00087	0.001095	0.002975	0.0087	0.035075	0.068	0.15
Reg-8	0.00009	0.000685	0.00123	0.00329	0.01085	0.02966	4
Reg-9	0.00021	0.00106	0.00171	0.00302	0.007	0.014	0.39

Means and Std Deviations

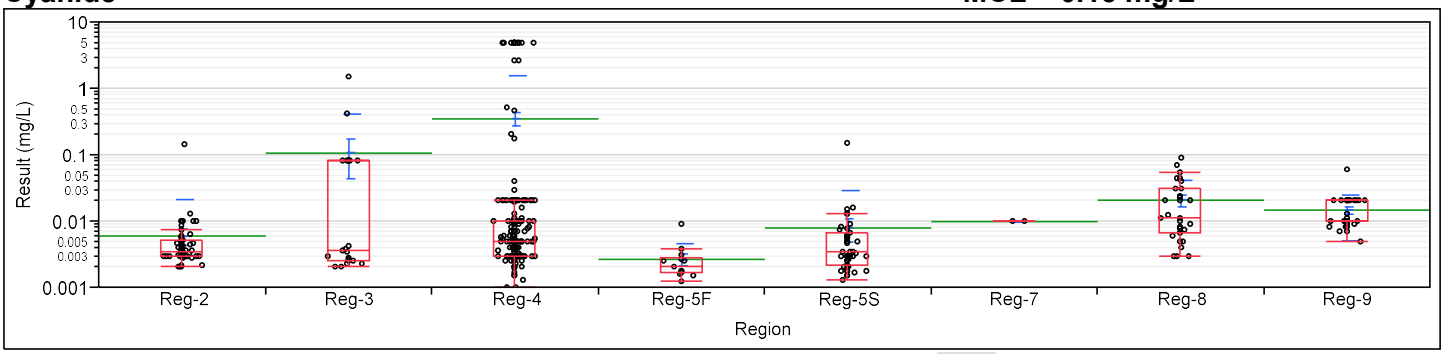
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	6	0.017	0.008	0.0034	0.008	0.025
Reg-2	364	0.016	0.035	0.0018	0.012	0.020
Reg-3	91	0.057	0.492	0.0516	-0.045	0.160
Reg-4	1070	0.130	2.413	0.0738	-0.015	0.275
Reg-5R	23	0.006	0.004	0.0009	0.004	0.008
Reg-5S	50	0.009	0.012	0.0018	0.006	0.013
Reg-6B	34	0.023	0.033	0.0057	0.012	0.035
Reg-8	513	0.027	0.216	0.0095	0.009	0.046
Reg-9	255	0.008	0.028	0.0017	0.005	0.012

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	6	6	12	0	0
Reg-2	364	116	480	25	5
Reg-3	91	24	115	1	1
Reg-4	1070	141	1211	65	5
Reg-5R	23	7	30	0	0
Reg-5S	50	59	109	1	1
Reg-6B	34	3	37	5	14
Reg-8	513	78	591	23	4
Reg-9	255	37	292	6	2

DRAFT

Cyanide

MCL = 0.15 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.002	0.003	0.003	0.0034	0.0051	0.01	0.14
Reg-3	0.002	0.0022	0.0025	0.00365	0.08	0.25	1.5
Reg-4	0.001	0.003	0.003	0.005	0.01	0.02	5
Reg-5F	0.0012	0.00132	0.00165	0.0021	0.00285	0.00682	0.0089
Reg-5S	0.0013	0.00179	0.002125	0.00335	0.006475	0.013	0.15
Reg-7	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Reg-8	0.003	0.0031	0.006475	0.011	0.031	0.0539	0.091
Reg-9	0.005	0.0075	0.00975	0.01	0.02	0.02	0.061

Means and Std Deviations

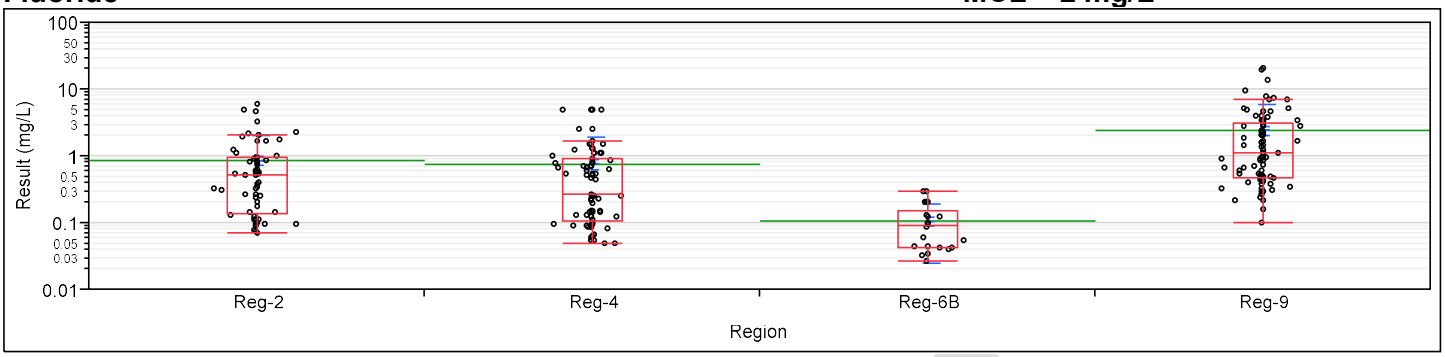
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	82	0.006	0.015	0.002	0.003	0.009
Reg-3	24	0.108	0.309	0.063	-0.022	0.239
Reg-4	263	0.356	1.246	0.077	0.204	0.507
Reg-5F	13	0.003	0.002	0.001	0.001	0.004
Reg-5S	48	0.008	0.021	0.003	0.002	0.014
Reg-7	2	0.010	0.000	0.000	0.010	0.010
Reg-8	30	0.021	0.022	0.004	0.013	0.029
Reg-9	34	0.015	0.010	0.002	0.011	0.018

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	82	108	190	0	0
Reg-3	24	30	54	2	4
Reg-4	263	405	668	23	3
Reg-5F	13	26	39	0	0
Reg-5R	0	2	2	0	0
Reg-5S	48	48	96	0	0
Reg-7	2	0	2	0	0
Reg-8	30	124	154	0	0
Reg-9	34	77	111	0	0

DRAFT

Fluoride

MCL = 2 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.071	0.0946	0.1375	0.515	0.955	2.14	5.9
Reg-4	0.05	0.0664	0.105	0.26	0.885	1.54	5
Reg-6B	0.027	0.0329	0.042	0.0915	0.1475	0.27	0.3
Reg-9	0.1	0.2955	0.4685	1.1	3.1025	6.01	20

Means and Std Deviations

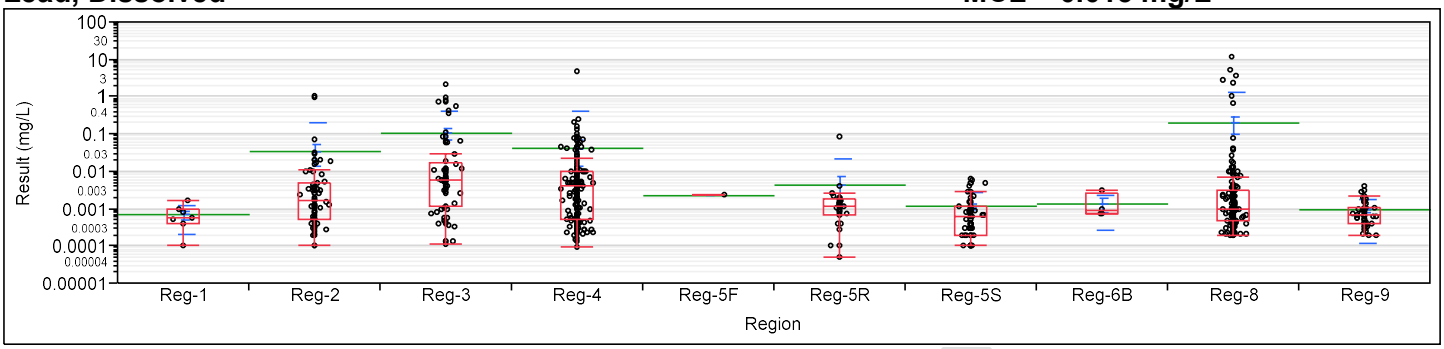
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	62	0.9	1.18	0.15	0.57	1.17
Reg-4	77	0.8	1.14	0.13	0.50	1.02
Reg-6B	22	0.1	0.08	0.02	0.07	0.14
Reg-9	84	2.5	3.57	0.39	1.68	3.23

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	62	50	112	6	5
Reg-4	77	12	89	6	7
Reg-6B	22	38	60	0	0
Reg-9	84	0	84	30	36

DRAFT

Lead, Dissolved

MCL = 0.015 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0001	0.0001	0.0004	0.00055	0.00096	0.0017	0.0017
Reg-2	0.0001	0.000268	0.0005	0.0016	0.005	0.02044	1
Reg-3	0.00011	0.00039	0.00114	0.006	0.017	0.41	2.1
Reg-4	8.98e-5	0.000257	0.000534	0.00416	0.01	0.0461	4.8
Reg-5F	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023
Reg-5R	0.00005	0.0001	0.0007	0.0012	0.0018	0.0029	0.088
Reg-5S	0.0001	0.0001	0.0002	0.0006	0.0012	0.0046	0.0062
Reg-6B	0.00071	0.00071	0.000723	0.00088	0.0025	0.003	0.003
Reg-8	0.00019	0.00027	0.00045	0.001	0.003	0.013	12
Reg-9	0.0002	0.000272	0.000395	0.00069	0.0011	0.00198	0.0042

Means and Std Deviations

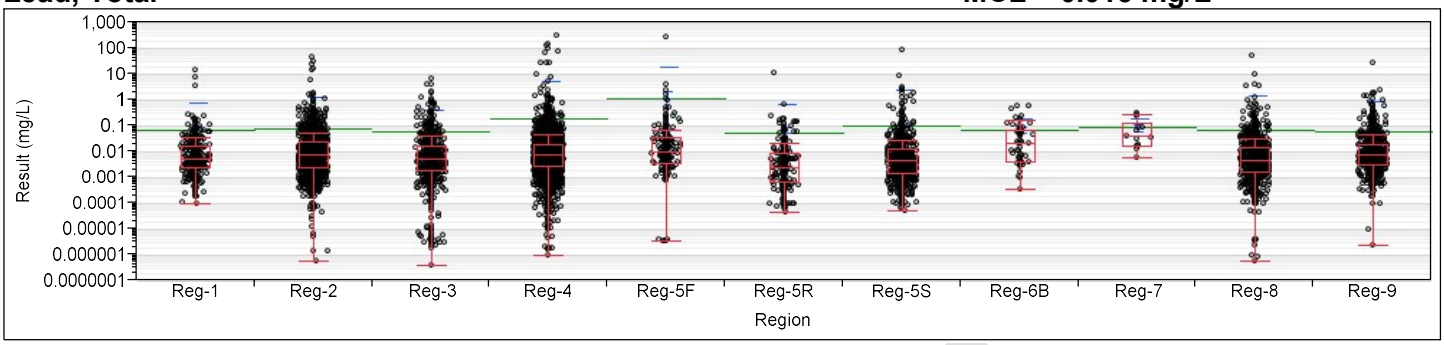
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	7	0.0007	0.0005	0.0002	0.0002	0.001
Reg-2	67	0.0347	0.1679	0.0205	-0.0062	0.076
Reg-3	69	0.1083	0.3188	0.0384	0.0317	0.185
Reg-4	168	0.0431	0.3707	0.0286	-0.0134	0.100
Reg-5F	1	0.0023	.	.	.	.
Reg-5R	27	0.0044	0.0167	0.0032	-0.0022	0.011
Reg-5S	53	0.0012	0.0016	0.0002	0.0008	0.002
Reg-6B	4	0.0014	0.0011	0.0005	-0.0004	0.003
Reg-8	139	0.2031	1.1861	0.1006	0.0042	0.402
Reg-9	45	0.0010	0.0008	0.0001	0.0007	0.001

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	7	1	8	0	0
Reg-2	67	7	74	11	15
Reg-3	69	19	88	18	20
Reg-4	168	87	255	28	11
Reg-5F	1	0	1	0	0
Reg-5R	27	12	39	1	3
Reg-5S	53	12	65	0	0
Reg-6B	4	1	5	0	0
Reg-8	139	120	259	13	5
Reg-9	45	95	140	0	0

DRAFT

Lead, Total

MCL = 0.015 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0001	0.000962	0.0024	0.0055	0.016	0.0496	15
Reg-2	6.1e-7	0.0011	0.0023	0.00749	0.024	0.0727	48
Reg-3	3.9e-7	0.00064	0.00184	0.0052	0.017	0.0597	6.7
Reg-4	0.000001	0.001098	0.00273	0.0077	0.02	0.05	299
Reg-5F	3.8e-6	0.0015	0.0038	0.0104	0.034	0.11	290
Reg-5R	0.000048	0.000293	0.00066	0.00256	0.009375	0.04245	11
Reg-5S	0.00005	0.0006	0.0014	0.0045	0.012525	0.0389	83
Reg-6B	0.00038	0.00299	0.00398	0.0212	0.068775	0.18	0.61
Reg-7	0.006	0.0095	0.01595	0.0405	0.126675	0.2975	0.305
Reg-8	6e-7	0.00069	0.001735	0.0046	0.014	0.03702	53
Reg-9	2.5e-6	0.00139	0.0032	0.0073	0.02	0.056	28

Means and Std Deviations

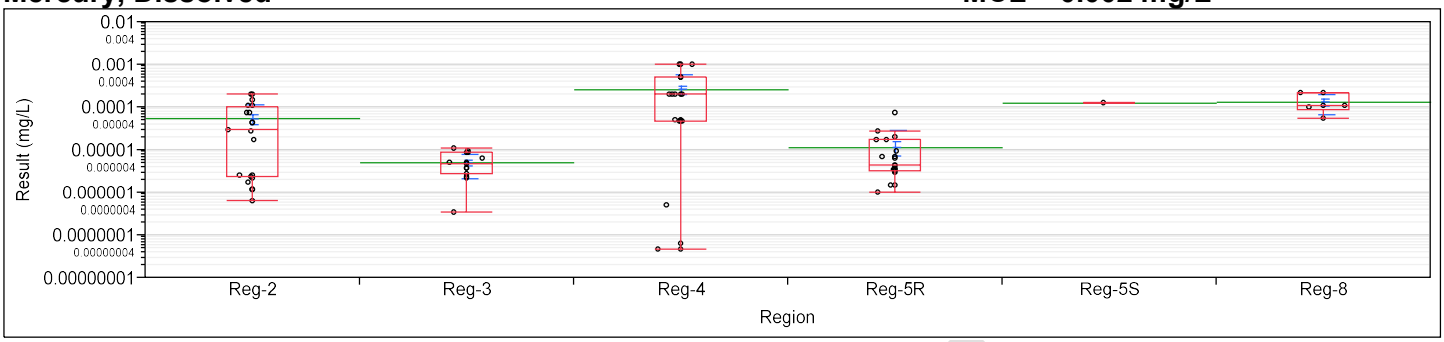
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	531	0.07	0.7	0.03	0.0033	0.13
Reg-2	2882	0.08	1.3	0.02	0.0346	0.13
Reg-3	1035	0.06	0.3	0.01	0.0359	0.08
Reg-4	6017	0.18	5.0	0.06	0.0541	0.31
Reg-5F	266	1.16	17.8	1.09	-0.9827	3.31
Reg-5R	296	0.05	0.6	0.04	-0.0192	0.13
Reg-5S	1370	0.10	2.3	0.06	-0.0225	0.22
Reg-6B	62	0.07	0.1	0.02	0.0366	0.10
Reg-7	14	0.09	0.1	0.03	0.0286	0.15
Reg-8	1648	0.06	1.3	0.03	-0.0006	0.13
Reg-9	1289	0.06	0.8	0.02	0.0137	0.10

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	531	228	759	138	18
Reg-2	2882	460	3342	929	28
Reg-3	1035	255	1290	274	21
Reg-4	6017	819	6836	1897	28
Reg-5F	266	45	311	116	37
Reg-5R	296	85	381	53	14
Reg-5S	1370	286	1656	288	17
Reg-6B	62	1	63	32	51
Reg-7	14	10	24	12	50
Reg-8	1648	376	2024	391	19
Reg-9	1289	168	1457	385	26

DRAFT

Mercury, Dissolved

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	6.1e-7	1.2e-6	2.25e-6	2.85e-5	0.000101	0.000195	0.0002
Reg-3	3.35e-7	1.418e-6	2.75e-6	4.68e-6	8.46e-6	9.862e-6	0.000011
Reg-4	4.53e-8	5.55e-8	4.53e-5	0.0002	0.0005	0.001	0.001
Reg-5R	0.000001	1.5e-6	3.2e-6	4.45e-6	1.67e-5	2.75e-5	7.62e-5
Reg-5S	0.000126	0.000126	0.000126	0.000126	0.000126	0.000126	0.000126
Reg-8	0.000055	0.000055	8.725e-5	0.00011	0.000214	0.000217	0.000217

Means and Std Deviations

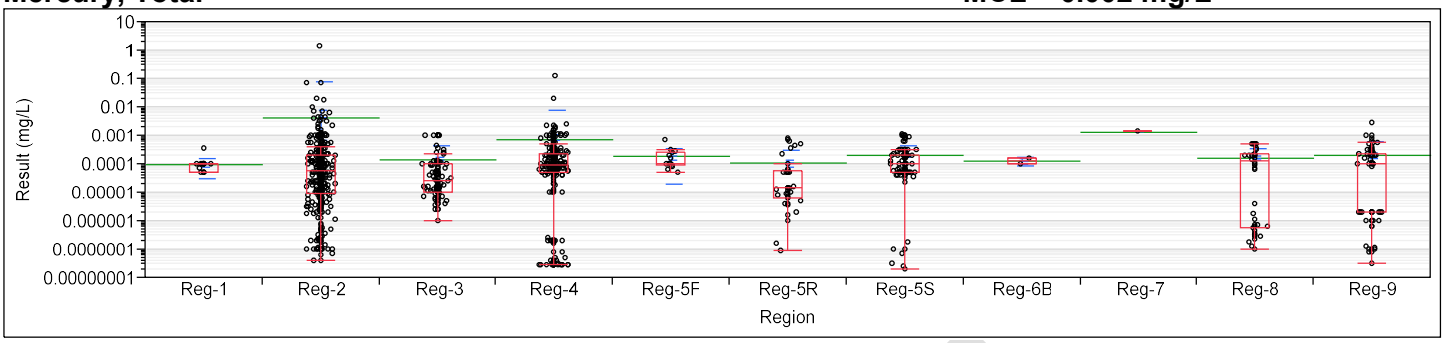
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	20	5.463e-5	6.634e-5	1.48e-5	2.36e-5	8.57e-5
Reg-3	15	5.11e-6	2.993e-6	7.73e-7	3.45e-6	6.77e-6
Reg-4	25	2.629e-4	3.246e-4	6.49e-5	1.29e-4	3.97e-4
Reg-5R	19	1.143e-5	1.731e-5	3.97e-6	3.08e-6	1.98e-5
Reg-5S	1	1.26e-4	.	.	.	.
Reg-8	6	1.338e-4	6.606e-5	2.7e-5	6.45e-5	2.03e-4

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	20	5	25	0	0
Reg-3	15	4	19	0	0
Reg-4	25	36	61	0	0
Reg-5R	19	7	26	0	0
Reg-5S	1	4	5	0	0
Reg-8	6	68	74	0	0

DRAFT

Mercury, Total

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.00005	0.00005	0.00005	0.0001	0.0001	0.000125	0.00035
Reg-2	4e-8	4.52e-7	9.075e-6	0.000055	0.0002	0.000991	1.43
Reg-3	0.000001	5.172e-6	1.05e-5	2.46e-5	0.0001	0.000664	0.001
Reg-4	2.9e-8	7.95e-8	0.00005	9.25e-5	0.000225	0.000926	0.12
Reg-5F	0.000053	5.58e-5	0.000085	0.0001	0.000265	0.000536	0.00068
Reg-5R	9.2e-8	1.7e-6	6.625e-6	1.44e-5	0.000055	0.00051	0.000832
Reg-5S	2e-8	3.95e-5	0.00005	0.0001	0.00021	0.000752	0.0011
Reg-6B	0.0001	0.0001	0.0001	0.00013	0.00016	0.00016	0.00016
Reg-7	0.00135	0.00135	0.00135	0.00135	0.00135	0.00135	0.00135
Reg-8	1e-7	2.58e-7	5.85e-7	0.000125	0.000216	0.0005	0.0005
Reg-9	3e-8	1.13e-7	0.000002	0.000105	0.000235	0.000545	0.0029

Means and Std Deviations

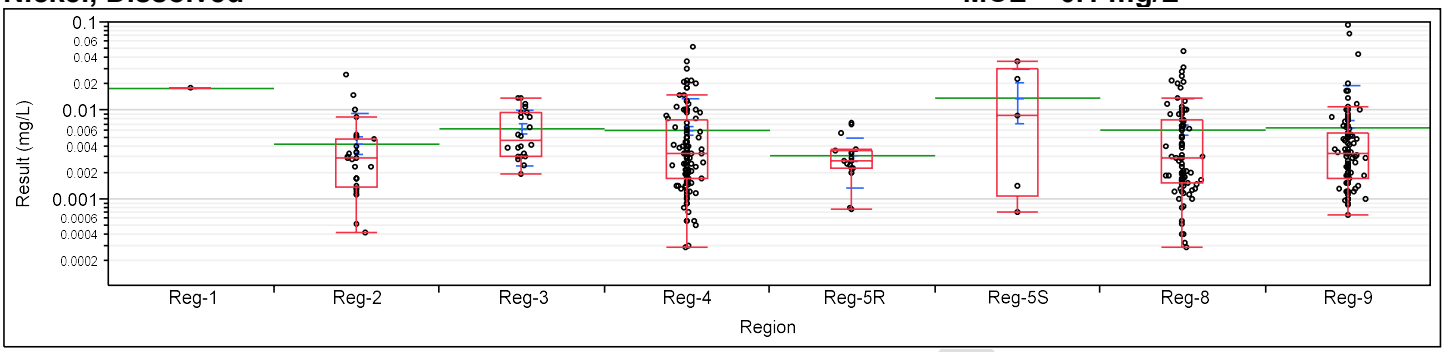
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	18	0.0001	0.00007	0.00002	0.00007	0.0001
Reg-2	402	0.0043	0.07148	0.00356	-0.0027	0.0113
Reg-3	95	0.0001	0.00029	0.00003	0.00008	0.0002
Reg-4	288	0.0007	0.00717	0.00042	-0.0001	0.0016
Reg-5F	13	0.0002	0.00017	0.00005	0.00009	0.0003
Reg-5R	41	0.0001	0.00021	0.00003	0.00004	0.0002
Reg-5S	108	0.0002	0.00026	0.00003	0.00016	0.0003
Reg-6B	2	0.0001	0.00004	0.00003	-0.0003	0.0005
Reg-7	1	0.0014	.	.	.	.
Reg-8	46	0.0002	0.00018	0.00003	0.00011	0.0002
Reg-9	72	0.0002	0.00039	0.00005	0.00012	0.0003

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	18	72	90	0	0
Reg-2	402	479	881	18	2
Reg-3	95	95	190	0	0
Reg-4	288	417	705	6	1
Reg-5F	13	28	41	0	0
Reg-5R	41	30	71	0	0
Reg-5S	108	357	465	0	0
Reg-6B	2	15	17	0	0
Reg-7	1	0	1	0	0
Reg-8	46	199	245	0	0
Reg-9	72	111	183	1	1

DRAFT

Nickel, Dissolved

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Reg-2	0.00042	0.0011	0.00135	0.0029	0.0048	0.01	0.025
Reg-3	0.0019	0.002533	0.003055	0.00459	0.009523	0.01331	0.014
Reg-4	0.00028	0.000889	0.001678	0.00324	0.0078	0.0153	0.052
Reg-5R	0.00075	0.0008	0.0022	0.0027	0.0035	0.007	0.0073
Reg-5S	0.00071	0.00071	0.001055	0.0088	0.0295	0.036	0.036
Reg-8	0.00028	0.000867	0.001495	0.002905	0.007725	0.0168	0.046
Reg-9	0.00066	0.00103	0.001725	0.00325	0.005575	0.0107	0.091

Means and Std Deviations

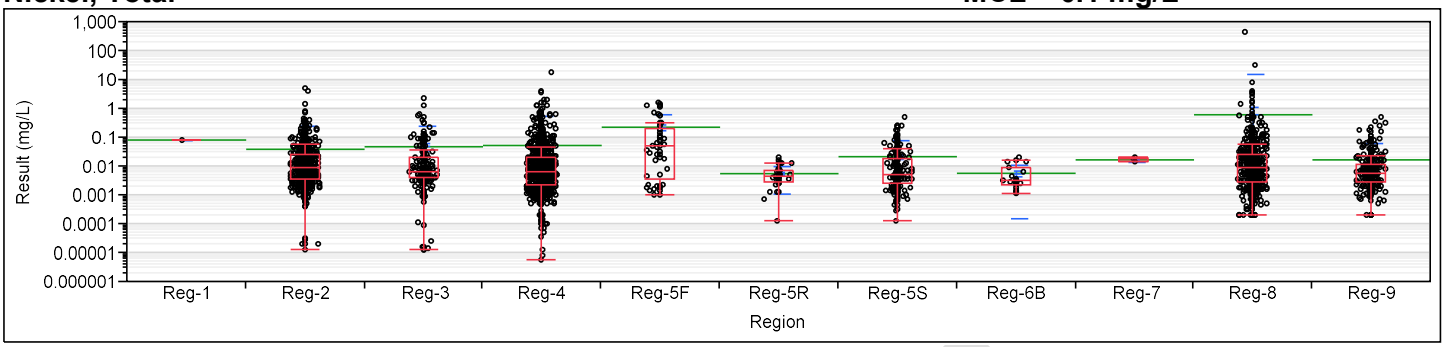
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	1	0.018	.	.	.	.
Reg-2	29	0.004	0.005	0.001	0.002	0.006
Reg-3	22	0.006	0.004	0.001	0.005	0.008
Reg-4	108	0.006	0.008	0.001	0.005	0.008
Reg-5R	19	0.003	0.002	0.000	0.002	0.004
Reg-5S	5	0.014	0.015	0.007	-0.005	0.033
Reg-8	82	0.006	0.008	0.001	0.004	0.008
Reg-9	92	0.006	0.013	0.001	0.004	0.009

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	1	0	1	0	0
Reg-2	29	4	33	0	0
Reg-3	22	8	30	0	0
Reg-4	108	17	125	0	0
Reg-5R	19	9	28	0	0
Reg-5S	5	0	5	0	0
Reg-8	82	26	108	0	0
Reg-9	92	18	110	0	0

DRAFT

Nickel, Total

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.083	0.083	0.083	0.083	0.083	0.083	0.083
Reg-2	0.000013	0.001964	0.0036	0.009	0.026	0.0686	5.1
Reg-3	0.000012	0.001465	0.00384	0.0062	0.02025	0.0899	2.2
Reg-4	5.8e-6	0.0012	0.00223	0.00652	0.02	0.0699	17
Reg-5F	0.001	0.0016	0.0035	0.05	0.21	1.1	1.5
Reg-5R	0.00012	0.00126	0.0029	0.0046	0.0068	0.013	0.02
Reg-5S	0.00013	0.0013	0.0025	0.00527	0.0185	0.0482	0.52
Reg-6B	0.0011	0.0012	0.0023	0.0031	0.0085	0.015	0.02
Reg-7	0.014	0.014	0.014	0.018	0.02	0.02	0.02
Reg-8	0.0002	0.001462	0.0027	0.0087	0.0251	0.09084	424
Reg-9	0.0002	0.001412	0.00298	0.0059	0.0113	0.0308	0.52

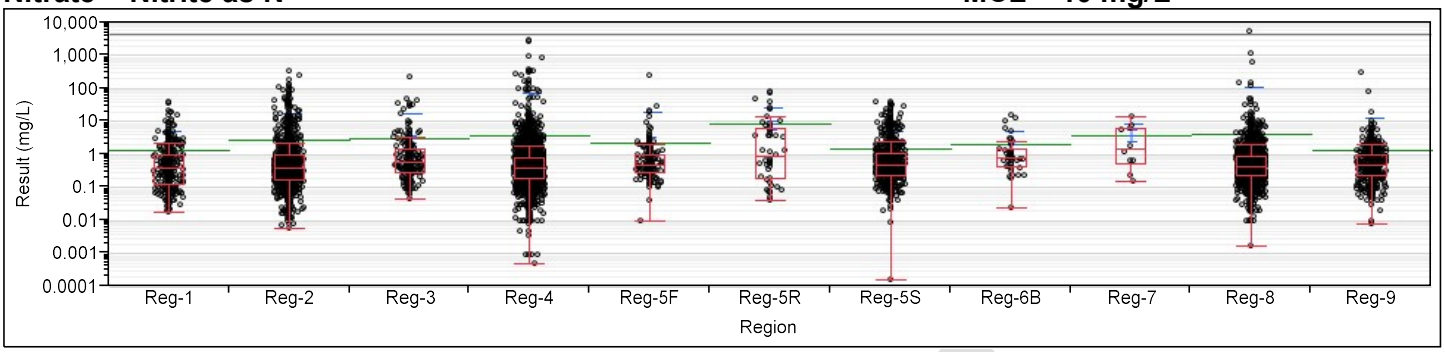
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	1	0.083	.	.	.	.
Reg-2	913	0.040	0.223	0.007	0.026	0.055
Reg-3	210	0.048	0.191	0.013	0.022	0.075
Reg-4	1400	0.055	0.496	0.013	0.029	0.081
Reg-5F	49	0.231	0.405	0.058	0.115	0.347
Reg-5R	35	0.006	0.005	0.001	0.004	0.007
Reg-5S	217	0.022	0.053	0.004	0.015	0.029
Reg-6B	19	0.006	0.006	0.001	0.003	0.009
Reg-7	3	0.017	0.003	0.002	0.010	0.025
Reg-8	811	0.629	14.935	0.524	-0.401	1.658
Reg-9	351	0.017	0.046	0.002	0.012	0.022

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	1	10	11	0	0
Reg-2	913	129	1042	59	6
Reg-3	210	18	228	17	7
Reg-4	1400	122	1522	96	6
Reg-5F	49	1	50	15	30
Reg-5R	35	6	41	0	0
Reg-5S	217	28	245	10	4
Reg-6B	19	0	19	0	0
Reg-7	3	0	3	0	0
Reg-8	811	160	971	71	7
Reg-9	351	48	399	11	3

DRAFT

Nitrate + Nitrite as N MCL = 10 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.018	0.0674	0.13	0.4	0.99	2.96	39
Reg-2	0.006	0.0983	0.18	0.38	1	3.8	340
Reg-3	0.048	0.14	0.2825	0.575	1.5	3.95	229
Reg-4	0.0005	0.1039	0.2	0.3965	0.851	2	3021.03
Reg-5F	0.01	0.19	0.302	0.5	1	2.2354	240
Reg-5R	0.04	0.0796	0.2025	0.865	6.525	27.3	83
Reg-5S	0.00017	0.13	0.2355	0.47	1.1	2.892	40.4
Reg-6B	0.0241	0.236	0.42	0.85	1.45	5.72	16
Reg-7	0.159	0.1661	0.5375	1.56	6.6	14.28	15
Reg-8	0.0018	0.12	0.23	0.447	0.948	2.157	5570
Reg-9	0.008	0.12	0.24	0.495	1.01	1.8	307

Means and Std Deviations

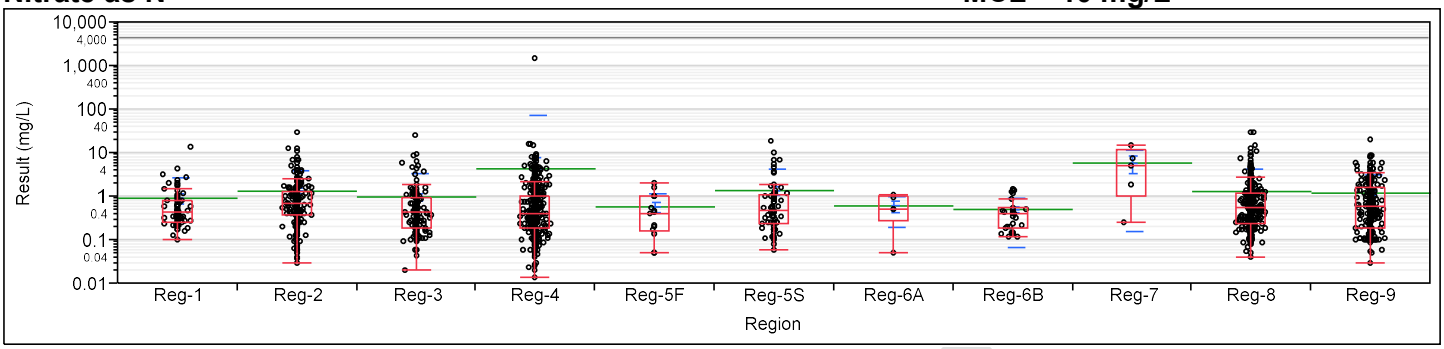
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	463	1	4	0.2	1.0	2
Reg-2	1892	3	14	0.3	2.2	3
Reg-3	284	3	15	0.9	1.3	5
Reg-4	4578	4	67	1.0	2.0	6
Reg-5F	223	2	16	1.1	0.2	4
Reg-5R	48	8	18	2.6	3.1	14
Reg-5S	1273	2	4	0.1	1.3	2
Reg-6B	45	2	3	0.5	1.0	3
Reg-7	10	4	5	1.5	0.5	7
Reg-8	2630	4	112	2.2	-0.3	8
Reg-9	843	1	11	0.4	0.6	2

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	463	71	534	12	2
Reg-2	1892	175	2067	91	4
Reg-3	284	61	345	12	3
Reg-4	4578	301	4879	68	1
Reg-5F	223	27	250	5	2
Reg-5R	48	7	55	8	15
Reg-5S	1273	141	1414	33	2
Reg-6B	45	4	49	3	6
Reg-7	10	0	10	1	10
Reg-8	2630	202	2832	29	1
Reg-9	843	32	875	4	0

DRAFT

Nitrate as N

MCL = 10 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.1	0.204	0.26	0.43	0.8075	2	14
Reg-2	0.03	0.1294	0.364	0.67	1.235	2.56	30
Reg-3	0.02	0.12	0.19	0.43	0.92	1.54	26
Reg-4	0.014	0.11	0.18	0.412	1	2.8	1520
Reg-5F	0.05	0.05	0.1625	0.41	0.9775	1.79	2
Reg-5S	0.06	0.12	0.24	0.48	1.05	4.08	18.5
Reg-6A	0.05	0.05	0.275	0.5	1.005	1.1	1.1
Reg-6B	0.12	0.138	0.185	0.39	0.5425	1.4	1.5
Reg-7	0.26	0.26	1.03	5.2	11.25	15	15
Reg-8	0.039	0.1349	0.23	0.5275	1.2	2.644	29
Reg-9	0.03	0.1	0.19	0.565	1.56	3.182	20.3

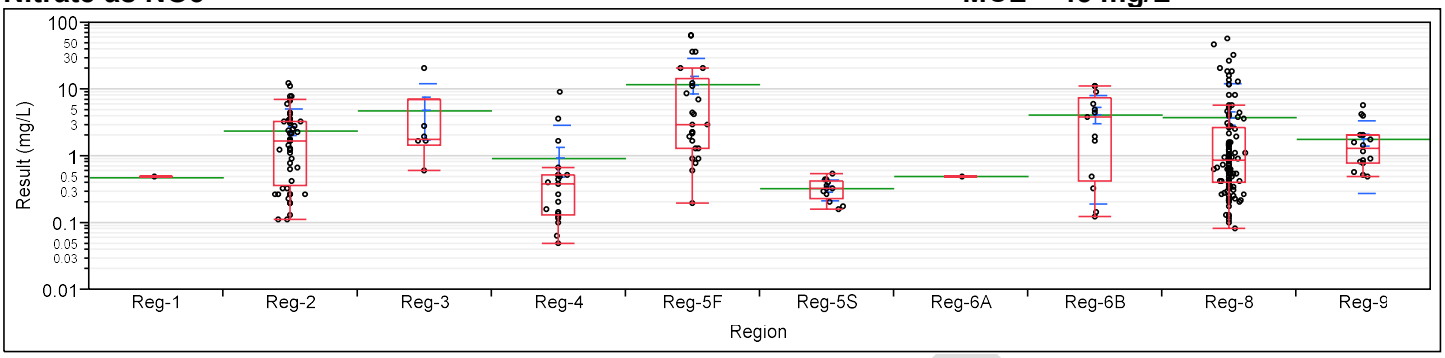
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	66	0.9	1.8	0.22	0.5	1.4
Reg-2	213	1.3	2.7	0.18	1.0	1.7
Reg-3	155	1.0	2.4	0.20	0.6	1.4
Reg-4	456	4.4	71.2	3.33	-2.1	10.9
Reg-5F	14	0.6	0.6	0.16	0.2	0.9
Reg-5S	65	1.4	2.8	0.35	0.7	2.1
Reg-6A	5	0.6	0.4	0.18	0.1	1.1
Reg-6B	28	0.5	0.4	0.08	0.3	0.7
Reg-7	5	6.0	5.8	2.59	-1.2	13.2
Reg-8	296	1.3	2.9	0.17	1.0	1.7
Reg-9	292	1.2	1.9	0.11	1.0	1.4

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	66	9	75	1	1
Reg-2	213	33	246	4	2
Reg-3	155	34	189	1	1
Reg-4	456	39	495	4	1
Reg-5F	14	0	14	0	0
Reg-5S	65	9	74	1	1
Reg-6A	5	1	6	0	0
Reg-6B	28	25	53	0	0
Reg-7	5	1	6	1	17
Reg-8	296	35	331	5	2
Reg-9	292	13	305	1	0

DRAFT

Nitrate as NO3 MCL = 45 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.48	0.48	0.48	0.48	0.48	0.48	0.48
Reg-2	0.11	0.218	0.3525	1.7	3.2	6.76	12
Reg-3	0.61	0.61	1.4275	1.8	7.1	20	20
Reg-4	0.05	0.0706	0.1285	0.37	0.52	3.148	9.03
Reg-5F	0.19	0.715	1.3	3	14.25	43.8	64
Reg-5S	0.16	0.166	0.2225	0.32	0.42	0.52	0.55
Reg-6A	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Reg-6B	0.12	0.128	0.415	3.8	7.35	11	11
Reg-8	0.08	0.22	0.39625	0.875	2.65	11.59	56.4
Reg-9	0.5	0.507	0.775	1.3	2.07	4.599	5.74

Means and Std Deviations

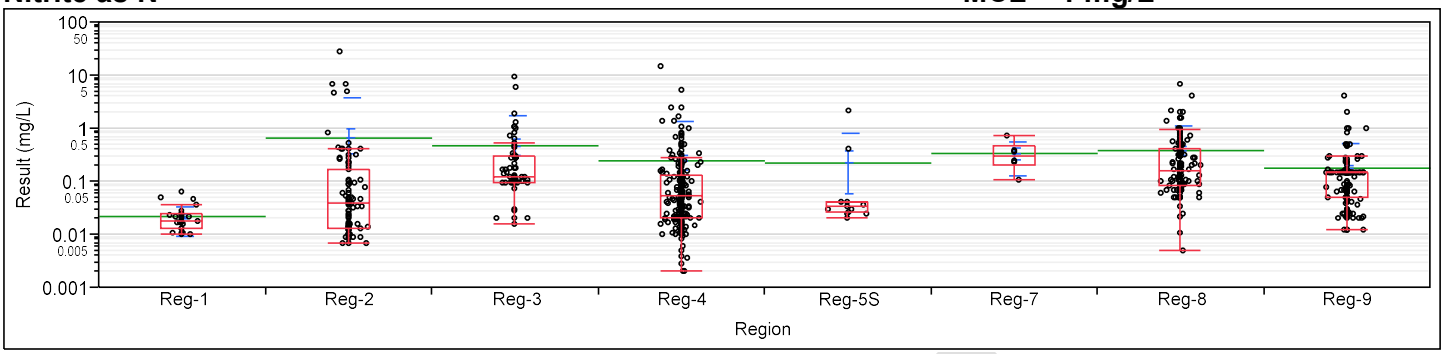
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	1	0.5	.	.	.	.
Reg-2	56	2.4	2.6	0.35	1.69	3.1
Reg-3	6	4.8	7.5	3.06	-3.07	12.6
Reg-4	21	0.9	2.0	0.44	0.01	1.8
Reg-5F	26	11.9	18.1	3.55	4.60	19.2
Reg-5S	12	0.3	0.1	0.03	0.25	0.4
Reg-6A	1	0.5	.	.	.	.
Reg-6B	13	4.2	4.0	1.10	1.77	6.6
Reg-8	110	3.8	8.6	0.82	2.18	5.4
Reg-9	16	1.8	1.5	0.38	0.99	2.6

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	1	0	1	0	0
Reg-2	56	15	71	0	0
Reg-3	6	4	10	0	0
Reg-4	21	0	21	0	0
Reg-5F	26	0	26	2	8
Reg-5S	12	0	12	0	0
Reg-6A	1	0	1	0	0
Reg-6B	13	15	28	0	0
Reg-8	110	8	118	2	2
Reg-9	16	0	16	0	0

DRAFT

Nitrite as N

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.01	0.0108	0.013	0.018	0.024	0.0464	0.062
Reg-2	0.007	0.009	0.013	0.038	0.17	0.406	27
Reg-3	0.016	0.0644	0.096	0.12	0.29	1.02	9.1
Reg-4	0.002	0.0122	0.02	0.054	0.131	0.338	14.9
Reg-5S	0.02	0.0216	0.0255	0.033	0.0405	1.48	2.2
Reg-7	0.11	0.11	0.2	0.305	0.4725	0.72	0.72
Reg-8	0.005	0.05	0.08	0.16	0.42	0.84	7
Reg-9	0.012	0.02404	0.051	0.15	0.15	0.2596	4

Means and Std Deviations

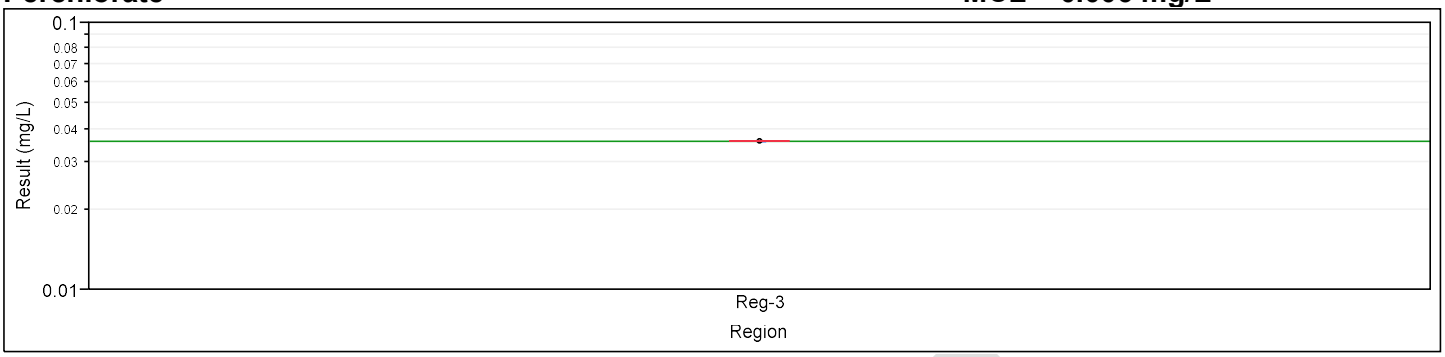
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	27	0.02	0.01	0.002	0.017	0.03
Reg-2	87	0.67	3.10	0.333	0.004	1.33
Reg-3	67	0.48	1.32	0.162	0.156	0.80
Reg-4	211	0.25	1.12	0.077	0.096	0.40
Reg-5S	13	0.23	0.60	0.167	-0.137	0.59
Reg-7	6	0.34	0.21	0.086	0.122	0.56
Reg-8	140	0.39	0.76	0.064	0.262	0.52
Reg-9	171	0.18	0.36	0.028	0.126	0.24

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	27	52	79	0	0
Reg-2	87	101	188	5	3
Reg-3	67	81	148	6	4
Reg-4	211	132	343	8	2
Reg-5S	13	15	28	1	4
Reg-7	6	0	6	0	0
Reg-8	140	144	284	9	3
Reg-9	171	78	249	3	1

DRAFT

Perchlorate

MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-3	0.036	0.036	0.036	0.036	0.036	0.036	0.036

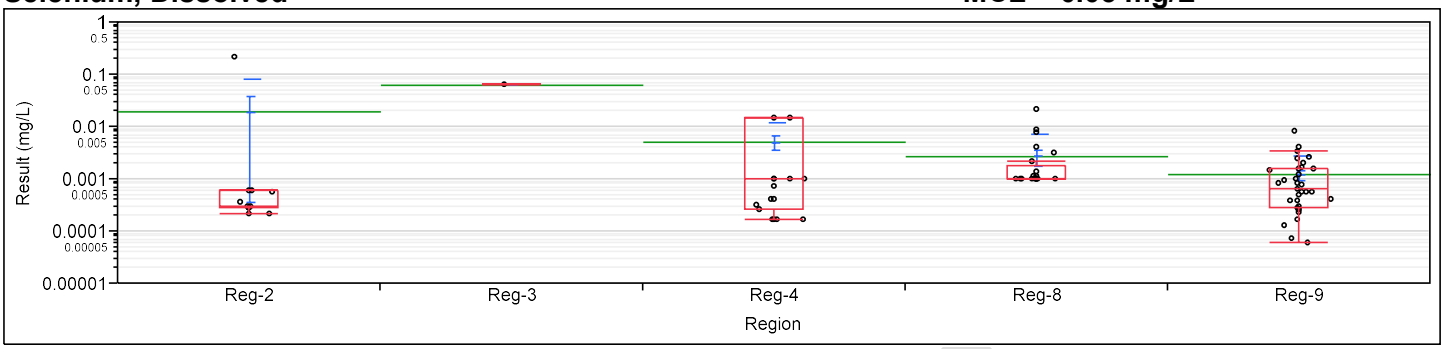
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-3	1	0.036	.	.	.	.

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-3	1	3	4	1	25
Reg-5S	0	8	8	0	0

DRAFT

Selenium, Dissolved MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.00022	0.00022	0.00027	0.0003	0.00059	0.168118	0.21
Reg-3	0.063	0.063	0.063	0.063	0.063	0.063	0.063
Reg-4	0.000168	0.000168	0.000254	0.001	0.015	0.015	0.015
Reg-8	0.001	0.001	0.001	0.001	0.00175	0.00818	0.022
Reg-9	0.000061	0.000147	0.000285	0.00062	0.001575	0.003066	0.0084

Means and Std Deviations

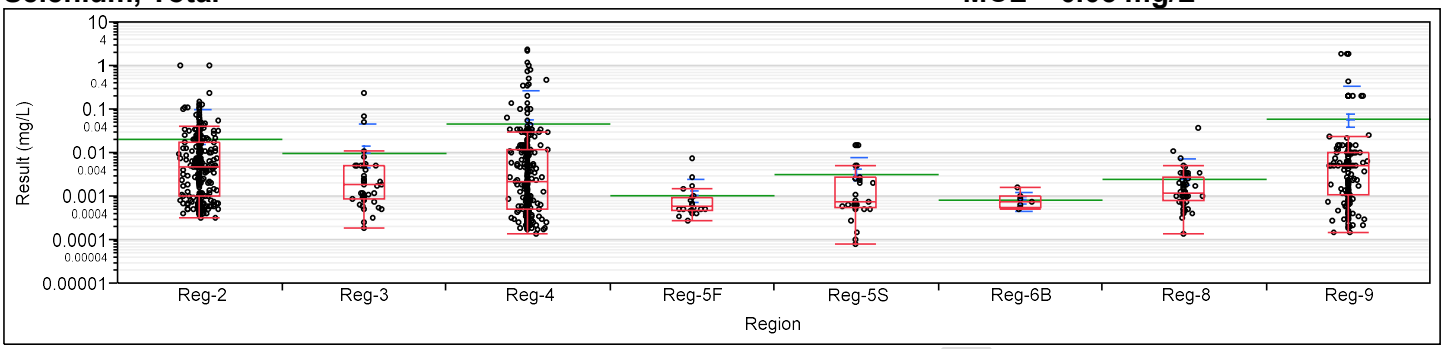
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	11	0.019	0.063	0.0191	-0.0230	0.062
Reg-3	1	0.063	.	.	.	.
Reg-4	19	0.005	0.007	0.0016	0.0018	0.008
Reg-8	25	0.003	0.005	0.0009	0.0008	0.005
Reg-9	33	0.001	0.002	0.0003	0.0007	0.002

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	11	3	14	1	7
Reg-3	1	0	1	1	100
Reg-4	19	10	29	0	0
Reg-8	25	61	86	0	0
Reg-9	33	9	42	0	0

DRAFT

Selenium, Total

MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.00032	0.000554	0.001	0.0046	0.0173	0.0383	1
Reg-3	0.000191	0.0005	0.000839	0.00185	0.005	0.00883	0.23
Reg-4	0.00014	0.00026	0.000495	0.0021	0.012	0.034	2.4
Reg-5F	0.00027	0.000351	0.000468	0.000595	0.000925	0.0024	0.0071
Reg-5S	0.00008	0.00015	0.00053	0.00076	0.0027	0.015	0.015
Reg-6B	0.0005	0.0005	0.00055	0.00071	0.001	0.0016	0.0016
Reg-8	0.00014	0.000458	0.000816	0.001205	0.002743	0.003751	0.0377
Reg-9	0.000142	0.000402	0.0011	0.005	0.01	0.0206	1.8

Means and Std Deviations

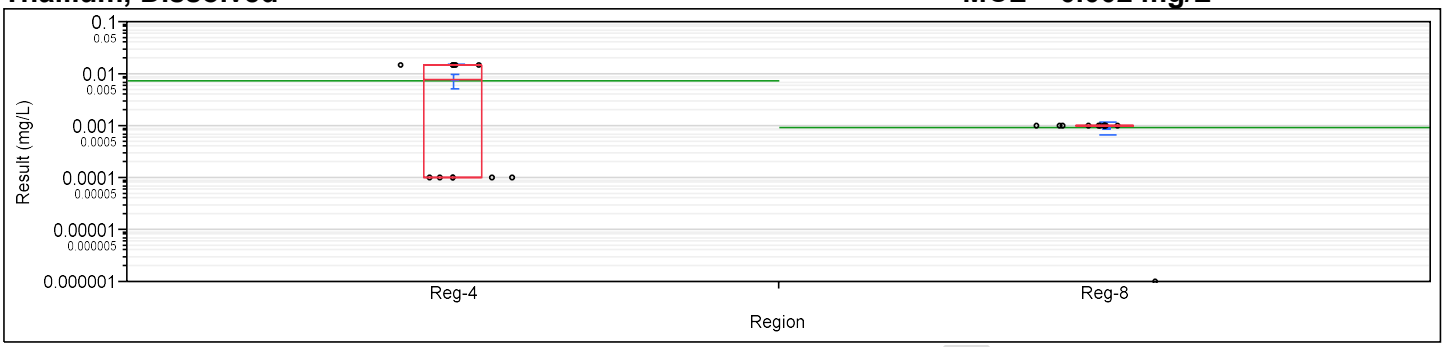
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	316	0.0207	0.0828	0.0047	0.0115	0.030
Reg-3	46	0.0099	0.0353	0.0052	-0.0005	0.020
Reg-4	285	0.0466	0.2269	0.0134	0.0201	0.073
Reg-5F	22	0.0011	0.0015	0.0003	0.0004	0.002
Reg-5S	29	0.0032	0.0050	0.0009	0.0013	0.005
Reg-6B	7	0.0008	0.0004	0.0001	0.0005	0.001
Reg-8	56	0.0025	0.0051	0.0007	0.0011	0.004
Reg-9	171	0.0598	0.2754	0.0211	0.0182	0.101

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	316	363	679	24	4
Reg-3	46	40	86	2	2
Reg-4	285	416	701	21	3
Reg-5F	22	19	41	0	0
Reg-5R	0	2	2	0	0
Reg-5S	29	21	50	0	0
Reg-6B	7	3	10	0	0
Reg-8	56	206	262	0	0
Reg-9	171	172	343	14	4

DRAFT

Thallium, Dissolved

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-4	0.000101	0.000101	0.000101	0.007551	0.015	0.015	0.015
Reg-8	0.000001	0.0008	0.001	0.001	0.001	0.001	0.001

Means and Std Deviations

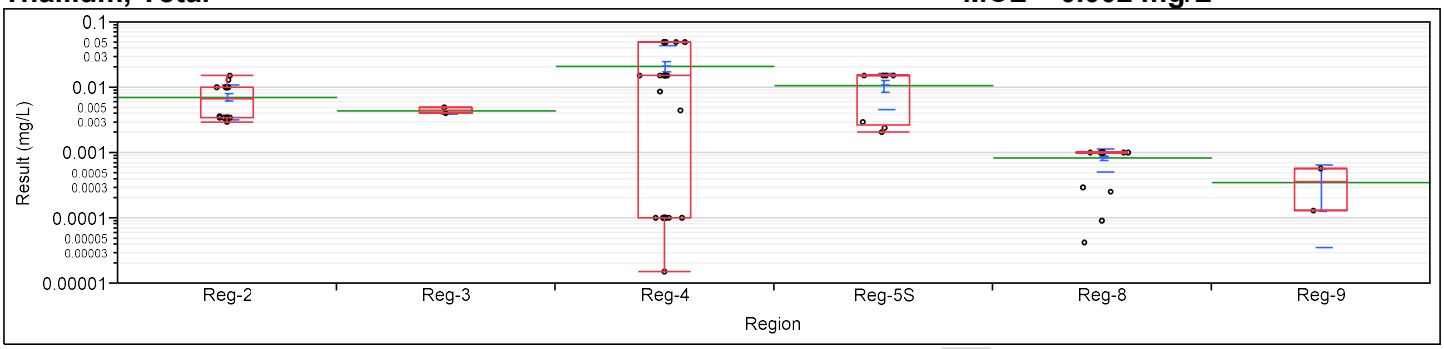
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-4	12	0.007551	0.007781	0.00225	0.00261	0.01249
Reg-8	17	0.000941	0.000242	5.88e-5	0.00082	0.00107

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	0	10	10	0	0
Reg-4	12	30	42	6	14
Reg-8	17	31	48	0	0

DRAFT

Thallium, Total

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.003	0.0035	0.0035	0.0068	0.01	0.0127	0.015
Reg-3	0.00408	0.00408	0.00408	0.004445	0.00481	0.00481	0.00481
Reg-4	0.000015	0.0001	0.000101	0.015	0.05	0.05	0.05
Reg-5S	0.002	0.002	0.0027	0.015	0.015	0.015	0.015
Reg-8	0.000042	0.000123	0.001	0.001	0.001	0.001	0.001
Reg-9	0.00013	0.00013	0.00013	0.000355	0.00058	0.00058	0.00058

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	20	0.0071	0.0040	0.0009	0.0053	0.009
Reg-3	2	0.0044	0.0005	0.0004	-0.0002	0.009
Reg-4	29	0.0213	0.0219	0.0041	0.0130	0.030
Reg-5S	9	0.0108	0.0063	0.0021	0.0060	0.016
Reg-8	21	0.0008	0.0003	0.0001	0.0007	0.001
Reg-9	2	0.0004	0.0003	0.0002	-0.0025	0.003

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	20	184	204	20	10
Reg-3	2	19	21	2	10
Reg-4	29	132	161	19	12
Reg-5S	9	7	16	8	50
Reg-8	21	85	106	0	0
Reg-9	2	21	23	0	0

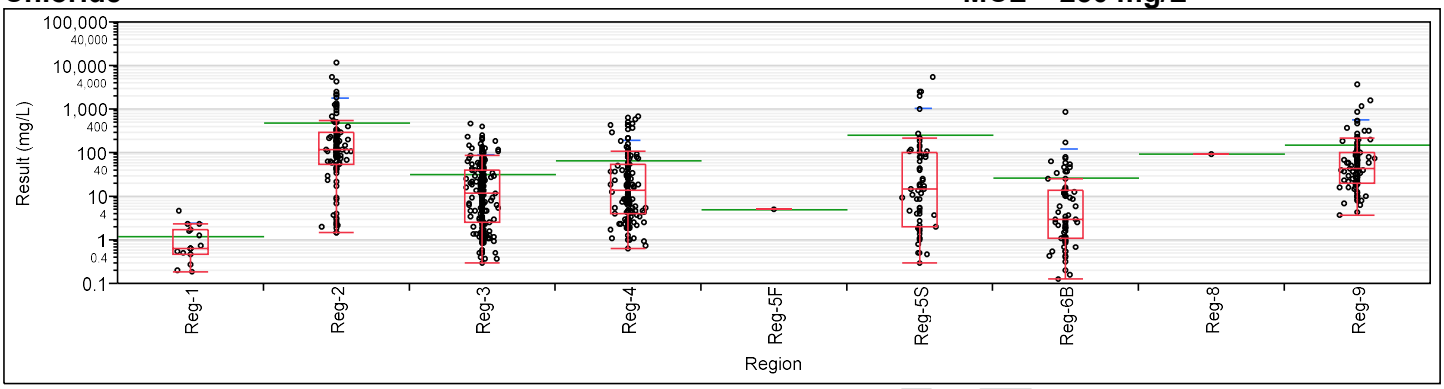
DRAFT

A1-E
SMARTS Data by Region: Secondary Standards

DRAFT

Chloride

MCL = 250 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.19	0.196	0.48	0.64	1.7	3.36	4.8
Reg-2	1.42	3.328	56	120	290	1270	12000
Reg-3	0.3	1.1	2.425	12	39	82.1	450
Reg-4	0.62	1.99	3.975	14	52.25	211	680
Reg-5F	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Reg-5S	0.29	1.03	2.06	15	100.25	252	5300
Reg-6B	0.13	0.438	1.1	2.9	14	56.2	830
Reg-8	96	96	96	96	96	96	96
Reg-9	3.73	10	20	42.95	102.75	322.4	3810

Means and Std Deviations

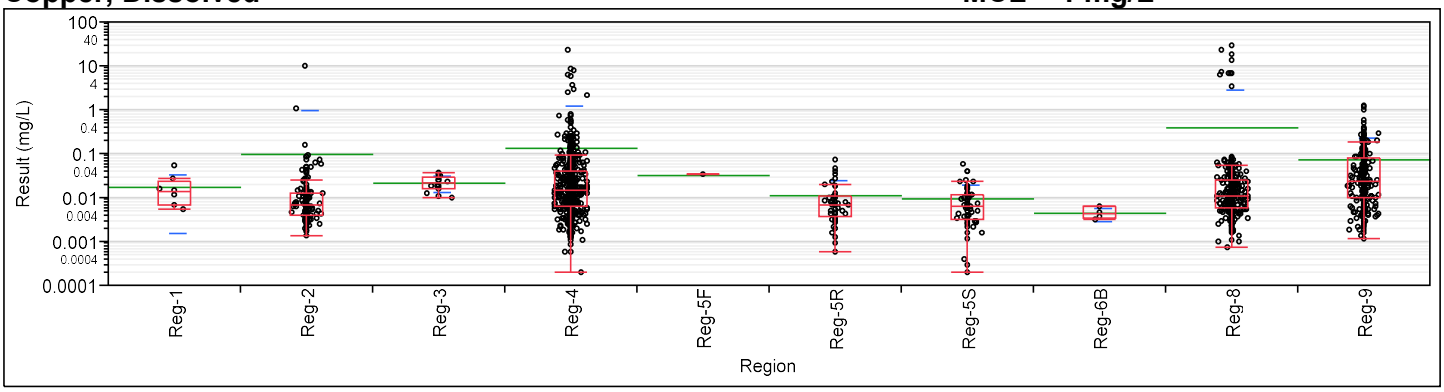
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	15	1	1	0.3	0.5	2
Reg-2	102	496	1397	138.3	221.7	770
Reg-3	248	32	58	3.7	25.1	39
Reg-4	138	67	133	11.3	44.4	89
Reg-5F	1	5	.	.	.	.
Reg-5S	62	258	838	106.4	45.5	471
Reg-6B	67	27	103	12.6	1.9	52
Reg-8	1	96	.	.	.	.
Reg-9	96	155	440	44.9	66.1	244

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	15	0	15	0	0
Reg-2	102	0	102	28	27
Reg-3	248	20	268	2	1
Reg-4	138	0	138	12	9
Reg-5F	1	0	1	0	0
Reg-5S	62	0	62	6	10
Reg-6B	67	4	71	1	1
Reg-8	1	1	2	0	0
Reg-9	96	0	96	11	11

DRAFT

Copper, Dissolved

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0054	0.0054	0.00685	0.01315	0.0241	0.054	0.054
Reg-2	0.0014	0.00303	0.0041	0.0066	0.013	0.0497	10
Reg-3	0.01	0.01056	0.015325	0.02125	0.02915	0.03498	0.0382
Reg-4	0.0002	0.0032	0.0063	0.0142	0.04	0.11	23
Reg-5F	0.033	0.033	0.033	0.033	0.033	0.033	0.033
Reg-5R	0.0006	0.0018	0.003675	0.00695	0.011	0.03	0.076
Reg-5S	0.0002	0.0016	0.0032	0.0062	0.012	0.023	0.059
Reg-6B	0.0032	0.0032	0.0033	0.0042	0.006075	0.0065	0.0065
Reg-8	0.00075	0.0036	0.0057	0.011	0.0245	0.05152	30
Reg-9	0.0012	0.00461	0.01	0.024	0.0795	0.19	1.3

Means and Std Deviations

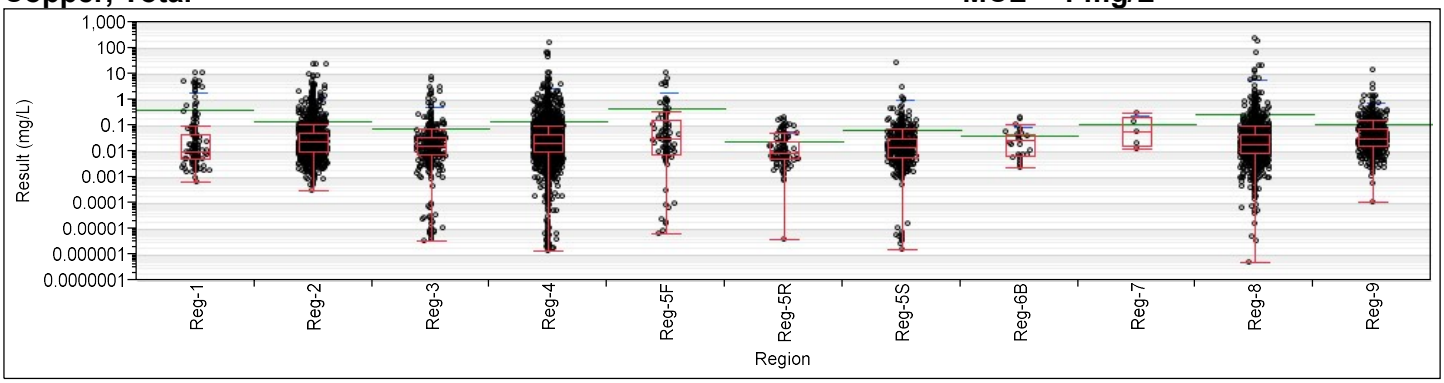
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	8	0.018	0.016	0.0057	0.004	0.031
Reg-2	132	0.099	0.874	0.0761	-0.052	0.249
Reg-3	16	0.022	0.008	0.0021	0.018	0.027
Reg-4	648	0.137	1.090	0.0428	0.053	0.222
Reg-5F	1	0.033	.	.	.	.
Reg-5R	44	0.011	0.014	0.0021	0.007	0.016
Reg-5S	59	0.010	0.011	0.0014	0.007	0.012
Reg-6B	4	0.005	0.001	0.0007	0.002	0.007
Reg-8	321	0.399	2.603	0.1453	0.113	0.685
Reg-9	250	0.075	0.151	0.0095	0.056	0.094

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	8	0	8	0	0
Reg-2	132	7	139	2	1
Reg-3	16	0	16	0	0
Reg-4	648	16	664	9	1
Reg-5F	1	0	1	0	0
Reg-5R	44	6	50	0	0
Reg-5S	59	8	67	0	0
Reg-6B	4	1	5	0	0
Reg-8	321	38	359	10	3
Reg-9	250	10	260	2	1

DRAFT

Copper, Total

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.00069	0.00303	0.005	0.0105	0.043625	0.552	11
Reg-2	0.0003	0.0055	0.01	0.023	0.056075	0.1659	26
Reg-3	3.5e-6	0.00326	0.0078	0.017	0.0368	0.0754	8.1
Reg-4	1.4e-6	0.0048	0.01	0.0209	0.048075	0.12	175
Reg-5F	6.9e-6	0.0003	0.00825	0.03	0.16	0.82	11
Reg-5R	4.3e-6	0.002982	0.005	0.00905	0.025	0.0712	0.21
Reg-5S	1.7e-6	0.0032	0.0063	0.014	0.033	0.08408	27
Reg-6B	0.0023	0.0037	0.007	0.027	0.0485	0.107	0.208
Reg-7	0.013	0.013	0.0175	0.0574	0.227	0.305	0.305
Reg-8	5.4e-7	0.00452	0.009008	0.019	0.0454	0.1165	250
Reg-9	0.00012	0.009546	0.017	0.032	0.077	0.18	14

Means and Std Deviations

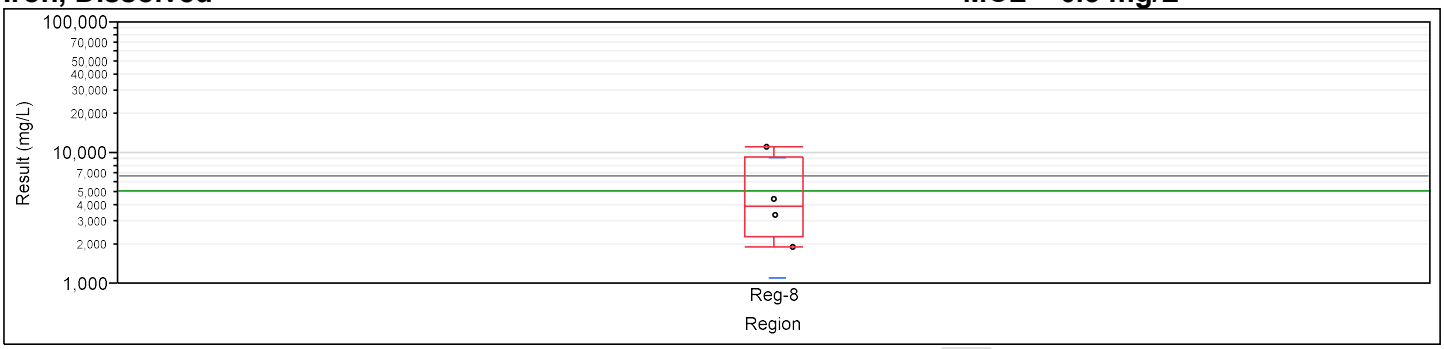
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	202	0.43	1.49	0.105	0.22	0.63
Reg-2	2900	0.14	1.03	0.019	0.11	0.18
Reg-3	735	0.08	0.45	0.016	0.05	0.11
Reg-4	6220	0.14	2.72	0.034	0.08	0.21
Reg-5F	109	0.44	1.46	0.140	0.16	0.72
Reg-5R	200	0.02	0.03	0.002	0.02	0.03
Reg-5S	948	0.07	0.89	0.029	0.01	0.12
Reg-6B	29	0.04	0.05	0.010	0.02	0.06
Reg-7	5	0.11	0.12	0.055	-0.04	0.26
Reg-8	2704	0.28	6.11	0.117	0.05	0.51
Reg-9	1307	0.11	0.69	0.019	0.07	0.15

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	202	48	250	17	7
Reg-2	2900	82	2982	53	2
Reg-3	735	31	766	10	1
Reg-4	6220	213	6433	69	1
Reg-5F	109	3	112	7	6
Reg-5R	200	16	216	0	0
Reg-5S	948	62	1010	5	0
Reg-6B	29	0	29	0	0
Reg-7	5	0	5	0	0
Reg-8	2704	118	2822	30	1
Reg-9	1307	35	1342	11	1

DRAFT

Iron, Dissolved

MCL = 0.3 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-8	1900	1900	2250	3850	9350	11000	11000

Means and Std Deviations

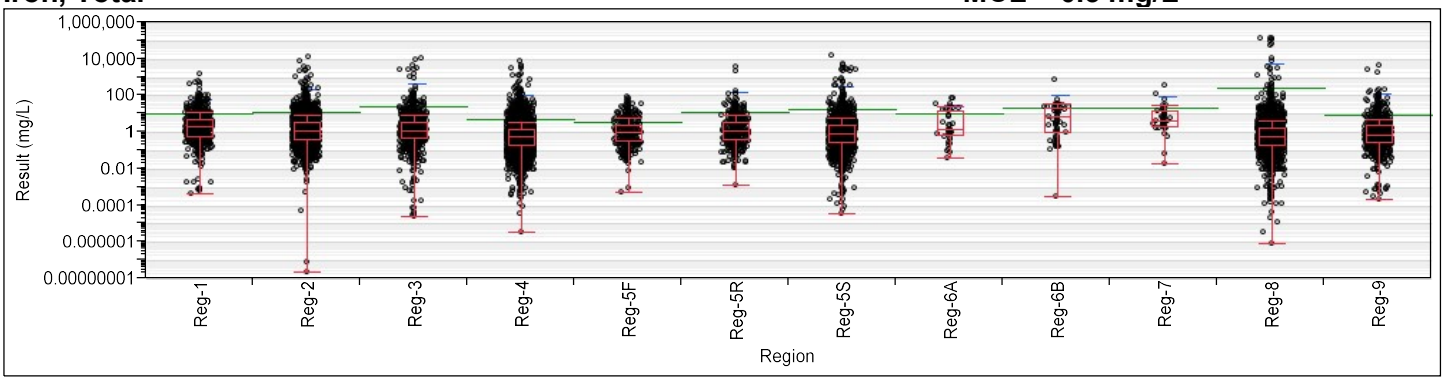
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-8	4	5150	4031.96	2016	-1266	11566

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-8	4	0	4	4	100

DRAFT

Iron, Total

MCL = 0.3 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0005	0.26	0.65	2	5.5	17	1600
Reg-2	2.6e-8	0.15	0.4	1.2	3.8	12.1	12800
Reg-3	0.000026	0.1632	0.48	1.26	3.9	10.5	11000
Reg-4	3.4e-6	0.07	0.2	0.57	1.56	4	7590
Reg-5F	0.00058	0.12	0.339	0.94	2.7	8.622	92
Reg-5R	0.0013	0.178	0.41525	1.2	3.905	11.65	3570
Reg-5S	0.000041	0.11	0.3	0.86	2.6	7.716	15260
Reg-6A	0.0413	0.13487	0.763175	1.441	14.69	35	82
Reg-6B	0.00032	0.21	1.01	6.83	21	32.8	720
Reg-7	0.02	1.044	2.05	4.68	14.4	32.4	385
Reg-8	9e-7	0.066	0.21	0.61	1.88	5.8	150000
Reg-9	0.00022	0.12	0.28	0.771	2.4	7.12	4300

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	1254	10	58	1.6	7	13
Reg-2	5529	13	226	3.0	7	19
Reg-3	1817	28	393	9.2	10	46
Reg-4	9884	5	112	1.1	3	8
Reg-5F	665	3	8	0.3	3	4
Reg-5R	774	13	154	5.5	2	23
Reg-5S	4261	17	300	4.6	8	26
Reg-6A	42	10	19	2.9	5	16
Reg-6B	81	21	80	8.9	3	38
Reg-7	41	21	62	9.7	1	40
Reg-8	4703	264	5350	78.0	111	417
Reg-9	1897	9	128	2.9	3	14

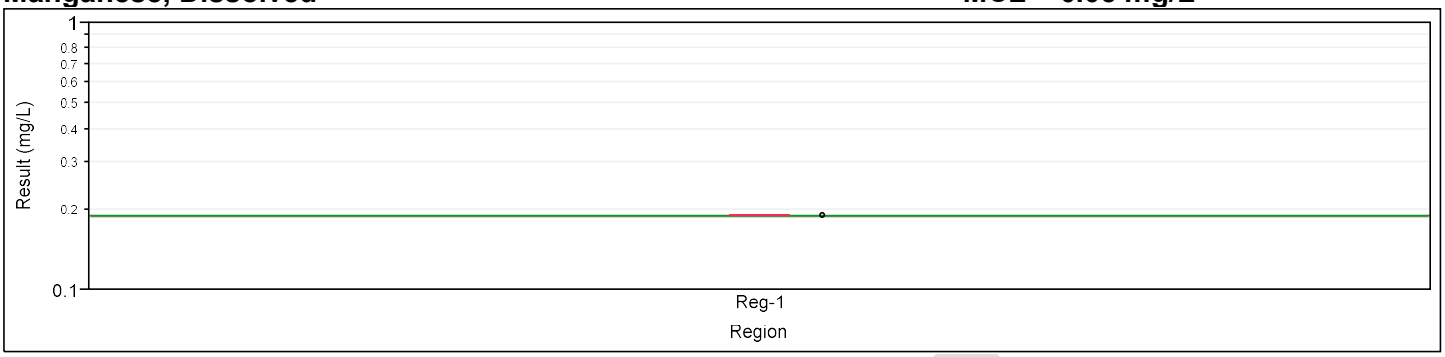
Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	1254	35	1289	1109	86
Reg-2	5529	249	5778	4436	77
Reg-3	1817	64	1881	1513	80
Reg-4	9884	474	10358	6518	63
Reg-5F	665	6	671	511	76
Reg-5R	774	18	792	629	79
Reg-5S	4261	125	4386	3190	73
Reg-6A	42	0	42	36	86
Reg-6B	81	7	88	69	78

DRAFT

Reg-7	41	0	41	39	95
Reg-8	4703	237	4940	3190	65
Reg-9	1897	42	1939	1401	72

DRAFT

Manganese, Dissolved MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.19	0.19	0.19	0.19	0.19	0.19	0.19

Means and Std Deviations

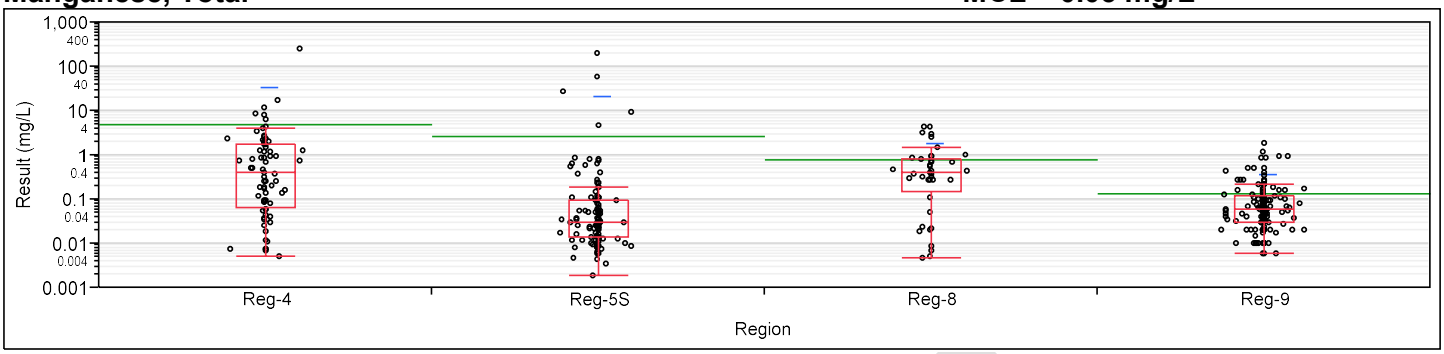
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	1	0.19	.	.	.	.

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	1	0	1	1	100

DRAFT

Manganese, Total

MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-4	0.0049	0.0138	0.0655	0.385	1.7	4.095	250
Reg-5S	0.0018	0.00818	0.0135	0.029	0.092	0.592	200
Reg-8	0.0046	0.00927	0.145	0.4055	0.82175	2.884	4.37
Reg-9	0.006	0.013	0.03	0.059	0.115	0.271	1.9

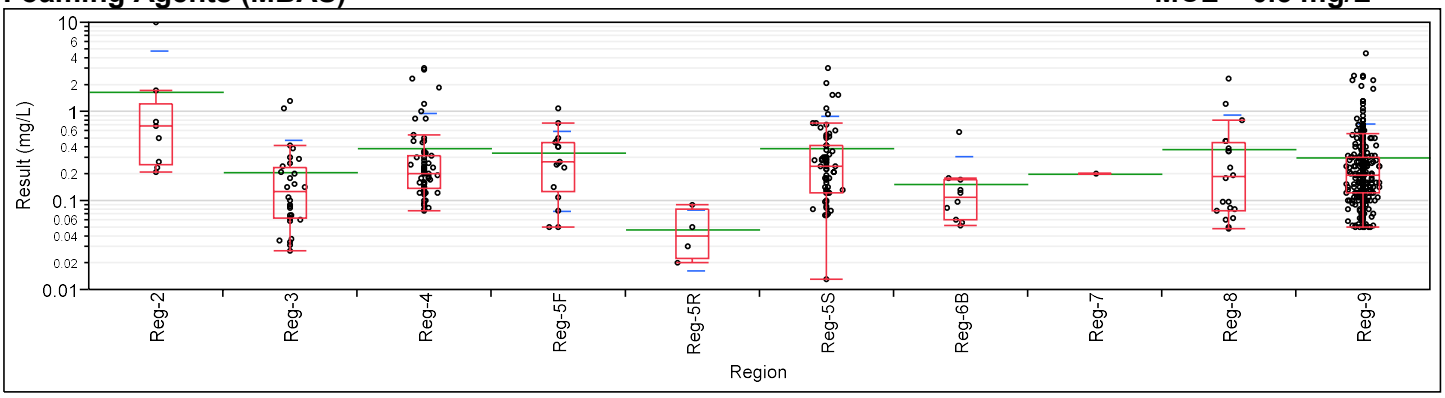
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-4	72	4.9	29.4	3.5	-2.0	11.8
Reg-5S	117	2.6	19.3	1.8	-0.9	6.2
Reg-8	40	0.8	1.1	0.2	0.4	1.2
Reg-9	135	0.1	0.2	0.0	0.1	0.2

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-4	72	0	72	57	79
Reg-5S	117	13	130	42	32
Reg-8	40	1	41	31	76
Reg-9	135	17	152	79	52

DRAFT

Foaming Agents (MBAS) MCL = 0.5 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.21	0.21	0.25	0.67	1.225	9.9	9.9
Reg-3	0.027	0.0346	0.064	0.125	0.2325	0.401	1.3
Reg-4	0.077	0.0927	0.1385	0.2	0.3145	0.847	3
Reg-5F	0.051	0.051	0.125	0.27	0.455	0.804	1.1
Reg-5R	0.02	0.02	0.0225	0.04	0.08	0.09	0.09
Reg-5S	0.013	0.0755	0.1225	0.24	0.4175	0.749	3
Reg-6B	0.053	0.0534	0.06	0.108	0.1725	0.549	0.59
Reg-7	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Reg-8	0.048	0.0511	0.07725	0.185	0.44	1.158	2.3
Reg-9	0.05	0.08	0.12	0.193	0.3	0.592	4.5

Means and Std Deviations

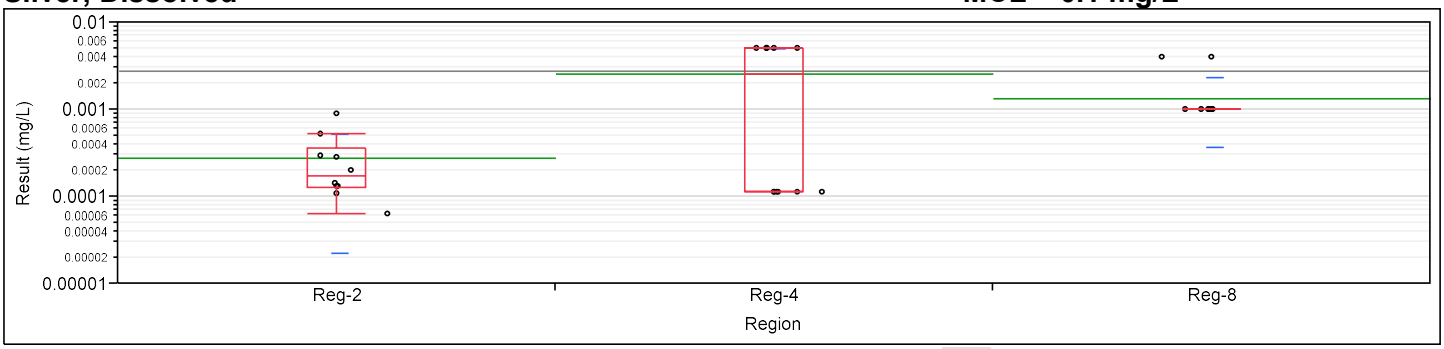
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	9	1.66	3.12	1.04	-0.743	4.1
Reg-3	32	0.21	0.28	0.05	0.107	0.3
Reg-4	68	0.39	0.59	0.07	0.245	0.5
Reg-5F	17	0.35	0.27	0.07	0.208	0.5
Reg-5R	4	0.05	0.03	0.02	-0.002	0.1
Reg-5S	68	0.39	0.49	0.06	0.268	0.5
Reg-6B	10	0.15	0.16	0.05	0.040	0.3
Reg-7	1	0.20	.	.	.	.
Reg-8	20	0.38	0.54	0.12	0.126	0.6
Reg-9	327	0.31	0.42	0.02	0.259	0.4

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	9	0	9	6	67
Reg-3	32	3	35	2	6
Reg-4	68	54	122	10	8
Reg-5F	17	0	17	3	18
Reg-5R	4	7	11	0	0
Reg-5S	68	24	92	15	16
Reg-6B	10	2	12	1	8
Reg-7	1	0	1	0	0
Reg-8	20	23	43	3	7
Reg-9	327	91	418	41	10

DRAFT

Silver, Dissolved

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.000064	6.86e-5	0.000125	0.00017	0.00035	0.000854	0.00089
Reg-4	0.000111	0.000111	0.000111	0.002556	0.005	0.005	0.005
Reg-8	0.001	0.001	0.001	0.001	0.001	0.004	0.004

Means and Std Deviations

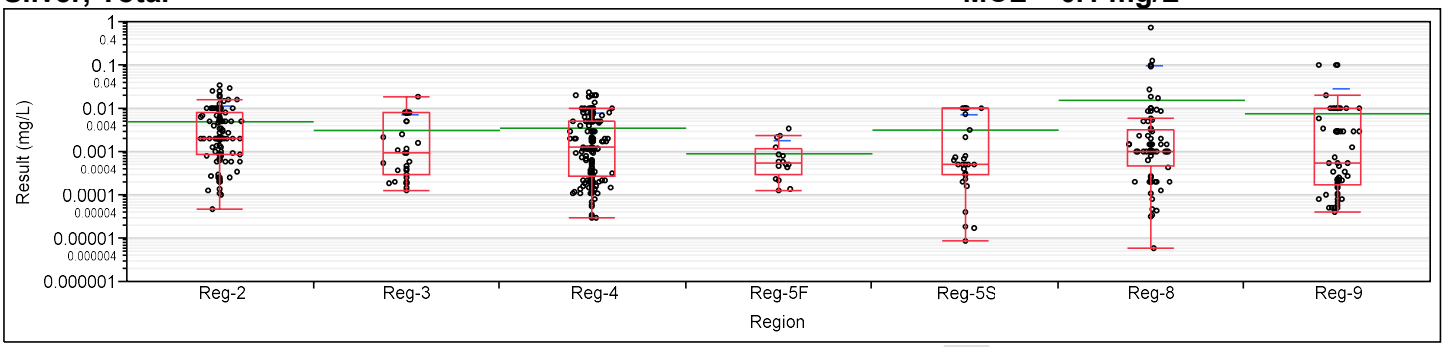
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	10	0.0003	0.0003	0.0001	0.00009	0.0005
Reg-4	12	0.0026	0.0026	0.0007	0.00093	0.0042
Reg-8	18	0.0013	0.0010	0.0002	0.00085	0.0018

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	10	7	17	0	0
Reg-3	0	16	16	0	0
Reg-4	12	66	78	0	0
Reg-8	18	82	100	0	0

DRAFT

Silver, Total

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-2	0.000046	0.000251	0.00089	0.002	0.007675	0.01	0.034
Reg-3	0.000124	0.000183	0.000286	0.00095	0.008	0.008	0.018
Reg-4	2.82e-5	0.00015	0.00027	0.0013	0.005	0.0099	0.023
Reg-5F	0.00013	0.000137	0.000285	0.00054	0.001198	0.00273	0.0035
Reg-5S	8.6e-6	2.22e-5	0.00029	0.0005	0.01	0.01	0.01
Reg-8	0.000006	0.000135	0.000479	0.001	0.00315	0.01	0.74
Reg-9	0.00004	0.000066	0.00017	0.00056	0.01	0.01	0.1

Means and Std Deviations

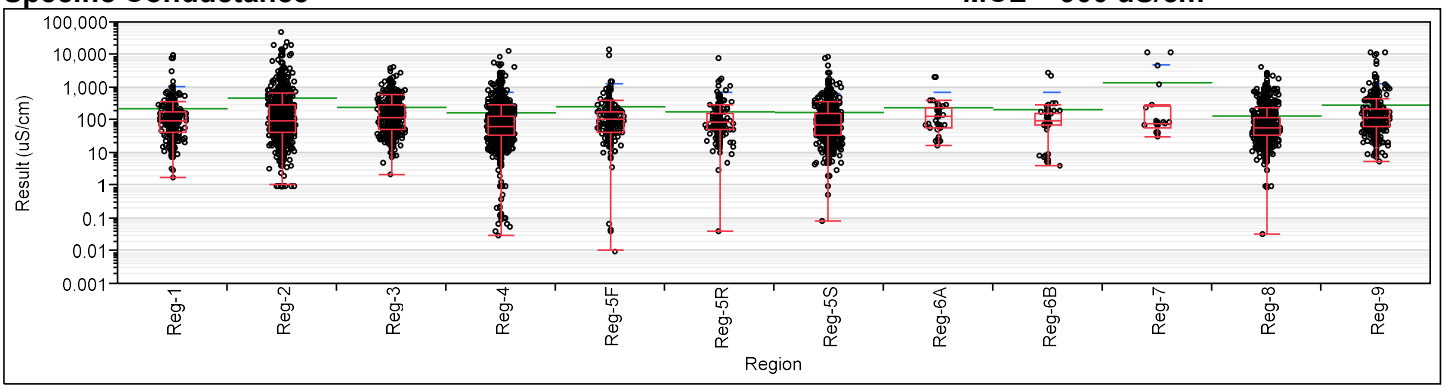
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-2	120	0.005	0.006	0.0006	0.0039	0.006
Reg-3	34	0.003	0.004	0.0007	0.0017	0.005
Reg-4	199	0.004	0.004	0.0003	0.0029	0.004
Reg-5F	16	0.001	0.001	0.0002	0.0004	0.001
Reg-5S	31	0.003	0.004	0.0008	0.0017	0.005
Reg-8	80	0.016	0.084	0.0094	-0.0030	0.035
Reg-9	65	0.008	0.021	0.0026	0.0025	0.013

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-2	120	329	449	0	0
Reg-3	34	122	156	0	0
Reg-4	199	476	675	0	0
Reg-5F	16	24	40	0	0
Reg-5R	0	2	2	0	0
Reg-5S	31	56	87	0	0
Reg-6B	0	13	13	0	0
Reg-8	80	224	304	2	1
Reg-9	65	78	143	0	0

DRAFT

Specific Conductance

MCL = 900 uS/cm



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	1.7	19	40	96	174	357	9500
Reg-2	1	21.92	42	95.9	300	909.6	51300
Reg-3	2.2	32.26	54.1	112	287.5	637	4010
Reg-4	0.03	18	33	65	133	336.3	12400
Reg-5F	0.01	24.16	43.8	100	180	388	13900
Reg-5R	0.039	23	50	83	154.7	320	7700
Reg-5S	0.078	19	33	73	164	346	8700
Reg-6A	16.7	22.42	57.755	130.2	243.75	380	2060
Reg-6B	3.8	7.23	69.25	98	166.25	293	2900
Reg-7	30	38	56	79	265	10022.4	11400
Reg-8	0.031	21	35	57.5	120	300	4340
Reg-9	5.6	32	62.85	114.5	208	504.7	12200

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	399	236	881	44	149	322
Reg-2	1331	491	2089	57	379	603
Reg-3	652	257	423	17	224	289
Reg-4	1636	173	526	13	147	198
Reg-5F	231	264	1130	74	117	410
Reg-5R	219	186	562	38	112	261
Reg-5S	889	178	493	17	145	210
Reg-6A	36	249	458	76	94	404
Reg-6B	48	216	513	74	67	365
Reg-7	21	1430	3457	754	-143	3004
Reg-8	1199	138	273	8	123	154
Reg-9	552	296	1012	43	211	380

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	399	21	420	8	2
Reg-2	1331	51	1382	134	10
Reg-3	652	25	677	31	5
Reg-4	1636	67	1703	44	3
Reg-5F	231	2	233	7	3
Reg-5R	219	21	240	6	3
Reg-5S	889	22	911	22	2
Reg-6A	36	0	36	2	6

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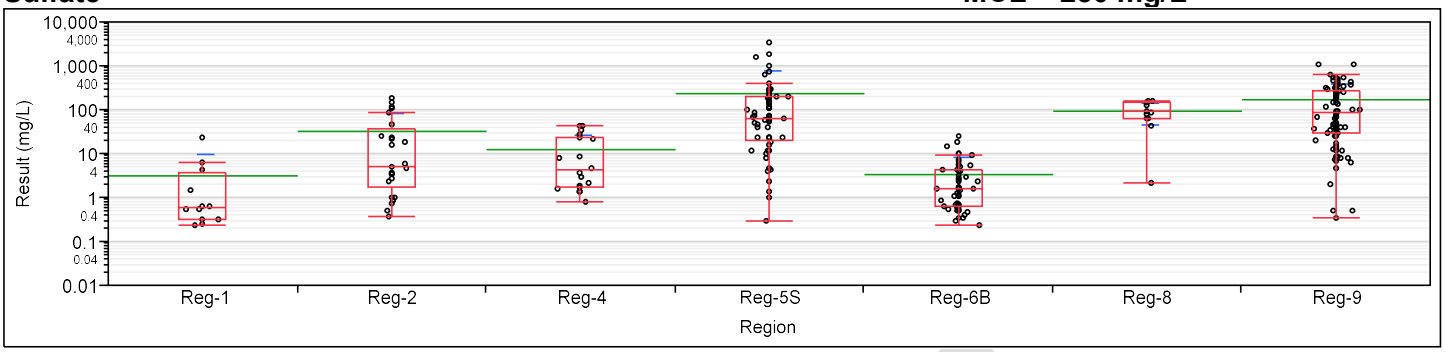
Reg-6B	48	1	49	2	4
Reg-7	21	0	21	4	19
Reg-8	1199	33	1232	27	2
Reg-9	552	7	559	19	3

DRAFT

Sulfate

MCL = 250 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.24	0.243	0.31	0.57	3.6	17.96	23
Reg-2	0.36	0.636	1.65	4.9	36	132	180
Reg-4	0.8	1.34	1.6825	4.3	24.1	41.73	42
Reg-5S	0.29	4.243	19.25	65.5	197.5	680	3300
Reg-6B	0.24	0.43	0.64	1.6	4.2	9.7	26
Reg-8	2.13	14.481	62.825	90.4	144.5	157.7	158
Reg-9	0.33	7.814	29	85	279	437.9	1090

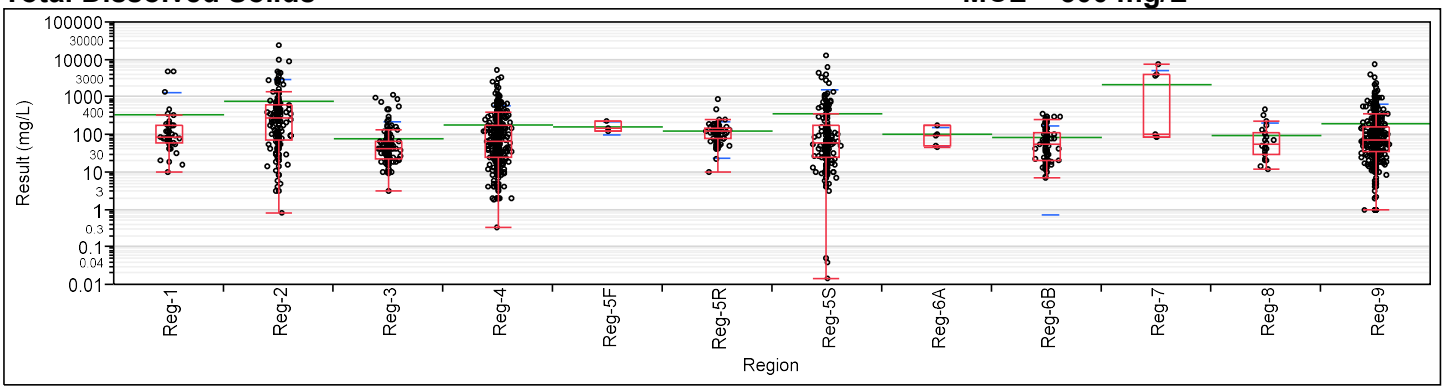
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	12	3	7	1.9	-1	7
Reg-2	25	33	52	10.4	12	55
Reg-4	18	13	15	3.5	5	20
Reg-5S	56	242	543	72.6	96	387
Reg-6B	54	3	5	0.7	2	5
Reg-8	12	96	49	14.2	65	127
Reg-9	86	177	212	22.9	131	222

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	12	0	12	0	0
Reg-2	25	0	25	0	0
Reg-4	18	1	19	0	0
Reg-5S	56	0	56	10	18
Reg-6B	54	0	54	0	0
Reg-8	12	0	12	0	0
Reg-9	86	5	91	24	26

DRAFT

Total Dissolved Solids MCL = 500 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	10	27	60	84	175	409.2	4830
Reg-2	0.828	24.5	72.5	265	617.5	1550	23000
Reg-3	3	18	23	40	66	128	1100
Reg-4	0.34	11.38	25	67	180	415.2	5140
Reg-5F	120	120	120	140	230	230	230
Reg-5R	10	48.6	74.5	118	146	188.8	894
Reg-5S	0.014	10	23.75	60.5	177.5	728	13000
Reg-6A	44	44	49.25	95.5	170	170	170
Reg-6B	7	13	21	53	110	232	360
Reg-7	85	85	86	98	3900	7400	7400
Reg-8	12	15.68	28	55	115	299.8	456
Reg-9	1	16	34.25	69	159.5	502.3	7370

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	45	348	981	146	53	643
Reg-2	164	791	2180	170	455	1127
Reg-3	171	79	150	11	57	102
Reg-4	427	186	420	20	146	226
Reg-5F	3	163	59	34	18	309
Reg-5R	85	128	104	11	105	150
Reg-5S	182	368	1206	89	192	545
Reg-6A	6	104	55	23	46	162
Reg-6B	83	86	86	9	68	105
Reg-7	7	2208	2896	1094	-470	4886
Reg-8	22	97	112	24	48	147
Reg-9	496	201	485	22	159	244

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	45	0	45	3	7
Reg-2	164	4	168	53	32
Reg-3	171	9	180	5	3
Reg-4	427	7	434	31	7
Reg-5F	3	0	3	0	0
Reg-5R	85	1	86	1	1
Reg-5S	182	5	187	31	17
Reg-6A	6	0	6	0	0

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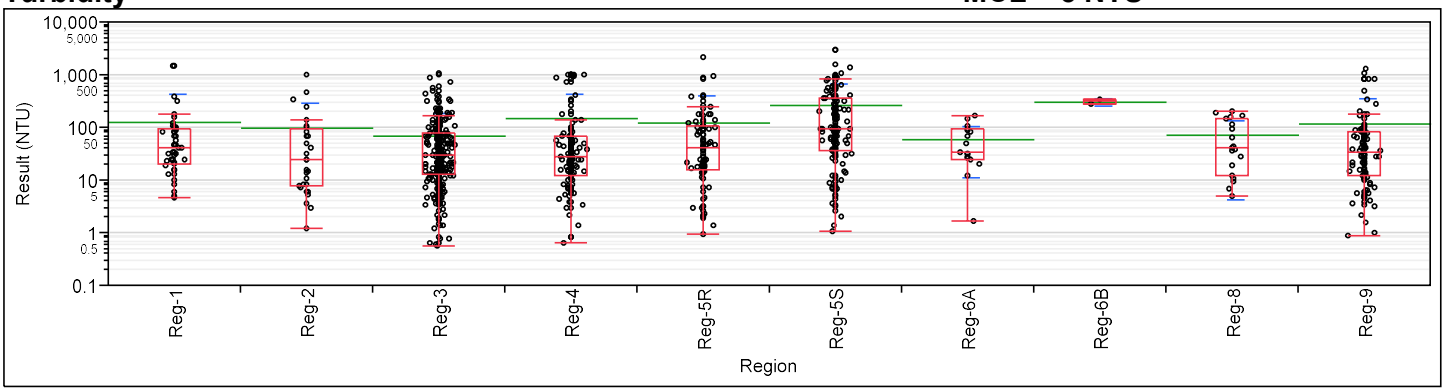
Reg-6B	83	0	83	0	0
Reg-7	7	0	7	3	43
Reg-8	22	1	23	0	0
Reg-9	496	13	509	49	10

DRAFT

Turbidity

MCL = 5 NTU



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	4.62	9.204	20.5	42	94.7	234.76	1476
Reg-2	1.2	3.5	7.55	25	91	340	1000
Reg-3	0.57	4.56	12.775	29	76.25	161.5	1057
Reg-4	0.621	5.55	12.4	27	67	867.4	1000
Reg-5R	0.92	2.9	15.275	39.95	109	270.7	2180
Reg-5S	1.1	7.44	35	94.5	350	740	3000
Reg-6A	1.7	9.94	25	33	92	153.8	169
Reg-6B	280	280	280	310	340	340	340
Reg-8	4.9	6.9	12	40	147	192	196
Reg-9	0.88	4.55	12.125	33.3	80.5	303.5	1282

Means and Std Deviations

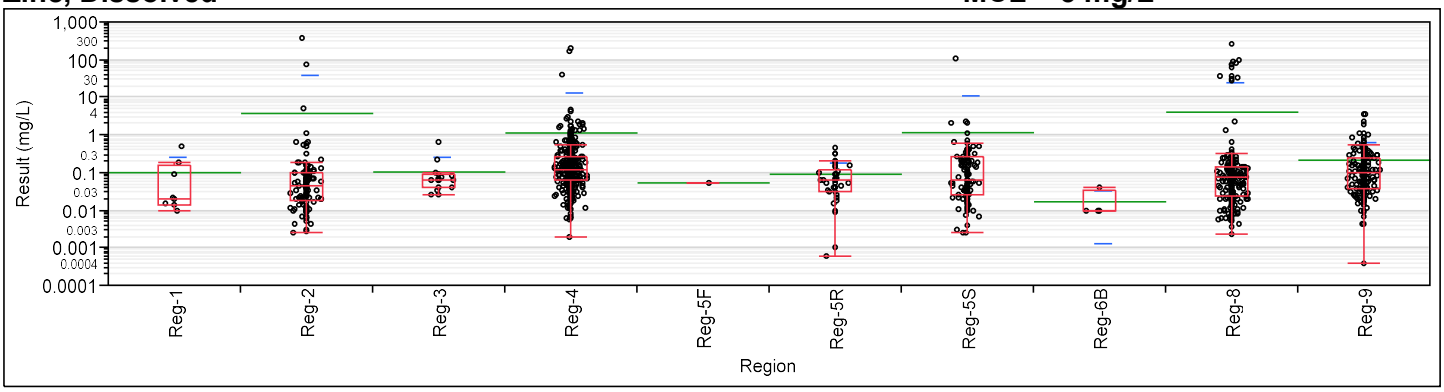
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	45	128	303	45	36.8	219
Reg-2	29	100	204	38	22.4	177
Reg-3	354	70	125	7	56.8	83
Reg-4	135	150	299	26	99.2	201
Reg-5R	88	124	281	30	64.0	183
Reg-5S	150	267	436	36	196.5	337
Reg-6A	17	60	49	12	34.8	85
Reg-6B	2	310	42	30	-71.2	691
Reg-8	19	73	68	16	39.8	106
Reg-9	104	118	242	24	71.1	165

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	45	0	45	43	96
Reg-2	29	0	29	26	90
Reg-3	354	0	354	316	89
Reg-4	135	0	135	124	92
Reg-5R	88	0	88	75	85
Reg-5S	150	0	150	141	94
Reg-6A	17	0	17	16	94
Reg-6B	2	0	2	2	100
Reg-8	19	0	19	18	95
Reg-9	104	0	104	93	89

DRAFT

Zinc, Dissolved

MCL = 5 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.0093	0.0093	0.014025	0.02	0.15775	0.476	0.476
Reg-2	0.0026	0.00894	0.01725	0.044	0.098	0.189	370
Reg-3	0.0248	0.02592	0.039975	0.0654	0.0877	0.3466	0.642
Reg-4	0.002	0.03014	0.0606	0.1205	0.26075	0.6312	200
Reg-5F	0.055	0.055	0.055	0.055	0.055	0.055	0.055
Reg-5R	0.0006	0.00925	0.03075	0.06215	0.1175	0.22	0.45
Reg-5S	0.0026	0.01198	0.026	0.062	0.27	0.428	110
Reg-6B	0.0093	0.0093	0.0093	0.0093	0.033075	0.041	0.041
Reg-8	0.0024	0.011	0.023	0.074	0.145	0.26	260
Reg-9	0.0004	0.02	0.038	0.096	0.235	0.462	3.7

Means and Std Deviations

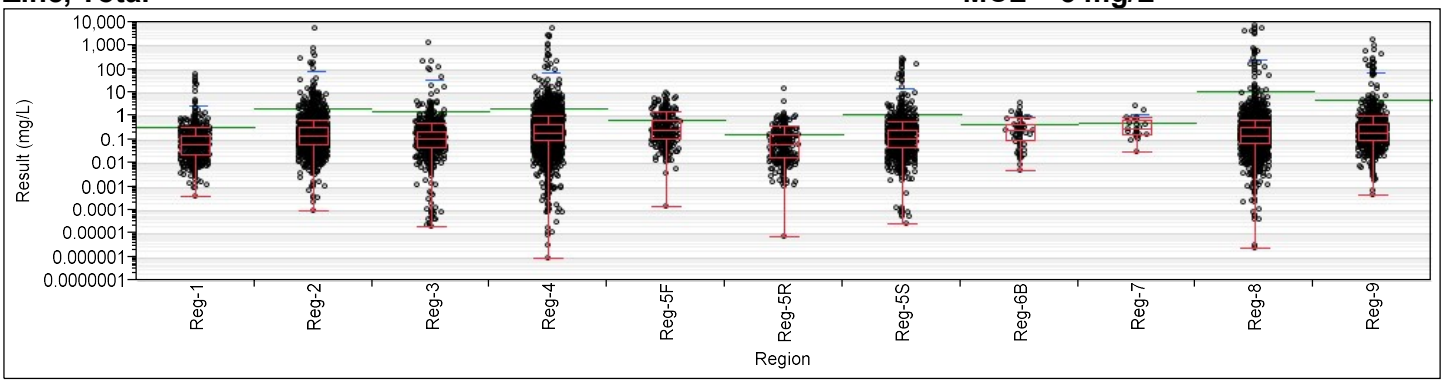
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	8	0.10	0.16	0.057	-0.033	0.24
Reg-2	120	3.84	34.40	3.140	-2.381	10.05
Reg-3	16	0.11	0.15	0.037	0.027	0.19
Reg-4	446	1.17	12.26	0.580	0.026	2.31
Reg-5F	1	0.06	.	.	.	.
Reg-5R	38	0.09	0.10	0.016	0.060	0.12
Reg-5S	111	1.19	10.43	0.990	-0.771	3.15
Reg-6B	4	0.02	0.02	0.008	-0.008	0.04
Reg-8	223	4.16	22.13	1.482	1.243	7.08
Reg-9	205	0.22	0.44	0.030	0.161	0.28

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	8	0	8	0	0
Reg-2	120	7	127	3	2
Reg-3	16	0	16	0	0
Reg-4	446	6	452	3	1
Reg-5F	1	0	1	0	0
Reg-5R	38	10	48	0	0
Reg-5S	111	1	112	1	1
Reg-6B	4	1	5	0	0
Reg-8	223	9	232	12	5
Reg-9	205	6	211	0	0

DRAFT

Zinc, Total

MCL = 5 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Reg-1	0.00039	0.011	0.023	0.061	0.15	0.34	59
Reg-2	0.0001	0.031	0.064	0.14	0.33	0.8076	5700
Reg-3	0.000022	0.024	0.051	0.105	0.24	0.5	1300
Reg-4	0.000001	0.044	0.096	0.201	0.46	1.1	6100
Reg-5F	0.00016	0.0496	0.11	0.26	0.7415	1.904	10
Reg-5R	7.9e-6	0.009812	0.0183	0.0623	0.18	0.4168	15
Reg-5S	2.78e-5	0.0221	0.05	0.112	0.28	0.58	287
Reg-6B	0.0053	0.0273	0.0925	0.25	0.4525	1.163	3.8
Reg-7	0.0335	0.10658	0.16725	0.3105	0.74	1.214	3
Reg-8	2.6e-6	0.033	0.076	0.152	0.331	0.716	7500
Reg-9	0.00048	0.053	0.101	0.209	0.466	1.1	1880

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Reg-1	1339	0.34	2.7	0.07	0.19	0.5
Reg-2	5147	2.03	80.9	1.13	-0.18	4.2
Reg-3	1529	1.67	34.6	0.89	-0.07	3.4
Reg-4	11087	2.25	74.9	0.71	0.86	3.6
Reg-5F	545	0.68	1.1	0.05	0.58	0.8
Reg-5R	641	0.17	0.6	0.03	0.12	0.2
Reg-5S	2629	1.25	13.2	0.26	0.75	1.8
Reg-6B	102	0.45	0.6	0.06	0.33	0.6
Reg-7	26	0.54	0.6	0.13	0.28	0.8
Reg-8	5349	11.94	236.2	3.23	5.61	18.3
Reg-9	2129	4.75	67.4	1.46	1.88	7.6

Region	Detected	ND	Total	Detected > MCL	% > MCL
Reg-1	1339	49	1388	10	1
Reg-2	5147	121	5268	48	1
Reg-3	1529	43	1572	11	1
Reg-4	11087	102	11189	146	1
Reg-5F	545	3	548	8	1
Reg-5R	641	17	658	1	0
Reg-5S	2629	108	2737	31	1
Reg-6B	102	0	102	0	0
Reg-7	26	0	26	0	0

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Reg-8	5349	82	5431	60	1
Reg-9	2129	15	2144	41	2

DRAFT

APPENDIX C
Statistical Summary of Combined-Source Detected Results by Land Use

DRAFT

Legend

o Data point

Quantiles

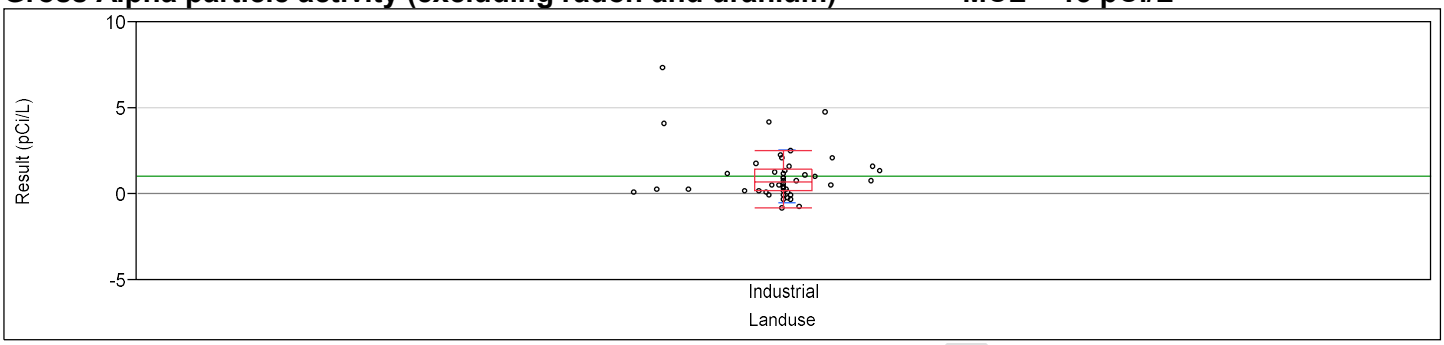
Mean

Standard Deviation

C-1
Radionuclides

DRAFT

Gross Alpha particle activity (excluding radon and uranium) MCL = 15 pCi/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	-0.802	-0.2387	0.12725	0.6805	1.4225	2.956	7.34

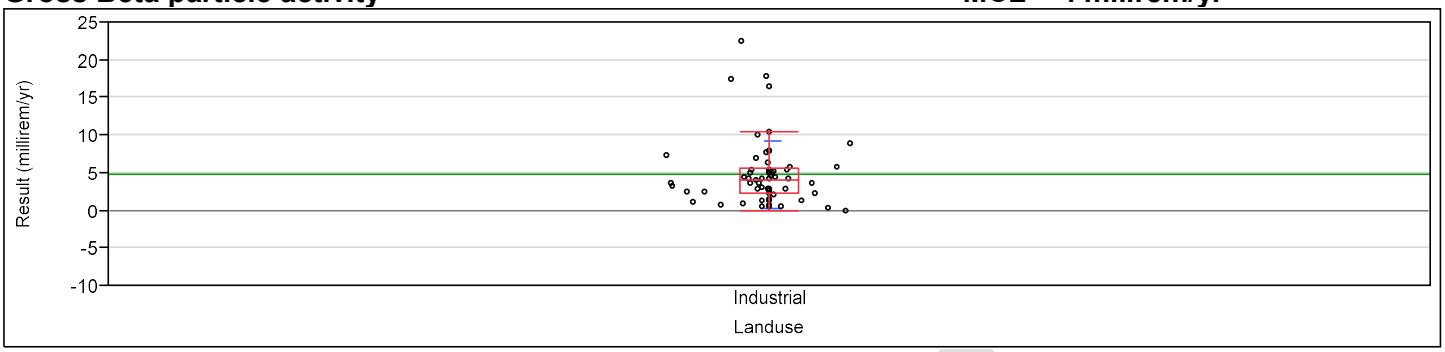
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	46	1	2	0.2	0.6	2

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	46	24	70	0	0

DRAFT

Gross Beta particle activity MCL = 4 millrem/yr



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	-0.00549	0.6484	2.22	4.07	5.595	9.868	22.4

Means and Std Deviations

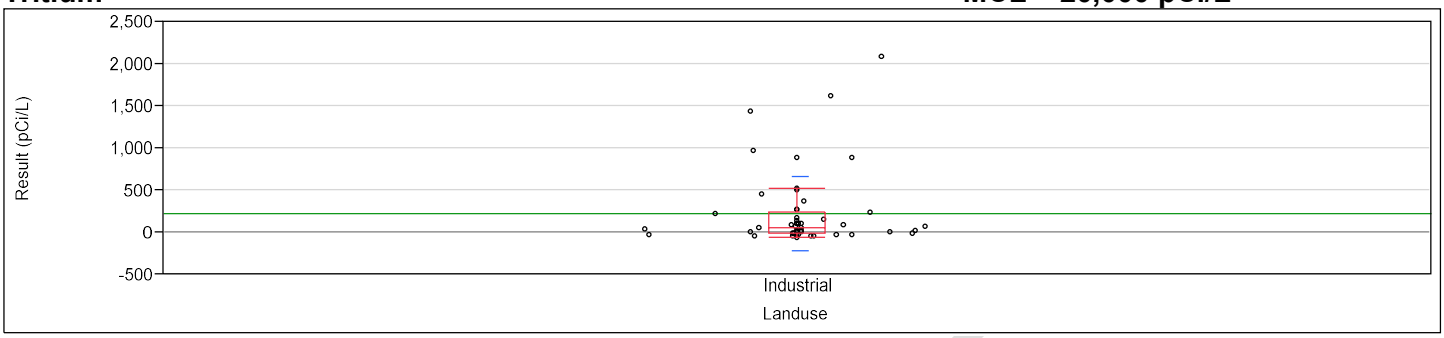
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	60	5	4	0.6	4	6

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	60	9	69	31	45

DRAFT

Tritium

MCL = 20,000 pCi/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	-69.4	-42.91	-10.945	57.75	231	877.4	2090

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	52	225	447	62	100	349

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	52	21	73	0	0

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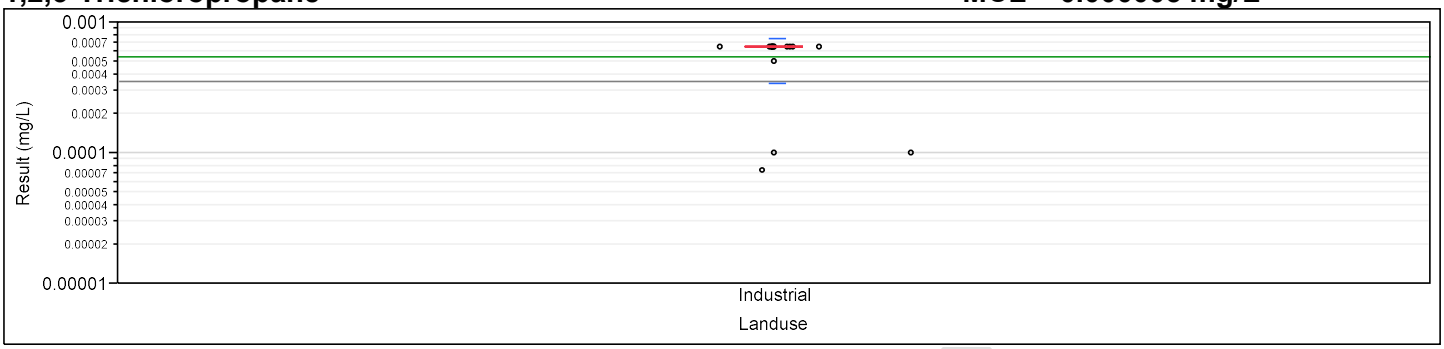
C-2
Synthetic Organic Chemicals (SOCs)

DRAFT

1,2,3-Trichloropropane MCL = 0.000005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000073	0.0001	0.00064	0.00064	0.00064	0.00064	0.00064

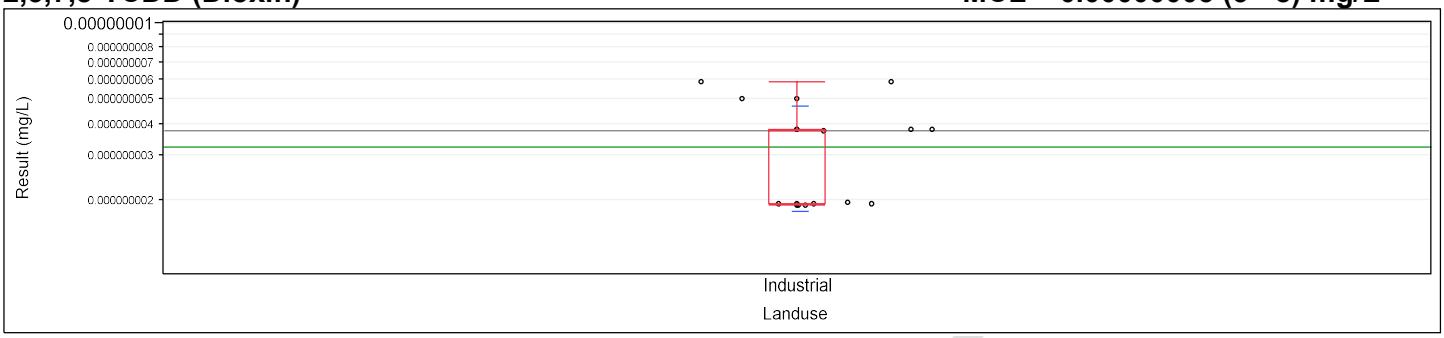
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	19	0.0005	0.0002	0.00005	0.0004	0.0006

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	19	26	45	19	42

DRAFT

2,3,7,8-TCDD (Dioxin) MCL = 0.00000003 (3^-8) mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	1.89e-9	1.9e-9	1.91e-9	3.75e-9	3.8e-9	5.81e-9	5.81e-9

Means and Std Deviations

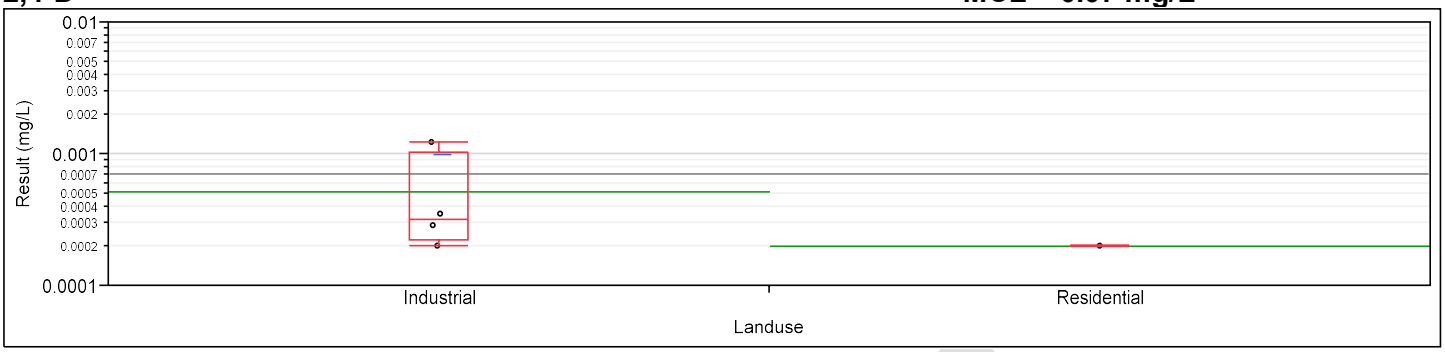
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	19	3.2395e-9	1.4365e-9	3.296e-10	2.5471e-9	3.9318e-9

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	19	66	85	0	0

DRAFT

2,4-D

MCL = 0.07 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.0002	0.0002	0.000221	0.000317	0.001018	0.00124	0.00124
Residential	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002

Means and Std Deviations

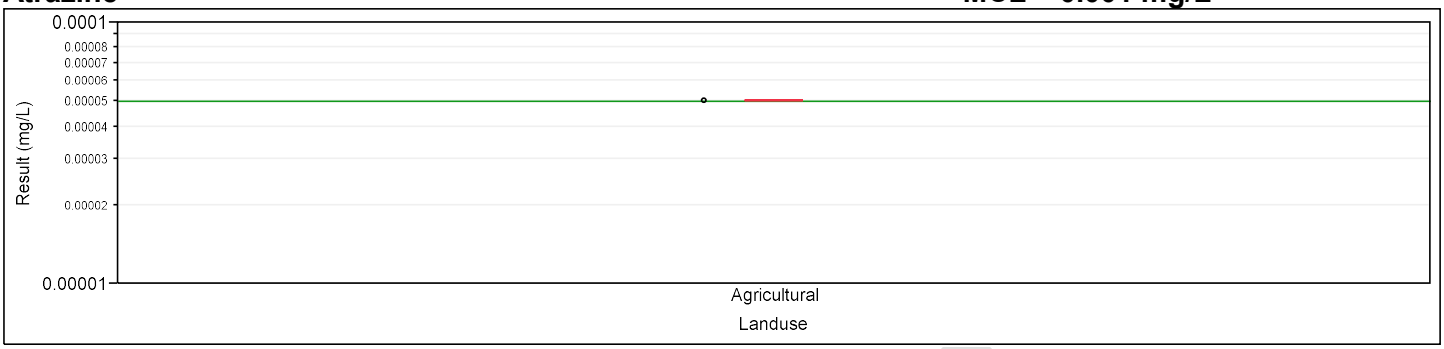
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	4	0.0005	0.0005	0.0002	-0.0003	0.001
Residential	1	0.0002	.	.	.	.

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	17	17	0	0
Industrial	4	23	27	0	0
Institutional	0	24	24	0	0
Residential	1	76	77	0	0
Transportation/Highway	0	37	37	0	0
Vacant/Open Space	0	28	28	0	0

DRAFT

Atrazine

MCL = 0.001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005

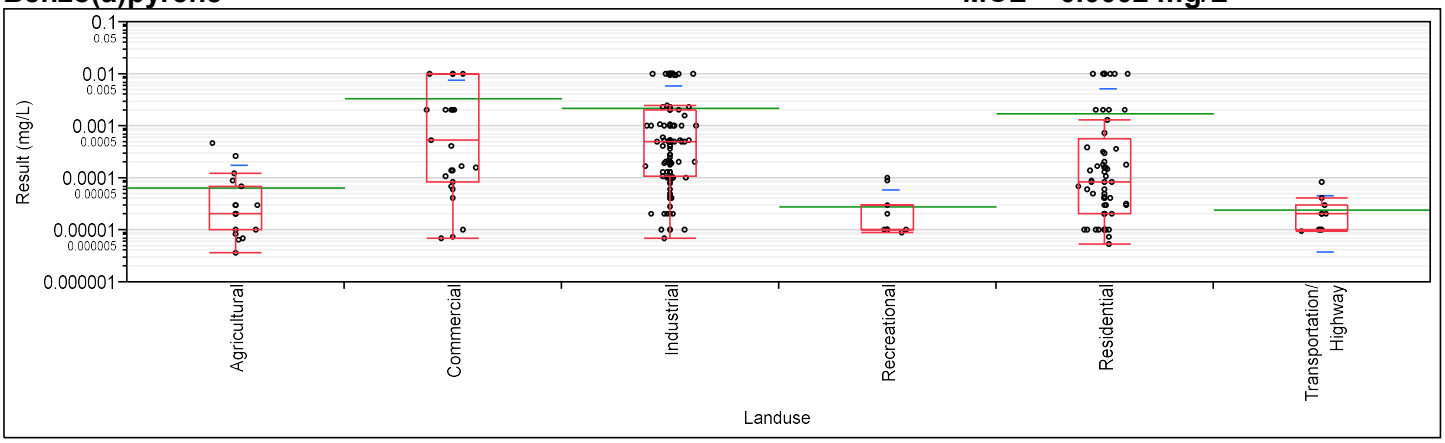
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	1	0.00005	.	.	.	.

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	1	1	2	0	0
Commercial	0	31	31	0	0
Industrial	0	35	35	0	0
Institutional	0	27	27	0	0
Residential	0	82	82	0	0
Transportation/Highway	0	51	51	0	0
Vacant/Open Space	0	42	42	0	0

DRAFT

Benzo(a)pyrene MCL = 0.0002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Agricultural	3.5e-6	6.3e-6	0.00001	0.00002	0.00007	0.00026
Commercial	0.000007	9.48e-6	0.00008	0.00052	0.01	0.01
Industrial	0.000007	0.000031	0.00011	0.00049	0.002	0.01
Recreational	0.000009	9.2e-6	0.00001	0.00001	0.00003	0.000098
Residential	5.4e-6	0.00001	0.00002	0.00008	0.000551	0.01
Transportation/Highway	9.1e-6	9.28e-6	0.00001	0.00002	0.00003	0.000072

Means and Std Deviations

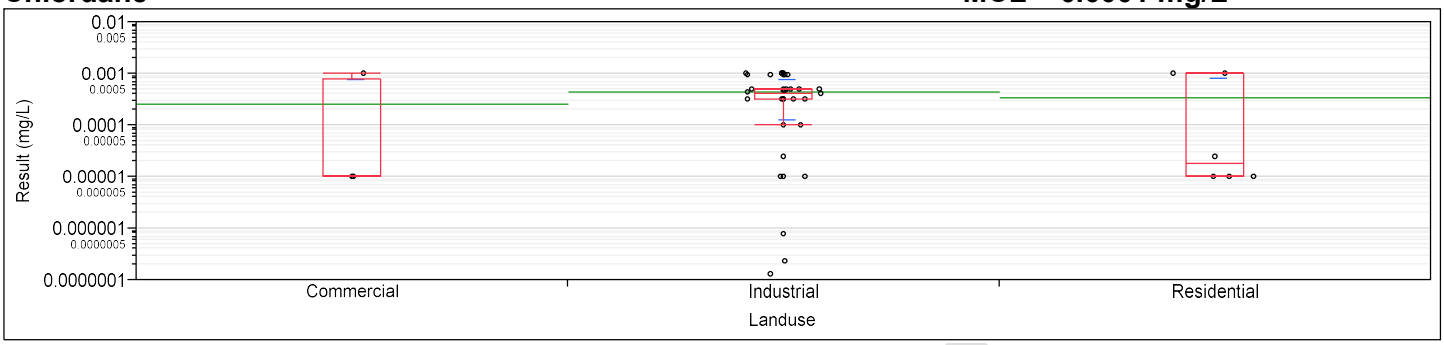
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	19	0.00007	0.0001	2.6e-5	1.04e-5	0.00012
Commercial	27	0.00340	0.0044	8.5e-4	1.66e-3	0.00515
Industrial	112	0.00223	0.0036	3.44e-4	1.55e-3	0.00292
Recreational	11	0.00003	0.0000	1.02e-5	5.41e-6	0.00005
Residential	65	0.00176	0.0036	4.44e-4	8.69e-4	0.00264
Transportation/Highway	11	0.00002	0.0000	6.25e-6	1.05e-5	0.00004

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	19	8	27	2	7
Commercial	27	52	79	15	19
Industrial	112	599	711	68	10
Institutional	0	23	23	0	0
Recreational	11	1	12	0	0
Residential	65	119	184	20	11
Transportation/Highway	11	53	64	0	0
Vacant/Open Space	0	46	46	0	0

DRAFT

Chlordane

MCL = 0.0001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.00001	0.00001	0.00001	0.00001	0.000753	0.001	0.001
Industrial	1.3e-7	0.00001	0.00032	0.00042	0.0005	0.000965	0.001
Residential	0.00001	0.00001	0.00001	1.75e-5	0.001	0.001	0.001

Means and Std Deviations

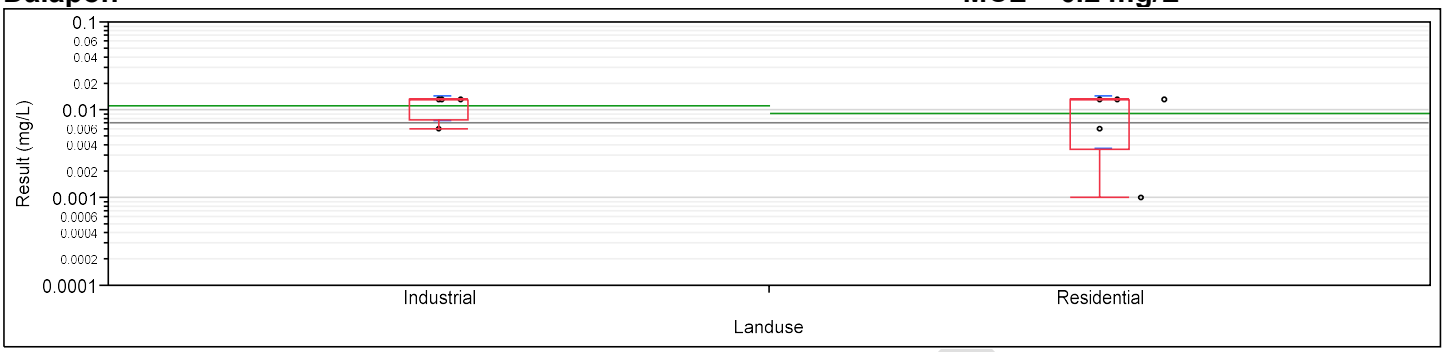
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	4	0.0003	0.0005	0.00025	-0.0005	0.001
Industrial	44	0.0004	0.0003	0.00005	0.0004	0.001
Residential	6	0.0003	0.0005	0.00021	-0.0002	0.001

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	4	22	26	1	4
Industrial	44	314	358	35	10
Institutional	0	22	22	0	0
Residential	6	78	84	2	2
Transportation/Highway	0	40	40	0	0
Vacant/Open Space	0	41	41	0	0

DRAFT

Dalapon

MCL = 0.2 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.006	0.006	0.00775	0.013	0.013	0.013	0.013
Residential	0.001	0.001	0.0035	0.013	0.013	0.013	0.013

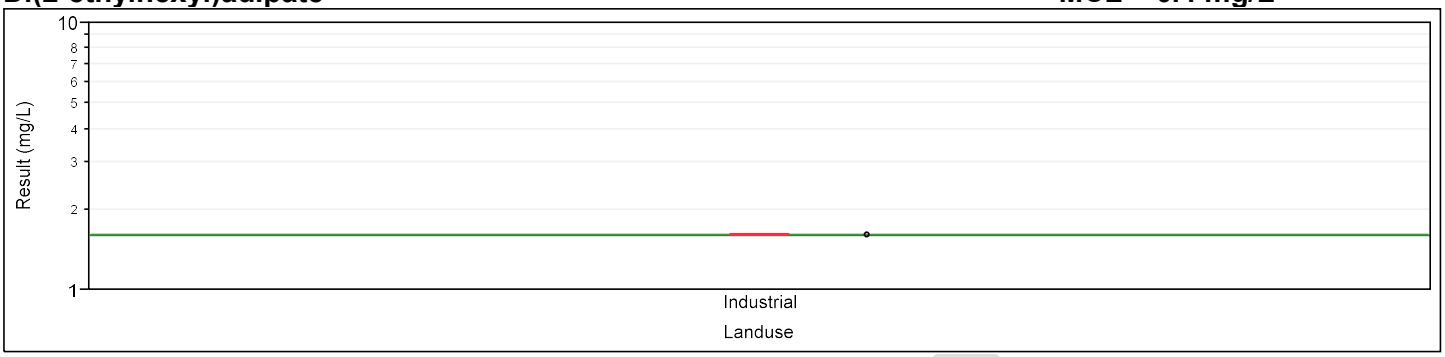
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	4	0.011	0.004	0.002	0.006	0.02
Residential	5	0.009	0.005	0.002	0.002	0.02

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	4	0	4	0	0
Residential	5	0	5	0	0

DRAFT

Di(2-ethylhexyl)adipate MCL = 0.4 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	1.6	1.6	1.6	1.6	1.6	1.6	1.6

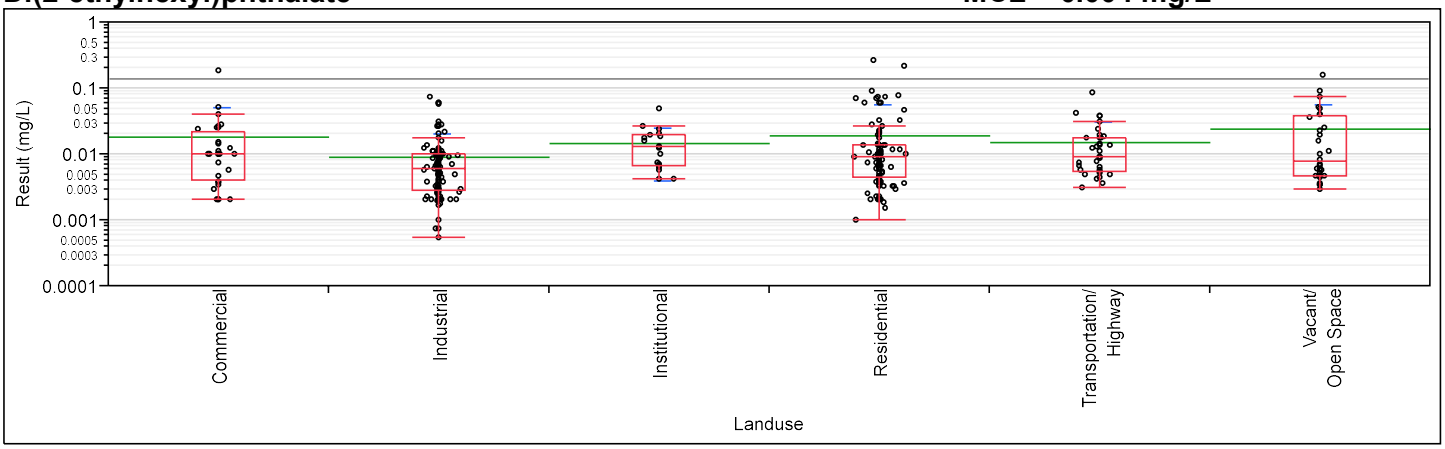
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	1	1.6	.	.	.	.

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	1	6	7	1	14

DRAFT

Di(2-ethylhexyl)phthalate MCL = 0.004 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Commercial	0.002	0.002	0.00395	0.01	0.021475	0.03646
Industrial	0.00053	0.002	0.00274	0.0059	0.01	0.0182
Institutional	0.0042	0.0042	0.0066	0.0126	0.019	0.0264
Residential	0.001	0.002394	0.0043	0.0089	0.0136	0.05876
Transportation/Highway	0.0031	0.0041	0.0055	0.0089	0.0175	0.03776
Vacant/Open Space	0.003	0.00351	0.0047	0.00765	0.036875	0.07286

Means and Std Deviations

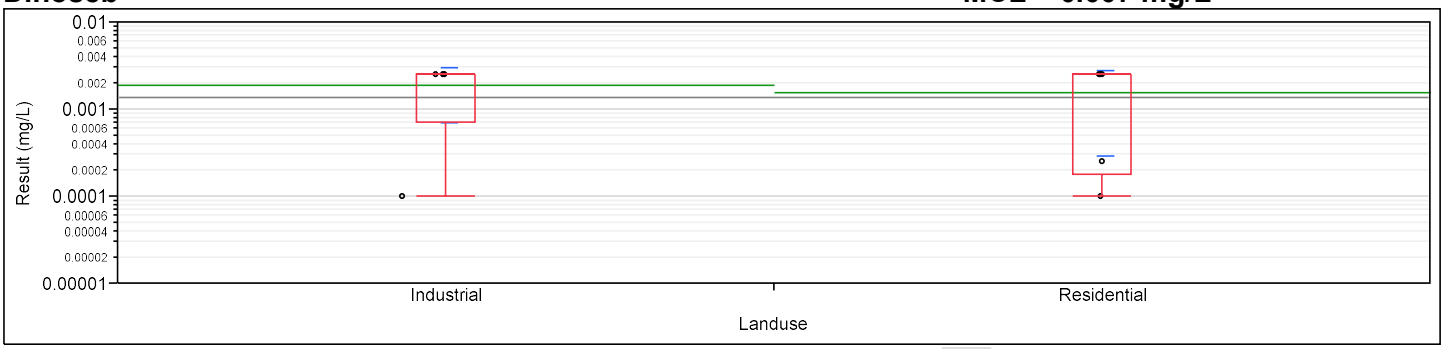
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	32	0.018	0.03	0.006	0.007	0.03
Industrial	117	0.009	0.01	0.001	0.007	0.01
Institutional	19	0.015	0.01	0.002	0.010	0.02
Residential	103	0.019	0.04	0.004	0.012	0.03
Transportation/Highway	35	0.015	0.02	0.003	0.010	0.02
Vacant/Open Space	30	0.024	0.03	0.006	0.011	0.04

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	32	6	38	24	63
Industrial	117	131	248	74	30
Institutional	19	4	23	19	83
Residential	103	8	111	80	72
Transportation/Highway	35	7	42	33	79
Vacant/Open Space	30	15	45	26	58

DRAFT

Dinoseb

MCL = 0.007 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.0001	0.0001	0.0007	0.0025	0.0025	0.0025	0.0025
Residential	0.0001	0.0001	0.000175	0.0025	0.0025	0.0025	0.0025

Means and Std Deviations

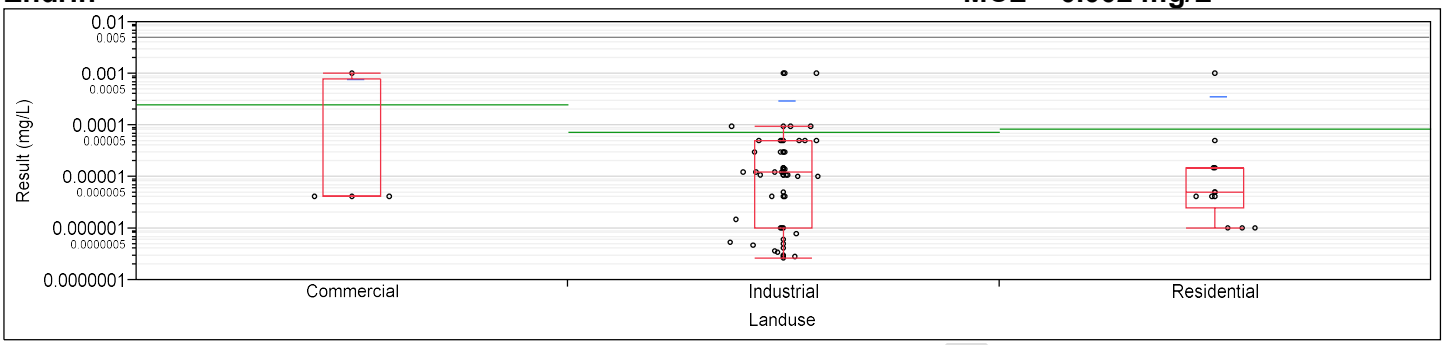
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	4	0.002	0.001	0.0006	-9.5e-6	0.004
Residential	5	0.002	0.001	0.0006	-1.3e-5	0.003

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	4	0	4	0	0
Residential	5	0	5	0	0

DRAFT

Endrin

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.000004	0.000004	0.000004	0.000004	0.000751	0.001	0.001
Industrial	2.56e-7	3.51e-7	0.000001	0.000012	0.00005	0.000096	0.001
Residential	0.000001	0.000001	2.5e-6	0.000005	0.000015	0.00062	0.001

Means and Std Deviations

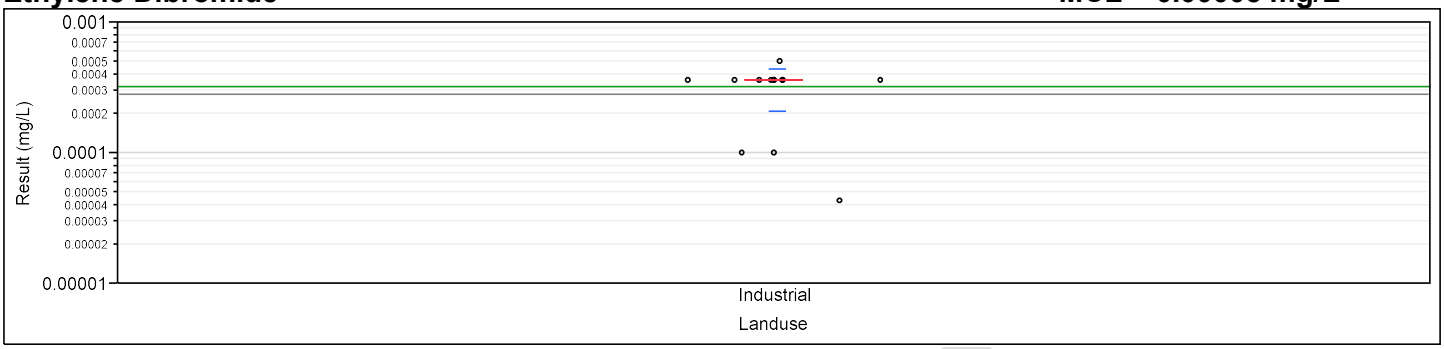
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	4	0.0003	0.0005	0.00025	-0.0005	0.0010
Industrial	57	0.0001	0.0002	0.00003	0.00002	0.0001
Residential	13	0.0001	0.0003	0.00008	-0.0001	0.0003

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	15	15	0	0
Commercial	4	29	33	0	0
Industrial	57	201	258	0	0
Institutional	0	22	22	0	0
Residential	13	129	142	0	0
Transportation/Highway	0	40	40	0	0
Vacant/Open Space	0	65	65	0	0

DRAFT

Ethylene Dibromide

MCL = 0.00005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000043	0.0001	0.00036	0.00036	0.00036	0.00036	0.0005

Means and Std Deviations

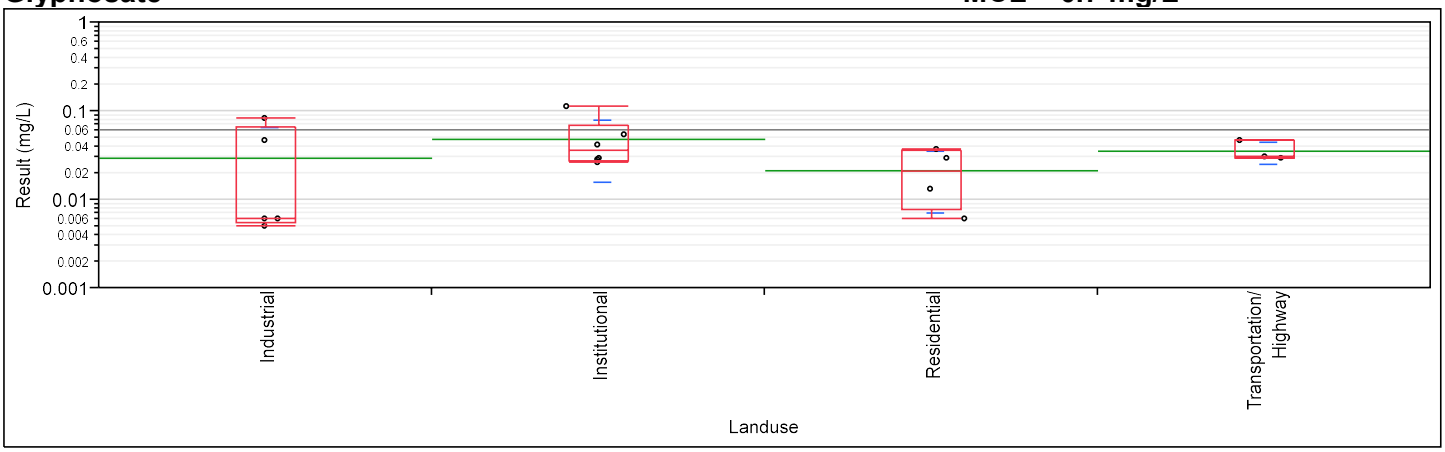
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	19	0.0003	0.0001	0.00003	0.0003	0.0004

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	19	26	45	18	40

DRAFT

Glyphosate

MCL = 0.7 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Industrial	0.005	0.005	0.0055	0.006	0.0651	0.083
Institutional	0.026	0.026	0.0275	0.0355	0.06825	0.111
Residential	0.006	0.006	0.007725	0.021	0.035025	0.037
Transportation/Highway	0.029	0.029	0.029	0.03	0.047	0.047

Means and Std Deviations

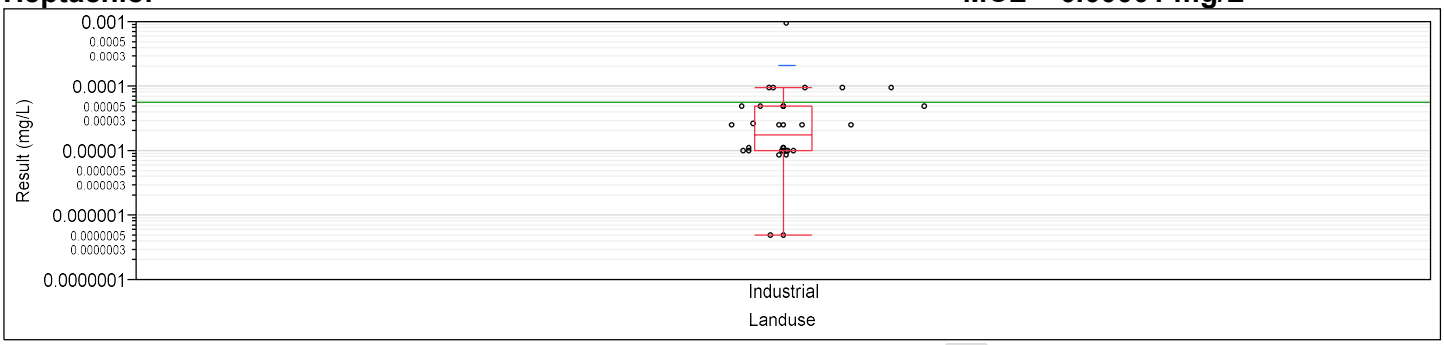
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	5	0.03	0.03	0.02	-0.014	0.07
Institutional	6	0.05	0.03	0.01	0.014	0.08
Residential	4	0.02	0.01	0.01	-0.001	0.04
Transportation/Highway	3	0.04	0.01	0.01	0.010	0.06

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	32	32	0	0
Industrial	5	42	47	0	0
Institutional	6	24	30	0	0
Residential	4	89	93	0	0
Transportation/Highway	3	47	50	0	0
Vacant/Open Space	0	31	31	0	0

DRAFT

Heptachlor

MCL = 0.00001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	5e-7	8.5e-6	0.00001	0.000018	0.00005	0.000096	0.00097

Means and Std Deviations

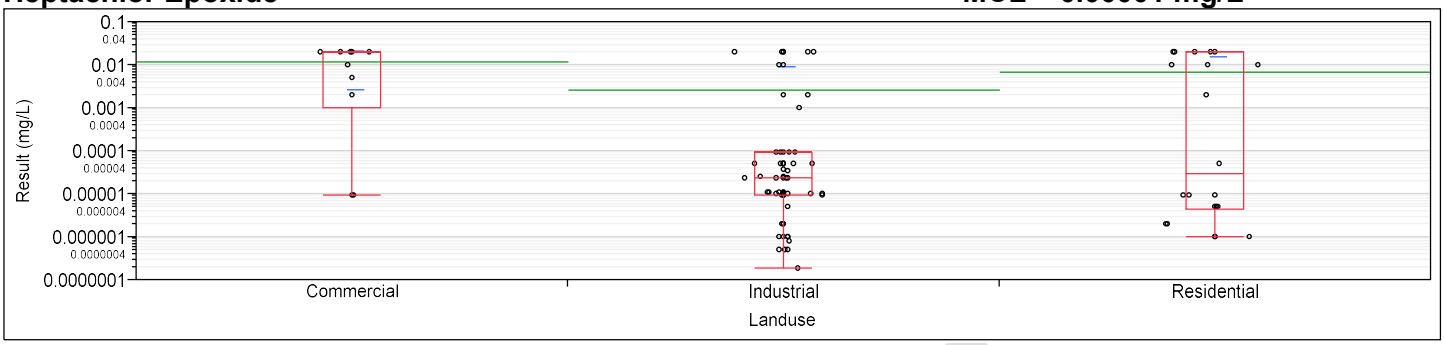
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	36	0.00006	0.0002	0.00003	3.4092e-6	0.0001

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	29	29	0	0
Industrial	36	211	247	24	10
Institutional	0	22	22	0	0
Residential	0	129	129	0	0
Transportation/Highway	0	40	40	0	0
Vacant/Open Space	0	65	65	0	0

DRAFT

Heptachlor Epoxide

MCL = 0.00001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.000009	0.000009	0.001005	0.02	0.02	0.02	0.02
Industrial	1.82e-7	0.000001	0.000009	0.000024	0.000096	0.02	0.02
Residential	0.000001	0.000001	4.25e-6	2.95e-5	0.02	0.02	0.02

Means and Std Deviations

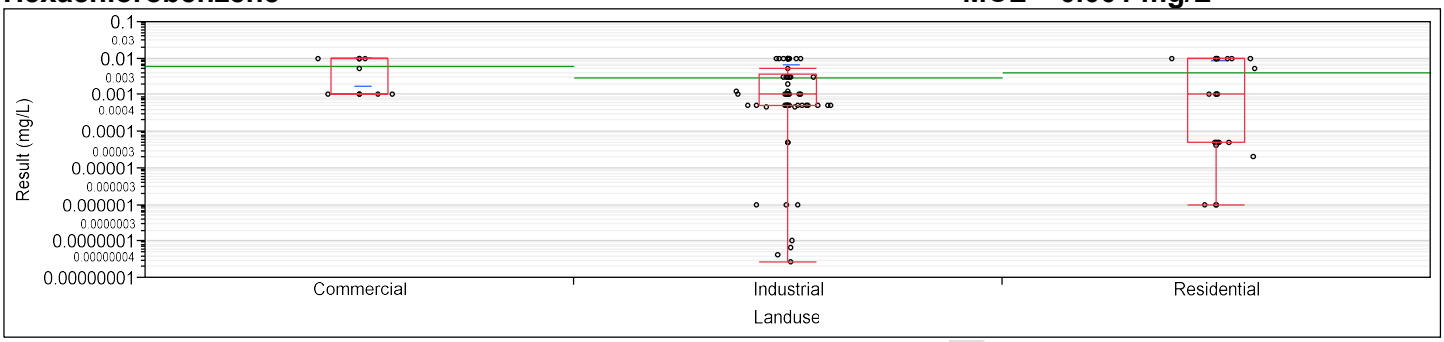
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	13	0.012	0.009	0.0026	0.006	0.018
Industrial	63	0.003	0.006	0.0008	0.001	0.004
Residential	22	0.007	0.009	0.0019	0.003	0.011

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	13	29	42	10	24
Industrial	63	203	266	38	14
Institutional	0	22	22	0	0
Residential	22	129	151	11	7
Transportation/Highway	0	40	40	0	0
Vacant/Open Space	0	65	65	0	0

DRAFT

Hexachlorobenzene

MCL = 0.001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.001	0.001	0.001	0.01	0.01	0.01	0.01
Industrial	2.79e-8	0.000001	0.00049	0.001	0.0035	0.01	0.01
Residential	0.000001	0.000001	0.00005	0.001	0.01	0.01	0.01

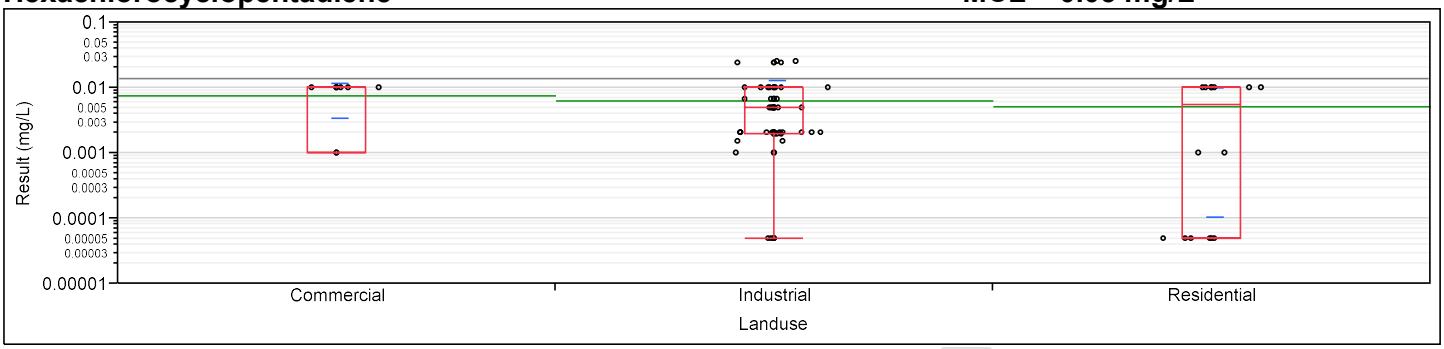
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	13	0.006	0.004	0.0012	0.003	0.009
Industrial	66	0.003	0.004	0.0005	0.002	0.004
Residential	24	0.004	0.005	0.0010	0.002	0.006

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	9	9	0	0
Commercial	13	32	45	8	18
Industrial	66	186	252	25	10
Institutional	0	23	23	0	0
Residential	24	89	113	10	9
Transportation/Highway	0	42	42	0	0
Vacant/Open Space	0	39	39	0	0

DRAFT

Hexachlorocyclopentadiene MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.001	0.001	0.001	0.01	0.01	0.01	0.01
Industrial	0.00005	0.000145	0.001925	0.005	0.01	0.0226	0.025
Residential	0.00005	0.00005	0.00005	0.0055	0.01	0.01	0.01

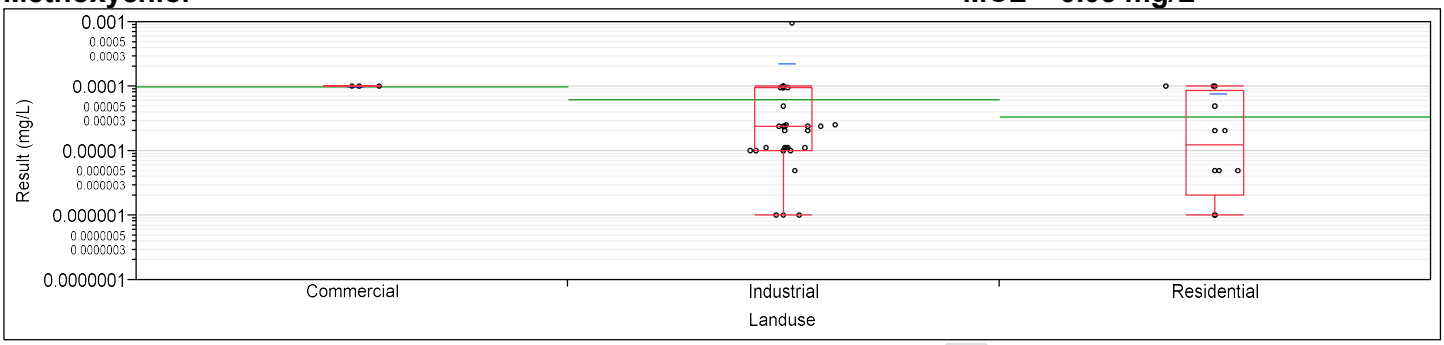
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	11	0.008	0.004	0.0013	0.005	0.010
Industrial	60	0.006	0.007	0.0009	0.005	0.008
Residential	20	0.005	0.005	0.0011	0.003	0.007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	11	25	36	0	0
Industrial	60	176	236	0	0
Institutional	0	23	23	0	0
Residential	20	72	92	0	0
Transportation/Highway	0	42	42	0	0
Vacant/Open Space	0	39	39	0	0

DRAFT

Methoxychlor MCL = 0.03 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Industrial	0.000001	0.000003	0.00001	0.000024	0.000096	0.0001	0.00097
Residential	0.000001	0.000001	0.000002	1.25e-5	8.75e-5	0.0001	0.0001

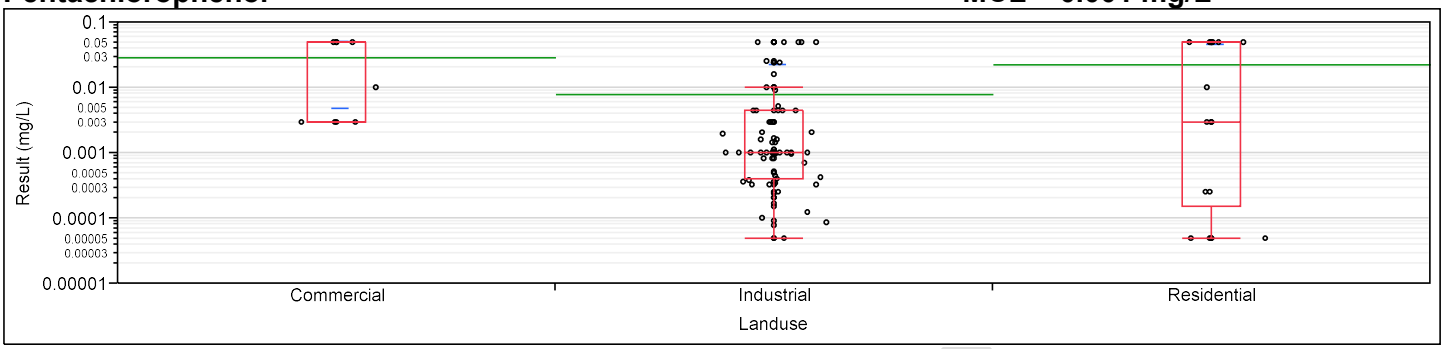
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	3	0.00010	0.0000	0.00000	1e-4	0.00010
Industrial	34	0.00006	0.0002	0.00003	5.83e-6	0.00012
Residential	12	0.00003	0.0000	0.00001	7.24e-6	0.00006

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	15	15	0	0
Commercial	3	29	32	0	0
Industrial	34	208	242	0	0
Institutional	0	22	22	0	0
Residential	12	129	141	0	0
Transportation/Highway	0	40	40	0	0
Vacant/Open Space	0	65	65	0	0

DRAFT

Pentachlorophenol MCL = 0.001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.003	0.003	0.003	0.05	0.05	0.05	0.05
Industrial	0.00005	0.000162	0.0004	0.001	0.0045	0.035	0.05
Residential	0.00005	0.00005	0.00015	0.003	0.05	0.05	0.05

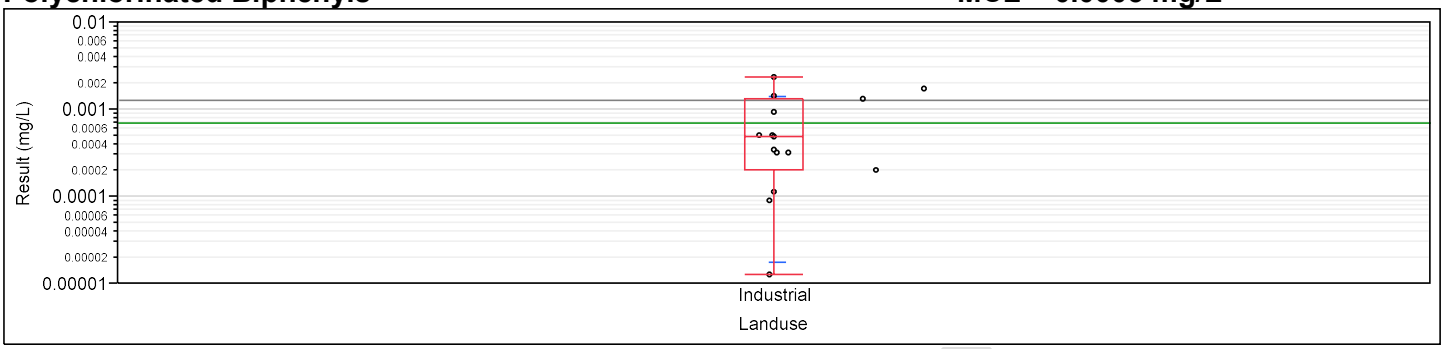
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	13	0.029	0.02	0.007	0.014	0.04
Industrial	95	0.008	0.01	0.002	0.005	0.01
Residential	21	0.023	0.02	0.005	0.011	0.03

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	13	24	37	13	35
Industrial	95	187	282	43	15
Institutional	0	23	23	0	0
Residential	21	72	93	14	15
Transportation/Highway	0	42	42	0	0
Vacant/Open Space	0	39	39	0	0

DRAFT

Polychlorinated Biphenyls MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	1.25e-5	5.774e-5	0.000203	0.00049	0.0013	0.001964	0.00233

Means and Std Deviations

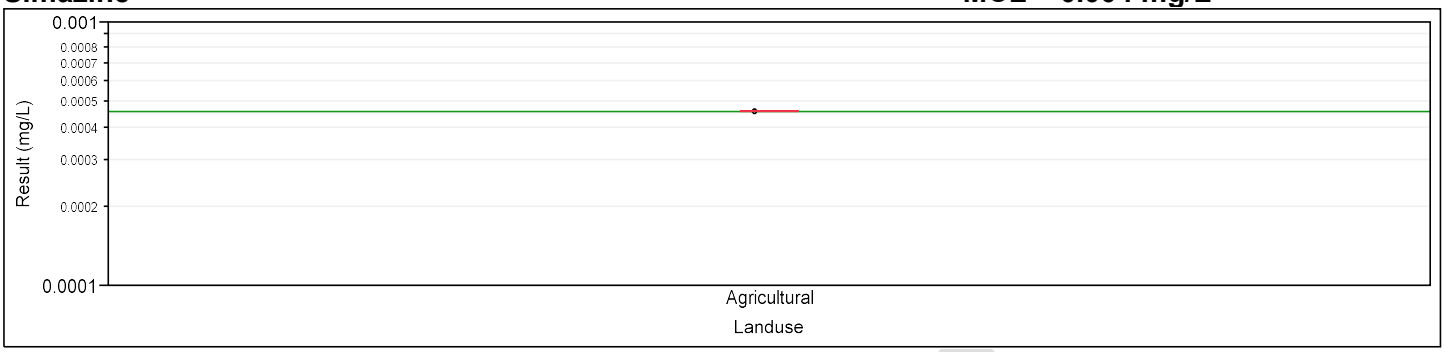
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	15	0.0007	0.0007	0.0002	0.0003	0.001

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	9	9	0	0
Commercial	0	7	7	0	0
Industrial	15	156	171	5	3
Residential	0	19	19	0	0
Vacant/Open Space	0	24	24	0	0

DRAFT

Simazine

MCL = 0.004 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046

Means and Std Deviations

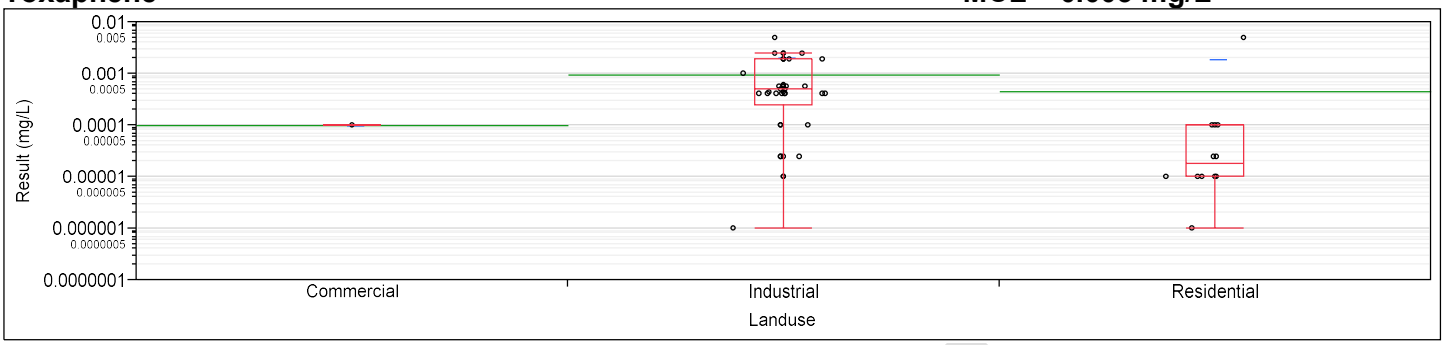
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	1	0.00046	.	.	.	.

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	1	1	2	0	0
Commercial	0	31	31	0	0
Industrial	0	33	33	0	0
Institutional	0	27	27	0	0
Residential	0	82	82	0	0
Transportation/Highway	0	51	51	0	0
Vacant/Open Space	0	42	42	0	0

DRAFT

Toxaphene

MCL = 0.003 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Industrial	0.000001	0.000019	0.00025	0.0005	0.0019	0.0025	0.005
Residential	0.000001	3.7e-6	0.00001	1.75e-5	0.0001	0.00353	0.005

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	3	0.0001	0.000	0.0000	0.0001	0.000
Industrial	45	0.0009	0.001	0.0002	0.0006	0.001
Residential	12	0.0005	0.001	0.0004	-0.0005	0.001

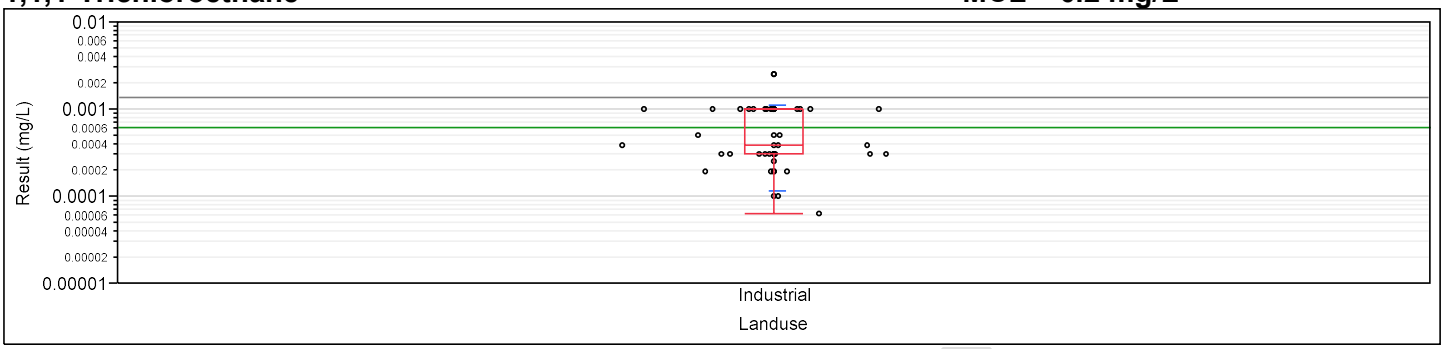
Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	15	15	0	0
Commercial	3	29	32	0	0
Industrial	45	204	249	1	0
Institutional	0	22	22	0	0
Residential	12	129	141	1	1
Transportation/Highway	0	40	40	0	0
Vacant/Open Space	0	65	65	0	0

DRAFT

C-3
Volatile Organic Chemicals (VOCs)

DRAFT

1,1,1-Trichloroethane MCL = 0.2 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000063	0.00019	0.0003	0.00038	0.001	0.001	0.0025

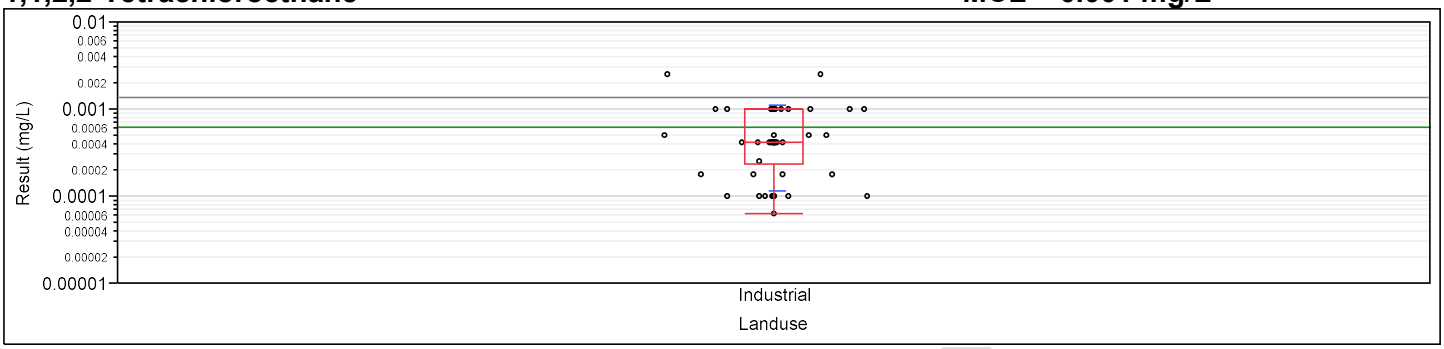
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	54	0.0006	0.0005	0.00007	0.0005	0.0008

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	54	91	145	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

1,1,2,2-Tetrachloroethane MCL = 0.001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000063	0.0001	0.000233	0.00041	0.001	0.001	0.0025

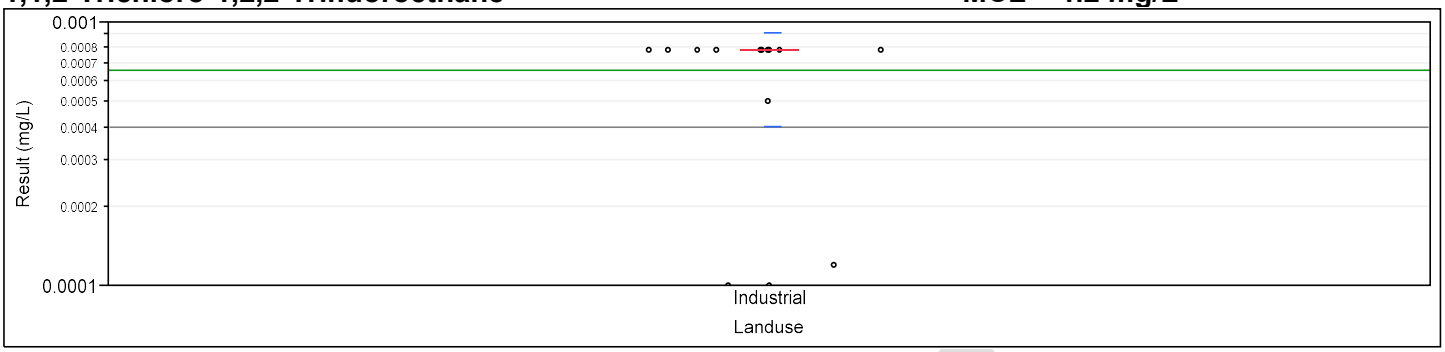
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	54	0.0006	0.0005	0.00007	0.0005	0.0008

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	54	91	145	2	1
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

1,1,2-Trichloro-1,2,2-Trifluoroethane MCL = 1.2 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.0001	0.0001	0.00078	0.00078	0.00078	0.00078	0.00078

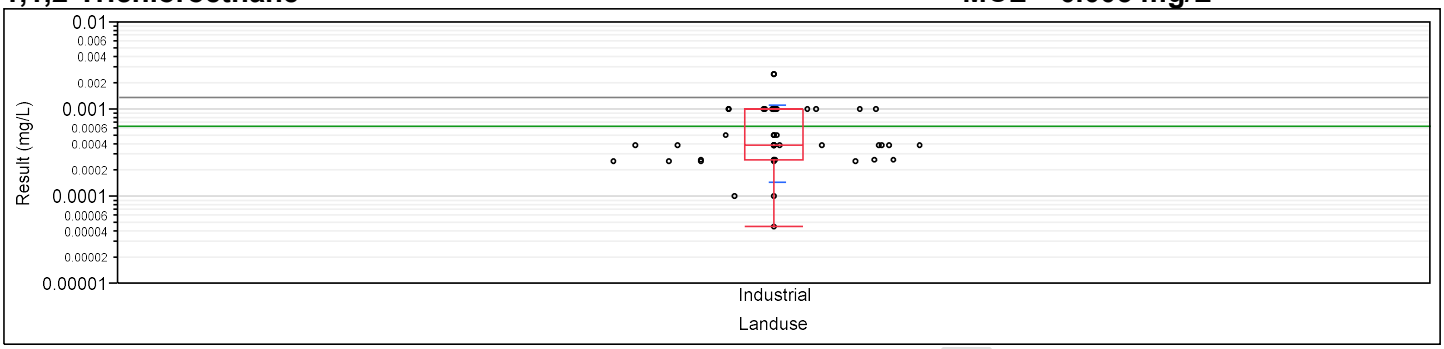
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	19	0.0007	0.0003	0.00006	0.0005	0.0008

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	19	13	32	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

1,1,2-Trichloroethane MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000045	0.00025	0.00026	0.00038	0.001	0.001	0.0025

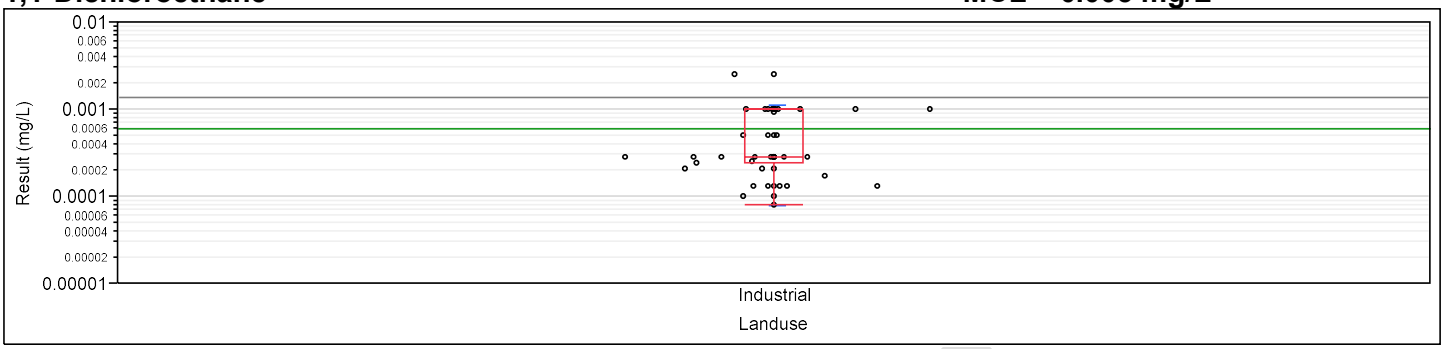
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	54	0.0006	0.0005	0.00007	0.0005	0.0008

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	54	91	145	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

1,1-Dichloroethane MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000078	0.00013	0.00024	0.00028	0.001	0.001	0.0025

Means and Std Deviations

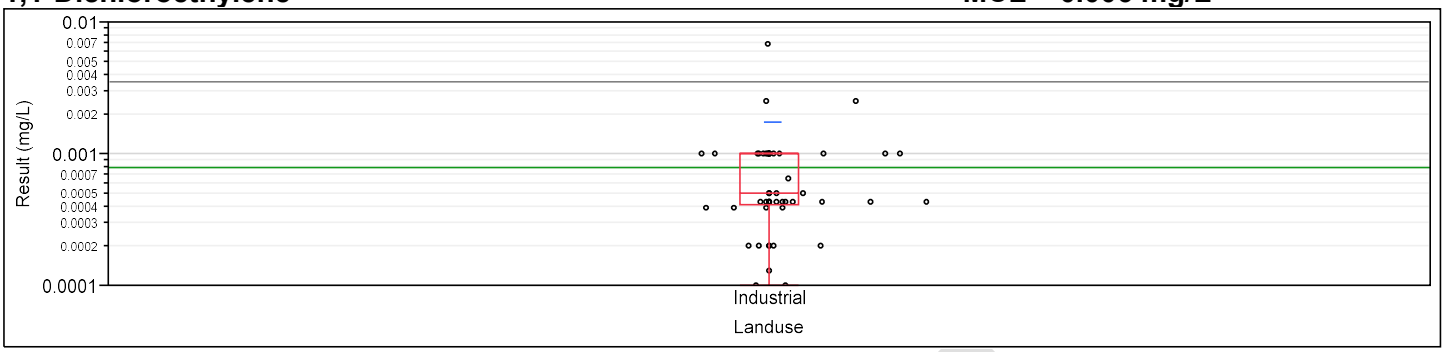
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	55	0.0006	0.0005	0.00007	0.0005	0.0007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	55	104	159	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

1,1-Dichloroethylene

MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.0001	0.0002	0.00041	0.0005	0.001	0.001	0.0068

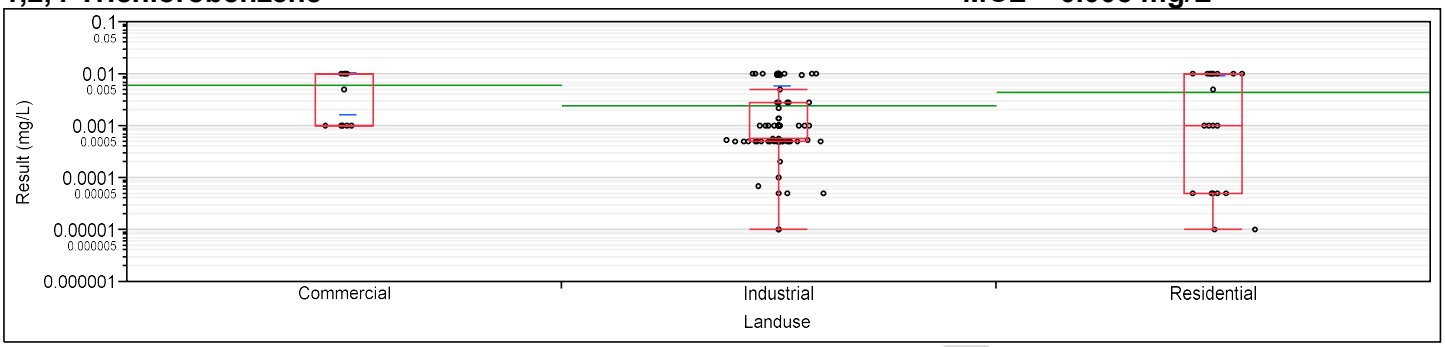
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	53	0.0008	0.001	0.0001	0.0005	0.001

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	53	77	130	1	1
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

1,2,4-Trichlorobenzene MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.001	0.001	0.001	0.01	0.01	0.01	0.01
Industrial	0.00001	0.00015	0.0005	0.00055	0.0027	0.01	0.01
Residential	0.00001	0.00001	0.00005	0.001	0.01	0.01	0.01

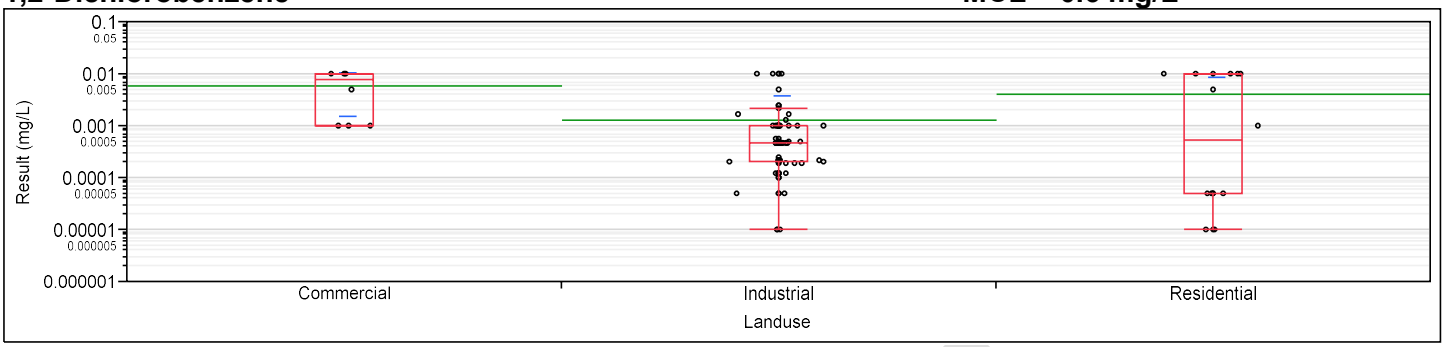
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	13	0.006	0.004	0.0012	0.003	0.009
Industrial	84	0.002	0.004	0.0004	0.002	0.003
Residential	22	0.005	0.005	0.0010	0.002	0.007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	13	25	38	7	18
Industrial	84	201	285	15	5
Institutional	0	23	23	0	0
Residential	22	72	94	9	10
Transportation/Highway	0	42	42	0	0
Vacant/Open Space	0	39	39	0	0

DRAFT

1,2-Dichlorobenzene MCL = 0.6 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.001	0.001	0.001	0.0075	0.01	0.01	0.01
Industrial	0.00001	0.0001	0.0002	0.00046	0.001	0.0025	0.01
Residential	0.00001	0.00001	0.00005	0.000525	0.01	0.01	0.01

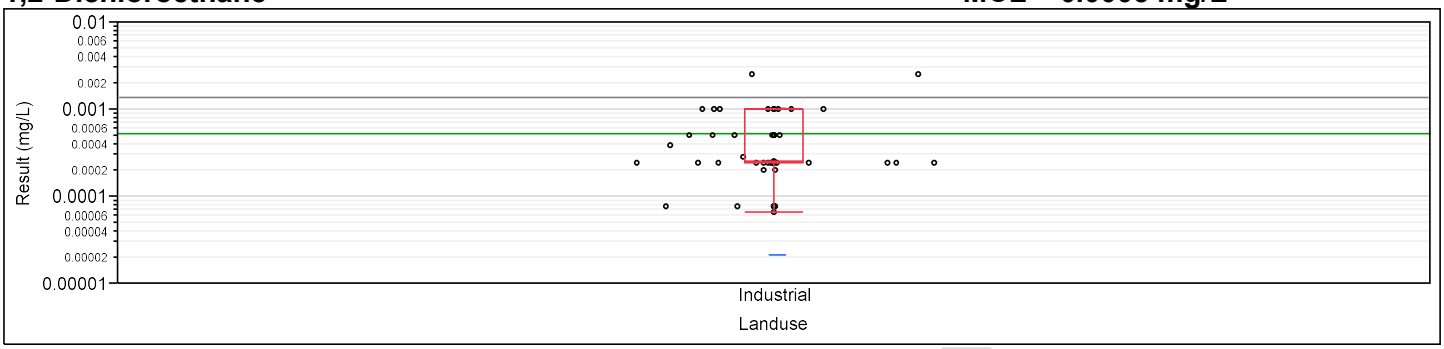
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	8	0.006	0.004	0.0016	0.0023	0.010
Industrial	82	0.001	0.003	0.0003	0.0007	0.002
Residential	16	0.004	0.005	0.0012	0.0016	0.007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	8	25	33	0	0
Industrial	82	247	329	0	0
Institutional	0	23	23	0	0
Residential	16	72	88	0	0
Transportation/Highway	0	42	42	0	0
Vacant/Open Space	0	39	39	0	0

DRAFT

1,2-Dichloroethane MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000066	0.000077	0.00024	0.00025	0.001	0.001	0.0025

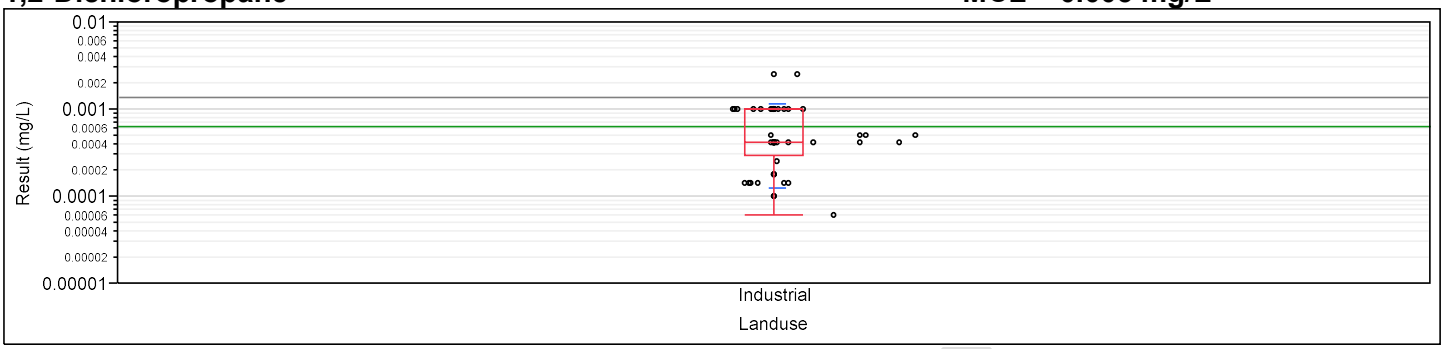
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	55	0.0005	0.0005	0.00007	0.0004	0.0007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	55	88	143	15	10

DRAFT

1,2-Dichloropropane MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.00006	0.00014	0.000293	0.00042	0.001	0.001	0.0025

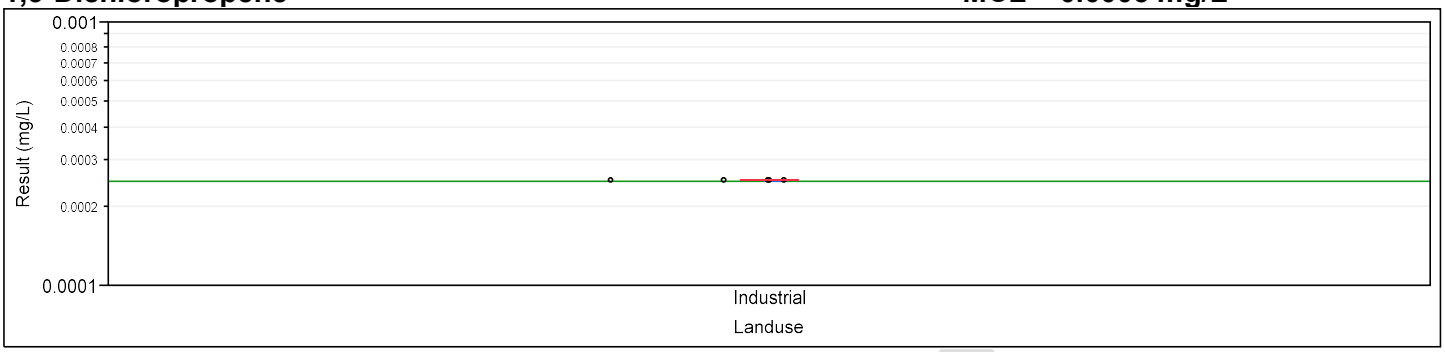
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	52	0.0006	0.0005	0.00007	0.0005	0.0008

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	52	91	143	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

1,3-Dichloropropene MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025

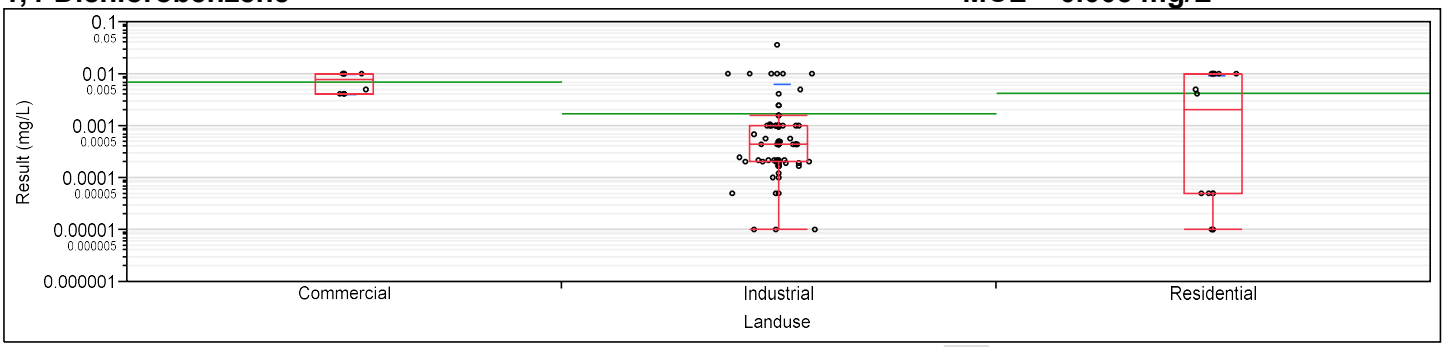
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	6	0.0003	0	0	0.0003	0.0003

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	6	2	8	0	0

DRAFT

1,4-Dichlorobenzene MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.004	0.004	0.004	0.0075	0.01	0.01	0.01
Industrial	0.00001	0.00011	0.0002	0.00043	0.001	0.0045	0.036
Residential	0.00001	0.00001	0.00005	0.002025	0.01	0.01	0.01

Means and Std Deviations

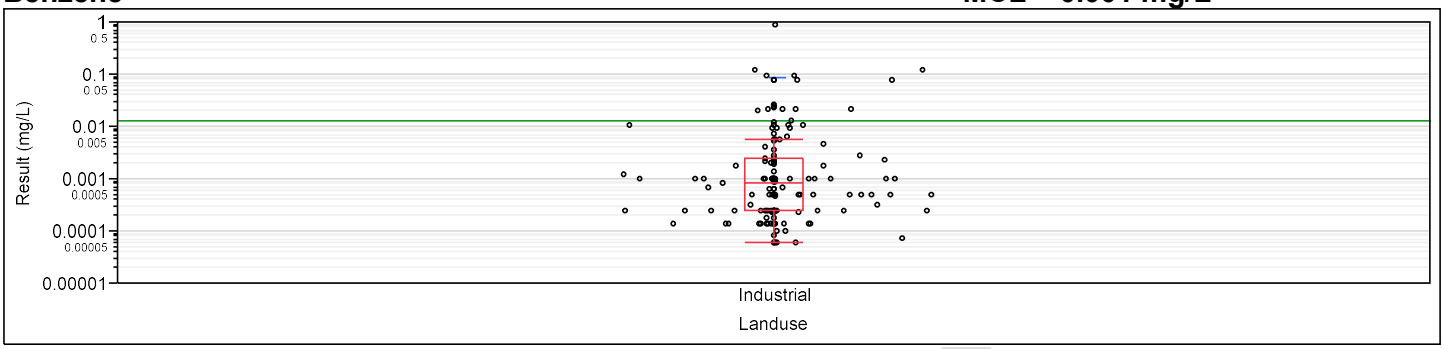
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	8	0.007	0.003	0.0011	0.0045	0.010
Industrial	84	0.002	0.005	0.0005	0.0007	0.003
Residential	16	0.004	0.005	0.0012	0.0018	0.007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	8	25	33	4	12
Industrial	84	281	365	7	2
Institutional	0	23	23	0	0
Residential	16	72	88	6	7
Transportation/Highway	0	42	42	0	0
Vacant/Open Space	0	39	39	0	0

DRAFT

Benzene

MCL = 0.001 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000061	0.00014	0.00025	0.00081	0.0025	0.021	0.88

Means and Std Deviations

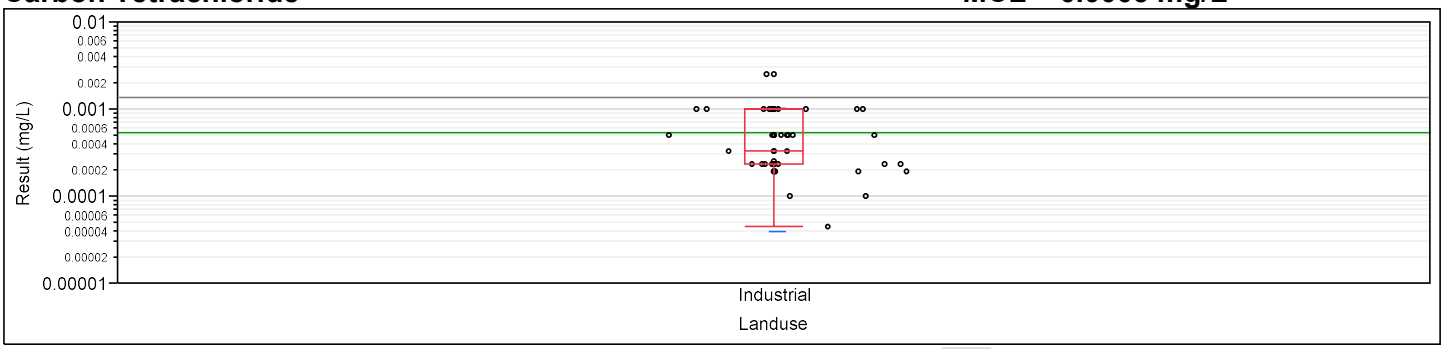
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	153	0.01	0.07	0.006	0.001	0.02

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	153	582	735	50	7
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

Carbon Tetrachloride

MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000045	0.00019	0.00023	0.00033	0.001	0.001	0.0025

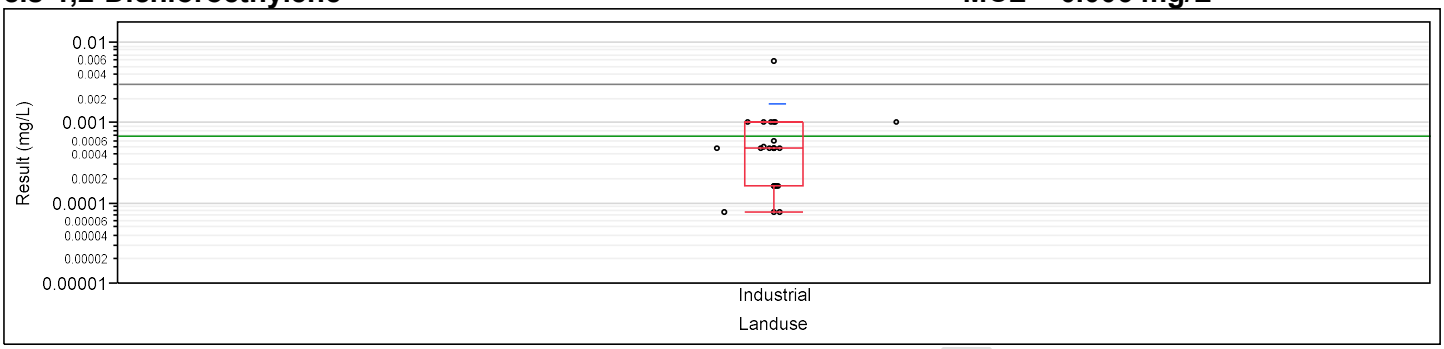
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	54	0.0005	0.0005	0.00007	0.0004	0.0007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	54	91	145	15	10
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

cis-1,2-Dichloroethylene MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000076	0.000076	0.00016	0.00048	0.001	0.001	0.0058

Means and Std Deviations

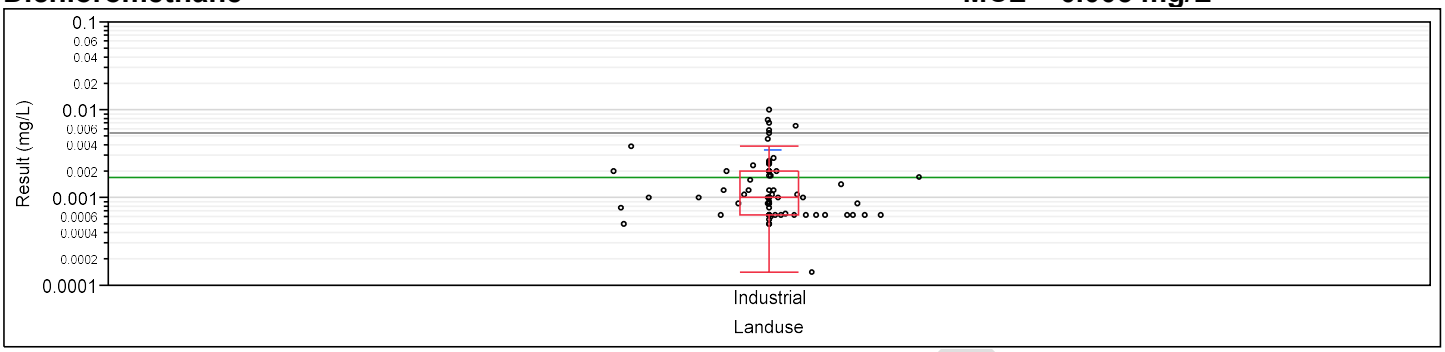
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	26	0.0007	0.001	0.000	0.000	0.001

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	26	67	93	0	0

DRAFT

Dichloromethane

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.00014	0.00064	0.00064	0.001	0.002	0.00416	0.01

Means and Std Deviations

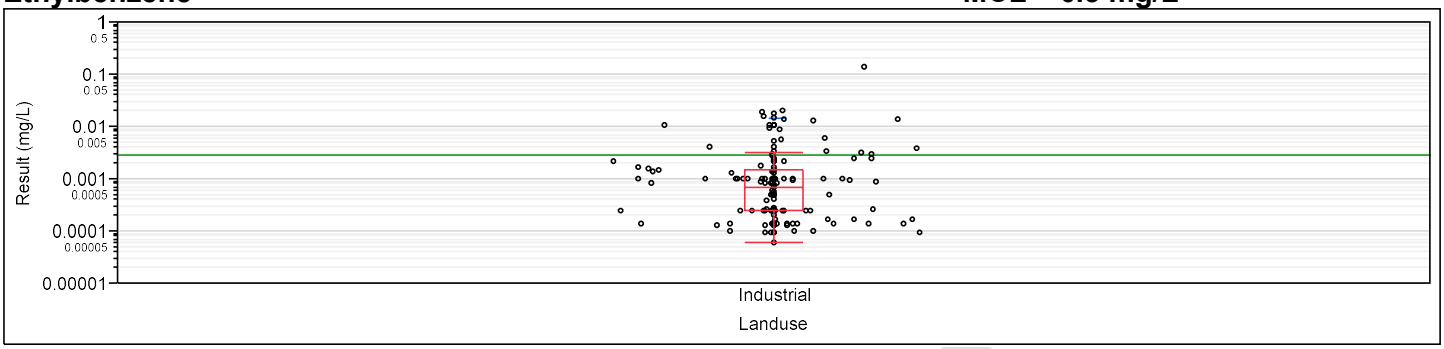
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	75	0.002	0.002	0.0002	0.001	0.002

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	75	74	149	6	4
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

Ethylbenzene

MCL = 0.3 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000059	0.000135	0.00025	0.00067	0.0015	0.00745	0.14

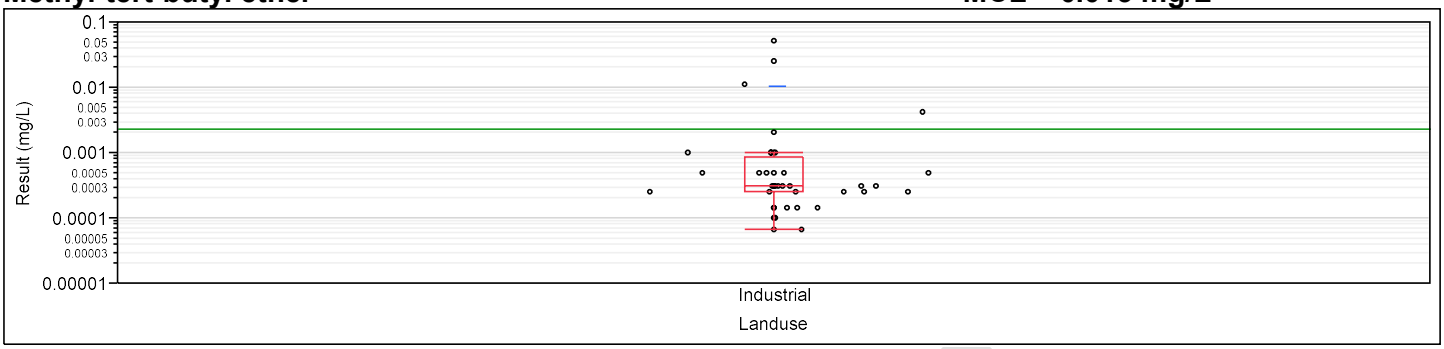
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	164	0.003	0.01	0.0009	0.001	0.005

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	164	538	702	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

Methyl-tert-butyl ether MCL = 0.013 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000065	0.000136	0.00025	0.00031	0.000875	0.00231	0.051

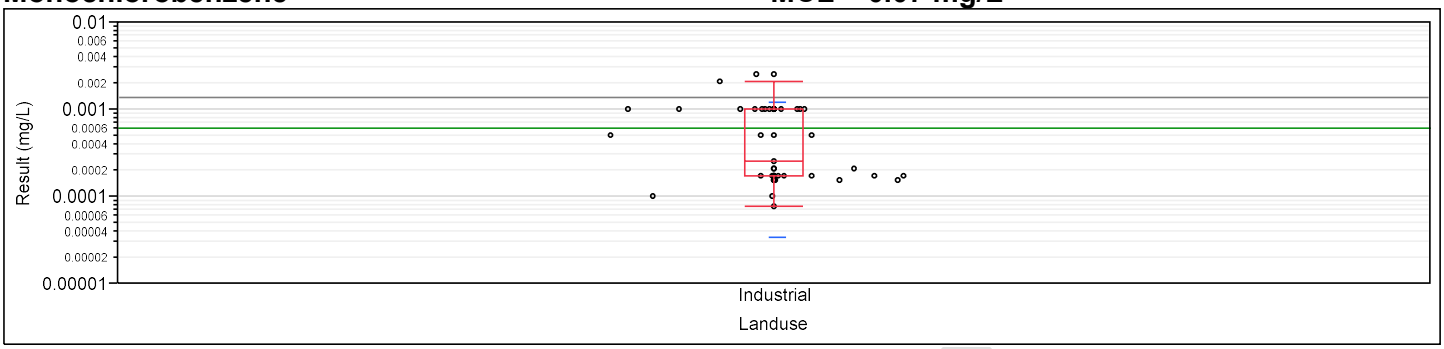
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	48	0.002	0.008	0.001	-4e-5	0.005

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	48	196	244	2	1

DRAFT

Monochlorobenzene MCL = 0.07 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000075	0.00015	0.00017	0.00025	0.001	0.001	0.0025

Means and Std Deviations

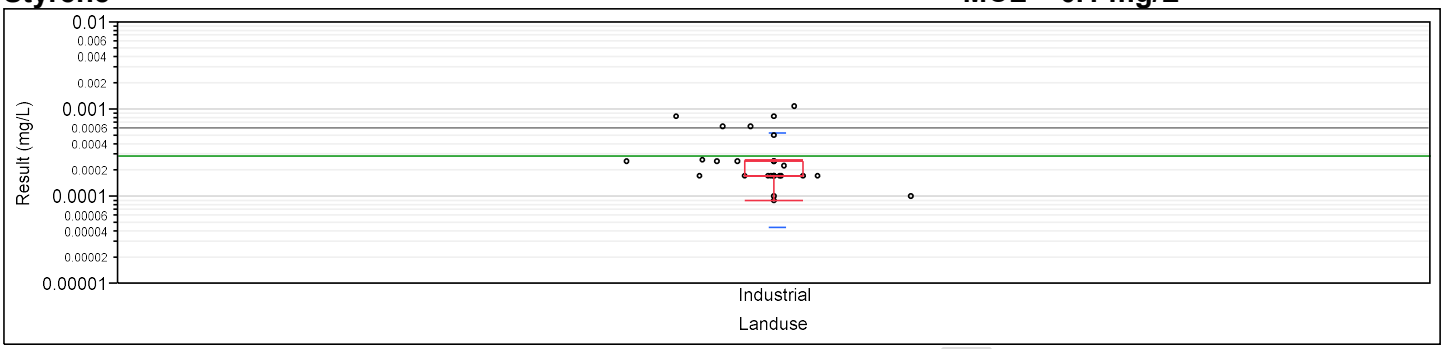
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	55	0.0006	0.0006	0.00008	0.0005	0.0008

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	55	137	192	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

Styrene

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000088	0.000114	0.00017	0.00017	0.00025	0.000782	0.0011

Means and Std Deviations

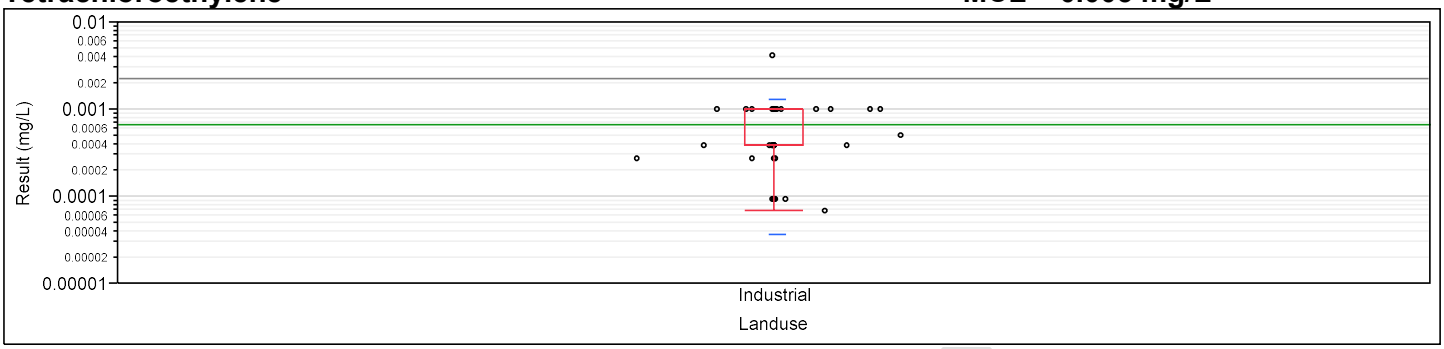
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	31	0.0003	0.0002	0.00004	0.0002	0.0004

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	31	40	71	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

Tetrachloroethylene

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000068	0.000094	0.00039	0.00039	0.001	0.001	0.0041

Means and Std Deviations

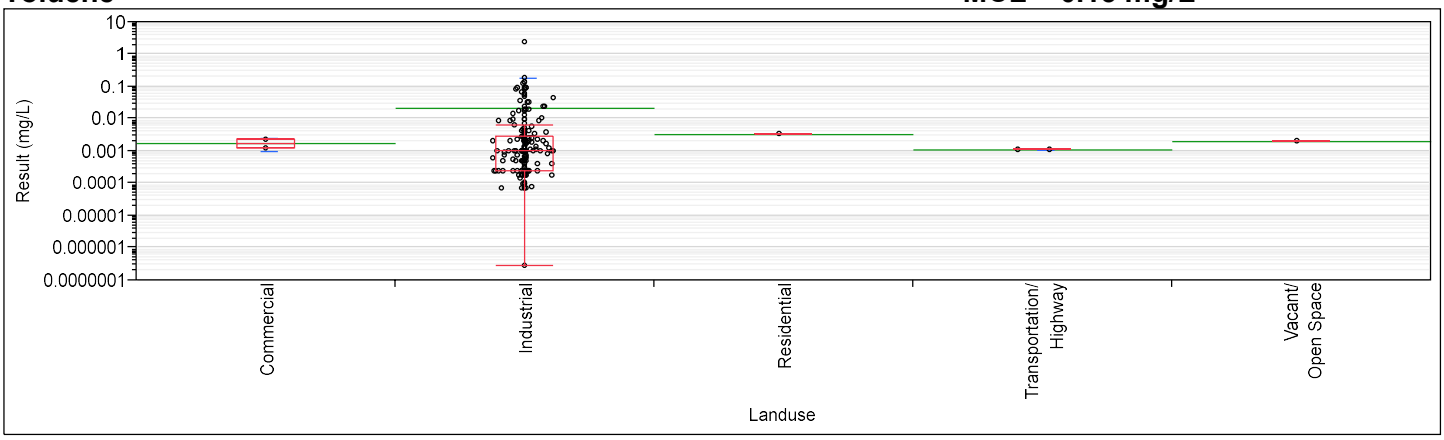
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	44	0.0007	0.0006	0.0001	0.0005	0.0009

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	44	50	94	0	0

DRAFT

Toluene

MCL = 0.15 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%
Commercial	0.0012	0.0012	0.0012	0.00175	0.0023	0.0023
Industrial	2.7e-7	0.00018	0.00025	0.001	0.0028	0.025
Residential	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033
Transportation/Highway	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
Vacant/Open Space	0.002	0.002	0.002	0.002	0.002	0.002

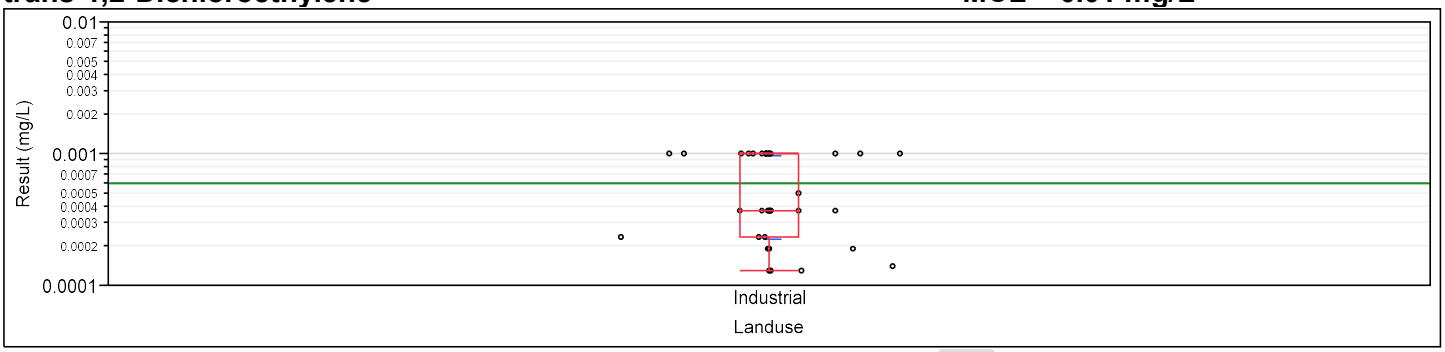
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	2	0.002	0.0008	0.0006	-0.005	0.009
Industrial	204	0.021	0.1694	0.0119	-0.002	0.045
Residential	1	0.003	.	.	.	.
Transportation/Highway	2	0.001	0.0000	0.0000	0.001	0.001
Vacant/Open Space	1	0.002	.	.	.	.

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	2	10	12	0	0
Industrial	204	516	720	2	0
Residential	1	5	6	0	0
Transportation/Highway	2	4	6	0	0
Vacant/Open Space	1	15	16	0	0

DRAFT

trans-1,2-Dichloroethylene MCL = 0.01 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.00013	0.000145	0.00023	0.00037	0.001	0.001	0.001

Means and Std Deviations

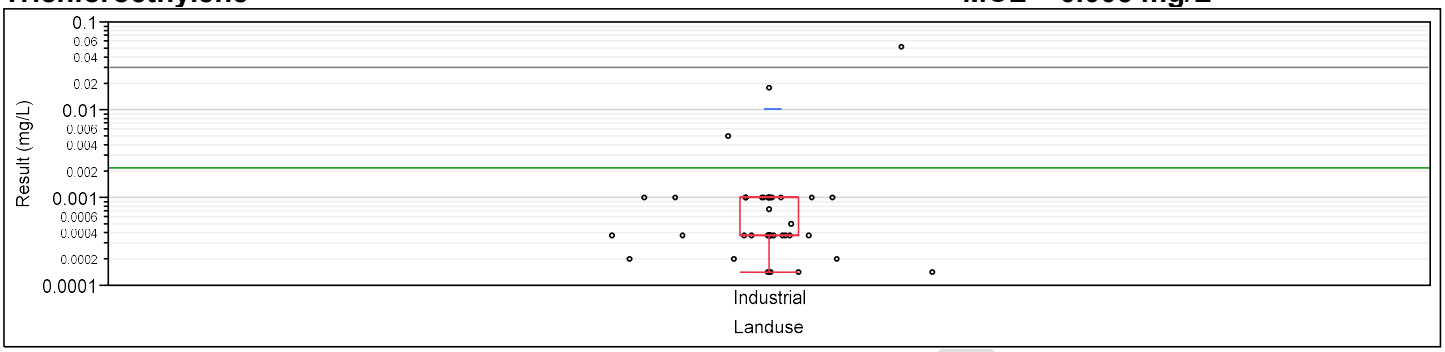
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	40	0.0006	0.0004	0.00006	0.0005	0.0007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	40	72	112	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

Trichloroethylene

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.00014	0.00014	0.00037	0.00037	0.001	0.001	0.053

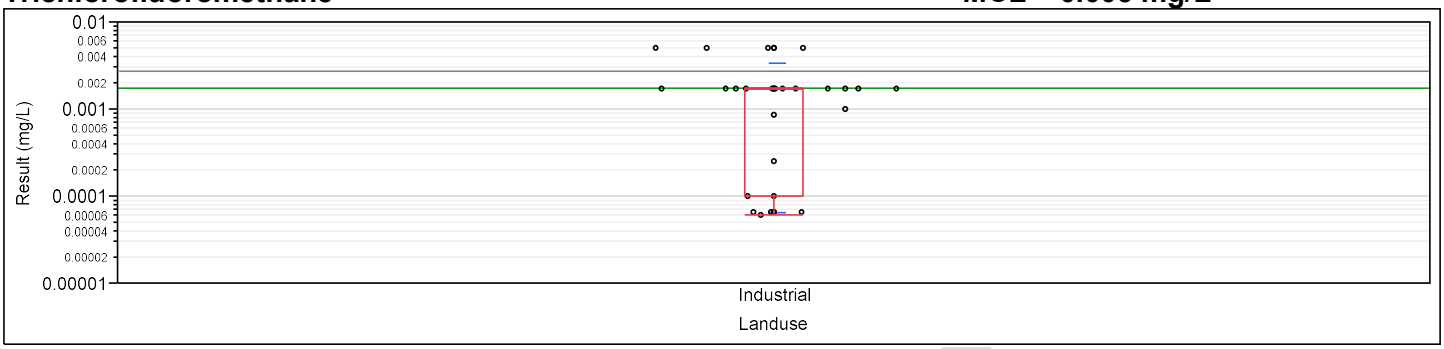
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	45	0.002	0.008	0.001	-0.0002	0.005

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	45	103	148	3	2

DRAFT

Trichlorofluoromethane MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.00006	0.000066	0.0001	0.0017	0.0017	0.005	0.005

Means and Std Deviations

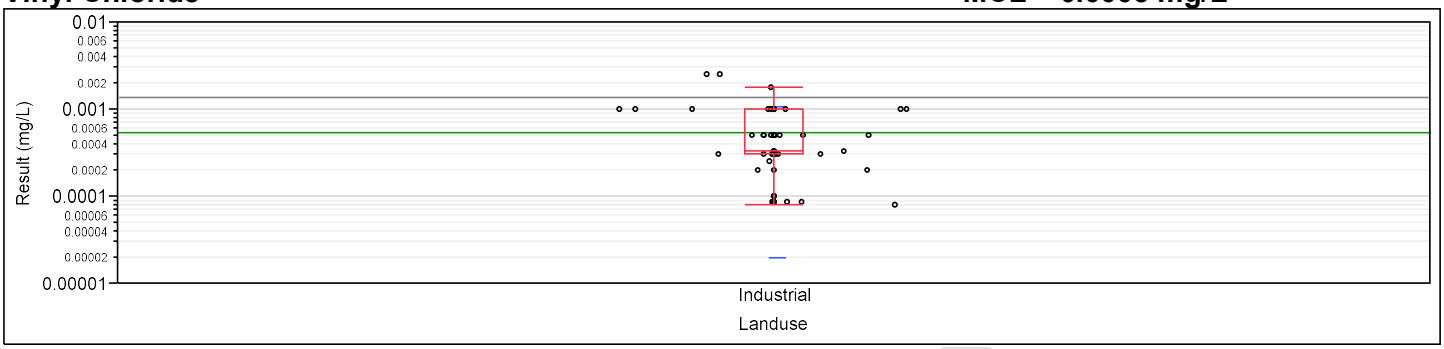
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	33	0.002	0.002	0.0003	0.001	0.002

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	33	78	111	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

Vinyl Chloride

MCL = 0.0005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.00008	0.000086	0.0003	0.00033	0.001	0.001	0.0025

Means and Std Deviations

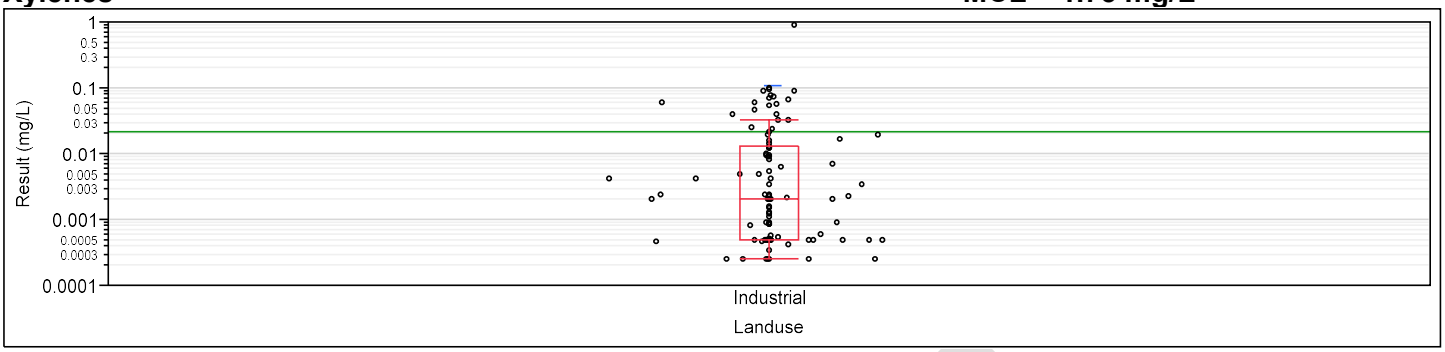
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	55	0.0005	0.0005	0.00007	0.0004	0.0007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	55	125	180	14	8
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

DRAFT

Xylenes

MCL = 1.75 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.00025	0.00047	0.0005	0.0021	0.01325	0.059	0.88

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	106	0.02	0.09	0.009	0.005	0.04

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	10	10	0	0
Industrial	106	382	488	0	0
Residential	0	5	5	0	0
Transportation/Highway	0	5	5	0	0
Vacant/Open Space	0	15	15	0	0

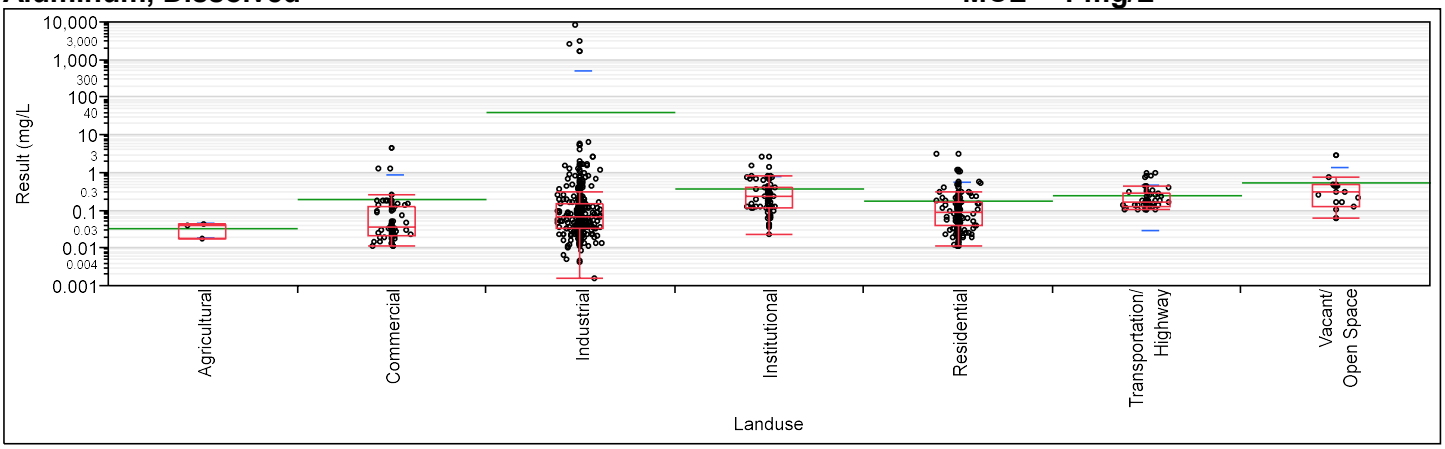
DRAFT

C-4
Inorganics

DRAFT

Aluminum, Dissolved

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.017	0.017	0.017	0.04	0.044	0.044	0.044
Commercial	0.011	0.014	0.021	0.0365	0.125025	0.1787	4.36
Industrial	0.0015	0.02186	0.034225	0.06605	0.15525	0.4731	8400
Institutional	0.023	0.0646	0.1185	0.2295	0.41775	0.7586	2.53
Residential	0.011	0.021	0.03775	0.092	0.165825	0.3129	3.17
Transportation/Highway	0.101	0.108	0.1261	0.166	0.277	0.775	1
Vacant/Open Space	0.062	0.0625	0.124	0.308	0.464	2.88	2.88

Means and Std Deviations

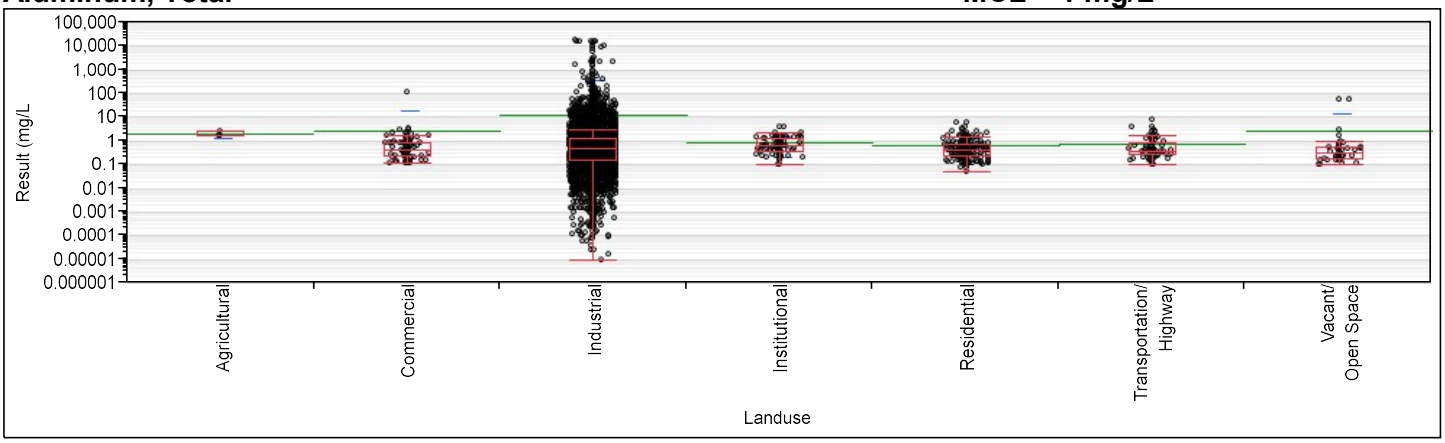
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	3	0.0	0.01	0.01	-0.00	0.07
Commercial	82	0.2	0.69	0.08	0.05	0.35
Industrial	422	41.2	465.77	22.67	-3.34	85.80
Institutional	78	0.4	0.46	0.05	0.28	0.49
Residential	166	0.2	0.38	0.03	0.12	0.24
Transportation/Highway	59	0.3	0.22	0.03	0.20	0.31
Vacant/Open Space	19	0.6	0.84	0.19	0.15	0.96

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	3	0	3	0	0
Commercial	82	49	131	0	0
Industrial	422	184	606	15	2
Institutional	78	28	106	0	0
Residential	166	196	362	0	0
Transportation/Highway	59	65	124	0	0
Vacant/Open Space	19	63	82	0	0

DRAFT

Aluminum, Total

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	1.6	1.6	1.6	1.7	2.8	2.8	2.8
Commercial	0.112	0.135	0.22875	0.4345	0.8975	2	114
Industrial	9.5e-6	0.0585	0.16	0.46	1.35	4	19000
Institutional	0.105	0.2254	0.3885	0.677	1.3795	1.58	3.86
Residential	0.0484	0.132	0.23075	0.428	0.777	1.446	6.39
Transportation/Highway	0.1039	0.1824	0.26875	0.376	0.831	1.568	7.63
Vacant/Open Space	0.109	0.155	0.177	0.31	0.531	1.5978	57.5

Means and Std Deviations

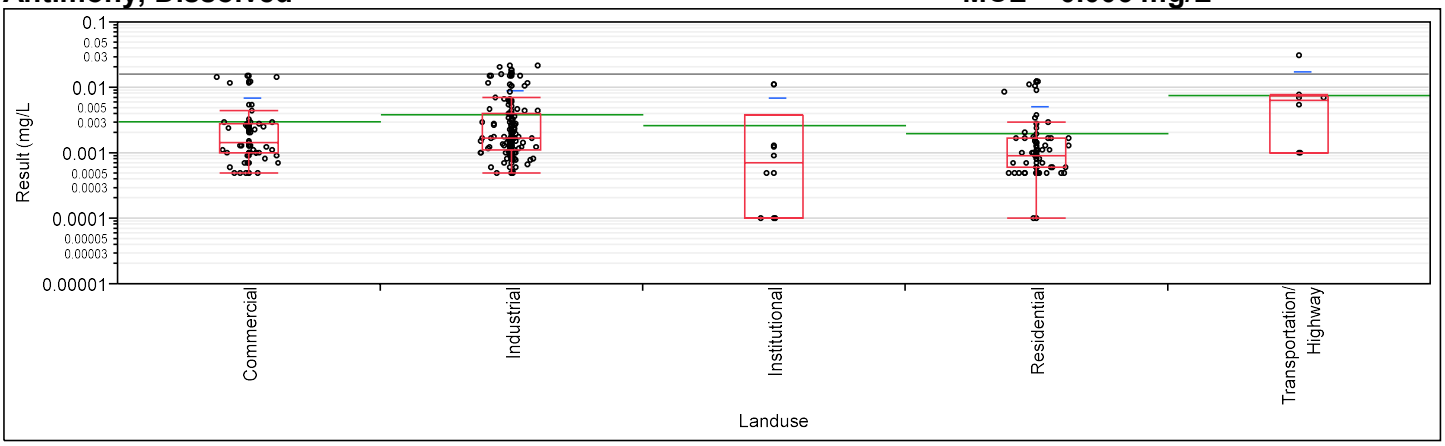
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	3	2.0	0.7	0.38	0.4	3.7
Commercial	110	2.8	15.2	1.45	-0.1	5.6
Industrial	24346	12.0	343.6	2.20	7.7	16.3
Institutional	97	0.9	0.7	0.07	0.7	1.0
Residential	336	0.6	0.7	0.04	0.6	0.7
Transportation/Highway	106	0.7	1.0	0.10	0.5	0.9
Vacant/Open Space	51	2.7	11.2	1.57	-0.4	5.8

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	3	0	3	3	100
Commercial	110	17	127	5	4
Industrial	24346	945	25291	7387	29
Institutional	97	7	104	5	5
Residential	336	47	383	25	7
Transportation/Highway	106	20	126	0	0
Vacant/Open Space	51	31	82	0	0

DRAFT

Antimony, Dissolved

MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0005	0.00061	0.001	0.0014	0.002725	0.01177	0.0154
Industrial	0.0005	0.0008	0.001093	0.0017	0.003975	0.01283	0.022
Institutional	0.0001	0.0001	0.0001	0.0007	0.003725	0.011	0.011
Residential	0.0001	0.0005	0.0006	0.0009	0.0017	0.00521	0.0125
Transportation/Highway	0.001	0.001	0.001	0.00617	0.007503	0.0314	0.0314

Means and Std Deviations

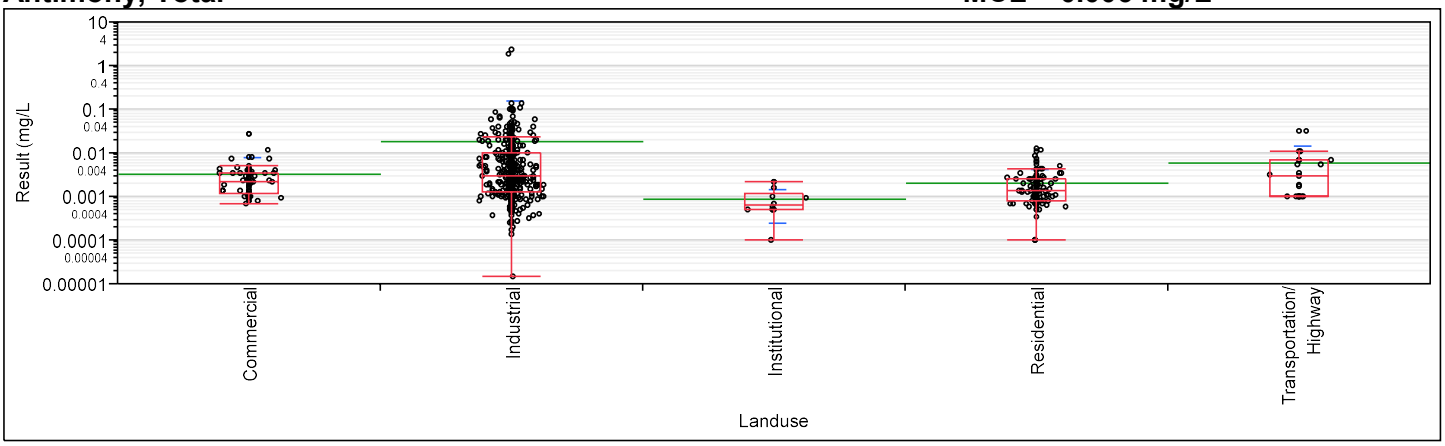
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	70	0.003	0.004	0.0005	0.0021	0.004
Industrial	156	0.004	0.005	0.0004	0.0031	0.005
Institutional	10	0.003	0.004	0.0014	-0.0005	0.006
Residential	86	0.002	0.003	0.0003	0.0014	0.003
Transportation/Highway	8	0.008	0.010	0.0035	-0.0007	0.016

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	2	2	0	0
Commercial	70	81	151	8	5
Industrial	156	134	290	28	10
Institutional	10	85	95	2	2
Residential	86	262	348	8	2
Transportation/Highway	8	136	144	0	0
Vacant/Open Space	0	100	100	0	0

DRAFT

Antimony, Total

MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0007	0.00095	0.0012	0.00215	0.003525	0.0063	0.0273
Industrial	0.000015	0.000762	0.00122	0.00294	0.01	0.0269	2.3
Institutional	0.0001	0.0003	0.0005	0.00065	0.00115	0.00215	0.0022
Residential	0.0001	0.000673	0.000813	0.001355	0.0025	0.0043	0.013
Transportation/Highway	0.001	0.001	0.001	0.0029	0.0069	0.02306	0.0315

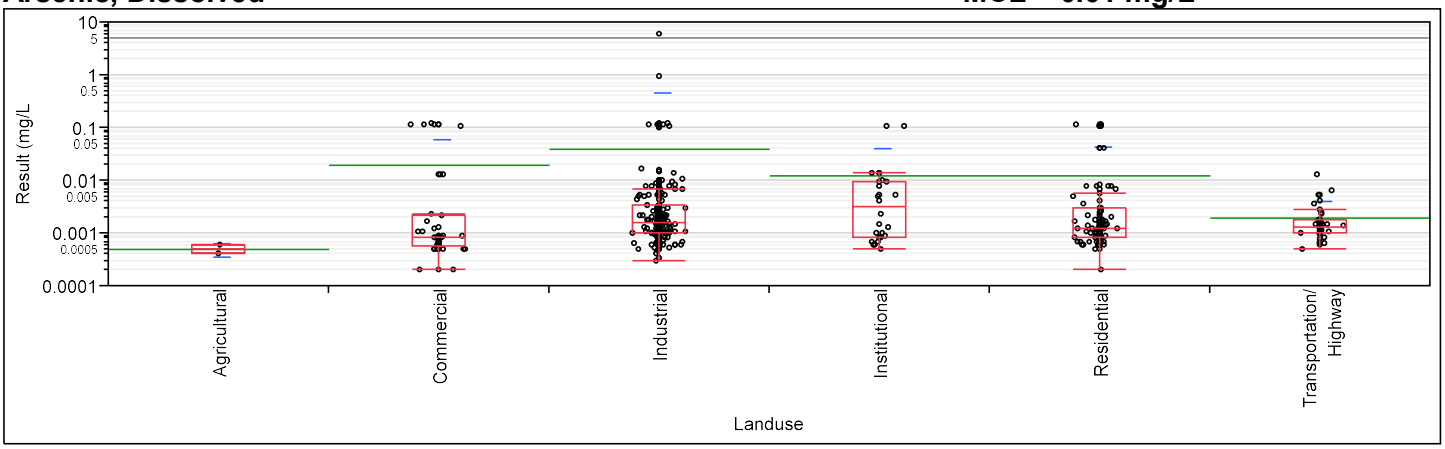
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	74	0.003	0.0045	0.0005	0.0023	0.004
Industrial	471	0.019	0.1382	0.0064	0.0061	0.031
Institutional	14	0.001	0.0006	0.0002	0.0005	0.001
Residential	120	0.002	0.0022	0.0002	0.0017	0.002
Transportation/Highway	23	0.006	0.0086	0.0018	0.0023	0.010

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	2	2	0	0
Commercial	74	77	151	6	4
Industrial	471	392	863	157	18
Institutional	14	85	99	0	0
Residential	120	261	381	6	2
Transportation/Highway	23	123	146	3	2
Vacant/Open Space	0	100	100	0	0

DRAFT

Arsenic, Dissolved MCL = 0.01 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.0004	0.0004	0.0004	0.0005	0.0006	0.0006	0.0006
Commercial	0.0002	0.0005	0.000575	0.0008	0.00215	0.11294	0.1183
Industrial	0.0003	0.0006	0.001	0.0016	0.0034	0.00948	6
Institutional	0.0005	0.0006	0.0008	0.00325	0.009625	0.04129	0.1066
Residential	0.0002	0.00065	0.0008	0.0012	0.002925	0.04185	0.1161
Transportation/Highway	0.0005	0.000631	0.001	0.00127	0.00178	0.00487	0.0132

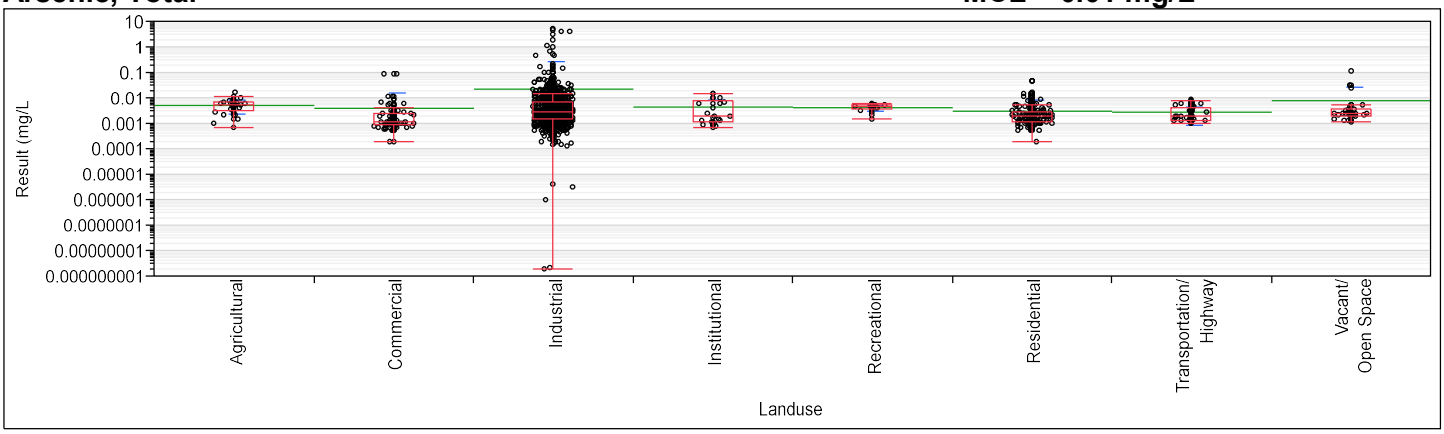
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	2	0.001	0.00	0.000	-0.001	0.002
Commercial	50	0.020	0.04	0.006	0.008	0.031
Industrial	217	0.040	0.41	0.028	-0.016	0.095
Institutional	26	0.012	0.03	0.005	0.001	0.024
Residential	94	0.012	0.03	0.003	0.006	0.019
Transportation/Highway	42	0.002	0.00	0.000	0.001	0.003

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	2	0	2	0	0
Commercial	50	84	134	9	7
Industrial	217	175	392	17	4
Institutional	26	80	106	3	3
Residential	94	260	354	9	3
Transportation/Highway	42	129	171	1	1
Vacant/Open Space	0	100	100	0	0

DRAFT

Arsenic, Total MCL = 0.01 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.0007	0.001654	0.003025	0.0053	0.006995	0.008678	0.01639
Commercial	0.0002	0.0006	0.0009	0.0012	0.002375	0.00595	0.084
Industrial	1.9e-9	0.00074	0.0014	0.0029	0.0065	0.014	5.4
Institutional	0.0007	0.00087	0.001075	0.0019	0.007625	0.0142	0.0142
Recreational	0.00139	0.002252	0.0036	0.0045	0.005245	0.005572	0.0058
Residential	0.0002	0.001	0.0012	0.00186	0.00281	0.00625	0.045
Transportation/Highway	0.001	0.0011	0.0013	0.002	0.0041	0.00604	0.0089
Vacant/Open Space	0.0012	0.00129	0.002	0.00245	0.003693	0.032	0.115

Means and Std Deviations

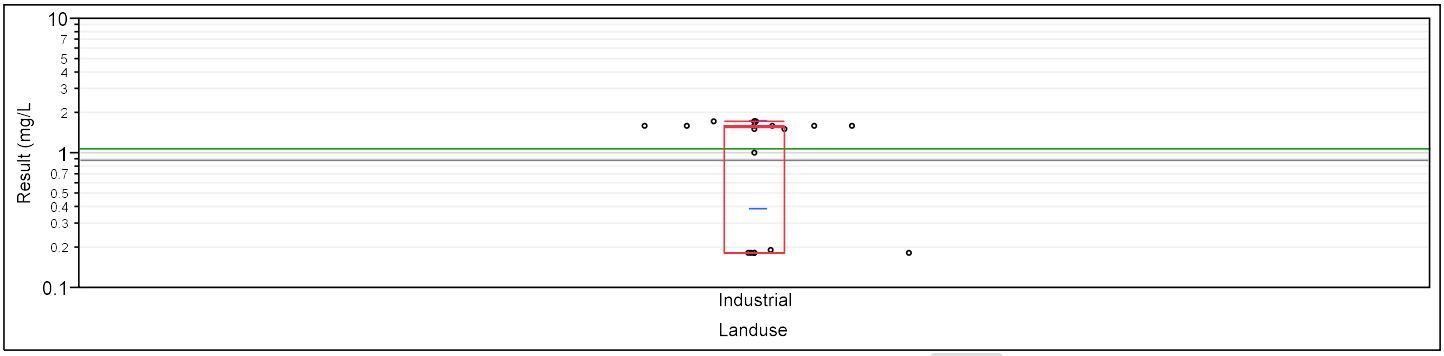
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	41	0.005	0.003	0.0005	0.004	0.006
Commercial	120	0.004	0.013	0.0012	0.002	0.006
Industrial	1640	0.023	0.249	0.0061	0.011	0.035
Institutional	26	0.005	0.005	0.0009	0.003	0.006
Recreational	21	0.004	0.001	0.0003	0.004	0.005
Residential	254	0.003	0.005	0.0003	0.002	0.004
Transportation/Highway	58	0.003	0.002	0.0003	0.002	0.003
Vacant/Open Space	40	0.008	0.019	0.0031	0.002	0.014

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	41	10	51	3	6
Commercial	120	96	216	3	1
Industrial	1640	847	2487	220	9
Institutional	26	80	106	1	1
Recreational	21	1	22	0	0
Residential	254	266	520	9	2
Transportation/Highway	58	138	196	0	0
Vacant/Open Space	40	98	138	3	2

DRAFT

Asbestos

MCL = 7 MFL



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.18	0.18	0.18	1.55	1.6	1.7	1.7

Means and Std Deviations

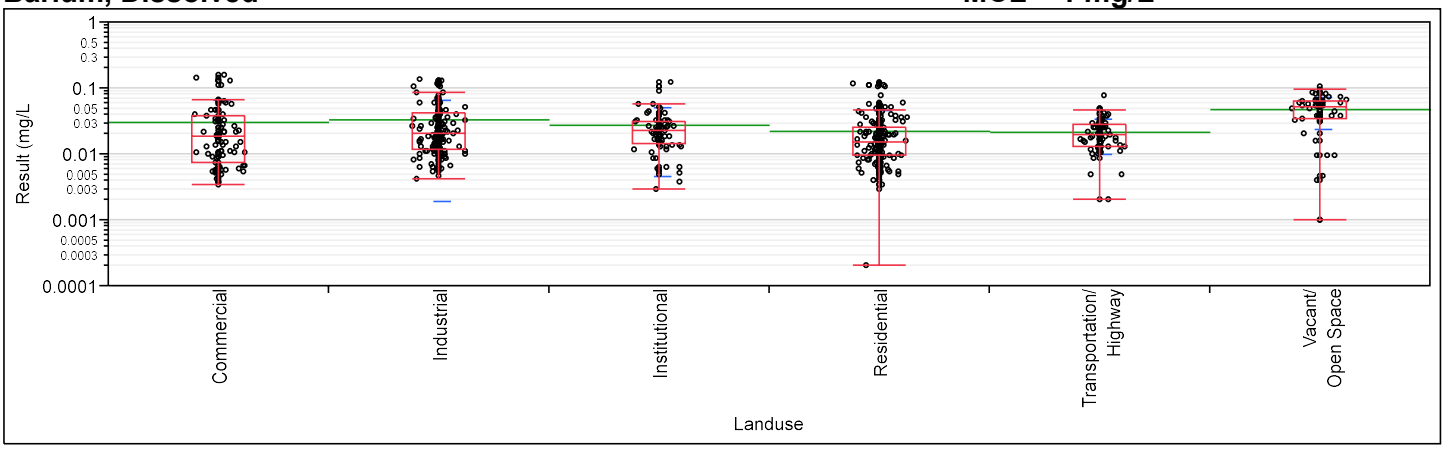
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	20	1.1	0.7	0.2	0.8	1.4087

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	20	0	20	0	0

DRAFT

Barium, Dissolved

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0035	0.0053	0.0075	0.0181	0.037	0.0674	0.158
Industrial	0.0042	0.0082	0.0118	0.0205	0.042725	0.07538	0.134
Institutional	0.003	0.0063	0.0141	0.0228	0.03155	0.04773	0.123
Residential	0.0002	0.00589	0.009625	0.0154	0.0245	0.04794	0.1227
Transportation/Highway	0.002	0.0107	0.01295	0.0197	0.0272	0.0388	0.0767
Vacant/Open Space	0.001	0.0095	0.035	0.05175	0.0626	0.08168	0.106

Means and Std Deviations

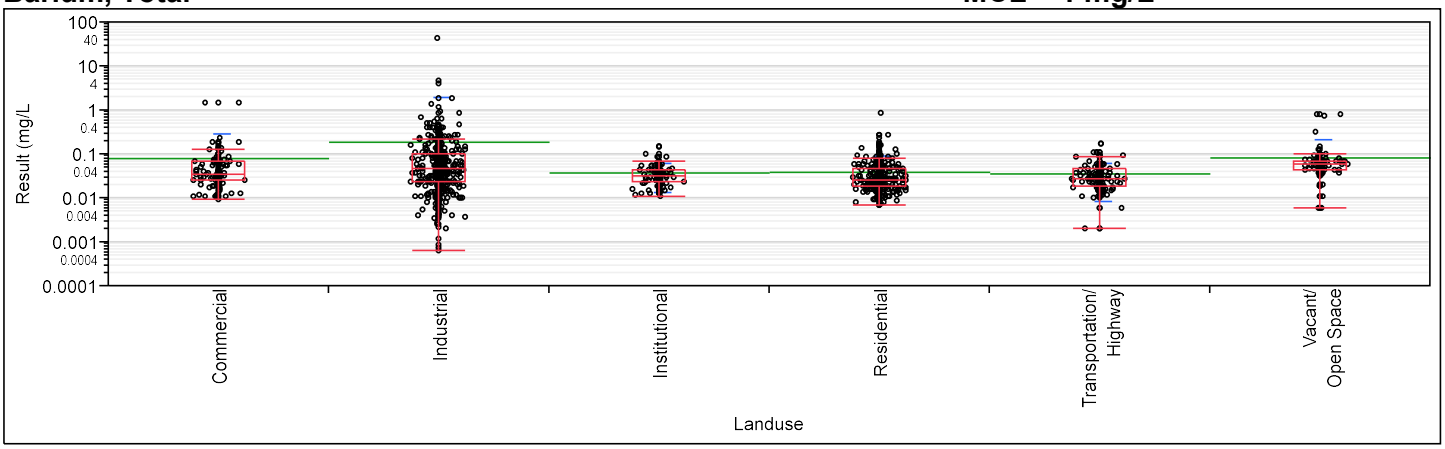
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	119	0.03	0.04	0.003	0.02	0.04
Industrial	200	0.03	0.03	0.002	0.03	0.04
Institutional	92	0.03	0.02	0.002	0.02	0.03
Residential	248	0.02	0.02	0.001	0.02	0.03
Transportation/Highway	93	0.02	0.01	0.001	0.02	0.02
Vacant/Open Space	76	0.05	0.02	0.003	0.04	0.05

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	119	32	151	0	0
Industrial	200	37	237	0	0
Institutional	92	14	106	0	0
Residential	248	115	363	0	0
Transportation/Highway	93	41	134	0	0
Vacant/Open Space	76	24	100	0	0

DRAFT

Barium, Total

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0094	0.01274	0.0249	0.0349	0.0656	0.1212	1.52
Industrial	0.000631	0.01025	0.0225	0.0451	0.09905	0.2299	43
Institutional	0.0108	0.01479	0.02265	0.0317	0.044025	0.0634	0.152
Residential	0.0069	0.01398	0.0185	0.0259	0.0457	0.07136	0.829
Transportation/Highway	0.002	0.0135	0.0181	0.0277	0.0448	0.066	0.169
Vacant/Open Space	0.006	0.02688	0.04395	0.058	0.0696	0.0996	0.82

Means and Std Deviations

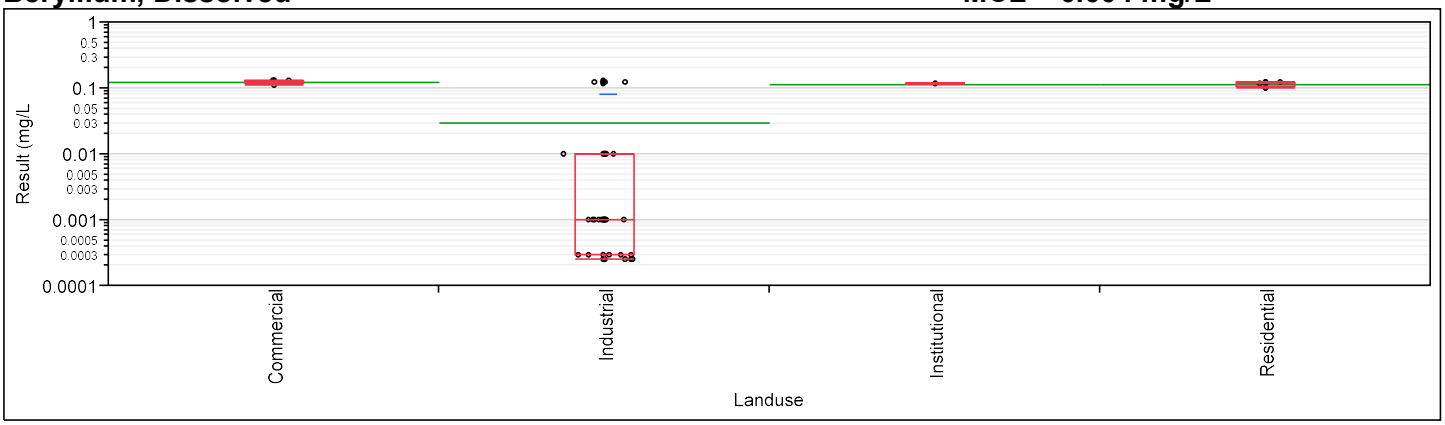
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	143	0.08	0.22	0.018	0.05	0.12
Industrial	554	0.19	1.85	0.079	0.03	0.34
Institutional	138	0.04	0.02	0.002	0.03	0.04
Residential	425	0.04	0.05	0.003	0.03	0.04
Transportation/Highway	168	0.04	0.03	0.002	0.03	0.04
Vacant/Open Space	125	0.08	0.13	0.012	0.06	0.11

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	143	31	174	1	1
Industrial	554	83	637	7	1
Institutional	138	14	152	0	0
Residential	425	77	502	0	0
Transportation/Highway	168	30	198	0	0
Vacant/Open Space	125	24	149	0	0

DRAFT

Beryllium, Dissolved

MCL = 0.004 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.1132	0.1132	0.116425	0.1256	0.128975	0.1295	0.1295
Industrial	0.00025	0.00025	0.00029	0.001	0.01	0.1239	0.1298
Institutional	0.1144	0.1144	0.1144	0.11445	0.1145	0.1145	0.1145
Residential	0.1006	0.1006	0.1057	0.11895	0.120625	0.1215	0.1215

Means and Std Deviations

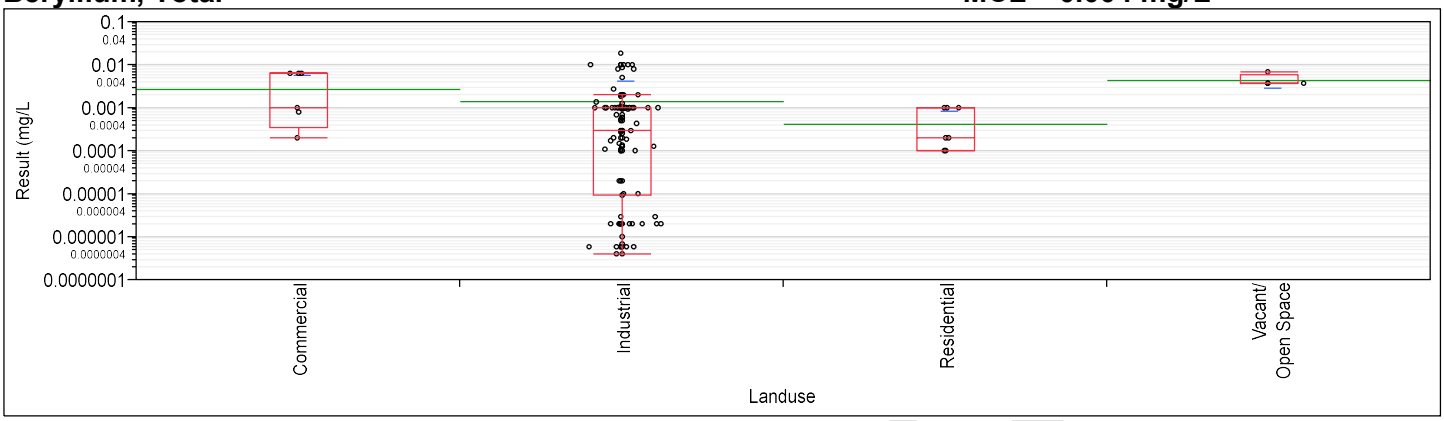
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	8	0.1	0.00661	0.00234	0.12	0.13
Industrial	44	0.0	0.05144	0.00776	0.01	0.05
Institutional	2	0.1	0.00007	0.00005	0.11	0.12
Residential	8	0.1	0.00861	0.00304	0.11	0.12

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	8	129	137	8	6
Industrial	44	236	280	16	6
Institutional	2	78	80	2	3
Residential	8	273	281	8	3
Transportation/Highway	0	106	106	0	0
Vacant/Open Space	0	76	76	0	0

DRAFT

Beryllium, Total

MCL – 0.004 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0002	0.0002	0.00035	0.001	0.0063	0.0063	0.0063
Industrial	3.9e-7	8.68e-7	0.000009	0.00029	0.001	0.00362	0.019
Residential	0.0001	0.0001	0.0001	0.0002	0.001	0.001	0.001
Vacant/Open Space	0.0037	0.0037	0.0037	0.0037	0.006033	0.00681	0.00681

Means and Std Deviations

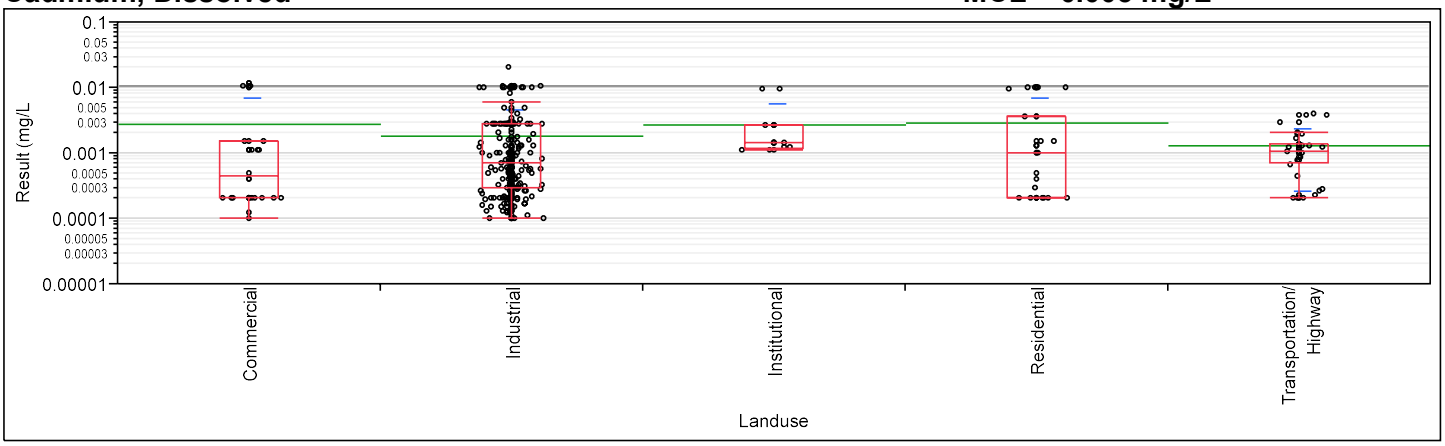
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	8	0.0028	0.0029	0.0010	0.00030	0.005
Industrial	115	0.0014	0.0030	0.0003	0.00087	0.002
Residential	9	0.0004	0.0004	0.0001	0.00009	0.001
Vacant/Open Space	4	0.0045	0.0016	0.0008	0.00200	0.007

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	8	139	147	1	1
Industrial	115	634	749	11	1
Institutional	0	104	104	0	0
Residential	9	371	380	0	0
Transportation/Highway	0	134	134	0	0
Vacant/Open Space	4	98	102	1	1

DRAFT

Cadmium, Dissolved

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0001	0.0002	0.0002	0.00045	0.0015	0.0104	0.0116
Industrial	0.0001	0.000172	0.0003	0.0007	0.0028	0.00394	0.02
Institutional	0.0011	0.0011	0.001175	0.00144	0.0026	0.0095	0.0096
Residential	0.0002	0.0002	0.0002	0.001	0.0036	0.00996	0.0102
Transportation/Highway	0.0002	0.000205	0.000689	0.00106	0.00138	0.0034	0.004

Means and Std Deviations

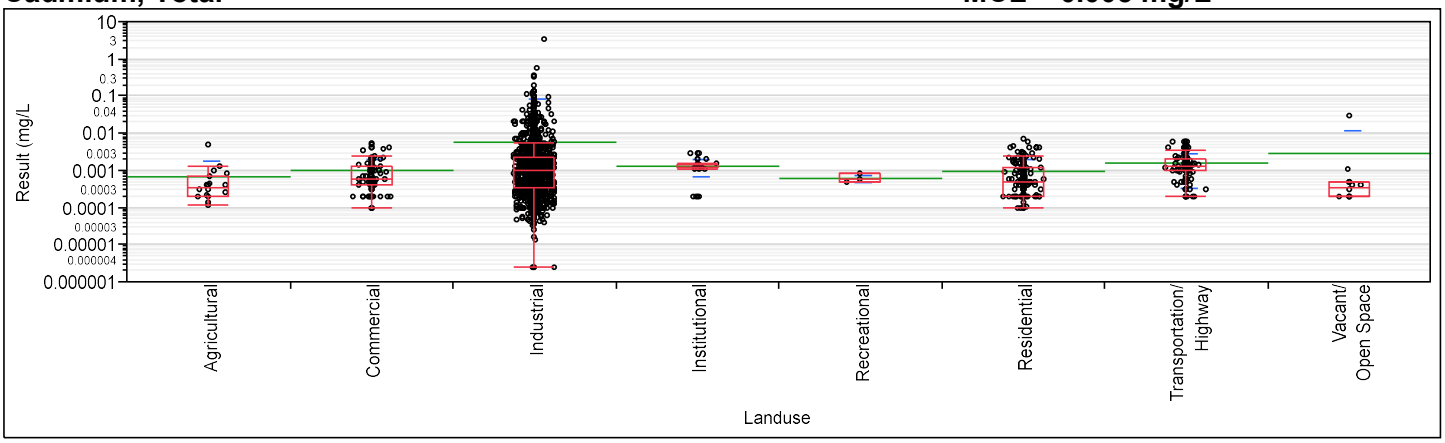
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	36	0.003	0.004	0.001	0.001	0.004
Industrial	310	0.002	0.003	0.000	0.002	0.002
Institutional	14	0.003	0.003	0.001	0.001	0.004
Residential	36	0.003	0.004	0.001	0.002	0.004
Transportation/Highway	44	0.001	0.001	0.000	0.001	0.002

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	5	5	0	0
Commercial	36	121	157	8	5
Industrial	310	295	605	26	4
Institutional	14	97	111	2	2
Residential	36	340	376	8	2
Transportation/Highway	44	122	166	0	0
Vacant/Open Space	0	100	100	0	0

DRAFT

Cadmium, Total

MCL = 0.005 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.00012	0.000138	0.0002	0.00035	0.000718	0.001678	0.00517
Commercial	0.0001	0.0002	0.0004	0.0006	0.001268	0.0023	0.0052
Industrial	2.5e-6	0.00017	0.00033	0.001	0.0023	0.0069	3.4
Institutional	0.0002	0.0002	0.0012	0.0012	0.001455	0.0024	0.0028
Recreational	0.0005	0.0005	0.0005	0.0006	0.0008	0.0008	0.0008
Residential	0.0001	0.0002	0.0002	0.0005	0.0012	0.0023	0.00724
Transportation/Highway	0.0002	0.0003	0.001	0.0013	0.002	0.00358	0.0058
Vacant/Open Space	0.0002	0.0002	0.0002	0.00035	0.0005	0.02203	0.031

Means and Std Deviations

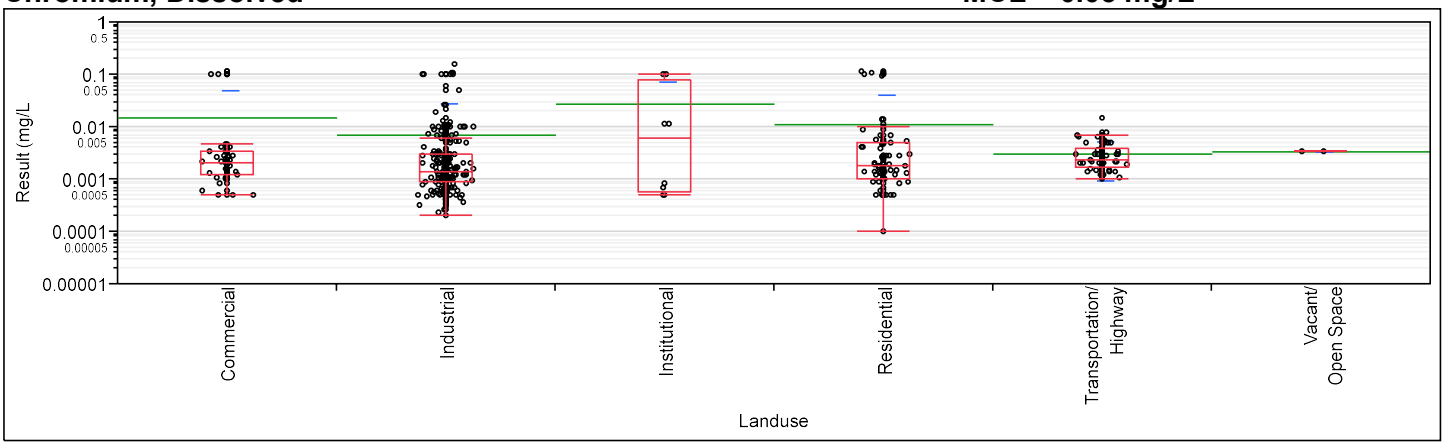
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	18	0.0007	0.0012	0.00027	0.0001	0.001
Commercial	108	0.0010	0.0010	0.00010	0.0008	0.001
Industrial	2056	0.0059	0.0776	0.00171	0.0025	0.009
Institutional	34	0.0013	0.0006	0.00011	0.0011	0.002
Recreational	3	0.0006	0.0002	0.00009	0.0003	0.001
Residential	176	0.0010	0.0011	0.00009	0.0008	0.001
Transportation/Highway	136	0.0016	0.0013	0.00011	0.0014	0.002
Vacant/Open Space	12	0.0029	0.0088	0.00255	-0.0027	0.009

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	18	32	50	1	2
Commercial	108	119	227	1	0
Industrial	2056	1358	3414	252	7
Institutional	34	78	112	0	0
Recreational	3	19	22	0	0
Residential	176	339	515	2	0
Transportation/Highway	136	96	232	2	1
Vacant/Open Space	12	122	134	1	1

DRAFT

Chromium, Dissolved

MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0005	0.00068	0.0012	0.002	0.0034	0.10152	0.1118
Industrial	0.0002	0.0005	0.00089	0.0014	0.003	0.01	0.16
Institutional	0.0005	0.0005	0.00055	0.006	0.07615	0.0991	0.0991
Residential	0.0001	0.0005	0.001	0.0018	0.0049	0.014	0.1129
Transportation/Highway	0.001	0.001313	0.00162	0.00231	0.00385	0.00597	0.015
Vacant/Open Space	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034

Means and Std Deviations

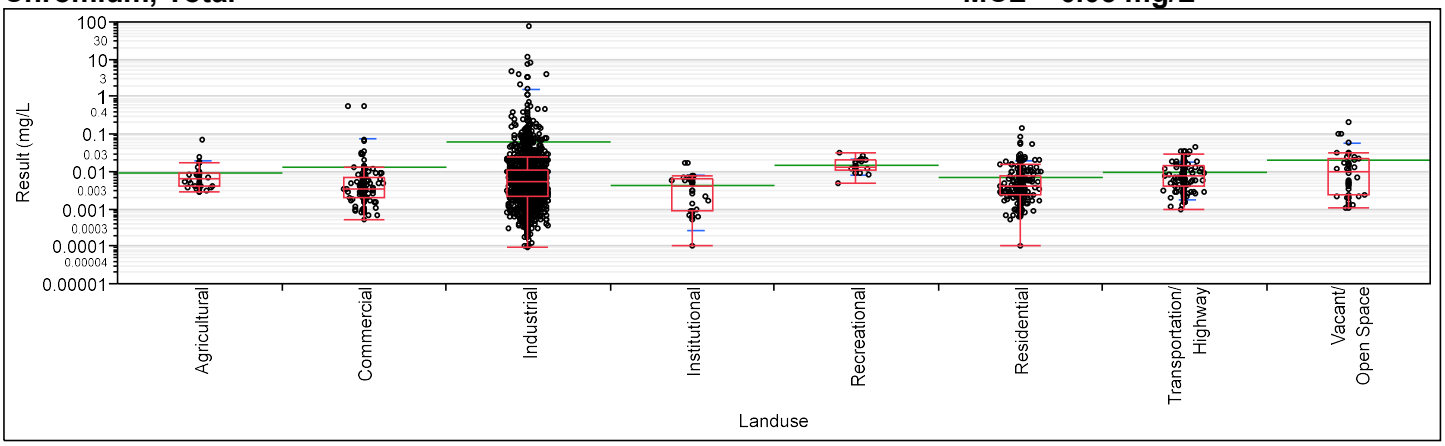
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	63	0.015	0.034	0.004	0.006	0.024
Industrial	307	0.007	0.021	0.001	0.005	0.009
Institutional	8	0.028	0.044	0.016	-0.009	0.064
Residential	95	0.011	0.028	0.003	0.005	0.017
Transportation/Highway	90	0.003	0.002	0.000	0.003	0.004
Vacant/Open Space	2	0.003	0.000	0.000	0.003	0.003

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	2	2	0	0
Commercial	63	76	139	8	6
Industrial	307	145	452	12	3
Institutional	8	62	70	2	3
Residential	95	195	290	8	3
Transportation/Highway	90	100	190	0	0
Vacant/Open Space	2	79	81	0	0

DRAFT

Chromium, Total

MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.0027	0.003232	0.004	0.00636	0.00929	0.0177	0.0704
Commercial	0.0005	0.00108	0.002	0.0035	0.0067	0.0121	0.559
Industrial	0.00009	0.001081	0.002118	0.0054	0.011	0.025	77
Institutional	0.0001	0.0006	0.0009	0.00405	0.0062	0.0078	0.0171
Recreational	0.005	0.00808	0.010595	0.013	0.0195	0.0262	0.032
Residential	0.0001	0.0013	0.0023	0.004	0.007753	0.0149	0.15
Transportation/Highway	0.001	0.00238	0.0042	0.00745	0.01375	0.019	0.045
Vacant/Open Space	0.0011	0.00136	0.002275	0.009845	0.0225	0.0495	0.2

Means and Std Deviations

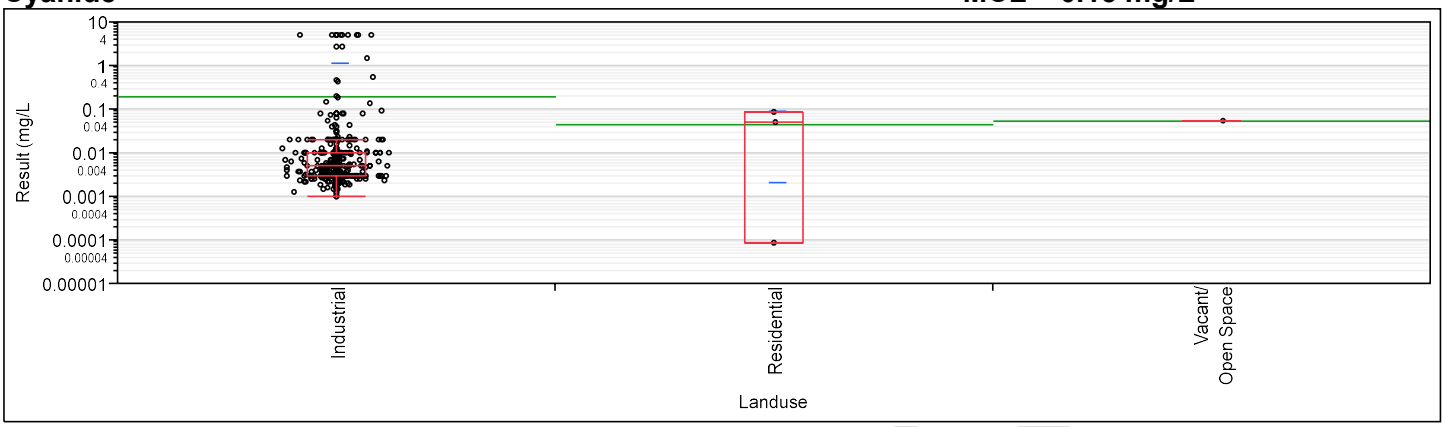
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	37	0.009	0.012	0.0019	0.006	0.013
Commercial	147	0.014	0.065	0.0054	0.003	0.024
Industrial	2650	0.064	1.540	0.0299	0.006	0.123
Institutional	36	0.004	0.004	0.0007	0.003	0.006
Recreational	21	0.015	0.007	0.0015	0.012	0.018
Residential	280	0.007	0.012	0.0007	0.006	0.009
Transportation/Highway	128	0.010	0.008	0.0007	0.008	0.011
Vacant/Open Space	42	0.021	0.037	0.0057	0.009	0.032

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	37	14	51	1	2
Commercial	147	88	235	3	1
Industrial	2650	537	3187	131	4
Institutional	36	53	89	0	0
Recreational	21	1	22	0	0
Residential	280	213	493	5	1
Transportation/Highway	128	95	223	0	0
Vacant/Open Space	42	83	125	3	2

DRAFT

Cyanide

MCL = 0.15 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.001	0.0025	0.003	0.005	0.01	0.02	5
Residential	0.000087	0.000087	0.000087	0.05	0.087	0.087	0.087
Vacant/Open Space	0.055	0.055	0.055	0.055	0.055	0.055	0.055

Means and Std Deviations

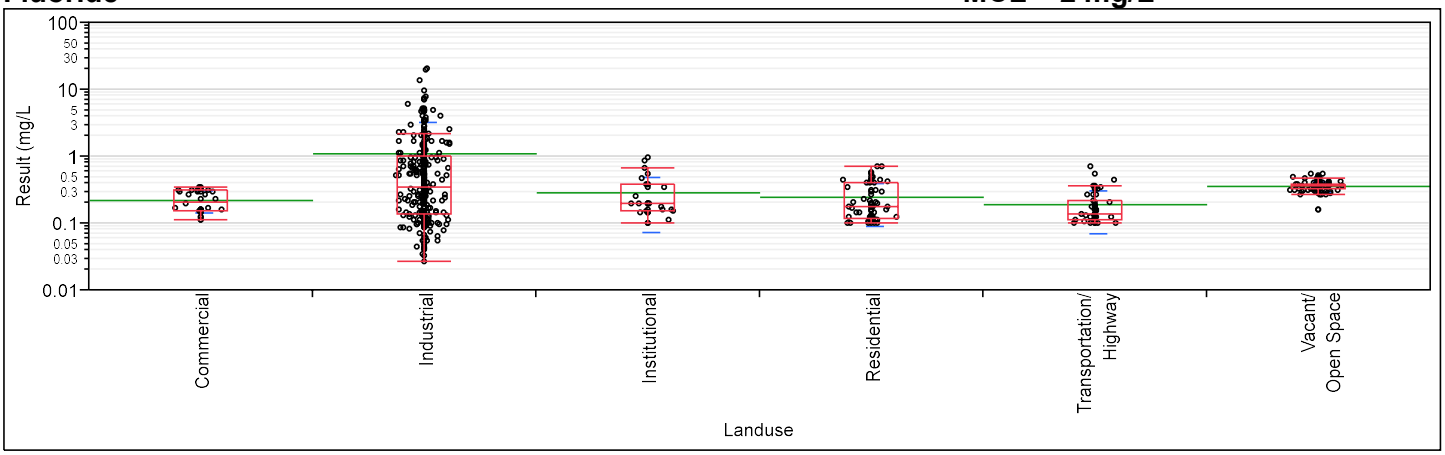
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	496	0.20	0.92	0.04	0.12	0.3
Residential	3	0.05	0.04	0.03	-0.06	0.2
Vacant/Open Space	1	0.06	.	.	.	.

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	8	8	0	0
Industrial	496	828	1324	25	2
Residential	3	4	7	0	0
Transportation/Highway	0	4	4	0	0
Vacant/Open Space	1	20	21	0	0

DRAFT

Fluoride

MCL = 2 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.11	0.12	0.149	0.21	0.30475	0.321	0.35
Industrial	0.027	0.0913	0.13425	0.345	0.9775	2.879	20
Institutional	0.1	0.116	0.15	0.19	0.378	0.63	0.93
Residential	0.1	0.105	0.116	0.18	0.4	0.4676	0.695
Transportation/Highway	0.1	0.101	0.113	0.136	0.22	0.3504	0.71
Vacant/Open Space	0.161	0.29	0.32425	0.36	0.3815	0.46	0.533

Means and Std Deviations

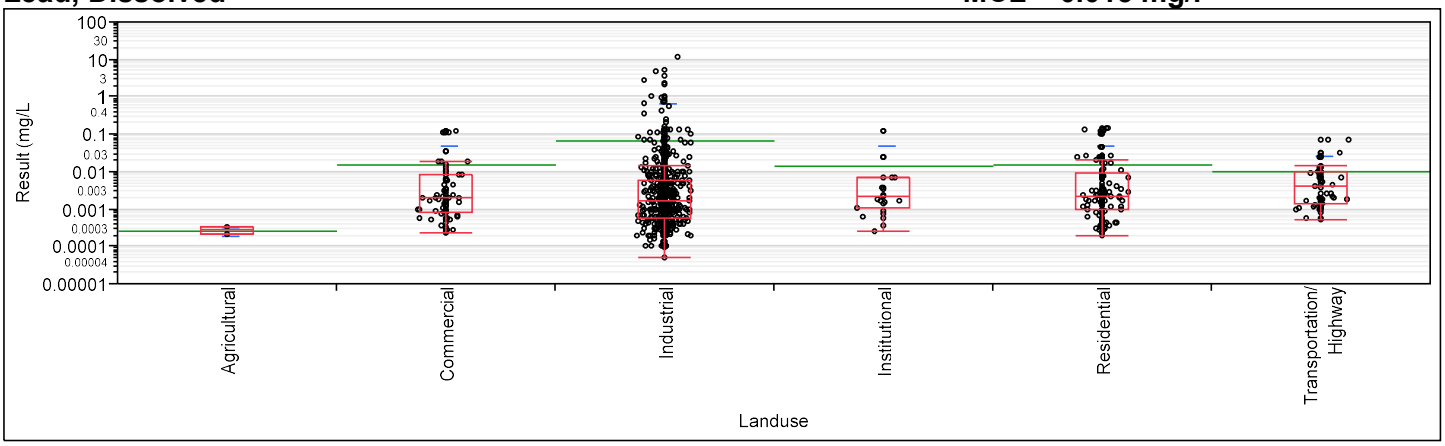
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	32	0.2	0.08	0.01	0.2	0.3
Industrial	302	1.1	2.21	0.13	0.9	1.4
Institutional	31	0.3	0.21	0.04	0.2	0.4
Residential	75	0.2	0.16	0.02	0.2	0.3
Transportation/Highway	51	0.2	0.12	0.02	0.2	0.2
Vacant/Open Space	96	0.4	0.06	0.01	0.3	0.4

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	32	36	68	0	0
Industrial	302	141	443	42	9
Institutional	31	49	80	0	0
Residential	75	142	217	0	0
Transportation/Highway	51	80	131	0	0
Vacant/Open Space	96	0	96	0	0

DRAFT

Lead, Dissolved

MCL = 0.015 mg/l



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.00021	0.00021	0.00021	0.000265	0.00032	0.00032	0.00032
Commercial	0.00022	0.000395	0.000838	0.001905	0.008	0.07325	0.1244
Industrial	0.00005	0.00028	0.00056	0.00171	0.006	0.0325	12
Institutional	0.00026	0.0005	0.001033	0.002235	0.0071	0.05433	0.1238
Residential	0.0002	0.00039	0.000985	0.00223	0.00935	0.0427	0.145
Transportation/Highway	0.00051	0.00097	0.0014	0.0039	0.01	0.02916	0.073

Means and Std Deviations

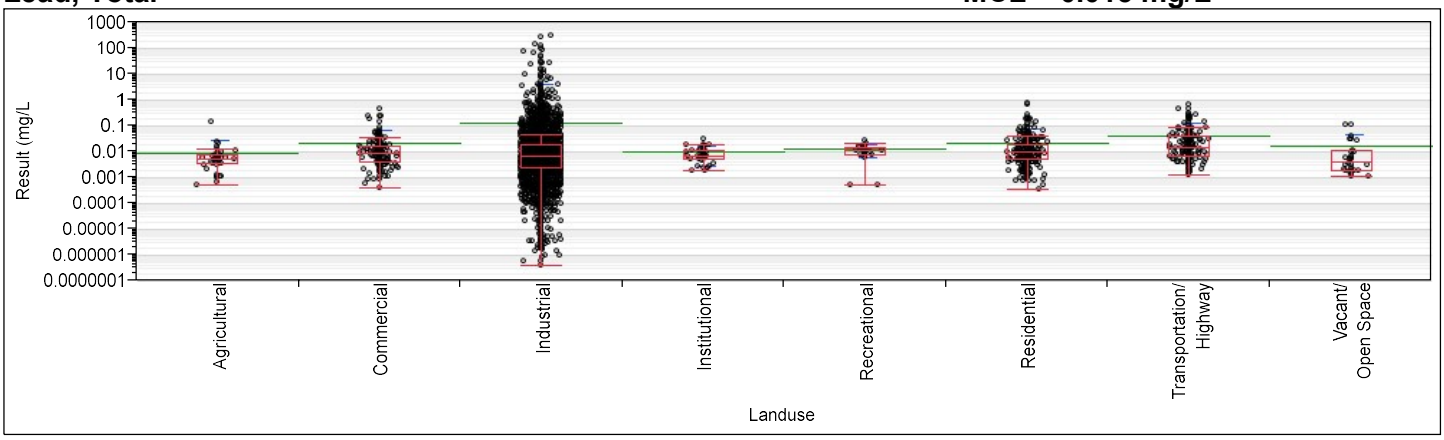
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	2	0.0003	0.00008	0.00006	-0.0004	0.001
Commercial	84	0.0154	0.03430	0.00374	0.0080	0.023
Industrial	699	0.0684	0.57373	0.02170	0.0258	0.111
Institutional	26	0.0144	0.03305	0.00648	0.0010	0.028
Residential	150	0.0155	0.03342	0.00273	0.0101	0.021
Transportation/Highway	63	0.0102	0.01638	0.00206	0.0061	0.014

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	2	3	5	0	0
Commercial	84	81	165	10	6
Industrial	699	453	1152	88	8
Institutional	26	82	108	3	3
Residential	150	241	391	17	4
Transportation/Highway	63	122	185	4	2
Vacant/Open Space	0	100	100	0	0

DRAFT

Lead, Total

MCL = 0.015 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.00051	0.00113	0.00344	0.00557	0.0074	0.0142	0.139
Commercial	0.0004	0.00236	0.004	0.00916	0.017	0.040566	0.44
Industrial	3.9e-7	0.000944	0.00237	0.00673	0.0198	0.05442	299
Institutional	0.00195	0.002766	0.0053	0.0072	0.01115	0.0191	0.03
Recreational	0.0005	0.00215	0.0081	0.0114	0.015265	0.020937	0.0285
Residential	0.00038	0.00249	0.0054	0.01	0.02	0.042461	0.76
Transportation/Highway	0.00129	0.0041	0.0069	0.0146	0.039	0.0891	0.66
Vacant/Open Space	0.0011	0.001537	0.002	0.004275	0.0115	0.0633	0.113

Means and Std Deviations

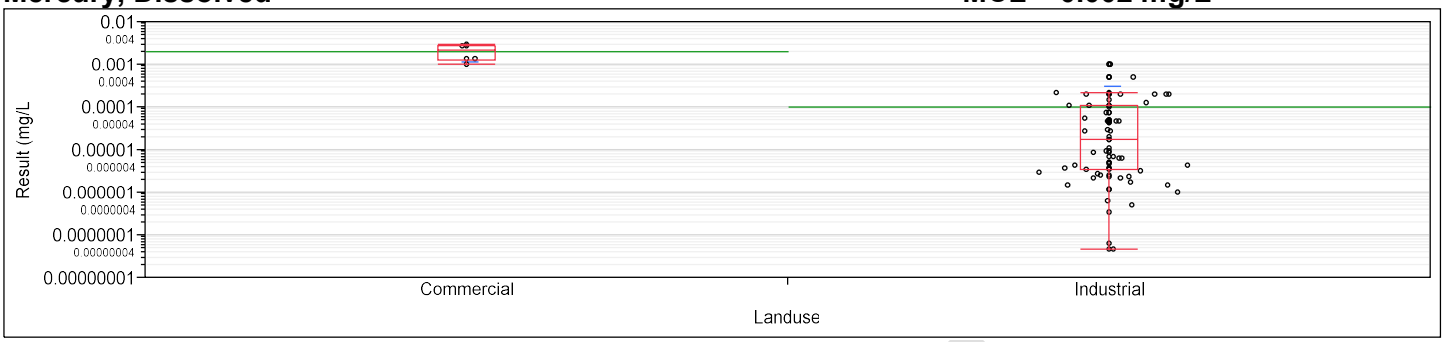
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	45	0.009	0.020	0.003	0.003	0.02
Commercial	215	0.022	0.050	0.003	0.015	0.03
Industrial	15727	0.131	3.979	0.032	0.069	0.19
Institutional	56	0.010	0.007	0.001	0.008	0.01
Recreational	22	0.012	0.006	0.001	0.009	0.01
Residential	458	0.022	0.055	0.003	0.017	0.03
Transportation/Highway	242	0.042	0.080	0.005	0.032	0.05
Vacant/Open Space	36	0.017	0.031	0.005	0.007	0.03

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	45	9	54	4	7
Commercial	215	43	258	49	19
Industrial	15727	2784	18511	4657	25
Institutional	56	61	117	5	4
Recreational	22	0	22	5	23
Residential	458	151	609	108	18
Transportation/Highway	242	65	307	94	31
Vacant/Open Space	36	108	144	4	3

DRAFT

Mercury, Dissolved

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.001	0.001	0.0013	0.002075	0.002813	0.003	0.003
Industrial	4.53e-8	1.2e-6	3.35e-6	1.73e-5	0.00011	0.000214	0.001

Means and Std Deviations

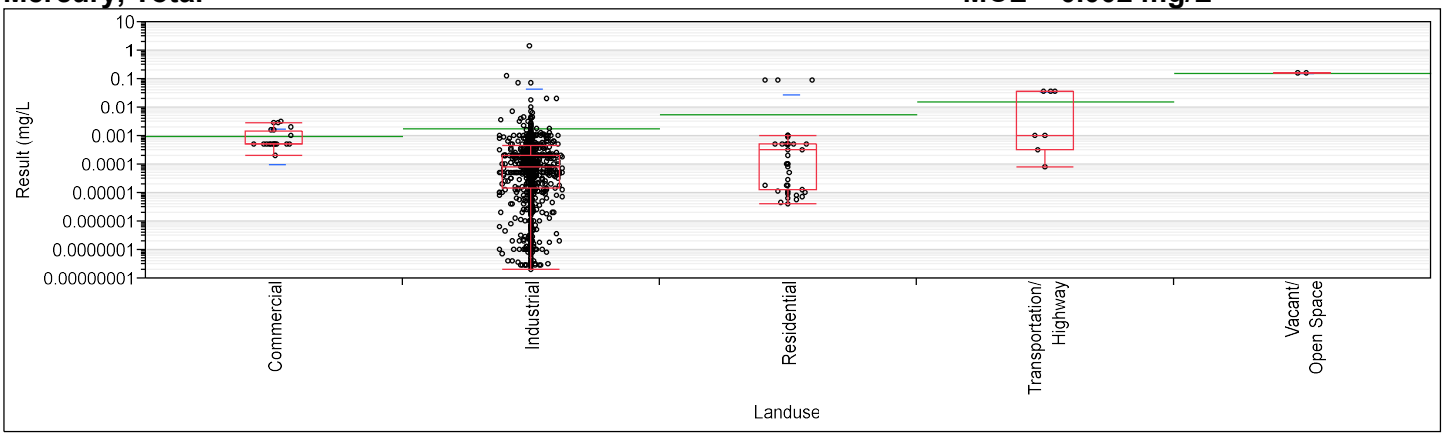
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	6	0.0021	0.0009	0.00036	0.00113	0.0030
Industrial	86	0.0001	0.0002	0.00002	0.00006	0.0001

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	6	75	81	1	1
Industrial	86	223	309	0	0
Institutional	0	80	80	0	0
Residential	0	238	238	0	0
Transportation/Highway	0	131	131	0	0
Vacant/Open Space	0	94	94	0	0

DRAFT

Mercury, Total

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0002	0.0005	0.0005	0.0005	0.00145	0.00285	0.003
Industrial	2e-8	5.42e-7	1.378e-5	0.000078	0.0002	0.000745	1.43
Residential	3.88e-6	6.962e-6	1.22e-5	0.00031	0.0005	0.001	0.085
Transportation/Highway	0.000083	0.000083	0.0003	0.001	0.036	0.036	0.036
Vacant/Open Space	0.161	0.161	0.161	0.161	0.161	0.161	0.161

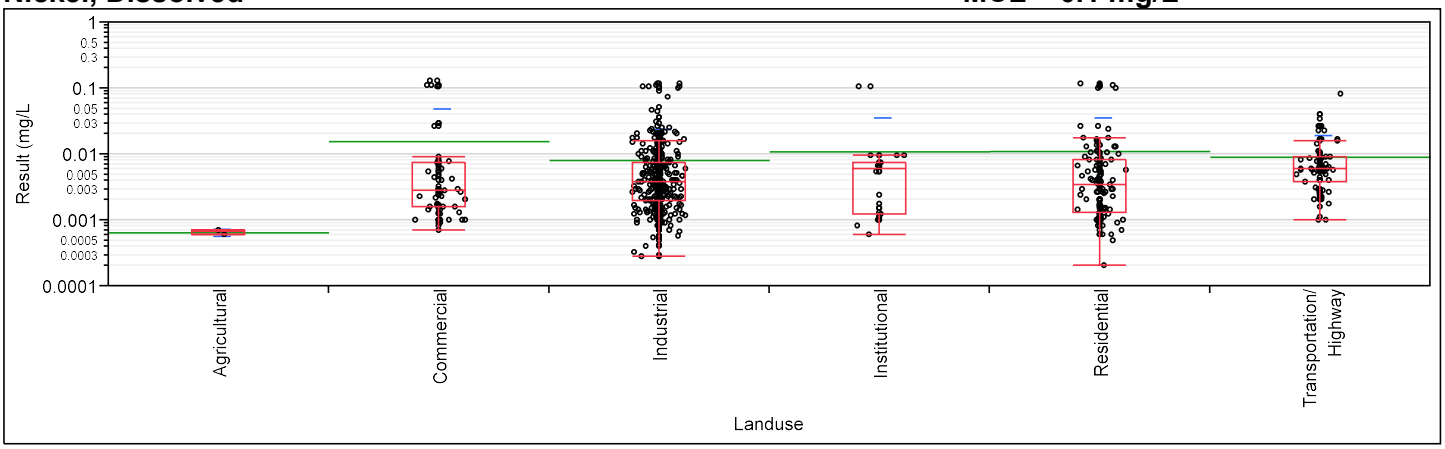
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	24	0.0010	0.001	0.0002	0.0006	0.001
Industrial	1140	0.0018	0.043	0.0013	-0.0007	0.004
Residential	47	0.0057	0.021	0.0031	-0.0004	0.012
Transportation/Highway	7	0.0158	0.019	0.0072	-0.0017	0.033
Vacant/Open Space	3	0.1610	0.000	0.0000	0.1610	0.161

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	24	75	99	1	1
Industrial	1140	1897	3037	26	1
Institutional	0	80	80	0	0
Residential	47	256	303	1	0
Transportation/Highway	7	128	135	1	1
Vacant/Open Space	3	94	97	1	1

DRAFT

Nickel, Dissolved MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.0006	0.0006	0.0006	0.00065	0.0007	0.0007	0.0007
Commercial	0.0007	0.001	0.0016	0.0028	0.0072	0.09626	0.1278
Industrial	0.00028	0.0011	0.0019	0.0037	0.007473	0.015	0.1187
Institutional	0.0006	0.001	0.001225	0.00595	0.0072	0.0097	0.1045
Residential	0.0002	0.0009	0.0013	0.0035	0.0082	0.0165	0.1188
Transportation/Highway	0.001	0.002178	0.0038	0.0059	0.009	0.023	0.082

Means and Std Deviations

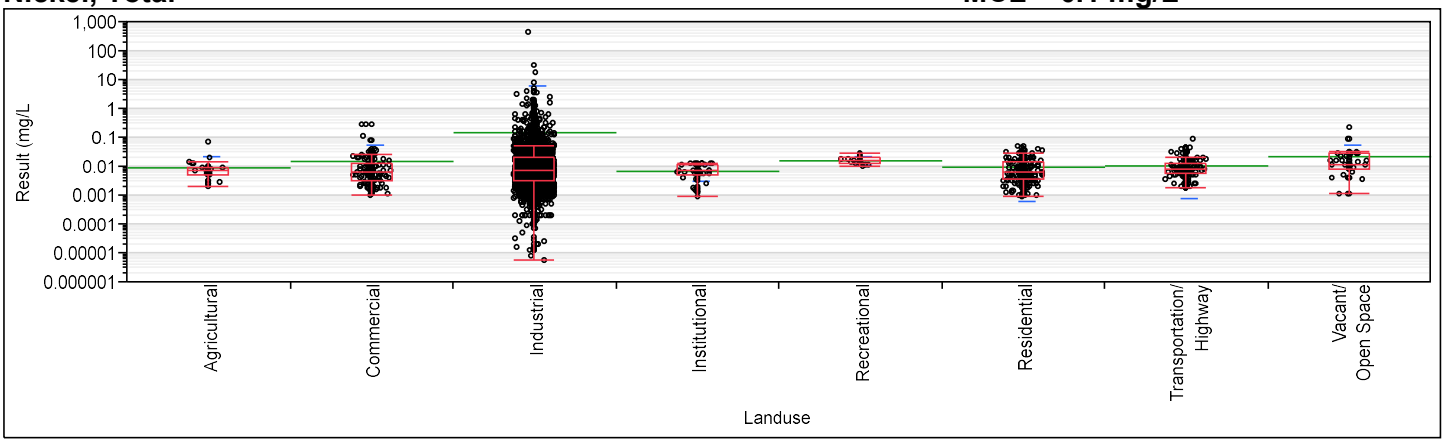
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	2	0.0007	0.00007	0.00005	0.00001	0.001
Commercial	80	0.0157	0.03344	0.00374	0.00828	0.023
Industrial	512	0.0081	0.01632	0.00072	0.00665	0.009
Institutional	32	0.0110	0.02475	0.00437	0.00203	0.020
Residential	139	0.0111	0.02479	0.00210	0.00690	0.015
Transportation/Highway	107	0.0091	0.01060	0.00102	0.00702	0.011

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	2	0	2	0	0
Commercial	80	78	158	8	5
Industrial	512	150	662	8	1
Institutional	32	77	109	2	2
Residential	139	244	383	7	2
Transportation/Highway	107	103	210	0	0
Vacant/Open Space	0	100	100	0	0

DRAFT

Nickel, Total

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.002	0.00272	0.00519	0.00719	0.009245	0.0136	0.07369
Commercial	0.001	0.0018	0.0031	0.00619	0.0125	0.026	0.281
Industrial	5.8e-6	0.001497	0.003	0.0073	0.021	0.067	424
Institutional	0.0009	0.0015	0.00512	0.0068	0.0107	0.0119	0.0132
Recreational	0.0098	0.011	0.01225	0.015	0.0195	0.0248	0.028
Residential	0.0009	0.0021	0.003475	0.006	0.014225	0.023	0.053
Transportation/Highway	0.0018	0.002975	0.0056	0.008	0.012012	0.02028	0.087
Vacant/Open Space	0.0011	0.003853	0.007843	0.01155	0.0275	0.0307	0.226

Means and Std Deviations

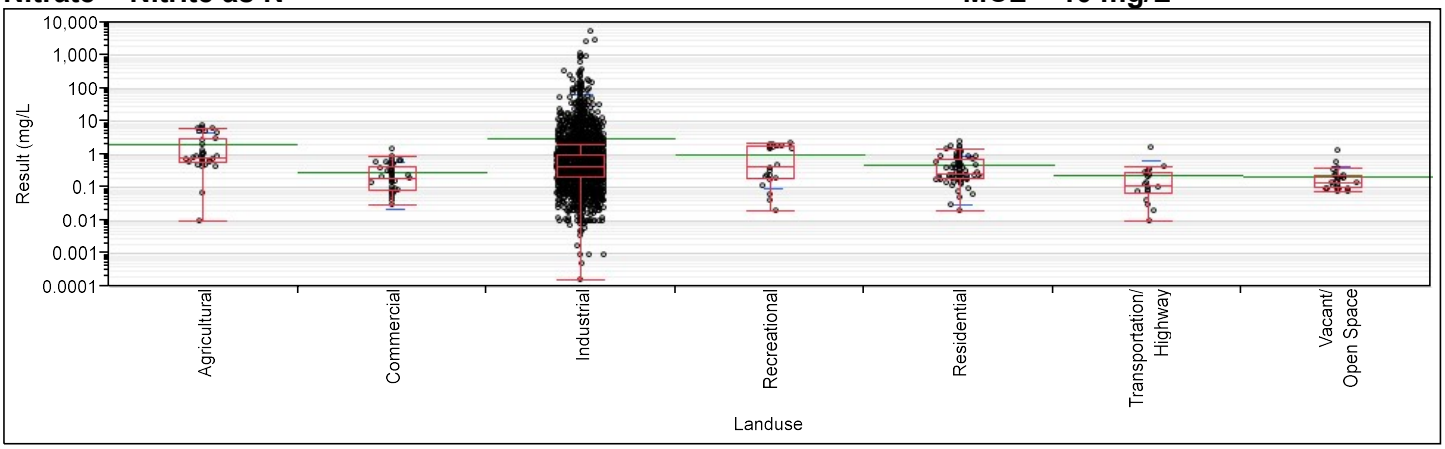
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	33	0.009	0.012	0.0021	0.005	0.014
Commercial	173	0.015	0.038	0.0029	0.010	0.021
Industrial	4316	0.153	6.482	0.0987	-0.040	0.347
Institutional	63	0.007	0.004	0.0005	0.006	0.008
Recreational	20	0.016	0.005	0.0011	0.014	0.019
Residential	302	0.010	0.009	0.0005	0.009	0.011
Transportation/Highway	205	0.011	0.010	0.0007	0.009	0.012
Vacant/Open Space	52	0.022	0.035	0.0048	0.013	0.032

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	33	18	51	0	0
Commercial	173	73	246	2	1
Industrial	4316	572	4888	280	6
Institutional	63	59	122	0	0
Recreational	20	2	22	0	0
Residential	302	262	564	0	0
Transportation/Highway	205	75	280	0	0
Vacant/Open Space	52	96	148	1	1

DRAFT

Nitrate + Nitrite as N

MCL = 10 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.01	0.462	0.58	0.79	3.1	6.22	8.11
Commercial	0.03	0.062	0.09	0.2	0.44	0.646	1.5
Industrial	0.00017	0.11	0.21	0.427	0.963	2.4	5570
Recreational	0.02	0.046	0.195	0.435	1.88	2.049	2.37
Residential	0.02	0.145	0.2	0.27	0.74	1.1	2.4
Transportation/Highway	0.01	0.019	0.07	0.12	0.2875	0.568	1.72
Vacant/Open Space	0.08	0.1	0.1	0.14	0.235	0.392	1.37

Means and Std Deviations

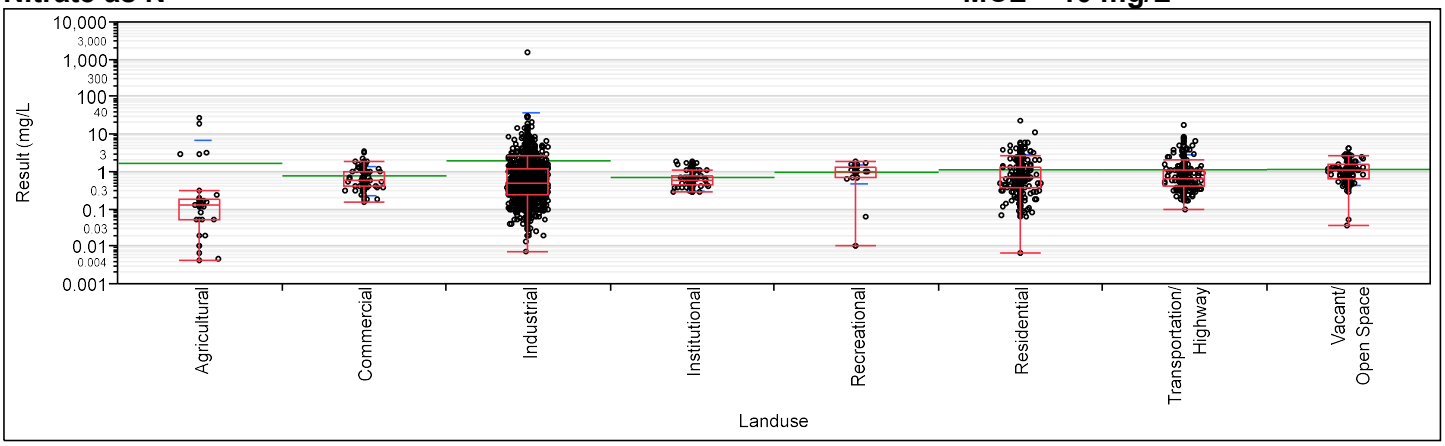
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	43	2.1	2.4	0.36	1.40	2.9
Commercial	51	0.3	0.3	0.04	0.22	0.4
Industrial	12349	3.2	66.4	0.60	2.03	4.4
Recreational	22	1.0	0.9	0.18	0.58	1.3
Residential	94	0.5	0.5	0.05	0.39	0.6
Transportation/Highway	18	0.2	0.4	0.09	0.05	0.4
Vacant/Open Space	33	0.2	0.2	0.04	0.13	0.3

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	43	2	45	0	0
Commercial	51	6	57	0	0
Industrial	12349	1029	13378	266	2
Recreational	22	0	22	0	0
Residential	94	6	100	0	0
Transportation/Highway	18	5	23	0	0
Vacant/Open Space	33	2	35	0	0

DRAFT

Nitrate as N

MCL = 10 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.004358	0.00871	0.05	0.13	0.18	2.98	28
Commercial	0.15	0.305	0.42	0.581	0.976	1.496	3.548
Industrial	0.007	0.12	0.23	0.504	1.18	2.594	1520
Institutional	0.273	0.36	0.4425	0.601	0.7885	1.33345	1.93
Recreational	0.01	0.03	0.72	0.98	1.35	1.666	1.91
Residential	0.006774	0.197	0.37975	0.707	1.29	2.309	21.7
Transportation/Highway	0.1	0.28	0.4	0.65	1.1	2.678	16.79
Vacant/Open Space	0.036	0.47	0.648	1.04	1.498	2.39	4.13

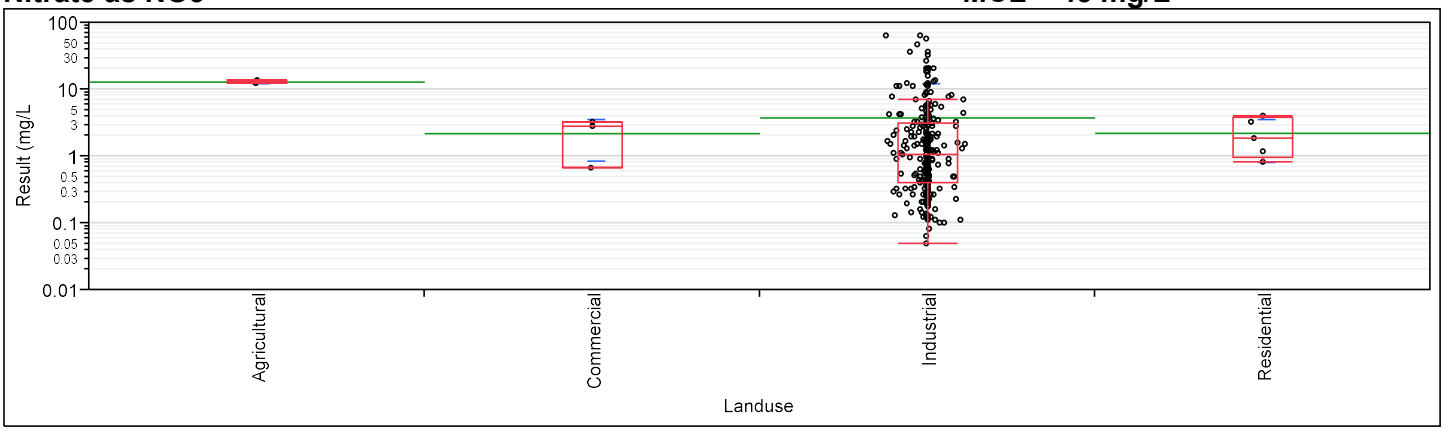
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	35	1.7	5.7	0.96	-0.2	3.6
Commercial	99	0.8	0.6	0.06	0.7	0.9
Industrial	1785	2.0	36.0	0.85	0.3	3.7
Institutional	93	0.7	0.4	0.04	0.6	0.8
Recreational	23	1.0	0.5	0.11	0.8	1.2
Residential	336	1.1	1.6	0.09	1.0	1.3
Transportation/Highway	260	1.2	1.7	0.10	1.0	1.4
Vacant/Open Space	169	1.2	0.7	0.06	1.1	1.3

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	35	1	36	2	6
Commercial	99	14	113	0	0
Industrial	1785	205	1990	18	1
Institutional	93	24	117	0	0
Recreational	23	0	23	0	0
Residential	336	79	415	2	0
Transportation/Highway	260	30	290	1	0
Vacant/Open Space	169	2	171	0	0

DRAFT

Nitrate as NO3 MCL = 45 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	12.39504	12.39504	12.39504	12.83772	13.72308	13.72308	13.72308
Commercial	0.66402	0.66402	0.66402	2.788884	3.187296	3.187296	3.187296
Industrial	0.05	0.2024	0.4	1.06	3.06	8.846	64
Residential	0.796824	0.796824	0.973896	1.859256	3.696378	4.072656	4.072656

Means and Std Deviations

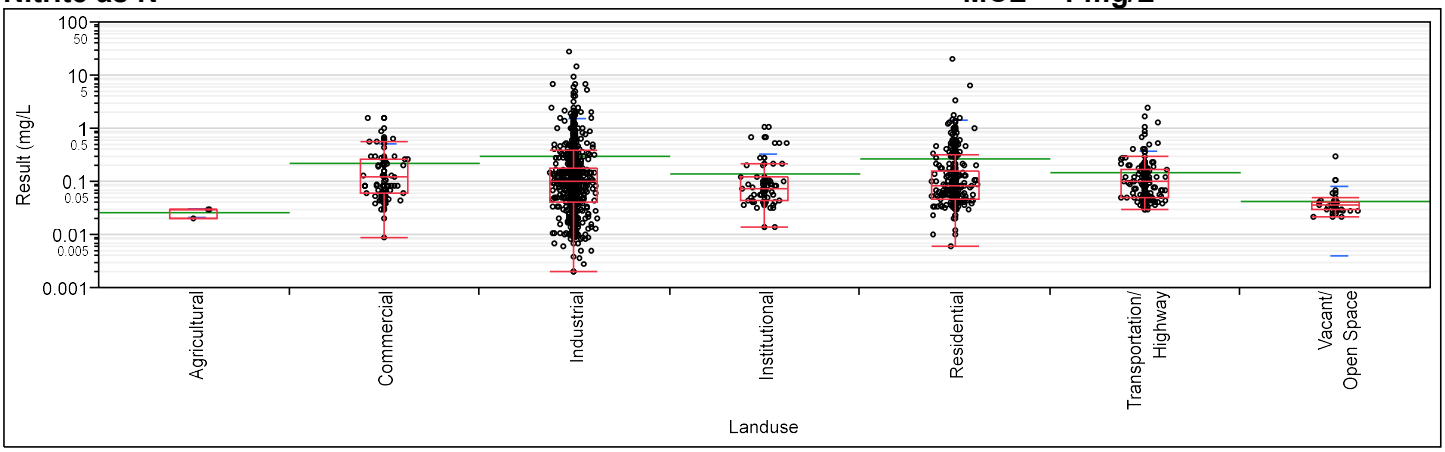
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	3	13	0.7	0.4	11	15
Commercial	3	2	1.4	0.8	-1	6
Industrial	267	4	8.5	0.5	3	5
Residential	5	2	1.4	0.6	0	4

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	3	0	3	0	0
Commercial	3	0	3	0	0
Industrial	267	43	310	4	1
Residential	5	1	6	0	0

DRAFT

Nitrite as N

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Commercial	0.009	0.043	0.06	0.119	0.264	0.6	1.615
Industrial	0.002	0.017	0.04	0.0984	0.181	0.5	27
Institutional	0.014	0.035	0.043	0.073	0.118	0.3196	1.05
Residential	0.006	0.033	0.047	0.085	0.161	0.496	20
Transportation/Highway	0.03	0.041	0.049	0.097	0.164	0.228	2.44
Vacant/Open Space	0.021	0.025	0.03	0.035	0.04	0.06	0.29

Means and Std Deviations

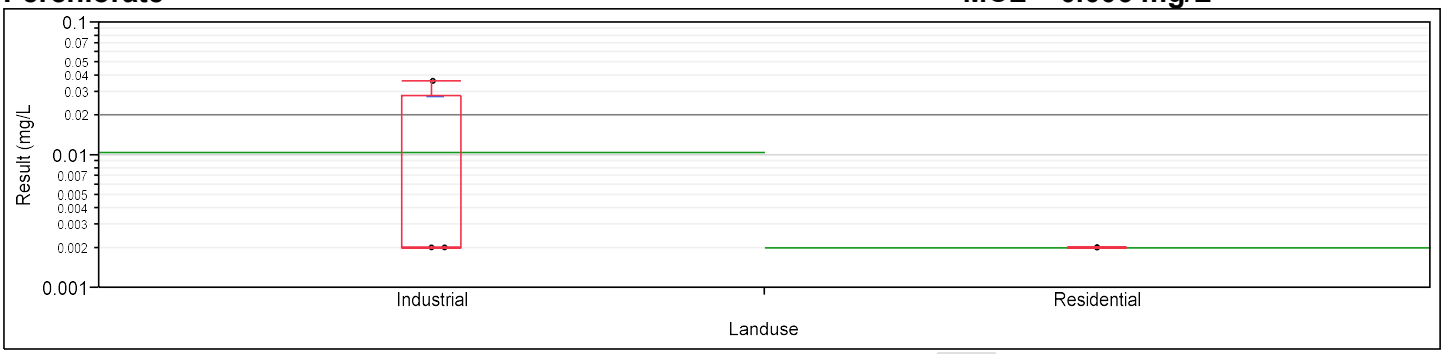
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	3	0.03	0.01	0.003	0.01	0.04
Commercial	109	0.23	0.30	0.029	0.17	0.28
Industrial	898	0.31	1.24	0.041	0.23	0.39
Institutional	87	0.14	0.20	0.022	0.10	0.19
Residential	325	0.28	1.20	0.066	0.14	0.41
Transportation/Highway	222	0.15	0.24	0.016	0.12	0.18
Vacant/Open Space	51	0.04	0.04	0.006	0.03	0.05

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	3	8	11	0	0
Commercial	109	18	127	1	1
Industrial	898	626	1524	32	2
Institutional	87	27	114	1	1
Residential	325	76	401	3	1
Transportation/Highway	222	20	242	4	2
Vacant/Open Space	51	68	119	0	0

DRAFT

Perchlorate

MCL = 0.006 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.002	0.002	0.002	0.002	0.0275	0.036	0.036
Residential	0.002	0.002	0.002	0.002	0.002	0.002	0.002

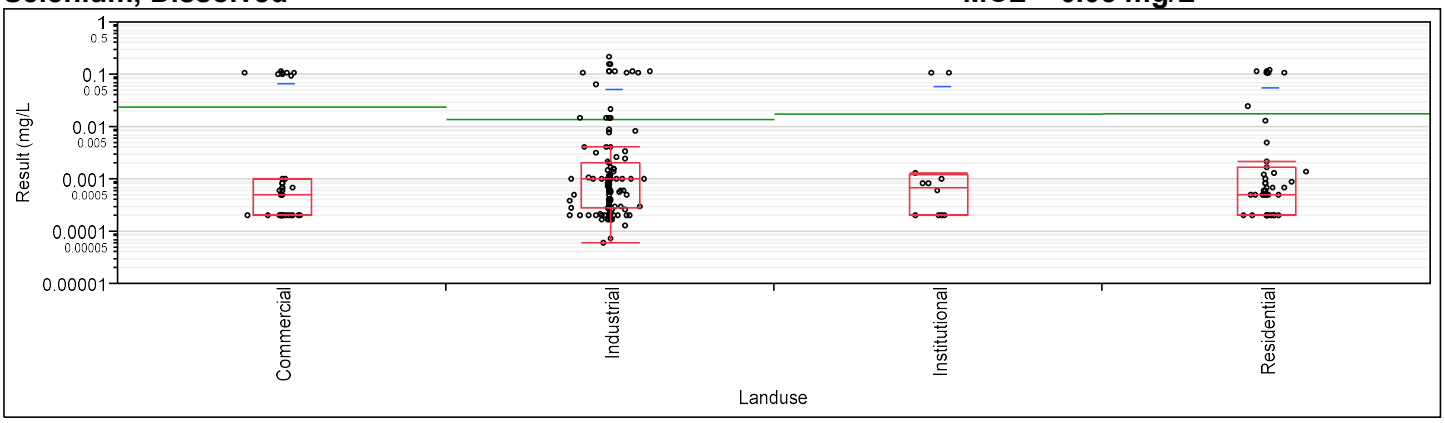
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	4	0.011	0.017	0.009	-0.017	0.038
Residential	3	0.002	0.000	0.000	0.002	0.002

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Industrial	4	11	15	1	7
Residential	3	0	3	0	0

DRAFT

Selenium, Dissolved MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0002	0.0002	0.0002	0.0005	0.001	0.10758	0.1125
Industrial	0.000061	0.0002	0.000276	0.001	0.002035	0.0548	0.21
Institutional	0.0002	0.0002	0.0002	0.0007	0.001225	0.10472	0.1052
Residential	0.0002	0.0002	0.0002	0.0005	0.001625	0.10697	0.1235

Means and Std Deviations

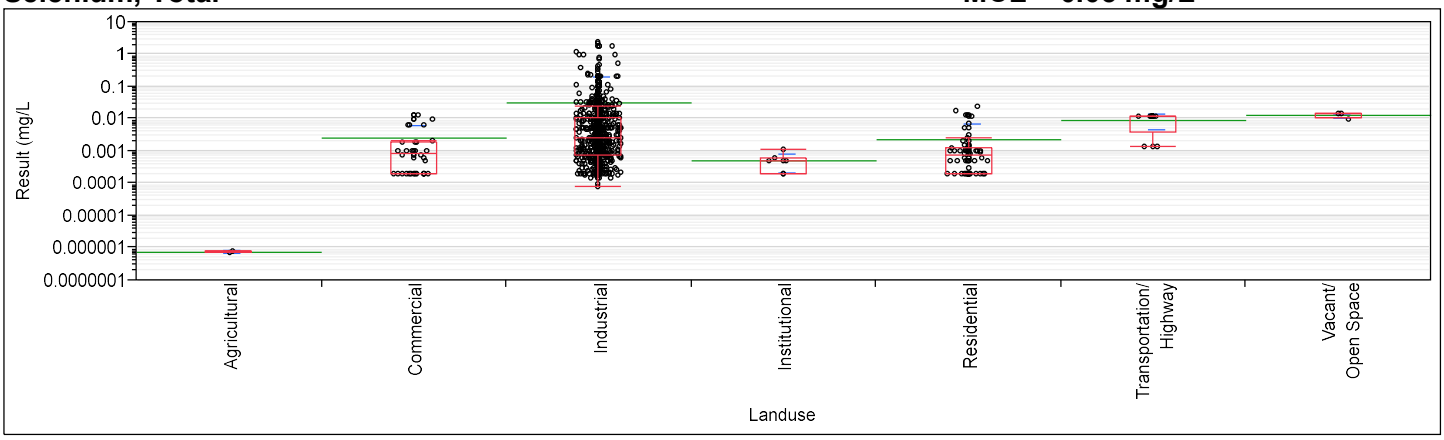
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	35	0.02	0.04	0.008	0.009	0.04
Industrial	121	0.01	0.04	0.003	0.007	0.02
Institutional	12	0.02	0.04	0.012	-0.008	0.04
Residential	52	0.02	0.04	0.006	0.007	0.03

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	0	2	2	0	0
Commercial	35	101	136	8	6
Industrial	121	210	331	12	4
Institutional	12	90	102	2	2
Residential	52	290	342	8	2
Transportation/Highway	0	134	134	0	0
Vacant/Open Space	0	100	100	0	0

DRAFT

Selenium, Total

MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	7e-7	7e-7	7e-7	7.5e-7	8e-7	8e-7	8e-7
Commercial	0.0002	0.0002	0.0002	0.00085	0.001925	0.0094	0.0132
Industrial	0.00008	0.00034	0.0007	0.0024	0.01	0.03	2.4
Institutional	0.0002	0.0002	0.0002	0.0005	0.0006	0.0011	0.0011
Residential	0.00019	0.0002	0.0002	0.00071	0.001288	0.0105	0.024
Transportation/Highway	0.0014	0.0014	0.003825	0.01145	0.011875	0.0119	0.0119
Vacant/Open Space	0.01	0.01	0.010975	0.0139	0.0139	0.0139	0.0139

Means and Std Deviations

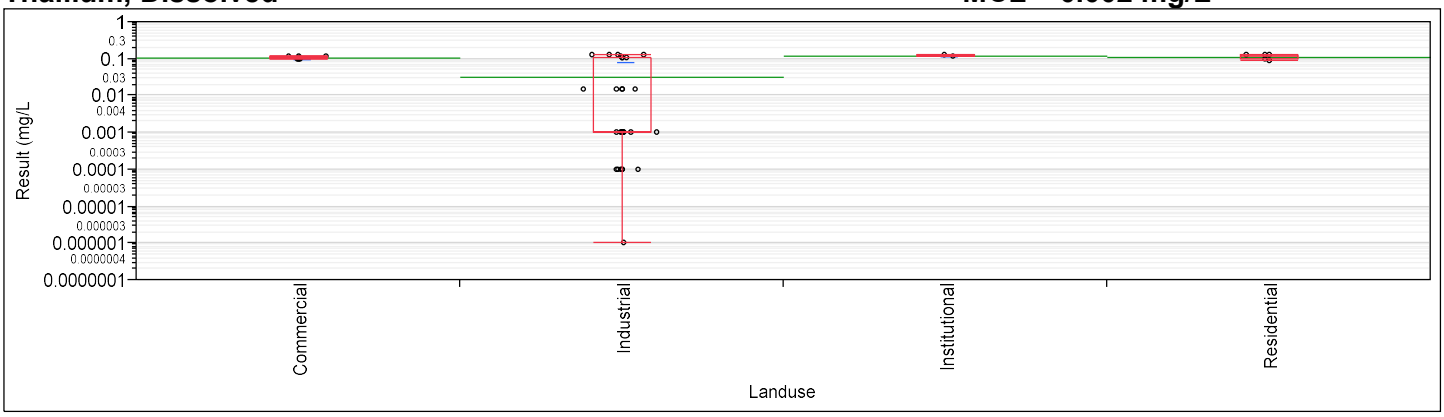
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	2	7.5e-7	7.071e-8	5e-8	1.15e-7	1.39e-6
Commercial	42	2.59e-3	0.003952	6.1e-4	1.36e-3	3.82e-3
Industrial	999	3.152e-2	0.174107	5.51e-3	2.07e-2	4.23e-2
Institutional	7	5.143e-4	0.000302	1.14e-4	2.35e-4	7.94e-4
Residential	72	2.29e-3	0.004439	5.23e-4	1.25e-3	3.33e-3
Transportation/Highway	12	9.05e-3	0.004624	1.33e-3	6.11e-3	1.2e-2
Vacant/Open Space	4	1.293e-2	0.001950	9.75e-4	9.82e-3	1.6e-2

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	2	0	2	0	0
Commercial	42	100	142	0	0
Industrial	999	1368	2367	63	3
Institutional	7	94	101	0	0
Residential	72	308	380	0	0
Transportation/Highway	12	126	138	0	0
Vacant/Open Space	4	98	102	0	0

DRAFT

Thallium, Dissolved

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0971	0.0971	0.098775	0.1058	0.115925	0.1174	0.1174
Industrial	0.000001	0.000101	0.001	0.001	0.102	0.1286	0.1313
Institutional	0.1218	0.1218	0.1218	0.1219	0.122	0.122	0.122
Residential	0.0906	0.0906	0.0968	0.1136	0.126375	0.129	0.129

Means and Std Deviations

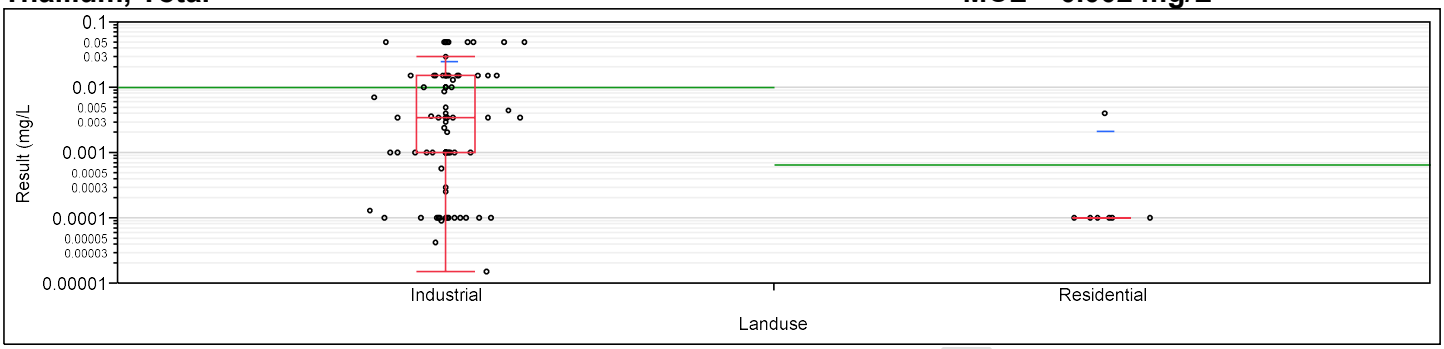
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	8	0.11	0.0086	0.0030	0.10	0.11
Industrial	39	0.03	0.0501	0.0080	0.02	0.05
Institutional	2	0.12	0.0001	0.0001	0.12	0.12
Residential	8	0.11	0.0155	0.0055	0.10	0.12

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	8	143	151	8	5
Industrial	39	234	273	16	6
Institutional	2	104	106	2	2
Residential	8	355	363	8	2
Transportation/Highway	0	134	134	0	0
Vacant/Open Space	0	100	100	0	0

DRAFT

Thallium, Total

MCL = 0.002 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Industrial	0.000015	0.0001	0.001	0.0035	0.015	0.05	0.05
Residential	0.0001	0.0001	0.0001	0.0001	0.0001	0.004	0.004

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Industrial	91	0.0101	0.015	0.0016	0.0070	0.013
Residential	7	0.0007	0.001	0.0006	-0.0007	0.002

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	0	143	143	0	0
Industrial	91	611	702	51	7
Institutional	0	104	104	0	0
Residential	7	376	383	1	0
Transportation/Highway	0	134	134	0	0
Vacant/Open Space	0	100	100	0	0

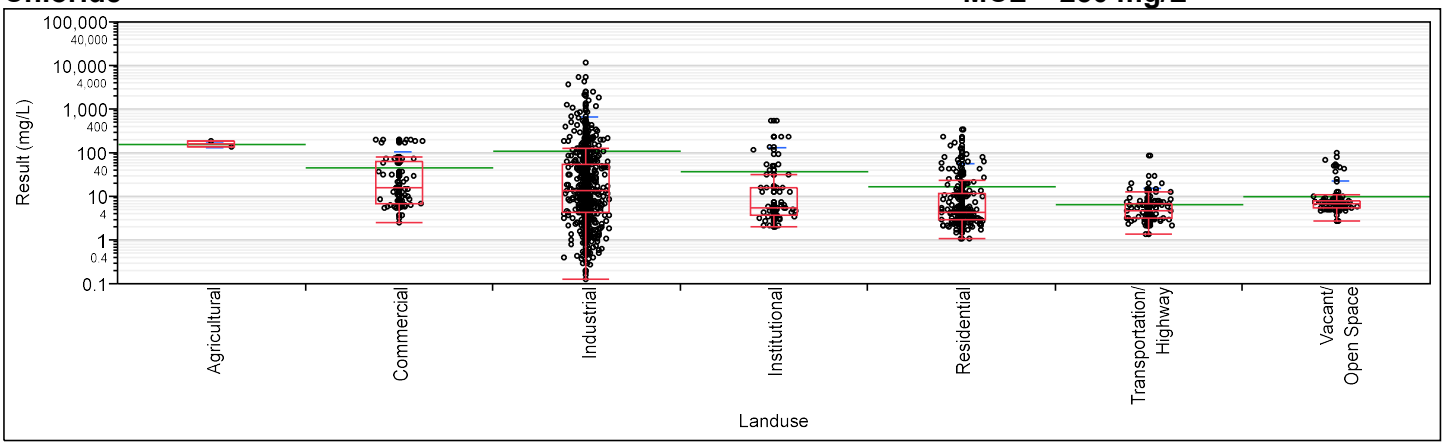
DRAFT

C-5
Secondary Standards

DRAFT

Chloride

MCL = 250 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	140	140	140	160	180	180	180
Commercial	2.53	5.66	6.87	16.1	62.3	182	203
Industrial	0.13	1.4	4.43	14	55	171.5	12000
Institutional	1.93	2.87	3.73	5.25	15.8	111.52	561
Residential	1.1	2.272	2.92	4.4	11.3	41.78	339
Transportation/Highway	1.41	2.61	3.17	4.62	7.06	10.3	88
Vacant/Open Space	2.72	4.88	5.3275	7.04	8.04	10.886	101

Means and Std Deviations

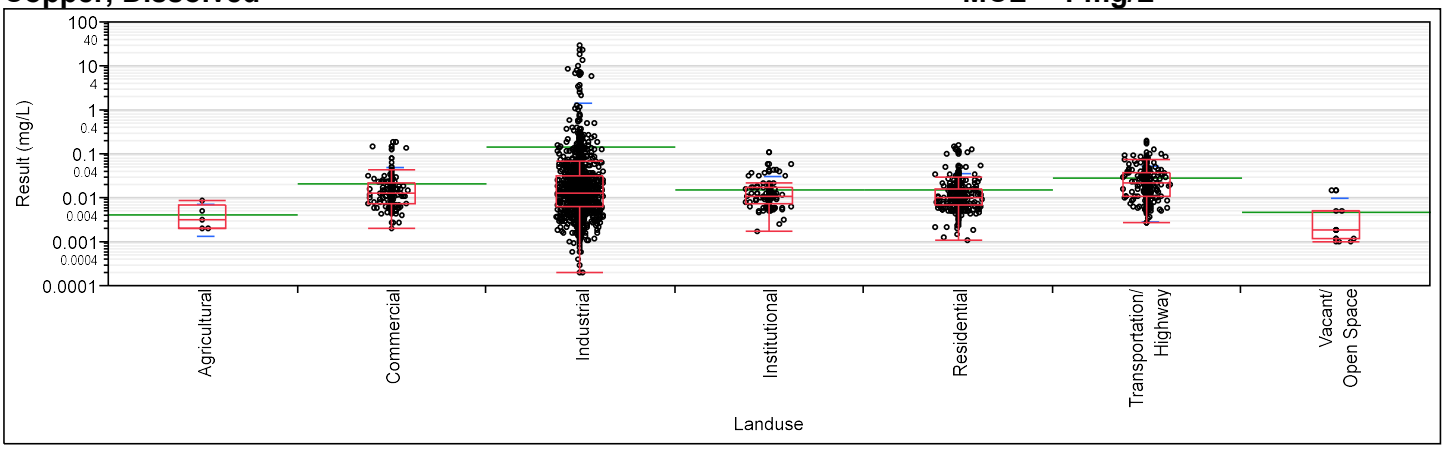
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	2	160	28	20	-94	414
Commercial	115	46	60	6	35	57
Industrial	916	113	556	18	77	149
Institutional	120	38	98	9	21	56
Residential	341	17	41	2	13	22
Transportation/Highway	199	7	9	1	5	8
Vacant/Open Space	172	10	13	1	8	12

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	2	0	2	0	0
Commercial	115	0	115	0	0
Industrial	916	25	941	60	6
Institutional	120	8	128	1	1
Residential	341	37	378	1	0
Transportation/Highway	199	7	206	0	0
Vacant/Open Space	172	0	172	0	0

DRAFT

Copper, Dissolved

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.002	0.002	0.002	0.0032	0.007	0.0089	0.0089
Commercial	0.002	0.0057	0.0074	0.013	0.02225	0.03806	0.1788
Industrial	0.0002	0.003452	0.0061	0.013	0.032	0.08578	30
Institutional	0.0017	0.005676	0.00755	0.0106	0.017	0.03518	0.1097
Residential	0.0011	0.005	0.007	0.009695	0.016	0.02469	0.1577
Transportation/Highway	0.0028	0.006737	0.011125	0.022	0.03675	0.05933	0.195
Vacant/Open Space	0.001	0.001	0.0012	0.0018	0.005	0.015	0.015

Means and Std Deviations

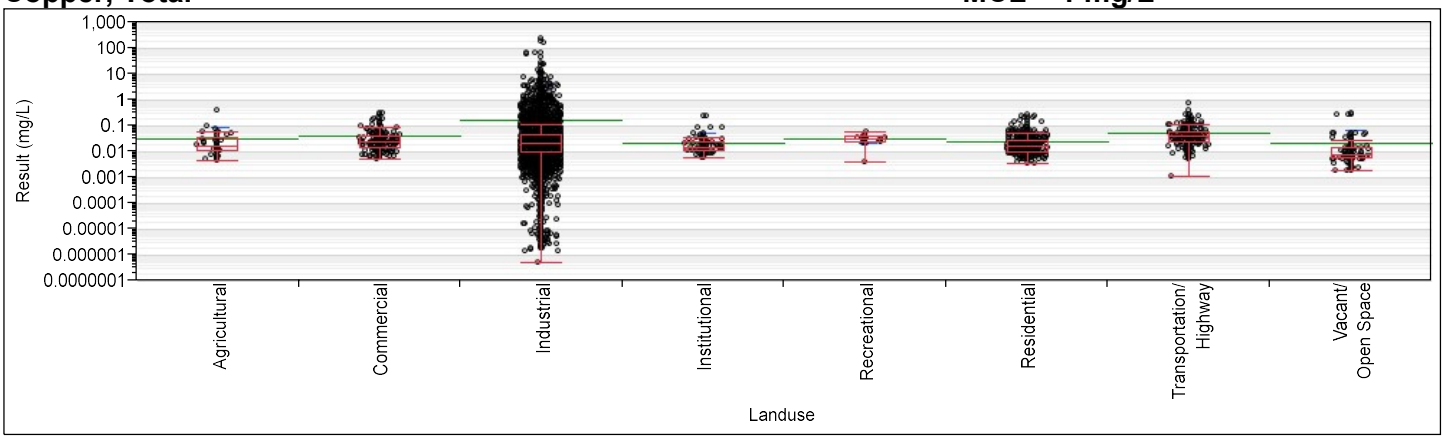
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	5	0.004	0.003	0.001	0.0006	0.008
Commercial	185	0.022	0.030	0.002	0.0172	0.026
Industrial	1743	0.148	1.328	0.032	0.0851	0.210
Institutional	133	0.016	0.016	0.001	0.0128	0.018
Residential	400	0.016	0.021	0.001	0.0136	0.018
Transportation/Highway	316	0.029	0.026	0.001	0.0259	0.032
Vacant/Open Space	15	0.005	0.005	0.001	0.0018	0.008

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	5	0	5	0	0
Commercial	185	16	201	0	0
Industrial	1743	107	1850	23	1
Institutional	133	17	150	0	0
Residential	400	96	496	0	0
Transportation/Highway	316	2	318	0	0
Vacant/Open Space	15	90	105	0	0

DRAFT

Copper, Total

MCL = 1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.00459	0.00655	0.01095	0.0165	0.034675	0.057	0.396
Commercial	0.005	0.0094	0.0146	0.024	0.04285	0.0703	0.32
Industrial	5.4e-7	0.004842	0.0099	0.021	0.0493	0.129	250
Institutional	0.00564	0.00861	0.0113	0.014	0.024	0.0373	0.232
Recreational	0.00419	0.022	0.0245	0.031	0.039	0.0428	0.058
Residential	0.0036	0.0075	0.010025	0.015845	0.0269	0.047177	0.27
Transportation/Highway	0.0011	0.016	0.024	0.039	0.06125	0.11	0.8
Vacant/Open Space	0.002	0.0035	0.005643	0.0076	0.015	0.048	0.305

Means and Std Deviations

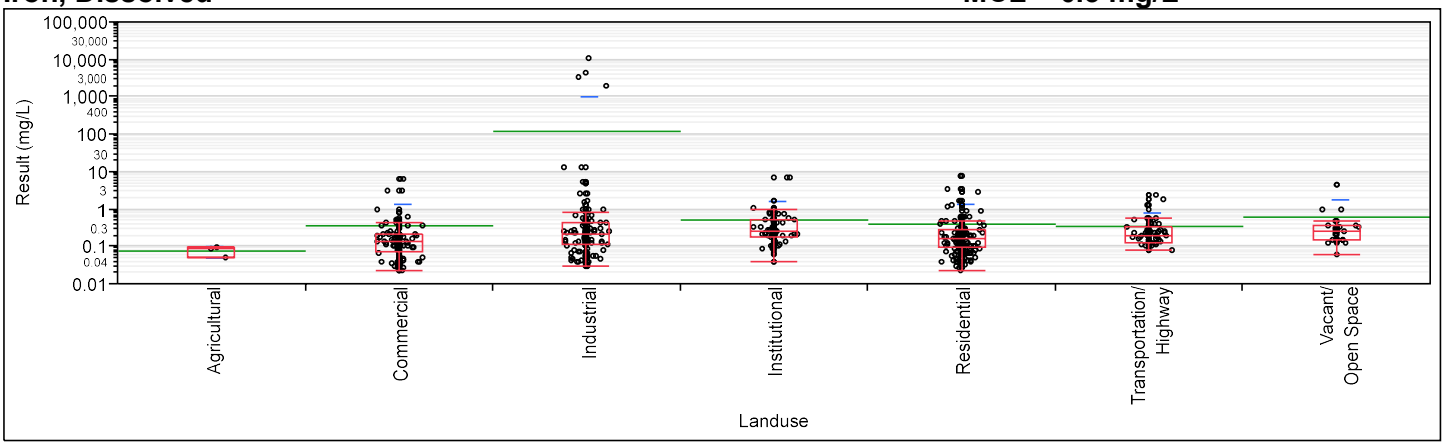
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	50	0.03	0.06	0.008	0.02	0.05
Commercial	277	0.04	0.05	0.003	0.03	0.05
Industrial	15751	0.16	3.11	0.025	0.11	0.21
Institutional	156	0.02	0.03	0.003	0.02	0.03
Recreational	21	0.03	0.01	0.002	0.03	0.04
Residential	716	0.02	0.03	0.001	0.02	0.03
Transportation/Highway	337	0.06	0.07	0.004	0.05	0.06
Vacant/Open Space	128	0.02	0.05	0.004	0.01	0.03

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	50	4	54	0	0
Commercial	277	6	283	0	0
Industrial	15751	617	16368	202	1
Institutional	156	2	158	0	0
Recreational	21	1	22	0	0
Residential	716	22	738	0	0
Transportation/Highway	337	1	338	0	0
Vacant/Open Space	128	53	181	0	0

DRAFT

Iron, Dissolved

MCL = 0.3 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.049	0.049	0.049	0.087	0.096	0.096	0.096
Commercial	0.022	0.034	0.07	0.13	0.213	0.525	6.2
Industrial	0.03	0.0509	0.10825	0.2195	0.434	1.695	11000
Institutional	0.038	0.101	0.177	0.26	0.498	0.83	6.7
Residential	0.023	0.0462	0.097	0.158	0.27	0.64	7.6
Transportation/Highway	0.077	0.107	0.126	0.193	0.3375	0.696	2.3
Vacant/Open Space	0.06	0.121	0.1485	0.255	0.355	2.002	4.41

Means and Std Deviations

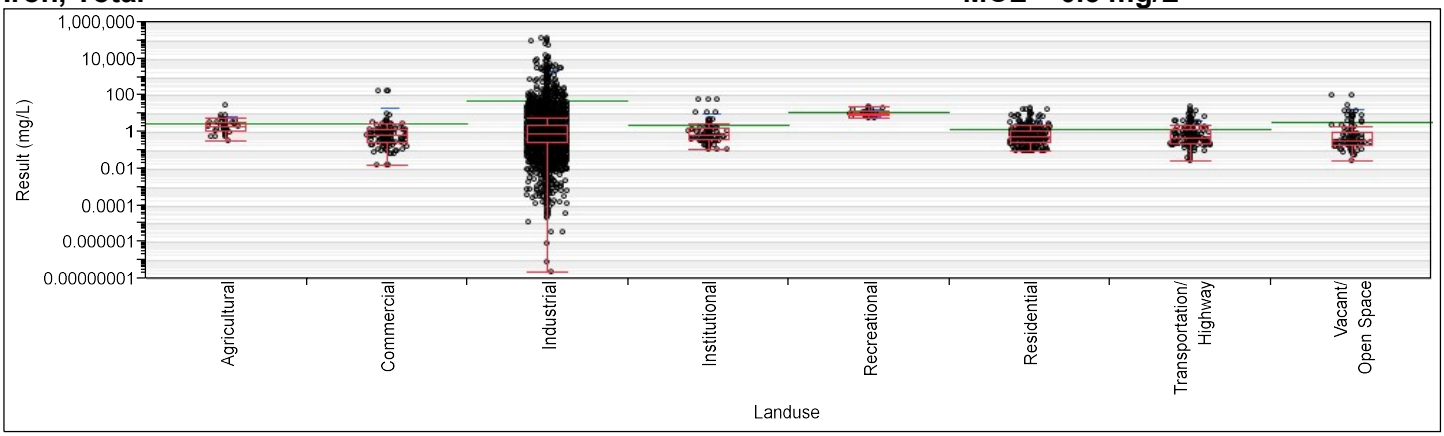
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	3	0.08	0.02	0.01	0.0	0.1
Commercial	143	0.37	0.97	0.08	0.2	0.5
Industrial	168	123.34	954.99	73.68	-22.1	268.8
Institutional	111	0.52	1.08	0.10	0.3	0.7
Residential	225	0.41	0.99	0.07	0.3	0.5
Transportation/Highway	105	0.36	0.48	0.05	0.3	0.4
Vacant/Open Space	36	0.62	1.17	0.20	0.2	1.0

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	3	0	3	0	0
Commercial	143	39	182	15	8
Industrial	168	57	225	32	14
Institutional	111	31	142	19	13
Residential	225	197	422	24	6
Transportation/Highway	105	73	178	12	7
Vacant/Open Space	36	82	118	6	5

DRAFT

Iron, Total

MCL = 0.3 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.322	0.744	1.189998	2.164995	3.79	4.750999	28.9
Commercial	0.017	0.1712	0.2975	0.677	1.4	2.718	177
Industrial	2.6e-8	0.1	0.278	0.802	2.48	7.4	150000
Institutional	0.123	0.214	0.4255	0.72	1.7925	2.92	57.8
Recreational	6.48999	6.696991	8.114998	11.2	16.225	20.24999	25.89999
Residential	0.1	0.163	0.3	0.55	1.28075	2.4	22.6
Transportation/Highway	0.02999	0.2	0.26	0.53	1.37	4.1	24
Vacant/Open Space	0.02999	0.11	0.2195	0.366	1.04	7.5	105

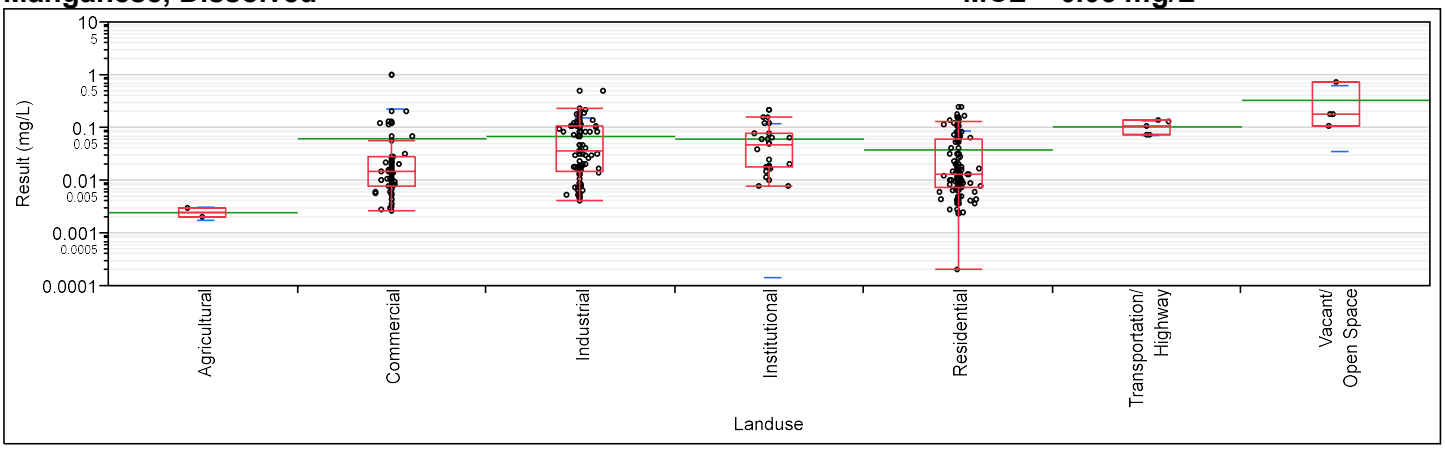
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	50	3	4	0.6	1.9	4
Commercial	241	3	20	1.3	0.8	6
Industrial	31245	49	2086	11.8	26.0	72
Institutional	146	3	8	0.7	1.2	4
Recreational	20	13	5	1.2	10.2	15
Residential	582	1	3	0.1	1.2	2
Transportation/Highway	251	2	3	0.2	1.2	2
Vacant/Open Space	149	4	15	1.2	1.3	6

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	50	4	54	50	93
Commercial	241	10	251	119	47
Industrial	31245	1273	32518	22820	70
Institutional	146	7	153	62	41
Recreational	20	2	22	20	91
Residential	582	53	635	282	44
Transportation/Highway	251	9	260	90	35
Vacant/Open Space	149	38	187	51	27

DRAFT

Manganese, Dissolved MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.002	0.002	0.002	0.0025	0.003	0.003	0.003
Commercial	0.0026	0.0043	0.0077	0.0147	0.02835	0.1257	1.02
Industrial	0.004	0.0065	0.0147	0.0358	0.1036	0.1723	0.504
Institutional	0.0076	0.00949	0.0176	0.045	0.079	0.15976	0.222
Residential	0.0002	0.004	0.00705	0.0131	0.06	0.11628	0.245
Transportation/Highway	0.074	0.074	0.074	0.11	0.136	0.14	0.14
Vacant/Open Space	0.106	0.106	0.106	0.182	0.727	0.727	0.727

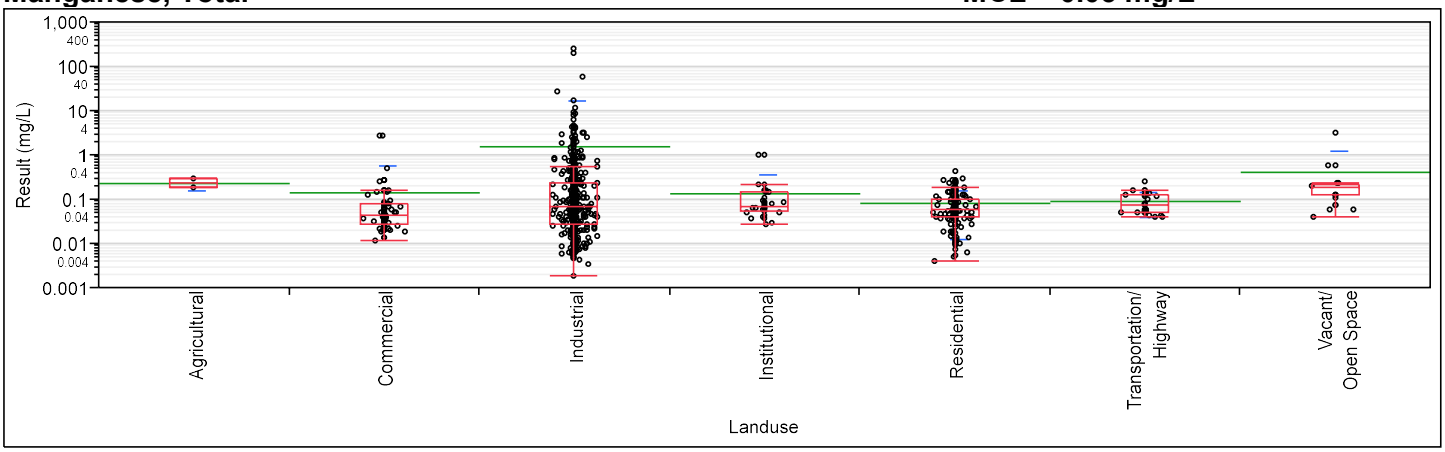
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	2	0.003	0.0007	0.0005	-0.004	0.009
Commercial	69	0.063	0.1732	0.0209	0.021	0.104
Industrial	89	0.069	0.0872	0.0092	0.051	0.088
Institutional	28	0.062	0.0622	0.0117	0.038	0.086
Residential	121	0.038	0.0512	0.0047	0.029	0.048
Transportation/Highway	5	0.106	0.0312	0.0140	0.067	0.145
Vacant/Open Space	6	0.338	0.3030	0.1237	0.020	0.656

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	2	0	2	0	0
Commercial	69	80	149	12	8
Industrial	89	85	174	21	12
Institutional	28	78	106	6	6
Residential	121	244	365	17	5
Transportation/Highway	5	129	134	0	0
Vacant/Open Space	6	94	100	0	0

DRAFT

Manganese, Total MCL = 0.05 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.184	0.184	0.184	0.2335	0.283	0.283	0.283
Commercial	0.0117	0.02016	0.0272	0.0442	0.08	0.19636	2.77
Industrial	0.0018	0.011	0.028	0.066	0.234	0.8998	250
Institutional	0.0264	0.03655	0.05245	0.07075	0.1427	0.20895	0.98
Residential	0.00395	0.01476	0.03845	0.059	0.10245	0.1797	0.4294
Transportation/Highway	0.04	0.0432	0.05	0.074	0.13	0.16	0.26
Vacant/Open Space	0.039	0.06	0.1215	0.182	0.20975	1.3785	3.23

Means and Std Deviations

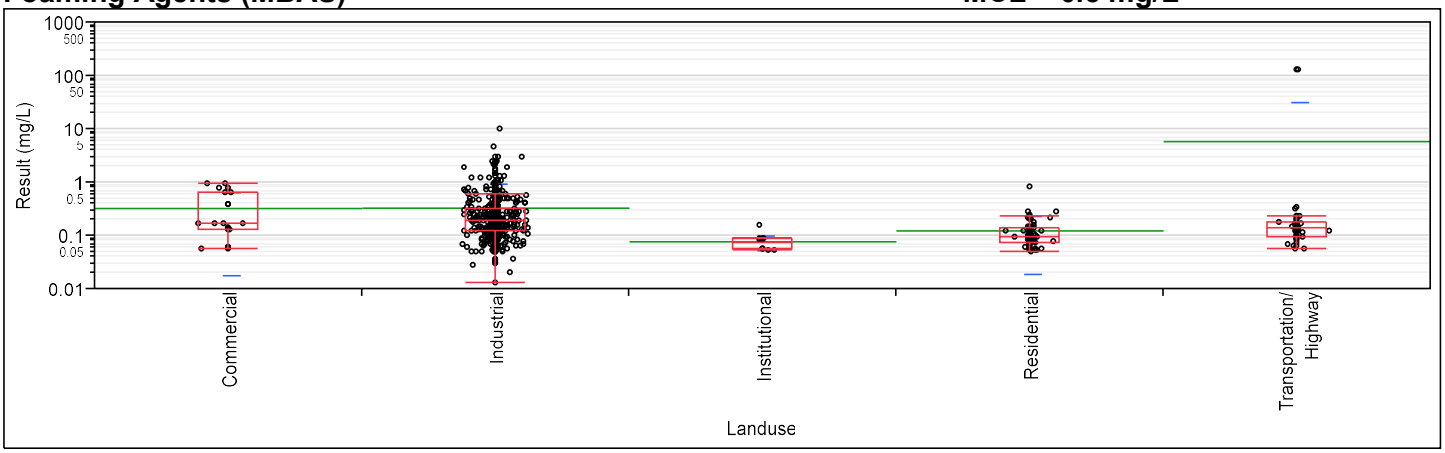
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	2	0.23	0.07	0.049	-0.40	0.86
Commercial	75	0.14	0.44	0.051	0.04	0.25
Industrial	457	1.60	15.27	0.714	0.19	3.00
Institutional	34	0.14	0.22	0.038	0.06	0.21
Residential	161	0.08	0.07	0.006	0.07	0.09
Transportation/Highway	27	0.09	0.05	0.010	0.07	0.11
Vacant/Open Space	26	0.42	0.84	0.164	0.08	0.76

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	2	0	2	2	100
Commercial	75	68	143	20	14
Industrial	457	105	562	240	43
Institutional	34	70	104	10	10
Residential	161	221	382	56	15
Transportation/Highway	27	107	134	0	0
Vacant/Open Space	26	74	100	0	0

DRAFT

Foaming Agents (MBAS)

MCL = 0.5 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.057	0.0582	0.127	0.164	0.628	0.9057	0.963
Industrial	0.013	0.075	0.12	0.195	0.31	0.6	9.9
Institutional	0.053	0.0535	0.055	0.072	0.08825	0.122	0.154
Residential	0.05	0.056	0.07175	0.096	0.141	0.2186	0.802
Transportation/Highway	0.055	0.0665	0.09325	0.14	0.1755	0.2745	127

Means and Std Deviations

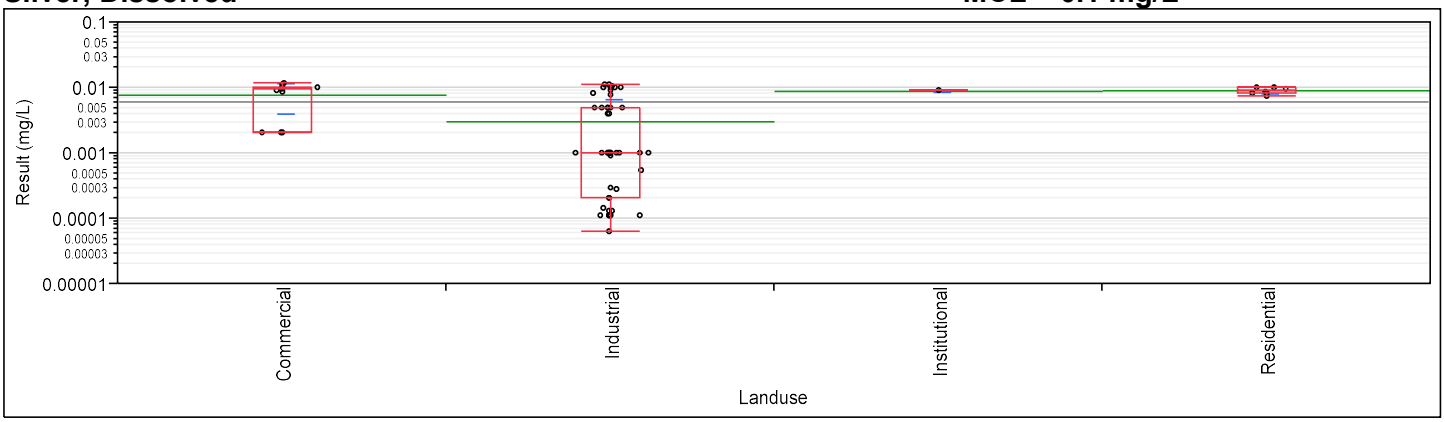
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	22	0.33	0.31	0.066	0.19	0.46
Industrial	599	0.33	0.58	0.024	0.28	0.38
Institutional	14	0.08	0.03	0.007	0.06	0.09
Residential	62	0.12	0.10	0.013	0.10	0.15
Transportation/Highway	44	5.91	26.73	4.030	-2.22	14.04

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	22	36	58	0	0
Industrial	599	242	841	81	10
Institutional	14	62	76	0	0
Residential	62	157	219	0	0
Transportation/Highway	44	73	117	0	0
Vacant/Open Space	0	72	72	0	0

DRAFT

Silver, Dissolved

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	0.0021	0.0021	0.0021	0.0094	0.0102	0.0114	0.0115
Industrial	0.000064	0.000111	0.0002	0.001	0.005	0.01008	0.0111
Institutional	0.0088	0.0088	0.0088	0.0089	0.009	0.009	0.009
Residential	0.0074	0.0074	0.00815	0.0092	0.009975	0.0101	0.0101

Means and Std Deviations

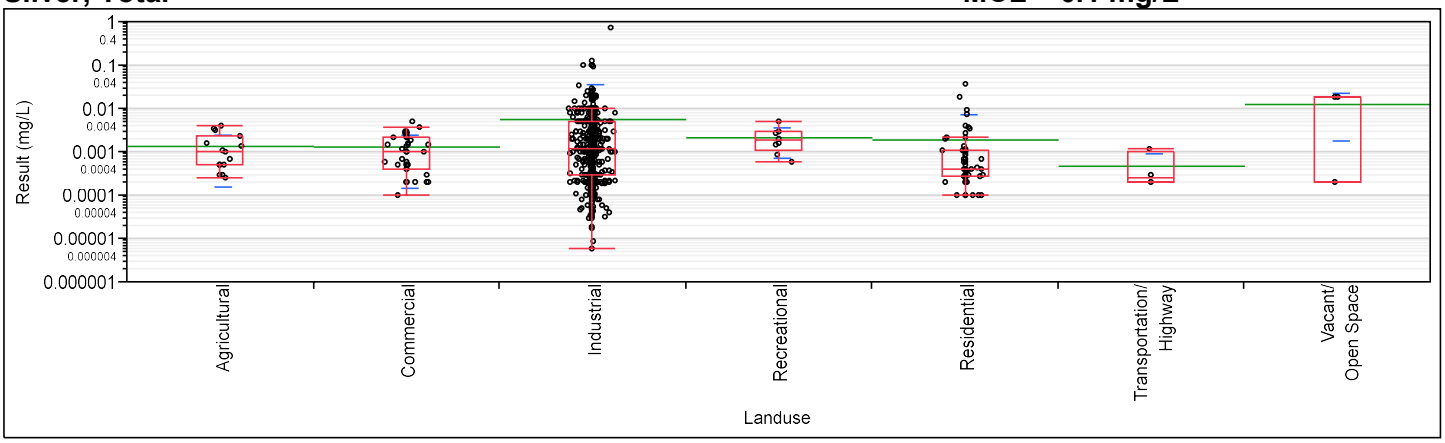
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	11	0.008	0.0037	0.0011	0.005	0.010
Industrial	51	0.003	0.0037	0.0005	0.002	0.004
Institutional	2	0.009	0.0001	0.0001	0.008	0.010
Residential	8	0.009	0.0010	0.0004	0.008	0.010

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	11	140	151	0	0
Industrial	51	334	385	0	0
Institutional	2	104	106	0	0
Residential	8	355	363	0	0
Transportation/Highway	0	134	134	0	0
Vacant/Open Space	0	100	100	0	0

DRAFT

Silver, Total

MCL = 0.1 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.00025	0.00028	0.0005	0.001	0.00229	0.003574	0.004
Commercial	0.0001	0.0002	0.0004	0.001	0.002145	0.003	0.00509
Industrial	0.000006	0.00015	0.000286	0.0012	0.005	0.01	0.74
Recreational	0.0006	0.0006	0.001043	0.0018	0.002948	0.00509	0.00509
Residential	0.0001	0.00011	0.00028	0.0004	0.001063	0.003571	0.03659
Transportation/Highway	0.0002	0.0002	0.0002	0.00025	0.000975	0.0012	0.0012
Vacant/Open Space	0.0002	0.0002	0.0002	0.019	0.019	0.019	0.019

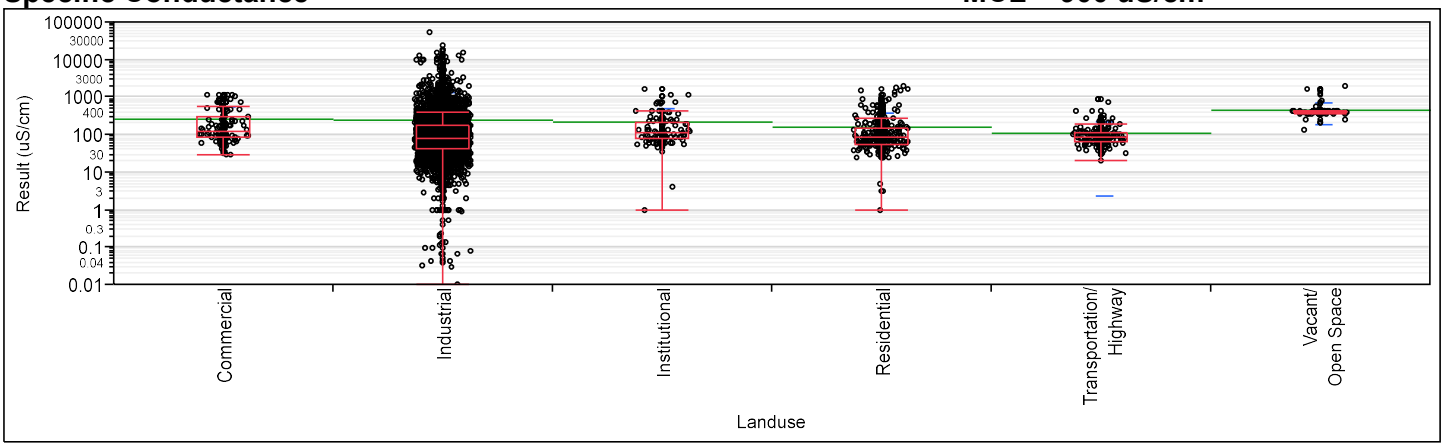
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	15	0.001	0.0012	0.0003	0.0007	0.002
Commercial	37	0.001	0.0012	0.0002	0.0009	0.002
Industrial	584	0.006	0.0324	0.0013	0.0031	0.008
Recreational	8	0.002	0.0014	0.0005	0.0010	0.003
Residential	60	0.002	0.0053	0.0007	0.0005	0.003
Transportation/Highway	4	0.000	0.0005	0.0002	-0.0003	0.001
Vacant/Open Space	3	0.013	0.0109	0.0063	-0.0142	0.040

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	15	31	46	0	0
Commercial	37	172	209	0	0
Industrial	584	1540	2124	2	0
Institutional	0	104	104	0	0
Recreational	8	14	22	0	0
Residential	60	428	488	0	0
Transportation/Highway	4	153	157	0	0
Vacant/Open Space	3	131	134	0	0

DRAFT

Specific Conductance MCL = 900 uS/cm



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	28	60.8	85.4	120	308.25	788.1	1185
Industrial	0.01	22	40	80	180	450	51300
Institutional	1	57	77.15	111	216	441	1672
Residential	1	40	56	81.4	146.5	366	1920
Transportation/Highway	20	46.3	63.5	85.8	115	183	888
Vacant/Open Space	129	365	382	395	416.5	444.8	1880

Means and Std Deviations

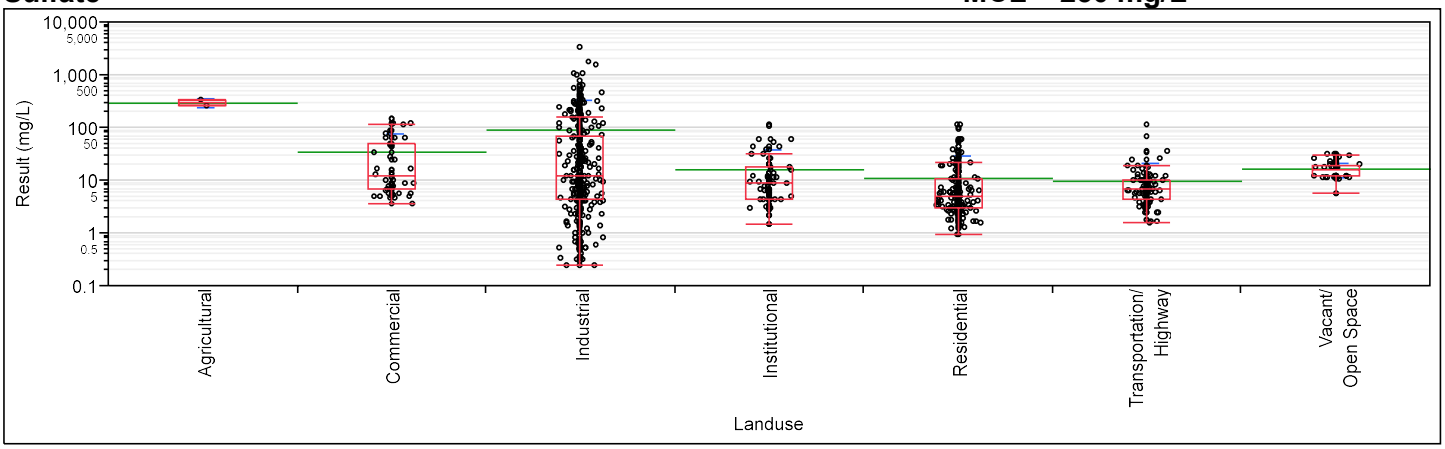
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	178	267	299	22	223	311
Industrial	7470	252	1056	12	228	276
Institutional	149	221	305	25	172	271
Residential	501	162	243	11	140	183
Transportation/Highway	280	111	109	7	98	124
Vacant/Open Space	157	461	275	22	418	505

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	178	1	179	3	2
Industrial	7470	252	7722	311	4
Institutional	149	0	149	3	2
Residential	501	4	505	12	2
Transportation/Highway	280	0	280	0	0
Vacant/Open Space	157	0	157	9	6

DRAFT

Sulfate

MCL = 250 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	255	255	255	295	335	335	335
Commercial	3.59	5.028	6.67	12.2	50.1	113.2	144
Industrial	0.24	0.898	4.25	12	67.5	249	3300
Institutional	1.5	2.921	4.29	8.53	17.5	43.03	112
Residential	0.93	1.91	2.93	4.86	10.5	26.9	116
Transportation/Highway	1.59	2.964	4.23	6.68	10.3	17.36	115
Vacant/Open Space	5.57	11.6	12.35	15.7	19.225	25.95	31.1

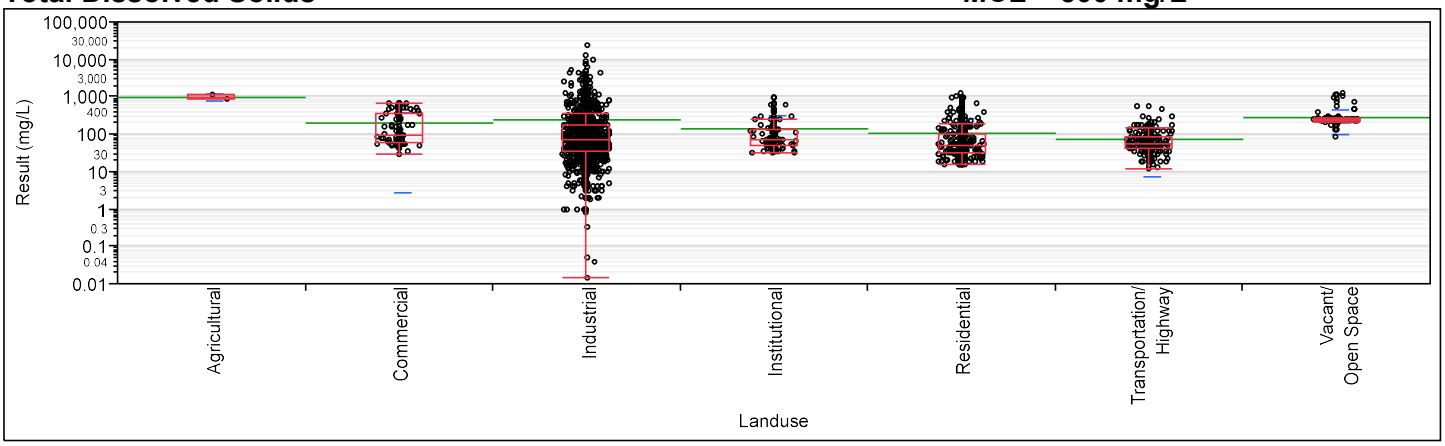
Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	2	295	57	40.0	-213	803
Commercial	68	35	41	4.9	25	45
Industrial	361	92	256	13.5	65	118
Institutional	80	16	21	2.3	12	21
Residential	219	11	18	1.2	9	14
Transportation/Highway	131	10	12	1.1	8	12
Vacant/Open Space	96	17	6	0.6	16	18

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	2	0	2	2	100
Commercial	68	0	68	0	0
Industrial	361	6	367	34	9
Institutional	80	0	80	0	0
Residential	219	0	219	0	0
Transportation/Highway	131	0	131	0	0
Vacant/Open Space	96	0	96	0	0

DRAFT

Total Dissolved Solids MCL = 500 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	835	835	835	982.5	1130	1130	1130
Commercial	28	49.2	58	94	348	525.6	680
Industrial	0.014	16	35	72	166.75	490	23000
Institutional	32	36	49	68	138	390	942
Residential	16	24	32	48	98	265	1240
Transportation/Highway	12	30	40	56	81.5	136	580
Vacant/Open Space	84	222	231	246	254	269.6	1216

Means and Std Deviations

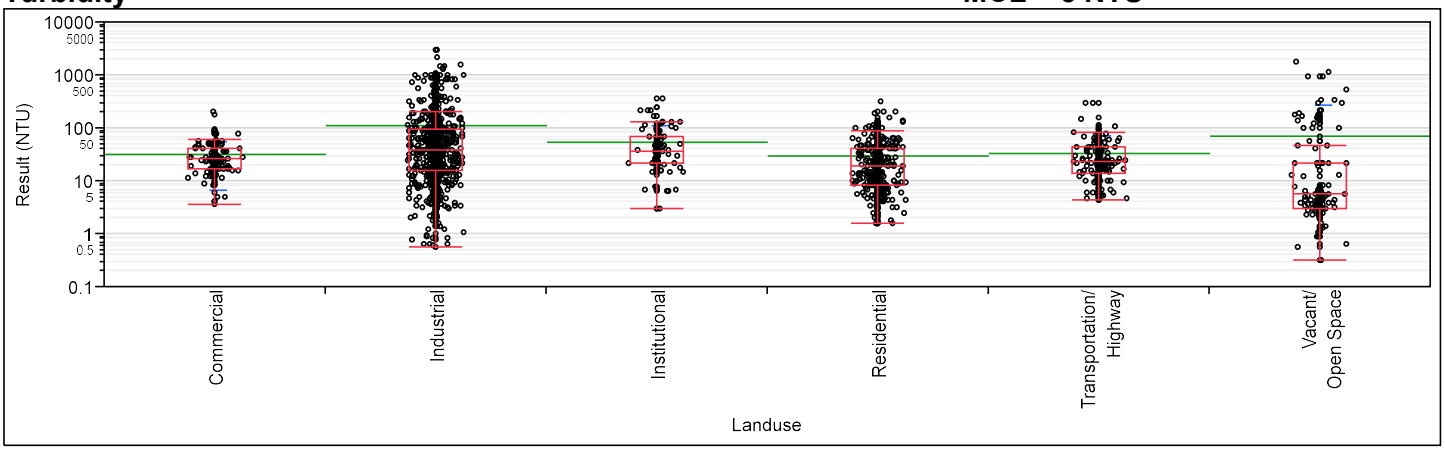
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	2	983	209	148	-892	2857
Commercial	125	204	201	18	168	239
Industrial	1904	247	866	20	208	286
Institutional	129	144	186	16	111	176
Residential	414	110	169	8	94	126
Transportation/Highway	289	74	67	4	67	82
Vacant/Open Space	157	288	187	15	258	317

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	2	0	2	2	100
Commercial	125	0	125	10	8
Industrial	1904	40	1944	182	9
Institutional	129	0	129	3	2
Residential	414	2	416	13	3
Transportation/Highway	289	0	289	1	0
Vacant/Open Space	157	0	157	10	6

DRAFT

Turbidity

MCL = 5 NTU



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Commercial	3.6	12	16.7	25.85	40.9	55.2	203
Industrial	0.57	6.315	15.525	38.7	91	235	3000
Institutional	3	13.78	21	36	68	122	349
Residential	1.52	4.45	8.07	19.1	39.6	66.9	309
Transportation/Highway	4.3	6.644	14.2	22.3	43.9	66.16	296
Vacant/Open Space	0.32	1.372	2.98	5.47	22.1	170.4	1800

Means and Std Deviations

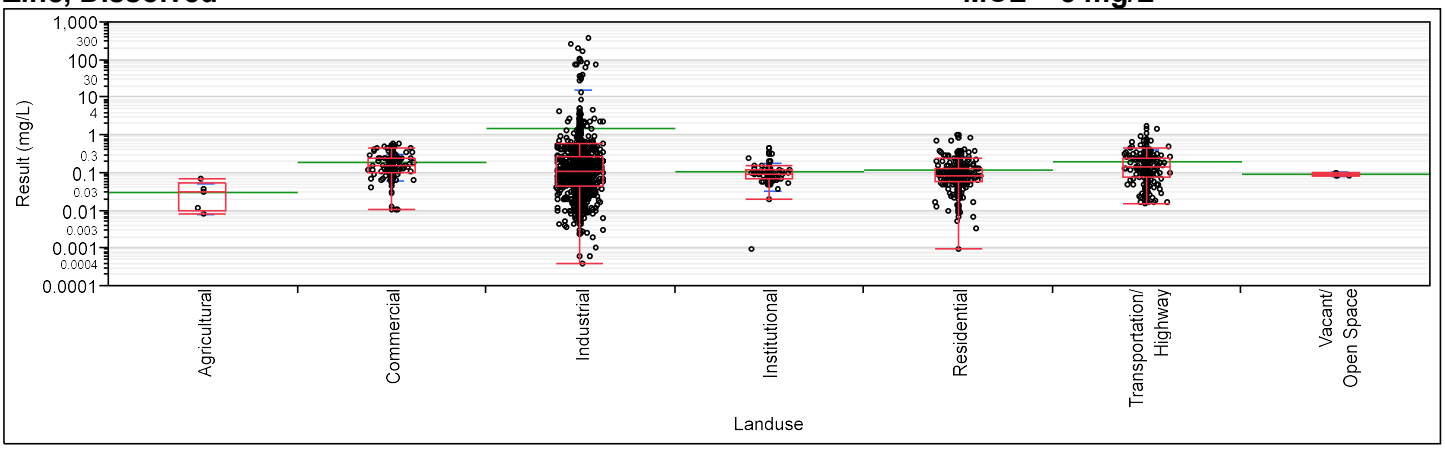
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Commercial	174	32	26	2	28	36
Industrial	1192	114	246	7	100	128
Institutional	153	55	59	5	46	65
Residential	495	30	35	2	27	34
Transportation/Highway	237	34	39	3	29	39
Vacant/Open Space	165	71	214	17	38	104

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Commercial	174	1	175	102	58
Industrial	1192	2	1194	1001	84
Institutional	153	2	155	70	45
Residential	495	8	503	244	49
Transportation/Highway	237	0	237	103	43
Vacant/Open Space	165	1	166	41	25

DRAFT

Zinc, Dissolved

MCL = 5 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.008	0.008	0.01	0.032	0.052	0.066	0.066
Commercial	0.011	0.062	0.102	0.1568	0.25	0.4315	0.5922
Industrial	0.0004	0.019	0.044	0.11	0.265	0.568	370
Institutional	0.0009	0.0557	0.07	0.093	0.114	0.1722	0.4467
Residential	0.0009	0.02925	0.057	0.0846	0.133	0.2305	1.02
Transportation/Highway	0.015	0.0326	0.0785	0.14	0.25	0.36	1.766
Vacant/Open Space	0.085	0.085	0.085	0.094	0.103	0.103	0.103

Means and Std Deviations

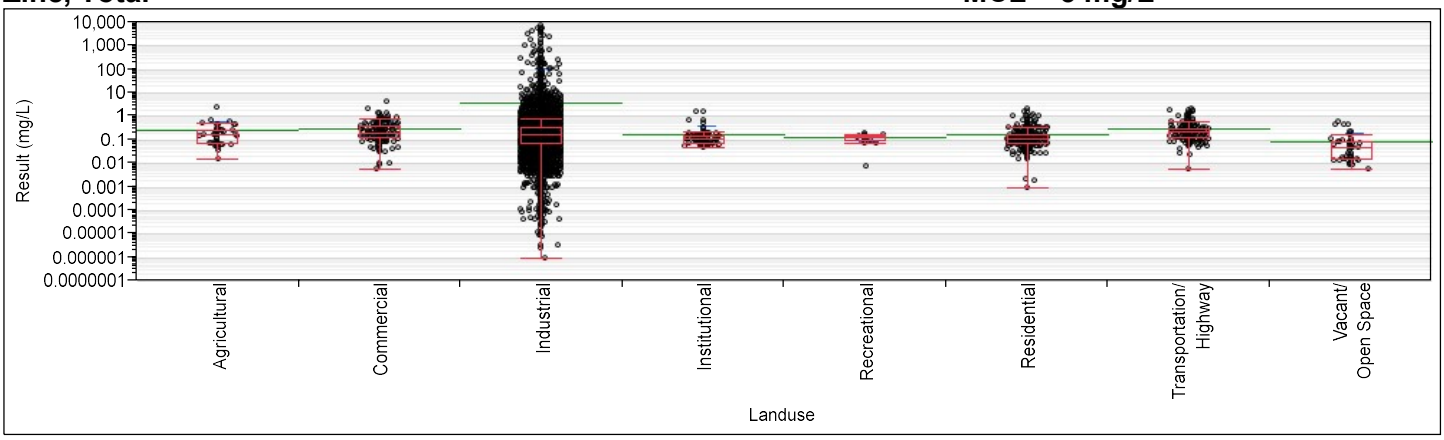
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	5	0.03	0.02	0.010	0.002	0.06
Commercial	199	0.20	0.13	0.009	0.176	0.21
Industrial	1451	1.55	15.13	0.397	0.767	2.33
Institutional	106	0.11	0.08	0.008	0.095	0.13
Residential	354	0.12	0.14	0.007	0.108	0.14
Transportation/Highway	277	0.20	0.21	0.013	0.175	0.23
Vacant/Open Space	6	0.09	0.01	0.004	0.084	0.10

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	5	0	5	0	0
Commercial	199	10	209	0	0
Industrial	1451	51	1502	21	1
Institutional	106	33	139	0	0
Residential	354	116	470	0	0
Transportation/Highway	277	11	288	0	0
Vacant/Open Space	6	96	102	0	0

DRAFT

Zinc, Total

MCL = 5 mg/L



Quantiles

Level	Minimum	10%	25%	Median	75%	90%	Maximum
Agricultural	0.016	0.0594	0.078	0.17	0.271	0.458	2.65
Commercial	0.00559	0.082	0.127	0.19835	0.388875	0.713	4.6
Industrial	0.000001	0.03	0.071925	0.16	0.37	0.86	7500
Institutional	0.05	0.06	0.074	0.112	0.156	0.20447	1.61
Recreational	0.0081	0.0716	0.101	0.124	0.144	0.1786	0.211
Residential	0.001	0.048631	0.069	0.11225	0.177	0.3187	2.2
Transportation/Highway	0.0055	0.09	0.134	0.212	0.322	0.5414	2.1
Vacant/Open Space	0.0055	0.0126	0.016	0.05	0.08	0.229	0.651

Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Agricultural	51	0.25	0.38	0.053	0.1	0.35
Commercial	278	0.32	0.39	0.023	0.3	0.37
Industrial	30916	3.77	114.67	0.652	2.5	5.05
Institutional	146	0.16	0.23	0.019	0.1	0.20
Recreational	21	0.12	0.04	0.009	0.1	0.14
Residential	670	0.17	0.21	0.008	0.1	0.18
Transportation/Highway	332	0.29	0.31	0.017	0.3	0.33
Vacant/Open Space	67	0.08	0.13	0.015	0.1	0.11

Landuse	Detected	ND	Total	Detected > MCL	% > MCL
Agricultural	51	3	54	0	0
Commercial	278	5	283	0	0
Industrial	30916	549	31465	366	1
Institutional	146	6	152	0	0
Recreational	21	1	22	0	0
Residential	670	43	713	0	0
Transportation/Highway	332	2	334	0	0
Vacant/Open Space	67	85	152	0	0

DRAFT

APPENDIX D
Statistical Summary of Non-Detected Results and MDLs > MCLs

DRAFT

Table D1-A. SMARTS Non-Detect Records for Disinfection Parameters

Total trihalomethanes (TTHM)	1	0	0

Table D1-B. SMARTS Non-Detect Records for Disinfection Parameters

Gross Alpha particle activity (excluding radon and uranium)	24	0	0
Gross Beta particle activity	9	0	0
Tritium	21	0	0

Table D1-C. SMARTS Non-Detect Records for SOC Parameters

MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
1,2,3-Trichloropropane	26	26	100
2,3,7,8-TCDD (Dioxin)	66	0	0
2,4-D	1	0	0
Alachlor	2	0	0
Atrazine	2	0	0
Benzo(a)pyrene	546	217	40
Chlordane	292	163	56
Di(2-ethylhexyl)adipate	6	1	17
Di(2-ethylhexyl)phthalate	127	47	37
Endrin	158	1	1
Ethylene Dibromide	26	26	100
Glyphosate	9	0	0
Heptachlor	168	74	44
Heptachlor Epoxide	160	87	54
Hexachlorobenzene	151	43	28
Hexachlorocyclopentadiene	151	0	0
Methoxychlor	165	1	1
Pentachlorophenol	162	62	38
Polychlorinated Biphenyls	137	28	20
Toxaphene	161	2	1

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Table D1-D. SMARTS Non-Detect Records for VOC Parameters

MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
1,1,1-Trichloroethane	82	0	0
1,1,2,2-Tetrachloroethane	82	9	11
1,1,2-Trichloro-1,2,2-Trifluoroethane	4	0	0
1,1,2-Trichloroethane	82	0	0
1,1-Dichloroethane	95	0	0
1,1-Dichloroethylene	68	0	0
1,2,4-Trichlorobenzene	176	14	8
1,2-Dichlorobenzene	222	0	0
1,2-Dichloroethane	88	8	9
1,2-Dichloropropane	82	4	5
1,3-Dichloropropene	2	2	100
1,4-Dichlorobenzene	256	16	6
Benzene	573	9	2
Carbon Tetrachloride	82	8	10
cis-1,2-Dichloroethylene	67	0	0
Dichloromethane	65	0	0
Ethylbenzene	529	0	0
Methyl-tert-butyl ether	196	0	0
Monochlorobenzene	128	0	0
Styrene	31	0	0
Tetrachloroethylene	50	0	0
Toluene	508	0	0
trans-1,2-Dichloroethylene	63	2	3
Trichloroethylene	103	0	0
Trichlorofluoromethane	69	0	0
Vinyl Chloride	116	8	7
Xylenes	373	0	0

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Table D1-E. SMARTS Non-Detect Records for Inorganic Parameters

Source Parameter	NDs	MDL-MCL>0	% MDL-MCL>0	MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
Aluminum, Dissolved	128	0	0	Aluminum	1056	42	5
Aluminum, Total	928	42	5				
Antimony, Dissolved	27	8	30	Antimony	312	97	61
Antimony, Total	285	89	31				
Arsenic, Dissolved	70	0	0	Arsenic	809	38	5
Arsenic, Total	739	38	5				
Barium, Dissolved	2	0	0	Barium	54	0	0
Barium, Total	52	0	0				
Beryllium, Dissolved	79	3	4	Beryllium	553	17	7
Beryllium, Total	474	14	3				
Cadmium, Dissolved	157	0	0	Cadmium	1400	51	4
Cadmium, Total	1243	51	4				
Chromium, Dissolved	72	6	8	Chromium	543	18	11
Chromium, Total	471	12	3				
Cyanide	820	74	9	Cyanide	820	74	9
Fluoride	100	2	2	Fluoride	100	2	2
Lead, Dissolved	354	16	5	Lead	3087	306	15
Lead, Total	2733	290	11				
Mercury, Dissolved	124	0	0	Mercury	1927	25	1
Mercury, Total	1803	25	1				
Nickel, Dissolved	82	0	0	Nickel	604	9	2
Nickel, Total	522	9	2				
Nitrate as N	199	0	0	Nitrate (as nitrogen)	199	0	0
Nitrate as NO3	42	0	0	Nitrate(as NO3)	42	0	0
Nitrate + Nitrite as N	1021	6	1	Nitrate+Nitrite (sum as nitrogen)	1021	6	1
Nitrite as N	603	3	0	Nitrite (as nitrogen)	603	3	0
Perchlorate	11	0	0	Perchlorate	11	0	0
Selenium, Dissolved	83	0	0	Selenium	1325	38	3
Selenium, Total	1242	38	3				
Thallium, Dissolved	71	0	0	Thallium	519	128	29
Thallium, Total	448	128	29				

Table D1-F. SMARTS Non-Detect Records for Secondary Parameters

Source Parameter	NDs	MDL-MCL>0	% MDL-MCL>0	MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
Chloride	25	0	0	Chloride	25	0	0
Copper, Dissolved	86	0	0	Copper	694	25	4
Copper, Total	608	25	4				
MBAS	204	1	0	Foaming Agents (MBAS)	204	1	0
Iron, Total	1257	241	19	Iron	1257	241	19
Manganese, Total	31	1	3	Manganese	31	1	3
Silver, Dissolved	171	0	0	Silver	1495	18	1
Silver, Total	1324	18	1				
Specific Conductance	250	0	0	Specific Conductance	250	0	0
Sulfate	6	0	0	Sulfate	6	0	0
TDS	40	0	0	Total Dissolved Solids	40	0	0
Zinc, Dissolved	40	0	0	Zinc	580	25	5
Zinc, Total	540	25	5				

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Table D2-A. Combined-Source Non-Detect Records for Disinfection Parameters

MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
Total trihalomethanes (TTHM)	1	0	0

Table D2-B. Combined-Source Non-Detect Records for Radionuclide Parameters

MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
Gross Alpha particle activity (excluding radon and uranium)	24	0	0
Gross Beta particle activity	9	0	0
Tritium	21	0	0

Table D2-C. Combined-Source Non-Detect Records for SOC Parameters

MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
1,2,3-Trichloropropane	26	26	100
2,3,7,8-TCDD (Dioxin)	66	0	0
2,4-D	205	0	0
Alachlor	2	0	0
Atrazine	269	264	98
Benzo(a)pyrene	901	443	49
Chlordane	517	163	32
Di(2-ethylhexyl)adipate	6	1	17
Di(2-ethylhexyl)phthalate	171	47	27
Endrin	501	1	0
Ethylene Dibromide	26	26	100
Glyphosate	265	0	0
Heptachlor	511	299	59
Heptachlor Epoxide	497	312	63
Hexachlorobenzene	420	43	10
Hexachlorocyclopentadiene	377	0	0
Methoxychlor	508	1	0
Pentachlorophenol	387	287	74
Polychlorinated Biphenyls	215	28	13
Toxaphene	504	2	0

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Table D2-D. Combined-Source Non-Detect Records for VOC Parameters

MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
1,1,1-Trichloroethane	126	0	0
1,1,2,2-Tetrachloroethane	126	9	7
1,1,2-Trichloro-1,2,2-Trifluoroethane	48	0	0
1,1,2-Trichloroethane	126	0	0
1,1-Dichloroethane	139	0	0
1,1-Dichloroethylene	112	0	0
1,2,4-Trichlorobenzene	402	14	3
1,2-Dichlorobenzene	448	0	0
1,2-Dichloroethane	88	8	9
1,2-Dichloropropane	126	4	3
1,3-Dichloropropene	2	2	100
1,4-Dichlorobenzene	482	16	3
Benzene	617	9	1
Carbon Tetrachloride	126	8	6
cis-1,2-Dichloroethylene	67	0	0
Dichloromethane	109	0	0
Ethylbenzene	573	0	0
Methyl-tert-butyl ether	196	0	0
Monochlorobenzene	172	0	0
Styrene	75	0	0
Tetrachloroethylene	50	0	0
Toluene	550	0	0
trans-1,2-Dichloroethylene	107	2	2
Trichloroethylene	103	0	0
Trichlorofluoromethane	113	0	0
Vinyl Chloride	160	8	5
Xylenes	417	0	0

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Table D2-E. Combined-Source Non-Detect Records for Inorganic Parameters

Source Parameter	NDs	MDL-MCL>0	% MDL-MCL>0	MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
Aluminum, Dissolved	585	0	0	Aluminum	1652	42	4
Aluminum, Total	1067	42	4				
Antimony, Dissolved	789	8	1	Antimony	1829	97	10
Antimony, Total	1040	89	9				
Arsenic, Dissolved	828	0	0	Arsenic	2364	38	2
Arsenic, Total	1536	38	2				
Barium, Dissolved	263	0	0	Barium	522	0	0
Barium, Total	259	0	0				
Beryllium, Dissolved	898	3	0	Beryllium	2378	17	1
Beryllium, Total	1480	14	1				
Cadmium, Dissolved	1080	0	0	Cadmium	3243	51	2
Cadmium, Total	2163	51	2				
Chromium, Dissolved	659	6	1	Chromium	1743	18	2
Chromium, Total	1084	12	1				
Cyanide	864	74	9	Cyanide	864	74	9
Fluoride	448	2	0	Fluoride	448	2	0
Lead, Dissolved	1082	16	1	Lead	4303	306	10
Lead, Total	3221	290	9				
Mercury, Dissolved	841	0	0	Mercury	3371	25	1
Mercury, Total	2530	25	1				
Nickel, Dissolved	752	0	0	Nickel	1692	9	1
Nickel, Total	940	9	1				
Nitrate as N	355	0	0	Nitrate (as nitrogen)	355	0	0
Nitrate as NO3	44	0	0	Nitrate(as NO3)	44	0	0
Nitrate + Nitrite as N	1050	6	1	Nitrate+Nitrite (sum as nitrogen)	1050	6	1
Nitrite as N	843	3	0	Nitrite (as nitrogen)	843	3	0
Perchlorate	11	0	0	Perchlorate	11	0	0
Selenium, Dissolved	927	0	0	Selenium	3021	38	2
Selenium, Total	2094	38	2				
Thallium, Dissolved	1070	323	30	Thallium	2538	774	61
Thallium, Total	1468	451	31				

Table D2-F. Combined-Source Non-Detect Records for Secondary Parameters

Source Parameter	NDs	MDL-MCL>0	% MDL-MCL>0	MCL Parameter	NDs	MDL-MCL>0	% MDL-MCL>0
Chloride	77	0	0	Chloride	77	0	0
Copper, Dissolved	328	0	0	Copper	1034	25	4
Copper, Total	706	25	4				
MBAS	642	1	0	Foaming Agents (MBAS)	642	1	0
Iron, Total	1396	241	17	Iron	1396	241	17
Manganese, Total	645	245	38	Manganese	645	245	38
Silver, Dissolved	1167	0	0	Silver	3740	18	1
Silver, Total	2573	18	1				
Specific Conductance	257	0	0	Specific Conductance	257	0	0
Sulfate	6	0	0	Sulfate	6	0	0
TDS	42	0	0	Total Dissolved Solids	42	0	0
Zinc, Dissolved	317	0	0	Zinc	1011	25	4
Zinc, Total	694	25	4				

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