



# **Analytical Feasibility Support Document for the Six-Year Review of Existing National Primary Drinking Water Regulations**

(Reassessment of Feasibility for Chemical Contaminants)

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**Analytical Feasibility Support Document  
for the Six-Year Review of  
Existing National Primary Drinking Water Regulations**

(Reassessment of Feasibility for Chemical Contaminants)

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United States Environmental Protection Agency  
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- (1) developing and/or reviewing the process used to assess whether the feasible limits have changed for a subset of the 68 chemical SDWA analytes under review;
- (2) review and comment on the preliminary results;
- (3) general QA/QC to verify that the approved analytical methods and the method detection limits listed for each contaminant was correct; and/or
- (4) writing and editorial review of portions of this document.

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## Executive Summary

The Safe Drinking Water Act (SDWA), as amended in 1996, requires the Environmental Protection Agency (EPA) to review and revise, if appropriate, existing National Primary Drinking Water Regulations (NPDWRs). As part of the review, EPA developed a protocol document (entitled *EPA Protocol for the Review of Existing National Primary Drinking Water Regulations*) to describe the process and strategy for regulatory review that EPA used to meet its statutory requirement. EPA developed the protocol based on recommendations from the National Drinking Water Advisory Council (NDWAC), through internal Agency deliberations, and through discussions with the diverse stakeholders involved in drinking water and its protection. Based on the NDWAC recommendations, EPA's review included the consideration of five key elements, as appropriate: *health effects, analytical and treatment feasibility, implementation-related issues, occurrence and exposure, and economic impacts*. The purpose of the analytical methods feasibility analysis was to determine whether changes in the practical quantitation level (PQL) were possible in those instances where the Maximum Contaminant Level is limited, or might be limited, by analytical feasibility. This document, "*Analytical Feasibility Support Document for the Six-Year Review of Existing National Primary Drinking Water Regulations: Reassessment of Feasibility for Chemical Contaminants*," describes the process recommended by NDWAC and used by EPA to address the analytical feasibility aspect of the current (1996-2002) Six-Year Review.

To be consistent with the accepted policy and procedures used by EPA to derive quantitation levels for drinking water contaminants, the Six-Year Review focused on the process that has been used by the Office of Ground Water and Drinking Water for many years. Historically, EPA's OGWDW used two main approaches to determine practical quantitation levels (PQLs) for SDWA analytes. One approach (and the preferred approach) used data from Water Supply (WS) Performance Evaluation (PE) studies. Although the primary use of the WS-PE data was for EPA's laboratory certification, the data were also used as a secondary data source for many years to develop PQLs when the spike concentrations were in the appropriate concentration range. The derivation of the PQL using WS data involved determining the concentration of an analyte at which 75 percent of EPA Regional and State laboratories achieved results within a specified range around the spike value. In the absence of WS data, the other approach that EPA used was the MDL multiplier method. In this approach, the PQL was calculated by multiplying the EPA-derived MDL by a factor of 5 or 10. The MDL multiplier method was mostly used in the early years of rule development for NPDWRs when insufficient WS data were available. Once sufficient WS data became available, most of the PQLs developed using the MDL multiplier were validated using WS data.

For the Six-Year analytical feasibility review, EPA focused on assessing whether the practical quantitation limit has changed since promulgation for a subset of the 68 chemical NPDWRs. EPA performed the analytical feasibility analysis for a total of 40 NPDWRs that fell into one of two categories:

- ▶ First, for those contaminants where the MCL is currently limited by analytical feasibility (i.e., the MCL is set at the PQL) and the MCLG is still appropriate, EPA evaluated the currently approved methods for those contaminants and available WS data to determine whether it might be possible to lower the PQL and hence set an MCL that is closer to the MCLG.
- ▶ The second circumstance under which EPA re-evaluated the PQL was for contaminants identified under the Six-Year health effects technical review as having potential changes to their MCLG. Because the information for the health effects review was not completely

available at the time the analytical methods analysis began, EPA took a broad-brush approach and included a number of contaminants that may not have needed a reassessment of their analytical feasibility.

For each of these 40 chemical NPDWRs, the analytical feasibility reassessment included:

- (1) a *methods comparison* step to help identify whether the ability to detect (and therefore quantify) these contaminants at lower levels has increased;
- (2) a *methods usage over time* step to identify the analytical methods that appear to be the most widely used for the analysis of particular contaminants.
- (3) a *Water Supply data analysis* step to determine if a PQL can be recalculated (if sufficient WS information is available) or if there is an indication that a PQL may be lower using the available information.

The results of these three steps aided in assessing whether a PQL might change for a specific contaminant and, if so, estimating what the new PQL might be.

The results of Six-Year analytical feasibility review concluded that the majority of the available WS data were insufficient to actually recalculate the PQL for many of the 40 contaminants of interest. The data were considered insufficient because either the true value of the spike concentrations used in the WS studies were above the concentration of interest and/or the percentages of labs passing exceeded the 75 percent criterion used to calculate a PQL. However, for many of the 40 contaminants, the available data were sufficient to indicate whether the PQL might change or if the current PQL is still appropriate. Of the 40 NPDWRs evaluated, the available information indicates that the PQL for 25 might possibly be lower. The PQL for the remaining 15 appears to still be appropriate. For the 25 analytes where the WS data indicate that a lower PQL may exist, EPA used the information about method usage over time, the MDLs for these methods, and the 10 x MDL multiplier to estimate what the potentially lower PQL might be. This estimated value was used as a threshold value in the occurrence and exposure analyses to determine whether an improvement in public health protection might be possible if EPA were to consider gathering more definitive data to recalculate the PQL and possibly lower the MCL.

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(Reassessment of Feasibility for Chemical Contaminants)**

## **I. Introduction**

The Safe Drinking Water Act (SDWA), as amended in 1996, requires the Environmental Protection Agency (EPA) to review and revise, if appropriate, existing National Primary Drinking Water Regulations (NPDWRs). As part of the review, EPA developed a protocol document (*EPA Protocol for the Review of Existing National Primary Drinking Water Regulations*) that describes the process and strategy EPA used to review existing NPDWRs in order to meet its statutory requirement. EPA developed the protocol document based on recommendations from the National Drinking Water Advisory Council (NDWAC), through internal Agency deliberations, and through discussions with the diverse stakeholders involved in drinking water and its protection. To more efficiently utilize limited resources, EPA performed a series of analyses that were intended to target those NPDWRs that are the most appropriate candidates for revision. As part of the review, and where appropriate, EPA reviewed the following key technical elements to make decisions regarding regulatory changes: health risks assessments; technology assessments (analytical feasibility and treatment technology); other regulatory revisions (e.g., monitoring and reporting); occurrence and exposure analyses; and available economic information. This document discusses the analytical feasibility aspect of the current (1996-2002) Six-Year Review.

The 1999-2002 Six-Year Review includes the review of 68 chemical NPDWRs promulgated prior to the 1996 SDWA Amendments. Because the analytical measurement feasibility may have been the limiting factor in setting the Maximum Contaminant Level (MCL) for some of the existing NPDWRs or because the health effects reviews may indicate a potential change in the MCLG, this report examines the reassessment of analytical methods capabilities including a reassessment of whether the Practical Quantitation Levels (PQLs) may have changed since promulgation. The PQL is generally defined as "the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions" (50 FR 46906, November 13, 1985). The purpose of this support document is to:

- provide background information on the relationship between SDWA requirements and the analytical methods feasibility;
- describe how PQLs have historically been determined;
- and describe the process used to identify which of the 68 chemical NPDWRs under the 1996-2002 review are subject to a further assessment with regards to analytical methods capabilities and a reassessment of the PQL.

## **II. Background**

### **A. What is the Relationship Between SDWA Requirements and Analytical Methods?**

The SDWA [§1401(1)(C)(i); 42 U.S.C. § 300f(1)(C)(i)] states that an MCL for a national primary drinking water regulation is set "if, in the judgment of the Administrator, it is economically and technologically feasible to ascertain the level of such contaminant in water in public water systems." According to SDWA, NPDWRs include "criteria and procedures to

assure a supply of drinking water which dependably complies with such maximum contaminant levels; including accepted methods of quality control and testing procedures to insure compliance with such levels" [§1401(1)(D); 42 U.S.C. § 300f(1)(D)]. Except in certain circumstances, EPA is to set the MCL as close to the Maximum Contaminant Level Goal (MCLG) as is feasible with the best available technologies (Section 1412 (b)(4)(B)). The MCLs for several SDWA contaminants were set due to the limits of the analytical feasibility at that time. Since the promulgation of pre-1996 SDWA NPDWRs, newer analytical methods and updated methods for measuring SDWA contaminants have been approved. The approval of newer analytical techniques may have provided laboratories with the analytical capability to measure some contaminants at lower levels. In addition, some laboratories may have improved in their ability to measure at lower levels using the same methods that were originally promulgated.

In considering analytical methods for use in compliance monitoring, EPA evaluates the overall sensitivity of the techniques. In previous regulations, EPA used two measures of analytical capability, the Method Detection Limit (MDL) and the Practical Quantitation Level (PQL).

- ▶ The MDL is a measure of method sensitivity. The MDL is defined at 40 CFR Part 136 Appendix B as *"the minimum concentration of a substance that can be reported with 99% confidence that the analyte concentration is greater than zero."* MDLs can be operator, method, laboratory, and matrix-specific. Due to normal day-to-day and run-to-run analytical variability, MDLs may not be reproducible within a laboratory or between laboratories. The regulatory significance of the MDL is that EPA uses the MDL to determine when a contaminant is deemed to be detected and it can be used to calculate a PQL for that contaminant.
- ▶ In the preamble to a November 13, 1985 rulemaking (50 FR 46906), the PQL was defined as *"the lowest concentration of an analyte that can be reliably measured within specified limits of precision and accuracy during routine laboratory operating conditions."* The Agency has used the PQL to estimate or evaluate the minimum concentration at which most laboratories can be expected to reliably measure a specific chemical contaminant during day-to-day analyses of drinking water samples. The PQL is a means of integrating information on the performance of the approved analytical methods into the development of a drinking water regulation (52 FR 25699, July 8, 1987). The PQL incorporates the following (50 FR 46880, November 13, 1985; 52 FR 25690, July 8, 1987; 54 FR 22062, May 22, 1989):
  - quantitation,
  - precision and bias,
  - normal operations of a laboratory, and
  - the fundamental need to have a sufficient number of laboratories available to conduct compliance monitoring analyses.
  -

In some cases, the quantitation limit for a particular analyte may have been the limiting factor in the determination of the MCL for that analyte. This could be especially true for contaminants with MCLGs of zero. Also, there are several SDWA contaminants with non-zero MCLGs that have their MCL set at the PQL.

## B. How Have PQLs Been Determined in the Past for SDWA Contaminants?

Historically, EPA's OGWDW used two main approaches to determine a PQL for SDWA analytes. One approach (and the preferred approach) used data from Water Supply (WS) Performance Evaluation (PE) studies. Although the primary use of the WS-PE data was for EPA's laboratory certification, the data were also used as a secondary data source for many years to develop PQLs when the spike concentrations were in the appropriate concentration range. The derivation of the PQL using WS data involved determining the concentration of an analyte at which 75 percent of EPA Regional and State laboratories achieved results within a specified range around the spike value. In the absence of WS data, the other approach that EPA used was the MDL multiplier method. In this approach, the PQL was calculated by multiplying the EPA-derived MDL by a factor of 5 or 10. The 5 or 10 multiplier was used to account for the variability and uncertainty that can occur at the MDL. The MDL multiplier method was mostly used in the early years of rule development for NPDWRs when insufficient WS data were available. Once sufficient WS data became available, most of the PQLs that were developed using the MDL multiplier were validated using WS data.

### 1. *How Were Water Supply Studies Conducted?*

Water Supply Performance Evaluation (WS PE) studies were an integral part of EPA's certification program for drinking water laboratories for over 20 years. Historically, WS studies were conducted semi-annually by EPA for all current and proposed drinking water contaminants. Although the WS studies were conducted semi-annually, for certification purposes, laboratories were only required to demonstrate acceptable performance once a year (141.23(k)(3) and 141.24(f)(17)). WS study samples (spike samples) were sent to all laboratories that conduct drinking water analyses, including utility laboratories, commercial laboratories, and State and EPA Regional laboratories. Each WS study included samples or sample concentrates that were analyzed both for all SDWA analytes and for analytes that were being considered for regulation under the SDWA.

During these WS studies, EPA's National Exposure Research Laboratory (NERL) in Cincinnati, Ohio, sent participating laboratories a set of stable sample concentrates in sealed glass ampules, a data reporting form, and appropriate instructions. Each laboratory produced the study samples by diluting a measured quantity of the specific concentrates to volume with reagent water. The laboratory then analyzed the samples using the specified procedures. The completed reporting form was sent to EPA for evaluation, the data were carefully reviewed (QA/QC'ed), entered into a database, and a fully detailed report was then returned to each laboratory. The responsible State or EPA office contacted those laboratories that demonstrated potential problems.

At this point in time, the WS Performance Evaluation studies are no longer performed by EPA. On July 18, 1996 (61 FR 37464), EPA proposed options for the externalization of the PE studies program (now referred to as the Proficiency Testing or PT program). After evaluating public comment, in the June 12, 1997 final notice EPA stated that the Agency has decided (62 FR 32112):

*...on a program where EPA would issue standards for the operation of the program, the National Institute of Standards and Technology (NIST) would develop standards for private sector PE (PT) suppliers and would evaluate and accredit PE suppliers, and the private sector would develop and manufacture PE (PT) materials and conduct PE (PT) studies. In addition, as part of the program, the PE (PT) providers would report the results of the studies to the study participants and to those organizations that have responsibility for administering programs supported by the studies.*

Since the last WS PE studies performed by EPA were done in the Fall of 1999, the externalization of the PE program should not effect the data needed for this Six-Year Review process. However, at this time the Agency has not determined how to gather data to reassess PQLs for subsequent reviews of NPDWRs.

## *2. What Criteria Are Used to Determine a PQL?*

The derivation of the PQL involves determining the concentration of an analyte at which a set percentage of the laboratories achieve results within a specified range of the spiked value. Historically, the percentage of laboratories has been set at 75 percent, while a range of acceptance limits around the spiked value has been used. In many cases, EPA derived PQLs only from the data submitted by the EPA Regional and State laboratories that participate in the WS studies.

A PQL derived from WS data in such a manner is considered a stringent target for routine laboratory performance because:

- WS samples are prepared in reagent water and therefore do not contain the matrix interferences that may occur in field samples.
- Laboratories analyze only a small number of samples for the study and are aware that the samples are for the purposes of performance evaluation (i.e., they are not "blind" samples).

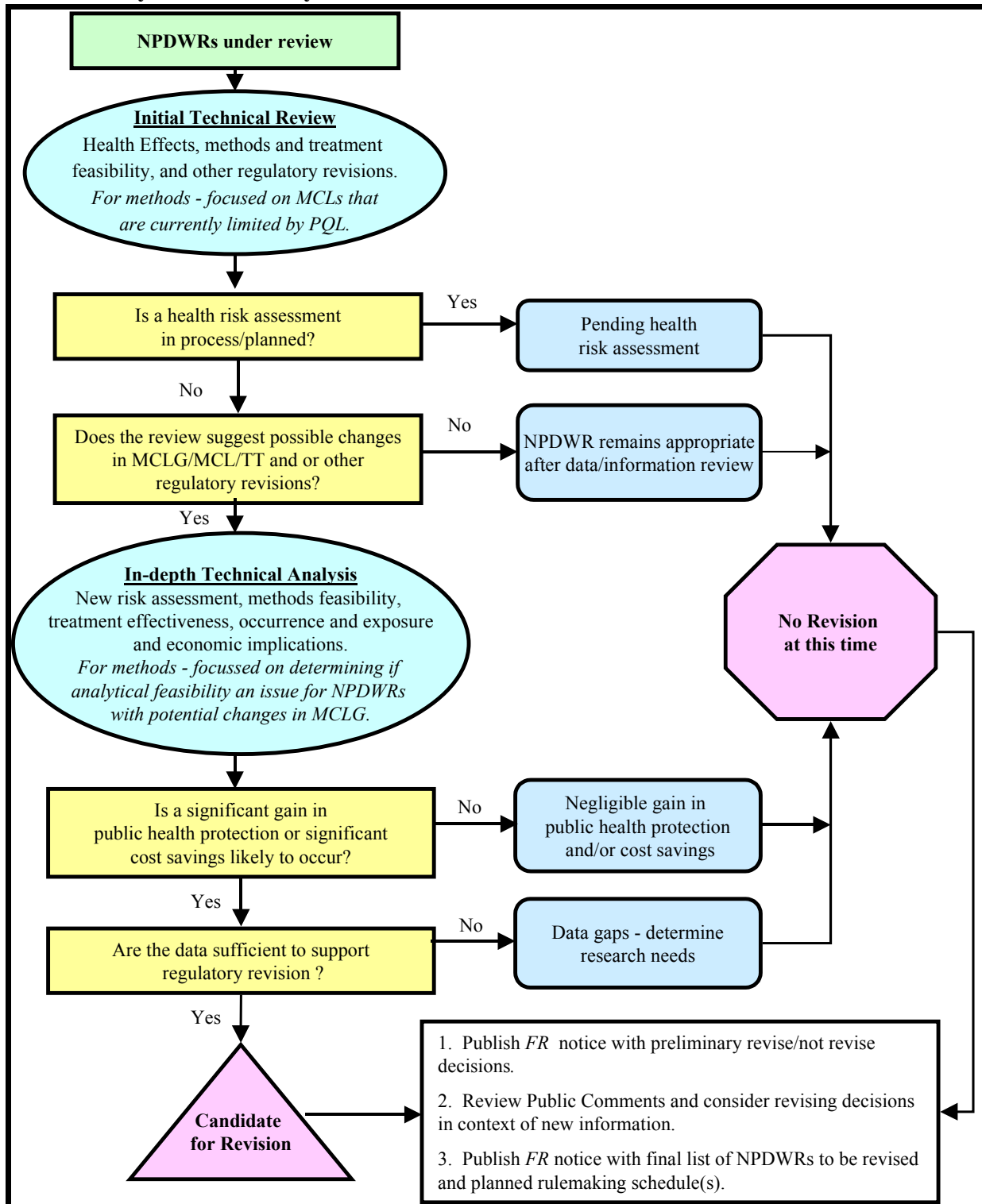
In deriving a PQL from WS study data, the Agency typically sets a fixed percentage or 2 sigma (2 standard deviation) acceptance window around the known concentration (or spike value) of the WS samples. Then the percentage of laboratories achieving results within the specified acceptance window (y-axis) is plotted against the known spike concentration of the Water Supply study samples (x-axis). While the acceptance limits for inorganics typically range from 15 to 30 percent (40 CFR §141.23(k)(3)(ii)), the acceptance limits for organics generally range from 20 to 50 percent (141.24(f)(17)(i) and 40 CFR §141.24(h)(19)(i)). Several SDWA analytes have acceptance limits of 2 sigma (2 standard deviation). Linear regression or graphical analysis is performed on the WS data to determine the concentration at which 75 percent of EPA Regional and State laboratories achieve acceptable results.

### **III. How Did EPA Identify Which Contaminants to Evaluate for a PQL Reassessment?**

For the Six-Year analytical feasibility review, EPA focused on assessing whether the practical quantitation level (or PQL) has changed since promulgation for a subset of the 68 chemical NPDWRs. Figure 1 illustrates the overall Six-Year protocol and the basic process used to identify the subset of contaminants for which a PQL reassessment should be appropriate. Using the protocol, EPA identified and performed the analytical feasibility analysis for a total of 40 NPDWRs (Table 1), which fell into one of two categories:

- ▶ First, for those contaminants where the MCL is currently limited by analytical feasibility (i.e., the MCL is set at the PQL) and the MCLG is still appropriate, EPA evaluated the currently approved methods for those contaminants and available WS data to determine whether it might be possible to lower the PQL and hence set an MCL that is closer to the MCLG.
- ▶ The second circumstance under which EPA re-evaluated the PQL was for contaminants identified under the Six-Year health effects technical review as having potential changes to their MCLG. Because the information for the health effects review was not completely available at the time the analytical methods analysis began, EPA took a broad-brush approach and included a number of contaminants that may not have needed a reassessment of their analytical feasibility.

**Figure 1. Overview of the Protocol for the Revise/Not Revise Decision with a Focus on Where Analytical Feasibility was Re-evaluated.**





**Table 1. SDWA Chemical Contaminants Undergoing Analytical Methods/PQL Reassessment**

	<b>SDWA Chemical Contaminant</b>	<b>MCLG <sup>1</sup> (mg/L)</b>	<b>MCL <sup>2</sup> (mg/L)</b>	<b>Current PQL <sup>3</sup> (mg/L)</b>	<b>Acceptance Limit<sup>4</sup></b>
1	Alachlor	zero	0.002	0.002	± 45 %
2	Benzene	zero	0.005	0.005	± 20 % or 40 %
3	Benzo(a)pyrene	zero	0.0002	0.0002	2 Std Dev.
4	Beryllium	0.004	0.004	0.001	± 15 %
5	Bis(2-ethylhexyl)phthalate	zero	0.006	0.006	2 Std Dev
6	Cadmium	0.005	0.005	0.002	± 20 %
7	Carbofuran	0.04	0.04	0.007	± 45 %
8	Carbon tetrachloride	zero	0.005	0.005	± 20 % or 40 %
9	Chlordane	zero	0.002	0.002	± 45
10	Chromium (Cr III and VI)	0.1	0.1	0.01	± 15 %
11	1,2-Dibromo-3-chloropropane (DBCP)	zero	0.0002	0.0002	± 40 %
12	1,4-Dichlorobenzene (para)	0.075	0.075	0.005	± 20 % or 40 %
13	1,2-Dichloroethane	zero	0.005	0.005	± 20 % or 40 %
14	1,1-Dichloroethylene	0.007	0.007	0.005	± 20 % or 40 %
15	Dichloromethane (methylene chloride)	zero	0.005	0.005	± 20 % or 40 %
16	1,2- Dichloropropane	zero	0.005	0.005	± 20 % or 40 %
17	Dioxin (2,3,7,8-TCDD)	zero	3 x 10 <sup>-8</sup>	3 x 10 <sup>-8</sup>	2 Std Dev
18	Diquat	0.02	0.02	0.004	2 Std Dev
19	Ethylene dibromide	zero	0.00005	0.00005	± 40 %
20	Fluoride	4.0	4.0	0.5	± 10 %
21	Glyphosate	0.7	0.7	0.06	2 Std Dev
22	Heptachlor	zero	0.0004	0.0004	± 45 %
23	Heptachlor epoxide	zero	0.0002	0.0002	± 45 %
24	Hexachlorobenzene	zero	0.001	0.001	2 Std Dev
25	Hexachlorocyclopentadiene	0.05	0.05	0.001	2 Std Dev
26	Mercury	0.002	0.002	0.0005	± 30 %
27	Methoxychlor	0.04	0.04	0.01	± 45 %
28	Oxamyl (Vydate)	0.2	0.2	0.02	2 Std Dev
29	PCBs - Polychlorinated biphenyls (as decachlorobiphenyl)	zero	0.0005	0.0005	± 100 %
30	Pentachlorophenol	zero	0.001	0.001	± 50 %
31	Picloram	0.5	0.5	0.001	2 Std Dev

	SDWA Chemical Contaminant	MCLG <sup>1</sup> (mg/L)	MCL <sup>2</sup> (mg/L)	Current PQL <sup>3</sup> (mg/L)	Acceptance Limit <sup>4</sup>
32	Tetrachloroethylene	zero	0.005	0.005	± 20 % or 40 %
33	Thallium	0.0005	0.002	0.002	± 30 %
34	Toluene	1	1	0.005	± 20 % or 40 %
35	Toxaphene	zero	0.003	0.003	± 45 %
36	1,1,1-Trichloroethane	0.2	0.2	0.005	± 20 % or 40 %
37	1,1,2-Trichloroethane	0.003	0.005	0.005	± 20 % or 40 %
38	Trichloroethylene	zero	0.005	0.005	± 20 % or 40 %
39	Vinyl chloride	zero	0.002	0.002	± 45 %
40	Xylene (total)	10	10	0.005	± 20 % or 40 %

Footnotes:

1. The MCLGs for inorganics are listed at 40 CFR 141.51. The MCLGs for organics are listed at 40 CFR 141.50.

2. The MCLs for inorganics are listed at 40 CFR 141.62. The MCLs for organics are listed at 40 CFR 141.61.

3. The PQL for fluoride is published in 51 FR 11397 (April 1986). The PQLs for benzene, carbon tetrachloride, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethylene, 1,1,1-trichloroethane and vinyl chloride are published in 52 FR 25690 at 25700 (July 8, 1987). The PQLs for alachlor, cadmium, carbofuran, chlordane, chromium, 1,2-dibromo-3-chloropropane, 1,2-dichloropropane, heptachlor, heptachlor epoxide, ethylene dibromide, mercury, methoxychlor, PCBs, pentachlorophenol, tetrachloroethylene, toxaphene and xylene are published in 56 FR 3526 at 3552 (January 30, 1991). In the January 1991 FR, the PQL for pentachlorophenol was proposed but the final PQL was published in 56 FR 30266 (July 1, 1991) at 30270. The PQL for beryllium, benzo(a)pyrene, bis or di(2-ethylhexyl)phthalate dichloromethane, dioxin, diquat, glyphosate, hexachlorobenzene, hexachloro-cyclopentadiene, picloram and thallium 1,1,1-trichloroethane are published in 57 FR 31776 at 31801 (July 17, 1992).

4. The acceptance limits inorganic can be found at CFR 141.23(k)(3)(ii). Acceptance limits for the organic chemicals are found at CFR 141.24(f)(17)(i)(C and D) and CFR 141.24(h)(19)(i)(B).

#### IV. What Approaches Were Used to Reassess the PQLs of Contaminants Identified by the Six-Year Review Process?

For this Six-Year Review process, several approaches could be used for the reassessment or re-evaluation of the PQLs for selected chemical contaminants. However, to be consistent with the policies and the process that the Agency has used in the past (50 FR 46880, November 13, 1985; 52 FR 25690, July 8, 1987; 54 FR 22062, May 22, 1989), only the "WS data" and the "MDL Multiplier" approaches were considered for the Six-Year Review process. Of these two approaches, the WS data approach is the preferred route since it relies on actual data to determine the level of quantitation. For the Six-Year Review, the MDL multiplier method is only used to estimate what a potential PQL could be if WS data are sufficient to indicate a change but insufficient to actually recalculate a PQL. There are advantages and disadvantages for each of these approaches. Some of the advantages and disadvantages for these PQL derivation approaches are as follows:

- (1) *Analysis of WS PE Data* - Uses data from WS studies to derive a new PQL. This value is compared to the old PQL (i.e., the one that is currently in place).

The advantages of the WS PE Data methods of deriving a PQL -

- ▶ Uses inter-laboratory data collected at concentrations near the MCL.
- ▶ More representative of what methods are being used for the analysis of that contaminant.
- ▶ May be the preferred approach for contaminants with MCLGs of zero.

The disadvantages of the WS analysis method of deriving a PQL -

- ▶ In the past, some stakeholders have felt that the PQL may be influenced by the set of WS data used (i.e., using data from all laboratories as opposed to only using data from EPA State and Regional laboratories).
- ▶ Some stakeholders have felt that the laboratory performance on WS data may be skewed, because WS samples may be treated as special samples that are critical for laboratory certification.
- ▶ The derivation of PQLs from WS data is a resource- and time-intensive process.
- ▶ Because the WS samples are designed to test precision and accuracy around the MCL, the WS data may not cover concentrations several orders of magnitude below the current MCL. Hence, for some analytes, data points at lower levels may not be represented.

- (2) *The MDL-Multiplier Approach* - Using the MDL of the currently approved method(s) for each contaminant, the 5 or 10 multiplier method can be used to estimate the PQL. This value is then compared to the PQL that was derived before the 1996 SDWA Amendments.

The advantage of the MDL multiplier approach - it is a relatively easy and clear process.

The disadvantages of the MDL multiplier approach -

- ▶ The WS studies test laboratory performance near the MCL as opposed to the MDL. A PQL derived from the MDL multiplier method may not be representative, because the reproducibility of a result obtained at the MDL is often not as good as that obtained near the MCL.
- ▶ Because several methods may be approved for the same contaminant, it can be difficult to decide which MDL to select for the PQL calculation. However, knowledge of the methods that are the most widely used can be determined from the WS data since laboratories report which method was used to analyze spike samples.

Acknowledging the advantages and disadvantages of the WS analysis and the MDL multiplier approach, EPA used the following steps for the Six Year Review to reassess analytical feasibility for the 40 chemical contaminants identified:

- The first step is the *methods comparison* step. This step compared the method detection limits of the analytical methods which were available at the time the PQL was set to the method detection limits for the currently approved analytical methods. This methods comparison should help to identify whether the ability to detect (and therefore quantify) these contaminants at lower levels has increased.

- The second step is the *method usage over time*. This step used information from the last eight Water Supply studies (WS 34 through WS 41; 1996 to 1999) to generate a bar graph of the distribution of the analytical methods used to analyze the spike samples in the WS studies. This analysis should give an idea of the analytical methods that appear to be the most widely used for the analysis of particular contaminants. Knowing which analytical methods are the most widely used and the MDL for these methods can aid in estimating where the quantitation may lie today.
- The third and last step is the *Water Supply data analysis* step. If Water Supply data are sufficient, more recent WS data can be used to recalculate the PQL (using linear regression or graphical analyses) and determine if the quantitation level has changed. Data may be considered insufficient if there are not enough data points around the 75 percent criteria to recalculate the PQL using linear regression or graphical analysis. This may occur if the laboratories evaluated exhibit high passing rates (>75 percent) for all of the WS studies evaluated and/or no WS spike samples were below the concentration of the current PQL. However, even if the WS data are insufficient to actually recalculate the PQL, the information may be useful to either confirm that the current PQL still appears to remain appropriate or it may give an indication as to whether the PQL is likely to change (if the data points at concentrations close to the current PQL are available).

Using the information from these three steps helped EPA to determine if our ability to quantify contaminants at lower levels has increased. If there was an indication that the PQL has or could change, then pending the results of the health effects and occurrence review, as well as risk management considerations, these chemical contaminants may be subject to a full blown PQL reassessment (i.e., gathering data that sufficiently covers the area around the 75 percent laboratory passing criteria and the appropriate concentration range).

*Note: This document will not discuss whether a full blown PQL reassessment is necessary for specific contaminants. Instead, that decision will be made after the integration of these results with the health effects and occurrence and exposure reviews and discussed in the Six Year Notice of Intent.*

## V. Results of the PQL Reassessment

### Alachlor

#### Results of the Method Comparison

The approved drinking water methods for the determination of alachlor, a Phase II synthetic organic compound (SOC), were listed in the 1991 NPDWRs (56 FR 3526). These methods all utilize GC or GC/MS with several extraction and/or detector variations: EPA Methods 505, 507, and 525.1. Since promulgation of these original methods, the Agency has eliminated EPA Method 525.1 from the list of approved methods, and has approved the use of three new GC methods: EPA Methods 508.1, 525.2, and 551.1. The three new methods are approximately 10 to 100 times more sensitive than the earlier methods. The current EPA 505 is equivalent in sensitivity relative to the time of Phase II promulgation. Table 2 summarizes the current and previous EPA methods along with their MDLs.

**Table 2. Results of the Analytical Methods Comparison for Alachlor (Newly Promulgated Methods are Indicated in Bold)**

MCL = 2 µg/L		Current PQL = 2 µg/L	DL <sup>▲</sup> = 0.2 µg/L	Acceptance Limit <sup>†</sup> = ± 45%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 505 <sup>1</sup>	Microextraction and GC	0.225	EPA 505 <sup>2</sup>	Microextraction and GC	0.225
EPA 507 <sup>1</sup>	GC with NPD	0.38 <sup>■</sup>	EPA 507 <sup>2</sup>	GC with ECD	0.14
EPA 525.1 <sup>1</sup>	LSE and GC/MS	1.0	<b>EPA 508.1<sup>2</sup></b>	LSE and GC with ECD	0.009
			<b>EPA 525.2<sup>2</sup></b>	LSE and GC/MS	0.069 - 0.16*
			<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.005 - 0.025*

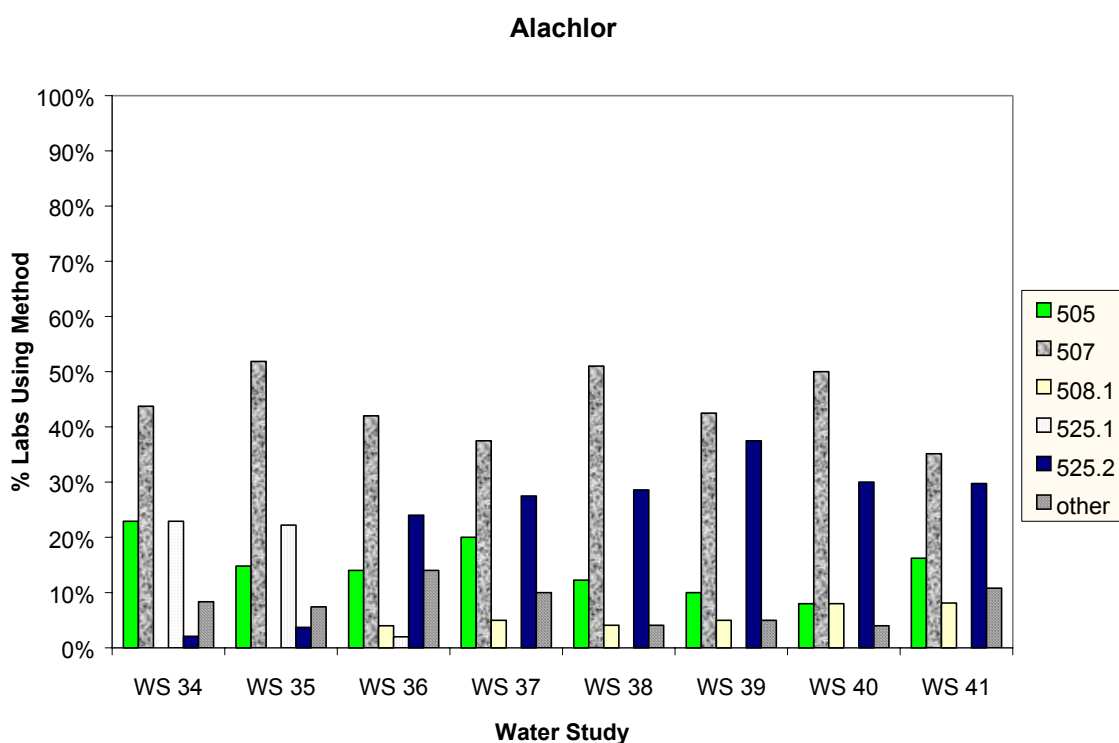
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).  
<sup>†</sup> Acceptance limits for organic compounds are listed at 40 CFR §141.24(h)(19)(i).  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.  
<sup>■</sup> EDL = estimated detection limit, used to approximate the MDL.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 2 plots the distribution of analytical techniques used by the EPA and State laboratories in WS 34 to 41. Methods categorized as "other" represent methods which were not specifically identified by participating laboratories or were otherwise unknown. As shown in Figure 2, EPA Method 507 was used fairly consistently throughout WS 34 to 41. Use of EPA Method 525.1 was phased out after WS 36, while use of EPA Method 525.2 increased significantly during the same study. EPA Methods 508.1, 505, and "other" methods remained in use minimally throughout the study period.

**Figure 2. Distribution of Analytical Techniques by WS Study: Alachlor**



### b. Results of the PQL Analysis

As PE data were not available at the time of the original PQL determination, the PQL of 2  $\mu\text{g/L}$  was derived using a multiplier of 10 on the interlaboratory MDL (0.15  $\mu\text{g/L}$ ) based on a study conducted by the Environmental Monitoring and Support Laboratory in Cincinnati, Ohio (54 FR 22104). Data from WS 24 to 41 were used to attempt a PQL re-evaluation. Table 3 summarizes these data, indicating the study number, the true value (i.e., the spiked value) of the WS sample, the number of results from EPA and State laboratories, and the calculated percentage of laboratories whose results successfully passed within designated acceptance limits for alachlor (specified in 40 CFR §141.24(h)(19)(i) to be  $\pm 45$  percent).

**Table 3. Evaluation of Alachlor Data from WS Studies Using the 45% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA Regional and State Labs	% Labs Passing ± 45% Acceptance Limits
24a	0.735	19	100
26b	0.933	20	95.0
29	1.59	14	71.4
25a	1.87	13	100
32	2.33	43	86.0
31	2.50	25	76.0
30	3.21	40	97.5
34	3.43	48	100
27	3.80	17	88.2
33	4.27	30	86.7
24b	4.53	19	100
37	4.87	40	85.0
35	5.27	27	96.3
26a	5.66	20	95.0
36	7.34	50	100
38	9.52	49	93.9
25b	9.80	13	100
41	12.9	37	100
39	14.8	40	97.5
40	17.7	50	90.0

The data from the available PE studies were not conducive to PQL re-evaluation, as the percentage of labs passing generally exceeded the standard 75 percent passing criterion needed to calculate the PQL using linear regression or graphical analysis (with the exception of one study - WS 29). However, even around the original PQL of 2 µg/L, the percentage of laboratories passing is extremely variable and ranges from 71.4 percent in WS 29 to 100 percent for several WS studies at varying concentrations. Even at higher concentrations of 3.8 µg/L (WS 27) and 4.87 µg/L (WS 37) the laboratory passing rates dip to 88 and 85 percent, respectively. Based on this information, EPA believes the PQL for alachlor appears to still be in the appropriate range.

## Conclusion for Alachlor

Since the promulgation of the 1991 NPDWR for alachlor and other Phase II SOCs, three new analytical methods (EPA Methods 525.2, 508.1, and 551.1) have been approved for the determination of alachlor in drinking water. Based on the distribution of method use over time (Figure 2), it appears that EPA and State laboratories did not utilize the increased analytical sensitivity of the newer methods, instead preferring use of EPA Method 507. Meanwhile, a PQL for alachlor could not be recalculated using the PE data from WS 24 to 41. Nearly every study exhibited a laboratory success rate above the 75 percent criterion needed for re-evaluating the PQL, and furthermore, the range of true values generally exceeded the current PQL value. Therefore, the available PE data provide very limited evidence for revising the current PQL of 2 µg/L. Based on the available data, EPA believes the PQL for alachlor is most likely in the appropriate range.

## **Benzene**

### Results of the Method Comparison

In July 1987, the final NPDWR for eight Phase I VOCs approved the use of EPA Methods 502.2, 503.1, 524.1, and 524.2 for the determination of benzene in drinking water (52 FR 25690). The currently approved methods for benzene determination are EPA Methods 502.2 and 524.2. Table 4 summarizes the MDLs for both the original and current approved versions of the methods. As compared to the original methods, the updated methods are equal in sensitivity to the original methods.

**Table 4. Results of the Analytical Methods Comparison for Benzene**

MCL = 5 µg/L    Current PQL = 5 µg/L    DL <sup>+</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL <sup>◇</sup> (µg/L)	Method	Technique	MDL (µg/L)
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.01	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01
EPA 503.1 <sup>1</sup>	Purge and Trap GC	0.02	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.03 - 0.04*
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.1			
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.03 - 0.04*			



<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

<sup>◊</sup> The MDLs of the original methods for this contaminant ranged from 0.2 - 0.5 µg/L according to the July 1987 Federal Register notice promulgating NPDWRs for the VOCs (52 FR 25690). However, the 1988 methods manual cited in footnote 1 lists the MDLs shown above.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

▲ Regulatory DLs for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

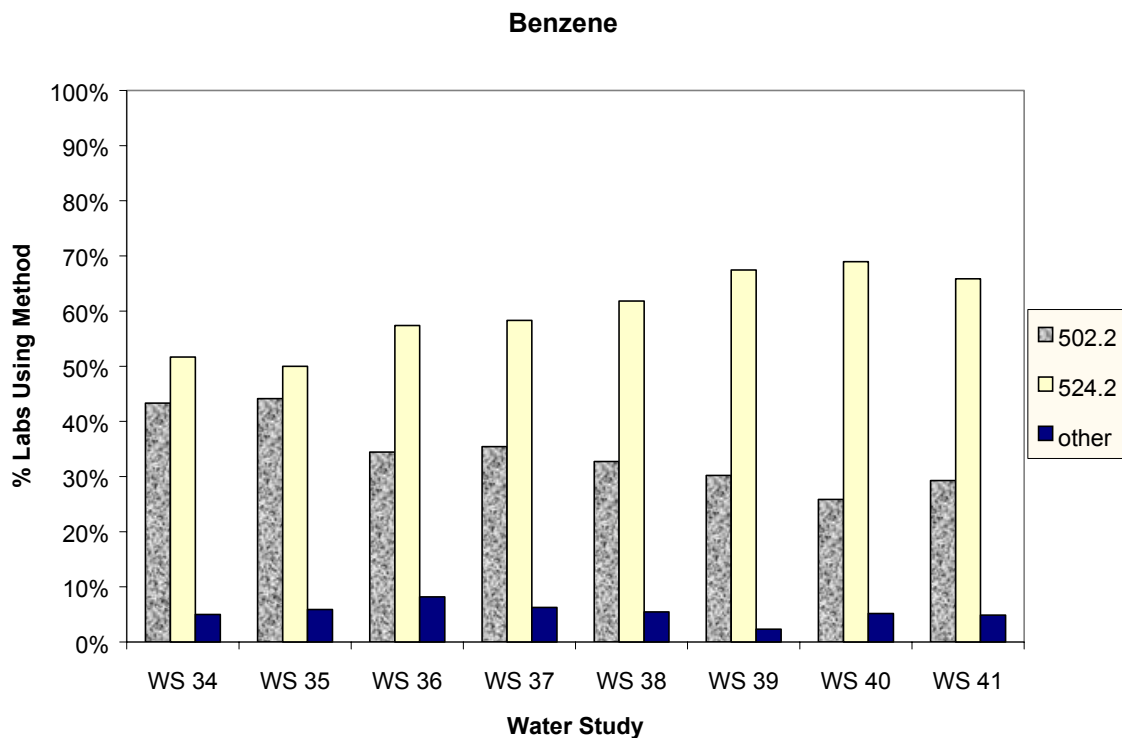
† Acceptance limits for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 3 summarizes the distribution of the different methods used by the EPA and State laboratories during WS studies 34 to 41. The category of "other" contains those methods that were either unknown or otherwise unidentified by the participating laboratories. As shown in Figure 3, use of EPA Method 524.2 during WS 34 to 41 generally increased over time while use of EPA Method 502.2 decreased slightly during the same period. Overall, usage of EPA Method 524.2 remained consistently dominant over that of EPA Method 502.2. Use of the original EPA Methods, 503.1 and 524.1, were not apparent during this period.

**Figure 3. Distribution of Analytical Techniques by WS Study: Benzene**



b. Results of the PQL Analysis

The original PQL of 5 µg/L for benzene was determined by multiplying the regulatory detection limit of 0.5 µg/L by a factor of 10 (52 FR 25700). To re-evaluate the PQL, multi-laboratory performance data from WS 24 through 41 were reviewed. Table 5 summarizes the results of these water studies, providing the study number, the spiked value for the WS sample, the number of laboratory results, and the percentage of laboratories whose reported results fell within the acceptance limits of ± 20 percent for true values greater than 10 µg/L and ± 40 percent for true values lower than 10 µg/L (specified at 141.24(f)(17)(i)).

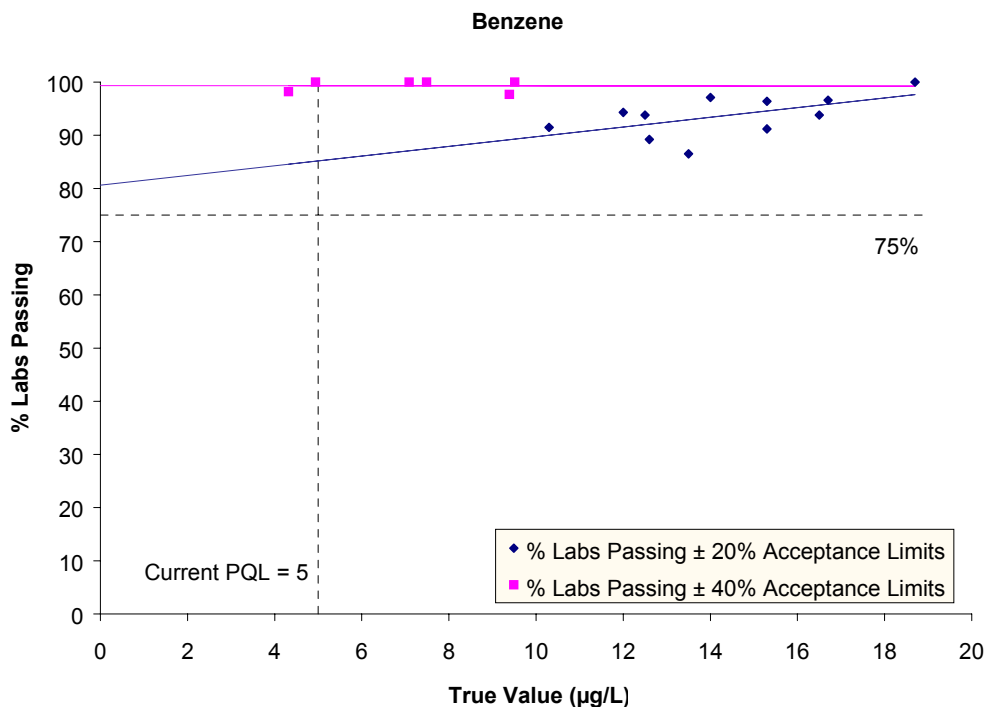
**Table 5. Evaluation of Benzene Data from WS Studies Using the ± 20% or ± 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 20% Acceptance Limits	% Labs Passing ± 40% Acceptance Limits
24	4.32	57		98.2
34	4.94	60		100
27	7.09	38		100
36	7.49	61		100
39	9.39	43		97.7
30	9.51	60		100
26	10.3	59	91.5	
33	12.0	35	94.3	
37	12.5	48	93.8	
31	12.6	37	89.2	
25	13.5	37	86.5	
35	14.0	34	97.1	
29	15.3	34	91.2	
38	15.3	55	96.4	
32	16.5	65	93.8	
40	16.7	58	96.6	
41	18.7	41	100	

The overall data for benzene, as shown in Table 5, indicate that the passing rates for laboratories fall well above the 75 percent criterion for establishing a revised PQL value. However, as shown in Figure 4, the PE data for benzene display different relationships with true values concentration depending on the acceptance limits (20 or 40 percent). The data representing laboratories passing the 40 percent acceptance limits plot a horizontal line and do not contribute meaningfully to a PQL re-evaluation. For the laboratories passing the 20 percent

acceptance limits, the regression line demonstrates a positive slope, although a PQL re-evaluation is also not possible because the true values exceed the current PQL. However, the high percentages of laboratories passing around the current PQL of 5  $\mu\text{g/L}$  suggest that the PQL for benzene could possibly be lower.

**Figure 4. Two-part Distribution of Benzene WS Data**



### Conclusion for Benzene

The method comparison results show that, since the promulgation of analytical methods under the original NPDWR for benzene, two of these methods are no longer approved for determination of this contaminant and method sensitivity has remained about the same. Evaluation of the quantitative PE data shows that the laboratories conducting WS analyses exhibited very high passing rates. Because the percentage of laboratories passing the PE testing exceeds the 75 percent criterion, a re-evaluation of the PQL could not be performed using this approach. But the high percentages of laboratories passing around the current PQL of 5  $\mu\text{g/L}$  suggest that the PQL for benzene could possibly be lower.

## Benzo(a)pyrene

### Results of the Method Comparison

With the Phase V synthetic organic compounds (57 FR 31776), three approved methods were listed for determination of benzo(a)pyrene in drinking water, including gas chromatography/mass spectrometry (GC/MS) with liquid-solid extraction (LSE; EPA Method 525.1), high performance liquid chromatography (HPLC) with liquid-liquid extraction (LLE; EPA Method 550), and HPLC with LSE (EPA Method 550.1). Since this regulation was promulgated, the Agency has replaced the old GC/MS - LSE method with an updated version, EPA Method 525.2.

**Table 6. Results of the Analytical Methods Comparison for Benzo(a)pyrene (Newly Promulgated Methods Indicated in Bold)**

MCL = 0.2 µg/L		Current PQL = 0.2 µg/L		DL <sup>▲</sup> = 0.02 µg/L		Acceptance Limit <sup>†</sup> = ± 2xS.D.	
Methods Approved At Promulgation			Currently Approved Methods (141.24)				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 525.1 <sup>1</sup>	LSE and GC/MS	0.04 - 0.1*	<b>EPA 525.2<sup>3</sup></b>	LSE and GC/MS	0.032 - 0.23*		
EPA 550 <sup>2</sup>	LLE, HPLC	0.029	EPA 550 <sup>2</sup>	LLE, HPLC	0.029		
EPA 550.1 <sup>2</sup>	LSE, HPLC	0.016	EPA 550.1 <sup>2</sup>	LSE, HPLC	0.016		

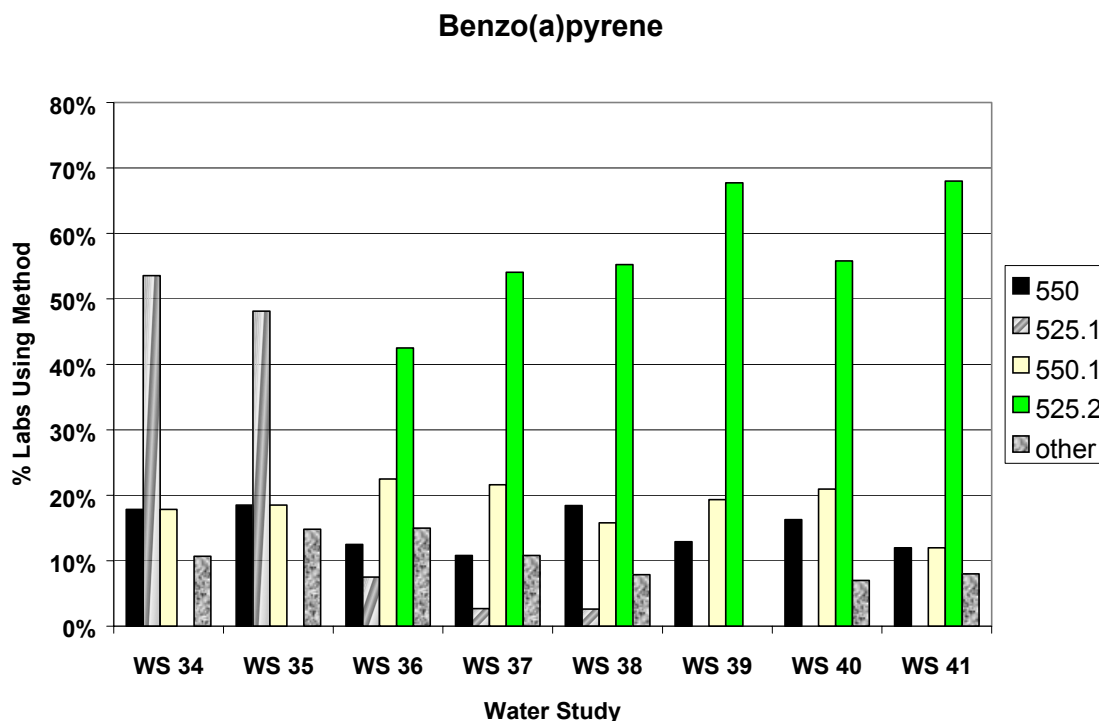
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement I," EPA/600/4-90/020, July 1990.  
<sup>3</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation, and/or laboratory/analyst performance.  
<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).  
<sup>†</sup> Acceptance limits are listed at 40 CFR §141.24(h)(19)(i).

### Results of the WS Data Analysis

#### a. Method Usage Over Time

Figure 5 illustrates the distribution of the analytical techniques used by EPA and State laboratories in WS studies 34 to 41. The "other" techniques shown in this figure include unidentified, unknown, or unreported techniques. Figure 5 shows that, by the time of WS study 38, EPA Method 525.1 was almost completely phased out and replaced with EPA 525.2 (which, according to Table 6, is more sensitive).

**Figure 5. Distribution of Analytical Techniques by WS Study: Benzo(a)pyrene**



b. Results of the PQL Analysis

The original PQL was estimated at 0.2 µg/L (57 FR 31802) based on PE data compiled from WS studies 23, 24, 26, and 27. The data used for the re-evaluation of the PQL were taken from WS studies 26 through 41. Table 7 summarizes the results of these studies. The table provides the WS study number, the spiked or "true value" for the WS sample, the number of laboratory results, and the percent of laboratories passing the WS proficiency test for benzo(a)pyrene within the acceptance limits. The acceptance limits were calculated to be plus or minus two standard deviations from the estimated mean recovery, as stipulated in CFR §141.24(h)(19)(i).

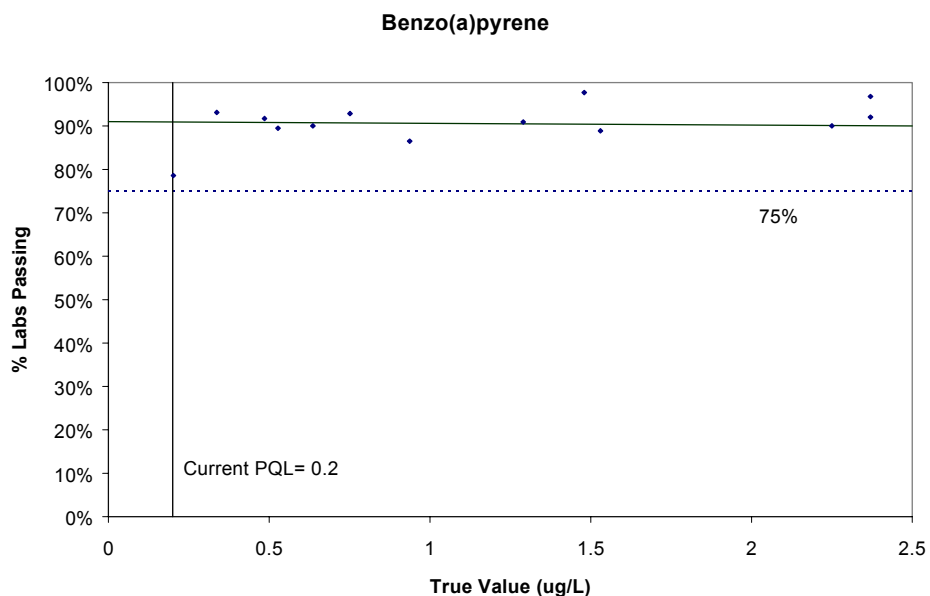
**Table 7. Evaluation of PE Data for Benzo(a)pyrene from WS Studies Using 2 x S.D. Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing Acceptance Limits
31	0.202	14	79
32	0.337	29	93
30	0.485	12	92
38	0.53	38	90
36	0.64	40	90
34	0.75	28	93

WS #	Spiked "True"Value (µg/L)	# Results from EPA and State Labs	% Labs Passing Acceptance Limits
37	0.94	37	87
33	1.29	22	91
40	1.48	43	98
35	1.53	27	89
26a	2.25	10	83
39	2.37	31	97
41	2.37	25	92
26b	15.5	12	90

Figure 6 shows the plot of the benzo(a)pyrene data for WS 26 to 41, and the linear regression line. There is no meaningful relationship in these data, in large part because the true values of the samples are so high that a very large percentage of the labs passed all the PE series. Further, only one PE sample approached the current PQL (WS 31), and these results (79 percent passing) support the current PQL.

**Figure 6. PQL Evaluation from PE WS Data: Benzo(a)pyrene**



### Conclusion for Benzo(a)pyrene

As noted in the method comparison, a more sensitive method (EPA Method 525.2) has been approved since the promulgation of benzo(a)pyrene, replacing an older and less sensitive version (EPA Method 525.1). The method usage evaluation shows that in recent years, a majority of

benzo(a)pyrene, replacing an older and less sensitive version (EPA Method 525.1). The method usage evaluation shows that in recent years, a majority of EPA and State laboratories in the PE studies have chosen to use this more sensitive method out of all the approved methods for benzo(a)pyrene. The WS data do not afford a re-evaluation of the PQL, and at best, support the current value. There is no clear evidence to support a change from the current PQL of 0.2 µg/L. The current PQL appears to be appropriate.

## **Beryllium**

### Results of the Method Comparison

With the Phase V IOCs (57 FR 31776), EPA approved multiple analytical methods for determination of beryllium in drinking water, including an atomic absorption–furnace (AAF) method (EPA Method 210.2), an inductively coupled plasma-atomic emission spectroscopy (ICP-AES) method (EPA Method 200.7), ICP-mass spectroscopy method (ICP/MS) (EPA Method 200.8), and atomic absorption-platform (AAP) method (EPA Method 200.9), and three voluntary consensus standard methods, including Standard Methods 3113B (AAF) and 3120B (ICP/AES) and ASTM Method D3645-84B (AAF). EPA Method 210.2 and ASTM Method D3645-84B have since been removed from the approved list and replaced by one voluntary consensus standard method, ASTM Method D3645-93B (AAF). These methods are listed in Table 8. The MDLs of EPA Methods 200.7, 200.8 and 200.9 do not present any improved sensitivity capabilities.

**Table 8. Results of the Analytical Methods Comparison for Beryllium (Newly Promulgated Methods Indicated in Bold)**

MCL = 4 µg/L		Current PQL = 1 µg/L		DL <sup>▲</sup> = 0.02-0.3 µg/L		Acceptance Limit <sup>†</sup> = ± 15%	
Methods Approved At Promulgation			Currently Approved Methods (141.23)				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 200.7 <sup>2</sup>	ICP/AES	0.3	EPA 200.7 <sup>5</sup>	ICP/AES	0.3		
EPA 200.8 <sup>2</sup>	ICP/MS	0.3	EPA 200.8 <sup>5</sup>	ICP/MS	0.02 -0.3*		
EPA 200.9 <sup>2</sup>	AAP	0.02	EPA 200.9 <sup>5</sup>	AAP	0.02		
EPA 210.2 <sup>1</sup>	AAF	0.2 <sup>■</sup>					
3113B <sup>3</sup>	AAF	N/A*	3113B <sup>7</sup>	AAF	N/A*		
3120B <sup>3</sup>	ICP	N/A*	3120B <sup>7</sup>	ICP	N/A*		
D3645-84B <sup>4</sup>	AAF	N/A*	<b>D3645-93B<sup>6</sup></b>	AAF	N/A*		

<sup>1</sup> "Methods for Chemical Analysis of Water and Wastes (MCAWW)," EPA/600/4-79/020, March 1983.  
<sup>2</sup> "Methods for the Determination of Metals in Environmental Samples," EPA/600/4-91/101, June 1991.  
<sup>3</sup> 17<sup>th</sup> edition of *Standard Methods for the Examination of Water and Waste*, 1989. American Public Health Association, American Water Works Association, Water Pollution Control Federation.  
<sup>4</sup> *Annual Book of ASTM Standards*. Vols. 11.01 and 11.02, 1991. American Society for Testing Materials, 1916 Race Street, Philadelphia, PA 19103.  
<sup>5</sup> "Methods for the Determination of Metals in Environmental Samples--Supplement I," EPA/600/R-94/111, May 1994.  
<sup>6</sup> *Annual Book of ASTM Standards*. Vol. 11.01, 1994. American Society for Testing and Materials, 1961 Race Street, Philadelphia, PA 19103.  
<sup>7</sup> 18<sup>th</sup> and 19<sup>th</sup> edition of *Standard Methods for the Examination of Water and Wastewater*, 1992 and 1995. American Public Health Association, 1015 Fifteenth Street NW, Washington, DC 20005.  
<sup>▲</sup> Regulatory DLs for inorganic compounds are listed at 40 CFR §141.23(a)(4)(i). These values vary depending on analytical method.  
<sup>\*</sup>MDLs are not specified for non-EPA (i.e., voluntary consensus standard) methods.  
<sup>†</sup> Acceptance limits are listed at 40 CFR §141.23(k)(3)(ii) for inorganic compounds.  
<sup>■</sup> EDL = estimated detection limit, used to approximate the MDL.

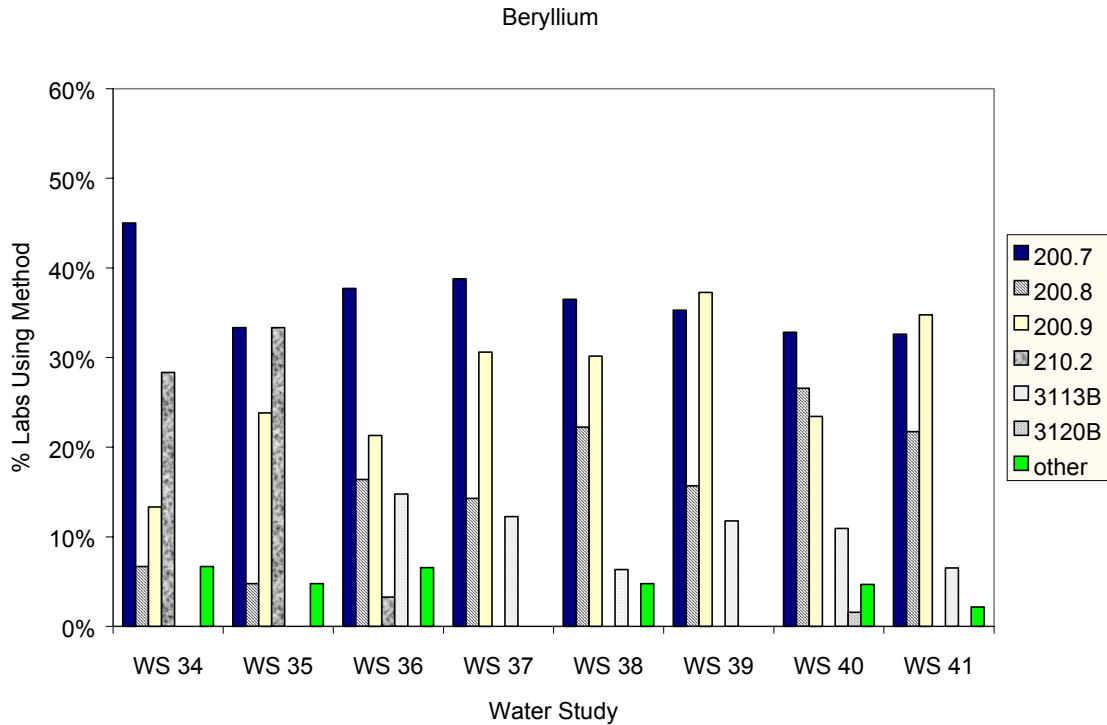
Results of the Analysis of the WS Data

a. Method Usage Over Time

The distribution of the analytical techniques used by the EPA and State laboratories in WS studies 34 to 41 is shown in Figure 7. The category of "other" techniques include additional methods used by participating laboratories, as well as "unknown" methods, i.e., methods for which laboratories did not report any information on the type of method used. As shown in Figure 7, EPA Methods 200.7 and 210.2 were the most widely used methods in WS 34 and 35. By WS 37, laboratories ceased to use EPA Method 210.2 and relied more on EPA Method 200.9. From WS 37 to 41, EPA Methods 200.7, 200.8, and 200.9 were most commonly used. The two 3000-series Standard Methods were used to a far lesser extent than these EPA Methods.



**Figure 7. Distribution of Analytical Techniques by WS Study: Beryllium**



b. Results of the PQL Analysis

The current PQL (1.0 µg/L) was originally determined using PE data from WS 24 through 27 (56 FR 60949). A PQL re-evaluation was attempted using more current data spanning WS 24 to 41. Table 9 summarizes the results of these water studies, providing the study number, the spiked value for the WS sample, the number of results from EPA and State laboratories, and the beryllium results evaluated using an acceptance limit of ± 15 percent (as indicated at 40 CFR §141.23(k)(3)(ii)).

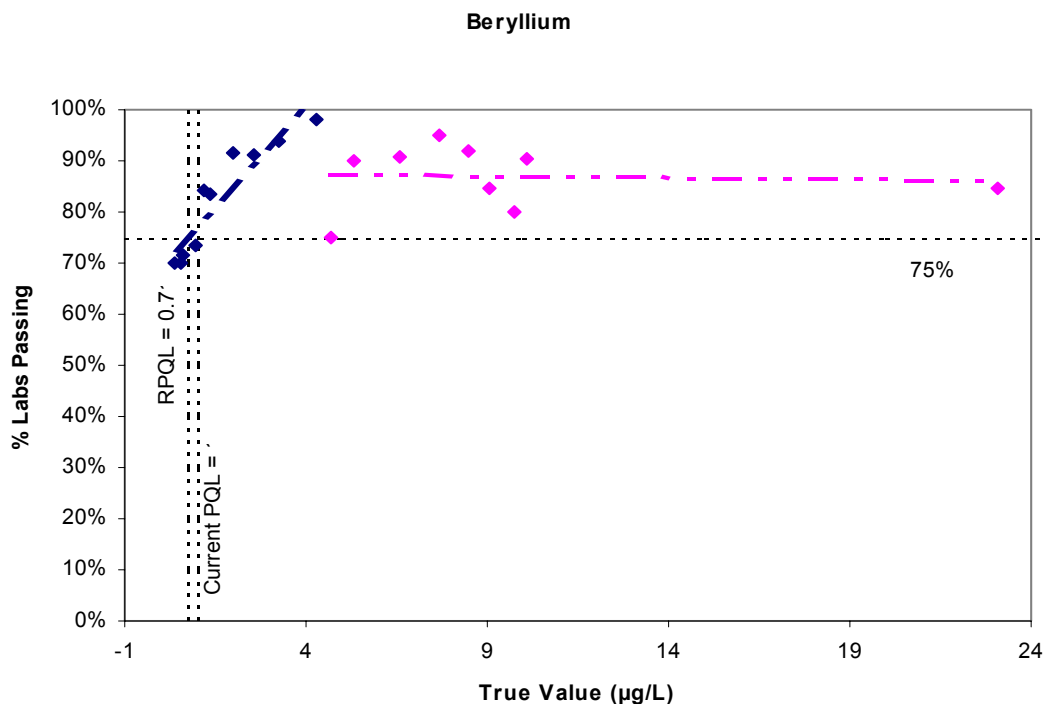
**Table 9. Evaluation of Beryllium Data from WS Studies Using the 15% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 15% Acceptance Limits
25b	0.400	20	70.0
26a	0.530	40	70.0
24	0.600	35	71.4
32	0.933	60	73.3
39	1.20	51	84.3
35	1.33	42	83.3

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 15\%$ Acceptance Limits
25a	2.00	24	91.7
41	2.58	46	91.3
31	3.27	33	93.9
37	4.26	49	98.0
27	4.67	24	75.0
34	5.33	60	90.0
40	6.60	64	90.6
36	7.70	61	95.1
30	8.47	49	91.8
33	9.07	39	84.6
29	9.76	25	80.0
38	10.1	63	90.5
26b	23.1	46	84.8

The data in Table 9 seems to indicate that a linear relationship might exist between "true" value concentration and percentage of labs passing. Furthermore, a PQL re-evaluation appeared possible because the percentage of labs passing fell within the 75 percent criterion for some studies, and the true values from the water studies approximated the general range of the current PQL. Visual evaluation of the laboratory passing percentages around the current PQL of  $1 \mu\text{g/L}$  indicate that this value is still appropriate and unlikely to change. The graph in Figure 8 illustrates this relationship between the spike concentrations and the laboratory passing rates. As shown in Figure 8, the recalculated PQL of  $0.71 \mu\text{g/L}$ , is slightly lower than the current PQL.

**Figure 8. Two-part Distribution of Beryllium WS Data:**



### Conclusion for Beryllium

The method comparison results indicate that EPA Method 200.9 is the most sensitive method for determination of beryllium in drinking water and its MDL has improved by five-fold over the most sensitive MDLs achieved at the time of promulgation. EPA Method 200.7 was used more widely in previous years but is less sensitive. As revealed by the results of method usage over time, EPA Method 200.9 is the most commonly employed method for beryllium determination in recent PE studies. These trends seem to imply a shift in analytical capabilities for beryllium determination toward greater sensitivity. Thus, EPA and State laboratories are likely to reach lower detection limits today compared to the year of NPDWR promulgation. The re-evaluation of the PQL using a linear regression was calculated to be 0.71 µg/L, a value close to the current PQL of 1 µg/L. Although it may be possible to lower the PQL slightly based on more recent PE data, the current PQL is still appropriate.

### **Bis(2-ethylhexyl)phthalate**

#### Results of the Method Comparison

At the time of the Phase V SOC promulgation (57 FR 31776), EPA Methods 506 and 525.1 were the only approved methods for the analysis of bis(2-ethylhexyl)phthalate (also known as di(2-ethylhexyl)phthalate). Since that time, EPA Method 506, which uses LLE or LSE GC with PID, has remained on the approved methods list while EPA Method 525.1, which utilizes LSE GC/MS, has been replaced by a more sensitive version, EPA Method 525.2. This increased

sensitivity, however, is only marginal, as evidenced by the similarity of their MDLs. Table 10 lists the approved methods, techniques, and MDLs, during and after the time of rule promulgation.

**Table 10. Results of the Analytical Methods Comparison for Bis(2-ethylhexyl)phthalate (Newly Promulgated Methods are Indicated in Bold)**

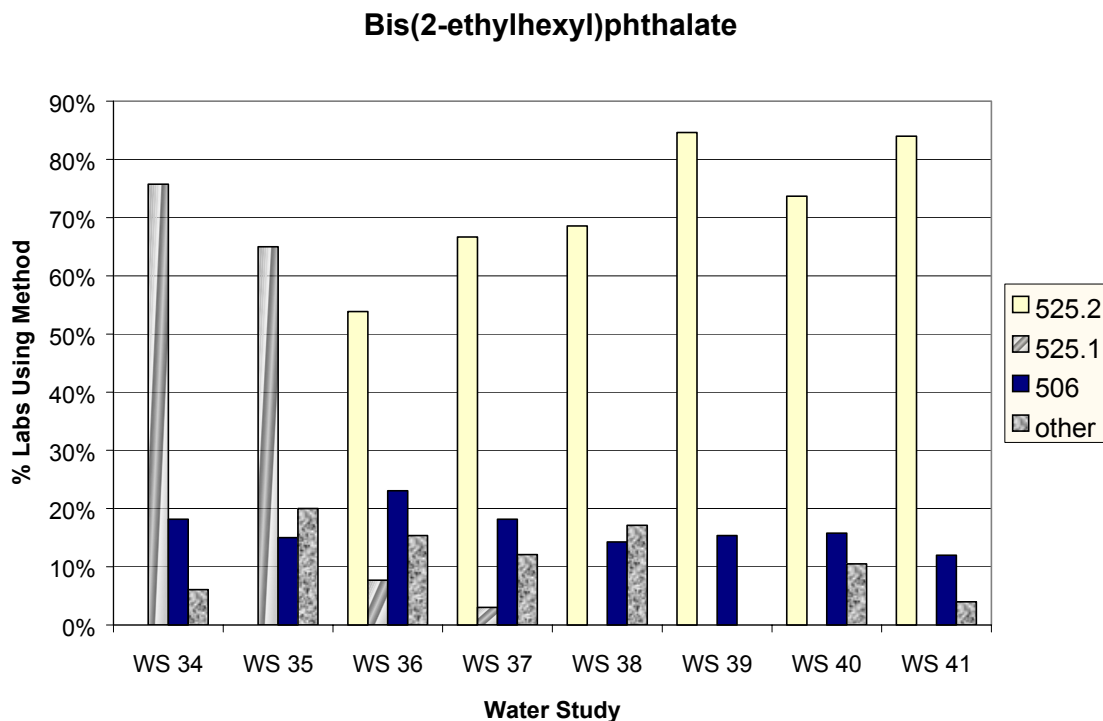
MCL = 6 µg/L		Current PQL = 6 µg/L		DL <sup>^</sup> = 0.6 µg/L		Acceptance Limit <sup>†</sup> = ± 2 x S.D.	
Methods Approved At Promulgation			Currently Approved Methods (141.24)				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 525.1 <sup>1</sup>	LSE and GC/MS	0.6 - 0.8*	<b>EPA 525.2<sup>3</sup></b>	LSE and GC/MS	0.46 - 1.3*		
EPA 506 <sup>2</sup>	LLE or LSE and GC w/ PID	2.25	EPA 506 <sup>3</sup>	LLE or LSE and GC with PID	2.25		
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988. <sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement I," EPA/600/4-90/020, July 1990. <sup>3</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995. * Multiple method detection limit (MDL) values result from variability of reagents, instrumentation, and/or laboratory/analyst performance. <sup>^</sup> Regulatory DLs for organic compounds are listed at 40 CFR 141.24(h)(18). <sup>†</sup> Acceptance limits for organic compounds are listed at 40 CFR 141.24(h)(19)(i).							

### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

The distribution of the analytical methods used during WS 34 to 41 by participating EPA and State laboratories are illustrated in Figure 9. The category of "other" represents any alternative or unreported methods. As shown in Figure 9, use of EPA Method 525.1 decreased significantly, corresponding to the introduction of EPA Method 525.2 during WS 36. By WS 38, EPA Method 525.1 was no longer used by any laboratories for analyzing bis(2-ethylhexyl)phthalate. Laboratories overwhelmingly chose to use the LSE GC/MS technique (either EPA Method 525.1 or its replacement, EPA Method 525.2) over EPA Method 506, which utilized the LLE or LSE GC with PID.

**Figure 9. Distribution of Analytical Techniques by WS Study: Bis(2-ethylhexyl)phthalate**



b. Results of the PQL Analysis

PE data from WS 24 to 41 were compiled to re-evaluate the PQL. Table 11 shows the WS number, the true value concentration, the number of participating laboratories, and the percent of laboratories passing within acceptance limits. These limits were calculated to be two times the standard deviation, as stipulated in 40 CFR §141.24(h)(19)(i).

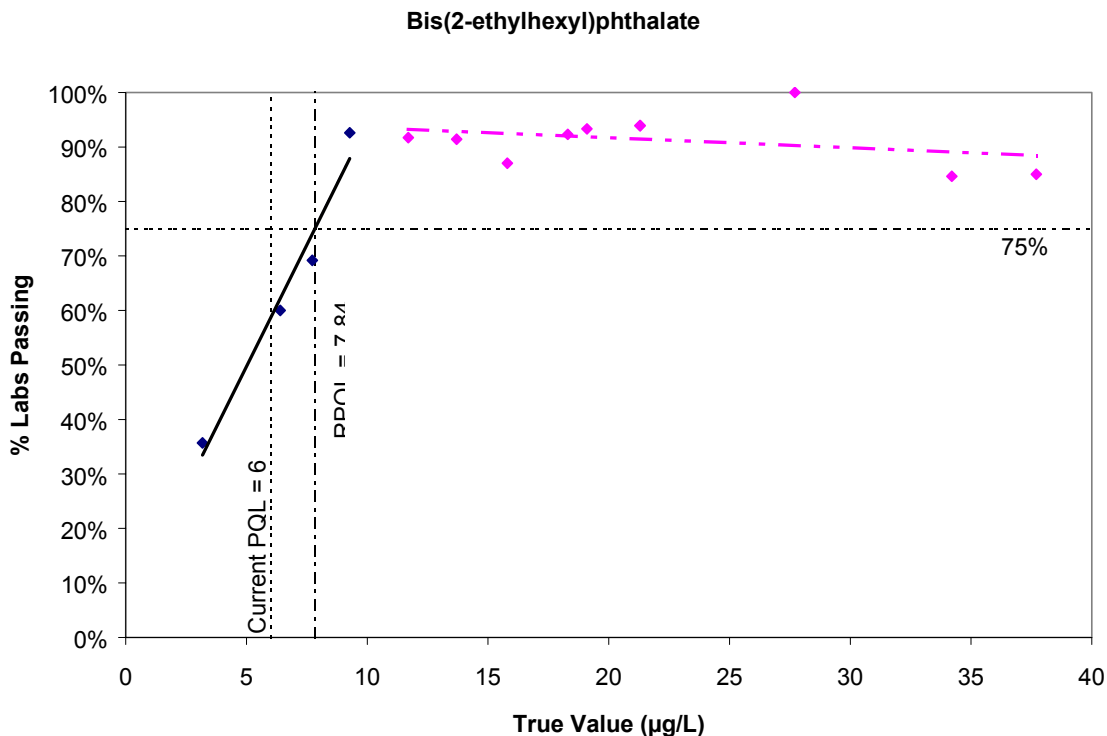
**Table 11. Evaluation of Bis(2-ethylhexyl)phthalate Data from WS Studies Using 2 x S.D. Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ±2 x S.D. Acceptance Limits
24a	3.18	14	35.7
29	4.58	8	75
30	6.40	15	60
26b	7.73	13	69.2
32	9.28	27	92.6
31	11.7	12	91.7

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ±2 x S.D. Acceptance Limits
38	13.7	35	91.4
41	15.3	25	84
33	15.8	23	87
27	17.3	7	85.7
36	18.3	39	92.3
24b	19.1	15	93.3
37	21.3	33	93.9
34	21.3	33	93.9
39	27.7	26	100
40	32.4	38	89.5
26a	34.2	13	84.6
35	37.7	20	85

Using the data in Table 11, a linear regression was performed by plotting the percentage of the laboratories passing for WS 24 to 41 (excluding WS 25) against the spiked value of bis(2-ethylhexyl)phthalate (Figure 10). Simple visual examination of the graph shows that the percentage of laboratories achieving acceptable results approximates 75 percent at a concentration of 7.84 µg/L. This concentration is higher than the current PQL of 6.0 µg/L, which was originally estimated using PE data from WS 23, 24, and 27 (57 FR 60953).

**Figure 10. Two-part Distribution of Bis(2-ethylhexyl)phthalate WS Data**



Conclusion for Bis(2-ethylhexyl)phthalate

Since the time of the Phase V SOC rule promulgation, EPA Method 525.2 has replaced EPA Method 525.1. The EPA and State laboratories have overwhelmingly chosen to use EPA Method 525.2 over any other available methods as evidenced by the plot of method usage over time. The re-evaluation of the PQL using a linear regression calculated from WS 24a, 26b, 30 and 32 data showed that a new PQL could be derived. The re-evaluated PQL of 7.84 µg/L is higher than the original PQL of 6 µg/L (57 FR 31802).

**Cadmium**

Results of the Method Comparison

The 1991 NPDWRs for Phase II IOCs listed atomic absorption–furnace (AAF; EPA Method 213.2), inductively coupled plasma (ICP; EPA Method 200.7A), and Standard Method 304 as approved analytical methods for the determination of cadmium in drinking water (57 FR 31776). Since the promulgation of the rule, these methods have been replaced by four new or updated methods; three EPA methods (EPA Methods 200.7, 200.8, and 200.9), and one voluntary consensus standard method (Standard Method 3113B). Table 12 compares the detection limits of approved methods during and after promulgation of the NPDWR for cadmium and shows EPA Method 200.9 to be the most sensitive method for detecting cadmium in drinking water.

**Table 12. Results of the Analytical Methods Comparison for Cadmium (Newly Promulgated Methods Indicated in Bold)**

MCL = 5 µg/L		Current PQL = 2 µg/L		DL <sup>^</sup> = 0.1-1.0 µg/L		Acceptance Limit <sup>†</sup> = ± 20%	
Methods Approved At Promulgation			Currently Approved Methods (141.23)				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 200.7A <sup>1</sup>	ICP/AES	0.6	<b>EPA 200.7<sup>2</sup></b>	ICP/AES	1		
EPA 213.2 <sup>5</sup>	AAF	0.1 <sup>▪</sup>	<b>EPA 200.8<sup>2</sup></b>	ICP/MS	0.03 - 0.5*		
SM 304 <sup>4</sup>	AAF	N/A <sup>◇</sup>	<b>EPA 200.9<sup>2</sup></b>	AAP	0.05		
			<b>SM 3113B<sup>3</sup></b>	AAF	N/A <sup>◇</sup>		

<sup>1</sup> "Inductively Coupled Plasma-Atomic Emission Analysis of Drinking Water," Appendix to Method 200.7, March 1987.  
<sup>2</sup> "Methods for the Determination of Metals in Environmental Samples--Supplement I," EPA/600/R-94/111, May 1994.  
<sup>3</sup> 18<sup>th</sup> and 19<sup>th</sup> editions of *Standard Methods for the Examination of Water and Wastewater*, 1992 and 1995, American Public Health Association, 1015 Fifteenth Street NW, Washington, D.C. 20005.  
<sup>4</sup> 16<sup>th</sup> edition of *Standard Methods for the Examination of Water and Wastewater*, 1985, American Public Health Association, American Water Works Association, Pollution Control Federation.  
<sup>5</sup> "Methods for Chemical Analysis of Water and Wastes (MCAWW)," EPA/600/4-79/020, March 1983..  
<sup>▲</sup> Regulatory DLs for inorganic compounds are listed at 40 CFR §141.23(a)(4)(i) and depend on analytical method.  
<sup>†</sup> Acceptance limits are listed at 40 CFR §141.23(k)(3)(ii).  
<sup>\*</sup> Multiple method detection limit (MDL) values result from variability of reagents, instrumentation, and/or laboratory/analyst performance.  
<sup>▪</sup> EDL = estimated detection limit, used to approximate the MDL.  
<sup>◇</sup> MDLs are not specified for non-EPA (i.e., voluntary consensus standard) methods.

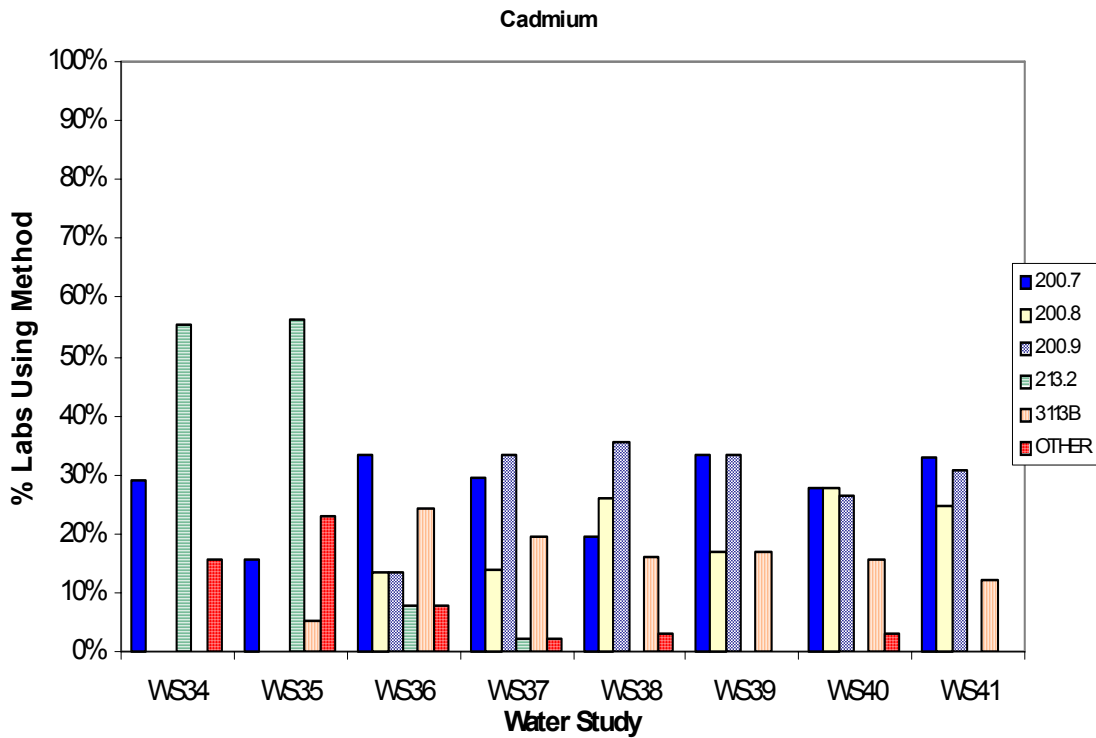
### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

Figure 11 shows the distribution of analytical techniques used by EPA and State laboratories for WS studies 34 to 41. The results for "other" techniques in this figure include the use of any other technique identified by the laboratories participating in the WS study, as well as "unknown" methods, i.e., methods for which laboratories did not report any information on the type of method used. During WS 34 and 35, EPA Method 213.2 was the most widely used method for determining cadmium in drinking water. EPA Methods 200.7, 200.8, and 200.9 were all used with relatively the same frequency by the participating laboratories in the PE studies. Use of SM 3113B lessened over the period between WS 36 and 41.



**Figure 11. Distribution of Analytical Techniques by WS Study: Cadmium**



b. Results of the PQL Analysis

The current PQL of 2.0 µg/L was originally set using PE data from WS 22 through 25 (56 FR 3549). With the availability of more current data from WS 24 to 41, a PQL re-evaluation was attempted. Table 13 summarizes the results of these water studies, providing the study number, the spiked value for the WS sample, the number of results from EPA and State laboratories, and the cadmium results evaluated using an acceptance limit of ± 20 percent, as designated in 40 CFR § 141.23(k)(3)(ii).

**Table 13. Evaluation of Cadmium Data from WS Studies Using the 20% Acceptance Limits (In Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 20% Acceptance Limits
38	2.12	62	85.5
35	2.80	39	87.2
29	2.80	34	88.2
32	4.80	67	97.4
40	6.31	65	87.7
26b	9.20	62	91.9

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 20% Acceptance Limits
37	10.2	51	98.0
24b	10.4	61	95.1
31	12.8	35	91.4
24a	15.4	61	90.2
41	18.2	45	95.6
34	23.0	65	96.9
25	27.6	40	100
39	28.5	54	98.1
27	29.3	40	92.5
36	34.0	66	98.5
30	39.0	66	98.5
33	49.0	38	97.4
26a	53.9	62	96.8

The data in Table 13 were not adequate to perform a PQL re-evaluation. EPA's preferred format for evaluating a PQL is to develop a regression (or graphical analysis) using the true value concentration and the percentage of laboratories passing the performance evaluation. The PQL is then set at a concentration in which 75 percent of those laboratories pass. In this instance, however, the participating laboratories passed the evaluation at an average rate of 93 percent, well above the 75 percent criterion. Also, all of the spiked "true" values were well above the original PQL of 2 µg/L.

#### Conclusion for Cadmium

A comparison of the analytical methods approved during and after the promulgation of the NPDWR for cadmium show that the four current methods have sensitivities similar to, or slightly better than, those of the original methods, with EPA Method 200.9 being the most sensitive (with an MDL of 0.05 µg/L). Laboratories that participated in the PE water studies chose to utilize EPA Method 213.2 in the WS studies prior to WS 36 but then chose to utilize EPA Methods 200.7, 200.8, and 200.9 with similar frequency. Review and analysis of the PE data did not result in the estimation of a new PQL because all of the EPA and State laboratories in the WS studies evaluated surpassed the required 75 percent criterion typically used to determine a new PQL. In addition, all of the WS spike concentrations were above the current PQL of 2 µg/L. However, laboratory passing rates of greater than 85 percent at concentrations slightly above the current PQL suggest that the PQL could be lower.

## Carbofuran

### Results of the Method Comparison

At the promulgation of the NPDWRs for synthetic organic chemicals (56 FR 3552), one analytical method (EPA Method 531.1) was approved for determination of carbofuran in drinking water. One additional method, Standard Method (SM) 6610, has been included as a currently approved method for carbofuran analysis. Both current methods use the HPLC technique and have similar MDLs. Table 14 summarizes the approved methods, both past and present, for determination of carbofuran.

**Table 14. Results of the Analytical Methods Comparison for Carbofuran (Newly Promulgated Methods in Bold)**

MCL = 40 µg/L		Current PQL = 7 µg/L		DL* = 0.9 µg/L		Acceptance Limit† = ± 45%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 531.1 <sup>1</sup>	HPLC	1.5 <sup>▪</sup>	EPA 531.1 <sup>2</sup>	HPLC	0.52		
			<b>SM 6610<sup>3</sup></b>	HPLC	0.53		

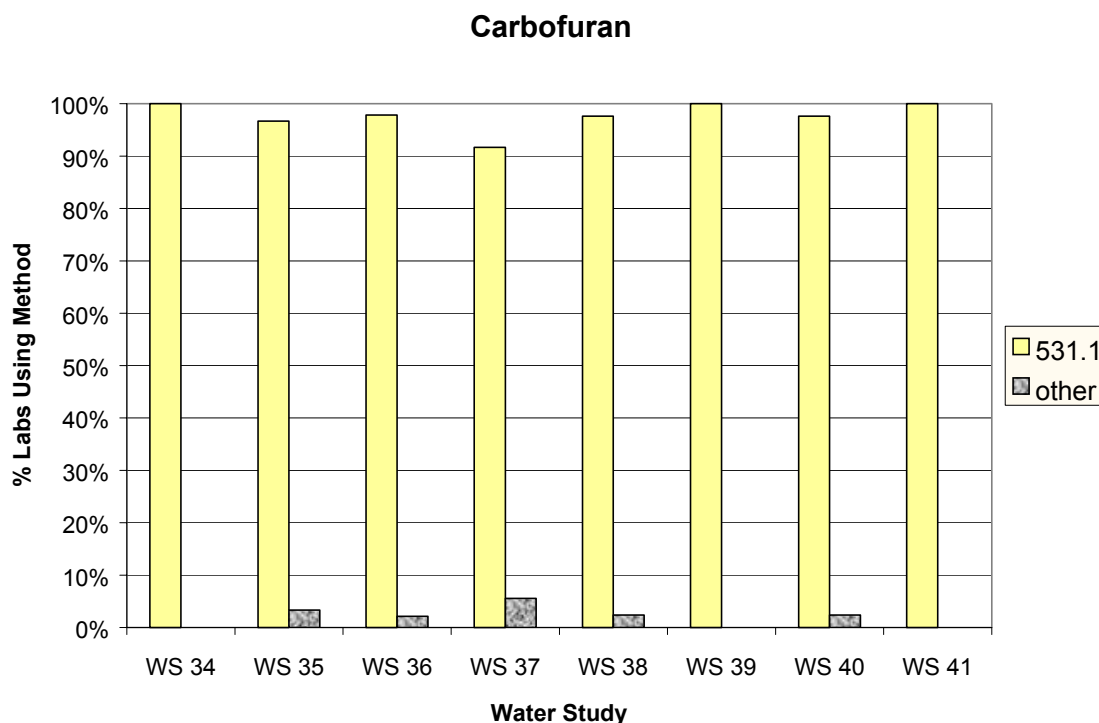
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>3</sup> Supplement to the 18th edition of *Standard Methods for the Examination of Water and Wastewater*, 1994, American Public Health Association, 1015 Fifteenth Street NW, Washington, D.C. 20005.  
\* Regulatory DLs for organic compounds are listed at 40 CFR § 141.24(h)(18).  
† Acceptance limits for organic compounds are listed at 40 CFR § 141.24(h)(19)(i).  
<sup>▪</sup> EDL = estimated detection limit, used to approximate the MDL.

### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

Figure 12 illustrates the methods chosen by EPA and State laboratories for carbofuran analysis during WS PE studies 34 to 41. The category of "other" includes any unidentified or unreported techniques used by participating laboratories. As shown in Figure 12, the predominant method used by laboratories participating in the WS studies is EPA Method 531.1. The smallest percentage of labs using this method is 91.7 percent (in WS 37), indicating wide usage compared to SM 6610 or any other available methods.

**Figure 12. Distribution of Analytical Techniques by WS Study: Carbofuran**



b. Results of the PQL Analysis

The current PQL of 7 µg/L was derived from multiplying the interlaboratory method detection limit (IMDL) of 0.7 µg/L by a factor of ten (54 FR 22062). To conduct a PQL re-evaluation, the numerical data from WS 24 to 41 were analyzed (no data were available for WS 28). Table 15 summarizes each WS result including the spiked (or "true") value, the number of participating laboratories, and the percentage of laboratories passing within the specified acceptance limit for carbofuran ( $\pm 45$  percent of the spiked value, as specified in 40 CFR §141.24(h)(19)(i)).

**Table 15. Evaluation of Carbofuran Data from WS Studies Using the 45% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing $\pm 45\%$ Acceptance Limits
29	4.00	10	100
30	5.78	26	92
32	7.67	36	94
31	11.3	14	86
24a	15.6	11	100

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 45% Acceptance Limits
26b	17.5	13	92
34	18.5	43	91
27	20.7	8	88
25a	24.2	5	80
33	24.8	33	94
38	33.6	42	95
26a	36.3	13	100
36	37.8	47	98
35	42.8	60	92
41	43.7	29	97
24b	44.5	11	100
25b	48.3	5	100
37	48.9	36	97
40	55.0	42	100
39	74.5	31	97

Re-evaluation of the PQL by a linear regression approach was not feasible using the data shown in Table 15. The percentage of laboratories passing within the acceptance limit was well above the 75 percent criterion historically used to calculate the PQL. Also, very few (e.g., only WS 29, 30, and 32) of the WS studies provided a sample with a true value concentration near the original PQL. Because of these data limitations, the PQL could not be re-evaluated using the historical linear regression approach. Instead, at concentrations approaching nearly half of the current PQL, laboratories in WS 29 were observed to achieve a 100 percent passing rate, implying strong analytical capabilities at a low concentration. This observation could have implications for lowering the PQL.

#### Conclusion for Carbofuran

Since the time of promulgation of the original methods, one new method (SM 6610) has been added for carbofuran analysis. The current EPA Method 531.1 is nearly twice as sensitive as the previous version, and the plot of method usage over time illustrates that EPA Method 531.1 was the most commonly used method for the determination of carbofuran. Together, these facts imply that analytical methods capabilities have improved over time. The PE data from WS studies 24 to 41, however, were not useful for a PQL re-evaluation because of the extremely high number of laboratories passing within the accepted limit for carbofuran. While the high success rate of laboratories at some low concentrations may present a potential argument for lowering the PQL from 7 µg/L, there are no data available to support changing the original PQL.

## Carbon Tetrachloride

### Results of the Method Comparison

In July 1987, the final NPDWR for eight Phase I VOCs approved the use of EPA Methods 502.1, 502.2, 524.1, and 524.2 for the determination of carbon tetrachloride in drinking water (52 FR 25690). The current approved methods for carbon tetrachloride determination are EPA Methods 502.2, 524.2, and 551.1. Table 16 summarizes the MDLs for both the original and currently approved versions of the methods. As shown in Table 16, EPA Method 551.1 has the greater detection sensitivity than EPA Methods 502.2 and 524.2.

**Table 16. Results of the Analytical Methods Comparison for Carbon Tetrachloride (Newly Promulgated Methods are Indicated in Bold)**

MCL = 5 µg/L    Current PQL = 5 µg/L    DL <sup>▲</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods		
Method	Technique	MDL <sup>◇</sup> (µg/L)	Method	Technique	MDL* (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	0.003	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01 - 0.02
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.01 - 0.02*	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.08 - 0.21
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.3	<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.002 - 0.006
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.08 - 0.21*			

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>◇</sup> The MDLs of the original methods for this contaminant ranged from 0.2 - 0.5 µg/L according to the July 1987 Federal Register notice promulgating NPDWRs for the VOCs (52 FR 25690). However, the 1988 methods manual cited in footnote 1 lists the MDLs shown above.  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.  
<sup>▲</sup> Regulatory DLs for VOCs are listed at 40 CFR § 141.24(f)(17).  
<sup>†</sup> Acceptance limits are listed at 40 CFR § 141.24(f)(17)(i).

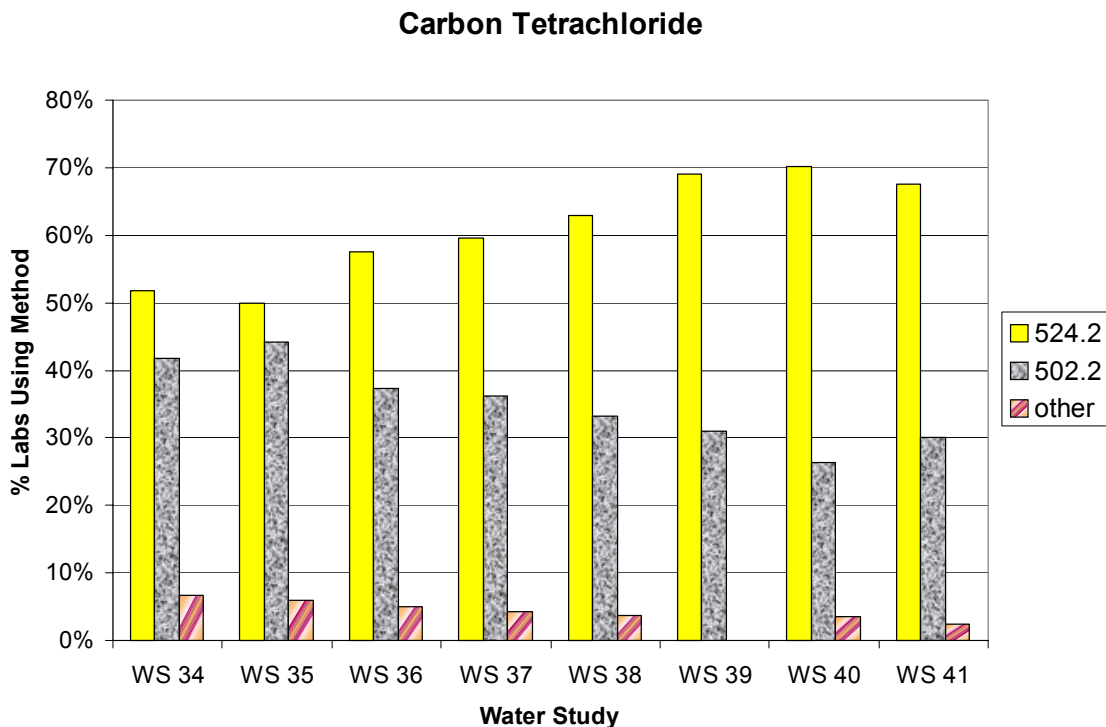
### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

The distribution of the different methods used by the EPA and State laboratories during WS studies 34 to 41 are shown in Figure 13. The category of "other" contains those methods that were unknown or unidentified by the participating laboratories. As shown in Figure 13, EPA Methods 524.2 and 502.2 are currently the preferred methods used by laboratories for

determination of carbon tetrachloride. Use of the original methods, EPA Methods 502.1 and 524.1, was not apparent over this time period; plotting data from studies prior to WS 34 might reveal more information on the use of these methods.

**Figure 13. Distribution of Analytical Techniques by WS Study: Carbon Tetrachloride**



b. Results of the PQL Analysis

The original PQL of 5 µg/L (52 FR 25700) for carbon tetrachloride was determined from PE data from WS 8 to 11. Re-evaluation of the PQL was attempted using data from WS studies 24 through 41. Table 17 summarizes the results of these WS studies providing the study number, the spiked value for the WS sample, the number of participating laboratories, and the percent of laboratories passing the WS proficiency test for carbon tetrachloride within the specified acceptance limits for carbon tetrachloride ( $\pm 20$  percent for a true value greater than 10 µg/L, or  $\pm 40$  percent for a true value lower than 10 µg/L as specified at 141.24(f)(17)(i)).

**Table 17. Evaluation of Carbon Tetrachloride Data from WS Studies Using Either 20% or 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 20% Acceptance Limits	% Labs Passing ± 40% Acceptance Limits
24	4.56	56		96
34	6.27	60		100
30	6.46	59		98
27	8.48	37		97
31	8.69	36		100
40	8.90	57		98
25	9.18	37		95
29	10.4	36	81	
35	10.8	34	88	
36	12.6	59	97	
37	12.7	47	87	
33	13.4	34	88	
41	14.2	40	100	
32	14.5	55	89	
38	15.6	54	94	
26	16.7	59	85	
39	19.2	42	83	

From Table 17, it can be concluded that the available PE data for carbon tetrachloride are insufficient for a PQL re-evaluation. For the WS studies evaluated, the participating labs passed the proficiency exams at a passing rates greater than the standard 75 percent acceptance criterion used to determine the PQL. In addition, only one WS study (WS 24) had a concentration lower than the current PQL. However, passing rates of greater than 96 percent at concentrations close to the current PQL suggest that the current PQL of 5 µg/L could be possibly be lower.

#### Conclusion for Carbon Tetrachloride

The method comparison results show that since the promulgation of analytical methods under the NPDWR, three new methods (EPA Methods 502.2, 524.2, and 551.1) have replaced the two original analytical methods (EPA Methods 502.1 and 524.1). While EPA Method 551.1 is the most sensitive of the three currently approved methods, this method is not currently used by EPA or State laboratories according to the available WS data. Instead, EPA Method 524.2, the least sensitive of the three current methods, has been the primary method of choice. The MDL of EPA Method 524.2 is more sensitive than EPA 524.1 but less sensitive than EPA 502.1. Evaluation of the quantitative PE data showed that the majority of the laboratories conducting WS analyses surpassed the 75 percent criterion. Because of the high percentage of laboratories



passing and a lack of spike samples at concentrations below the current PQL, a re-evaluation of the PQL could not be performed using this approach. However, high passing rates at values close to the current PQL of 5 µg/L suggest that a lower PQL is possible.

## Chlordane

### Results of the Method Comparison

With the 1991 promulgation of the Phase II Rule for SOCs, three analytical methods were approved for the determination of chlordane in drinking water: EPA Methods 505 (GC/microextraction), 508 (GC/ECD), and 525.1 (LSE/GC/MS) (56 FR 3526). Since the promulgation of this rule, EPA Method 525.1 was removed and EPA Methods 525.2 (LSE, GC/MS) and 508.1 (GC/LSE/ECD) were added to the approved list. Table 18 lists detection limits for these methods. Using the highest value of the range of MDLs reported, EPA Methods 508 and 508.1 are both approximately 30 times more sensitive than EPA Method 505.

**Table 18. Results of the Analytical Methods Comparison for Chlordane (Newly Promulgated Methods are Indicated in Bold)**

MCL = 2 µg/L		Current PQL = 2 µg/L		DL <sup>▲</sup> = 0.2 µg/L		Acceptance Limit <sup>†</sup> = ± 45%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 505 <sup>1</sup>	Microextraction and GC	0.14	EPA 505 <sup>2</sup>	Microextraction and GC	0.14		
EPA 508 <sup>1</sup>	GC with ECD	0.0015 <sup>■</sup>	EPA 508 <sup>2</sup>	GC with ECD	0.0016 - 0.0041 <sup>*</sup>		
EPA 525.1 <sup>1</sup>	LSE and GC/MS	0.1 - 0.3 <sup>*</sup>	<b>EPA 508.1<sup>2</sup></b>	LSE and GC with ECD	0.001 - 0.004 <sup>*</sup>		
			<b>EPA 525.2<sup>2</sup></b>	LSE and GC/MS	0.05 - 0.17 <sup>*</sup>		

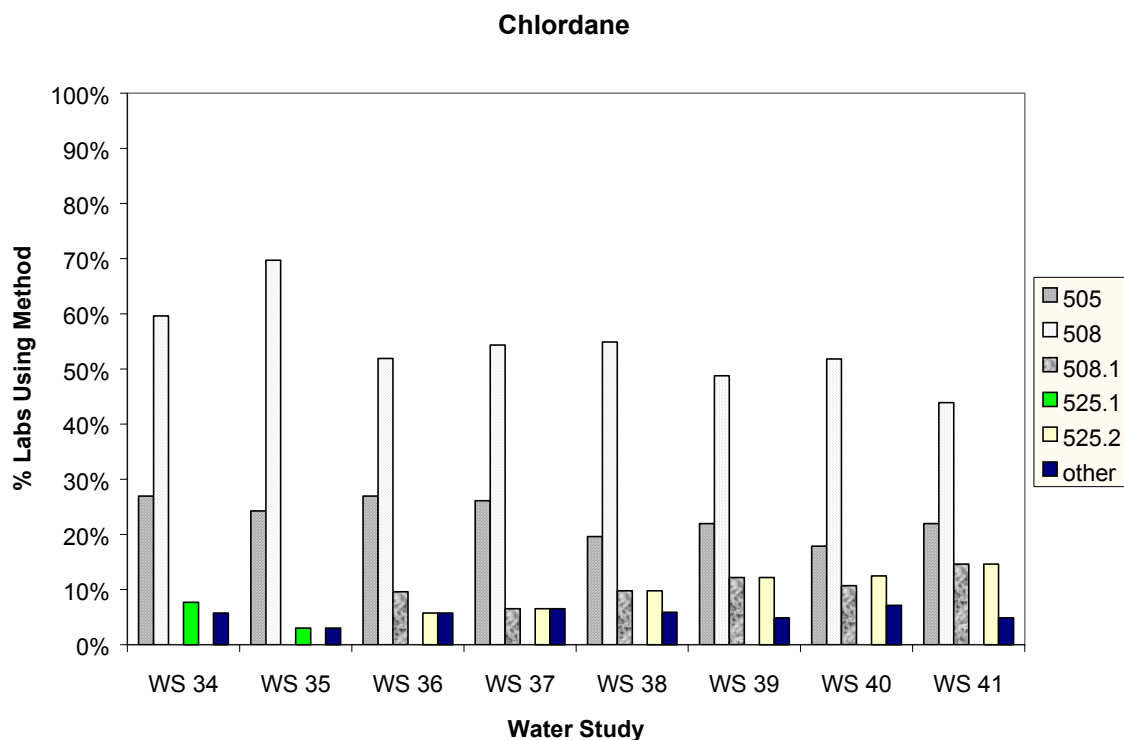
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA-600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).  
<sup>†</sup> Acceptance limits for organic compounds are listed at 40 CFR §141.24(h)(19)(i).  
<sup>\*</sup> Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.  
<sup>■</sup> EDL = estimated detection limit, used to approximate the MDL.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 14 plots the distribution of analytical techniques used by EPA and State laboratories in WS 34 to 41. The "other" techniques represent methods which were not specifically identified by participating laboratories or were otherwise unknown. As shown in Figure 14, the majority of laboratories used EPA Method 508 for determination of chlordane in WS 34 to 41. EPA Method 525.1, which was used quite minimally in earlier WS studies, was replaced by EPA Method 525.2 in WS 36. Laboratories also began to employ EPA Methods 508.1 and 525.2 during WS 36. For WS 34 to 41, EPA Method 505 consistently remained the second-most commonly used method after EPA Method 508.

**Figure 14. Distribution of Analytical Techniques by WS Study: Chlordane**



### b. Results of the PQL Analysis

The Agency derived the current chlordane PQL of 2 µg/L by multiplying the detection limit by a factor of ten (56 FR 3552). With the availability of recent PE WS data, efforts were made to reassess the PQL using PE data from WS 24 to 41. Table 19 summarizes the data from these WS studies, indicating the study number, the spiked or "true" value of the WS sample, the number of results from EPA and State laboratories, and the calculated percentage of laboratories whose results successfully passed within federally designated acceptance limits for chlordane. These acceptance limits are specified in 40 CFR §141.24(h)(19)(i) to be ± 45 percent.

**Table 19. Evaluation of Chlordane Data from WS Studies Using the 45% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 45% Acceptance Limits
29	0.833	25	88.0
24a	1.32	40	87.5
27	1.84	28	96.4
26a	2.70	39	94.9
33	2.76	36	88.9
41	2.90	41	95.1
25a	3.30	22	95.5
39	3.57	41	95.1
30	4.20	49	93.9
37	4.44	46	93.5
24b	4.86	40	85.0
31	5.16	30	83.3
32	5.33	56	83.9
34	7.26	52	90.4
38	8.20	51	98.0
26b	9.60	39	97.4
40	11.8	56	94.6
25b	12.6	22	100
35	13.6	33	93.9
36	16.7	52	94.2

Table 19 shows that EPA and State laboratories consistently demonstrated high success rates, surpassing the 75 percent criterion for all evaluated water studies. Therefore, a new PQL could not be re-evaluated using this approach. Even at low spiked concentrations, including three samples below the current PQL, well over 80 percent of participating laboratories successfully determined results within the acceptance limits. This observation suggests the possibility that laboratories may be capable of determining chlordane at levels below the current PQL.

### Conclusion for Chlordane

The plot of method usage over time (from WS studies) indicates consistent use of EPA Methods 508 and 505 over the duration of the selected studies, with laboratories favoring usage of EPA Method 508. EPA Method 508 represents the most sensitive currently approved method (Table 18). It appears that analytical capabilities for chlordane overall have improved since the

time of NPDWR promulgation. The available WS data do not support a reassessment of the PQL based on the 75 percent criterion, however, because the passing rates of laboratories always exceeded this value. Because such high passing rates were observed for some low spiked concentrations (e.g., 88 percent laboratory success for a concentration 2.5 times lower than the current PQL), it is possible that a lowered PQL might be appropriate. However, the desired quantitative reassessment of the PQL could not be performed using the historical approach.

## Chromium

### Results of the Method Comparison

In 1991, the Phase II rule for IOCs listed EPA Methods 218.2 (AAF) and 200.7A (ICP) and Standard Method 304 (AAF) as the approved methods for determination of chromium in drinking water (57 FR 31776). Since that time, EPA Method 218.2 has been removed from the list of approved methods and four new methods have been added: two EPA Methods (200.8, ICP/MS; and 200.9, AAP); and two Standard Methods (3113B, AAF; and 3120B, ICP). The sensitivity of EPA Method 200.9 exhibits approximately ten times the sensitivity of the prior methods. The detection limits of the Standard Methods are not specified. Table 20 summarizes the MDL information for all current and former approved methods.

**Table 20. Results of the Analytical Methods Comparison for Chromium (Newly Promulgated Methods in Bold)**

MCL = 100 µg/L		Current PQL = 10 µg/L	DL <sup>1</sup> = 1 - 7 µg/L	Acceptance Limit <sup>†</sup> = ± 15%	
Methods Approved At Promulgation			Currently Approved Methods (141.23)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 200.7A <sup>1</sup>	ICP	0.6 <sup>▪</sup>	EPA 200.7 <sup>3</sup>	ICP	4
EPA 218.2 <sup>2</sup>	AAF	1 <sup>▪</sup>	<b>EPA 200.8<sup>3</sup></b>	ICP/MS	0.08 - 0.9*
SM 304 <sup>5</sup>	AAF	N/A <sup>◇</sup>	<b>EPA 200.9<sup>3</sup></b>	AAP	0.1
			<b>SM 3113B<sup>4</sup></b>	AAF	N/A <sup>◇</sup>
			<b>SM 3120B<sup>4</sup></b>	ICP	N/A <sup>◇</sup>

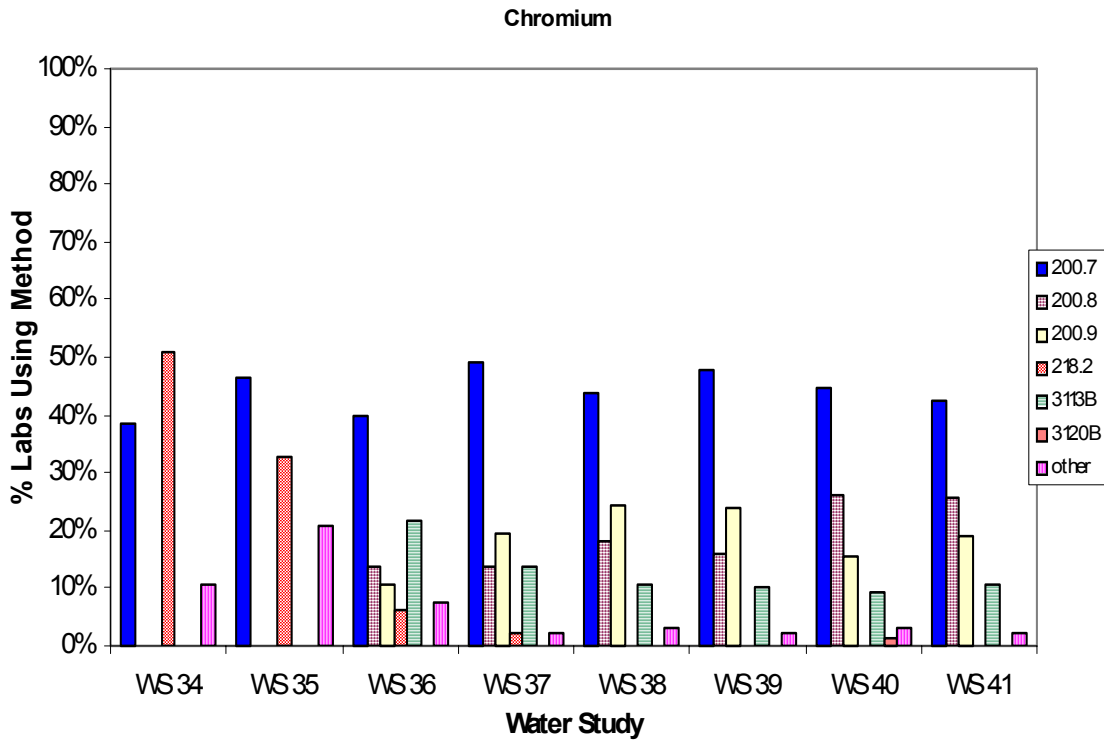
<sup>1</sup> "Inductively-Coupled Plasma Atomic Emission Analysis of Drinking Water," Appendix to Method 200.7, March 1987, U.S. EPA, Environmental Monitoring and Support Laboratory, Cincinnati, OH 45268.  
<sup>2</sup> "Methods for Chemical Analysis of Water and Wastes (MCAWW)," EPA/600/4-79/020, March 1983.  
<sup>3</sup> "Methods for the Determination of Metals in Environmental Samples Supplement I," EPA/600/R-94/111, May 1994.  
<sup>4</sup> Standard Methods for the Examination of Water and Wastewater. American Public Health Association, 1015 Fifteenth Street NW, Washington, DC 20005.  
<sup>5</sup> 16<sup>th</sup> edition of *Standard Methods for the Examination of Water and Wastewater*, 1985, American Public Health Association, American Water Works Association, Pollution Control Federation.  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation, and/or laboratory/analyst performance.  
▲ Regulatory DLs for inorganic compounds are listed at 40 CFR §141.23(a)(4)(i). The value may vary depending on analytical technique.  
† Acceptance limits are listed at 40 CFR §141.23(k)(3)(ii) for inorganic compounds.  
◇ MDLs are not specified for non-EPA (i.e., voluntary consensus standard) methods.  
■ EDL = estimated detection limit, used to approximate the MDL.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of analytical methods used by participating laboratories from WS 34 to 41 is shown in Figure 15. The results for "other" techniques in this figure include the use of any other technique identified by the laboratories participating in the WS study, as well as "unknown" methods, i.e., methods for which laboratories did not report any information on the type of method used. During WS 34 and 35, EPA Methods 200.7 and 218.2 were the most widely used among laboratories participating in the PE studies. By WS 36, EPA Method 218.2 was no longer in use. Overall, EPA Method 200.7 remained the most commonly used method during WS 34-41. Voluntary consensus standard methods SM 3120 and SM 3113B were also used in many WS studies.

**Figure 15. Distribution of Analytical Techniques by WS Study: Chromium**



b. Results of the PQL Analysis

The current PQL of 10 µg/L was derived using earlier PE data from WS 24 through 27 (56 FR 3549). For the PQL re-evaluation, data were taken from a broader range of studies, including more recent PE data (WS 24 to 41). The results of these water studies, providing the study number, the spiked value for the WS sample, the number of results from EPA and State laboratories, and the reported results evaluated using an acceptance limit of ± 15 percent (§141.23(k)(3)(ii)) are summarized in Table 21.

**Table 21. Evaluation of Chromium Data from WS Studies Using the 15% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 15% Acceptance Limits
34	11.6	65	93.8
25a	15.0	41	92.7
39	23.9	50	94.0
24b	25.5	62	90.3
36	37.8	65	95.4
26a	50.2	64	95.3

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 15% Acceptance Limits
41	55.5	47	100
25b	60.0	42	95.2
32	68.1	67	95.5
37	72.9	51	98.0
27	75.3	35	94.3
31	81.6	38	92.1
40	90.9	65	96.9
26b	94.6	64	93.8
29	110	33	87.9
35	119	43	90.7
24a	127	62	88.7
38	148	66	95.5
33	159	35	91.4
30	200	66	93.9

A re-evaluation of the PQL could not be performed using the available PE data in Table 21. To conduct a graphical PQL analysis requires laboratory success rates ranging below the 75 percent criterion, which participating laboratories consistently surpassed (achieving a passing rate of greater than 87 percent for all the WS studies evaluated). Furthermore, the spiked concentrations used in each water study were above the original PQL (10 µg/L).

### Conclusion for Chromium

The method comparison results indicate that some methods approved after the promulgation of the Phase II Rule are more sensitive than the original methods (one of which was discontinued). Currently the most sensitive method is EPA Method 200.9 (AAP). However, according to the plot of method usage over time, EPA Method 200.7 (ICP) consistently has remained the most frequent choice for EPA and State laboratories, and the MDL of this method has not changed significantly. These facts suggest no significant alteration to the analytical capabilities of laboratories. Using the designated ± 15 percent acceptance limit, the evaluation of recent WS data revealed that these data are outside a range that would allow for a re-evaluation of the PQL. Thus, the PE data continue to support the existing PQL of 10 µg/L.

## **1,2-Dibromo-3-chloropropane (DBCP)**

### Results of the Method Comparison

The NPDWR for DBCP, a Phase II SOC, listed EPA Method 504 (GC with microextraction) as the only approved method for determination of this compound (56 FR 3526). Since then, EPA has replaced this method with EPA Methods 504.1 and 551.1. Table 22 summarizes the

approved methods at promulgation and currently approved methods. EPA Method 504.1 has a MDL roughly equal to the MDL of the original EPA Method 504.

**Table 22. Results of the Analytical Methods Comparison for DBCP (Newly Promulgated Methods are Indicated in Bold)**

MCL = 0.2 µg/L		Current PQL = 0.2 µg/L		DL <sup>▲</sup> = 0.02 µg/L		Acceptance Limit <sup>†</sup> = ± 40%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)				
Method	Technique	MDL* (µg/L)	Method	Technique	MDL* (µg/L)		
EPA 504 <sup>1</sup>	Microextraction and GC	0.01	<b>EPA 504.1<sup>2</sup></b>	Microextraction and GC	0.01		
			<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.006 - 0.009*		

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).  
<sup>†</sup> Acceptance limits for organic compounds are listed at 40 CFR §141.24(h)(19)(i).  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

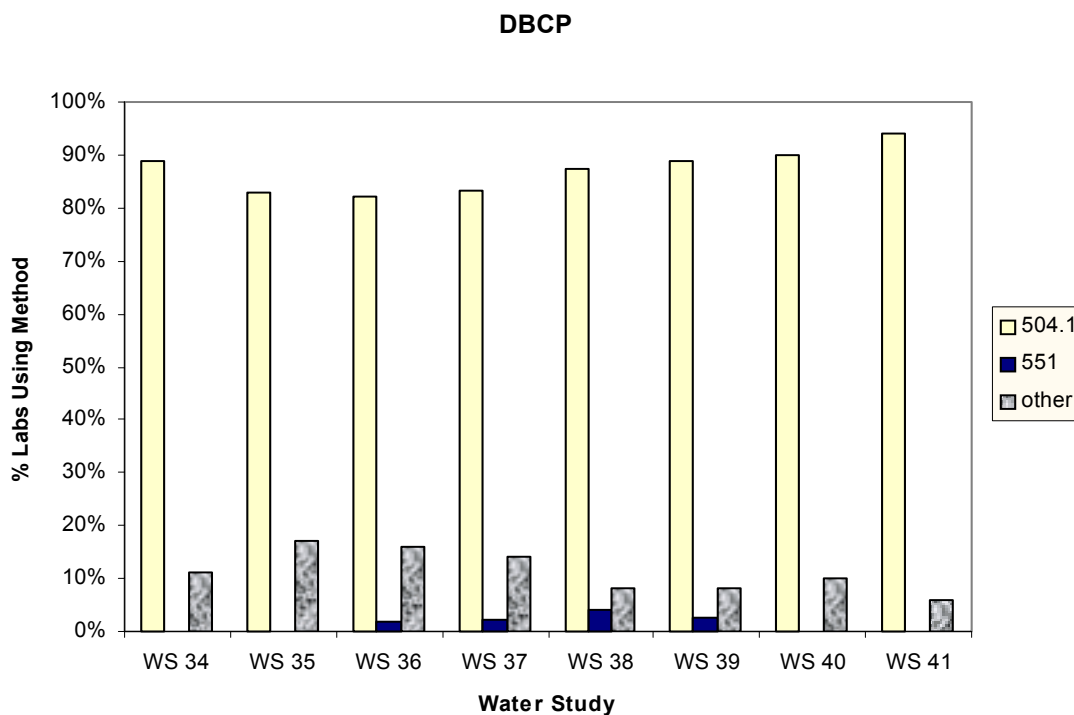
### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

Figure 16 is a plot of the distribution of analytical techniques used by EPA and State laboratories in WS 34 to 41. The "other" techniques represent methods that were not specifically identified by participating laboratories or were otherwise unknown. As shown in Figure 16, the majority of laboratories used EPA Method 504.1 during WS studies 34 to 41. The other recently approved method, EPA Method 551, was only used minimally during WS 36 to 39. Participating laboratories chose "other" methods approximately 10 to 15 percent of the time.



**Figure 16. Distribution of Analytical Techniques by WS Study: DBCP**



b. Results of the PQL Analysis

For DBCP, the original PQL of 0.2 µg/L was derived by multiplying the detection limit of 0.02 µg/L by a factor of ten (56 FR 3551). Recent PE data from WS 26 to 41 have enabled EPA to attempt a reassessment of the PQL. Table 23 summarizes the data from these WS studies (except WS 33 which did not contain data), indicating the study number, the true value of the WS sample, the number of results from EPA and State laboratories, and the calculated percentage of laboratories whose results successfully passed within the 40 percent acceptance limits for DBCP.

**Table 23. Evaluation of DBCP Data from WS Studies Using the ± 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 40% Acceptance Limits
36	0.196	50	92.0
32	0.233	24	95.8
39	0.246	36	91.7
37	0.286	42	88.1
34	0.363	45	88.9

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 40% Acceptance Limits
38	0.429	48	97.9
41	0.451	34	100
40	0.527	50	98.0
35	0.589	29	93.1
27	0.653	18	88.9
29	0.980	39	94.9
26	1.13	35	88.6
31	1.78	44	97.7
30	2.65	24	91.7

Based on the data in Table 23, a revised PQL value could not be estimated because the passing rate of participating laboratories surpassed the 75 percent criterion needed. Also, the true values of the spiked samples in all but one study (WS 36) were greater than the existing PQL, limiting potential conclusions regarding a lower PQL. Therefore, a regression analysis was not performed. However, high passing rates at concentrations around the current PQL of 0.2 µg/L are suggestive of a change in the PQL.

#### Conclusion for DBCP

The MDL of EPA Method 504.1, a GC-microextraction technique, has not changed substantially since the promulgation of the NPDWR for DBCP. According to recent WS study data, laboratories have elected to use EPA Method 504.1 more often than EPA Method 551.1. These observations imply that detection limits for the overall contaminant have remained fairly constant over time. Using the data compiled from WS 26 to 41, the current PQL was reassessed. However, laboratories in all studies surpassed the 75 percent passing rate used in a PQL re-evaluation, such that a regression analysis was not attempted. Furthermore, the true value concentrations exhibited in almost all of the studies were higher than the current PQL, meaning that the effects of lower PQL could not be determined. Although, the available PE data were not suitable to recalculate a new PQL, the high passing rates are suggestive of a change in the PQL.

### **1,4-Dichlorobenzene (para-dichlorobenzene)**

#### Results of the Method Comparison

With the promulgation of the final rule for Phase I VOCs in July 1987 (52 FR 25690), five approved methods were listed for the determination of 1,4-dichlorobenzene (also known as para-dichlorobenzene) in drinking water: EPA Methods 502.1, 502.2, 503.1, 524.1, and 524.2. Since the promulgation of this rule, the Agency has removed EPA Methods 502.1, 503.1, and 524.1 from the list of approved methods. The detection limits of the currently approved methods have not changed significantly from the methods approved at the time of promulgation. Table 24 summarizes the original and current methods and their MDLs.

**Table 24. Results of the Analytical Methods Comparison for 1,4-Dichlorobenzene**

MCL = 75 µg/L    Current PQL = 5 µg/L    DL <sup>▲</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL <sup>◇</sup> (µg/L)	Method	Technique	MDL* (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	ND	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01 - 0.04
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.01 - 0.04*	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.03 - 0.04
EPA 503.1 <sup>1</sup>	Purge and Trap GC	0.006			
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	2.0			
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.03 - 0.04*			

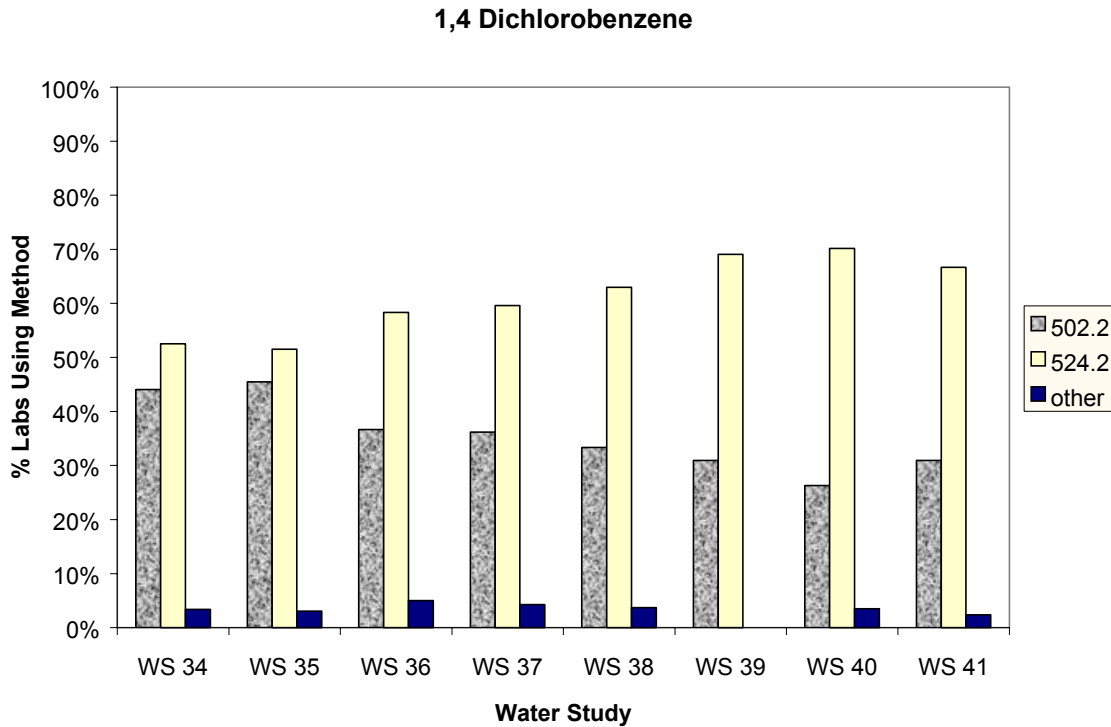
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>◇</sup> The MDLs of the original methods for this contaminant ranged from 0.2 - 0.5 µg/L according to the July 1987 Federal Register notice promulgating NPDWRs for the VOCs (52 FR 25690). However, the 1988 methods manual cited in footnote 1 lists the MDLs shown above.  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.  
<sup>▲</sup> Regulatory DLs for VOCs are listed at 40 CFR § 141.24(f)(17).  
<sup>†</sup> Acceptance limits for organic compounds are listed at 40 CFR § 141.24(f)(17)(i).  
ND = Not determined.

Results of the Analysis of the WS Data

a. Method Usage Over Time

The distribution of different methods used by EPA and State laboratories during WS 34 to 41 is charted in Figure 17. The category of "other" methods includes those methods that were unknown or otherwise unidentified by the participating laboratories. During WS 34 to 41, the use of EPA Method 524.2 increased while use of EPA Method 502.2 diminished slightly.

**Figure 17. Distribution of Analytical Techniques by WS Study: 1,4-Dichlorobenzene**



b. Results of the PQL Analysis

The original PQL of 5 µg/L for 1,4-dichlorobenzene was determined by using PE data from Water Supply Studies 8 to 11 (50 FR 46880). For the six-year regulatory review, more recent WS data were compiled to provide a more accurate, updated assessment of laboratory capabilities. Hence, data from WS studies 24 to 27 and 29 to 41 were used to attempt to re-evaluate the PQL. Table 25 summarizes the available PE data by providing the study number, spiked value for the WS sample, number of laboratory results, and percentage of laboratories passing the proficiency test within the acceptance limits, meaning their reported results fall within the designated acceptance limits for a particular contaminant. The acceptance limits for 1,4-dichlorobenzene are ± 20 percent for a true value greater than 10 µg/L, or ± 40 percent for a true value lower than 10 µg/L (as specified at 40 CFR § 141.24(f)(17)(i)).

**Table 25. Evaluation of 1,4-Dichlorobenzene Data from WS Studies Using the  $\pm 20\%$  or  $\pm 40\%$  Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 20\%$ Acceptance Limits	% Labs Passing $\pm 40\%$ Acceptance Limits
24	2.50	57		96.5
34	5.78	59		100
29	6.60	34		97.1
37	7.31	47		95.7
31	9.40	36		97.2
27	9.58	38		100
40	11.6	57	87.7	
36	11.9	60	95.0	
32	13.6	61	93.4	
38	14.2	54	55.6	
26	14.6	60	93.3	
33	15.1	33	87.9	
41	15.8	42	92.9	
30	16.1	58	84.5	
35	16.7	33	97.0	
39	17.8	42	88.1	
25	20.8	37	83.8	

Because a very large percentage of EPA and State laboratories passed the proficiency test within the bounds of the designated acceptance limits, the PQL could not be determined using the historical 75 percent criterion. Therefore, a regression analysis could not be conducted. However, the high passing rates suggest that the PQL could be lower.

#### Conclusion for 1,4-Dichlorobenzene

Since the promulgation of the NPDWR for 1,4-dichlorobenzene, the two analytical methods approved in 1987, EPA Methods 502.2 and 524.2, are still approved for use today. According to the distribution of analytical methods usage over time, EPA Method 524.2 was more widely used than EPA Method 502.2 during WS 34 to 41. Upon review of the WS data, a high percentage of laboratories successfully passed the proficiency tests, preventing a graphical estimated assessment of the PQL at the 75 percent passing rate. Although the available PE data are insufficient to recalculate the PQL, high passing rates are suggestive of a change in the PQL.

## 1,2-Dichloroethane

### Results of the Method Comparison

The approved drinking water methods for the determination of 1,2-dichloroethane, a Phase I VOC (52 FR 25690) are EPA Methods 502.1, 502.2, 524.1, and 524.2. These methods all utilize GC or GC/MS with several extraction and/or detector variations. Since promulgation of these original methods, the Agency has removed EPA Methods 502.1 and 524.1 from the list of approved methods, and has continued to approve the use of EPA Methods 502.2 and 524.2. Table 26 summarizes the current and previous EPA methods along with their MDLs.

**Table 26. Results of the Analytical Methods Comparison for 1,2-Dichloroethane**

MCL = 5 µg/L    Current PQL = 5 µg/L    DL <sup>▲</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods		
Method	Technique	MDL <sup>◇</sup> (µg/L)	Method	Technique	MDL (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	0.002	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.03
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.03	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.02 - 0.06*
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.2			
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.02 - 0.06*			

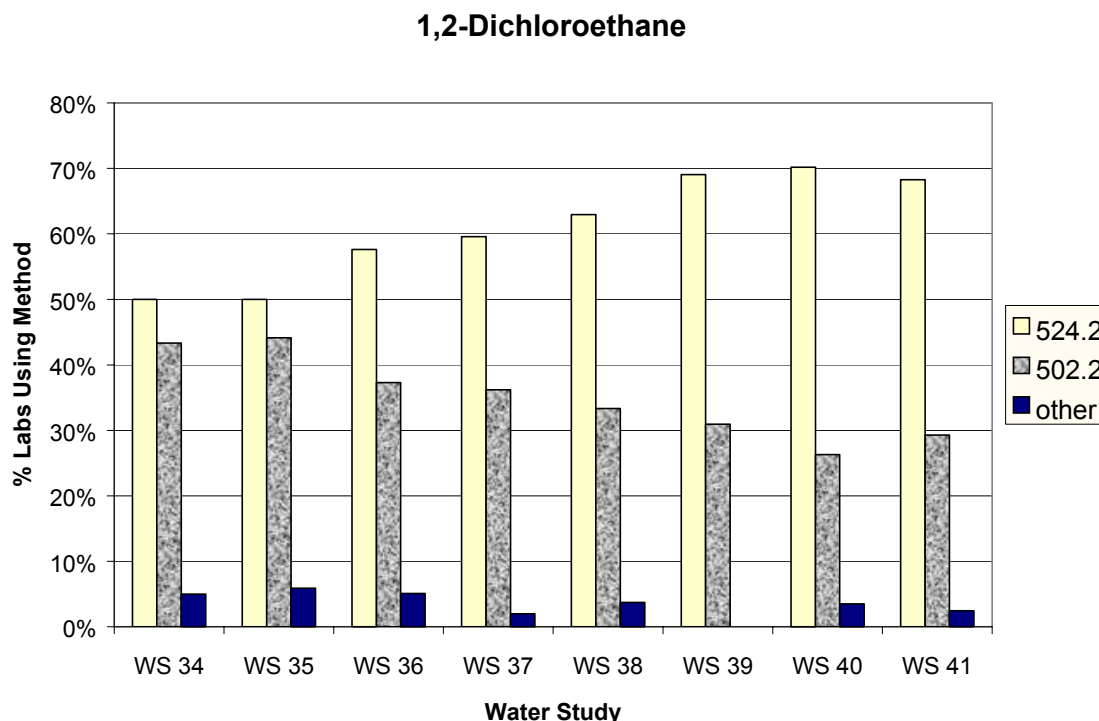
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>◇</sup> The MDLs of the original methods for this contaminant ranged from 0.2 - 0.5 µg/L according to the July 1987 Federal Register notice promulgating NPDWRs for the VOCs (52 FR 25690). However, the 1988 methods manual cited in footnote 1 lists the MDLs shown above.  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.  
<sup>▲</sup> Regulatory DLs for VOCs are listed at 40 CFR § 141.24(f)(17).  
<sup>†</sup> Acceptance limits are listed at 40 CFR § 141.24(f)(17)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The types of methods used over time by the EPA and State laboratories during WS studies 34 to 41 are illustrated in Figure 18. The results for "other" techniques in this figure include any unknown or unreported methods. Using Figure 18, it is apparent that the percentage of labs using EPA Method 502.2 has steadily declined while EPA Method 524.2 has experienced an increase in use over the time period between WS studies 34 and 41.

**Figure 18. Distribution of Analytical Techniques by WS Study: 1,2-Dichloroethane**



### b. Results of the PQL Analysis

The original PQL of 5 µg/L (52 FR 25700) for 1,2-dichloroethane was established by using the data from WS PE studies 8 to 11. To re-evaluate the PQL, data were taken from WS 24 to 41. This data, including the study number, the spiked or "true" value for the WS sample, the number of laboratory results, and the percent of laboratories passing within the accepted limits of ± 20 percent for a spiked value of > 10 µg/L and ± 40 percent for a spiked value of < 10 µg/L, are compiled and illustrated in Table 27.

**Table 27. Evaluation of 1,2-Dichloroethane Data from WS Studies Using Either 20% or 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 20% Acceptance Limit	% Labs Passing ± 40% Acceptance Limit
27	4.88	37		100
30	7.69	59		98
36	9.00	59		100
31	9.25	36		100
26	10.8	59	95	
34	12.1	60	98	
29	12.9	34	79	
24	13.2	56	89	
37	13.2	47	81	
32	13.3	63	94	
41	13.7	41	93	
35	14.1	34	94	
25	15.5	38	90	
38	15.6	54	93	
40	15.6	57	88	
33	16.9	35	97	
39	17.6	42	86	

As shown in Table 27, the percentage of laboratories passing the acceptance limit averaged over 90 percent which is well above the 75 percent passing criterion selected to determine the PQL. Also, the spiked (or "true") values which the laboratories received were higher than the original PQL of 5 µg/L (with the exception of WS 27). Therefore, recalculation of the PQL could not be performed with these data. However, the high passing rates at concentrations close to the current PQL suggest that the PQL could be lower.

#### Conclusion for 1,2-Dichloroethane

EPA Methods 502.2 and 524.2 have remained approved analytical methods for the determination of 1,2-dichloroethane in drinking water since promulgation of analytical methods under Phase I. One of the original methods, EPA Method 502.1, had the greatest detection sensitivity of the four methods mentioned but is currently not approved for analysis. The method usage evaluation shows that, of the two currently approved methods, EPA Method 524.2 has steadily become the more preferred method of analysis by laboratories. Based on an analysis of the WS data, there are not enough appropriate data to conduct a reassessment of the PQL. However, high laboratory passing rates at concentrations close to the PQL 5 µg/L are suggestive of a change in the PQL.



## 1,1-Dichloroethylene

### Results of the Method Comparison

The analytical methods approved for the determination of 1,1-dichloroethylene under the NPDWRs for Phase I VOCs include EPA Methods 502.1, 503.1, and 524.1 (52 FR 25899). Since the promulgation of the rule in 1987, the Agency has added EPA Methods 502.2 and 524.2, to the list of approved methods. The currently approved methods for 1,1-dichloroethylene determination are EPA Methods 502.2 and 524.2. Table 28 summarizes the MDLs for both the original and current approved versions of the methods.

**Table 28. Results of the Analytical Methods Comparison for 1,1-Dichloroethylene (Newly Promulgated Methods Indicated in Bold)**

MCL = 7 µg/L    Current PQL = 5 µg/L    DL <sup>▲</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods		
Method	Technique	MDL (µg/L)	Method	Technique	MDL* (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	0.003	<b>EPA 502.2<sup>2</sup></b>	Purge and Trap GC	0.04 - 0.10
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.2	<b>EPA 524.2<sup>2</sup></b>	Purge and Trap GC/MS	0.05 - 0.12

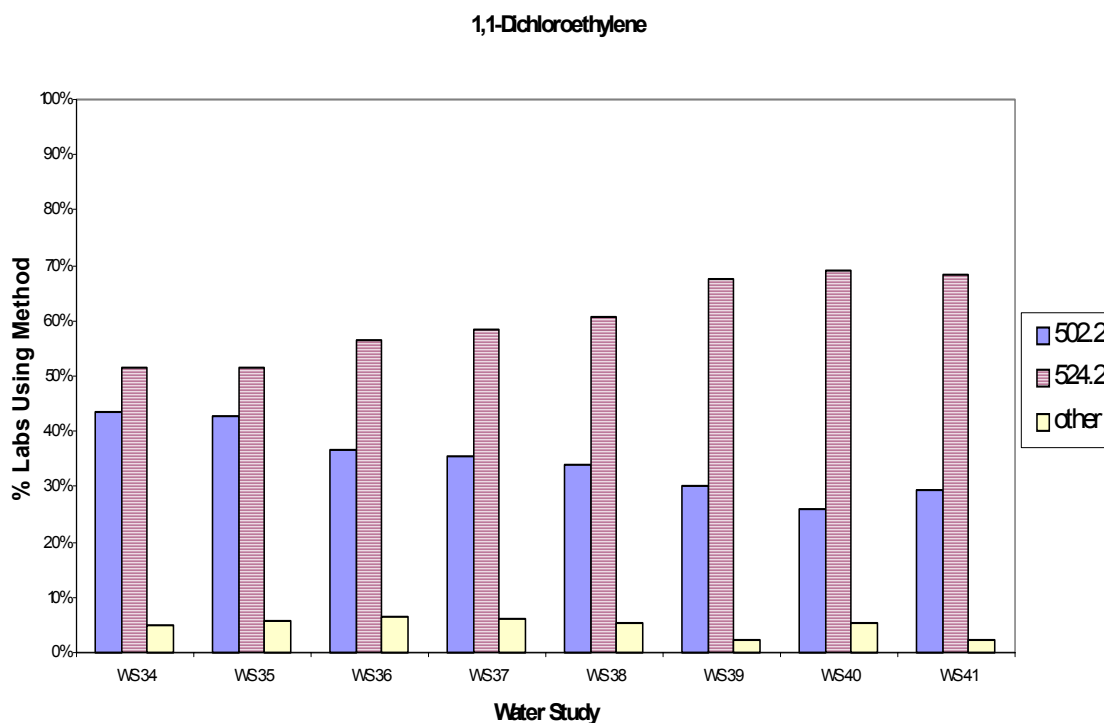
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>◊</sup> The MDLs of the original methods for this contaminant ranged from 0.2 - 0.5 µg/L according to the July 1987 Federal Register notice promulgating NPDWRs for the VOCs (52 FR 25690). However, the 1988 methods manual cited in footnote 1 lists the MDLs shown above.  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.  
<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR § 141.24(f)(17).  
<sup>†</sup> Acceptance limits for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 19 shows the distribution of analytical techniques used by EPA and State laboratories for WS studies 34 to 41. The results for "other" techniques in this figure include the use of any other technique identified by the laboratories participating in the WS study, as well as "unknown" methods, i.e., methods for which laboratories did not report any information on the type of method used. As shown in Figure 19, EPA Method 502.2 was used less as EPA Method 524.2 was used more often (as shown from WS 34 to 41).

**Figure 19. Distribution of Analytical Techniques by WS Study: 1,1-Dichloroethylene**



### b. Results of the PQL Analysis

The current PQL of 5 µg/L was originally set using previous PE data (54 FR 22102). With the availability of more current data from WS 24 to 41, a PQL re-evaluation was attempted. Table 29 summarizes the results of these studies, including the study number, the spiked (or "true") value for the sample, the number of laboratory results, and the percent of laboratories

passing the WS proficiency test for 1,1-dichloroethylene within the acceptance limits. The acceptance limits were calculated as  $\pm 20$  percent for a spike value of  $>10 \mu\text{g/L}$  and  $\pm 40$  percent for a spiked value of  $<10 \mu\text{g/L}$  (as specified at 40 CFR §141.23(f)(17)(i)).

**Table 29. Evaluation of 1,1-Dichloroethylene Data from WS Studies Using Either 20% or 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 20\%$ Acceptance Limits	% Labs Passing $\pm 40\%$ Acceptance Limits
41	5.25	41		97.6
24	5.36	57		87.7
26	6.64	60		95.0
31	7.02	37		97.3
34	7.64	60		98.3
36	8.49	60		98.3
32	9.13	63		100
27	9.45	37		89.2
29	11.7	35	74.3	
38	11.7	56	19.6	
39	12.4	43	79.1	
33	12.9	33	75.8	
35	13.9	35	88.6	
30	14.2	45	77.8	
25	14.9	38	94.7	
37	16.5	48	83.3	
40	18.3	58	86.2	

The data from the available PE studies were not conducive to PQL re-evaluation, as the percentage of labs passing generally exceeded the standard 75 percent passing criterion needed to estimate the PQL using the graphical approach (with the exception of two studies). However, high laboratory passing rates for those spike concentrations just above the PQL of  $5 \mu\text{g/L}$  suggest that the PQL could be lower.

## Conclusion for 1,1-Dichloroethylene

The method comparison results indicate that EPA Method 502.2 is now the most sensitive method for determination of 1,1-dichloroethylene in drinking water. As revealed by the results of method usage over time, EPA Method 524.2 is the most commonly employed method for 1,1-dichloroethylene determination in recent PE studies. Based on the evaluation of more recent quantitative PE data, a recalculation of the PQL is not possible. However, the high laboratory passing rates for a couple spike samples with concentrations slightly above the current PQL of 5 µg/L suggest that the PQL could change.

## **Dichloromethane (methylene chloride)**

### Results of the Method Comparison

At the promulgation of the Phase V rule for VOCs (57 FR 31776), four analytical methods were approved (EPA Methods 502.1, 502.2, 524.1, and 524.2) for the analysis of dichloromethane (also known as methylene chloride). Since that time, EPA Methods 502.1 and 524.1 have been removed from the approved list, leaving EPA Methods 502.2 and 524.2 as the remaining currently approved methods. Table 30 provides descriptions of the methods and their MDLs. The MDLs of the two current methods remain unchanged from their values at the promulgation of the rule.

**Table 30. Results of the Analytical Methods Comparison for Dichloromethane**

MCL = 5 µg/L    Current PQL = 5 µg/L    DL <sup>▲</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL* (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	ND	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01 - 0.02
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.01 - 0.02*	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.03 - 0.09
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	1.0			
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.03 - 0.09*			

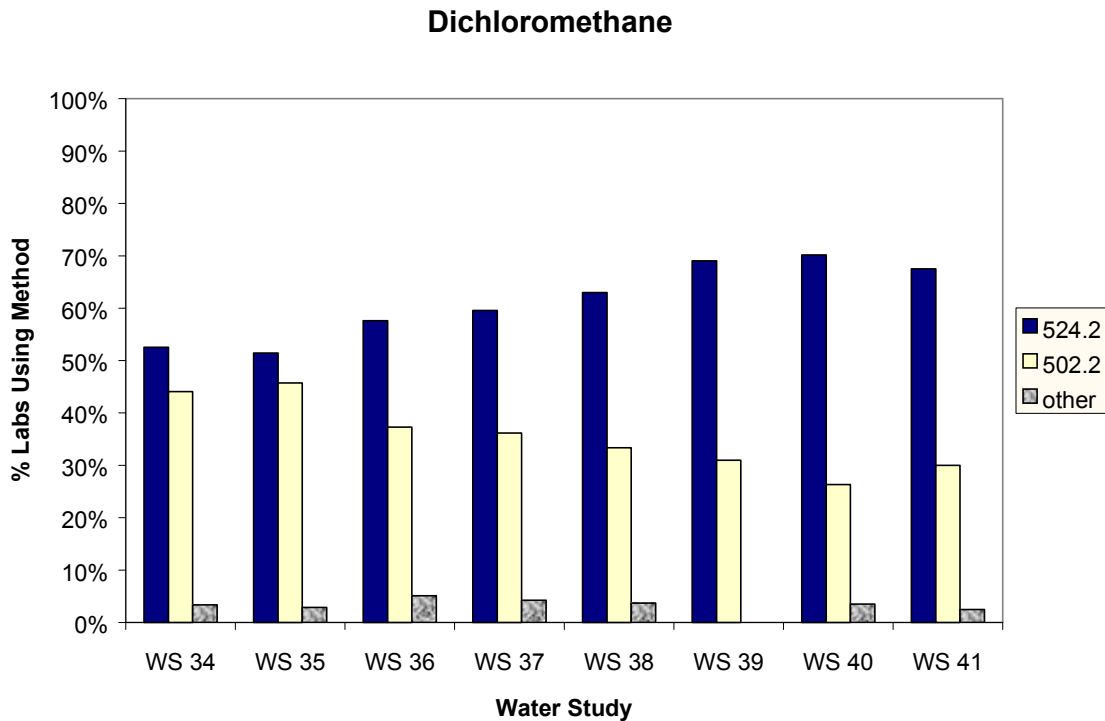
<sup>1</sup> "Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water," June 1985.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95-131, August 1995.  
<sup>▲</sup> Regulatory DLS for organic compounds are listed at 40 CFR 141.24(f)(17).  
<sup>†</sup> Acceptance limits for VOCs are listed at 40 CFR 141.24(f)(17)(i).  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation, and/or laboratory/analyst performance.  
ND = Not determined.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of methods used over WS studies 34 to 41 is illustrated in Figure 20. The designation "other" includes all unknown and unreported methods. As illustrated in Figure 20, EPA Method 524.2 was the predominant method used in these WS studies. Since WS 35, EPA Method 524.2 has steadily increased in its usage, experiencing only a slight decrease in WS 41. Even though EPA Method 502.2 features slightly better sensitivity than EPA Method 524.2, laboratories favored EPA Method 524.2, which utilizes GC/MS.

**Figure 20. Distribution of Analytical Techniques by WS Study: Dichloromethane**



b. Results of the PQL Analysis

Table 31 summarizes the results of the data from WS 26 to 41 for the use in the PQL re-evaluation. Note that data for WS 24, 25, 27, 30, and 31 are not available for this analysis. Table 31 includes the WS number, the spiked "true" value, number of labs that participated in the studies, and the percentage of those passing within the acceptance limit designated for dichloromethane ( $\pm 20$  percent if spiked "true" value is  $> 10 \mu\text{g/L}$  or  $\pm 40$  percent if the spiked "true" value is  $< 10 \mu\text{g/L}$  specified at 141.24(f)(17)(i)).

**Table 31. Evaluation of Dichloromethane Data from WS Studies Using Either 20% or 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 20\%$ Acceptance Limits	% Labs Passing $\pm 40\%$ Acceptance Limits
35	5.83	35		97
40	6.2	57		97
39	7.31	42		100
32	7.77	51		94
37	8.41	47		92
36	12.3	59	90	
33	12.8	34	94	
38	14.7	54	98	
29	14.7	33	97	
26	15.2	51	71	
41	15.9	40	85	
34	18.4	59	86	

The original PQL of  $5 \mu\text{g/L}$  was derived from PE data from WS 22, 23, and 26 (57 FR 60953). As shown by Table 31, the WS data are not appropriate for a PQL re-evaluation using the linear regression approach. For most of the concentrations listed in Table 31, the percentage of laboratories passing were well above the 75 percent criterion necessary to recalculate the PQL. In summary, these data were not suitable for use in reassessing the current PQL using a graphical method. However, high laboratory passing rates at concentrations close to the current PQL suggest that the PQL may be lower.

## Conclusion for Dichloromethane

Since the promulgation of the Phase V rule, no new methods have been approved for the analysis of dichloromethane, and analytical capabilities have remained essentially constant. Of the currently approved methods, EPA Method 524.2 is used more frequently by laboratories for the detection of dichloromethane, although it is not the most sensitive method available (EPA Method 502.2). During WS 26 to 41, the percentage of laboratories passing was very high, limiting the possibilities of re-evaluating the PQL using the historical 75 percent criterion. Although, data are insufficient to recalculate the PQL, high passing rates at values close to the current PQL suggest that the PQL could change.

## **1,2-Dichloropropane**

### Results of the Method Comparison

The final NPDWR for 1,2-dichloropropane, a Phase II VOC, has four approved methods: EPA Methods 502.1, 502.2, 524.1, and 524.2. Since that time, EPA Methods 502.1 and 524.1 have been removed from the approved list, leaving EPA Methods 502.2 and 524.2 as the remaining currently approved methods. Table 32 provides descriptions of the methods and their MDLs. The MDLs of the two current methods remain unchanged from their values at the promulgation of the rule.

**Table 32. Results of the Analytical Methods Comparison for 1,2-Dichloropropane**

MCL = 5 µg/L    Current PQL = 5 µg/L    DL <sup>1</sup> = 0.5 µg/L    Acceptance Limits <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL* (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	ND	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01 - 0.03
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.01 - 0.03*	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.02 - 0.04
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.2			
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.02 - 0.04*			

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

ND = Not determined.

▲ Regulatory DLs for organic compounds are listed at 40 CFR § 141.24(f)(17).

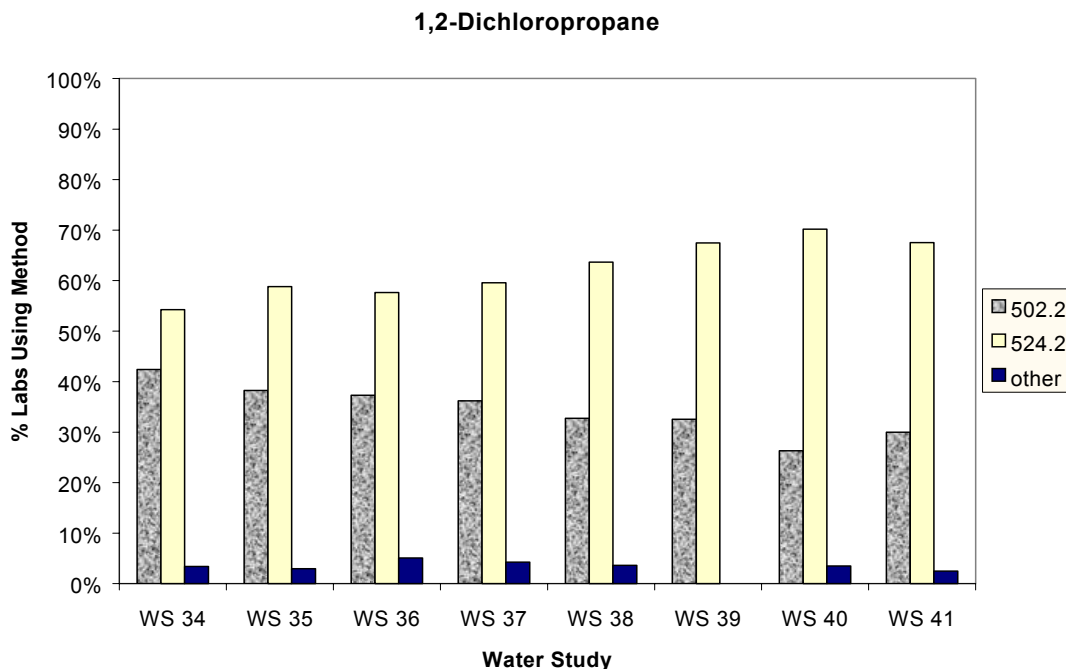
† Acceptance limits for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

For PE WS studies 34 to 41, the distribution of methods used by EPA and State laboratories is illustrated by Figure 21. The category of "other" contains those methods that were unknown or unidentified by participating laboratories. As Figure 21 shows, EPA Method 524.2 was the preferred method for laboratories participating in WS 34 to 41. For the most part, the use of EPA Method 502.2 decreased over time.

**Figure 21. Distribution of Analytical Techniques by WS Study: 1,2-Dichloropropane**





b. Results of the PQL Analysis

The original PQL of 5 µg/L (56 FR 3526) for 1,2-dichloropropane was determined by using PE data from WS 18. A re-evaluation of the PQL was attempted using more recent data from WS studies 29 through 41. Table 33 summarizes the results of these WS studies, including the study number, the true value concentration of the spiked sample, the number of laboratory results returned, and the percentage of laboratories passing the proficiency test within acceptance limits of ± 20 percent for a true value greater than 10 µg/L, or ± 40 percent for a true value lower than 10 µg/L (as specified in 141.24(f)(17)).

**Table 33. Evaluation of 1,2-Dichloropropane Data from WS Studies Using the ± 20% or ± 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 20% Acceptance Limits	% Labs Passing ± 40% Acceptance Limits
32	6.46	61		100
35	9.00	34		100
30	10.9	58	98.3	
39	12.2	43	93.0	
34	12.3	59	96.6	
37	14.2	47	91.5	
33	14.3	32	93.8	
41	15.4	40	97.5	
29	15.8	33	87.9	
36	16.4	59	93.2	
38	18.3	55	94.5	
40	19.0	57	94.7	

For this contaminant, the participating laboratories studies achieved success rates far greater than the 75 percent criterion typically used to estimate the PQL. Also, all of the true value concentrations used in the available studies exceeded the current PQL. Thus, the PQL could not be re-evaluated using the regression method. However, high passing rates of 100 percent for WS 32 with a spike concentration of 6.46 µg/L is very close to the current PQL. This suggests that the PQL could be lower.

## Conclusion for 1,2-Dichloropropane

The method comparison results show that no new methods have been approved since the promulgation of the NPDWR for 1,2-dichloropropane. Evaluation of the quantitative PE data showed that laboratories conducting WS analyses had surpassed the 75 percent criterion. Because the data featured a large percentage of laboratories passing, and very high true value concentrations, a re-evaluation of the PQL could not be performed using the typical graphical estimation approach. Thus, the available WS data are insufficient to recalculate the PQL for 1,2-dichloropropane. However, high laboratory passing rates for WS studies with concentrations close to the current PQL are suggestive of a change in the PQL.

## **2,3,7,8-TCDD (Dioxin)**

### Results of the Method Comparison

2,3,7,8-TCDD, commonly known as dioxin, was listed with the Phase V SOCs (57 FR 31776). Dioxin has not had any new methods approved for analysis since the promulgation of the NPDWRs for this contaminant. The MDL of the current method has remain unchanged from the value at the time of promulgation. Table 34 shows the specifications of EPA Method 1613 in both past and current periods.

**Table 34. Results of the Analytical Methods Comparison for 2,3,7,8-TCDD**

MCL = 30 pg/L		Current PQL = 30 pg/L	DL <sup>^</sup> = 5 pg/L	Acceptance Limit <sup>†</sup> = ± 2*S.D.	
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (pg/L)	Method	Technique	MDL (pg/L)
EPA 1613 <sup>1</sup>	high resolution GC/MS (GC/HRMS)	10	EPA 1613 <sup>2</sup>	high resolution GC/MS (GC/HRMS)	10

<sup>1</sup> Method 1613: Tetra-Through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS: Revision A, USEPA, April 1990.

<sup>2</sup> "Tetra-through Octa-Chlorinated Dioxins and Furans by Isotope-Dilution HRGC/HRMS," EPA/821/B-94/005, October 1994.

<sup>^</sup> Regulatory DLs for organic compounds are listed at 40 CFR 141.24(h)(18).

<sup>†</sup> Acceptance limits for organic compounds are listed at 40 CFR 141.24(h)(19)(i).

## Results of the Analysis of the WS Data

WS data were not available for dioxin; hence, no analyses on these data could be performed.

## Conclusion

No new methods have been approved for the analysis of dioxin since the promulgation of the NPDWRs. The sensitivity of EPA Method 1613 has remained the same. A re-evaluation of the PQL could not be determined because no PE data were available for examination. Therefore, the current PQL is likely to remain unchanged.

## **Diquat**

### Results of the Method Comparison

Diquat became a regulated SDWA contaminant with the promulgation of the July 1992 Phase V rule for SOCs. Table 35 compares the approved methods at promulgation with currently approved methods. At the time of the Phase V regulation EPA Methods 549, was approved for determination of diquat in drinking water (57 FR 31776). In August 1992, EPA Method 549 was replaced by an updated method, EPA Method 549.1. Because Method EPA 549.1 received approval so soon after the promulgation of the Phase V rule, it is listed in the column of methods approved at promulgation in Table 35. In 1999 EPA approved EPA Method 549.2 (64 FR 67450) and discontinued EPA Method 549.1.

**Table 35. Results of the Analytical Methods Comparison for Diquat (Newly Promulgated Methods Are Indicated in Bold)**

MCL = 20 µg/L		Current PQL = 4 µg/L	DL <sup>▲</sup> = 0.4 µg/L	Acceptance Limit <sup>†</sup> = ± 2*S.D.	
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 549 <sup>1</sup>	LSE and with UV	0.44	<b>EPA 549.2<sup>3</sup></b>	LSE and HPLC with UV	0.72
EPA 549.1 <sup>2</sup>	LSE and HPLC with UV	0.44 - 0.51*			

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement I," EPA/600/4-90/020, July 1990.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement II," EPA/600/R-92/129, August 1992. (Note this method was not actually approved at the time of July 1992 Phase V promulgation but was approved immediately after.)

<sup>3</sup> "Analytical Methods for Chemical and Microbiological Contaminants and Revisions to Laboratory Certification Requirements," *Federal Register*, Vol. 64, No. 230, pp. 67450-67467.

▲ Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

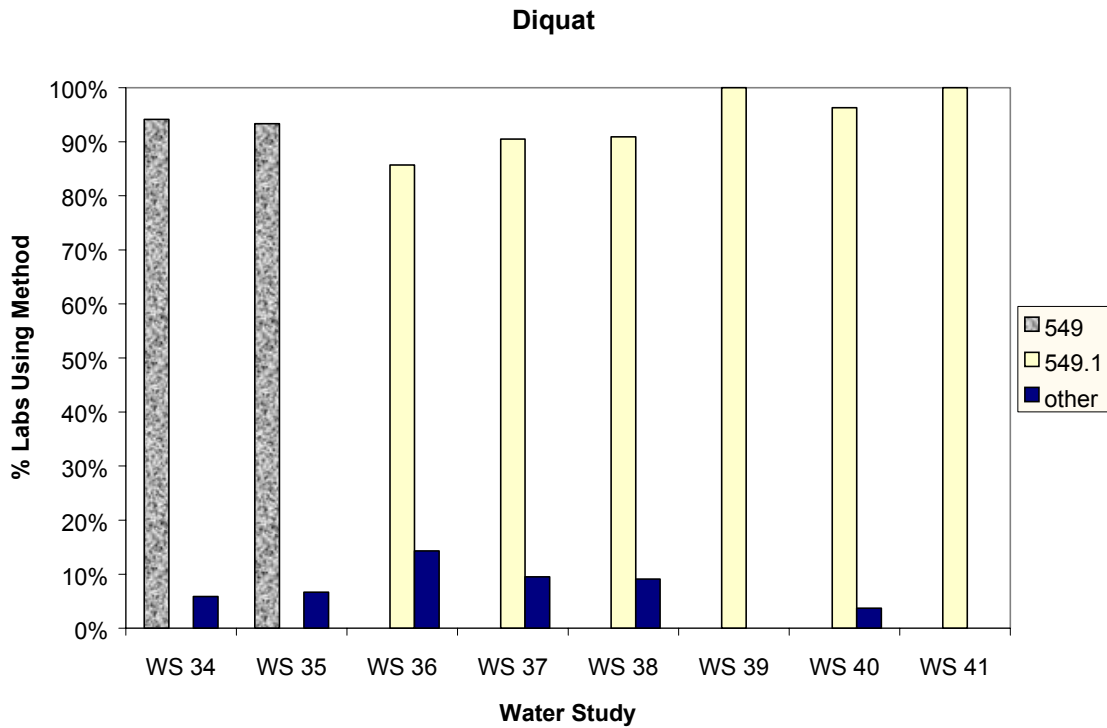
† Acceptance limits for organic compounds are listed at are listed at 40 CFR §141.24(h)(19)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of analytical techniques used by the EPA and State laboratories in WS 34 to 41 is shown in Figure 22. The "other" techniques represent methods which were not specifically identified by participating laboratories or were otherwise unknown. EPA has consistently approved a single method for diquat at any given time, EPA Method 549 was predominantly used prior to WS 36 and EPA Method 549.1 was used predominantly after WS 36.

**Figure 22. Distribution of Analytical Techniques by WS Study: Diquat**



b. Results of the PQL Analysis

The original PQL for diquat (4 µg/L) was derived by using PE data from WS 23 to 27 (56 FR 60949). A reassessment of the PQL was attempted after compiling additional data from WS 24 to 41. However, for several of these available water studies, the number of participating laboratories were too few (under ten) to include for consideration in the analysis. After omitting these studies, the remaining usable PE data were summarized, including the study number, the true value of the WS sample, the number of results from EPA and State laboratories, and the calculated percentage of laboratories whose results successfully passed within federally designated acceptance limits (Table 36). The acceptance limits for diquat are specified in 40 CFR §141.24(h)(19)(i) to be twice the standard deviation, or  $\pm 2 \cdot S.D.$ , from the value "x" (where  $x = aT + b$  and T represents the true value).

Table 36 reveals that laboratory success rates ranged between 78.6 and 100 percent. Thus, use of the 75 percent criterion for estimation of the PQL by the graphical method would be meaningless. The dataset is also incompatible with the goals of a PQL reassessment—particularly a potential lowering of the PQL—because the concentrations of all the spiked samples exceeded the current PQL. Also, the concentration of the spike samples was well above the PQL of 4 µg/L.

**Table 36. Evaluation of Diquat Data from WS Studies Using the  $\pm 2^*$  S.D. Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 2^*$ S.D. Acceptance Limits
37	8.41	21	90.5
36	14.7	28	78.6
40	14.8	27	96.3
38	23.7	22	95.5
32	28.2	11	100
34	29.2	17	94.1
39	32.2	21	95.2
35	37.4	15	86.7
41	44.0	17	100

### Conclusion for Diquat

As shown by the results of the method comparison, few methods have been approved by EPA for the determination of diquat. The analytical technology supporting the determination of diquat has remained essentially unchanged over time. However, analytical capabilities have improved. The original method, EPA Method 549, was less sensitive than today's method, EPA Method 549.2, indicating significant analytical improvements. The plot of method usage over time reveals that the techniques predominantly used by participating laboratories were EPA Methods 549 (prior to WS 36) and 549.1 (subsequent to WS 36). Although the method comparison indicates increased analytical capabilities, the available WS data did not provide information suitable for a PQL reassessment. The percentage of laboratories passing within the acceptance window was generally well above the 75 percent criterion for use in the linear regression approach.

### **Ethylene Dibromide**

#### Results of the Method Comparison

With the Phase II SOCs (56 FR 3526), EPA 504, was the only approved method listed for analysis of ethylene dibromide (EDB) in drinking water. Since this regulation was promulgated, the Agency has approved a new revision of GC with microextraction (EPA Method 504.1) and approved an additional analytical method (EPA Method 551.1, LLE and GC with ECD). As

shown in Table 37, the MDLs of EPA Methods 504 and 504.1 are equivalent, but EPA Method 551.1 offers a slightly greater level of sensitivity.

**Table 37. Results of the Analytical Methods Comparison for Ethylene Dibromide (New Methods in Bold)**

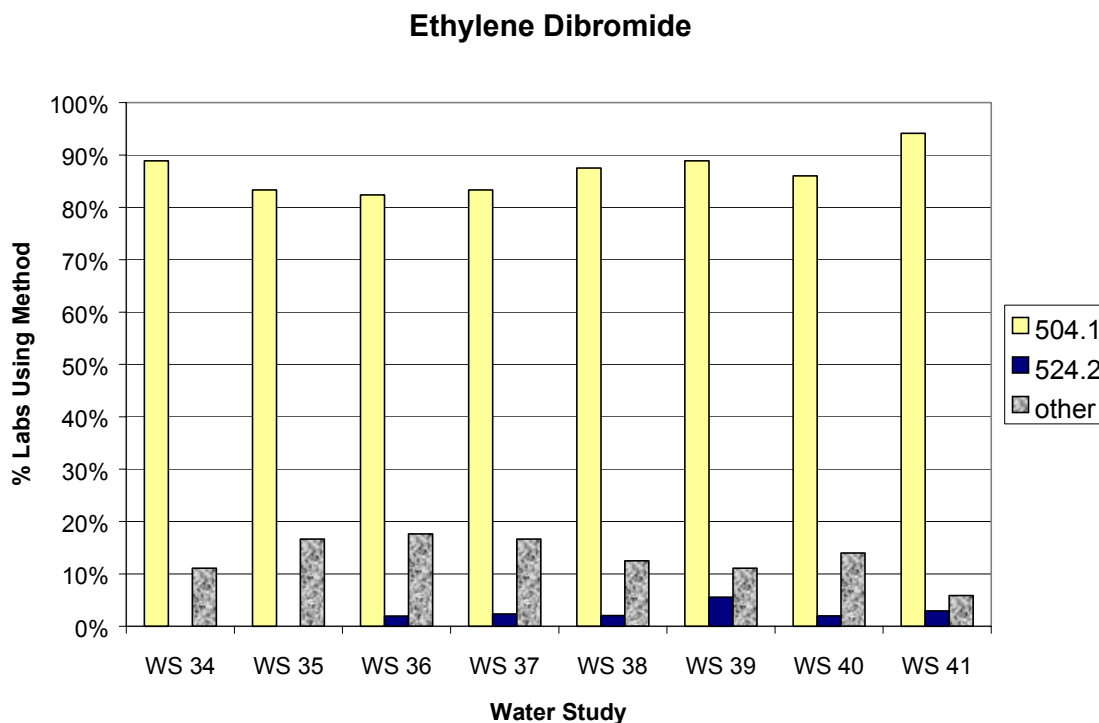
MCL = 0.05 µg/L		Current PQL = 0.05 µg/L		DL <sup>▲</sup> = 0.01 µg/L		Acceptance Limit <sup>†</sup> = ± 40%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 504 <sup>1</sup>	Microextraction and GC	0.01	<b>EPA 504.1<sup>2</sup></b>	Microextraction and GC	0.01		
			<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.007 - 0.008*		
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988. <sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995. <sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18). <sup>†</sup> Acceptance limits are listed at 40 CFR §141.24(h)(19)(i). * Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.							

### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

Figure 23 illustrates the distribution of the analytical techniques used by the EPA and State laboratories in WS studies 34 to 41. The "other" designation includes methods for which laboratories did not report any information on the method used or non-EPA methods. The use of EPA Method 504.1 greatly exceeds the use of any other method. This distribution is consistent through the duration of the WS studies shown in Figure 23.

**Figure 23. Distribution of Analytical Techniques by WS Study: Ethylene Dibromide**



b. Results of the PQL Analysis

The current PQL, 0.05 µg/L, was derived from a multiplier of 5 from the MDL of 0.01 µg/L (56 FR 3552). The data used for PQL re-evaluation were taken from WS studies 24 to 41. Table 38 summarizes the results of the WS studies, providing the study number, the true concentration of the spiked sample, the number of laboratories participating, and the percentage of laboratories passing the WS study (evaluated using acceptance limit of ± 40 percent for EDB as cited in 40 CFR § 141.24(h)(19)(i)).

Using the 75 percent criterion, it appears from the numerical data that EPA and regional laboratories are able to achieve acceptable results within the ± 40 percent acceptance window at concentrations from 0.14 to 2.3 µg/L.



**Table 38. Evaluation of Ethylene Dibromide Data from WS Studies Using the  $\pm 40\%$  Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing Acceptance Limits
37	0.138	42	81
33	0.143	24	75
39	0.227	36	94
36	0.283	51	94
38	0.336	48	96
41	0.344	34	100
34	0.406	45	87
26	0.434	35	91
24	0.480	32	100
35	0.609	30	90
31	0.637	25	84
40	0.638	50	98
29	0.850	25	84
25	0.944	18	100
30	1.39	39	92
27	1.45	17	88
32	2.29	44	98

The percentages of the acceptable results for laboratories were not plotted, as these values all exceeded the 75 percent criterion and therefore could not contribute meaningful information toward the re-evaluation of a PQL using the linear regression approach. In addition, none of the WS studies evaluated had spike concentrations below the current PQL of 0.05  $\mu\text{g/L}$ . However, WS studies at concentrations slightly above the PQL (WS 37 and 33) had laboratory passing rates of 81 and 75 percent, respectively. This would indicate that the current PQL is probably appropriate and unlikely to change.

#### Conclusion for Ethylene Dibromide

The method comparison results indicate that the sensitivity of the available methods has not improved significantly since the promulgation of NPDWRs for EDB. Evaluation of more recent WS data provides no evidence that would support a change from the current PQL of 0.05  $\mu\text{g/L}$ .

## Fluoride

### Results of the Method Comparison

Fluoride, a Phase II IOC, is unique among SDWA contaminants because it is often added to drinking water to provide well-known health benefits. Because low concentrations of fluoride are often added to public water supplies to protect dental health, EPA has not published a detection limit for this contaminant. Since the Agency's promulgation of the MCL for fluoride (April 1986, 51 FR 11397), this contaminant has gained several additional approved methods, mostly developed by voluntary consensus standard organizations. Currently, the only EPA-approved method for fluoride determination is EPA Method 300.0, an ion chromatography method with greater sensitivity than the EPA methods approved at the time of promulgation. Table 39 summarizes original and current methods, and their individual detection limits. The voluntary consensus standard method MDLs are not listed in this table because non-EPA methods are not required to document detection limits.

**Table 39. Results of the Analytical Methods Comparison for Fluoride (Newly Promulgated Methods are Indicated in Bold)**

MCL = 4 mg/L		Current PQL = 0.5 mg/L	DL = N/A <sup>^</sup>	Acceptance Limit <sup>†</sup> = ± 10%	
Methods Approved At Promulgation			Currently Approved Methods (141.23)		
Method	Technique	MDL (mg/L)	Method	Technique	MDL (mg/L)
EPA 340.1 <sup>1</sup>	Colorimetric SPADNS, with Bellack Distillation	0.1 - 1.4*	<b>EPA 300.0<sup>6</sup></b>	Ion chromatography	0.01
EPA 340.2 <sup>1</sup>	Potentiometric, with ion-selective electrode (ISE)	N/A <sup>^</sup>			
EPA 340.3 <sup>1</sup>	Automated Alizarin, with distillation (complexone)	0.05 - 1.5*	<b>D1179-93B<sup>2</sup></b>	Manual electrode	N/A <sup>^</sup>
D1179-72A <sup>2</sup>	Colorimetric SPADNS, with distillation	N/A <sup>^</sup>	<b>D4327-91<sup>7</sup></b>	Ion chromatography	N/A <sup>^</sup>
D1179-72B <sup>2</sup>	Potentiometric, with ISE	N/A <sup>^</sup>	4500F-B,D <sup>8</sup>	Manual distillation; colorimetric SPADNS	N/A <sup>^</sup>
43A; C <sup>3</sup>	Colorimetric SPADNS, with distillation	N/A <sup>^</sup>	<b>4500F-C<sup>7</sup></b>	Manual electrode	N/A <sup>^</sup>
413B <sup>3</sup>	Potentiometric, with ISE	N/A <sup>^</sup>	<b>4500F-E<sup>7</sup></b>	Automated Alizarin	N/A <sup>^</sup>
413E <sup>3</sup>	Automated Alizarin, w/distillation	N/A <sup>^</sup>	<b>4110B<sup>7</sup></b>	Ion chromatography	N/A <sup>^</sup>
380-75WE <sup>5</sup>	Automated electrode	N/A <sup>^</sup>	380-75WE <sup>5</sup>	Automated electrode	N/A <sup>^</sup>
129-71W <sup>4</sup>	Automated Alizarin, w/distillation	N/A <sup>^</sup>	129-71W <sup>4</sup>	Automated Alizarin	N/A <sup>^</sup>

<sup>1</sup> "Methods of Chemical Analysis of Water and Wastes (MCAWW)," EPA/600/4-79/020, EPA Environmental Monitoring Laboratory, Cincinnati, Ohio 45268. March 1983.

<sup>2</sup> *Annual Book of ASTM Standards*, 1994, Vol. 11.01, American Society for Testing and Materials, 1961 Race Street. Philadelphia, PA 19103.

<sup>3</sup> *Standard Methods for the Examination of Water and Wastewater*, 16<sup>th</sup> edition. American Public Health Association, American Water Works Association, Water Pollution Control Federation, 1985.

<sup>4</sup> "Fluoride in Water and Wastewater, Industrial Method 129-71W," Technicon Industrial Systems, Tarrytown, New York 10591. December 1972.

<sup>5</sup> "Fluoride in Water and Wastewater," Technicon Industrial Systems, Tarrytown, New York 10591. February 1976.

<sup>6</sup> "Methods for the Determination of Inorganic Substances in Environmental Samples," EPA/600/R-94/111, August 1993.

<sup>7</sup> *Standard Methods for the Examination of Water and Wastewater*, 19<sup>th</sup> edition. American Public Health Association, American Water Works Association, Water Pollution Control Federation.

\* MDLs are not specified for non-EPA (i.e., voluntary consensus standard) methods.

† Acceptance limits for inorganic compounds are listed at 40 CFR §141.23(k)(3)(ii).

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

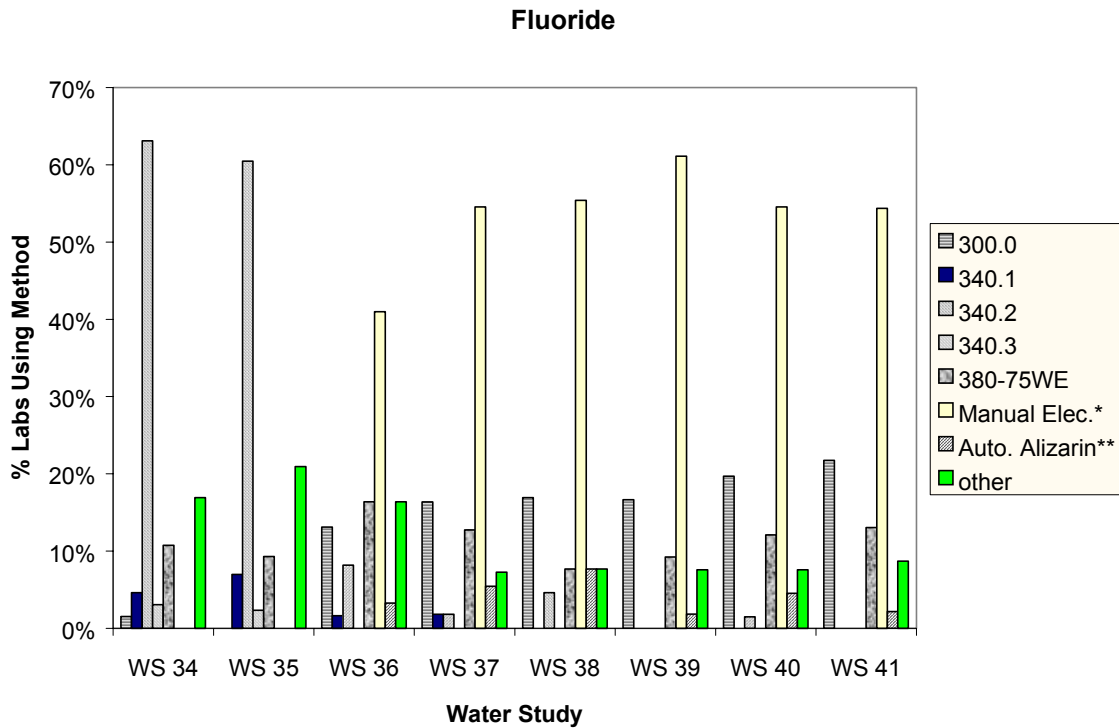
As shown in Table 39, multiple versions of methods exist for some technologies such as ion chromatography, automated electrode, automated alizarin, and manual electrode.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of the analytical techniques used by the EPA and State laboratories in WS 34 to 41 is shown in Figure 24. The results for "other" techniques include the use of other techniques identified by the laboratories participating in the WS study, as well as "unknown" methods, i.e., methods for which laboratories did not report any information on the type of method used.

**Figure 24. Distribution of Analytical Techniques by WS Study: Fluoride**



\* Manual electrode combines the methods D1179-93B (ASTM) and 4500F-C (SM).

\*\* Automated Alizarin combines the methods 4500F-E (SM) and 129-71W (Technicon).

Fluoride determination has involved the use of a wide variety of analytical methods. In earlier years, the most popular method was EPA Method 340.2, an ion selective electrode method, but its usage dropped significantly after WS 35. Since WS 36, method usage by laboratories participating in the water supply studies has been dominated by a non-EPA manual electrode method. Laboratories have also increasingly favored the use of EPA Method 300.0, though to a lesser extent relative to the manual electrode methods (D1179-93B, 4500F-C). A small fraction of participating laboratories have employed the voluntary consensus standard method 380-75WE (automated electrode) throughout WS 34 to 41.

**b. Results of the PQL Analysis**

The current PQL (500 µg/L or 0.5 mg/L) was originally determined from older PE water supply study data (WS 8 to 12, see USEPA, "Monitoring for Fluoride in Drinking Water: Revised," March 1986). The PQL was re-evaluated using a broader range of PE data including more recent studies (WS 24 to 41). Table 40 summarizes the results of these studies, providing the study number, the spiked or "true" value for the WS sample, the number of results from EPA

and State laboratories, and the actual responses returned by laboratories. For fluoride, EPA stipulates acceptance limits of  $\pm 10$  percent (§141.23(k)(3)(ii)).

**Table 40. Evaluation of Fluoride Data from WS Studies Using the 10% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (mg/L)	# Results from EPA and State Labs	% Labs Passing $\pm 10\%$ Acceptance Limits
29	0.33	33	84.8
34	1.10	65	93.8
26a	1.25	63	93.7
24b	1.30	62	96.8
40	1.40	66	60.6
25b	1.50	40	87.5
24a	1.72	62	93.5
37	1.80	55	87.3
32	2.00	67	92.5
25a	2.50	40	87.5
39	2.90	54	92.6
26b	3.41	64	89.1
35	3.80	43	97.7
27	4.35	37	86.5
38	4.70	65	98.5
31	5.70	33	97.0
41	6.20	46	95.3
33	6.60	35	94.3
36	7.20	61	95.1
30	7.90	61	93.4

The WS data indicate that EPA and State laboratories performed with high success rates in WS studies involving fluoride determination. On average, 91 percent of participating laboratories achieved results within the  $\pm 10$  percent acceptance window. The range of true value concentrations contained many spikes above the current PQL (0.5 mg/L), preventing a thorough analysis of laboratory capabilities at or below the PQL. For WS 29, the only study where the true value was below the PQL, 85 percent of laboratories successfully passed within the specified acceptance limits, well above the 75 percent criterion. Thus, it might be possible

for laboratories to pass the PE studies at even lower concentrations; however, such a conclusion is uncertain in the absence of additional data below the PQL value.

### Conclusion for Fluoride

The MDL of the only currently approved EPA method, EPA Method 300.0, is much lower than those of previous EPA methods and use of this method has increased gradually over time. However, EPA Method 300.0 still accounts for less than a quarter of method usage for fluoride and thus cannot be representative of overall laboratory analytical capabilities. Based on the graph of method usage over time (Figure 24), the method most commonly used in recent years is a manual electrode method, whose detection limit is not specified. Hence, the combined results of the method comparison and method usage over time suggest that analytical capabilities have improved for only a subset of EPA and State laboratories.

Based on the evaluation of quantitative WS data, the current PQL of 0.5 mg/L is still supportable and appropriate, although an even lower value might be attainable based on the high success rates of laboratories in water studies. However, this hypothesis would require further analysis using WS data at spiked concentrations below 0.5 mg/L, and such data are currently not available.

## **Glyphosate**

### Results of the Method Comparison

In 1992, the Agency listed EPA 547 as the only approved method for determination of glyphosate in drinking water, according to the Phase V rule for SOCs (57 FR 31776). Since that time, EPA has added Standard Method (SM) 6651, a voluntary consensus standard method, to the approved list. The MDL of SM 6651 is not specified, but it is reasonable to expect a similar detection limit compared to EPA Method 547 due to the similarity in determinative technique. Because the MDL of EPA Method 547 has not changed over time and no additional EPA methods were approved, the analytical capabilities for determination of glyphosate have remained constant since the approval of EPA Method 547.

**Table 41. Results of the Analytical Methods Comparison for Glyphosate (Newly Promulgated Methods are Indicated in Bold)**

Methods Approved At Promulgation		Currently Approved Methods (141.24)			
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 547 <sup>1</sup>	HPLC, post-column derivatization, fluorescence detection	5.99 - 8.99*	EPA 547 <sup>1</sup>	HPLC, post-column derivatization, fluorescence detection	5.99 - 8.99 *
			<b>SM 6651<sup>2</sup></b>	Liquid chromatography, post-column fluorescence	N/A <sup>◇</sup>

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement I," EPA/600/4-90/020, July 1990.

<sup>2</sup> 18<sup>th</sup> edition of *Standard Methods for the Examination of Water and Wastewater*, 1992, American Public Health Association, 1015 Fifteenth Street NW, Washington, DC 20005.

▲ Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).

† Acceptance limits for organic compounds are listed at are listed at 40 CFR §141.24(h)(19)(i).

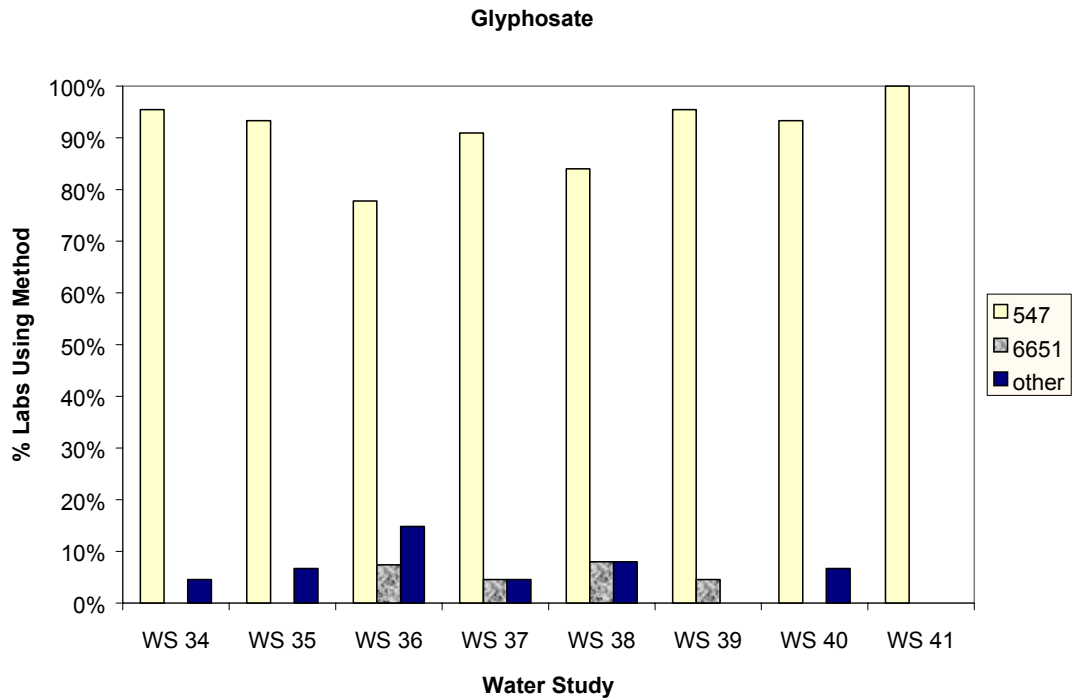
◇ MDLs are not specified for non-EPA (i.e., voluntary consensus standard) methods.

Results of the Analysis of the WS Data

a. Method Usage Over Time

Figure 25 is a plot of the distribution of analytical techniques used by the EPA and State laboratories during WS 34 to 41. As shown in Figure 25, the majority of the participating laboratories utilized EPA Method 547 for the determination of glyphosate. A small fraction of laboratories employed the voluntary consensus standard method, SM 6651 and a minority of laboratories used "other" methods or methods that were not specified.

**Figure 25. Distribution of Analytical Techniques by WS Study: Glyphosate**



b. Results of the PQL Analysis

Glyphosate currently has a PQL of 0.06 mg/L (or 60 µg/L) which was derived from previous WS results from EPA and State laboratories (WS 24 to 27, 56 FR 60949). In light of the availability of more recent PE WS data from WS studies 32 to 41, efforts were made to reassess the PQL. Table 42 summarizes the data from these water studies, indicating the study number, the true value of the WS sample, the number of results from laboratories, and the calculated percentage of laboratories whose results successfully passed within the designated acceptance limits for glyphosate ( $\pm 2$ \*S.D. as specified at 141.24(h)(19)(i).

Table 42 shows that the laboratories in these water studies were able to achieve results within the acceptance window with 73 to 100 percent passing rates. Using the 75 percent criterion for estimation of the PQL will not be meaningful for this dataset because of the high success rate and the lack of spike values at concentrations around the current PQL of 60 µg/L.



**Table 42. Evaluation of Glyphosate Data from WS Studies Using the  $\pm 2^*$  S.D. Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 2^*$ S.D. Acceptance Limits
33	308	11	72.7
40	375	30	96.7
38	410	25	88.0
34	438	22	90.9
32	447	15	86.7
36	528	27	96.3
41	560	17	100
39	620	22	95.5
35	665	15	86.7
37	780	22	77.3

### Conclusion for Glyphosate

Currently, EPA Method 547 is the sole approved EPA method for determination of glyphosate and its MDL has not changed over time (Table 41). A voluntary consensus standard method (SM 6651) with similar determinative technology is also approved for use, but was used minimally over the duration of the selected studies according to PE records (Figure 25). The MDL of SM 6651 is not specified but in all likelihood, resembles the MDL of EPA Method 547. Therefore, the analytical methods capabilities for glyphosate determination have stayed constant for most laboratories. The available numerical WS data do not support a reassessment of the PQL based on the 75 percent criterion, because the passing rates of laboratories typically exceeded this value. In addition, the spike concentration of the WS samples were much higher than the current PQL.

### **Heptachlor**

#### Results of the Method Comparison

The approved methods for the analysis of heptachlor, a Phase II SOC, in drinking water were listed in the NPDWRs (56 FR 3526). These original methods included gas chromatography with several extraction and/or detector variations (EPA Methods 505, 508, and 525.1). Since promulgation of the Phase II rule, EPA has removed one method (EPA Method 525.1) and approved the use of three new analytical methods (EPA Methods 508.1, 525.2, and 551.1). EPA

Method 508.1 is nearly seven times more sensitive than it was at the time of NPDWR promulgation, and represents the most sensitive of the new methods, with a current MDL of approximately 0.0015 µg/L. The MDLs of the newly approved methods, EPA Methods 508.1, 525.2, and 551.1, range from 0.5 to 15 times the MDLs of the most sensitive method at the time of the NPDWR promulgation.

**Table 43. Results of the Analytical Methods Comparison for Heptachlor (Newly Promulgated Methods are Indicated in Bold)**

MCL = 0.4 µg/L		Current PQL = 0.4 µg/L		DL <sup>▲</sup> = 0.04 µg/L		Acceptance Limit <sup>†</sup> = ± 45%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 505 <sup>1</sup>	Microextraction and GC	0.003	EPA 505 <sup>2</sup>	Microextraction and GC	0.003		
EPA 508 <sup>1</sup>	GC with ECD	0.01 <sup>■</sup>	EPA 508 <sup>2</sup>	GC with ECD	0.0015		
EPA 525.1 <sup>1</sup>	LSE and GC/MS	0.04 - 0.2 <sup>*</sup>	<b>EPA 508.1<sup>2</sup></b>	LSE and GC with ECD	0.005		
			<b>EPA 525.2<sup>2</sup></b>	LSE and GC/MS	0.059 - 0.15 <sup>*</sup>		
			<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.002 - 0.081 <sup>*</sup>		

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).  
<sup>†</sup> Acceptance limits for organic compounds are listed at are listed at 40 CFR §141.24(h)(19)(i).  
<sup>\*</sup> Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.  
<sup>■</sup> EDL = estimated detection limit, used to approximate the MDL.

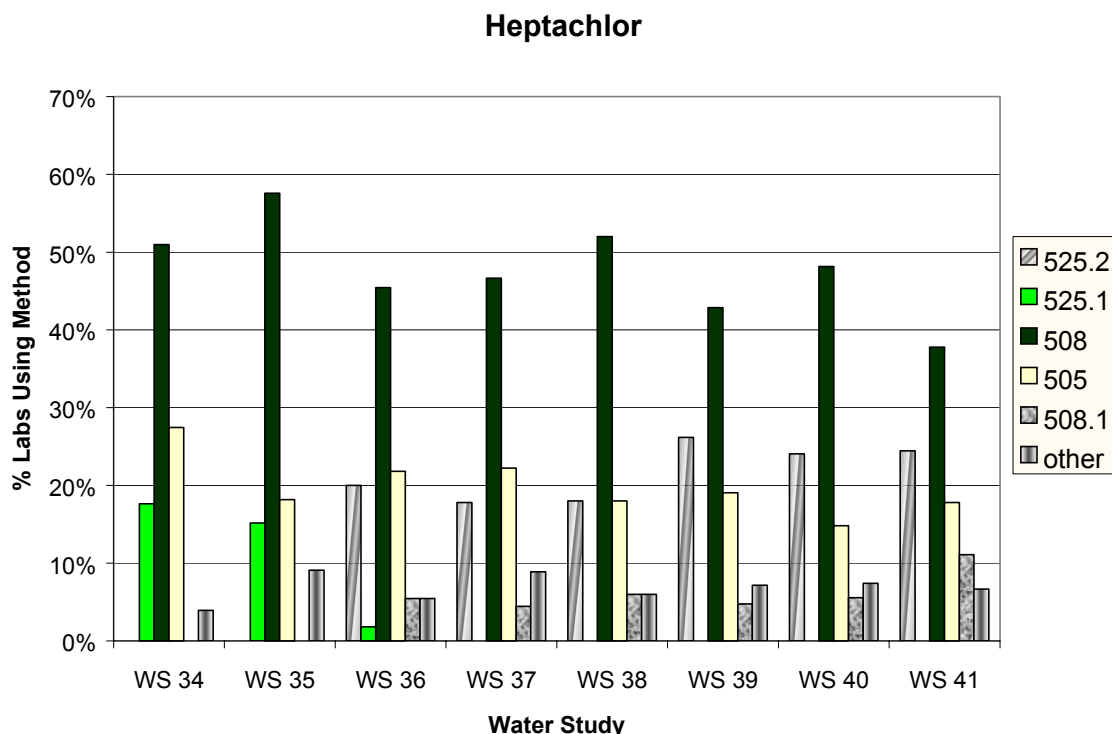
### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

Figure 26 is a plot of the distribution of analytical techniques used by the EPA and State laboratories in WS 34 to 41. The "other" techniques represent methods which were not specifically identified by participating laboratories or were otherwise unknown. As shown in Figure 26, the majority of laboratories used EPA Method 508 for determination of heptachlor in WS studies 34 to 41. EPA Method 525.1, which was used in earlier WS studies, was replaced by

EPA Method 525.2 after WS 36. Other than this shift, there has been little overall change in method usage over time for this contaminant.

**Figure 26. Distribution of Analytical Techniques by WS Study: Heptachlor**



b. Results of the PQL Analysis

The original PQL for heptachlor (0.4 µg/L) was derived via multiplication of the IMDL by a factor of 10 (56 FR 3552). With the availability of recent PE WS data, efforts were made to reassess the PQL using data from WS studies 24 to 41. Table 44 summarizes the data from these WS studies, indicating the study number, the true value of the WS sample, the number of results from EPA and State laboratories, and the calculated percentage of laboratories whose results successfully passed within federally designated acceptance limits for heptachlor. These acceptance limits are specified in 40 CFR §141.24(h)(19)(i) to be ± 45 percent from the true concentration of the spike sample.

The numerical data in Table 44 demonstrate that the laboratories in these WS studies are able to achieve results within the  $\pm 45$  percent acceptance window with 82 to 100 percent passing rates. Using the 75 percent criterion for estimation of the PQL, the dataset are not adequate to re-evaluate the PQL. Further, the majority of the spike samples had concentrations in excess of the current PQL of 0.4  $\mu\text{g/L}$ . Nevertheless, the high passing rates of laboratories at concentrations around the PQL (e.g., 100 percent passing for a true value equal to 0.11  $\mu\text{g/L}$ ) support a possible reconsideration of the current PQL.

**Table 44. Evaluation of Heptachlor Data from WS Studies Using the 45% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 45\%$ Acceptance Limits
25b	0.113	18	100
24a	0.263	33	94
29	0.370	24	95.8
32	0.443	44	94.6
37	0.563	42	95.6
27	0.642	24	100
39	0.667	36	97.6
36	0.751	51	94.5
41	0.83	34	93
34	0.914	45	90.2
38	1.20	48	94
30	1.38	47	93.6
25a	1.42	19	100
31	1.44	25	84.6
33	1.73	24	90.6
26	2.27	31	90.3
40	2.33	50	90.7
35	2.54	30	90.9
24b	3.15	33	93.9

## Conclusion for Heptachlor

The plot of the method usage over time (from WS studies) indicates consistent use of two methods, EPA Methods 508 and 505 over the duration of the selected studies, with laboratories slightly favoring usage of EPA Method 508. EPA Method 508 represents the most sensitive currently approved method, according to Table 43. The overall level of analytical sensitivity for this contaminant has improved approximately seven-fold from the time of NPDWR promulgation. The available numerical WS data do not support a reassessment of the PQL based on the 75 percent criterion, because the passing rates of laboratories always exceeded this value. Because such high passing rates were observed for some low spiked concentrations (e.g., 100 percent laboratory success for a concentration three times lower than the current PQL), it is possible that a lowered PQL might be appropriate. However, the desired quantitative reassessment of the PQL could not be performed using the historical approach.

## **Heptachlor Epoxide**

### Results of the Method Comparison

The approved methods designated in the Phase II rule for heptachlor epoxide (56 FR 3526) included EPA Methods 505, 508, and 525.1. These methods are variations of GC methods with different extraction and/or detection techniques as shown in Table 45. The most sensitive of the currently approved methods is EPA Method 508.1 (GC with ECD), with an MDL of 0.001 µg/L. This method was introduced subsequent to the promulgation of the Phase II rule, along with two additional methods, EPA Methods 525.2 and 551.1.

**Table 45. Results of the Analytical Methods Comparison for Heptachlor Epoxide (New Methods Indicated in Bold)**

MCL = 0.2 µg/L		Current PQL = 0.2 µg/L	DL <sup>▲</sup> = 0.02 µg/L	Acceptance Limit <sup>†</sup> = ± 45%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 505 <sup>1</sup>	Microextraction and GC	0.004	EPA 505 <sup>2</sup>	Microextraction and GC	0.004
EPA 508 <sup>1</sup>	GC with ECD	0.015*	EPA 508 <sup>2</sup>	GC with ECD	0.0059
EPA 525.1 <sup>1</sup>	LSE and GC/MS	0.2 - 0.3*	<b>EPA 508.1<sup>2</sup></b>	LSE and GC with ECD	0.001
			<b>EPA 525.2<sup>2</sup></b>	LSE and GC/MS	0.048-0.13*
			<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.002 - 0.202*

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

▲ Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).

† Acceptance limits for organic compounds are listed at are listed at 40 CFR 141.24(h)(19)(i).

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

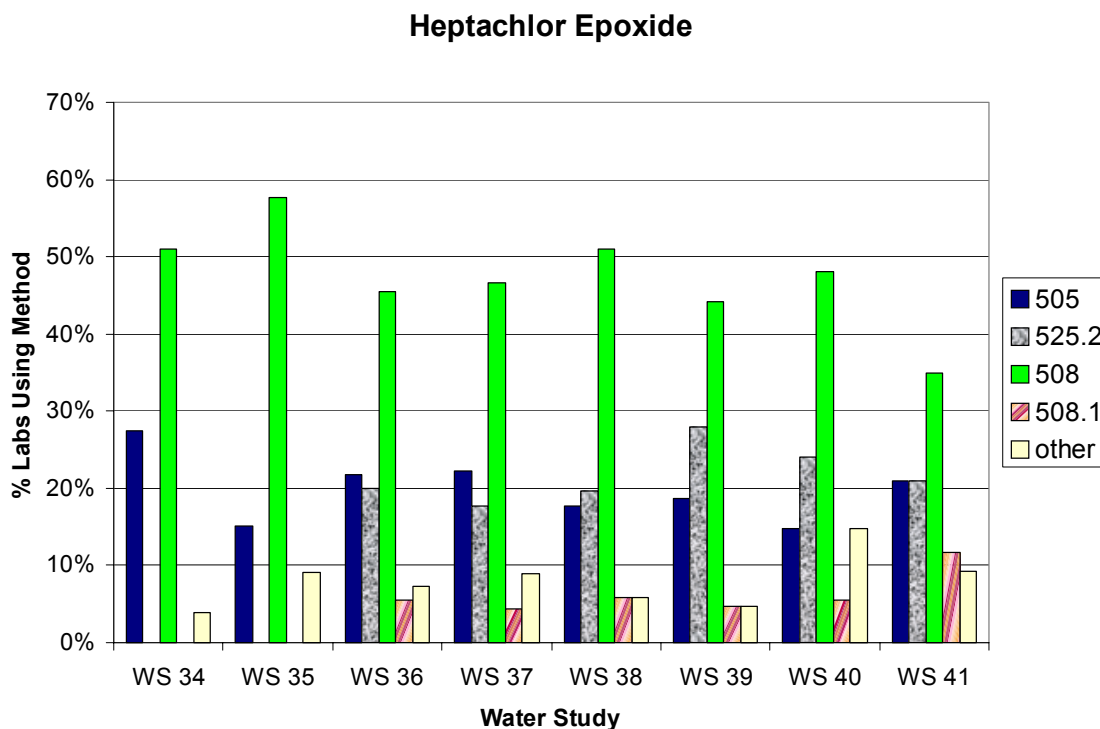
▪ EDL = estimated detection limit, used to approximate the MDL.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 27 illustrates the distribution of the analytical techniques used by the EPA and State laboratories in WS 34 to 41. Analytical methods which were not reported by laboratories or were otherwise unknown were grouped into the category of "other." As illustrated by Figure 27, EPA Method 508 represents the most commonly used method for heptachlor epoxide WS analyses. EPA Methods 505 and 525.2 were used to a lesser degree; together, these methods account for 40 to 50 percent of the techniques used during the indicated time frame.

**Figure 27. Distribution of Analytical Techniques by WS Study: Heptachlor Epoxide**



b. Results of the PQL Analysis

The PQL for heptachlor epoxide is currently 0.2 µg/L. EPA obtained this value by multiplying the estimated IMDL by a factor of 10 (56 FR 3552). The Agency wished to re-evaluate the PQL using available WS data from WS studies 24 to 41 (although no data were available for WS 28). Table 46 summarizes these data, indicating the study number, the true value of the sample, the number of non-zero responses from laboratories, and the calculated passing rates of laboratories who satisfied the specified acceptance limits for heptachlor epoxide. These limits are designated as ± 45 percent (40 CFR §141.24(h)(19)(i)).

**Table 46. Evaluation of Heptachlor Epoxide Data from WS Studies Using the 45% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 45% Acceptance Limits
24a	0.161	33	91
26a	0.198	31	87
29	0.267	25	92
39	0.340	43	98
32	0.346	55	95
37	0.403	45	93
27	0.533	24	88
34	0.55	51	94
41	0.63	43	95
33	0.679	31	94
38	0.742	51	96
25a	0.771	21	100
30	0.85	47	98
25b	0.094	20	100
40	1.48	54	94
35	1.49	33	97
24b	1.61	33	88
26b	1.81	30	97
31	1.92	27	82

The values in the last column of Table 46 demonstrate that the laboratories participating in these WS studies achieved a very high rate of success with respect to the designated acceptance limits. While the 75 percent criterion has historically been used to evaluate PQLs, such an analysis would be impossible for heptachlor epoxide because none of the laboratories exhibited success rates below this threshold. Thus, a regression of the WS results was not performed, as the data did not appear to contribute meaningfully to recalculate the PQL. In addition, the concentrations of the spike samples generally exceeded the concentration of interest, the PQL (0.2 µg/L).



## Conclusion for Heptachlor Epoxide

According to the method comparison results, the introduction of three new analytical methods since the promulgation of the Phase II rule has not presented any significant improvements in overall method sensitivity. The most sensitive method (EPA Method 508) at the time of NPDWR promulgation is no longer the most sensitive method today, due to its MDL change, as evident in Table 45. Based on the analysis of method usage over time, EPA Method 508 is more widely used than the current most sensitive method, EPA Method 508.1. In light of the usage patterns for heptachlor epoxide, analytical method capabilities for the overall contaminant are probably similar to those of the original methods. Although the WS data did not provide enough information to perform a regression analysis, the passing rates at concentrations around the current PQL of 0.2 µg/L suggest that the PQL could be lower.

## **Hexachlorobenzene**

### Results of the Method Comparison

Hexachlorobenzene, a Phase V SOC, had three approved methods for drinking water analysis at the time NPDWRs were promulgated (57 FR 31776). All three original methods consisted of GC with extraction and/or detector variations (EPA Method 505, microextraction; 508, ECD; and 525.1, LSE). Since the Phase V rule was promulgated, the Agency has retained two of the old methods, removed EPA Method 525.1, and approved three additional analytical methods, EPA Methods 508.1, 525.2, and 551.1 (LSE, ECD; LSE; and LLE, ECD, respectively). As shown in Table 47, the most sensitive method of both the old and new categories is EPA Method 508.1, with an MDL of 0.001 µg/L.

**Table 47. Results of the Analytical Methods Comparison for Hexachlorobenzene (Newly Promulgated Methods are Indicated in Bold)**

MCL = 1 µg/L		Current PQL = 1 µg/L	DL <sup>▲</sup> = 0.1 µg/L	Acceptance Limit <sup>†</sup> = ± 2 x S.D.	
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 505 <sup>1</sup>	Microextraction and GC	0.002	EPA 505 <sup>2</sup>	Microextraction and GC	0.002
EPA 508 <sup>1</sup>	GC with ECD	0.0077 <sup>▲</sup>	EPA 508 <sup>2</sup>	GC with ECD	0.0077
EPA 525.1 <sup>1</sup>	LSE and GC/MS	0.1 - 0.2 <sup>*</sup>	<b>EPA 508.1<sup>2</sup></b>	LSE and GC with ECD	0.001
			<b>EPA 525.2<sup>2</sup></b>	LSE and GC/MS	0.049 - 0.13 <sup>*</sup>
			<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.001 - 0.003 <sup>*</sup>

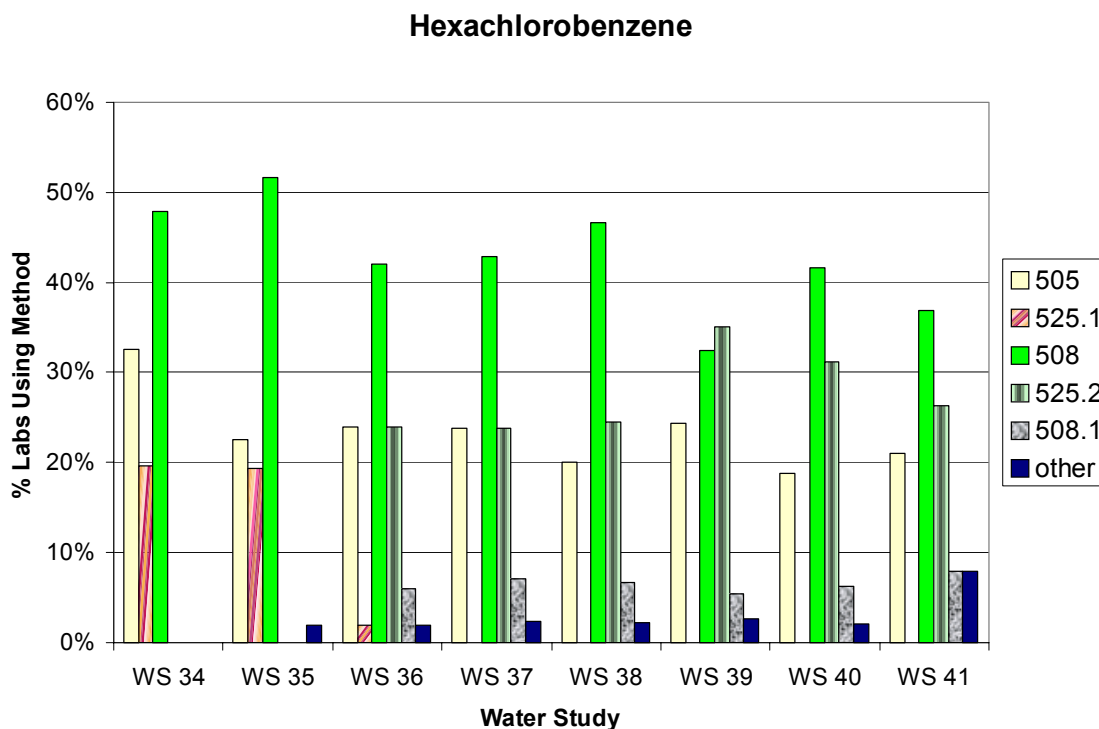
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95-131, August 1995.  
<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).  
<sup>†</sup> Acceptance limits are listed at 40 CFR §141.24(h)(19)(i). S.D. = standard deviation.  
<sup>\*</sup> Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.  
<sup>▲</sup> EDL = estimated detection limit, used to approximate the MDL.

Results of the Analysis of the WS Data

a. Method Usage Over Time

The distribution of the analytical techniques used by EPA and State laboratories in PE WS studies 34 to 41 is illustrated by Figure 28. Methods designated as "other" include methods for which laboratories did not specify the method used or were otherwise unknown. As shown by Figure 28, laboratories responding to these PE WS studies mainly determined hexachlorobenzene using EPA Method 508, with the exception of one study (WS 39) where use of EPA Method 525.2 was more prevalent. Use of EPA Method 525.2 began to appear in WS 36 and has increased slightly in recent years. The analytical methods used most recently (i.e., WS 41) for determination of hexachlorobenzene are divided between the several available current methods. Use of EPA Method 508.1 was quite small relative to the other methods used.

**Figure 28. Distribution of Analytical Techniques by WS Study: Hexachlorobenzene**



b. Results of the PQL analysis

The original PQL of hexachlorobenzene (1 µg/L, 56 FR 3552) was determined using PE data from WS 27. The data used for the re-evaluation of the PQL were taken from WS 27 through 41. The results of these WS studies are summarized in Table 48, which provides the study number, the spiked value for the WS sample, the number of results from EPA and State laboratories, and the results evaluated using acceptance limits of  $\pm 2 \times S.D$  (as specified at 141.24(h)(19)(i)).

It appears from the numerical data that EPA Regional and State laboratories are able to achieve successful results within the  $\pm 2 \times S.D.$  acceptance limits at rates well above the 75 percent criterion typically used for determining a PQL. Thus, a regression analysis using the available PE data was not attempted due to the nature of these data. On average, the success rates of the WS laboratories were about 92 percent over spike concentrations ranging from 0.4 to 3.6 µg/L. The high passing rates at concentrations around the PQL of 1 µg/L suggest that the PQL could be lower.

**Table 48. Evaluation of Hexachlorobenzene Data from WS Studies Using the 2 x S.D. Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 2 x S.D. Acceptance Limits
29	0.417	18	83
27	0.483	15	100
38	0.538	45	93
35	0.635	31	90
30	0.667	38	95
37	0.806	42	95
36	0.847	50	88
32	0.857	44	89
41	1.03	38	97
33	1.32	29	93
39	1.68	37	97
31	2.4	23	87
40	2.9	48	92
34	3.57	46	89

Conclusion for Hexachlorobenzene

Together, the results from the method comparison and the method usage over time show that the one of the most sensitive methods, EPA Method 508, has been consistently used since the promulgation of the NPDWRs and is one of the more frequently used methods for determination of hexachlorobenzene. Thus, the MDL for the overall contaminant appears to be unchanged since the original methods were promulgated. Other less sensitive methods that are also currently in use include EPA Methods 505 and 525.2. Examination of the quantitative PE WS data reveal that the percentage of laboratories successfully passing the proficiency exams is too high to provide insight toward a re-evaluated PQL. However, the high laboratory passing rates at concentrations around the current PQL are suggestive of a change in the PQL.

## Hexachlorocyclopentadiene

### Results of the Method Comparison

With the promulgation of the NPDWRs for Phase V SOCs, the approved methodology for determination of hexachlorocyclopentadiene included two EPA gas chromatography methods, EPA Methods 505 and 525.1. Since that time, EPA Method 525.1 was discontinued and four new methods were added (EPA Methods 525.2, 508.1, 551.1, and 508). As indicated in Table 49, the MDLs for the newer methods (EPA Methods 508.1 and 551.1) are lower than the MDLs of both original methods, while the MDLs of EPA Methods 505 and 525.2 are comparable to the MDL of the original EPA Method 505.

**Table 49. Results of the Analytical Methods Comparison for Hexachlorocyclopentadiene (Newly Promulgated Methods are Indicated in Bold)**

MCL = 50 µg/L		Current PQL = 1 µg/L	DL <sup>▲</sup> = 0.1 µg/L	Acceptance Limit <sup>†</sup> = ± 2*S.D.	
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 505 <sup>1</sup>	Microextraction and GC	0.13	EPA 505 <sup>2</sup>	Microextraction and GC	0.13
EPA 525.1 <sup>1</sup>	LSE and GC/MS	0.03 - 0.1*	<b>EPA 525.2<sup>2</sup></b>	LSE and GC/MS	0.072 - 0.16*
			<b>EPA 508<sup>2</sup></b>	GC with ECD	N/A
			<b>EPA 508.1<sup>2</sup></b>	LSE and GC with ECD	0.004
			<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.018

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).

<sup>†</sup> Acceptance limits for organic compounds are listed at 40 CFR §141.24(h)(19)(i).

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

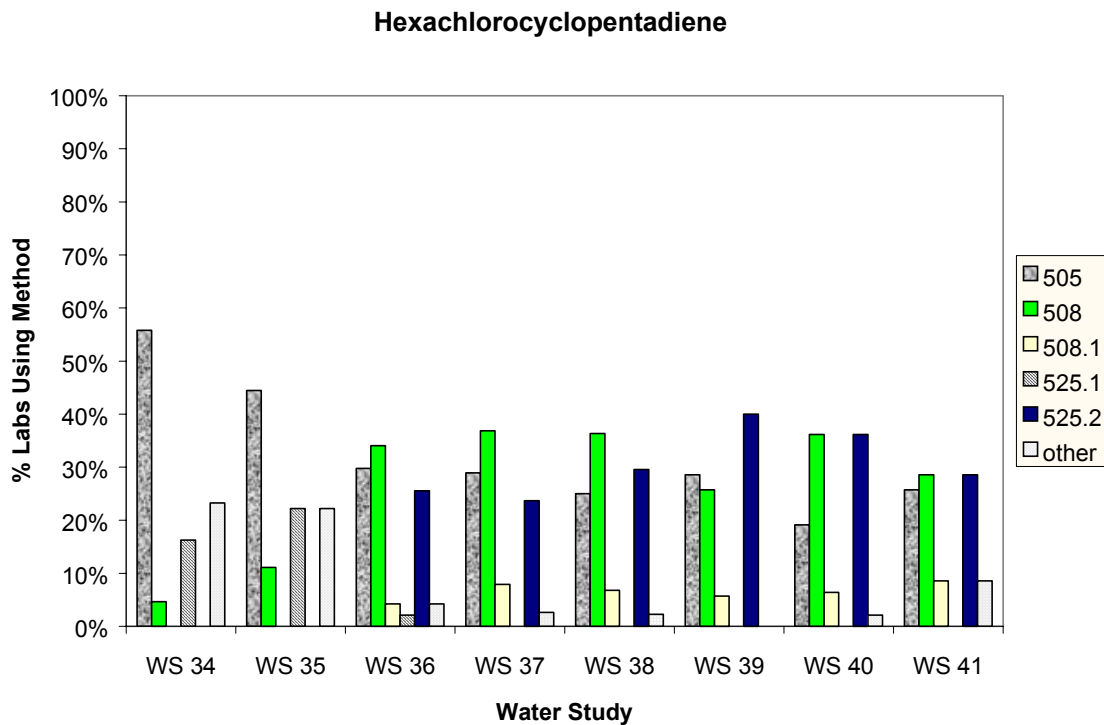
◇ MDLs are not specified for non-EPA (i.e., voluntary consensus standard) methods.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 29 illustrates the distribution of the analytical techniques used by EPA and State laboratories in WS studies 34 to 41. The results for "other" techniques in this figure include the use of any other technique identified by the laboratories participating in the WS study, as well as methods for which laboratories did not report any information on the type of method used. The distribution of methods used by EPA and State laboratories has been fairly well-mixed. During WS 34 and 35, EPA Method 505 was the predominant choice for determination of hexachlorocyclopentadiene. From WS 36 to 41, however, use of EPA Methods 508 and 525.2 began to eclipse that of EPA Method 505. The remaining methods were used minimally throughout WS 34 to 41.

**Figure 29. Distribution of Analytical Techniques by WS Study: Hexachlorocyclopentadiene**



### b. Results of the PQL Analysis

The current PQL of 1.0 µg/L was originally set from PE data from WS 23 through 27 (57 FR 31801). The PQL re-evaluation used data from WS 24 to 41. Table 50 summarizes the results of these studies, providing the study number, the spiked value for the WS sample, the number of results from EPA Regional and State laboratories, and the passing rates of these laboratories

when evaluated using an acceptance limit of  $\pm$  twice the standard deviation (as specified at 141.24(h)(19)(i)).

**Table 50. Evaluation of Hexachlorocyclopentadiene Data from WS Studies Using the  $\pm$  2\* S.D. Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm$ 2* S.D. Acceptance Limits
25b	0.267	11	54.5
29	0.313	14	92.9
26b	0.367	21	95.2
24b	0.736	21	95.2
27	0.774	14	100
32	0.823	41	87.8
31	1.11	16	93.8
40	1.22	47	93.6
38	1.47	44	93.2
30	1.72	35	100
35	1.84	27	92.6
25a	1.87	12	83.3
41	1.93	35	97.1
34	2.14	43	95.3
26a	2.47	21	81.0
37	2.49	40	95.0
33	2.92	26	96.2
39	3.26	35	94.3
24a	4.42	21	90.5
36	4.71	47	93.6

As shown in Table 50, laboratories exhibited passing rates over 75 percent in all WS studies with the exception of one (WS 25b). Because the passing rates for laboratories determining hexachloropentadiene were well above 75 percent, a re-evaluation of the PQL was not feasible. However, the demonstrated success of laboratories at concentrations well below the existing PQL of 1  $\mu\text{g/L}$  (e.g., WS 27, 29 and 32) suggests that a lower PQL may be possible.

## Conclusion for Hexachlorocyclopentadiene

The method comparison results indicate that method sensitivities have either remained similar or improved slightly (e.g., for EPA Methods 508.1 and 551.1). A review of method usage over time shows that EPA Methods 505, 525.2, and 508 were the most commonly used methods in recent WS studies. Because the more sensitive methods were not used with great frequency, it would appear that method capabilities for hexachlorocyclopentadiene have remained more or less unchanged over time. Although it was not possible to recalculate the PQL, high laboratory passing rates at concentrations below the current PQL suggest that a lower PQL may be feasible.

## **Mercury**

### Results of the Method Comparison

The analytical methods approved for the determination of mercury under the NPDWRs for Phase II IOCs include EPA Methods 245.1 and 245.2 (56 FR 3526). Since the time of promulgation, EPA Method 200.8 has been approved. The currently approved methods for mercury determination include EPA Methods 200.8, 245.1, and 245.2. Table 51 summarizes the MDLs for both the original and current approved versions of the methods. As shown in Table 51, the MDLs for current methods are equal in sensitivity to past methods.



**Table 51. Results of the Analytical Methods Comparison for Mercury (Newly Promulgated Methods Indicated in Bold)**

MCL = 2 µg/L    Current PQL = 0.5 µg/L    DL <sup>^</sup> = 0.2 µg/L    Acceptance Limit <sup>†</sup> = ± 30%					
Methods Approved At Promulgation			Currently Approved Methods		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 245.1 <sup>1</sup>	Manual, Cold Vapor	0.2 <sup>°</sup>	EPA 245.1 <sup>1</sup>	Manual, Cold Vapor	0.2 <sup>°</sup>
EPA 245.2 <sup>1</sup>	Automated, Cold Vapor	0.2 <sup>°</sup>	EPA 245.2 <sup>1</sup>	Automated, Cold Vapor	0.2 <sup>°</sup>
			<b>EPA 200.8<sup>2</sup></b>	ICP/MS	0.2
D3223-80 <sup>4</sup>	Manual, Cold Vapor	N/A <sup>*</sup>	D3223-91 <sup>5</sup>	Manual, Cold Vapor	N/A <sup>*</sup>
SM 303F <sup>3</sup>	Manual, Cold Vapor	N/A <sup>*</sup>	SM 3112B <sup>6</sup>	Manual, Cold Vapor	N/A <sup>*</sup>

<sup>1</sup> "Methods for Chemical Analysis of Water and Wastes," EPA/600/4-79/020, March 1983.  
<sup>2</sup> "Methods for the Determination of Metals in Environmental Samples—Supplement I," EPA/600/R-94/111, May 1994.  
<sup>3</sup> 16<sup>th</sup> edition of *Standard Methods for the Examination of Water and Wastewater*, 1985. American Public Health Association, American Water Works Association, Pollution Control Federation.  
<sup>4</sup> *Annual Book of ASTM Standards*, Vol. 11.01, American Society for Testing and Materials, 1961 Race Street, Philadelphia, PA 19103.  
<sup>5</sup> *Annual Book of ASTM Standards*, 1994 and 1996, Vols. 11.01 and 11.02, American Society for Testing and Materials.  
<sup>6</sup> 18<sup>th</sup> and 19<sup>th</sup> editions of *Standard Methods for the Examination of Water and Wastewater*, 1992 and 1995, American Public Health Association.  
<sup>\*</sup> Regulatory DLs for inorganic compounds are listed at 40 CFR §141.23(a)(4)(i) and depend on analytical method.  
<sup>†</sup> Acceptance limits are listed at 40 CFR §141.23(k)(3)(ii) for inorganic compounds.  
<sup>°</sup> This value is the lower limit of the analytical range and was not determined using the MDL procedure.

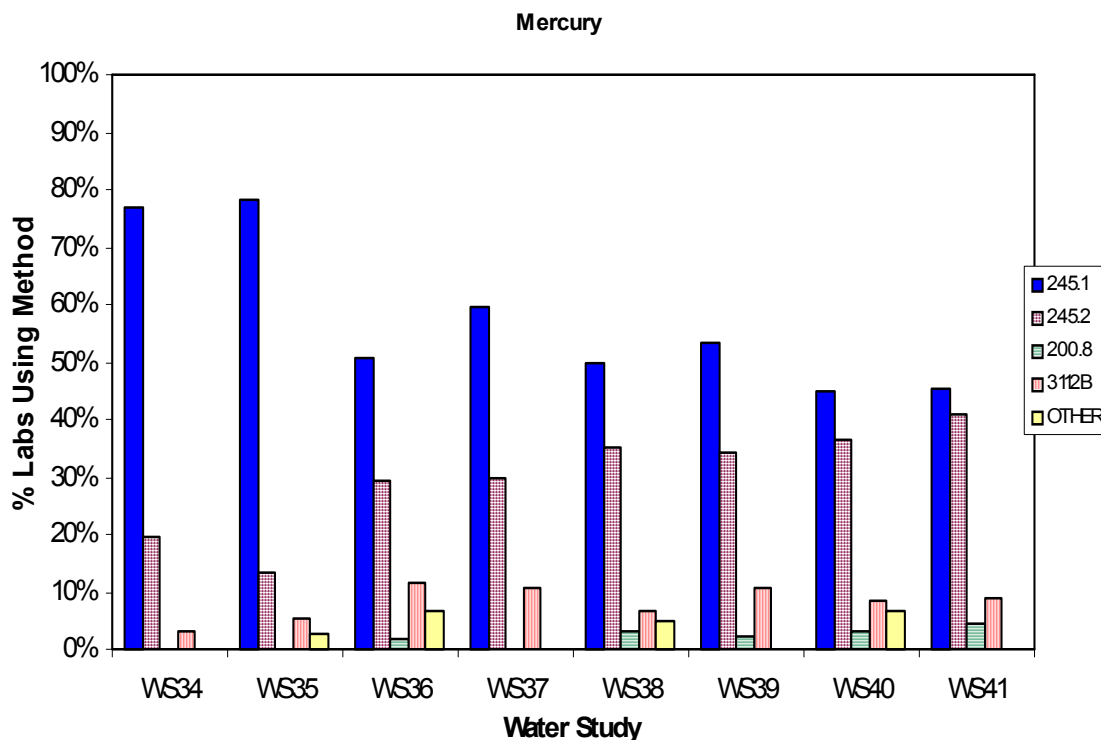
## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 30 shows the distribution of analytical techniques used by EPA and State laboratories for WS studies 34 to 41. The results for "other" techniques in this figure include the use of any other technique identified by the laboratories participating in the WS study, as well as "unknown" methods, (i.e., methods for which laboratories did not report any information on the type of method used).

As shown in Figure 30, EPA Method 245.1 (automated cold vapor) was the most widely used method in WS 34 and 35. From WS 36 to WS 41, EPA Methods 245.1 (manual cold vapor) and 245.2 were most commonly used.

**Figure 30. Distribution of Analytical Techniques by WS Study: Mercury**



b. Results of the PQL Analysis

The current PQL of 0.5 µg/L was originally set using previous PE data (56 FR 3549). With the availability of more current data from WS 24 to 41, a PQL re-evaluation was attempted. Table 52 summarizes the results of these water studies, providing the study number, the spiked value for the WS sample, the number of results from EPA and State laboratories, and the mercury results evaluated using an acceptance limit of ± 30 percent, as designated in 40 CFR § 141.23(k)(3)(ii).

**Table 52. Evaluation of Mercury Data from WS Studies Using the 30% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 30% Acceptance Limits
29	0.506	31	87.1
25a	0.720	37	70.3
35	0.897	37	94.6
31	0.908	31	87.1
27	1.29	33	97.0
40	1.50	60	93.3
33	1.77	34	94.1
24b	2.16	59	94.9
26b	2.47	61	93.4
36	3.00	61	95.1
30	3.46	62	100.0
39	3.80	47	83.0
25b	4.32	37	91.9
26a	4.56	61	96.7
34	5.09	61	100.0
24a	5.76	59	96.9
41	5.82	44	100.0
32	6.23	64	96.9
38	6.39	60	95.0
37	8.16	47	91.5

The data from the available WS studies were not conducive to recalculation of the PQL because the percentage of labs passing (with the exception of one study) generally exceeded the standard 75 percent passing criterion needed to evaluate the PQL using either a linear regression or graphical approach. In addition, the majority of the true values were above the original PQL of 0.5 µg/L. However, at values slightly above the current PQL (e.g., WS 29 and 25a) the passing rates of 87 and 70 percent would indicate that the current PQL is most likely in the appropriate range.

## Conclusion for Mercury

Since the promulgation of the NPDWR for mercury, EPA Method 200.8 has been added to the original two analytical methods approved for the measurement of mercury in drinking water (EPA Methods 245.1 and 245.2). According to the distribution of analytical methods usage over time, EPA Method 245.1 was more widely used than EPA Method 245.2 during WS 34 to 35. From WS 36 to 41, these two methods were utilized with approximately the same frequency. Upon review of the WS data, a high percentage of laboratories successfully passing the WS studies prevented a recalculation of the PQL at the 75 percent passing rate. Thus, the available PE data provided little evidence for a lower PQL using this approach. Observation of laboratory passing rates at concentrations slightly above the current PQL of 0.5 µg/L suggests that this PQL is still in all likelihood appropriate.

## **Methoxychlor**

### Results of the Method Comparison

At the promulgation of the NPDWRs for methoxychlor, three methods were approved for the determination of this compound: EPA Methods 505, 508, and 525.1 (56 FR 3552). Since that time, use of EPA Method 525.1 has been discontinued and additional methods have been approved, including EPA Methods 508.1, 525.2, and 551.1. All approved methods utilize GC in various forms. As shown in Table 53, the MDL of EPA Method 505 has remained unchanged over time, whereas the MDL of EPA Method 508 has improved in sensitivity. The MDLs of the newer methods (in bold) range from 0.003 to 0.13 µg/L. The most sensitive method currently available (EPA Method 508.1) has about 125 times the sensitivity of the original EPA Method 505.

**Table 53. Results of the Analytical Methods Comparison for Methoxychlor (Newly Promulgated Methods in Bold)**

MCL = 40 µg/L		Current PQL = 10 µg/L	DL <sup>^</sup> = 0.1 µg/L	Acceptance Limit <sup>†</sup> = ± 45%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 505 <sup>1</sup>	Microextraction and GC	0.96	EPA 505 <sup>2</sup>	Microextraction and GC	0.96
EPA 508 <sup>1</sup>	GC with ECD	0.05	EPA 508 <sup>2</sup>	GC with ECD	0.022
EPA 525.1 <sup>1</sup>	LSE and GC/MS	0.04 - 0.3*	<b>EPA 508.1<sup>2</sup></b>	LSE and GC with ECD	0.003
			<b>EPA 525.2<sup>2</sup></b>	LSE and GC/MS	0.033 - 0.13*
			<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.008 - 0.023*

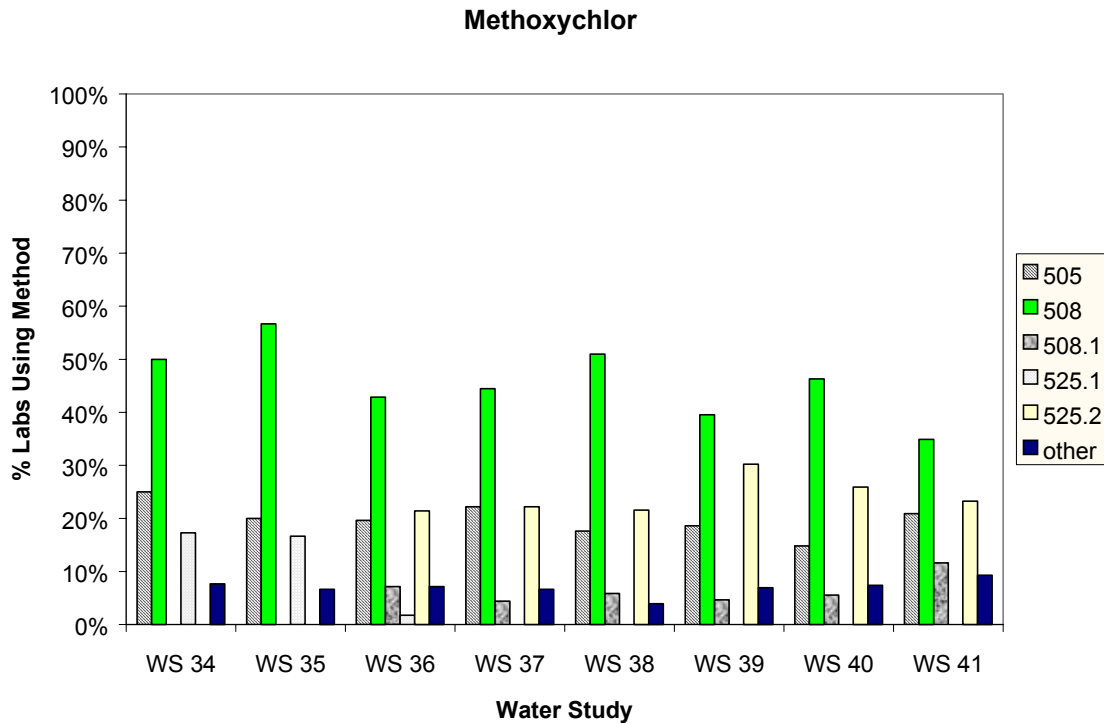
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.  
<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.  
<sup>^</sup> Regulatory DLs for organic compounds are listed at 40 CFR § 141.24(h)(18).  
<sup>†</sup> Acceptance limits for organic compounds are listed at 40 CFR § 141.24(h)(19)(i).  
\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

The distribution of methods used by EPA and State laboratories participating in WS 34 to 41 is depicted in Figure 31. The category of "other" includes any unidentified techniques used by participating laboratories. As Figure 31 shows, EPA Method 508 was used most widely by participating laboratories during WS 34 to 41. As EPA Method 525.1 was phased out in WS 36, use of newer methods, EPA Methods 525.2 and 508.1, began. EPA Method 505 and other unidentified methods were used intermittently throughout WS 34 to 41.

**Figure 31. Distribution of Analytical Techniques by WS Study: Methoxychlor**



b. Results of the PQL Analysis

The PQL for methoxychlor was originally proposed at 0.001 mg/L, but was finalized in 1991 at 0.01 mg/L (or 10 µg/L). The method for deriving this value was multiplication of the detection limit by a factor of ten (56 FR 3551). Recently, with the availability of more recent laboratory performance data from WS 24 to 41, a reassessment of the existing PQL was conducted. Table 54 summarizes each WS result including the spiked (or "true") concentration in the test sample, the number of participating laboratories, and the calculated percentage of laboratories successfully passing within the specified ± 45 percent acceptance limit for methoxychlor (141.24(h)(19)(i)).

**Table 54. Evaluation of Methoxychlor Data from WS Studies Using the 45% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 45% Acceptance Limits
26b	2.18	59	98.3
25a	3.17	37	94.6
29	5.21	33	97.0

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 45% Acceptance Limits
24b	5.37	61	93.4
31	12.9	32	81.3
34	14.2	52	92.3
27	16.6	39	89.7
32	17.4	59	88.1
37	18.5	45	93.3
41	26.8	43	90.7
36	28.9	56	92.9
30	34.2	54	88.9
38	34.8	51	88.2
33	42.3	35	97.1
40	42.8	54	96.3
25b	48.8	37	94.6
39	53.8	43	93.0
35	62.6	30	96.7
24a	73.2	62	91.9
26a	92.8	59	93.2

Table 54 reveals that the percentage of passing laboratories was well above the 75 percent criterion, and thus, the PQL could not be re-evaluated using the regression technique. Table 53 also shows that even at very low concentrations (e.g., one-fifth of the existing PQL), a large percentage of EPA and State laboratories was able to pass the WS study, suggesting that a lower PQL may be feasible.

### Conclusion for Methoxychlor

EPA Methods 505, 508, and 525.1 were originally approved for the determination of methoxychlor with the promulgation of the NPDWRs for Phase II SOCs in 1991. Since then, EPA Method 525.1 has been removed while EPA Methods 508.1, 525.2, and 551.1 have been added to the approved list. A review of the method usage over time shows that laboratories participating in WS 34 to 41 utilized EPA Method 508 more frequently than all other approved methods, although this margin of difference began to decrease in more recent WS studies. A revised PQL for methoxychlor could not be determined due to the large percentage of laboratories surpassing the 75 percent criterion. However, the data do reveal a possible basis for lowering the PQL based on the high success rates of laboratories at concentrations well below the current PQL.

## Oxamyl

### Results of the Method Comparison

Oxamyl is one of several SOCs first regulated under the Phase V Rule (57 FR 31776). Under this rule, EPA Method 531.1 (a HPLC method) was approved for determination of oxamyl. More recently, the Agency has approved an additional analytical method, Standard Method (SM) 6610 (HPLC followed by post-column reaction and fluorescence detection), while retaining the use of EPA Method 531.1. The MDL for SM 6610 is not specified, as methods published by organizations outside the Agency are not required to calculate an MDL. The MDL for EPA Method 531.1 has not changed since the 1988 Phase V Rule promulgation, signifying no change in analytical sensitivity for this contaminant.

**Table 55. Results of the Analytical Methods Comparison for Oxamyl (Newly Promulgated Methods in Bold)**

MCL = 200 µg/L		Current PQL = 20 µg/L		DL <sup>▲</sup> = 2 µg/L		Acceptance Limit <sup>†</sup> = ± 2*S.D.	
Methods Approved At Promulgation			Currently Approved Methods				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 531.1 <sup>1</sup>	HPLC	2.0 <sup>■</sup>	EPA 531.1 <sup>2</sup>	HPLC	0.86		
			<b>SM 6610<sup>3</sup></b>	HPLC-post column reaction/ fluorescence detection	N/A*		
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988. <sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995. <sup>3</sup> Standard Method 6610. Supplement to the 18th edition of Standard Methods for the Examination of Water and Wastewater, 1994, American Public Health Association, 1015 Fifteenth Street NW, Washington, D.C. 20005. <sup>▲</sup> Regulatory DLs for inorganic compounds are listed at 40 CFR §141.24(h)(18). <sup>†</sup> Acceptance limits are listed at 40 CFR §141.24(h)(19)(i). * MDLs are not specified for non-EPA (i.e., voluntary consensus standard) methods. <sup>■</sup> EDL = estimated detection limit, used to approximate the MDL.							

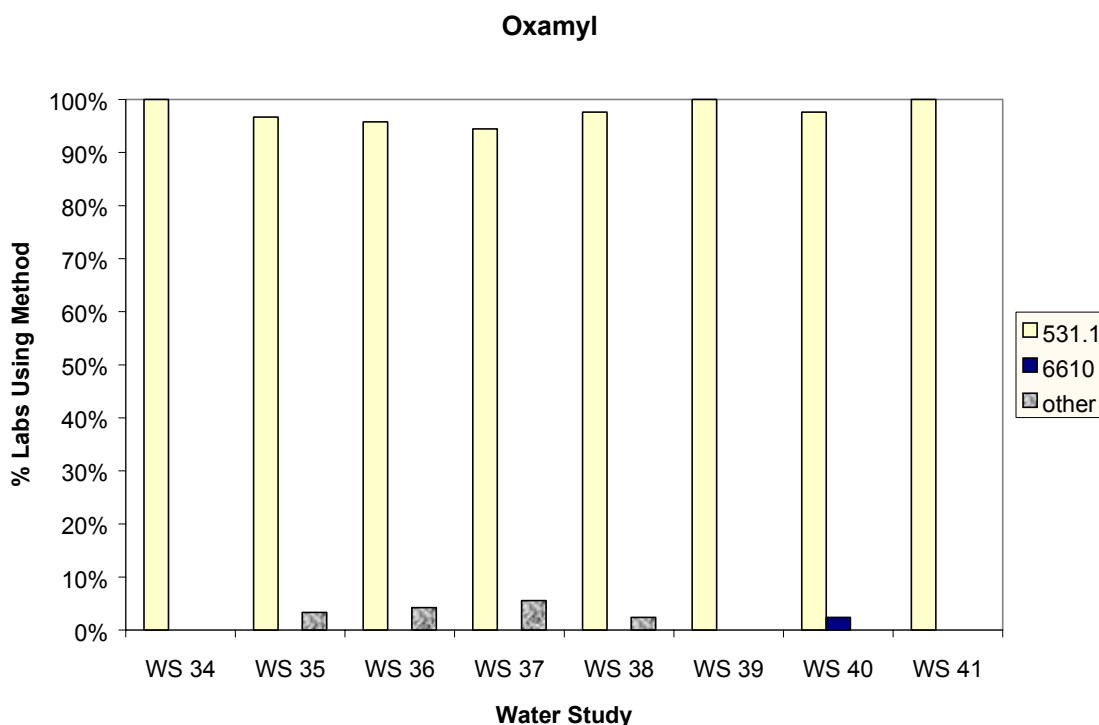


## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of the methods used by EPA Regional and State laboratories in WS studies 34 to 41 is shown in Figure 32. The results for "other" techniques in this figure include methods for which laboratories did not report any information on the type of method used or reported codes that could not be identified. As shown in Figure 32, EPA Method 531.1 was the most widely used analytical method for determination of oxamyl during WS 34 to 41. By contrast, the more recently approved SM 6610 was only used minimally during WS 40.

**Figure 32. Distribution of Analytical Techniques by WS Study: Oxamyl**



### b. Results of the PQL Analysis

The current PQL of 20 µg/L was originally determined using a ten times MDL multiplier (56 FR 30370). In re-evaluating the PQL, a broader range of PE data from WS 24 to 41 were analyzed. Table 56 summarizes the results of these water studies, providing the study number, the spiked (or "true") value for the WS sample, the number of results from EPA and State laboratories, and the percentage of laboratories that successfully passed the test using an acceptance limit of  $\pm 2$ \*S.D. (specified at 141.24(h)(19)(i)).

**Table 56. Evaluation of Oxamyl Data from WS Studies Using the  $\pm 2^*$  S.D. Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA Regional and State Labs	% Labs Passing $\pm 2^*$ S.D. Acceptance Limits
29	4.60	10	10.0
31	5.72	14	0.00
30	6.47	25	24.0
27	12.4	8	25.0
24a	12.5	8	75.0
32	12.8	36	50.0
25a	17.6	5	60.0
34	22.5	43	76.7
26a	22.6	13	76.9
33	26.2	13	46.2
24b	31.3	8	87.5
41	33.8	29	86.2
36	34.1	47	80.9
40	42.7	42	95.2
37	46.4	36	83.3
26b	46.4	13	76.9
35	47.2	30	83.3
25b	53.5	5	80.0
38	58.8	42	90.5
39	78.7	32	90.6

The WS data for the EPA Regional and State laboratories shown in Table 56 were also used to develop a linear regression. The spiked value concentration is the independent variable ( $x$ ) and the percentage of laboratories achieving acceptable results (within the acceptance window) is the dependent variable ( $y$ ). For the equation  $y = mx + b$ ,  $m$  stands for the slope of the regression line (change in the percentage of laboratories passing as spiked concentration increases) and  $b$  stands for the  $y$ -intercept.

The use of regression techniques assumes that the data from the various WS studies form a single continuous data set. In reality, the study results do not form a continuous data set, but represent results from samples spiked at specific discrete concentrations of oxamyl and analyzed

a few at a time over an extended period. However, through the use of a linear regression, the data can be used to create a model (the regression line) that may be useful in predicting accuracy and precision as a function of the concentration of the samples. The regression determines the linear relationship that best fits the observed results, in effect smoothing the curve and ensuring that there is a unique concentration that corresponds to any percentage of acceptable laboratories.

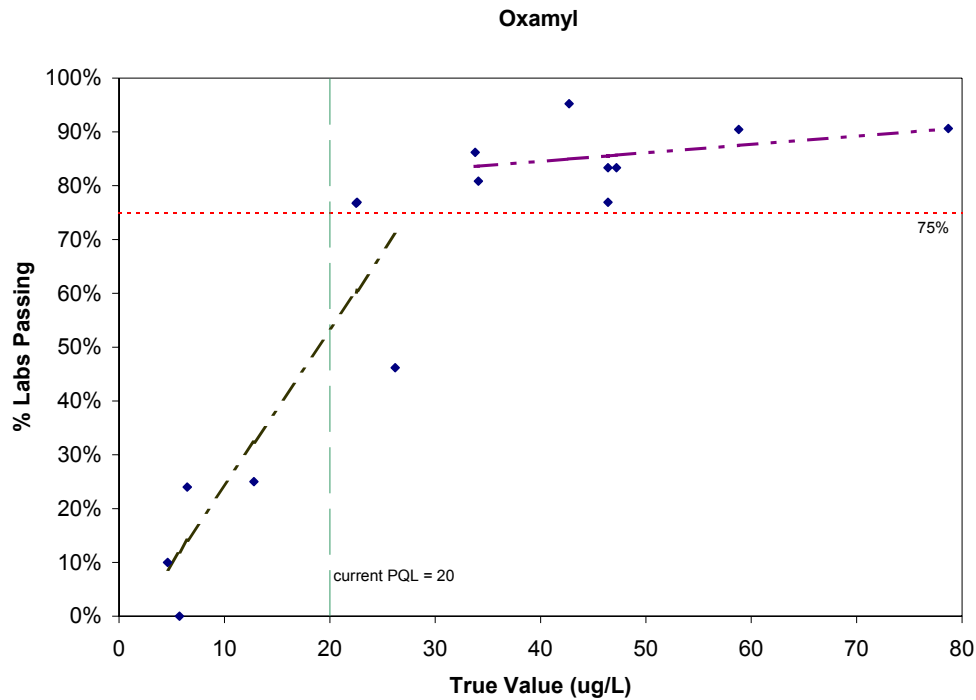
Calculating the regression equations also provides the correlation coefficient ( $r$ ) for the regression, which is a measure of the degree to which the actual data fit the linear model represented by the regression line. An  $r$  value of one would indicate a perfect fit with a positive slope of the data to the model. A value,  $p$ , can also be calculated for the regression that indicates the probability of concluding the null hypothesis (in this case that the spiked value concentration is linearly correlated with the percentage of labs achieving acceptable results) is false, when in fact the null hypothesis is true, for the given data set. In statistical terms,  $p$  indicates the probability of a Type I error. The results for the regression equation are summarized in Table 57.

<b>Table 57. Regression Results for Oxamyl</b>	
<b>Regression Term</b>	<b><math>\pm 2</math>*S.D. Acceptance Limits</b>
<i>m</i>	0.0125
<i>b</i>	0.223
<i>r</i>	0.819
<i>p</i>	0.005

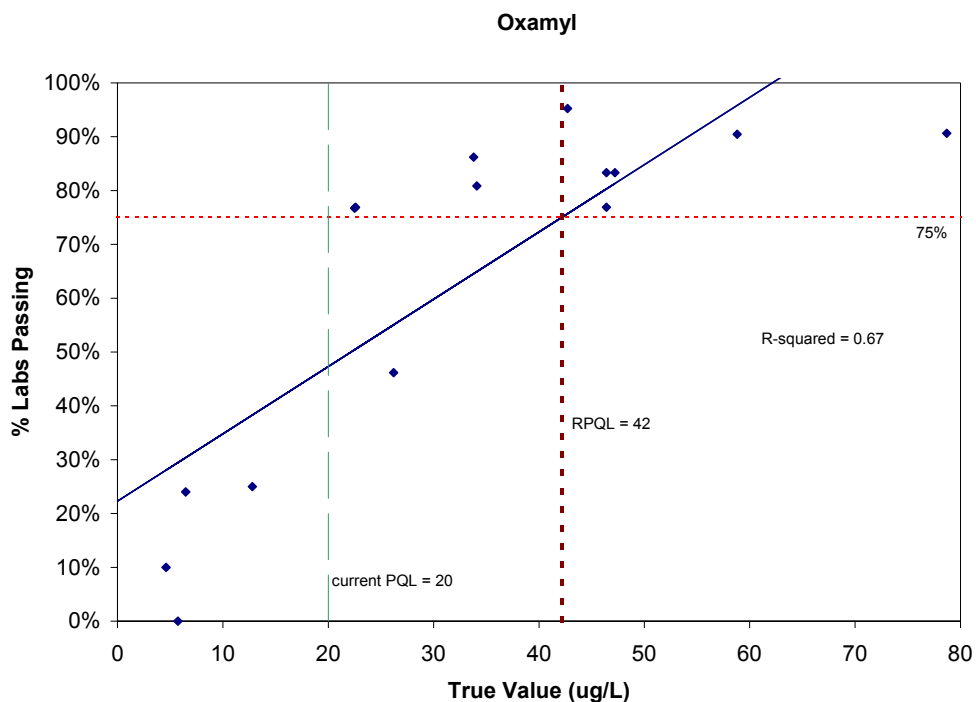
The  $r$  value of 0.82 indicates that the data fit the linear model fairly well. The  $p$  value of 0.005 indicates that the spiked value and the percentage acceptable are linearly correlated with more than 99 percent confidence. Figure 33 shows the graphical results of the regression. The observed data were plotted against the WS spiked value concentration and the results predicted from the linear regression line were superimposed. The observed success rate for the EPA and State laboratories is noticeably lower than the predicted success rate in the region below 20  $\mu\text{g/L}$ . While attempts might be made to model the observed results using a second order (non-linear) regression, the Agency does not believe that there is a scientifically valid reason to do so.

The oxamyl PE data illustrate the expected outcome from PE testing: a lower percentage of labs passing at the lowest true values, with an increasing percentage of labs passing as true values increase, due to increasing lab analytical capabilities at higher concentrations. As true values increase further, the percentage of labs passing approaches a stable plateau beyond which lab analytical capabilities do not improve. This results in a two-part distribution: the lower true values (<30 µg/L) are characterized by a line of steeper slope, while higher true values (>30 µg/L), are characterized by a line that is nearly flat (see Figure 34). Using this graph to visually estimate a re-evaluated PQL, the original choice of 20 µg/L appears to be appropriate. Figure 34 also shows that the percentage of laboratories achieving acceptable results reaches 75 percent at a concentration of 39.5 µg/L which, by the graphical method, indicates the value of the re-evaluated PQL (RPQL). This concentration is higher than the existing PQL of 20 µg/L.

**Figure 33. Two-part Distribution of Oxamyl WS Data**



**Figure 34. PQL Evaluation of PE WS Data: Oxamyl**



### Conclusion for Oxamyl

Although a new method for the determination of oxamyl was introduced (SM 6610), this method was rarely used, as seen in the graph of method usage over time (Figure 32). Analytical method capabilities have increased in sensitivity for EPA Method 531.1 overtime. Based on the PQL reassessment, it is apparent that laboratory success follows a linear relationship with true value concentration to a point, after which the success rate plateaus. Using the standard linear regression approach, the new RPQL was determined to be 39.5  $\mu\text{g/L}$ , which may be linked to higher spiked concentrations exhibited in more recent PE WS data. However, if the data are not plotted on a single line but rather in the two-part manner of Figure 34, the RPQL would most likely resemble the existing value of 20  $\mu\text{g/L}$ . It is likely that the PQL may lie somewhere between 20 and 40  $\mu\text{g/L}$ .

### **PCBs**

#### Results of the Method Comparison

For the NPDWRs, all polychlorinated biphenyls (PCBs) were collectively grouped and identified by the particular aroclor decachlorobiphenyl (DCBP). In 1991, EPA approved EPA Method 508A for determination of DCBP, a Phase II SOC (56 FR 3526), in drinking water. This

analytical method utilizes gas chromatography with perchlorination. Since promulgation of the Phase II rule, EPA has not changed the status of EPA Method 508A and its MDL remains at 0.08 µg/L (Table 58).

**Table 58. Results of the Analytical Methods Comparison for PCBs**

MCL = 0.5 µg/L		Current PQL = 0.5 µg/L		DL <sup>▲</sup> = 0.1 µg/L		Acceptance Limit <sup>†</sup> = ± 100%	
Methods Approved At Promulgation			Currently Approved Methods				
Method	Technique	MDL* (µg/L)	Method	Technique	MDL* (µg/L)		
EPA 508A <sup>1</sup>	Perchlorination with GC	0.08 - 0.23	EPA 508A <sup>1</sup>	Perchlorination with GC	0.08 - 0.23		
<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988. <sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18). <sup>†</sup> Acceptance limits for organic compounds are listed at are listed at 40 CFR §141.24(h)(19)(i). * Multiple MDL values result from variability of reagents, instrumentation and/or laboratory performance.							

### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

Because only one method, EPA Method 508A, was approved for determination of PCBs (as DCBP) over the duration of WS 34 to 41, its usage was not plotted.

#### b. Results of the PQL Analysis

The original PQL for PCBs was proposed at five times the MDL of 0.08 µg/L. For the final rule, EPA compared this value with multilaboratory performance data from WS studies 22 to 24, and found the PE data to support the proposed value, 0.5 µg/L (56 FR 3552). For the six-year regulatory review, new efforts have been made to reassess the PQL using more recent PE WS data from WS 31 to 41. These data are summarized in Table 59, which indicates the study number, the true value of the WS sample, the number of results returned by EPA and State laboratories, and the calculated percentage of laboratories whose results successfully passed within designated acceptance limits for PCBs (±100 percent, as specified at 40 CFR §141.24(h)(19)(i)).

**Table 59. Evaluation of PCBs Data from WS Studies Using the  $\pm 100\%$  Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 100\%$ Acceptance Limits
31	0.445	13	69.2
37	0.527	27	92.6
35	0.596	15	80.0
39	0.667	26	96.2
38	0.733	27	92.6
33	0.807	14	92.9
32	0.959	22	95.5
34	1.08	26	96.2
36	1.13	30	93.3
40	1.23	27	100
41	1.80	21	100

A PQL is historically derived from a concentration at which 75 percent of the participating laboratories pass, or report concentrations that fall within the specified acceptance limits. However, the data in Table 59 indicate that laboratories exceeded the required 75 percent criterion in almost all studies (with the exception of WS 31). Because of the high laboratory passing rates and a lack of sufficient spike concentrations below  $0.5 \mu\text{g/L}$ , the PQL for PCBs could not be re-evaluated graphically with these data. However, the two of the three lowest spike concentrations close to the current PQL, WS 31 ( $0.445 \mu\text{g/L}$ ) and WS 35 ( $0.596 \mu\text{g/L}$ ), had passing rates of 69 and 80 percent, respectively. These passing rates suggest that the current PQL of  $0.5 \mu\text{g/L}$  is unlikely to change.

#### Conclusion for PCBs

Since the promulgation of the NPDWR for PCBs, EPA Method 508A has been the only method approved for PCB determination. As the current PQL was derived from the MDL multiplier method rather than multi-laboratory performance data, a PQL re-evaluation was attempted using current PE data from WS 31 to 41. The high percentage of laboratories passing the PE testing within the designated acceptance limits and the relatively high spike concentrations prevented a conclusive re-evaluation of the PQL using the historical approach. However, spike concentrations close to the current PQL had laboratory passing rates close to 75 percent. This suggests that the current PQL is appropriate and unlikely to change.

## Pentachlorophenol

### Results of the Method Comparison

With the promulgation of NPDWRs for Phase II SOCs, two methods were approved for the determination of pentachlorophenol in drinking water: EPA Methods 515.1 and 525.1 (56 FR 3526). Since promulgation of this rule, EPA removed EPA Method 525.1 and approved the use of five new or updated methods: EPA Methods 515.2, 515.3, 555, 525.2, and ASTM Method D5317-93 (GC with ECD), a voluntary consensus method. The MDLs of these methods are indicated in Table 60.

**Table 60. Results of the Analytical Methods Comparison for Pentachlorophenol (Newly Promulgated Methods Are Indicated in Bold)**

MCL = 1 µg/L		Current PQL = 1 µg/L	DL <sup>▲</sup> = 0.04 µg/L	Acceptance Limit <sup>†</sup> = ± 50%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 515.1 <sup>1</sup>	GC with ECD	0.076 <sup>▪</sup>	EPA 515.1 <sup>2</sup>	GC with ECD	0.032
EPA 525.1 <sup>1</sup>	LSE and GC/MS	0.3 - 3.0*	<b>EPA 515.2<sup>2</sup></b>	LSE and GC with ECD	0.16
			<b>EPA 515.3<sup>4</sup></b>	LLE, derivatization and GC with ECD	0.021 - 0.085*
			<b>EPA 525.2<sup>2</sup></b>	LSE and GC/MS	0.72 - 1.0*
			<b>EPA 555<sup>3</sup></b>	LLE, derivatization and GC with ECD	0.15 - 1.6*
			<b>D5317-93<sup>5</sup></b>	GC with ECD	N/A <sup>◇</sup>

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

<sup>3</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement II," EPA/600/R-92/129, August 1992.

<sup>4</sup> "Determination of Chlorinated Acids in Drinking Water by Liquid-liquid Extraction, Derivatization and Gas Chromatography with Electron Capture Detection," Revision 1.0, EPA/815/B-99/001, July 1996.

<sup>5</sup> *Annual Book of ASTM Standards*, 1994, Vol. 11.01. American Society for Testing and Materials, 1961 Race Street. Philadelphia, PA 19103.

<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).

<sup>†</sup> Acceptance limits for organic compounds are listed at are listed at 40 CFR §141.24(h)(19)(i).

\* Multiple MDL values result from variability of reagents, instrumentation and/or laboratory performance.

<sup>◇</sup> N/A = not available. MDLs for voluntary consensus standard methods are not specified.

<sup>▪</sup> EDL = estimated detection limit, used to approximate the MDL.



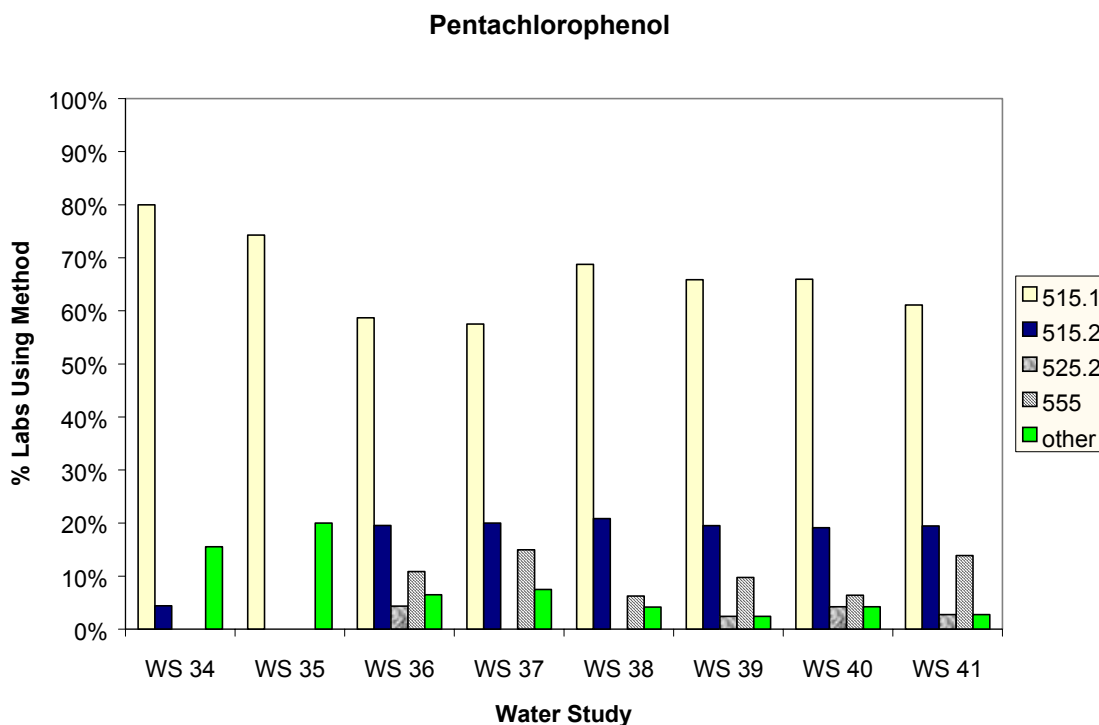
As shown in Table 60, most of the current EPA methods for pentachlorophenol do not display a significant increase in analytical sensitivities as compared to the methods approved at the time of the Phase II rule promulgation. The exception is EPA Method 515.1, which has approximately twice the sensitivity of the prior version of the same method approved at the time of promulgation.

### Results of the Analysis of the WS Data

#### a. Method Usage Over Time

The distribution of analytical methods used by the EPA and State laboratories in WS 34 to 41 is plotted in Figure 35. The "other" techniques represent methods which were not specifically identified by participating laboratories or were otherwise unknown. As shown in Figure 35, despite the addition of several new analytical methods, the majority of laboratories still favored the use of EPA Method 515.1 for determination of pentachlorophenol during WS 34 to 41. The more recently approved EPA Methods 515.2 and 555 were used much less frequently, by comparison. EPA Method 525.2 was only used intermittently during the study period.

**Figure 35. Distribution of Analytical Techniques by WS Study: Pentachlorophenol**



b. Results of the PQL Analysis

EPA determined the current PQL of 1 µg/L (0.001 mg/L) for pentachlorophenol using earlier water supply data (WS 22 to 25, 56 FR 3552). A re-evaluation of the PQL was attempted using more recent PE data from WS 24 to 41. Table 61 summarizes the data from these WS studies (with the exception of WS 25, 27, and 30), indicating the study number, the true value of the WS sample, the number of results from EPA and State laboratories, and the percentage of laboratories whose results successfully passed the acceptance limits of ± 50 percent for pentachlorophenol (40 CFR §141.24(h)(19)(i)).

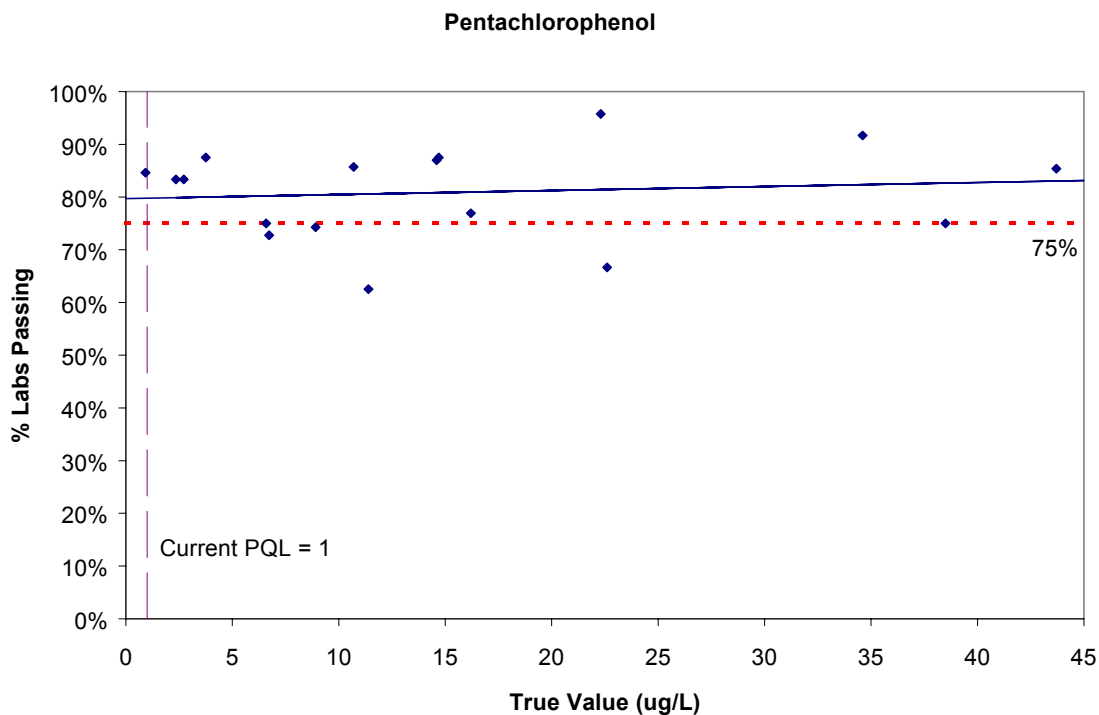
**Table 61. Evaluation of Pentachlorophenol Data from WS Studies Using the ± 50% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 50% Acceptance Limits
24a	0.924	13	84.6
33	2.72	24	83.3
26a	3.75	16	87.5
37	6.59	40	75.0
29	6.73	11	72.7
35	8.91	35	74.3
32	10.7	35	85.7
31	11.4	16	62.5
36	14.6	46	87.0
38	14.7	48	87.5
24b	16.2	13	76.9
40	22.3	47	95.7
34	22.6	45	66.7
41	34.6	36	91.7
26b	38.5	16	75.0
39	43.7	41	85.4

Examination of the data show that with the exception of three WS studies (WS 29, 35 and 34), the laboratory passing rates exceeded the 75 percent criterion and only one WS study had a spike concentration below the current PQL of 1 µg/L. Because many of the laboratories achieved high success rates during PE testing for pentachlorophenol, the resulting regression line, shown in Figure 36, failed to intersect the 75 percent line that would have indicated the new

estimated PQL. Furthermore, there were very few water studies with spiked samples below the current PQL. Thus, a new PQL could not be derived using this procedure.

**Figure 36. Evaluation of PE WS Data: Pentachlorophenol**



### Conclusion for Pentachlorophenol

The plot of the method usage over time for WS 34 to 41 indicates laboratories consistently used EPA Method 515.1 more frequently than other methods. The detection limit for EPA 515.1 has not changed over time, as shown by the results of the method comparison (Table 60). The available WS data did not provide a basis for lowering the PQL for two reasons: the passing rates of laboratories were generally greater than the 75 percent criterion for PQL estimation and the true value concentrations typically exceeded the current PQL.

## Picloram

### Results of the Method Comparison

Picloram became a regulated SDWA contaminant in 1992 with the promulgation of NPDWRs for Phase V SOCs (57 FR 31776). At that time, the sole method approved for determination of picloram in drinking water was EPA Method 515.1. Since promulgation of the Phase V rule, EPA has added two methods to the approved list: EPA Methods 515.2 and 555. Table 62 summarizes MDL information for the current and former approved methods for picloram.

**Table 62. Results of the Analytical Methods Comparison for Picloram (Newly Promulgated Methods Are Indicated in Bold)**

MCL = 500 µg/L		Current PQL = 1 µg/L	DL <sup>▲</sup> = 0.1 µg/L	Acceptance Limit <sup>†</sup> = 2*S.D.	
Methods Approved At Promulgation			Currently Approved Methods		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 515.1 <sup>1</sup>	GC with ECD	0.14 <sup>▪</sup>	EPA 515.1 <sup>2</sup>	GC with ECD	0.15
			<b>EPA 515.2<sup>3</sup></b>	LSE and GC with ECD	0.35
			<b>EPA 515.3<sup>4</sup></b>	LLE, derivatization and GC with ECD	0.47 - 1*
			<b>EPA 555<sup>2</sup></b>	HPLC with a Photodiode Array Ultraviolet Detector	0.5

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water Supplement II," EPA/600/R-92/129, August 1992.

<sup>3</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

<sup>4</sup> "Determination of Chlorinated Acids in Drinking Water by Liquid-liquid Extraction, Derivatization and Gas Chromatography with Electron Capture Detection," Revision 1.0, EPA/815/B-99/001, July 1996.

<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR §141.24(h)(18).

<sup>†</sup> Acceptance limits for organic compounds are listed at are listed at 40 CFR §141.24(h)(19)(i).

<sup>▪</sup> EDL = estimated detection limit, used to approximate the MDL.

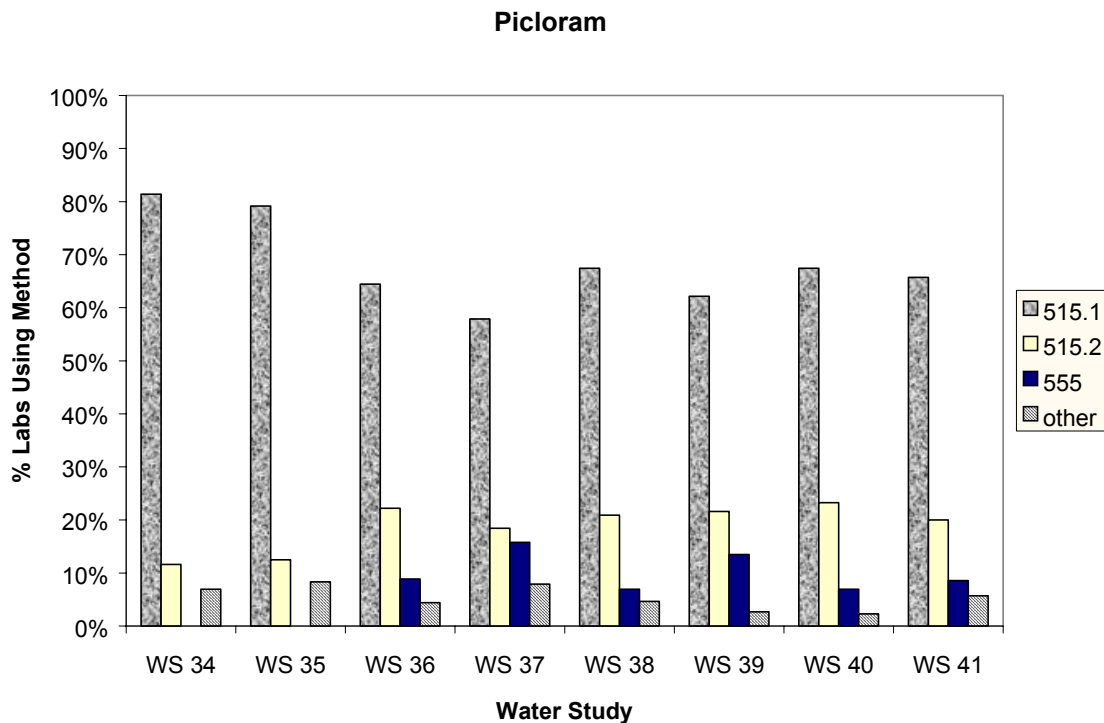
\* Multiple MDL values result from variability of reagents, instrumentation and/or laboratory performance.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of analytical methods used during each water study from WS 34 to 41 were plotted (Figure 37). The "other" techniques represent methods which were not specifically identified by participating laboratories or were otherwise unknown. As shown in Figure 37, during WS 34 to 36, the majority of laboratories used EPA Method 515.1 for determination of picloram. Use of EPA Method 515.2 gradually increased over this period but was still greatly outweighed by use of EPA Method 515.1. Laboratories employed EPA Method 555 only minimally.

**Figure 37. Distribution of Analytical Techniques by WS Study: Picloram**



### b. Results of the PQL Analysis

The original PQL for picloram of 1.0 µg/L was derived by multiplying the detection limit (DL) by a factor of 10 (57 FR 31776). With the availability of more recent PE data, a reassessment of the PQL was attempted. Table 63 summarizes the data from WS 24 to 41 (with the exception of WS 25, 27, and 29, which lacked data), indicating the study number, the true value of the WS sample, the number of results from EPA and State laboratories, and the percentage of laboratories whose results successfully passed within the acceptance limits for

picloram. These limits ( $\pm 2$ \*S.D.) are not fixed but essentially represent a function of the true value (40 CFR §141.24(h)(19)(i)).

**Table 63. Evaluation of Picloram Data from WS Studies Using the  $\pm 2$ \* S.D. Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 2$ * S.D. Acceptance Limits
26b	1.33	11	63.6
24b	2.63	12	91.7
32	10.6	32	93.8
34	13.2	43	93.0
33	17.4	24	100
24a	17.5	11	100
30	22.4	26	88.5
37	23.3	38	100
31	26.7	12	91.7
26a	31.2	12	91.7
36	42.2	45	100
40	44.0	43	95.3
38	56.4	43	93.0
41	62.1	35	97.1
35	62.5	24	79.2
39	74.9	37	100

As shown by Table 63, participating EPA and State laboratories in every water study but one (WS 26b) achieved a passing rate above the 75 percent criterion for determination of the PQL. Therefore, estimation of the PQL is likely to not be meaningful for this dataset. In addition, the entire range of true values for this contaminant exceeded the current PQL, some by nearly two orders of magnitude, preventing any assertions on the appropriateness of a lower PQL.

#### Conclusion for Picloram

The available WS data do not support a reassessment of the PQL based on the 75 percent criterion because the passing rates of laboratories almost always exceeded this value. Therefore,

a quantitative reassessment of the PQL could not be performed using the graphical approach. The current PQL of 1 µg/L appears to still be appropriate.

## Tetrachloroethylene

### Results of the Method Comparison

The final January 1991 NPDWR for Phase II VOCs (56 FR 3526) approved several analytical methods for tetrachloroethylene. These included EPA Methods 502.1, 502.2, 503.1, 524.1, and 524.2. Since this regulation was promulgated, the Agency retained EPA Methods 502.2 and 524.2 for determination of tetrachloroethylene and introduced a new GC variation, EPA Method 551.1. Table 64 summarizes the MDLs for both the original and currently approved versions of the methods. As shown in Table 64, EPA Methods 502.2 and 551.1 have greater detection sensitivity than EPA Method 524.2.

**Table 64. Results of the Analytical Methods Comparison for Tetrachloroethylene (Newly Promulgated Methods in Bold)**

MCL = 5 µg/L    Current PQL = 5 µg/L    DL <sup>1</sup> = 0.5 µg/L    Acceptance Limits <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	0.001	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.02 - 0.05*
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.02 - 0.05*	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.05 - 0.14*
EPA 503.1 <sup>1</sup>	Purge and Trap GC	0.01	<b>EPA 551.1<sup>2</sup></b>	<b>LLE and GC with ECD</b>	0.002
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.3			
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.05 - 0.14*			

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

▲ Regulatory DLs for organic compounds are listed at 40 CFR § 141.24(f)(17).

† Acceptance limits for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

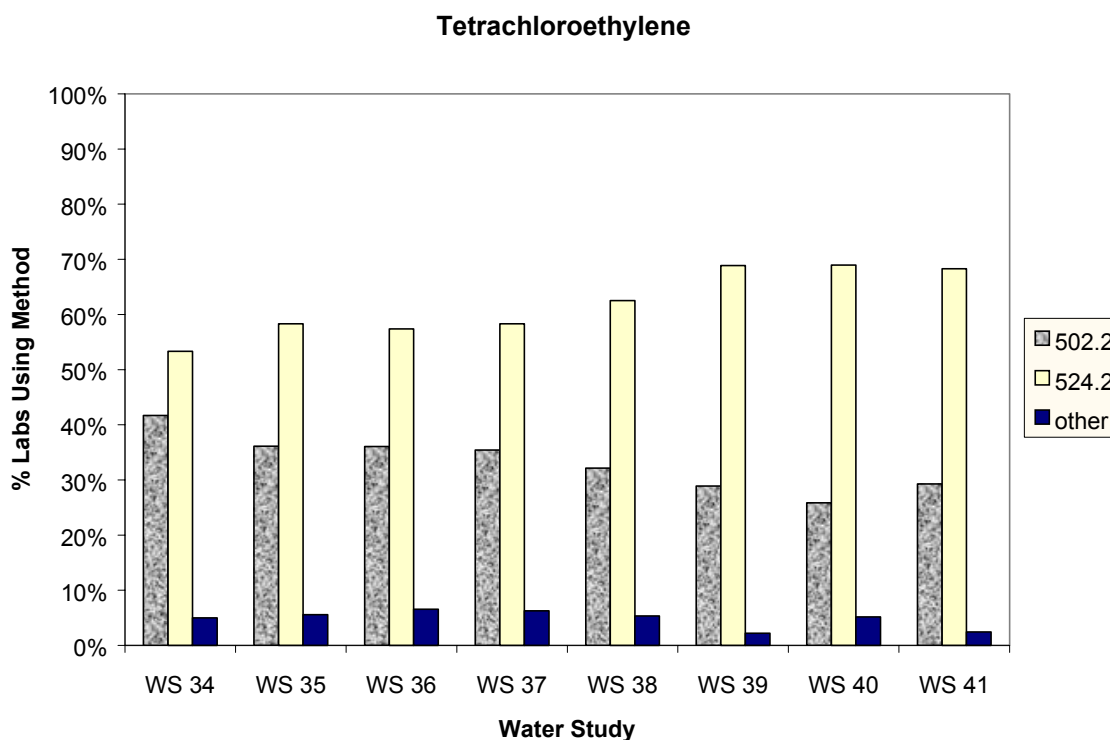
## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of the different methods used by EPA and State laboratories during WS studies 34 to 41 are shown in Figure 38. The category of "other" contains those methods that were unknown or unidentified by the participating laboratories. During WS 34 to 41, EPA Method 524.2 was the favored method for determining tetrachloroethylene among participating laboratories. Use of EPA Method 524.2 generally increased slightly over time while usage of EPA Method 502.2 declined. No use of EPA Method 551.1 was observed during these studies.



**Figure 38. Distribution of Analytical Techniques by WS Study: Tetrachloroethylene**



b. Results of the PQL Analysis

The Agency set the original PQL at 5 µg/L (52 FR 25700 and 56 FR 3526) for all VOCs except vinyl chloride. More recent data from WS 27 through 41 were used to re-evaluate the PQL for tetrachloroethylene. Table 65 summarizes the results of these WS studies providing the study number, the spiked value for the WS sample, the number of laboratory results reported, and the percent of laboratories passing the WS proficiency test for tetrachloroethylene within the acceptance limits of ± 20 percent for a true value greater than 10 µg/L, or ± 40 percent for a true value less than 10 µg/L (specified at 141.24(f)(17)(i)).

**Table 65. Evaluation of Tetrachloroethylene Data from WS Studies Using the  $\pm 20\%$  or  $\pm 40\%$  Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 20\%$ Acceptance Limits	% Labs Passing $\pm 40\%$ Acceptance Limits
32	7.43	63		100
39	7.60	45		97.8
27	7.76	35		100
30	9.00	60		100
37	9.60	48		100
41	11.5	41	92.7	
31	11.6	33	97.0	
35	11.6	36	91.7	
33	12.9	34	91.2	
38	14.1	56	94.6	
40	14.7	58	91.4	
29	15.6	34	85.3	
34	16.5	60	96.7	
36	18.5	61	91.8	

The data for tetrachloroethylene could not be used to re-evaluate the PQL because State and EPA laboratories, on average, passed the performance evaluation at a rate over 90 percent. Thus, laboratories surpassed the standard 75 percent acceptance criterion typically used to determine the PQL. In addition, the true value concentrations observed in the available WS data were all greater than the current PQL of 5  $\mu\text{g/L}$ . At concentrations close to the current PQL (7.43, 7.60 and 7.76  $\mu\text{g/L}$ ), the passing rates were 100, 98 and 100 percent, respectively. This data suggest that the current PQL of 5  $\mu\text{g/L}$  could be lower.

#### Conclusion for Tetrachloroethylene

The method comparison results show that since the promulgation of analytical methods for tetrachloroethylene under the NPDWR, one method was retained (EPA Method 524.2) and two methods were added (EPA Methods 502.2 and 551.1). The most commonly used method in recent WS studies has been EPA Method 524.2, which is also the least sensitive method of the past and present methods. The MDL and method usage information together imply that observable analytical sensitivities for this contaminant have not improved since the promulgation of the Phase I rule. This conclusion is further supported by the observation that EPA 551.1, the most sensitive of the three currently approved methods, appears from the WS data to not be employed by EPA or State laboratories. Evaluation of the quantitative PE data showed that the

majority of the laboratories conducting WS analyses had surpassed the 75 percent criterion. The high percentage of laboratories passing and high true value concentrations apparent in the WS data prevented a re-evaluation of the PQL using the graphical approach. However, the high laboratory passing rates at concentrations slightly above the current PQL may suggest that the PQL could be lower.

## Thallium

### Results of the Method Comparison

With the Phase V IOCs (57 FR 31776), furnace atomic absorption (AAF; EPA Method 279.2), inductively coupled plasma (ICP)/MS (EPA Method 200.8), and platform AA spectrometry (EPA Method 200.9) were the approved methods listed for analysis of thallium in drinking water. Since this regulation was promulgated, the only change in approved analytical methods made by the Agency was the removal of EPA 279.2 from the list of approved analytical methods. MDLs for EPA Methods 200.8 and 200.9 have not changed, as indicated in Table 66. This table also shows that the discontinued EPA Method 279.2 was less sensitive than EPA Methods 200.8 and 200.9, meaning that the collective methods approved since promulgation are, on average, more sensitive than the methods approved at the time of promulgation. EPA Method 200.8 is approximately twice as sensitive than the other currently approved method, EPA Method 200.9.

**Table 66. Results of the Analytical Methods Comparison for Thallium**

MCL = 2 µg/L		Current PQL = 2 µg/L		DL <sup>▲</sup> = 0.3 - 0.7 µg/L		Acceptance Limit <sup>†</sup> = ± 30%	
Methods Approved At Promulgation			Currently Approved Methods				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 279.2 <sup>1</sup>	AAF	1 <sup>■</sup>	EPA 200.8 <sup>2</sup>	ICP/MS	0.01 - 0.3*		
EPA 200.8 <sup>1</sup>	ICP/MS	0.3	EPA 200.9 <sup>2</sup>	AAP	0.7		
EPA 200.9 <sup>1</sup>	AAF	0.7					

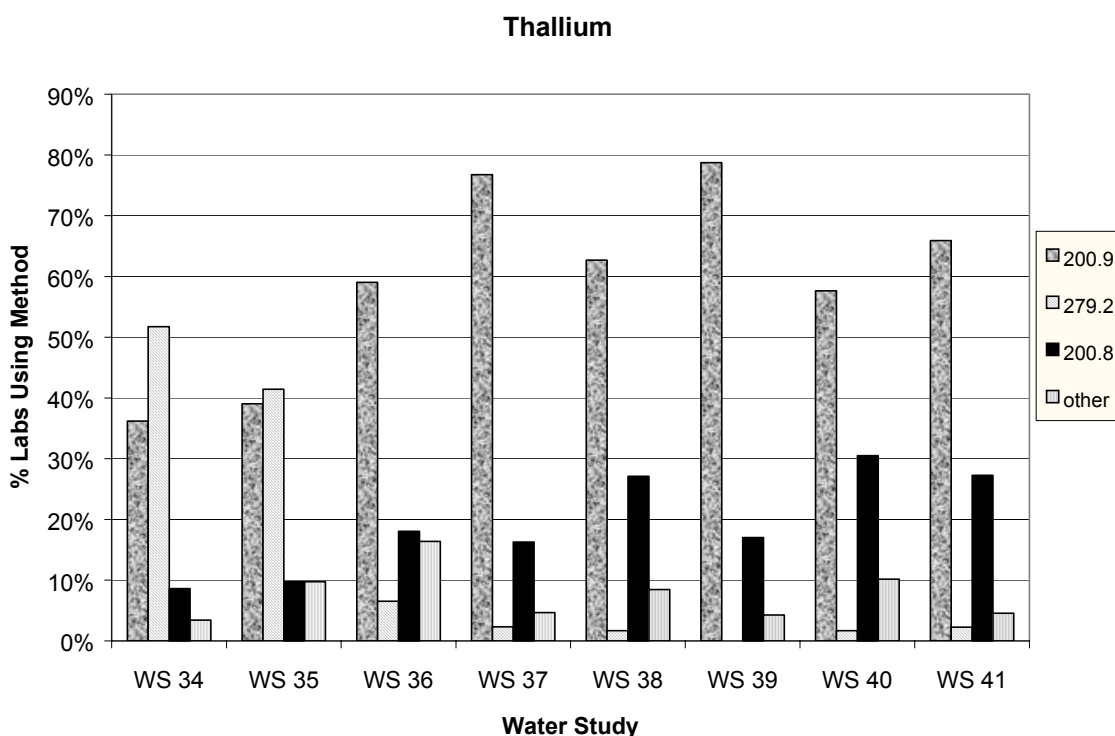
<sup>1</sup> "Methods for Chemical Analysis of Water and Wastes (MCAWW)," EPA/600/4-79/020, March 1983.  
<sup>2</sup> "Methods for the Determination of Metals in Environmental Samples--Supplement I," EPA/600/R-94/111, May 1994.  
<sup>▲</sup> Regulatory DLs for inorganic compounds are listed at 40 CFR §141.23(a)(4)(i) and depend on analytical methodology.  
<sup>†</sup> Acceptance limits are listed at 40 CFR §141.23(k)(3)(ii).  
<sup>\*</sup> Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.  
<sup>■</sup> EDL = estimated detection limit, used to approximate the MDL.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 39 shows the variety of analytical techniques used by EPA and State laboratories in WS studies 34 to 41. The results for "other" techniques in this figure include the use of any other technique identified by the laboratories participating in the WS study, as well as "unknown" methods, i.e., techniques for which laboratories did not report the type of method used. In recent years, method usage by laboratories participating in the water studies has been dominated by EPA Method 200.9 (AAP) which is actually less sensitive than the other approved method, EPA Method 200.8 (ICP/MS).

**Figure 39. Distribution of Analytical Techniques by WS Study: Thallium**



### b. Results of the PQL Analysis

The current PQL (2 µg/L) was originally set using PE data from WS 24 through 27. For the PQL re-evaluation, data were taken from WS 24 to 41 (57 FR 31801). Table 67 summarizes the results of these water studies, providing the study number, the spiked value for the WS sample, the number of results from EPA and State laboratories, and the results evaluated using acceptance limits of ± 30 percent (specified at 141.23(k)(3)(ii)).

**Table 67. Evaluation of Thallium Data from WS Studies Using the 30% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 30% Acceptance Limit
31	1.44	27	82
24a	2.00	30	80
37	2.38	43	91
32	2.56	60	88
25b	3.00	21	81
41	3.50	44	96
26	4.00	37	87
36	4.50	61	98
30	5.30	48	92
39	5.60	47	98
34	6.19	58	97
35	8.00	41	93
38	8.91	59	95
33	9.56	32	91
29	9.74	21	95
40	10.0	59	98
24b	18.0	35	89
27	26.9	23	91
25a	36.0	26	96

Using the 75 percent criterion, EPA and regional laboratories were able to achieve acceptable results within the ± 30 percent acceptance window over the entire range of tested concentrations, i.e., 1.44 to 36 µg/L. Upon examination of the data, the current PQL of 2 µg/L appears to be easily supportable, as over 75 percent of laboratories successfully passed within the acceptance limits when tested at those concentration. It might even be possible for the labs to pass at a slightly lower concentration; however, a conclusion is uncertain in the absence of additional data below the PQL concentrations.

## Conclusion for Thallium

The method comparison results indicate that use of the least sensitive method was discontinued since promulgation of NPDWRs. In addition, the MDLs of all the possible methods do not differ much between themselves (only by about a factor of two) with the ICP/MS method having greater sensitivity. The method usage over time shows that EPA Method 200.9, the less sensitive method, was the preferred choice for EPA and State laboratories. Based on the evaluation of more recent quantitative PE data, the current PQL of 2 µg/L using a ± 30 percent acceptance limit appears to still be supportable and appropriate. Data do suggest that it may be possible for the labs to pass at a slightly lower concentration.

## **Toluene**

### Results of the Method Comparison

The NPDWR for Phase II VOCs (56 FR 3526) approved several analytical methods for toluene. These included EPA Methods 502.2, 503.1, 524.1, and 524.2. Since this regulation was promulgated, the Agency retained EPA Methods 502.2 and 524.2 for determination of toluene. Table 68 summarizes the MDL for both the original and currently approved versions of the methods. As shown in Table 68, the MDLs of the two current methods remain essentially unchanged from their values at promulgation of the rule.

**Table 68. Analytical Methods Comparison for Toluene**

MCL = 1 mg/L    Current PQL = 5 µg/L    DL <sup>1</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)
EPA502.2 <sup>1</sup>	Purge and Trap GC	0.01 - 0.02*	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01 - 0.02*
EPA 503.1 <sup>1</sup>	Purge and Trap GC	0.02	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.08 - 0.11*
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.1			
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.08 - 0.11*			

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation, and/or laboratory/analyst performance.

▲ Regulatory DLs for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

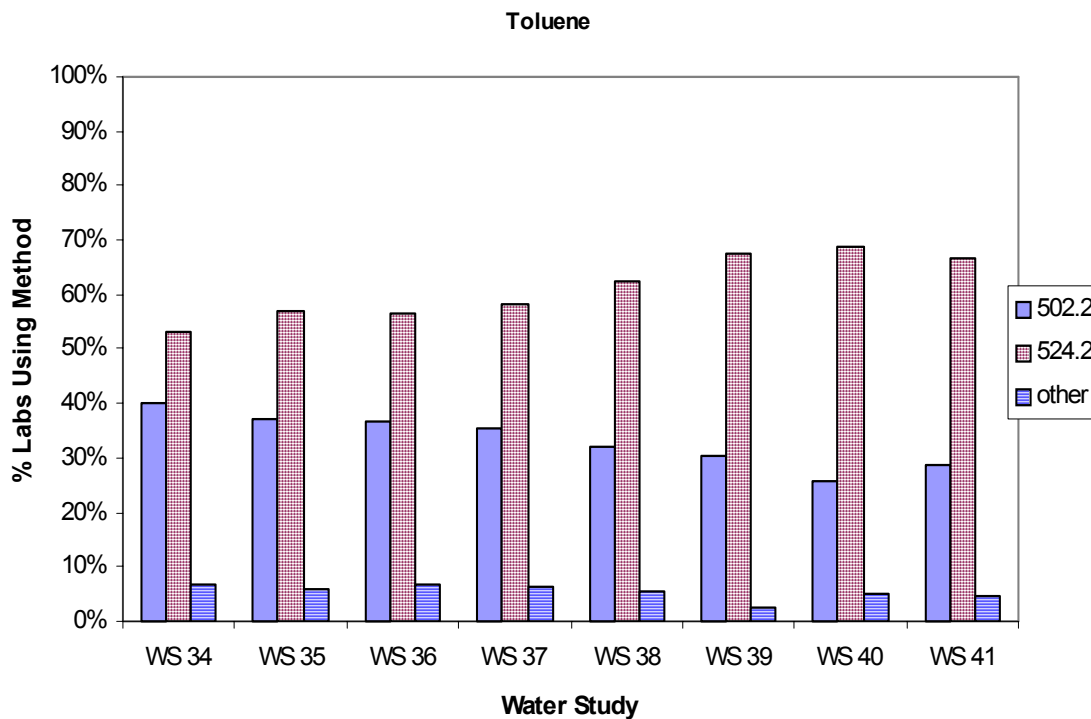
† Acceptance limits for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of analytical methods used by participating laboratories from WS 34 to 41 is shown in Figure 40. The category of "other" contains those methods that were unknown or unidentified by the participating laboratories. As shown in Figure 40, EPA Method 524.2 was the preferred method for laboratories participating in WS 34 to 41 and the use of EPA Method 502.2 decreased over time.

**Figure 40. Distribution of Analytical Techniques by WS Study: Toluene**



b. Results of the PQL Analysis

The Agency set the original PQL at 5 µg/L (52 FR 25700 and 56 FR 3526) for all VOCs except vinyl chloride. More recent data from WS 29 through 41 were used to re-evaluate the PQL for toluene. Table 69 summarizes the results of these WS studies providing the study number, the spiked value for the WS sample, the number of laboratory results, and the percent of laboratories passing the WS proficiency test for toluene within specified acceptance limits. The acceptance limits for toluene are ± 20% for a true value greater than 10 µg/L or ± 40% for a true value lower than 10 µg/L (as specified at 141.24(f)(17)(i)).

**Table 69. Evaluation of Toluene Data from WS Studies Using Either 20% or 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% EPA and State Passing ± 20% Acceptance Limit	% EPA and State Passing ± 40% Acceptance Limit
37	5.7	48		100
32	6.54	63		100
30	8.02	59		98.0
35	9.92	35		100
29	11.5	35	94.3	
33	12.3	33	90.9	
36	13.2	60	96.7	
40	14.6	58	96.6	
31	15.3	35	100	
34	15.6	60	98.3	
38	16.2	56	96.4	
41	18.7	42	95.2	
39	24.4	44	88.6	

A re-evaluation of the PQL for toluene could not be performed using the available PE data in Table 4. All of the passing rates in Table 4 were well above the 75 percent criterion necessary to recalculate the PQL. In addition, the true value concentrations observed in the available WS data were all greater than the current PQL of 5 µg/L. However, at concentrations close to the current PQL (spikes of 5.7, 6.54, and 8.02 µg/L), the passing rates were 100, 100 and 98 percent, respectively. These data suggest that a lower PQL may exist for toluene.



## Conclusion for Toluene

The method comparison results show that since the promulgation of analytical methods under the NPDWR, no new methods have been approved for the analysis of toluene, and analytical capabilities have remained essentially constant. The most commonly used method has been EPA Method 524.2, which is also the least sensitive method of the past and present methods. Evaluation of the PE data show that the majority of the laboratories conducting WS analyses surpassed the 75 percent criterion typically used to derive a PQL. However, the high laboratory passing rates (> 95%) at concentrations slightly above the current PQL of 5 µg/L suggest that the PQL for toluene could be lower.

## **Toxaphene**

### Results of the Method Comparison

At the promulgation of the NPDWRs for Phase II SOCs, three GC methods, EPA Method 505 (GC with microextraction), EPA Method 508 (GC with ECD), and EPA Method 525.1 (GC/MS with LSE), were approved for the determination of toxaphene in drinking water (56 FR 3552). Since that time, EPA has approved two additional GC and GC/MS methods, respectively: EPA Methods 508.1 and 525.2 (both featuring LSE extraction). Table 70 provides a summary of MDLs for the approved methods. As shown in Table 70, EPA Method 508 does not specify the MDL for toxaphene. The MDL for EPA Method 525.2 is comparable to that of EPA Method 505. The MDL of EPA Method 505 has not changed over time, 1 µg/L. The MDLs of the newer methods range from about 0.03 to 1.7 µg/L. The most sensitive method currently available, EPA Method 508.1, has about eight times the sensitivity of EPA Method 505.

**Table 70. Results of the Analytical Methods Comparison for Toxaphene (Newly Promulgated Methods in Bold)**

MCL = 3 µg/L		Current PQL = 3 µg/L		DL <sup>1</sup> = 1 µg/L		Acceptance Limit <sup>†</sup> = ± 45%	
Methods Approved At Promulgation			Currently Approved Methods (141.24)				
Method	Technique	MDL (µg/L)	Method	Technique	MDL (µg/L)		
EPA 505 <sup>1</sup>	Microextraction and GC	1.0	EPA 505 <sup>2</sup>	Microextraction and GC	1.0		
EPA 508 <sup>1</sup>	GC with ECD	ND	EPA 508 <sup>2</sup>	GC with ECD	ND		
EPA 525.1 <sup>1</sup>	LSE and GC/MS	15	<b>EPA 508.1<sup>2</sup></b>	LSE and GC with ECD	0.13		
			<b>EPA 525.2<sup>2</sup></b>	LSE and GC/MS	1.0 - 1.7*		

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation, and/or laboratory/analyst performance.

\* Regulatory DLs for organic compounds are listed at 40 CFR § 141.24(h)(18).

† Acceptance limits for organic compounds are listed at 40 CFR § 141.24(h)(19)(i).

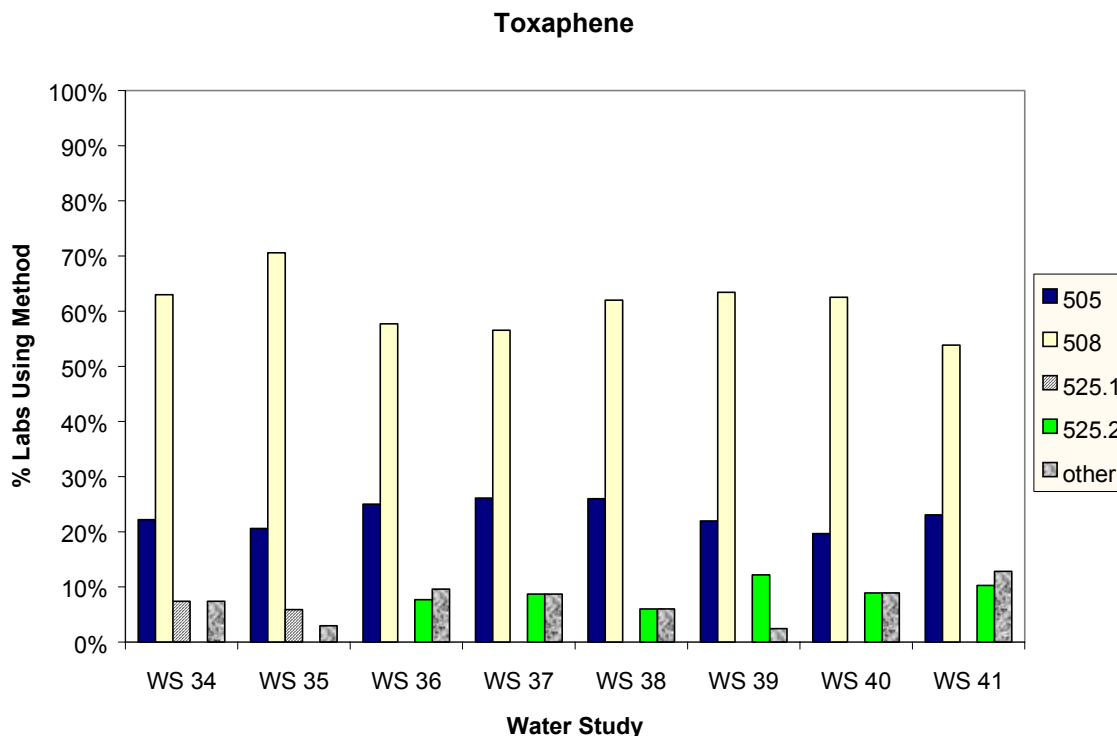
ND = Not determined.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 41 illustrates the methods chosen by EPA and State laboratories for toxaphene analysis during WS PE studies 34 to 41. The category of "other" includes any unidentified or unreported techniques used by participating laboratories. As shown in Figure 41, the predominant method used by laboratories participating in the WS studies was EPA Method 508, followed by EPA Method 505. Other methods such as EPA Methods 525.1, 525.2, and other unidentified methods were used intermittently throughout WS 34 to 41. EPA Method 508.1 was not used by laboratories according to the PE data.

**Figure 41. Distribution of Analytical Techniques by WS Study: Toxaphene**



b. Results of the PQL Analysis

The current PQL of 3 µg/L was derived by multiplying the IMDL by factor of five (56 FR 3526). With the availability of more recent WS data, EPA reviewed the data from WS studies 24 to 41 to attempt a PQL re-evaluation. Table 71 summarizes each WS result including the spiked (or "true") value, the number of participating laboratories, and the percentage of laboratories passing within the specified acceptance limit for toxaphene ( $\pm 45$  percent as designated in 40 CFR §141.24(h)(19)(i)).

**Table 71. Evaluation of Toxaphene Data from WS Studies Using the 45% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 45% Acceptance Limits
25b	1.41	35	97.1
24b	2.33	59	91.5
30	2.80	54	92.6
31	3.31	31	93.5
39	3.65	41	92.7
26b	3.68	58	94.8
32	3.71	56	92.9
25a	4.22	35	94.3
34	5.37	54	94.4
27	6.39	34	91.2
41	6.90	39	92.3
24a	7.58	60	91.7
29	7.60	33	97.0
37	8.81	46	87.0
33	9.23	33	90.9
26a	10.8	58	96.6
38	12.7	50	92.0
36	14.7	52	90.4
40	16.5	56	94.6
35	18.3	34	97.1

EPA prefers to evaluate the PQL as the concentration at which 75 percent of laboratories are able to pass the proficiency exam within the 45 percent acceptance limits. In the case of toxaphene, however, this approach could not be used, since the percentage of laboratories passing within acceptance limits was well above the 75 percent criterion. Also, very few WS studies (e.g., 24b, 25b and 30) involved true value concentrations near the current PQL; all other studies involved spiked values above 3 µg/L. Because of these data limitations, the PQL could not be re-evaluated using the historical linear regression approach. However, the observed high success rates of laboratories suggests that the PQL may be lowered. Since 97 percent of participating laboratories, on average, were able to determine concentrations at about half of the existing PQL, this success rate suggests that a lower PQL probably would not challenge most laboratories' analytical capabilities.

## Conclusion for Toxaphene

The 1991 NPDWR for toxaphene approved the use of EPA Methods 505, 508, and 525.1 for toxaphene determination in drinking water. EPA Methods 508.1 and 525.2, using similar GC technologies, were approved more recently. The MDL of EPA Method 508.1 was the most sensitive compared to all other methods; however, data on method usage over time revealed that this method was not employed by laboratories. Instead, laboratories participating in the PE studies used EPA Method 508 with the greatest frequency. Unfortunately, no data are available regarding the MDL of this method. A PQL re-evaluation could not be completed due to the high success rates (well above the 75 percent criterion) in each water study as well as the high spiked concentrations in all but three water studies. The high success rates of laboratories during PE testing at concentrations well below the current PQL leads to the inference that a lower PQL would not greatly lessen laboratory performance.

## **1,1,1-Trichloroethane**

### Results of the Method Comparison

The NPDWRs for 1,1,1-trichloroethane approved certain analytical methods for the determination of this contaminant (52 FR 25690) and seven other Phase I VOCs. These methods included EPA Methods 502.1, 502.2, 503.1, 542.1, and 524.2. Since this regulation was promulgated, the Agency retained EPA Methods 502.2 and 524.2 for determination of 1,1,1-trichloroethane and introduced a new GC variation, EPA Method 551.1, LLE/GC with ECD. Table 72 summarizes the MDLs for both the original and current methods.

**Table 72. Results of the Analytical Methods Comparison for 1,1,1-Trichloroethane (Newly Promulgated Methods in Bold)**

MCL = 200 µg/L    Current PQL = 5 µg/L    DL <sup>†</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL <sup>o</sup> (µg/L)	Method	Technique	MDL* (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	0.003	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01 - 0.03
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.01 - 0.03*	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.04 - 0.08
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.3	<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.005 - 0.012
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.04 - 0.08*			

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

◊ The MDLs of the original methods for this contaminant ranged from 0.2 - 0.5 µg/L according to the July 1987 Federal Register notice promulgating NPDWRs for the VOCs (52 FR 25690). However, the 1988 methods manual cited in footnote 1 lists the MDLs shown above.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

▲ Regulatory DLs for organic compounds are listed at 40 CFR § 141.24(f)(17)(i).

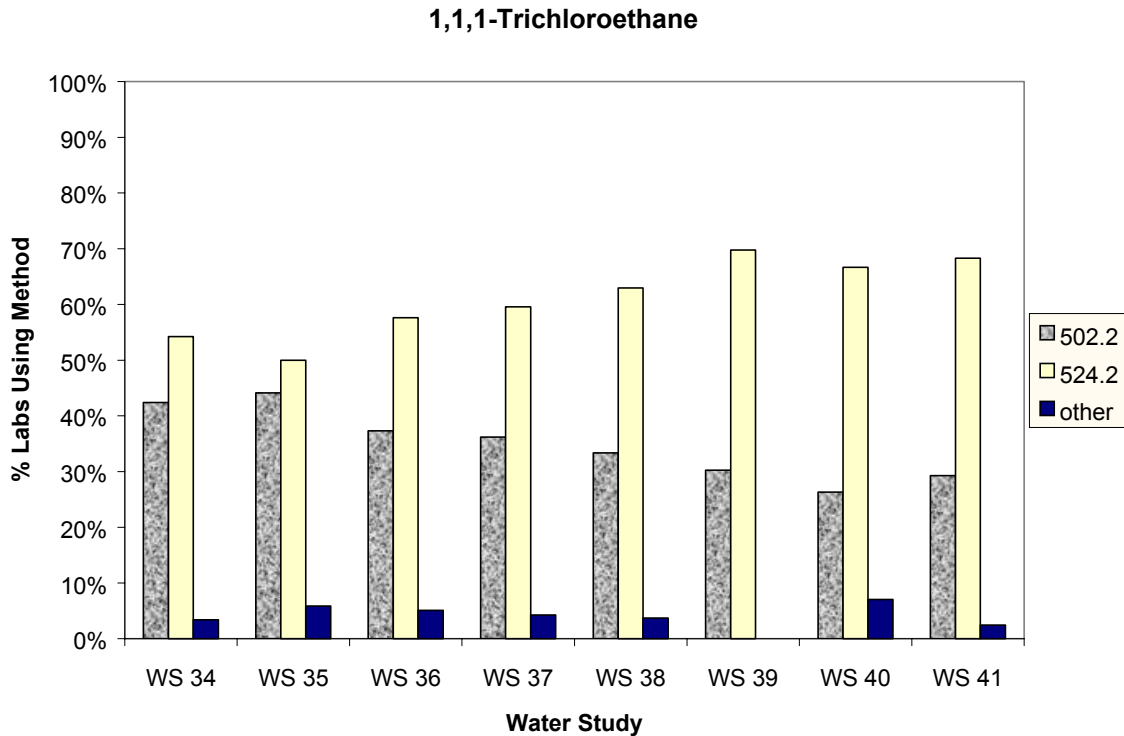
† Acceptance limits are listed at 40 CFR § 141.24(f)(17)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of the different methods used by the EPA and State laboratories during WS studies 34 to 41 are shown in Figure 42. The category of "other" contains those methods that were unknown or unidentified by the participating laboratories. As shown in Figure 42, the increase in EPA and State laboratory usage of EPA Method 524.2 was accompanied by a gradual decrease in use of EPA Method 502.2 during WS 34 to 41. Although EPA Method 551.1 was approved during this time, laboratories participating in WS studies did not report usage of this method.

**Figure 42. Distribution of Analytical Techniques by WS Study: 1,1,1-Trichloroethane**



b. Results of the PQL Analysis

As with the majority of the Phase I VOCs, the current PQL for 1,1,1-trichloroethane of 5 µg/L was determined using a multiplier of ten times the detection limit of 0.5 µg/L (52 FR 25700). Re-evaluation of the PQL was attempted using data from WS studies 24 through 41. Table 73 summarizes the results of these WS studies, providing the study number, the spiked value for the WS sample, the number of laboratory results, and the percent of laboratories passing the WS proficiency test for 1,1,1-trichloroethane within the specified acceptance limits ( $\pm 20$  percent for true values greater than 10 µg/L and  $\pm 40$  percent for true values less than 10 µg/L as specified at 141.24(f)(17)(i)).

**Table 73. Evaluation of 1,1,1-Trichloroethane Data from WS Studies Using the  $\pm 20\%$  or  $\pm 40\%$  Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 20\%$ Acceptance Limits	% Labs Passing $\pm 40\%$ Acceptance Limits
24	3.21	57		98.2
34	5.73	59		100
30	7.13	59		98.3
40	7.20	57		98.2
27	7.38	37		97.3
35	8.78	34		100
29	8.80	35		100
32	10.1	62	95.2	
37	10.3	47	87.2	
39	11.2	43	90.7	
25	11.3	37	83.8	
41	12.6	41	100	
31	13.0	36	100	
26	13.6	59	86.4	
36	14.5	59	100	
33	14.6	33	87.9	
38	17.2	54	96.3	

The 1,1,1-trichloroethane data from Table 73 are insufficient for a PQL re-evaluation using the graphical or linear regression approach. The high laboratory passing rates do not permit evaluation of the PQL using the 75 percent criterion. In addition, only one spike concentration (WS 24) was below the current PQL of 5  $\mu\text{g/L}$ . However, the laboratory passing rates at spike concentrations around the current PQL exceeded 98 percent. This information suggests that a lower PQL could be possible.

#### Conclusion for 1,1,1-Trichloroethane

The method comparison results show that since the promulgation of analytical methods under the NPDWR, EPA Methods 502.2 and 524.2 have remained in use whereas EPA Method 551.1 was more recently approved. While EPA Method 551.1 is the most sensitive of the three currently approved methods, this method is not currently used by EPA or State laboratories according to the available WS data. However, all current methods are more sensitive than the



methods approved at promulgation, as shown in Table 72. Evaluation of the quantitative PE data showed that the majority of the laboratories conducting WS analyses were able to surpass the 75 percent criterion needed to evaluate the PQL. Because of the high percentage of laboratories passing and an insufficient number of spike concentrations below the 5 µg/L, a re-evaluation of the PQL could not be performed using the graphical approach. However, the high passing rates at concentrations slightly above 5 µg/L are suggestive of a potential change in the current PQL.

## 1,1,2-Trichloroethane

### Results of the Method Comparison

As determined by the Phase I rules for volatile organic compounds (57 FR 31776), the approved methods listed for analysis of 1,1,2-trichloroethane in drinking water were purge and trap GC and GC/MS. Since this regulation was promulgated, the detection capability of EPA Method 524.2 has become slightly more sensitive. One new analytical method, LLE/GC with ECD (EPA 551.1), has been approved by the EPA since the promulgation of the original methods. As shown in Table 74, all three currently approved methods have comparable MDLs. However, EPA Method 502.1, which is no longer approved for analysis, has the greatest sensitivity level of all the approved methods, past and present.

**Table 74. Results of the Analytical Methods Comparison for 1,1,2-Trichloroethane (New Methods in Bold)**

MCL = 5 µg/L    Current PQL = 5 µg/L    DL <sup>▲</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL <sup>◊</sup> (µg/L)	Method	Technique	MDL (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	0.007	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.04
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.04	EPA 524.2 <sup>2</sup>	GC/MS	0.03 - 0.1*
EPA 524.1 <sup>1</sup>	GC/MS	ND	<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.012 - 0.014*
EPA 524.2 <sup>1</sup>	GC/MS	0.03 - 0.1*			

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

◊ The MDLs of the original methods for this contaminant ranged from 0.2 - 0.5 µg/L according to the July 1987 Federal Register notice promulgating NPDWRs for the VOCs (52 FR 25690). However, the 1988 methods manual cited in footnote 1 lists the MDLs shown above.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

▲ Regulatory DLs for organic compounds are listed at 40 CFR §141.24(f)(17)(i).

† Acceptance limits are listed at 40 CFR §141.24(f)(17)(i).

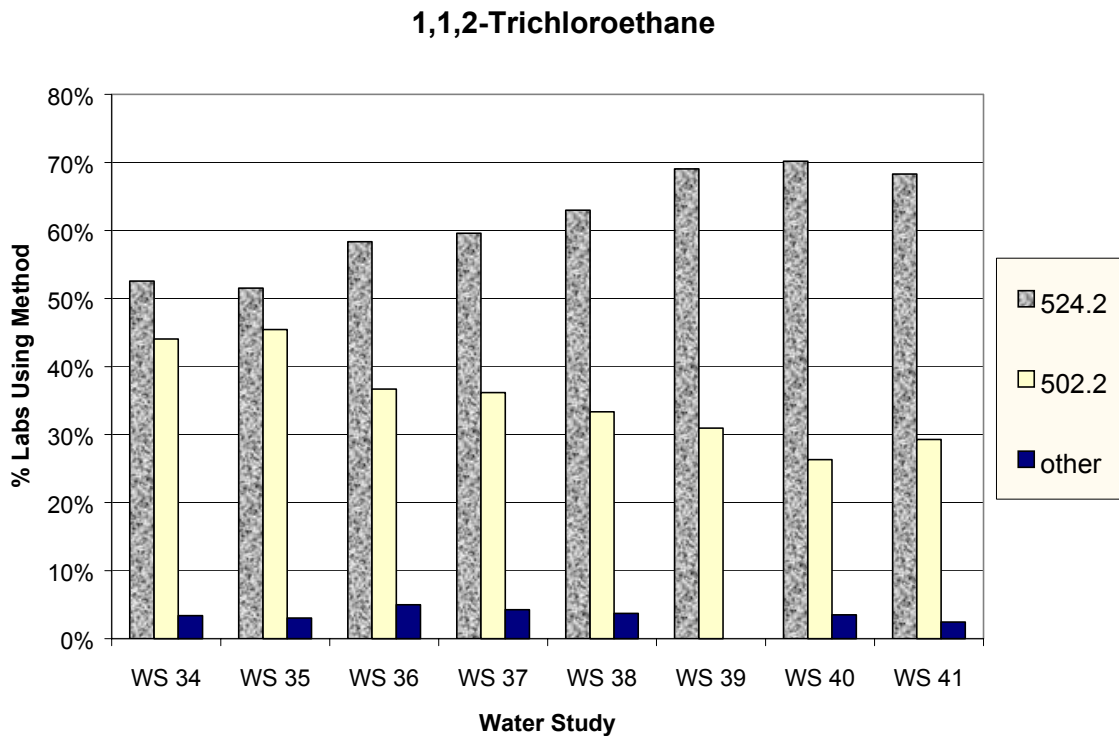
ND = Not determined.

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 43 shows the distribution of methods used by the EPA and State laboratories during WS 34 to 41. The category of "other" includes any unknown or unreported techniques used by the participating laboratories. As shown in Figure 43, the predominant methods used since the time of promulgation are EPA Methods 524.2 and 502.2. Although EPA approved a new method (EPA Method 551.1), none of the laboratories that responded used it for analysis.

**Figure 43. Distribution of Analytical Techniques by WS Study: 1,1,2-Trichloroethane**



b. Results of the PQL analysis

The original PQL for 1,1,2-trichloroethane was estimated from PE data (specifically WS 20, 23, and 26) to be 5 µg/L (55 FR 30414). The PQL re-evaluation data were taken from WS 24 through 41 (note that data were not available for WS 24, 25, 27 to 29, and 31). Table 75 summarizes the results of these studies, including the study number, the spiked (or "true") value for the sample, the number of laboratory results, and the percent of laboratories passing the WS proficiency test for 1,1,2-trichloroethane within the specified acceptance limits ( $\pm 20$  percent for a spiked value of  $>10$  µg/L and  $\pm 40$  percent for a spiked value of  $<10$  µg/L, as stipulated in 40 CFR §141.23(f)(17)(i)).

**Table 75. Evaluation of 1,1,2-Trichloroethane Data from WS Studies Using Either 20% or 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 20% Acceptance Limits	% Labs Passing ± 40% Acceptance Limits
36	6.46	59		98.3
34	8.50	59		100
37	10.7	47	89.4	
30	11.5	50	94.0	
39	12.3	42	97.6	
35	12.8	35	90.9	
32	13.2	51	90.6	
41	13.3	40	95.1	
33	15.7	34	91.4	
38	16.3	54	98.1	
40	17.2	57	98.2	
26	26.9	54	94.4	

The standard approach to develop or evaluate a PQL could not be performed with 1,1,2-trichloroethane because the high laboratory passing percentage data (as shown in Table 75) does not permit the plotting of a useful linear regression line. Therefore, the re-evaluation of the PQL could not be done using these WS data. However, high laboratory passing rates at concentrations slightly above the current PQL of 5 µg/L suggest that a lower PQL may be possible.

#### Conclusion for 1,1,2-Trichloroethane

The method comparison shows that since the promulgation of the original analytical methods for 1,1,2-trichloroethane, one new method (EPA Method 551.1) has been approved for contaminant analysis. However, laboratories who responded to the WS studies primarily chose to use EPA Methods 524.2 and 502.2 rather than EPA Method 551.1, as shown by the plot of method usage over time. The MDL for EPA Method 524.2 has decreased slightly over time, indicating slightly greater sensitivity. While EPA Method 502.1 had a maximum MDL of 0.007 µg/L, the lowest of any methods, it is currently not approved for 1,1,2-trichloroethane analyses. The evaluation of the WS data show that the majority of participating labs surpassed the 75 percent EPA criterion. Hence, because of the high percentage of labs passing and the lack of spike concentrations below the current PQL, a re-evaluation of the PQL could not be performed using linear regression or graphical analysis. However, the high passing rates at concentrations slightly above 5 µg/L are suggestive of a potential change in the current PQL.

## Trichloroethylene

### Results of the Method Comparison

The analytical methods approved for the determination of trichloroethylene under the NPDWRs for Phase I VOCs include EPA Methods 502.1, 502.2, 524.1, and 524.2 (52 FR 25899). Since the promulgation of the rule in 1987, the Agency has added EPA Method 551.1, a GC method with liquid-liquid extraction (LLE) and electron capture detector, to the list of approved methods. The currently approved methods for trichloroethylene determination are EPA Methods 502.2, 524.2, and 551.1. Table 76 summarizes the MDLs for both the original and current approved versions of the methods.

**Table 76. Results of the Analytical Methods Comparison for Trichloroethylene (Newly Promulgated Methods in Bold)**

MCL = 5 µg/L    Current PQL = 5 µg/L    DL <sup>▲</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL <sup>◇</sup> (µg/L)	Method	Technique	MDL* (µg/L)
EPA 502.1 <sup>1</sup>	Purge and Trap GC	0.001	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01 - 0.06
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.01 - 0.06*	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.02 - 0.19
EPA 503.1 <sup>1</sup>	Purge and Trap GC	0.01	<b>EPA 551.1<sup>2</sup></b>	LLE and GC with ECD	0.002 - 0.004
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.4			
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.02 - 0.19*			

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

<sup>◇</sup> The MDLs of the original methods for this contaminant ranged from 0.2 - 0.5 µg/L according to the July 1987 Federal Register notice promulgating NPDWRs for the VOCs (52 FR 25690). However, the 1988 methods manual cited in footnote 1 lists the MDLs shown above.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

<sup>▲</sup> Regulatory DLs for organic compounds are listed at 40 CFR § 141.24(f)(17)(i).

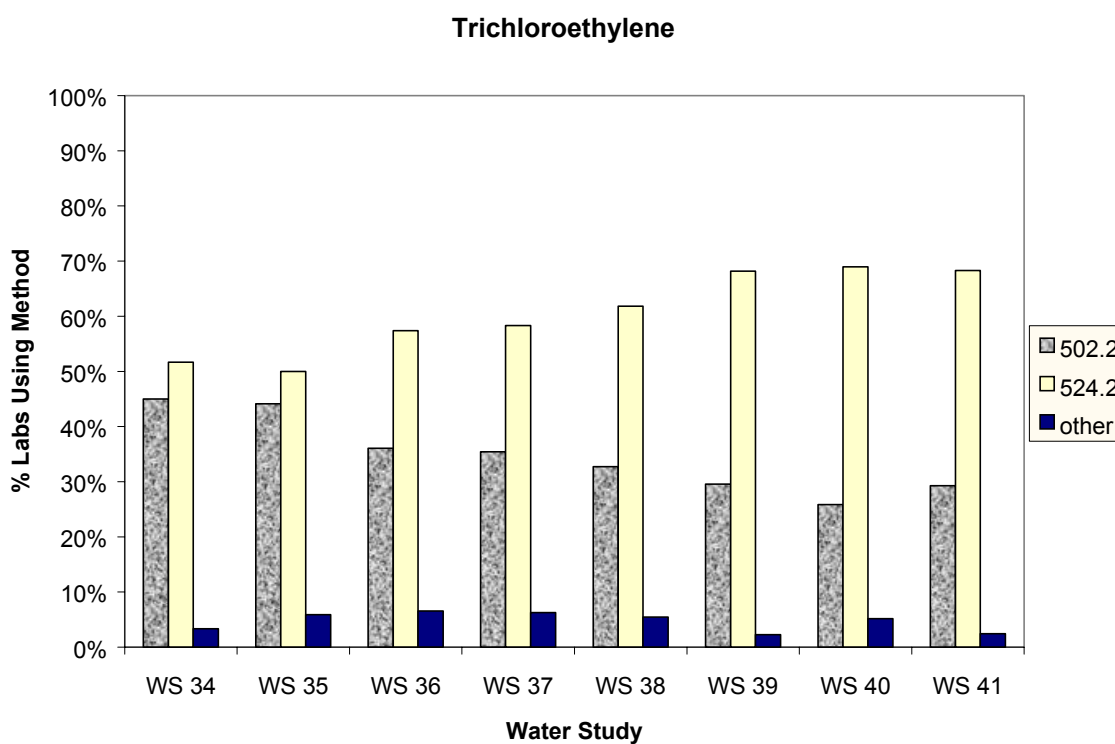
<sup>†</sup> Acceptance limits for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

Figure 44 shows the distribution of the different methods used by the EPA and State laboratories during WS studies 34 to 41. The category of "other" contains those methods that were unknown or unidentified by the participating laboratories. As shown in Figure 44, laboratories participating in studies WS 34 to 41 used EPA Method 524.2 with increasing frequency over EPA Method 502.2. No laboratories used EPA Method 551.1 for PE determinations of trichloroethylene.

**Figure 44. Distribution of Analytical Techniques by WS Study: Trichloroethylene**



### b. Results of the PQL Analysis

The original PQL of 5 µg/L for trichloroethylene was determined by evaluation of data from WS studies 8 to 11 (50 FR 46880). For the PQL reassessment, updated data from WS 24 to 41 were reviewed. Table 77 summarizes the results of these WS studies providing the study number, the spiked value for the WS sample, the number of laboratory results, and the percent of

laboratories passing the WS proficiency test for trichloroethylene within the acceptance limits ( $\pm 20$  percent for a true value greater than  $10 \mu\text{g/L}$ , or  $\pm 40$  percent for a true value lower than  $10 \mu\text{g/L}$ ).

**Table 77. Evaluation of Trichloroethylene Data from WS Studies Using the  $\pm 20\%$  or  $\pm 40\%$  Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 20\%$ Acceptance Limits	% Labs Passing $\pm 40\%$ Acceptance Limits
40	5.80	58		98.3
35	6.13	34		97.1
26	6.63	59		100
41	6.87	41		100
24	7.36	57		100
31	7.46	36		97.2
37	8.70	48		97.9
34	8.89	60		100
30	9.45	38		100
25	10.4	37	83.8	
32	11.2	63	95.2	
38	12.4	55	94.5	
27	14.0	37	91.9	
33	14.9	34	94.1	
29	15.9	34	85.3	
39	16.4	44	95.5	
36	17.4	61	96.7	

Table 77 reveals that the percentage of laboratories passing the acceptance limit averaged over 90 percent. Because the laboratories exceeded the standard 75 percent criterion used to estimate the PQL, the typical regression method could not be successfully employed to estimate a new PQL value. Another limitation of the data was that the true value concentrations in the available studies were all greater than  $0.5 \mu\text{g/L}$ , preventing evaluation of laboratory performance at concentrations below the current PQL. However, high laboratory passing rates at concentrations slightly above the current PQL of  $5 \mu\text{g/L}$  suggest that a lower PQL may be possible.

## Conclusion for Trichloroethylene

The method comparison results show that, since the promulgation of analytical methods under the original NPDWR for trichloroethylene, two of these methods are no longer approved for determination of this contaminant. While EPA Method 551.1 is the most sensitive of the three currently approved methods, this method is not currently used by EPA or State laboratories according to the available WS data. Instead, EPA Method 524.2, the least sensitive of the three current methods, has been the primary method of choice. Evaluation of the quantitative PE data shows that the majority of the laboratories conducting WS analyses had surpassed the 75 percent criterion. Because of the high percentage of laboratories passing, a re-evaluation of the PQL could not be performed using this approach. However, the high laboratory passing rates at concentrations slightly above 5 µg/L are suggestive of a change in the PQL.

## **Vinyl Chloride**

### Results of the Method Comparison

With the promulgation of NPDWRs for Phase I VOCs (proposed November 1985, 50 FR 46905; finalized July 1987, 52 FR 25690), EPA Methods 502.1, 502.2, 524.1, and 524.2 were listed as approved methods for the determination of vinyl chloride in drinking water. Since promulgation of this rule, EPA Methods 502.1 and 524.1 were removed. As shown in Table 78, the MDLs of the current methods are comparable in sensitivity to previously approved methods.

**Table 78. Results of the Analytical Methods Comparison for Vinyl Chloride**

MCL = 2 µg/L		Current PQL = 2 µg/L		DL <sup>^</sup> = 0.5 µg/L		Acceptance Limit <sup>†</sup> = ± 40%	
Methods Approved At Promulgation			Currently Approved Methods				
Method	Technique	MDL <sup>o</sup> (µg/L)	Method	Technique	MDL <sup>*</sup> (µg/L)		
EPA 502.1 <sup>1</sup>	Purge and Trap GC	0.01	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01 - 0.18		
EPA 502.2 <sup>1</sup>	Purge and Trap GC	0.01 - 0.18*	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.04 - 0.17		
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.3					
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.04 - 0.17 *					



<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

◊ The MDLs of the original methods for this contaminant ranged from 0.2 - 0.5 µg/L according to the July 1987 Federal Register notice promulgating NPDWRs for the VOCs (52 FR 25690). However, the 1988 methods manual cited in footnote 1 lists the MDLs shown above.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation and/or laboratory/analyst performance.

▲ Regulatory DLs for organic compounds are listed at 40 CFR § 141.24(f)(17)(i).

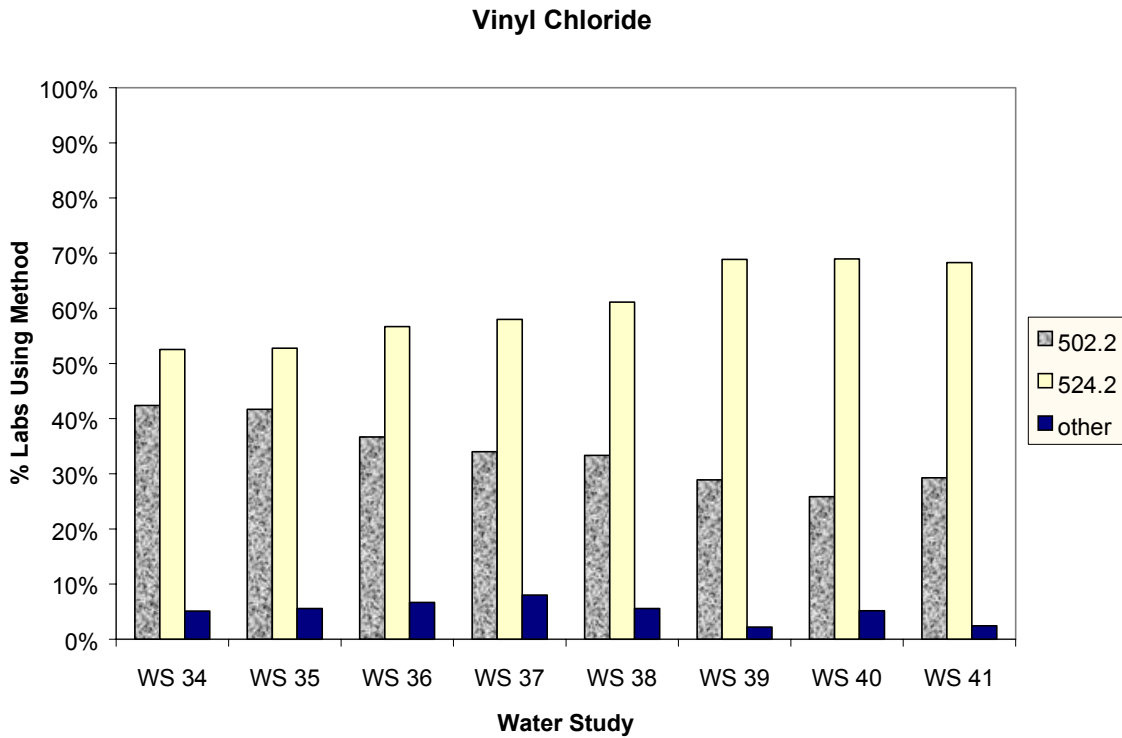
† Acceptance limits for vinyl chloride are listed at 40 CFR §141.24(f)(17)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of methods used by EPA and State laboratories during WS studies 34 to 41 is plotted in Figure 45. The category of "other" contains those methods that were unknown or unidentified by the participating laboratories. As shown in Figure 45, over the course of the past eight WS Studies, the use of EPA Method 524.2 has grown while the use of EPA Method 502.2 has decreased. EPA Method 524.2 has consistently remained the most commonly used method for vinyl chloride determination.

**Figure 45. Distribution of Analytical Techniques by WS Study: Vinyl Chloride**



b. Results of the PQL Analysis

The original PQL of 2 µg/L for vinyl chloride was determined by using multi-laboratory performance data, rather than the multiplier procedure used for other VOCs (52 FR 25700). A re-evaluation of the PQL was attempted using more recent PE data from WS 24 to 41. Table 79 summarizes the results of these studies, providing the study number, the spiked value for the WS sample, the number of laboratory results, and the percentage of laboratories passing the performance evaluation within the ± 40 percent acceptance limits (40 CFR § 141.24(f)(17)(ii)).

**Table 79. Evaluation of Vinyl Chloride Data from WS Studies Using  $\pm 40\%$  Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value ( $\mu\text{g/L}$ )	# Results from EPA and State Labs	% Labs Passing $\pm 40\%$ Acceptance Limits
32	2.57	43	79.1
27	3.57	39	79.5
24	4.35	57	80.7
35	4.91	36	100
30	5.48	58	82.8
39	6.19	45	91.1
33	7.35	34	79.4
26	8.70	59	86.4
36	9.47	60	88.3
31	11.9	39	79.5
25	12.4	38	86.8
34	14.1	59	93.2
29	14.6	38	78.9
37	14.8	50	88.0
38	17.9	54	96.3
41	22.3	41	92.7
40	27.2	58	94.8

EPA prefers to estimate the PQL by choosing the spiked value at which 75 percent of laboratories can determine the concentration within the appropriate 40 percent acceptance window. In the case of vinyl chloride, the results from participating laboratories listed in Table 79 could not be used to re-evaluate the PQL because the laboratory success rate exceeded this 75 percent criterion. The other limitation of these data was the high range of spiked concentrations exhibited during the WS studies, which exceeded the current PQL of 2  $\mu\text{g/L}$ . Therefore, the available data do not provide sufficient data to recalculate the PQL. However, passing rates of 79 to 81 percent for the three lowest concentrations (2.57, 3.57 and 4.35  $\mu\text{g/L}$ ) above the current PQL of 2  $\mu\text{g/L}$  suggest that the current PQL is in the appropriate range and unlikely to change.

#### Conclusion for Vinyl Chloride

As shown by the method comparison table, EPA Methods 502.2 and 524.2 were approved with the Phase I Rule promulgation for VOCs and continue to be approved today. The sensitivity of newer versions of the methods are comparable older versions. According to the

plot of methods usage over time, the laboratories who participated in WS 34 to 41 employed EPA Method 524.2 more frequently than EPA Method 502.2. The available PE data were reviewed but did not provide sufficient data to recalculate the PQL. Evaluation of the available WS data suggest that the current PQL of 2 µg/L vinyl chloride is unlikely to change.

## Xylenes (total)

### Results of the Method Comparison

The NPDWR for total xylenes, a Phase II VOC, approved four methods: EPA Methods 502.2, 503.1, 524.1, and 524.2. Since this regulation was promulgated, EPA Methods 503.1 and 524.1 have been removed from the approved list, leaving EPA Methods 502.2 and 524.2 as the only currently approved methods; no new methods have been introduced. Table 80 provides descriptions of the methods and their MDLs. The MDLs of the two current methods remain essentially unchanged from their values at promulgation of the rule.

**Table 80. Analytical Methods Comparison for Xylenes (total)**

MCL = 10 mg/L    Current PQL = 5 µg/L    DL <sup>▲</sup> = 0.5 µg/L    Acceptance Limit <sup>†</sup> = ± 20% (>10 µg/L) or ± 40% (<10 µg/L)					
Methods Approved At Promulgation			Currently Approved Methods (141.24)		
Method	Technique	MDL * (µg/L)	Method	Technique	MDL* (µg/L)
EPA502.2 <sup>1</sup>	Purge and Trap GC	0.01 -0.02	EPA 502.2 <sup>2</sup>	Purge and Trap GC	0.01 - 0.02
EPA 503.1 <sup>1</sup>	Purge and Trap GC	0.002 - 0.004	EPA 524.2 <sup>2</sup>	Purge and Trap GC/MS	0.03 - 0.13
EPA 524.1 <sup>1</sup>	Purge and Trap GC/MS	0.2 - 0.3			
EPA 524.2 <sup>1</sup>	Purge and Trap GC/MS	0.03 - 0.13			

<sup>1</sup> "Methods for the Determination of Organic Compounds in Drinking Water," EPA/600/4-88/039, December 1988.

<sup>2</sup> "Methods for the Determination of Organic Compounds in Drinking Water--Supplement III," EPA/600/R-95/131, August 1995.

\* Multiple method detection limit (MDL) values result from variability of reagents, instrumentation, and/or laboratory/analyst performance.

▲ Regulatory DLs for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

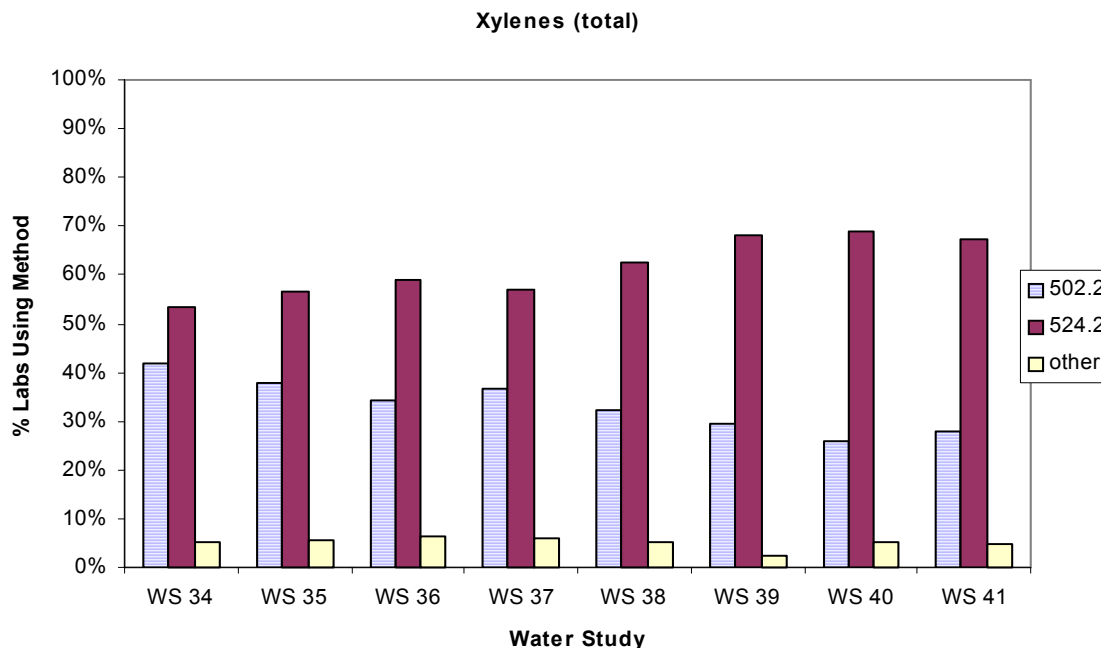
† Acceptance limits for VOCs are listed at 40 CFR § 141.24(f)(17)(i).

## Results of the Analysis of the WS Data

### a. Method Usage Over Time

The distribution of analytical methods used by participating laboratories from WS 34 to 41 is shown in Figure 46. The results for "other" techniques in this figure include the use of any other technique identified by the laboratories participating in the WS study, as well as "unknown" methods, i.e., methods for which laboratories did not report the method used. As Figure 46 shows, EPA Method 524.2 was the preferred method for laboratories participating in WS studies 34 to 41. The use of EPA Method 502.2 appears to decrease over time.

**Figure 46. Distribution of Analytical Techniques by WS Study: Xylenes (total)**



### b. Results of the PQL Analysis

The Agency set the original PQL at 5  $\mu\text{g/L}$  (52 FR 25700 and 56 FR 3526) for all VOCs except vinyl chloride. Data from WS 24 through 41 were used to re-evaluate the PQL for total xylenes. Table 81 summarizes the results of these WS studies providing the study number, the spiked "true" value for the WS sample, the number of results from EPA and State laboratories, and the percent of laboratories passing the WS proficiency test for total xylenes within specified acceptance limits. The acceptance limits for total xylenes are  $\pm 20\%$  for a true value greater than 10  $\mu\text{g/L}$  or  $\pm 40\%$  for a true value lower than 10  $\mu\text{g/L}$  (as specified at 40 CFR § 141.24(f)(17)(i)).

**Table 81. Evaluation of Xylenes (total) Data from WS Studies Using Either 20% or 40% Acceptance Limits (in Order of Increasing Concentration)**

WS #	Spiked "True" Value (µg/L)	# Results from EPA and State Labs	% Labs Passing ± 20% Acceptance Limit	% Labs Passing ± 40% Acceptance Limit
32	7.54	61		95.1
27	8.45	32		90.6
36	10.4	61	95.1	
33	11.6	34	91.2	
29	12.0	34	88.2	
25	12.5	33	87.9	
37	12.9	49	87.8	
34	13.1	60	90.0	
31	13.2	38	84.2	
24	14.0	45	80.0	
30	15.0	59	83.0	
35	17.4	37	91.9	
38	22.9	56	92.9	
39	24.4	44	88.6	
40	30.3	58	91.4	
41	30.9	43	97.7	

A re-evaluation of the PQL could not be performed using the available PE data in Table 81. All of the passing rates in Table 81 were well above the 75 percent criterion necessary to recalculate the PQL. High laboratory passing rates (greater than 90 percent) at concentrations slightly above (i.e., ~ 7 and 8 µg/L) the current PQL suggest that a lower PQL may exist.

#### Conclusion for Xylenes (total)

Since the promulgation of the Phase II rule, no new methods have been approved for the analysis of total xylenes, and analytical capabilities have remained essentially constant. Of the currently approved methods, EPA Method 524.2 is used more frequently by laboratories for the detection of total xylenes (although it is not the most sensitive method available). Evaluation of WS studies 24 to 41 show that the percentage of laboratories passing are higher than the 75% criterion typically used to develop a PQL. Also, all of the true values for the WS PE studies were above the current PQL. At the lowest concentrations tested (~ 7 and 8 µg/L), the laboratory

passing rates were quite high (greater than 90 percent). Although not definitive, high passing rates at values slightly above the current PQL of 5 µg/L suggest that a lower PQL may exist for total xylenes.

## **VI. Conclusion**

As part of the 1996-2002 Six-Year Review of National Primary Drinking Water Regulations, EPA's Office of Ground Water and Drinking Water re-evaluated the analytical feasibility for 40 selected NPDWRs. Table 82 summarizes the results of the analytical feasibility analysis. Upon review, EPA found that the majority of the available WS data were insufficient for the recalculation of the PQL for many of the 40 contaminants of interest. The data were considered insufficient because either the true value of the spike concentrations used in the WS studies were above the concentration of interest and/or the percentages of labs passing exceeded the 75 percent criterion used to calculate a PQL. However, for many of the 40 contaminants, the available data were sufficient to indicate whether the PQL might change or if the current PQL is still appropriate. Of the 40 NPDWRs evaluated, the available information indicates that the PQL for 25 may possibly be lower. The PQL for the remaining 15 appears to still be appropriate.

For the 25 analytes where the WS data indicate that a lower PQL may exist, EPA used the information about method usage over time, the MDLs for these methods, and the 10 x MDL multiplier to estimate what the potentially lower PQL might be. These estimates are shown in Appendix A. Pending the outcome of the health effects review, the majority of these estimated values will be used as thresholds in the occurrence and exposure analyses to determine whether an improvement in public health protection might be possible if EPA were to consider gathering more definitive data to recalculate the PQL and possibly lower the MCL.

**Table 82. Summary of Results from the Methods Comparison  
and WS Analysis**

<b>SDWA Chemical Contaminant</b>		<b>Current PQL (mg/L)<sup>1</sup> (PQL at the time of the original promulgation)</b>	<b>Result of the Six-Year Analytical Feasibility Reassessment</b>
1	Alachlor	0.002	Current PQL still appropriate
2	Benzene	0.005	WS Data indicative of change
3	Benzo(a)pyrene	0.0002	Current PQL still appropriate
4	Beryllium	0.001	Current PQL still appropriate
5	Bis (2-ethylhexyl)phthalate (also known as Di(2-ethylhexyl) phthalate or DEHP)	0.006	Current PQL still appropriate
6	Cadmium	0.002	WS Data indicative of change
7	Carbofuran	0.007	WS Data indicative of change
8	Carbon tetrachloride	0.005	WS Data indicative of change
9	Chlordane	0.002	WS Data indicative of change
10	Chromium (total - Cr III and VI)	0.01	Current PQL still appropriate
11	1,2-Dibromo-3-chloropropane (DBCP)	0.0002	WS Data indicative of change
12	1,4-Dichlorobenzene (para)	0.005	WS Data indicative of change
13	1,2-Dichloroethane	0.005	WS Data indicative of change
14	1,1-Dichloroethylene	0.005	WS Data indicative of change
15	Dichloromethane (methylene chloride)	0.005	WS Data indicative of change
16	1,2-Dichloropropane	0.005	WS Data indicative of change
17	Dioxin - 2,3,7,8-TCDD	$3 \times 10^{-8}$	PQL most likely still appropriate - no data but unlikely to change since no new method approved
18	Diquat	0.004	Current PQL still appropriate
19	Ethylene dibromide	0.00005	Current PQL still appropriate
20	Fluoride	0.5	Current PQL still appropriate
21	Glyphosate	0.06	Current PQL still appropriate
22	Heptachlor	0.0004	WS Data indicative of change
23	Heptachlor epoxide	0.0002	WS Data indicative of change
24	Hexachlorobenzene	0.001	WS Data indicative of change
25	Hexachlorocyclopentadiene	0.001	WS Data indicative of change
26	Mercury	0.002	Current PQL still appropriate
27	Methoxychlor	0.01	WS Data indicative of change
28	Oxamyl	0.02	PQL could range from 0.02 to 0.04 mg/L
29	Polychlorinated biphenyls (PCBs) (as decachlorobiphenyl)	0.0005	Current PQL still appropriate



**Table 82. Summary of Results from the Methods Comparison  
and WS Analysis**

<b>SDWA Chemical Contaminant</b>		<b>Current PQL (mg/L)<sup>1</sup> (PQL at the time of the original promulgation)</b>	<b>Result of the Six-Year Analytical Feasibility Reassessment</b>
30	Pentachlorophenol	0.001	Current PQL still appropriate
31	Picloram	0.001	Current PQL still appropriate
32	Tetrachloroethylene	0.005	WS Data indicative of change
33	Thallium	0.002	WS Data indicative of change
34	Toluene	0.005	WS Date indicative of change
35	Toxaphene	0.003	WS Data indicative of change
36	1,1,1-Trichloroethane	0.005	WS Data indicative of change
37	1,1,2-Trichloroethane	0.005	WS Data indicative of change
38	Trichloroethylene	0.005	WS Data indicative of change
39	Vinyl chloride	0.002	Current PQL still appropriate
40	Xylenes (total)	0.005	WS Data indicative of change

<sup>1</sup> The PQL values were converted from µg/L to mg/L to allow for comparison of values in other support documents.

## References

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- USEPA. 1996. Performance Evaluation Studies Supporting Administration of the Clean Water Act and the Safe Drinking Water Act. *Federal Register*. Vol. 61, No. 139, p. 37464, July 18, 1996.
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- USEPA. 2001a. Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; National Primary Drinking Water Regulations; and National Secondary Drinking Water Regulations; Methods Update; Proposed Rule. *Federal Register*. Vol. 66, p. 3526, January 16, 2001.
- USEPA. 2001b. National Primary Drinking Water Regulations; Arsenic and Clarifications to Compliance and New Source Contaminants Monitoring; Final Rule. *Federal Register*. Vol. 66, No. 14, p. 6976, January 22, 2001.

## Appendix A

After re-evaluating more recent Water Supply data for the Six-Year Review, EPA found that insufficient data were available around the 75 percent criterion to actually recalculate the PQL. However, in many cases, the passing rates for the EPA Regional and State laboratories exceeded the 75 percent at values close to the current PQL. If the passing rates were greater than 80 to 85 percent at spike concentrations close to the current PQL, then this information was considered to be indicative of a possible change in the PQL. If data indicated a possible change in the PQL, EPA then evaluated the distribution of the analytical methods used to analyze the spike samples in the WS studies. Evaluation of the method usage over time allowed EPA to determine the analytical methods that appear to be the most widely used for the analysis of a particular contaminant. Knowledge of which analytical methods are the most widely used, along with the MDL for these methods, and a ten times MDL multiplier allowed EPA to estimate where the potential lower limit of quantitation may lie today. These values are shown in Table 83. Most of these estimated PQLs have or will be used as a threshold value in the occurrence and exposure (O/E)<sup>1</sup> analysis to help the Agency determine if there may be a meaningful opportunity for health risk reduction if EPA were to consider gathering the information needed to recalculate the PQL (and therefore consider changes to the MCL).

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<sup>1</sup> For those contaminants where occurrence is evaluated with respect to the revise/not revise decision, EPA is using the Stage 2 occurrence analysis for the 16 State database to determine the percentage of PWSs that could be impacted, and the percentage of the exposed population served by these systems. In making the revise/not revise decision, EPA will consider the difference between levels of occurrence and exposure above the current MCL and the occurrence and exposure at threshold levels of interest (e.g. potential MCLs and/or MCLGs).

**Table 83. Estimated PQLs Based on Method Usage and 10 x MDL Multiplier**  
*Estimated values to use in the Occurrence and Exposure (O/E) analyses*  
*(units converted from µg/L to mg/L to allow for comparison of values in other support documents)*

Chemical analyte		Current PQL <sup>1</sup> (mg/L)	Most commonly used methods with published MDL (mg/L)		Estimated value for O/E (mg/L)
1	Benzene	0.005	EPA 524.2 EPA 502.2	0.00004 (upper MDL) 0.00001	0.0004 0.0001  Use upper value of 0.0004 mg/L
2	Cadmium	0.002	EPA 200.7 EPA 200.8 EPA 200.9 all used equally	0.001 0.0005 0.00005	0.01 0.005 0.0005  If use upper or intermediate value - these are higher than current MCL. Could use 0.0005 mg/L as a value for O/E but this would probably be the lower edge of the quantitation limit.
3	Carbofuran	0.007	EPA 531.1	0.00052	0.0052  Round to 0.005 mg/L
4	Carbon tetrachloride	0.005	EPA 524.2 EPA 502.2	0.00021 (upper MDL) 0.00002 (upper MDL)	0.0021 0.0002  Use upper value of 0.0021 and since this value is close to one-half MCL, use 0.0025 mg/L.
5	Chlordane	0.002	EPA 505 EPA 508	0.00014 0.0000041 (upper MDL)	0.0014 0.000041  Because there is an order of magnitude difference between these two values, use the average and round up. Average = 0.00072 mg/L Round up to 0.001 mg/L
6	1,2-Dibromo-3-chloropropane (DBCP)	0.0002	EPA 504.1	0.00001	0.0001 mg/L
7	1,4-Dichlorobenzene (para)	0.005	EPA 502.2 EPA 524.2	0.00004 (upper MDL) 0.00004 (upper MDL)	0.0004 0.0004  Use upper value of 0.0004 mg/L

Chemical analyte		Current PQL <sup>1</sup> (mg/L)	Most commonly used methods with published MDL (mg/L)		Estimated value for O/E (mg/L)
8	1,2-Dichloroethane	0.005	EPA 502.2 EPA 524.2	0.00003 0.00006 (upper MDL)	0.0003 0.0006  Use upper value and round to 0.001 mg/L
9	1,1-Dichloroethylene	0.005	EPA 524.2 EPA 502.2	0.00012 (upper MDL) 0.00007 (upper MDL)	0.0012 0.0007  Could use either both round to 0.001 mg/L
10	Dichloromethane (methylene chloride)	0.005	EPA 524.2 EPA 502.2	0.00009 (upper MDL) 0.00002 (upper MDL)	0.0009 0.0002  Used average for these two since close to one-half MCL Average = 0.00055 mg/L
11	1,2-Dichloropropane	0.005	EPA 524.2 EPA 502.2	0.00004 (upper MDL) 0.00003 (upper MDL)	0.0004 0.0003  Use upper value 0.0004 mg/L
12	Heptachlor	0.0004	EPA 525.2 EPA 505 EPA 508	0.00015 (upper MDL) 0.000003 0.0000015	0.0015 0.00003 0.000015  Because of widespread between these - use the intermediate value and round to 0.0001 mg/L to be conservative
13	Heptachlor epoxide	0.0002	EPA 525.2 EPA 508 EPA 505	0.00013 (upper MDL) 0.0000059 0.000004	0.0013 0.000059 0.00004  Because of widespread between these - use the intermediate value and round to 0.0001 mg/L to be conservative
14	Hexachlorobenzene	0.001	EPA 508 EPA 505 EPA 525.2	0.0000077 0.000002 0.00013 (upper MDL)	0.000077 0.00002 0.0013  Average = 0.0005 mg/L

Chemical analyte		Current PQL <sup>1</sup> (mg/L)	Most commonly used methods with published MDL (mg/L)		Estimated value for O/E (mg/L)
15	Hexachlorocyclopentadiene	0.001	EPA 508 EPA 505 EPA 525.2	N/A 0.00013 0.00016 (upper MDL)	----- 0.0013 (rounds to 0.001) 0.0016  Use 0.001 mg/L
16	Methoxychlor	0.01	EPA 505 EPA 525.2 EPA 508	0.00096 0.00013 (upper MDL) 0.000022	0.0096 0.0013 0.00022  Use intermediate value and round to 0.001 mg/L
17	Oxamyl	0.02	-----	-----	PQL could range from 0.02 to 0.04 mg/L
18	Tetrachloroethylene	0.005	EPA 524.2 EPA 502.2	0.00014 (upper MDL) 0.00005 (upper MDL)	0.0014 0.0005  In this case, used the lower value of 0.0005 mg/L because of the 95-100 % passing rates around the current PQL.
19	Thallium	0.002	EPA 200.9 EPA 200.8	0.0007 0.0003	0.007 0.003  These values higher than current MCL, could not estimate using 10 multiplier.
20	Toluene	0.005	EPA 502.2 EPA 524.2	0.00002 (upper MDL) 0.00011 (upper MDL)	0.0002 0.0011  Average = 0.00065 mg/L
21	Toxaphene	0.003	EPA 508 EPA 505	N/A (Not Available) 0.001	----- 0.01 (higher than current MCL)
22	1,1,1-Trichloroethane	0.005	EPA 524.2 EPA 502.2	0.00008 (upper MDL) 0.00003 (upper MDL)	0.0008 0.0003  Average = 0.0005 mg/L

Chemical analyte		Current PQL <sup>1</sup> (mg/L)	Most commonly used methods with published MDL (mg/L)		Estimated value for O/E (mg/L)
23	1,1,2-Trichloroethane	0.005	EPA 524.2 EPA 502.2	0.0001 (upper MDL) 0.00004	0.001 0.0004  Average = 0.0007 mg/L Estimated value is lower than MCLG of 0.003 mg/L. So should use MCLG value as threshold in O/E analysis.
24	Trichloroethylene	0.005	EPA 502.2 EPA 524.2	0.00006 (upper MDL) 0.00019 (upper MDL)	0.0006 0.0019  Average = 0.00125 mg/L
25	Xylenes (total)	0.005	EPA 502.2 EPA 524.2	0.00002 (upper MDL) 0.00013 (upper MDL)	0.0002 0.0013  Average = 0.00075 mg/L

<sup>1</sup> PQL at the time of the original promulgation.





## **Appendix B**

### **Water Supply Raw Data**

Below are tables that contain the raw Water Supply (WS) data used to construct the Distribution of Analytical Techniques figures and Evaluation of Data tables.

**Alachlor**

**Water Study: 24a**

**True Value: 0.735 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	0.690	505	0.771	505	0.824	other	0.900	other	0.913		
505	0.703	other	0.777	507	0.829	507	0.908	505	0.945		
507	0.732	507	0.791	other	0.860	other	0.909	other	0.980		
507	0.763	507	0.822	other	0.879	507	0.910				

**Water Study: 24b**

**True Value: 4.53 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	3.400	507	4.030	other	4.250	505	4.540	other	5.020		
507	3.630	505	4.060	505	4.470	507	4.610	507	5.420		
other	3.765	507	4.160	other	4.500	507	4.610	other	6.400		
505	3.900	507	4.170	other	4.500	other	4.730				

**Water Study: 25a**

**True Value: 1.87 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	1.479	507	1.600	507	1.800	507	1.910	other	2.590		
other	1.560	505	1.630	507	1.860	507	2.000				
507	1.560	other	1.760	505	1.860	507	2.300				

**Water Study: 25b**

**True Value: 9.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	7.310	507	7.670	507	9.630	other	10.200	507	11.800		
507	7.400	505	8.520	other	9.660	22	10.300				
other	7.446	507	9.460	505	9.670	507	11.000				

**Water Study: 26a**

**True Value: 5.66 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	4.400	507	5.150	other	5.300	507	5.570	507	5.890		
505	4.550	other	5.220	507	5.400	507	5.570	505	7.130		
505	4.870	other	5.230	507	5.500	other	5.600	other	7.350		
507	5.140	other	5.270	505	5.560	507	5.600	507	42.500		

**Water Study: 26b****True Value: 0.933 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	0.588	505	0.810	other	0.900	other	0.953	other	1.130		
other	0.600	507	0.875	507	0.910	other	0.971	507	1.200		
507	0.730	507	0.890	other	0.921	507	0.980	505	1.210		
505	0.779	507	0.894	507	0.939	505	1.030	507	7.000		

**Water Study: 27****True Value: 3.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	1.900	other	3.200	507	3.370	507	3.710	507	4.080	507	4.300
505	2.060	507	3.240	other	3.490	507	3.960	other	4.160	other	4.610
507	3.000	505	3.270	507	3.500	507	4.030	other	4.160		

**Water Study: 29****True Value: 1.59 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.161	other	1.310	507	1.460	507	1.690	505	2.000		
other	0.237	507	1.400	507	1.500	507	1.750	other	1310.000		
507	0.700	507	1.420	other	1.570	507	1.860				

**Water Study: 30****True Value: 3.21 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	2.130	507	2.620	other	2.950	507	3.156	other	3.370	507	3.760
507	2.260	other	2.750	507	3.000	505	3.270	507	3.380	other	3.890
other	2.301	507	2.810	other	3.050	other	3.270	507	3.390	505	4.410
other	2.310	other	2.820	other	3.050	505	3.280	507	3.390	other	4.500
other	2.400	other	2.900	507	3.050	507	3.300	other	3.450	other	5.590
505	2.480	other	2.910	505	3.060	507	3.350	other	3.490		
507	2.500	other	2.940	507	3.110	505	3.360	507	3.700		

**Water Study: 31****True Value: 2.50 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.975	507	1.260	507	2.200	other	2.420	other	2.680		
507	1.000	507	1.740	other	2.250	507	2.470	507	2.720		
other	1.030	other	1.870	other	2.300	507	2.510	other	2.720		
other	1.040	505	2.170	507	2.310	507	2.570	507	2.930		
505	1.200	507	2.200	507	2.318	507	2.650	507	3.230		

**Water Study: 32****True Value: 2.33 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	0.0387	other	1.960	525.1	2.110	525.1	2.410	505	2.690	505	3.860
507	1.170	other	2.030	507	2.160	507	2.420	507	2.690	505	5.800
525.1	1.410	507	2.040	507	2.190	505	2.430	507	2.700	other	9.430
other	1.710	505	2.050	505	2.240	507	2.470	525.1	2.940		
507	1.800	507	2.060	507	2.260	other	2.520	507	2.960		
525.1	1.880	other	2.078	507	2.330	507	2.600	507	3.120		
505	1.919	525.1	2.080	505	2.340	other	2.600	525.1	3.280		
other	1.920	other	2.100	505	2.400	505	2.670	525.1	3.435		

**Water Study: 33****True Value: 4.27 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	1.110	507	3.380	505	3.960	525.1	4.140	507	4.344	505	4.920
525.1	1.830	505	3.800	507	3.990	505	4.240	other	4.350	507	5.340
507	3.250	507	3.830	505	4.000	507	4.290	525.1	4.740	525.1	5.670
other	3.350	525.1	3.910	507	4.000	507	4.290	507	4.800	other	12.700
507	3.370	other	3.950	505	4.130	other	4.310	525.1	4.850	505	56.200

**Water Study: 34****True Value: 3.43 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	1.910	505	2.759	505	3.140	505	3.460	505	3.600	505	3.700
507	2.090	525.2	2.820	other	3.140	505	3.490	525.1	3.630	505	3.810
505	2.230	505	2.880	525.1	3.210	507	3.510	507	3.640	507	3.896
507	2.280	505	2.890	507	3.220	505	3.520	507	3.650	525.1	3.910
525.1	2.510	other	2.900	507	3.250	507	3.560	507	3.652	525.1	4.000
other	2.580	507	2.910	507	3.260	525.1	3.560	525.1	3.670	525.1	4.010
507	2.650	507	3.100	other	3.260	525.1	3.560	507	3.670	507	4.020
507	2.750	525.1	3.110	525.1	3.310	505	3.596	507	3.690	507	4.160

**Water Study: 35****True Value: 5.27 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	3.130	507	4.120	507	4.950	525.1	5.410	other	5.720	507	7.350
507	3.230	525.2	4.430	505	5.050	525.1	5.430	525.1	5.740	505	10.000
507	3.580	505	4.490	507	5.120	507	5.460	other	5.820		
525.1	3.810	507	4.860	507	5.270	507	5.550	525.1	5.960		
507	4.020	507	4.870	505	5.280	507	5.600	525.1	6.220		

**Water Study: 36****True Value: 7.34 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	4.840	507	6.060	507	6.650	507	7.135	505	7.490	505	8.200
507	4.890	507	6.310	505	6.710	525.2	7.190	505	7.610	507	8.510
525.2	5.160	other	6.380	508.1	6.710	525.2	7.200	525.2	7.620	507	9.040
507	5.370	507	6.390	525.2	6.750	525.2	7.210	507	7.790	508.1	9.750
507	5.590	507	6.490	505	6.790	507	7.230	525.2	7.840	525.1	10.300
other	5.600	507	6.490	507	6.960	525.2	7.310	507	7.860		
other	5.660	507	6.550	525.2	6.960	525.2	7.330	525.2	8.060		
525.2	5.710	507	6.580	505	7.020	507	7.410	507	8.190		
other	6.040	other	6.620	other	7.060	507	7.430	other	8.110		

**Water Study: 37****True Value: 4.87 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	2.320	other	3.920	525.2	4.683	525.2	4.920	507	5.220	505	6.277
507	2.660	525.2	4.140	505	4.750	525.2	4.930	other	5.380	507	7.190
505	2.750	525.2	4.150	505	4.770	507	4.950	505	5.480	507	7.280
507	3.190	507	4.500	other	4.810	525.2	4.970	525.2	5.580	507	7.410
505	3.480	507	4.580	505	4.840	505	5.060	other	5.890	508.1	8.340
507	3.490	507	4.620	508.1	4.880	525.2	5.070	525.2	6.170		
507	3.700	507	4.680	507	4.890	505	5.100	525.2	6.250		

**Water Study: 38****True Value: 9.52 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	2.470	507	7.670	507	8.960	507	9.520	525.2	10.000	525.2	10.900
525.2	4.670	508.1	7.700	505	9.010	507	9.680	507	10.100	525.2	11.800
507	5.110	507	7.840	507	9.080	505	9.710	507	10.100	525.2	13.000
505	5.370	507	8.060	507	9.150	525.2	9.800	525.2	10.120	507	13.600
507	5.580	507	8.470	507	9.150	525.2	9.810	525.2	10.200		
507	6.150	507	8.550	507	9.220	525.2	9.840	505	10.290		
507	6.830	508.1	8.560	525.2	9.230	507	9.910	507	10.670		
525.2	7.220	507	8.650	505	9.320	other	9.980	525.2	10.700		
other	7.500	507	8.950	507	9.500	525.2	10.000	507	10.800		

**Water Study: 39****True Value: 14.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	6.600	508.1	12.600	525.2	13.600	505	14.170	507	15.100	525.2	16.400
507	10.500	525.2	12.700	507	13.900	507	14.200	525.2	15.600	525.2	16.430
other	10.600	507	12.800	507	13.900	other	14.500	505	15.600	507	16.500
507	12.100	507	12.900	507	13.900	507	14.540	525.2	15.900	525.2	18.300
507	12.200	507	12.900	507	13.900	505	14.600	525.2	16.000	505	18.900
507	12.300	525.2	13.200	507	13.900	525.2	14.790	525.2	16.200		
508.1	12.400	525.2	13.500	525.2	14.000	525.2	14.800	525.2	16.300		

**Water Study: 40****True Value: 17.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
507	0.480	507	12.900	507	16.000	507	17.800	525.2	18.700	507	19.800
508.1	2.260	507	13.400	525.2	16.600	507	18.000	525.2	18.700	507	20.290
507	8.620	525.2	13.700	507	16.800	507	18.200	507	18.800	525.2	22.000
508.1	8.680	507	14.000	507	16.900	525.2	18.300	525.2	18.900	525.2	23.300
507	9.020	505	14.500	505	16.900	505	18.400	525.2	19.100	525.2	24.100
507	10.000	507	14.900	525.2	17.100	525.2	18.400	507	19.200		
other	10.900	508.1	14.900	507	17.400	525.2	18.430	507	19.200		
507	12.500	507	15.400	505	17.400	525.2	18.500	525.2	19.400		
507	12.700	508.1	15.600	507	17.800	507	18.700	other	19.700		

**Water Study: 41****True Value: 12.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508.1	8.950	507	10.300	525.2	12.040	525.2	12.700	525.2	13.800	507	15.800
507	9.150	507	10.300	508.1	12.200	505	12.700	525.2	13.900	525.2	15.900
525.2	9.580	525.2	11.100	507	12.300	525.2	12.800	507	14.100		
507	9.740	508.1	11.300	507	12.500	505	13.000	525.2	14.280		
other	9.800	507	11.500	507	12.500	505	13.200	525.2	14.800		
507	10.000	505	12.000	525.2	12.500	505	13.500	505	14.800		
507	10.100	other	12.000	507	12.600	other	13.600	other	15.400		

**Benzene**

**Water Study: 24**

**True Value: 4.32 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	2.600	524.2	3.890	524.2	4.110	524.2	4.320	other	4.600	502.2	4.890
524.1	3.340	502.2	3.920	524.1	4.133	524.2	4.350	502.2	4.650	503.1	4.930
502.2	3.420	524.1	4.000	524.2	4.140	524.2	4.390	502.2	4.660	524.2	4.940
502.2	3.640	524.2	4.008	524.2	4.200	502.2	4.400	524.2	4.660	502.2	4.960
503.1	3.710	502.2	4.012	502.2	4.200	502.1	4.440	524.2	4.690	502.2	5.200
502.2	3.780	524.2	4.050	524.2	4.210	other	4.480	524.2	4.700	503.1	5.250
502.2	3.800	502.2	4.070	502.2	4.220	524.1	4.570	other	4.700	other	6.700
524.1	3.830	503.1	4.100	524.2	4.267	524.2	4.580	524.2	4.730		
524.2	3.870	502.2	4.100	502.2	4.300	524.1	4.590	524.2	4.800		
502.1	3.890	524.2	4.100	524.2	4.300	502.2	4.590	502.2	4.890		

**Water Study: 25**

**True Value: 13.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.400	524.2	12.940	524.1	13.400	524.2	14.000	502.2	14.500	524.2	21.300
524.1	9.700	524.1	13.000	502.2	13.400	503.1	14.100	524.1	14.600	other	26.200
502.2	11.800	502.2	13.000	502.2	13.500	502.2	14.100	502.2	14.900		
524.2	12.080	502.2	13.000	524.2	13.600	524.2	14.100	502.2	15.000		
502.2	12.500	502.2	13.020	other	13.620	524.2	14.100	502.2	15.000		
524.2	12.690	524.2	13.190	other	13.800	502.2	14.200	524.1	15.100		
503.1	12.900	524.2	13.400	502.2	14.000	524.2	14.400	524.2	17.400		

**Water Study: 26**

**True Value: 10.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
503.1	7.170	524.1	9.590	524.1	10.100	524.2	10.280	524.2	10.700	524.2	11.900
524.1	8.970	502.2	9.600	502.2	10.100	524.2	10.300	524.2	10.800	524.2	11.900
502.2	9.140	503.1	9.630	502.2	10.100	524.2	10.330	524.2	10.900	524.2	12.000
502.2	9.190	524.2	9.630	502.2	10.100	524.2	10.400	502.2	11.000	other	12.100
502.2	9.200	524.2	9.640	524.2	10.170	524.2	10.400	524.2	11.000	524.2	12.200
503.1	9.240	524.2	9.650	502.2	10.200	502.2	10.500	503.1	11.100	524.1	12.400
other	9.300	502.2	9.690	502.2	10.200	524.1	10.500	524.2	11.200	502.2	12.700
503.1	9.350	502.2	9.700	524.2	10.200	524.2	10.500	502.2	11.520	502.2	12.700
524.2	9.360	524.2	9.750	502.2	10.200	502.2	10.550	524.2	11.600	503.1	17.700
502.2	9.550	502.2	9.900	502.2	10.200	524.2	10.700	502.2	11.700		

**Water Study: 27****True Value: 7.09 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	5.900	502.2	6.520	503.1	6.810	502.2	7.140	503.1	7.740	524.2	8.470
524.2	5.910	524.2	6.570	524.2	6.840	524.2	7.160	524.2	7.900	524.2	8.590
other	6.010	502.2	6.600	524.2	6.900	524.2	7.200	502.2	7.940	524.1	9.930
524.2	6.390	502.2	6.660	502.2	6.910	502.2	7.210	524.1	7.940		
other	6.400	502.2	6.660	502.2	7.020	524.2	7.310	other	7.960		
502.2	6.410	502.2	6.670	502.2	7.100	502.2	7.400	502.2	8.070		
524.2	6.490	524.2	6.780	502.2	7.110	502.2	7.550	502.2	8.410		

**Water Study: 29****True Value: 15.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	12.520	524.2	14.300	502.2	15.200	524.1	15.900	other	16.400	other	18.300
502.2	13.300	524.2	14.700	502.2	15.220	524.2	15.980	502.2	16.700	502.2	19.300
524.2	14.000	524.2	14.900	502.2	15.300	502.2	16.000	524.2	17.200	524.2	16.500
524.2	14.140	524.2	14.900	524.2	15.700	524.1	16.400	524.2	17.200	502.2	21.600
502.2	14.200	502.2	15.100	502.2	15.700	502.2	16.400	502.2	17.720		
524.2	14.200	524.2	15.100	502.2	15.740	524.2	16.400	other	18.000		

**Water Study: 30****True Value: 9.51 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	7.060	524.2	8.880	524.1	9.210	524.2	9.560	other	9.890	524.2	10.300
502.2	7.640	502.2	8.920	524.2	9.220	524.2	9.580	524.1	9.970	524.2	10.300
524.2	8.150	502.2	8.960	503.1	9.220	524.2	9.660	502.2	9.980	524.2	10.400
524.2	8.200	502.2	8.990	524.2	9.300	524.2	9.680	524.2	10.000	502.2	10.500
502.2	8.210	524.2	9.000	502.2	9.330	502.2	9.700	503.1	10.020	502.2	10.580
524.2	8.700	502.2	9.050	502.2	9.340	524.2	9.700	502.2	10.100	502.2	10.600
524.2	8.700	502.2	9.070	502.2	9.400	524.2	9.740	502.2	10.100	502.2	10.700
502.2	8.720	524.2	9.100	524.2	9.410	502.2	9.770	502.2	10.140	502.2	10.700
502.2	8.790	502.1	9.170	524.1	9.480	524.2	9.800	524.2	10.200	502.2	10.800
524.2	8.840	524.2	9.200	524.2	9.500	524.2	9.880	other	10.290	other	12.800



**Water Study: 31****True Value: 12.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	8.110	503.1	11.700	524.1	12.100	502.2	12.700	502.2	13.400	502.2	15.300
other	8.590	524.2	11.710	524.2	12.100	502.2	12.900	524.2	13.600	502.2	19.100
503.1	10.200	524.2	11.900	524.2	12.100	502.2	12.900	524.2	13.600		
503.1	11.200	502.2	11.900	524.2	12.200	502.2	12.900	502.1	13.900		
502.2	11.400	524.2	11.900	524.2	12.200	502.2	13.000	524.2	14.050		
524.2	11.590	502.2	11.970	524.2	12.600	524.2	13.100	502.2	14.600		
502.2	11.600	524.2	12.000	524.2	12.600	502.2	13.300	502.2	14.900		

**Water Study: 32****True Value: 14.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	13.400	502.2	15.300	524.2	16.160	524.2	16.500	502.1	17.200	502.2	18.100
503.1	13.600	502.2	15.300	524.2	16.200	524.2	16.600	524.2	17.200	502.2	18.300
524.2	13.800	524.2	15.400	502.2	16.300	524.2	16.800	524.2	17.200	502.2	18.500
524.2	14.300	524.2	15.400	524.2	16.300	524.2	16.800	524.2	17.200	502.2	18.700
502.2	14.700	503.1	15.400	524.2	16.390	524.2	16.840	524.2	17.300	503.1	18.900
524.2	14.700	524.2	15.600	524.2	16.400	524.2	16.900	502.2	17.300	524.2	19.300
502.2	14.900	524.2	15.700	524.2	16.400	502.2	17.000	502.2	17.400	other	20.000
502.2	14.900	524.2	15.840	other	16.400	other	17.000	502.2	17.600	524.2	20.000
502.2	15.000	524.2	16.000	502.2	16.500	502.2	17.100	524.2	17.600	524.2	20.500
502.2	15.000	524.2	16.000	502.2	16.500	502.2	17.200	502.2	17.800	502.2	20.900
524.2	15.200	524.2	16.100	502.2	16.500	524.1	17.200	502.2	18.000		

**Water Study: 33****True Value: 12.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	9.920	524.1	11.100	524.2	11.700	502.2	12.000	524.2	12.400	502.2	13.400
other	10.420	524.2	11.100	502.2	11.700	502.2	12.200	other	12.700	524.2	13.800
502.1	10.500	524.2	11.300	502.2	11.700	502.2	12.200	502.2	12.700	524.2	14.400
502.2	10.580	524.2	11.380	524.2	11.800	502.2	12.200	524.2	12.900	524.2	14.800
502.2	10.800	524.2	11.440	524.2	11.900	502.2	12.300	502.2	13.100	502.2	30.300
502.2	10.830	524.2	11.500	502.1	12.000	502.2	12.400	524.2	13.200		

**Water Study: 34****True Value: 4.94 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	3.600	502.2	4.440	502.2	4.720	524.2	4.910	524.2	5.100	524.2	5.260
502.2	3.850	524.2	4.440	502.2	4.750	502.2	4.920	502.2	5.110	524.2	5.260
524.2	4.150	524.2	4.470	524.2	4.750	502.2	4.950	524.2	5.120	524.2	5.300
502.2	4.230	524.2	4.500	524.2	4.830	502.2	4.980	524.2	5.120	524.2	5.300
502.2	4.290	other	4.600	524.2	4.840	502.2	5.000	524.2	5.130	524.2	5.410
502.2	4.320	502.2	4.610	502.2	4.850	502.2	5.020	502.2	5.140	502.2	5.520
502.2	4.356	502.2	4.620	524.2	4.870	524.2	5.040	502.2	5.150	524.2	5.550
524.2	4.420	502.2	4.700	524.2	4.900	524.2	5.050	524.2	5.170	502.2	5.570
503.1	4.430	524.2	4.710	524.2	4.900	524.2	5.070	other	5.200	502.2	5.730
524.2	4.440	502.2	4.710	524.2	4.900	502.2	5.080	502.2	5.250	524.2	6.080

**Water Study: 35****True Value: 14.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	11.500	502.2	13.040	502.2	13.600	524.2	13.900	524.2	14.700	524.2	15.600
524.2	12.000	524.2	13.100	502.2	13.600	524.2	13.900	502.2	14.710	524.2	16.170
502.2	12.200	524.2	13.170	524.2	13.700	524.2	14.000	502.2	14.960	502.2	16.300
524.2	12.400	524.2	13.300	502.2	13.700	524.2	14.200	524.2	15.400	502.2	17.000
524.2	12.900	502.2	13.300	other	13.740	502.2	14.300	502.2	15.500		
524.2	13.000	502.2	13.500	502.2	13.900	524.2	14.700	other	15.600		

**Water Study: 36****True Value: 7.49 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.900	524.2	6.920	524.2	7.140	other	7.340	524	7.630	other	8.500
502.2	6.000	524.2	6.930	524.2	7.160	524.2	7.360	502.2	7.660	524.2	8.590
524.2	6.300	524.2	7.000	524.2	7.190	524.2	7.370	524.2	7.670	524.2	8.670
524.2	6.640	502.2	7.000	524.2	7.200	502.2	7.400	other	7.750	502.2	8.680
502.2	6.730	502.2	7.030	524.2	7.210	524.2	7.420	524.2	7.810	524.2	8.700
502.2	6.730	524.2	7.030	other	7.220	524.2	7.420	502.2	7.940	other	8.930
524.2	6.850	524.2	7.040	524.2	7.290	502.2	7.460	524.2	7.970		
502.2	6.860	524.2	7.050	524.2	7.300	524.2	7.510	502.2	8.140		
524.2	6.880	502.2	7.060	502.2	7.300	524.2	7.530	524.2	8.350		
524.2	6.890	502.2	7.070	502.2	7.310	524.2	7.560	502.2	8.400		
524.2	6.900	502.2	7.120	502.2	7.320	524.2	7.600	502.2	8.440		

**Water Study: 37****True Value: 12.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	10.970	524.2	11.900	502.2	12.300	524.2	12.600	524.2	13.100	502.2	13.900
524.2	11.200	524.2	12.000	524.2	12.300	502.2	12.600	524.2	13.200	502.2	14.000
524.2	11.300	502.2	12.000	524.2	12.370	502.2	12.700	524.2	13.400	other	14.300
502.2	11.400	other	12.100	502.2	12.400	other	12.800	524.2	13.400	524.2	14.500
502.2	11.500	524.2	12.100	502.2	12.400	502.2	12.800	524.2	13.400	502.2	14.500
524.2	11.600	502.2	12.200	524.2	12.400	524.2	13.000	524.2	13.430	524.2	16.800
502.2	11.800	524.2	12.200	502.2	12.500	502.2	13.100	524.2	13.800	524.2	16.900
524.2	11.900	524.2	12.250	524.2	12.500	524.2	13.100	502.2	13.800	524.2	24.800

**Water Study: 38****True Value: 15.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	12.500	524.2	14.500	502.2	15.000	502.2	15.600	502.2	16.200	524.2	16.800
524.2	13.100	524.2	14.500	other	15.000	524.2	15.600	524.2	16.200	524.2	17.100
524.2	13.300	502.2	14.500	524.2	15.000	502.2	15.600	524.2	16.200	502.2	17.100
524.2	13.500	524.2	14.500	524.2	15.000	502.2	15.700	524.2	16.300	524.2	18.800
502.2	14.000	524.2	14.600	524.2	15.100	502.2	15.800	524.2	16.300	524.2	20.800
524.2	14.000	other	14.600	524.2	15.100	502.2	15.900	502.2	16.400		
524.2	14.100	other	14.800	524.2	15.400	524.2	15.900	502.2	16.600		
524.2	14.140	524.2	14.900	524.2	15.400	524.2	16.000	502.2	16.600		
524.2	14.200	524.2	14.900	502.2	15.400	524.2	16.100	524.2	16.600		
502.2	14.300	502.2	14.950	524.2	15.600	524.2	16.130	502.2	16.600		

**Water Study: 39****True Value: 9.39 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.600	524.2	8.900	524.2	9.290	502.2	9.640	524.2	10.100	524.2	11.400
524.2	8.250	502.2	9.000	524.2	9.300	502.2	9.650	524.2	10.200	524.2	12.400
524.2	8.300	502.2	9.060	524.2	9.320	524.2	9.730	524.2	10.300	524.2	16.990
502.2	8.330	524.2	9.100	502.2	9.330	502.2	9.740	524.2	10.400		
502.2	8.450	502.2	9.130	524.2	9.390	524.2	9.750	524.2	10.400		
524.2	8.540	524.2	9.150	524.2	9.400	502.2	9.820	524.2	10.530		
other	8.830	502.2	9.180	524.2	9.400	524.2	9.980	524.2	10.600		
524.2	8.840	524.2	9.280	502.2	9.440	502.2	10.100	524.2	11.000		

**Water Study: 40****True Value: 16.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	9.100	524.2	15.400	524.2	16.300	524.2	16.600	502.2	17.200	524.2	18.400
524.2	13.400	524.2	15.500	524.2	16.300	524.2	16.700	502.2	17.300	524.2	18.500
524.2	14.000	524.2	15.800	502.2	16.300	524.2	16.700	502.2	17.400	524.2	18.600
524.2	14.000	524.2	15.800	524.2	16.400	502.2	16.800	524.2	17.400	502.2	18.700
502.2	14.300	524.2	16.000	524.2	16.400	other	16.800	524.2	17.500	502.2	18.700
524.2	14.900	502.2	16.100	524.2	16.430	524.2	16.800	524.2	17.600	other	19.500
524.2	15.100	524.2	16.100	524.2	16.500	502.2	16.800	524.2	17.700	524.2	20.000
524.2	15.100	502.2	16.200	524.2	16.500	502.2	16.800	524.2	17.900	524.2	20.300
524.2	15.300	524.2	16.200	524.2	16.600	524.2	16.900	502.2	17.900		
other	15.400	524.2	16.300	524.2	16.600	502.2	17.000	502.2	18.100		

**Water Study: 41****True Value: 18.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	16.040	502.2	17.000	524.2	17.400	502.2	18.000	524.2	18.300	524.2	18.700
502.2	16.300	524.2	17.000	502.2	17.500	other	18.000	502.2	18.300	524.2	19.000
502.2	16.500	524.2	17.100	524.2	17.600	524.2	18.000	524.2	18.400	502.2	19.400
524.2	16.600	524.2	17.100	524.2	17.700	524.2	18.100	524.2	18.400	502.2	19.700
524.2	16.600	502.2	17.100	502.2	17.900	524.2	18.200	524.2	18.500	524.2	19.800
524.2	16.800	524.2	17.300	other	17.900	502.2	18.200	524.2	18.600	502.2	20.300
524.2	16.900	524.2	17.300	524.2	17.900	524.2	18.300	524.2	18.700		

**Benzo(a)pyrene****Water Study: 26a****True Value: 2.25 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.690	525	1.150	other	1.790	525	1.840	550	2.000		
525	0.810	other	1.260	525	1.840	525	1.960	525	3.920		

**Water Study: 26b****True Value: 15.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	10.500	525	13.200	525	14.000	550	15.000	525	16.310	other	30.400
525	11.800	other	14.000	other	14.900	525	15.300	525	18.900	525	76.000

**Water Study: 30****True Value: 0.485 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525	0.190	550	0.200	550	0.280	525	0.340	other	0.371	550	0.630
550.1	0.200	525	0.280	525	0.328	525	0.355	525	0.405	550	0.749

**Water Study: 31****True Value: 0.202 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
550.1	0.100	other	0.180	550	0.209	550.1	0.231	525.1	0.690		
525.1	0.160	525.1	0.182	550.1	0.219	550	0.250	550	1.310		
550	0.166	550.1	0.182	525.1	0.220	other	0.380				

**Water Study: 32****True Value: 0.337 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
550.1	0.015	525.1	0.210	525.1	0.228	525.1	0.280	other	0.325	525.1	0.370
525.1	0.162	525.1	0.214	550	0.238	550	0.291	525.1	0.342	550.1	0.414
550.1	0.167	525.1	0.220	550	0.260	525.1	0.304	other	0.353	525.1	0.450
550	0.197	other	0.220	525.1	0.264	550	0.310	other	0.360	550	1.380
525.1	0.204	550	0.220	525.1	0.272	525.1	0.322	550	0.367		

**Water Study: 33****True Value: 1.29 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	0.200	525.1	0.688	other	0.930	550	1.083	525.1	1.310	other	1.800
525.1	0.300	525.1	0.690	525.1	0.930	550.1	1.090	550.1	1.350	other	9.710
525.1	0.394	550.1	0.690	other	1.020	525.1	1.110	550.1	1.370		
525.1	0.620	525.1	0.851	525.1	1.070	550.1	1.220	550.1	1.580		

**Water Study: 34****True Value: 0.751 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	0.090	525.1	0.442	other	0.570	525.1	0.639	550	0.760	525.1	0.870
525.1	0.261	525.1	0.478	550	0.577	525.1	0.656	550	0.778	550.1	0.990
550	0.356	525.1	0.478	525.1	0.615	525.1	0.678	other	0.796	550	1.524
525.1	0.416	525.1	0.560	525.1	0.620	550.1	0.701	525.1	0.820		
550.1	0.426	550.1	0.566	550.1	0.637	other	0.728	525.1	0.870		

**Water Study: 35****True Value: 1.53 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	0.200	550.1	0.642	525.1	1.120	550	1.390	550.1	1.490	other	1.640
525.1	0.290	525.1	0.661	550.1	1.120	550.1	1.402	525.1	1.500	other	2.400
550	0.407	525.1	0.711	525.1	1.200	525.1	1.415	525.1	1.522		
525.1	0.556	550.1	1.020	550	1.201	550	1.460	other	1.530		
550	0.611	525.1	1.100	525.1	1.220	525.1	1.470	other	1.600		

**Water Study: 36****True Value: 0.636 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	0.040	525.1	0.358	550.1	0.440	other	0.500	550	0.546	525.2	0.626
525.2	0.162	525.2	0.360	525.2	0.460	550.1	0.505	other	0.547	525.2	0.640
other	0.190	550.1	0.370	525.2	0.462	525.2	0.524	525.2	0.550	550.1	0.659
550.1	0.207	other	0.380	550	0.468	525.2	0.526	525.2	0.566	525.2	0.919
other	0.313	525.2	0.418	550	0.493	525.2	0.530	550.1	0.566	550.1	514.000
525.1	0.320	525.1	0.423	550.1	0.495	other	0.534	550	0.590		
525.2	0.338	550.1	0.427	550	0.497	525.2	0.540	525.2	0.624		

**Water Study: 37****True Value: 0.937 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
550.1	0.084	525.2	0.505	550.1	0.636	525.2	0.732	550	0.807	525.2	1.290
550.1	0.172	525.2	0.506	525.2	0.638	525.2	0.734	other	0.826	525.2	1.320
525.2	0.215	525.2	0.510	525.2	0.663	525.2	0.740	525.2	0.860		
525.1	0.243	550.1	0.536	550.1	0.672	525.2	0.762	other	0.875		
other	0.429	525.2	0.552	550.1	0.682	525.2	0.768	525.2	0.910		
550	0.478	550	0.566	550	0.698	525.2	0.790	525.2	0.910		
550.1	0.504	other	0.572	525.2	0.728	525.2	0.790	550	0.990		

**Water Study: 38****True Value: 0.527 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
550.1	0.045	525.2	0.350	525.2	0.388	525.2	0.480	550	0.536	525.2	0.648
525.2	0.119	550.1	0.355	525.2	0.393	550.1	0.480	525.2	0.541	550	0.716
525.2	0.158	525.1	0.360	525.2	0.406	525.2	0.484	other	0.541	550.1	4.490
550	0.168	525.2	0.370	550	0.412	other	0.493	525.2	0.548		
525.2	0.233	550	0.378	525.2	0.422	525.2	0.510	550.1	0.550		
525.2	0.290	550.1	0.380	525.2	0.428	550	0.522	550	0.550		
525.2	0.310	525.2	0.382	other	0.462	525.2	0.530	525.2	0.636		

**Water Study: 39****True Value: 2.37 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	0.240	525.2	1.617	525.2	1.990	525.2	2.120	550.1	2.390	525.2	2.800
550.1	0.750	550	1.650	525.2	2.010	550.1	2.140	525.2	2.420		
550.1	1.190	525.2	1.700	525.2	2.020	550	2.220	525.2	2.460		
525.2	1.240	525.2	1.920	550	2.060	525.2	2.270	525.2	2.510		
550.1	1.330	550.1	1.970	525.2	2.070	525.2	2.310	525.2	2.550		
525.2	1.600	525.2	1.980	550	2.090	525.2	2.320	525.2	2.660		

**Water Study: 40****True Value: 1.48 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.480	550	0.899	550	1.010	525.2	1.220	525.2	1.370	525.2	1.520
525.2	0.550	550.1	0.912	525.2	1.130	550.1	1.280	550	1.400	525.2	1.732
550.1	0.614	550	0.941	525.2	1.170	550	1.280	525.2	1.440	525.2	5.700
525.2	0.710	550.1	0.951	other	1.180	550.1	1.280	525.2	1.440		
550	0.724	525.2	0.960	525.2	1.190	525.2	1.320	550.1	1.470		
525.2	0.779	525.2	0.970	525.2	1.200	525.2	1.320	525.2	1.490		
other	0.790	525.2	0.999	525.2	1.210	525.2	1.340	550.1	1.490		
550.1	0.800	550.1	1.000	525.2	1.220	525.2	1.350	550	1.500		

**Water Study: 41****True Value: 2.37 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
550.1	0.190	525.2	1.340	550	1.620	525.2	1.860	525.2	2.270		
other	0.660	525.2	1.350	525.2	1.640	525.2	1.880	525.2	2.400		
550.1	0.990	550	1.490	525.2	1.650	525.2	1.940	525.2	2.400		
550.1	1.140	550	1.600	550.1	1.670	525.2	2.000	other	2.660		
525.2	1.320	525.2	1.610	525.2	1.700	525.2	2.140	525.2	6.270		

**Beryllium**

**Water Study: 24**

**True Value: 0.600 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7A	0.490	200.7A	0.560	210.1	0.600	210.2	0.615	210.2	0.660	210.2	0.700
210.2	0.500	210.2	0.590	210.2	0.600	210.2	0.620	210.1	0.675	200.7A	0.800
210.2	0.520	210.2	0.591	200.7A	0.600	210.2	0.643	210.2	0.690	210.2	0.800
210.2	0.540	200.7A	0.600	other	0.604	210.2	0.650	210.2	0.699	200.7A	1.000
210.2	0.540	200.7A	0.600	210.2	0.610	210.1	0.650	210.1	0.700	other	1.000
210.2	0.560	210.1	0.600	210.2	0.610	other	0.660	200.7A	0.700		

**Water Study: 25a**

**True Value: 2.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7A	1.360	200.7A	1.900	200.7A	2.000	200.7A	2.000	210.2	2.050	210.2	2.130
200.7A	1.590	210.1	1.950	other	2.000	210.2	2.000	other	2.060	210.2	2.140
200.7A	1.900	200.7A	1.950	200.7A	2.000	210.2	2.000	210.2	2.100	210.2	2.160
200.7A	1.900	210.2	1.980	210.2	2.000	210.1	2.040	210.2	2.100	210.2	2.200

**Water Study: 25b**

**True Value: 0.400 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7A	0.300	210.1	0.346	other	0.380	210.2	0.400	other	0.440		
210.2	0.300	210.2	0.370	200.7A	0.390	200.7A	0.410	210.1	0.446		
200.7A	0.300	210.2	0.374	200.7A	0.400	210.2	0.416	200.7A	0.500		
210.2	0.330	210.2	0.379	210.2	0.400	210.2	0.440	210.2	0.500		

**Water Study: 26a**

**True Value: 0.530 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7A	0.400	210.2	0.500	210.2	0.520	210.2	0.552	other	0.600	210.2	0.675
200.7A	0.430	200.7A	0.500	210.2	0.523	210.2	0.560	210.2	0.600	210.2	0.765
210.2	0.440	200.7A	0.500	210.2	0.529	210.2	0.560	210.2	0.610	200.7A	0.800
210.2	0.480	200.7A	0.500	210.2	0.530	200.7A	0.560	210.2	0.620	210.2	0.950
210.2	0.480	200.7A	0.500	200.7A	0.530	200.7A	0.569	210.2	0.636	210.2	7.600
210.2	0.490	200.7A	0.500	200.7A	0.550	210.2	0.588	210.2	0.638		
200.7A	0.490	200.7A	0.516	210.2	0.550	210.2	0.600	210.2	0.660		



**Water Study: 26b****True Value: 23.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
210.2	2.000	200.7A	20.200	210.2	21.700	200.7A	22.000	210.2	22.800	200.7A	24.700
200.7A	13.000	200.7A	20.800	200.7A	21.700	210.2	22.300	200.7A	22.800	210.2	24.700
210.2	13.700	200.7A	21.000	210.2	21.800	210.2	22.300	210.2	22.900	210.2	24.800
210.2	18.700	200.7A	21.200	210.2	21.800	210.2	22.380	200.7A	23.000	210.2	26.000
other	19.100	210.2	21.200	210.2	21.900	other	22.400	200.7A	23.600	210.2	27.400
210.2	19.900	210.2	21.400	200.7A	22.000	200.7A	22.400	200.7A	23.600	210.2	30.000
200.7A	20.000	other	21.400	210.2	22.000	200.7A	22.400	210.2	24.000		
210.2	20.000	200.7A	21.500	other	22.000	210.2	22.600	210.2	24.400		

**Water Study: 27****True Value: 4.67 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
304	2.610	other	4.000	200.7A	4.410	210.2	4.610	200.7A	4.900	200.8	5.150
210.2	3.400	other	4.200	200.7A	4.500	210.2	4.700	210.2	4.920	210.2	5.370
200.7A	3.790	200.7A	4.400	200.7A	4.550	200.7A	4.820	210.2	4.980	210.2	5.500
200.7A	3.930	200.7A	4.400	other	4.600	210.2	4.860	other	5.000	210.2	7.840

**Water Study: 29****True Value: 9.76 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
210.2	7.700	other	9.000	other	9.300	210.2	9.920	200.7A	10.200		
210.2	8.050	other	9.000	210.2	9.400	200.7A	9.970	210.2	10.300		
200.7A	8.120	210.2	9.080	200.7A	9.480	200.7A	10.000	210.2	10.900		
210.2	8.220	200.7A	9.300	200.7A	9.500	200.7A	10.000	210.2	11.100		
other	8.900	200.7A	9.300	210.2	9.600	other	10.000	210.2	12.500		

**Water Study: 30****True Value: 8.47 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
210.2	4.720	200.7	7.690	other	8.000	200.7	8.250	210.2	8.500	210.2	9.200
200.7	6.000	200.7	7.700	200.7	8.000	200.7	8.270	other	8.500	210.2	9.200
200.9	7.050	210.2	7.700	210.2	8.060	200.7	8.300	200.7	8.600	210.2	9.690
200.7	7.120	200.7	7.760	210.2	8.070	200.7	8.300	210.2	8.670	210.2	9.700
210.2	7.200	210.2	7.800	200.7	8.100	210.2	8.400	200.7	8.700		
210.2	7.310	200.7	7.900	210.2	8.165	210.2	8.400	210.2	8.800		
200.7	7.400	200.9	7.900	200.7	8.200	200.9	8.400	210.2	8.800		
200.9	7.600	210.2	7.900	200.8	8.200	210.2	8.450	200.7	8.920		
200.7	7.680	210.2	7.920	200.7	8.210	200.7	8.500	210.2	9.100		

**Water Study: 31****True Value: 3.27 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7	2.450	200.7	3.030	210.2	3.200	210.2	3.210	200.7	3.300	200.7	3.450
210.2	2.920	210.2	3.030	other	3.200	200.9	3.250	200.7	3.300	200.9	3.500
200.7	2.940	210.2	3.050	200.7	3.200	210.2	3.270	210.2	3.322	210.2	3.900
200.9	2.950	210.2	3.100	210.2	3.200	200.9	3.280	200.7	3.370		
200.7	2.990	200.7	3.100	200.7	3.200	200.7	3.300	210.2	3.400		
210.2	3.000	200.7	3.190	200.7	3.200	200.7	3.300	200.9	3.400		

**Water Study: 32****True Value: 0.933 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.570	200.9	0.849	200.7	0.900	210.2	0.9500	210.2	0.997	200.7	1.140
other	0.750	210.2	0.850	200.7	0.918	200.7	0.950	210.2	1.000	200.9	1.156
200.7	0.761	210.2	0.851	200.7	0.920	210.2	0.953	210.2	1.000	200.7	1.180
210.2	0.770	210.2	0.870	200.9	0.920	200.9	0.955	200.7	1.020	200.7	1.300
210.2	0.798	200.9	0.870	200.8	0.924	210.2	0.960	210.2	1.020	200.7	1.700
200.9	0.800	200.7	0.890	210.2	0.930	200.8	0.960	200.9	1.040	200.7	1.930
200.7	0.800	210.2	0.890	200.9	0.930	210.2	0.970	210.2	1.050	210.2	2.200
200.7	0.820	200.7	0.890	210.2	0.935	210.2	0.970	200.7	1.060	200.9	9.000
210.2	0.829	200.7	0.900	210.2	0.940	210.2	0.973	200.7	1.090	200.7	9.980
other	0.835	200.7	0.900	210.2	0.941	200.9	0.979	210.2	1.100	200.7	92.300

**Water Study: 33****True Value: 9.07 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	5.780	200.7	7.880	200.7	8.400	200.9	8.640	200.7	8.990	210.2	9.500
200.7	7.000	200.7	7.950	other	8.400	200.7	8.690	200.9	9.000	210.2	9.630
210.2	7.400	200.7	8.000	210.2	8.440	200.7	8.700	210.2	9.000	210.2	9.675
200.9	7.400	210.2	8.100	200.9	8.450	210.2	8.700	200.9	9.150	210.2	9.700
200.8	7.520	210.2	8.100	200.7	8.530	200.7	8.740	200.9	9.270	210.2	14.690
210.2	7.750	200.7	8.100	200.7	8.570	200.7	8.900	200.7	9.350		
other	7.790	210.2	8.400	200.7	8.580	210.2	8.900	200.7	9.410		

**Water Study: 34****True Value: 5.33 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	3.680	210.2	4.850	200.9	5.000	200.7	5.100	210.2	5.170	210.2	5.270
200.7	3.920	200.7	4.860	210.2	5.000	200.7	5.100	210.2	5.190	200.9	5.270
210.2	4.200	200.9	4.880	other	5.000	210.2	5.100	200.7	5.190	210.2	5.300
200.7	4.310	200.7	4.900	200.9	5.000	210.2	5.100	200.7	5.200	200.7	5.330
200.8	4.410	200.7	4.900	200.7	5.010	200.7	5.100	210.2	5.200	other	5.330
other	4.600	200.7	4.900	200.7	5.020	other	5.100	200.8	5.200	200.9	5.400
200.8	4.680	210.2	4.920	200.7	5.040	210.2	5.100	210.2	5.200	210.2	5.410
210.2	4.720	200.9	4.930	210.2	5.060	200.7	5.103	200.7	5.200	210.2	5.420
200.7	4.730	200.7	4.940	210.2	5.090	200.7	5.120	200.8	5.213	200.7	5.480
210.2	4.850	200.7	4.970	200.7	5.100	200.9	5.130	200.7	5.260	200.7	10.200

**Water Study: 35****True Value: 1.33 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.8	1.000	210.2	1.210	200.7	1.290	200.9	1.310	200.7	1.390	210.2	1.500
200.9	1.040	210.2	1.210	200.9	1.290	210.2	1.310	200.9	1.400	200.7	1.500
200.9	1.100	200.9	1.240	200.7	1.300	210.2	1.310	210.2	1.420	200.9	1.520
210.2	1.140	210.2	1.250	200.7	1.300	210.2	1.340	200.9	1.430	210.2	1.580
200.9	1.200	200.7	1.260	200.7	1.300	200.8	1.350	210.2	1.430	other	1.700
210.2	1.200	210.2	1.270	200.7	1.300	200.7	1.350	200.7	1.450	other	1.700
200.7	1.200	210.2	1.280	200.7	1.300	200.7	1.370	200.9	1.470	200.7	2.000

**Water Study: 36****True Value: 7.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
210.2	5.200	200.8	7.020	3113B	7.340	200.8	7.490	200.7	7.660	other	8.130
200.9	5.840	other	7.080	200.8	7.340	200.9	7.500	200.7	7.720	3113B	8.170
200.7	5.900	200.7	7.150	200.8	7.370	other	7.500	200.7	7.730	210.2	8.300
200.9	6.700	200.7	7.150	200.9	7.380	200.7	7.500	3113B	7.800	3113B	8.310
3113B	6.780	200.7	7.160	200.7	7.390	200.9	7.510	200.8	7.800	3113B	8.500
200.7	6.780	200.9	7.200	200.7	7.400	200.7	7.520	3113B	7.810	200.9	8.500
200.8	6.880	200.7	7.230	200.9	7.400	200.7	7.525	200.8	7.900		
200.7	6.900	200.8	7.290	200.8	7.400	3113B	7.550	3113B	7.950		
200.9	6.940	other	7.300	200.7	7.450	200.9	7.560	200.9	8.000		
200.8	6.970	200.9	7.300	200.7	7.460	200.7	7.570	200.7	8.000		
200.7	7.000	200.7	7.320	200.7	7.470	200.9	7.590	200.7	8.050		

**Water Study: 37****True Value: 4.26 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	1.000	3113B	4.120	200.9	4.200	200.7	4.270	200.7	4.400	200.8	4.600
200.7	3.700	200.9	4.120	200.9	4.200	200.7	4.270	200.7	4.400	200.8	4.630
200.9	3.750	200.8	4.130	200.7	4.200	3113B	4.300	200.7	4.420	3113B	4.690
200.7	3.880	200.7	4.130	200.9	4.200	3113B	4.310	200.7	4.420	200.7	4.780
200.7	3.970	200.9	4.160	200.7	4.200	200.9	4.320	200.9	4.450		
200.7	4.000	200.9	4.170	200.9	4.230	200.8	4.320	200.9	4.480		
3113B	4.040	200.9	4.190	200.8	4.240	200.7	4.350	200.9	4.500		
200.7	4.090	200.7	4.200	200.7	4.250	200.8	4.350	200.9	4.550		
200.8	4.100	200.7	4.200	200.7	4.260	200.9	4.350	3113B	4.550		

**Water Study: 38****True Value: 10.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	2.620	200.8	9.550	200.7	9.800	200.9	9.990	200.7	10.100	200.7	11.000
200.9	5.140	200.9	9.600	200.7	9.800	200.7	9.996	200.8	10.300	other	11.000
200.9	7.680	200.9	9.600	200.9	9.800	200.9	10.000	200.8	10.300	200.7	11.000
200.7	8.880	3113B	9.630	200.7	9.850	200.8	10.000	3113B	10.400	200.9	11.600
200.9	9.060	200.7	9.630	200.7	9.850	200.7	10.000	200.7	10.500	200.9	11.600
200.7	9.120	200.8	9.650	200.9	9.880	200.8	10.000	200.7	10.500	3113B	12.300
200.8	9.210	200.7	9.700	200.9	9.880	200.7	10.100	200.9	10.500	200.7	15.200
200.8	9.360	200.9	9.750	200.8	9.900	200.7	10.100	200.8	10.600	200.9	34.400
200.9	9.400	200.7	9.760	200.9	9.910	200.7	10.100	200.9	10.800		
200.7	9.400	other	9.790	200.7	9.920	200.8	10.100	other	10.800		
200.8	9.400	200.7	9.800	200.8	9.950	3113B	10.100	200.8	11.000		

**Water Study: 39****True Value: 1.20 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7	1.000	200.9	1.100	200.9	1.190	3113B	1.210	200.8	1.280	200.7	1.370
200.7	1.000	200.7	1.110	200.7	1.190	200.9	1.210	200.8	1.280	200.9	1.430
200.9	1.000	200.9	1.120	200.9	1.200	3113B	1.210	200.9	1.290	200.8	1.470
200.7	1.050	200.9	1.140	200.7	1.200	200.9	1.210	3113B	1.300	200.7	1.580
200.7	1.060	200.7	1.150	200.9	1.200	200.7	1.220	200.9	1.300	200.7	1.600
200.9	1.070	200.9	1.160	200.8	1.200	200.8	1.230	200.7	1.300	200.7	1.730
200.7	1.100	200.9	1.180	3113B	1.200	200.8	1.230	200.9	1.320		
200.7	1.100	200.9	1.180	200.7	1.200	200.7	1.240	3113B	1.330		
3113B	1.100	200.9	1.190	200.8	1.200	200.8	1.270	200.9	1.350		

**Water Study: 40****True Value: 6.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
3113B	2.900	3113B	6.250	200.8	6.420	200.7	6.500	200.9	6.600	200.8	6.980
200.7	5.500	200.9	6.290	200.9	6.430	200.8	6.500	3113B	6.630	200.8	6.990
200.8	5.600	200.8	6.290	200.8	6.450	200.9	6.510	other	6.650	200.9	7.000
200.7	5.700	200.7	6.290	200.9	6.450	200.8	6.520	200.7	6.650	200.7	7.140
200.7	6.000	200.7	6.300	200.7	6.470	other	6.520	200.8	6.650	200.8	7.310
3113B	6.090	200.9	6.330	200.8	6.470	200.7	6.530	200.7	6.690	200.7	7.350
200.7	6.140	200.7	6.350	200.7	6.480	200.7	6.550	200.9	6.700	3113B	7.660
200.7	6.150	200.9	6.370	200.9	6.480	3120B	6.560	200.9	6.720	200.9	7.840
other	6.200	200.8	6.400	200.8	6.480	3113B	6.570	200.9	6.870	200.9	8.000
200.7	6.240	200.9	6.400	200.8	6.490	200.7	6.580	200.8	6.900		
200.7	6.250	200.8	6.400	200.7	6.500	3113B	6.580	200.8	6.971		

**Water Study: 41****True Value: 2.58 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.8	2.180	200.9	2.500	200.7	2.600	200.7	2.650	200.8	2.780	200.7	2.820
3113B	2.420	200.9	2.500	200.8	2.600	200.7	2.670	200.8	2.780	200.9	2.830
3120B	2.420	200.7	2.510	200.7	2.640	200.9	2.700	200.9	2.790	3113B	2.830
200.7	2.440	200.9	2.540	3113B	2.640	200.9	2.700	200.7	2.800	200.9	3.000
200.7	2.460	200.8	2.560	200.8	2.640	200.7	2.700	200.7	2.800	200.7	3.050
200.7	2.460	200.8	2.560	200.9	2.640	200.7	2.700	200.9	2.800	200.9	5.020
200.8	2.470	200.8	2.590	200.9	2.650	200.9	2.740	200.7	2.800		
200.9	2.500	200.9	2.600	200.9	2.650	200.8	2.760	other	2.800		

**Bis(2-ethylhexyl)phthalate****Water Study: 24a****True Value: 3.18 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525	2.430	525	3.880	other	6.360	other	8.950	other	19.000		
525	2.640	525	4.100	525	7.770	525	10.260	other	19.600		
525	3.080	525	5.860	525	8.300	other	12.300				

**Water Study: 24b****True Value: 19.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	12.000	other	14.600	other	16.000	525	17.500	525	21.900		
525	13.200	525	15.000	525	16.700	525	18.500	525	27.200		
other	14.000	525	15.200	525	17.000	other	20.500	other	42.000		

**Water Study: 26a****True Value: 34.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525	17.200	525	21.000	525	30.900	other	39.400	other	70.300		
525	20.000	other	27.300	525	33.200	525	47.400				
other	20.600	other	29.700	525	38.260	other	60.000				

**Water Study: 26b****True Value: 7.73 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525	4.060	other	6.840	525	8.180	525	12.450	other	25.600		
other	6.570	525	7.030	525	8.440	525	14.000				
other	6.840	other	8.040	525	9.390	other	20.000				

**Water Study: 27****True Value: 17.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525	6.180	525	11.000	525	13.000	other	18.100				
525	9.990	525	12.200	525	14.900						

**Water Study: 29****True Value: 4.58 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525	2.200	525	2.740	525	3.000	525	7.700				
525	2.460	525	2.910	525	4.010	525	17.800				

**Water Study: 30****True Value: 6.40 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525	1.730	525	5.350	other	5.920	other	9.300	506	12.300		
525	4.230	other	5.400	525	6.060	525	9.900	other	12.600		
506	4.610	525	5.800	525	6.430	525	11.100	525	14.300		

**Water Study: 31****True Value: 11.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	3.680	other	7.400	525.1	8.750	525.1	9.870	525.1	10.600	506	12.710
525.1	5.567	525.1	7.910	506	8.780	525.1	10.000	other	12.000	other	13.500

**Water Study: 32****True Value: 9.28 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	4.200	525.1	7.330	525.1	8.360	other	9.110	525.1	9.590	525.1	14.600
506	4.310	other	7.460	525.1	8.670	525.1	9.190	525.1	11.400	525.1	43.500
other	4.650	525.1	7.540	525.1	8.950	525.1	9.320	other	12.800		
525.1	4.880	525.1	8.000	525.1	8.990	525.1	9.400	525.1	12.900		
525.1	5.980	506	8.020	525.1	9.035	506	9.560	525.1	12.900		

**Water Study: 33****True Value: 15.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
506	3.430	506	9.210	525.1	13.760	525.1	14.900	other	18.400	525.1	21.670
506	4.050	525.1	10.900	525.1	14.100	525.1	15.610	other	18.500	other	25.700
506	8.370	other	11.800	525.1	14.100	525.1	16.300	525.1	19.200	525.1	31.000
525.1	8.950	525.1	12.600	525.1	14.400	506	16.400	525.1	20.160		

**Water Study: 34****True Value: 21.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	7.400	525.1	16.300	525.1	19.700	506	22.000			525.1	24.600
506	10.200	525.1	18.000	525.1	20.200			525.1	23.250	525.1	27.180
525.1	12.600	525.1	18.100	506	20.200			525.1	23.600	525.1	27.200
525.1	13.400	525.1	18.400	525.1	20.200			525.1	24.000	506	30.000
506	13.800	506	19.100	525.1	20.200			525.1	24.100	525.1	31.800
525.1	14.900	525.1	19.200	other	20.500			525.1	24.500	525.1	42.700
other	15.700	525.1	19.600	525.1	20.900						

**Water Study: 35****True Value: 37.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	16.200	525.1	29.600	525.1	40.650	other	44.900	525.1	48.000		
506	22.150	525.1	36.600	525.1	41.200	525.1	45.860	other	49.000		
506	23.600	525.1	36.750	506	43.200	525.1	45.900	525.1	59.400		
525.1	27.450	525.1	37.500	525.1	43.900	other	46.700	other	65.000		

**Water Study: 36****True Value: 18.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	1.240	525.1	13.600	506	16.600	525.2	17.900	525.2	19.600	525.2	21.800
other	5.090	525.2	14.200	525.2	16.800	525.2	18.000	525.2	19.700	506	23.400
506	8.800	525.2	14.400	525.2	17.200	other	18.900	525.2	20.000	506	27.600
506	9.840	506	14.400	506	17.400	525.2	18.900	525.2	20.600	525.1	29.300
525.2	11.100	525.2	15.600	other	17.700	525.2	19.100	506	20.600		
525.2	12.400	506	15.800	525.2	17.800	525.2	19.100	525.2	21.000		
other	13.600	other	16.300	other	17.830	525.2	19.200	525.2	21.500		

**Water Study: 37****True Value: 21.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	5.100	525.2	14.700	525.2	19.900	525.2	20.900	525.2	22.800	525.2	26.600
506	9.350	506	16.600	525.2	20.300	other	21.000	525.2	22.900	525.2	31.500
525.2	11.510	525.2	18.800	525.2	20.550	525.2	21.100	525.2	24.100	525.2	35.600
506	12.000	525.2	19.000	506	20.600	506	21.800	other	24.600		
525.1	13.500	506	19.200	525.2	20.600	525.2	22.200	525.2	24.700		
other	14.260	other	19.400	525.2	20.700	525.2	22.700	525.2	25.200		

**Water Study: 38****True Value: 13.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	4.410	525.2	12.300	525.2	13.200	525.2	14.200	525.2	15.900	525.2	18.100
525.2	6.370	525.2	12.500	525.2	13.600	525.2	14.700	525.2	16.800	525.2	18.500
other	9.710	other	12.700	525.2	13.600	525.2	14.800	525.2	16.800	other	20.610
506	10.500	525.2	12.700	506	13.600	525.2	15.000	other	17.300	525.2	24.800
525.2	10.600	506	12.800	525.2	13.900	525.2	15.300	525.2	17.400	525.2	25.900
525.2	12.000	525.2	13.030	506	14.000	other	15.500	506	18.100		

**Water Study: 39****True Value: 27.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	17.200	506	24.300	525.2	25.800	506	29.500	525.2	38.400	525.2	42.400
506	20.000	525.2	24.500	525.2	27.400	525.2	30.600	525.2	39.100		
525.2	20.300	525.2	24.700	525.2	28.400	525.2	30.900	525.2	39.600		
525.2	22.640	525.2	25.400	525.2	29.400	525.2	30.900	525.2	40.900		
525.2	23.700	525.2	25.600	525.2	29.500	525.2	36.500	506	41.900		



**Water Study: 40****True Value: 32.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
506	1.950	506	22.400	506	27.300	525.2	30.600	525.2	35.780	525.2	42.900
525.2	8.250	525.2	23.380	525.2	27.400	525.2	30.800	525.2	35.900	525.2	52.200
525.2	12.100	525.2	24.300	525.2	28.000	525.2	31.500	525.2	35.900	525.2	65.400
other	17.100	525.2	25.800	525.2	28.300	525.2	32.500	525.2	36.600		
other	19.300	525.2	26.800	525.2	28.300	other	32.600	other	40.200		
525.2	19.500	525.2	27.100	525.2	28.400	506	33.400	525.2	40.800		
525.2	20.300	506	27.300	525.2	29.200	506	34.800	525.2	41.000		

**Water Study: 41****True Value: 15.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
506	6.000	525.2	13.400	other	14.800	525.2	16.700	525.2	20.300		
506	9.780	525.2	14.090	525.2	14.800	525.2	17.200	525.2	21.100		
525.2	12.200	525.2	14.500	525.2	15.200	525.2	18.100	525.2	24.300		
525.2	12.300	525.2	14.700	506	15.600	525.2	19.400	525.2	25.700		
525.2	13.040	525.2	14.700	525.2	16.000	525.2	20.100	525.2	42.000		

**Cadmium****Water Study: 24a****True Value: 15.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	11.600	213.1	14.800	200.7A	15.100	213.1	15.600	213.2	16.350	213.2	17.800
213.1	13.400	200.7A	14.800	213.2	15.200	213.1	15.700	213.2	16.400	213.2	18.500
213.2	13.600	200.7A	14.800	213.2	15.200	213.2	15.700	other	16.500	213.2	19.400
213.2	14.400	200.7A	14.900	200.7A	15.200	other	15.800	213.1	16.500	213.2	19.500
213.1	14.400	213.2	15.000	213.2	15.200	213.2	15.900	213.2	16.500	213.2	20.000
213.2	14.500	200.7	15.000	213.1	15.300	213.2	15.900	213.2	16.500	213.2	168.000
213.2	14.600	213.1	15.000	200.7A	15.300	213.1	16.000	213.2	16.600		
200.7A	14.600	200.7A	15.000	200.7A	15.400	213.2	16.000	213.2	17.100		
213.2	14.600	213.2	15.000	213.1	15.400	213.2	16.000	213.2	17.200		
213.2	14.700	213.2	15.000	other	15.500	213.2	16.000	213.2	17.300		
213.2	14.700	213.2	15.100	213.2	15.500	other	16.100	213.2	17.600		

**Water Study: 24b****True Value: 10.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	9.200	213.2	9.840	213.1	10.100	213.2	10.300	213.1	10.800	213.2	11.500
213.1	9.220	213.1	10.000	other	10.100	213.1	10.400	213.2	10.800	213.2	11.800
200.7A	9.300	213.2	10.000	200.7A	10.100	213.2	10.500	other	10.800	213.2	12.200
213.2	9.370	200.7A	10.000	213.2	10.200	213.2	10.500	213.2	11.000	213.2	13.200
213.1	9.420	other	10.000	213.1	10.200	213.2	10.500	213.1	11.000	213.2	14.100
213.2	9.500	213.2	10.000	200.7A	10.200	213.2	10.500	213.2	11.000	213.2	39.000
213.2	9.540	213.1	10.000	200.7A	10.200	213.2	10.500	213.2	11.000		
213.2	9.660	200.7A	10.000	213.2	10.200	213.1	10.600	213.2	11.000		
213.2	9.750	213.2	10.000	213.2	10.200	200.7A	10.600	213.2	11.100		
200.7A	9.800	other	10.100	213.2	10.200	213.2	10.600	213.2	11.200		
213.2	9.800	200.7A	10.100	213.2	10.300	200.7A	10.700	213.2	11.400		

**Water Study: 25****True Value: 27.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	22.500	213.2	25.000	213.2	26.800	213.2	27.600	213.2	28.000	213.2	31.000
213.2	23.500	213.1	25.100	213.2	26.900	other	27.800	200.7	28.100	213.2	31.600
213.2	24.500	200.7	26.000	213.2	27.000	200.7	27.900	213.2	29.000	213.2	31.700
213.2	24.500	213.2	26.000	213.1	27.000	213.2	27.900	213.2	29.600	213.2	31.800
213.2	24.500	213.1	26.400	213.2	27.000	213.2	28.000	213.2	29.900	213.2	32.100
200.7	25.000	213.2	26.600	213.2	27.000	213.1	28.000	213.2	30.000		
213.2	25.000	213.2	26.700	213.2	27.400	213.2	28.000	200.7	30.900		

**Water Study: 26a****True Value: 53.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	42.000	213.1	49.600	200.7	51.830	213.2	53.100	213.2	54.100	213.2	57.700
213.2	44.100	213.2	49.800	other	52.000	213.2	53.200	other	54.100	213.2	58.800
213.2	44.400	213.2	50.000	200.7	52.000	213.2	53.300	213.2	54.200	213.1	59.000
213.2	44.500	213.1	50.400	213.1	52.300	213.2	53.400	213.2	54.200	200.7	60.000
213.2	45.000	213.2	50.600	other	52.400	213.1	53.400	213.1	54.300	213.2	60.000
213.2	46.100	200.7	51.000	213.2	52.500	200.7	53.700	200.7	54.300	213.2	60.000
213.2	47.800	213.2	51.000	213.2	52.500	213.1	53.700	200.7	56.100	213.2	67.900
213.2	48.000	200.7	51.000	213.2	52.600	213.2	53.800	other	56.100		
213.2	48.000	other	51.400	213.2	52.600	213.1	53.900	200.7	56.200		
other	48.000	213.1	51.600	200.7	52.800	213.1	54.000	200.7	56.900		
213.2	48.400	213.1	51.600	213.2	52.800	213.2	54.000	200.7	57.500		

**Water Study: 26b****True Value: 9.20 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	6.450	213.2	8.720	213.2	9.000	213.1	9.300	213.2	9.630	213.2	10.800
200.7	6.700	other	8.800	213.1	9.020	other	9.300	213.2	9.700	213.2	10.800
213.2	7.420	213.1	8.800	213.2	9.100	213.2	9.320	213.2	9.700	213.1	10.900
213.2	7.860	213.2	8.860	213.2	9.150	213.1	9.320	200.7	9.800	213.1	11.000
213.2	8.080	213.2	8.900	213.2	9.180	200.7	9.400	213.2	9.810	other	11.200
213.2	8.250	200.7	8.900	200.7	9.200	213.2	9.400	213.2	10.000	213.2	11.900
213.1	8.400	213.1	8.970	200.7	9.250	200.7	9.400	200.7	10.000	200.7	12.000
213.2	8.430	200.7	8.970	213.1	9.250	213.2	9.400	213.2	10.100		
213.2	8.550	other	9.000	213.2	9.250	213.2	9.430	213.2	10.200		
213.1	8.600	213.2	9.000	213.1	9.250	213.2	9.600	213.2	10.400		
other	8.700	213.2	9.000	200.7	9.300	other	9.620	200.7	10.800		

**Water Study: 27****True Value: 29.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	20.400	213.2	27.700	200.7	28.500	213.2	29.600	200.7	30.000	213.2	33.000
213.2	26.000	213.2	27.700	213.2	29.000	213.2	29.600	213.2	30.300	213.2	33.000
other	26.100	213.2	27.700	213.2	29.000	213.2	29.700	200.7	30.400	213.2	34.700
200.7	26.700	200.7	28.000	213.2	29.000	200.7	29.800	213.2	30.700	213.2	36.800
213.2	26.900	213.1	28.000	213.2	29.200	200.7	29.800	213.2	30.900	213.2	158.000
213.2	27.060	213.2	28.000	200.7	29.200	213.1	30.000	200.7	30.940		
213.2	27.600	other	28.400	213.2	29.400	213.1	30.000	213.2	31.200		

**Water Study: 29****True Value: 2.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	2.000	200.7	2.600	213.2	2.750	213.2	2.875	213.2	2.910	213.2	3.110
213.2	2.200	other	2.650	213.2	2.780	200.7	2.900	213.2	2.930	213.2	3.300
other	2.200	213.2	2.670	other	2.800	213.2	2.900	213.2	3.000	213.2	3.400
other	2.300	213.1	2.690	213.1	2.810	other	2.900	213.2	3.000	other	191.000
200.7	2.410	213.2	2.720	200.7	2.860	213.2	2.900	213.2	3.090		
213.2	2.500	213.2	2.740	213.2	2.870	213.2	2.900	213.2	3.100		

**Water Study: 30****True Value: 39.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	32.000	213.1	37.000	other	37.800	200.7	39.000	213.2	40.000	213.2	41.700
213.2	32.000	213.1	37.000	213.2	37.900	213.1	39.000	213.2	40.100	213.2	41.700
213.2	32.100	213.1	37.000	213.2	38.000	200.7	39.200	213.2	40.100	213.1	41.700
213.2	32.500	200.7	37.190	other	38.000	213.2	39.200	213.2	40.160	213.2	42.000
213.1	33.000	200.7	37.200	213.2	38.100	200.7	39.200	213.2	40.300	213.1	42.000
200.7	35.000	213.2	37.400	213.2	38.500	213.1	39.400	200.7	40.500	213.1	42.000
213.2	35.000	200.7	37.500	200.7	38.600	200.7	39.500	213.2	40.800	other	42.000
213.2	35.500	213.1	37.500	213.2	38.700	other	39.500	213.1	41.000	213.2	42.190
213.2	36.000	200.7	37.500	213.2	38.800	200.7	39.600	213.2	41.070	213.2	42.300
213.2	36.800	200.7	37.600	213.2	38.900	213.2	39.900	200.7	41.200	213.2	45.700
213.1	36.900	213.2	37.800	other	39.000	213.1	40.000	200.7	41.300	200.7	47.200

**Water Study: 31****True Value: 12.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	7.080	213.2	11.600	213.2	12.200	200.7	12.900	213.2	13.000	213.2	13.600
213.2	9.990	213.2	11.950	200.7	12.300	213.2	12.900	213.2	13.000	213.1	14.200
213.2	10.500	213.1	12.000	213.2	12.500	213.2	12.930	other	13.000	213.2	14.200
213.2	11.300	213.2	12.000	213.2	12.500	213.2	13.000	213.2	13.400	other	14.500
other	11.400	213.2	12.080	213.2	12.700	200.7	13.000	200.7	13.400	213.2	15.800
213.2	11.500	213.1	12.200	other	12.700	other	13.000	other	13.500		

**Water Study: 32****True Value: 4.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	3.970	213.2	4.540	200.7	4.740	213.2	4.900	213.2	5.040	213.2	5.690
213.2	4.200	other	4.570	213.2	4.740	200.7	4.900	213.2	5.050	other	5.690
213.2	4.200	213.2	4.590	other	4.740	200.7	4.900	213.2	5.080	213.2	5.700
213.1	4.220	213.2	4.600	213.2	4.750	213.2	4.920	213.2	5.103	200.7	5.770
213.2	4.280	200.7	4.600	213.2	4.760	213.1	4.980	213.2	5.170	213.2	6.030
200.7	4.370	213.2	4.640	213.2	4.770	213.2	4.990	200.7	5.200	213.2	7.300
213.2	4.400	213.2	4.690	213.2	4.790	213.2	5.000	other	5.200	213.2	7.500
213.2	4.430	213.2	4.690	213.2	4.790	200.7	5.000	213.2	5.200		
213.2	4.490	213.2	4.700	200.7	4.800	213.2	5.000	213.2	5.300		
213.2	4.500	213.2	4.700	213.2	4.820	213.2	5.000	200.7	5.370		
213.2	4.500	213.2	4.700	200.7	4.880	213.2	5.000	213.2	5.400		
213.2	4.500	213.2	4.730	200.7	4.880	other	5.000	200.7	5.530		

**Water Study: 33****True Value: 49.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	41.700	213.2	46.500	other	47.700	213.2	48.580	other	49.000	213.2	51.200
200.7	44.700	other	46.800	213.2	47.800	other	48.700	213.2	49.000	200.7	54.700
213.2	45.000	200.7	47.000	200.7	47.900	213.2	48.700	200.7	49.100	213.2	59.800
200.7	45.500	3113B	47.000	200.7	48.000	other	48.800	213.2	49.200		
other	45.900	200.7	47.000	other	48.000	213.2	49.000	213.2	49.400		
213.2	46.000	213.2	47.400	200.7	48.300	213.2	49.000	213.2	50.000		
213.2	46.300	200.7	47.600	213.2	48.500	213.1	49.000	other	51.200		

**Water Study: 34****True Value: 23.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
213.2	16.700	other	22.000	213.2	22.400	200.7	22.900	213.2	23.600	200.7	24.300
213.2	19.300	200.7	22.000	213.1	22.500	213.2	22.900	other	23.700	200.7	24.300
213.2	19.600	213.2	22.000	213.2	22.500	other	23.000	213.2	23.700	213.2	24.500
200.7	20.000	200.7	22.000	other	22.500	213.2	23.000	213.2	23.700	213.2	24.500
213.2	20.700	213.2	22.000	200.7	22.500	213.2	23.000	200.7	23.900	213.2	24.600
213.2	21.500	213.2	22.100	other	22.600	213.2	23.100	200.7	23.900	213.2	25.000
213.2	21.600	213.2	22.100	213.2	22.600	other	23.110	213.2	23.900	213.2	25.200
200.7	21.700	other	22.100	213.2	22.620	213.2	23.200	213.2	24.000	213.2	26.200
other	21.700	213.2	22.100	200.7	22.700	200.7	23.300	200.7	24.000	213.2	27.200
213.2	21.900	200.7	22.200	213.2	22.700	other	23.400	200.7	24.000	200.7	47.400
213.2	21.900	213.2	22.400	200.7	22.900	200.7	23.500	200.7	24.200		

**Water Study: 35****True Value: 2.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
3113B	1.800	200.7	2.650	213.2	2.720	213.2	2.890	200.7	3.000	200.7	3.280
200.7	2.100	3113B	2.650	213.2	2.740	213.2	2.890	other	3.000	other	3.300
200.7	2.210	213.2	2.660	213.2	2.750	213.2	2.900	213.2	3.050	213.2	3.860
other	2.560	213.2	2.670	other	2.800	213.2	2.930	other	3.090	other	27.300
213.2	2.600	213.2	2.700	213.2	2.800	213.2	2.960	200.7	3.090		
213.2	2.600	other	2.700	213.2	2.850	213.2	3.000	other	3.110		
213.2	2.620	other	2.700	213.2	2.860	213.2	3.000	213.2	3.160		

**Water Study: 36****True Value: 34.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7	29.400	200.8	32.800	3113B	33.600	200.8	34.300	3113B	35.100	200.7	36.000
3113B	30.000	200.9	32.800	3113B	33.700	200.9	34.400	200.7	35.400	200.8	36.000
200.7	30.000	3113B	33.000	200.9	33.700	200.7	34.400	213.2	35.400	other	36.300
other	30.800	200.7	33.000	200.8	33.700	213.2	34.400	3113B	35.400	3113B	36.400
3113B	31.300	200.9	33.000	3113B	33.900	3113B	34.500	3113B	35.400	200.7	36.500
200.8	32.000	213.2	33.300	213.2	34.000	200.7	34.500	200.7	35.600	3113B	36.500
3113B	32.100	other	33.300	200.7	34.100	200.7	34.700	200.9	35.600	other	36.500
200.7	32.200	200.8	33.400	200.9	34.100	200.9	34.700	200.7	35.800	200.7	36.900
other	32.200	3113B	33.400	200.7	34.100	3113B	34.800	200.7	35.900	200.9	37.000
200.8	32.300	200.7	33.500	200.8	34.100	200.7	34.800	200.7	36.000	200.9	38.300
200.7	32.700	3113B	33.500	200.7	34.200	200.8	34.900	200.7	36.000	213.2	56.300

**Water Study: 37****True Value: 10.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
3113B	5.350	200.7	9.210	200.9	9.550	200.7	9.830	200.9	10.100	200.9	10.300
3113B	8.310	200.7	9.340	3113B	9.560	3113B	9.860	200.8	10.100	200.9	10.300
200.9	8.600	200.9	9.430	200.7	9.600	200.8	9.880	3113B	10.100	200.7	10.700
3113B	8.950	200.7	9.480	200.7	9.630	other	9.900	200.8	10.100	200.9	10.800
200.9	8.990	200.8	9.480	200.9	9.650	200.9	9.900	3113B	10.100	200.7	10.900
200.9	9.000	3113B	9.500	200.9	9.680	200.9	9.980	3113B	10.200	200.7	11.100
200.7	9.050	200.9	9.520	200.7	9.700	200.9	10.000	200.7	10.200		
200.7	9.100	200.8	9.540	200.7	9.700	200.7	10.000	200.8	10.200		
213.2	9.110	200.9	9.540	200.8	9.800	200.9	10.000	3113B	10.300		

**Water Study: 38****True Value: 2.12 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	1.100	200.9	1.950	200.8	2.040	3113B	2.110	200.8	2.180	200.9	2.480
3113B	1.170	200.9	1.960	200.9	2.040	200.8	2.130	3113B	2.180	200.9	2.560
200.9	1.800	200.7	1.980	200.8	2.050	200.7	2.130	200.8	2.200	200.7	2.650
200.9	1.800	200.7	2.000	200.8	2.070	200.8	2.140	200.9	2.200	200.7	2.660
200.8	1.810	200.9	2.000	200.7	2.090	200.9	2.150	3113B	2.250	other	2.890
200.9	1.840	200.8	2.000	200.7	2.100	200.9	2.150	200.7	2.300	3113B	3.150
3113B	1.877	3113B	2.000	200.7	2.100	3113B	2.150	200.8	2.300	200.7	3.460
3113B	1.880	200.8	2.000	200.8	2.100	200.9	2.160	200.7	2.300		
200.9	1.900	200.8	2.000	200.9	2.100	200.7	2.160	other	2.300		
200.9	1.900	200.9	2.020	200.9	2.100	200.8	2.160	200.9	2.360		
200.8	1.910	200.8	2.040	200.9	2.100	200.9	2.170	3113B	2.410		

**Water Study: 39****True Value: 28.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
3113B	24.500	3113B	27.300	200.7	27.700	200.9	28.000	200.7	28.700	200.8	29.500
3113B	24.600	3113B	27.400	200.9	27.800	200.8	28.100	200.9	28.800	200.7	29.600
200.7	26.400	200.9	27.400	200.7	27.800	200.7	28.200	200.9	28.800	200.8	29.700
3113B	26.600	200.7	27.600	200.7	27.840	3113B	28.300	200.9	28.800	200.9	29.800
200.8	27.200	200.9	27.600	200.9	27.900	200.8	28.300	200.7	28.900	200.7	30.600
200.8	27.200	200.9	27.600	3113B	27.900	3113B	28.400	200.7	28.900	200.9	31.300
200.9	27.200	200.9	27.600	200.9	28.000	200.8	28.500	200.7	29.000	200.9	31.400
200.9	27.300	200.7	27.600	200.7	28.000	200.7	28.600	200.8	29.000	200.7	31.600
200.7	27.300	3113B	27.600	200.8	28.000	200.9	28.700	200.7	29.500	200.9	44.900

**Water Study: 40****True Value: 6.31 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	1.720	200.9	6.100	200.7	6.240	200.8	6.340	200.8	6.500	200.7	6.840
200.9	3.900	200.9	6.130	200.9	6.250	200.8	6.360	200.9	6.520	200.7	6.880
200.9	4.000	200.9	6.160	3113B	6.250	200.8	6.380	200.8	6.564	200.7	6.880
200.7	4.300	200.8	6.180	200.8	6.260	200.7	6.400	3113B	6.570	200.8	6.960
200.7	4.510	3113B	6.180	200.8	6.260	200.7	6.400	200.9	6.580	200.7	7.000
200.9	5.590	200.8	6.190	200.8	6.270	200.8	6.400	200.8	6.580	200.9	7.100
200.8	5.700	200.9	6.200	200.7	6.320	200.8	6.400	3113B	6.640	200.9	7.480
200.9	5.840	200.8	6.200	200.9	6.320	200.8	6.410	3113B	6.640	200.7	7.630
3113B	5.990	3113B	6.200	3113B	6.320	200.9	6.490	200.7	6.800	200.7	8.280
200.7	6.000	3113B	6.230	other	6.330	200.7	6.500	other	6.800	200.7	9.810
3113B	6.080	200.7	6.230	200.8	6.330	200.7	6.500	200.9	6.830		

**Water Study: 41****True Value: 18.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	13.600	200.7	17.700	200.7	18.500	200.7	18.800	200.7	19.100	200.7	19.600
3113B	15.000	200.9	17.900	200.8	18.500	200.8	18.800	200.9	19.200	200.7	19.900
200.8	15.500	200.7	18.000	200.7	18.600	200.8	19.000	200.8	19.200	200.7	21.160
200.9	16.400	200.7	18.000	200.8	18.600	200.9	19.000	200.8	19.200	200.9	25.600
200.9	17.000	3113B	18.100	200.9	18.600	200.7	19.000	200.9	19.300		
200.9	17.000	200.7	18.200	200.8	18.700	3113B	19.000	200.7	19.300		
200.8	17.500	200.8	18.400	200.8	18.700	200.7	19.000	200.9	19.300		
3113B	17.600	200.9	18.400	200.9	18.800	201	19.000	3113B	19.300		
200.7	17.600	200.9	18.500	200.7	18.800	200.9	19.000	3113B	19.300		

**Carbofuran**

**Water Study: 24a**

**True Value: 15.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	11.300	531.1	15.300	other	15.750	531.1	16.000	531.1	16.800	531.1	20.400
531.1	15.000	531.1	15.400	other	15.800	531.1	16.700	531.1	17.200		

**Water Study: 24b**

**True Value: 44.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	33.000	531.1	38.400	531.1	41.700	531.1	44.000	531.1	46.700	531.1	57.900
531.1	37.100	531.1	40.800	531.1	43.800	other	45.040	other	53.550		

**Water Study: 25a**

**True Value: 24.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	7.980	531.1	19.300	531.1	23.400	531.1	24.360	531.1	26.190		

**Water Study: 25b**

**True Value: 48.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	43.700	531.1	44.300	531.1	47.700	531.1	51.430	531.1	52.060		

**Water Study: 26a**

**True Value: 36.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	21.000	other	32.400	531.1	35.200	531.1	37.400	531.1	47.700		
531.1	27.400	531.1	33.690	531.1	35.600	531.1	38.600				
other	32.000	531.1	34.100	531.1	36.900	531.1	45.800				

**Water Study: 26b**

**True Value: 17.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	8.650	other	15.600	531.1	17.300	531.1	18.100	531.1	22.100		
531.1	12.900	other	15.600	531.1	17.500	531.1	19.000				
531.1	15.100	531.1	17.240	531.1	17.700	531.1	21.700				



**Water Study: 27****True Value: 20.7**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	4.290	531.1	18.200	531.1	21.700	531.1	26.800				
531.1	17.400	531.1	18.500	531.1	23.300	531.1	27.500				

**Water Study: 29****True Value: 4.00**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	3.900	531.1	4.030	531.1	4.220	531.1	4.670	531.1	5.000		
531.1	3.960	other	4.170	531.1	4.510	531.1	4.970	531.1	6.490		

**Water Study: 30****True Value: 5.78 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	5.100	531.1	5.500	531.1	5.970	other	6.330	531.1	7.500	531.1	8.950
531.1	5.230	531.1	5.560	531.1	6.210	531.1	6.470	531.1	7.820		
531.1	5.240	531.1	5.610	531.1	6.260	531.1	6.720	531.1	7.890		
531.1	5.320	531.1	5.650	531.1	6.280	531.1	7.270	531.1	8.200		
531.1	5.390	531.1	5.720	531.1	6.310	531.1	7.320	531.1	8.880		

**Water Study: 31****True Value: 11.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	4.890	531.1	8.750	531.1	10.500	531.1	11.700	531.1	12.000		
531.1	5.430	531.1	9.430	531.1	10.700	531.1	11.800	531.1	12.300		
531.1	8.250	531.1	10.300	531.1	11.400	531.1	11.900				

**Water Study: 32****True Value: 7.67 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	4.230	531.1	7.070	531.1	7.440	531.1	7.640	other	7.880	531.1	8.320
531.1	6.540	531.1	7.110	531.1	7.450	531.1	7.740	531.1	7.910	531.1	8.370
531.1	6.580	531.1	7.160	531.1	7.460	531.1	7.760	531.1	7.910	531.1	8.700
531.1	6.700	531.1	7.190	531.1	7.520	531.1	7.850	531.1	8.030	531.1	9.960
531.1	6.780	531.1	7.340	531.1	7.610	531.1	7.850	531.1	8.070	531.1	12.500
531.1	7.000	531.1	7.420	531.1	7.640	531.1	7.860	531.1	8.230	531.1	13.700

**Water Study: 33****True Value: 24.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	1.560	531.1	21.610	531.1	22.800	531.1	24.900	531.1	25.500	531.1	31.100
531.1	10.300	531.1	21.700	531.1	23.800	531.1	25.100	531.1	25.700	531.1	33.160
other	15.200	531.1	21.800	531.1	23.900	531.1	25.200	531.1	26.300	531.1	33.500
531.1	19.000	531.1	21.870	531.1	23.900	531.1	25.300	531.1	28.400		
531.1	19.700	531.1	22.100	531.1	24.500	531.1	25.500	531.1	28.600		
531.1	20.400	531.1	22.600	531.1	24.800	531.1	25.500	531.1	29.600		

**Water Study: 34****True Value: 18.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	0.017	531.1	16.600	531.1	17.600	531.1	18.000	531.1	19.600	531.1	25.700
531.1	6.010	531.1	16.700	531.1	17.700	531.1	18.100	531.1	19.900	531.1	31.200
531.1	15.200	531.1	16.800	531.1	17.700	531.1	18.200	531.1	20.070	531.1	37.300
531.1	15.900	531.1	17.000	531.1	17.800	531.1	18.200	531.1	20.100		
531.1	16.000	531.1	17.300	531.1	17.900	531.1	18.500	531.1	21.400		
531.1	16.000	531.1	17.300	531.1	17.900	531.1	18.600	531.1	21.600		
531.1	16.400	531.1	17.310	531.1	18.000	531.1	18.900	531.1	21.700		
531.1	16.600	531.1	17.500	531.1	18.000	531.1	19.100	531.1	22.400		

**Water Study: 35****True Value: 42.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	22.100	531.1	33.920	531.1	38.490	531.1	40.600	531.1	43.200	531.1	49.200
531.1	26.900	531.1	34.700	531.1	39.400	531.1	41.500	531.1	43.800	531.1	65.300
531.1	28.900	531.1	35.600	531.1	39.570	531.1	42.000	531.1	44.000	other	66.400
531.1	32.900	531.1	36.400	531.1	39.700	531.1	42.200	531.1	45.200	531.1	67.000
531.1	33.600	531.1	38.100	531.1	40.600	531.1	42.300	531.1	46.600	531.1	84.800

**Water Study: 36****True Value: 37.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	22.900	531.1	31.800	531.1	34.700	531.1	37.600	531.1	38.700	531.1	40.900
531.1	26.000	531.1	33.100	531.1	34.900	531.1	37.800	531.1	39.300	531.1	41.400
531.1	26.200	531.1	33.200	531.1	35.000	531.1	37.900	531.1	39.300	531.1	42.300
531.1	28.900	531.1	34.000	531.1	35.300	531.1	38.300	531.1	40.000	531.1	43.600
531.1	31.000	531.1	34.100	531.1	36.300	531.1	38.300	531.1	40.000	other	47.700
531.1	31.100	531.1	34.200	531.1	36.400	531.1	38.500	531.1	40.400	531.1	48.700
531.1	31.200	531.1	34.200	531.1	36.800	531.1	38.500	531.1	40.400	531.1	496.000
531.1	31.300	531.1	34.400	531.1	37.300	531.1	38.700	531.1	40.500		

**Water Study: 37****True Value: 48.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	7.920	531.1	40.560	531.1	43.300	531.1	45.100	531.1	46.700	531.1	48.400
531.1	30.600	531.1	41.000	531.1	44.000	531.1	45.200	531.1	46.730	531.1	49.700
531.1	36.000	531.1	41.400	531.1	44.100	531.1	45.500	531.1	47.400	531.1	51.100
531.1	38.500	531.1	41.900	531.1	44.600	531.1	46.000	other	47.700	other	52.600
531.1	39.000	531.1	43.000	531.1	44.700	531.1	46.500	531.1	48.300	531.1	54.800
531.1	39.000	531.1	43.100	531.1	45.000	531.1	46.700	531.1	48.300	531.1	61.300

**Water Study: 38****True Value: 33.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	4.250	531.1	33.100	531.1	35.200	531.1	37.000	531.1	39.200	531.1	41.500
other	22.600	531.1	33.600	531.1	35.500	531.1	37.500	531.1	39.300	531.1	41.600
531.1	27.400	531.1	34.000	531.1	35.600	531.1	38.200	531.1	40.000	531.1	42.100
531.1	29.500	531.1	34.000	531.1	36.300	531.1	38.300	531.1	41.000	531.1	43.600
531.1	30.200	531.1	34.300	531.1	36.400	531.1	38.400	531.1	41.000	531.1	45.400
531.1	31.200	531.1	34.360	531.1	36.800	531.1	38.400	531.1	41.180	531.1	48.000
531.1	31.700	531.1	34.900	531.1	37.000	531.1	38.600	531.1	41.400	531.1	76.700

**Water Study: 39****True Value: 74.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	40.600	531.1	65.000	531.1	66.300	531.1	67.700	531.1	81.500	531.1	94.800
531.1	52.300	531.1	65.500	531.1	66.500	531.1	67.700	531.1	81.700		
531.1	52.500	531.1	65.500	531.1	66.800	531.1	68.100	531.1	83.260		
531.1	63.200	531.1	65.500	531.1	67.100	531.1	70.500	531.1	84.100		
531.1	63.500	531.1	65.870	531.1	67.100	531.1	73.300	531.1	85.900		
531.1	64.300	531.1	66.000	531.1	67.100	531.1	79.900	531.1	89.000		

**Water Study: 40****True Value: 55.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	41.800	531.1	50.400	531.1	53.300	531.1	54.700	531.1	56.900	531.1	62.900
531.1	43.200	531.1	50.500	531.1	54.300	531.1	55.200	531.1	57.000	531.1	63.300
other	43.500	531.1	50.640	531.1	54.300	531.1	55.400	531.1	57.800	531.1	65.200
531.1	45.100	531.1	51.000	531.1	54.400	531.1	55.800	531.1	59.700	531.1	65.900
531.1	45.300	531.1	51.800	531.1	54.500	531.1	56.200	531.1	60.300	531.1	69.300
531.1	47.100	531.1	52.100	531.1	54.600	531.1	56.700	531.1	60.400	531.1	71.500
531.1	50.000	531.1	52.500	531.1	54.600	531.1	56.770	531.1	61.100	531.1	71.700

**Water Study: 41****True Value: 43.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	10.800	531.1	36.050	531.1	40.400	531.1	41.300	531.1	42.700	531.1	45.400
531.1	24.800	531.1	36.800	531.1	40.500	531.1	41.800	531.1	42.900	531.1	46.900
531.1	28.200	531.1	37.320	531.1	40.800	531.1	41.800	531.1	43.000	531.1	47.000
531.1	32.100	531.1	40.000	531.1	41.100	531.1	42.500	531.1	43.500	531.1	52.400
531.1	32.100	531.1	40.300	531.1	41.300	531.1	42.600	531.1	44.900		

**Carbon Tetrachloride**

**Water Study: 24**

**True Value: 4.56 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	3.420	524.1	3.840	502.2	4.180	502.2	4.490	502.2	4.880	524.2	5.480
524.1	3.500	502.2	3.840	524.1	4.180	502.2	4.490	502.2	4.890	502.2	5.600
502.1	3.530	524.2	3.860	other	4.300	502.1	4.500	502.2	4.900	524.2	5.620
524.2	3.583	502.1	3.900	524.2	4.310	524.2	4.600	502.2	4.960	524.2	5.779
524.1	3.590	524.2	3.980	524.2	4.330	other	4.700	502.1	4.970	502.2	6.500
524.1	3.613	502.2	4.000	502.2	4.400	524.2	4.700	502.2	5.100	524.2	15.400
502.2	3.680	502.1	4.000	502.2	4.410	524.2	4.780	502.1	5.200		
502.2	3.740	502.2	4.030	502.2	4.420	502.2	4.780	524.2	5.400		
502.2	3.780	524.2	4.090	524.2	4.460	524.2	4.800	502.2	5.400		
524.2	3.790	524.2	4.180	524.2	4.490	524.2	4.850	524.1	5.450		

**Water Study: 25**

**True Value: 9.18 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	5.800	524.1	8.500	524.2	9.050	524.2	9.440	524.2	10.100	502.2	13.000
502.2	7.250	502.2	8.600	502.2	9.050	502.1	9.650	other	10.110	other	17.500
502.2	7.300	524.2	8.790	502.1	9.160	524.2	9.680	524.2	10.140		
524.1	8.240	524.2	8.880	524.2	9.300	502.2	9.700	502.2	10.400		
502.2	8.270	524.2	8.890	502.2	9.350	524.2	9.930	502.2	10.900		
502.2	8.360	524.2	8.966	502.2	9.350	524.1	10.000	524.2	11.000		
502.2	8.400	502.2	9.020	502.2	9.370	other	10.000	524.1	11.300		

**Water Study: 26**

**True Value: 16.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	12.000	524.1	15.200	524.2	16.400	524.2	17.200	502.2	18.200	502.1	19.700
502.2	12.300	502.2	15.400	524.2	16.430	502.1	17.300	502.2	18.400	524.1	19.700
502.2	12.900	524.2	15.520	524.2	16.700	502.2	17.400	524.2	18.500	524.2	19.800
524.2	13.400	524.2	15.800	524.1	16.700	524.2	17.500	502.2	18.500	502.2	20.300
502.2	13.500	502.2	15.800	524.1	16.800	524.2	17.600	524.2	18.600	502.1	21.300
502.2	13.900	502.2	15.900	502.2	16.900	502.2	17.600	524.2	18.800	502.2	21.320
502.2	13.900	524.2	16.000	524.2	17.000	502.2	17.600	524.2	19.000	502.2	21.400
524.2	14.700	502.2	16.040	524.2	17.100	524.1	17.900	502.2	19.200	502.2	23.700
other	14.700	other	16.300	524.2	17.100	502.1	18.000	524.2	19.500	524.2	25.300
502.2	15.100	502.1	16.380	524.2	17.200	502.1	18.200	524.2	19.700		

**Water Study: 27****True Value: 8.48 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	3.930	502.2	7.540	502.1	8.270	524.2	8.600	502.2	9.220	524.1	11.300
other	5.750	524.2	7.590	502.2	8.370	502.2	8.600	524.1	9.220	502.2	11.400
502.2	6.280	502.2	7.700	502.2	8.430	524.2	8.640	524.2	9.890		
502.2	6.940	502.2	7.900	524.2	8.490	524.2	8.680	other	9.990		
524.2	6.990	502.2	7.900	502.2	8.520	524.2	8.740	502.2	10.100		
502.2	7.200	524.2	8.160	502.2	8.540	502.2	8.950	524.2	10.470		
524.2	7.300	524.2	8.180	524.2	8.570	other	9.100	502.2	10.800		

**Water Study: 29****True Value: 10.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.500	502.2	9.540	524.2	10.200	524.1	10.900	other	11.440	524.2	12.500
other	8.600	other	9.580	502.2	10.200	524.2	10.900	502.2	11.500	502.2	12.890
502.2	8.670	other	9.640	502.2	10.600	502.2	11.200	524.2	12.000	524.2	13.400
524.2	8.880	524.2	9.820	502.2	10.610	524.2	11.200	524.2	12.100	502.2	13.400
502.2	9.170	524.2	10.000	524.2	10.700	502.2	11.400	524.1	12.300	502.2	13.700
502.2	9.290	502.2	10.000	524.2	10.700	524.2	11.400	502.2	12.410	502.2	14.400

**Water Study: 30****True Value: 6.46 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.1	4.160	524.2	5.830	524.2	6.220	502.2	6.440	524.2	6.860	other	7.198
524.2	5.150	502.2	5.840	524.2	6.240	524.2	6.500	524.2	6.900	524.2	7.200
other	5.260	502.2	5.900	502.2	6.250	524.2	6.550	other	6.960	524.2	7.360
524.2	5.400	524.2	5.940	524.1	6.310	other	6.560	524.1	6.990	524.2	7.400
524.2	5.430	502.2	5.950	502.2	6.340	502.2	6.600	502.2	7.000	502.2	7.580
502.2	5.740	524.2	6.010	502.1	6.340	502.2	6.600	524.2	7.000	502.2	7.620
524.2	5.760	502.2	6.100	502.2	6.360	502.2	6.650	524.2	7.020	524.2	7.700
524.2	5.770	502.2	6.130	502.2	3.391	502.2	6.700	502.2	7.050	502.1	8.530
524.2	5.800	524.2	6.150	524.2	6.400	524.2	6.700	502.2	7.060	502.2	10.250
524.2	5.800	524.2	6.160	502.2	6.400	524.1	6.730	502.2	7.150		

**Water Study: 31****True Value: 8.69 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.670	502.2	7.390	502.2	8.050	502.1	8.550	524.2	9.100	502.2	9.680
502.2	6.540	524.2	7.620	524.2	8.100	502.1	8.560	502.2	9.140	524.2	9.720
502.2	6.930	524.2	7.700	502.2	8.220	502.2	8.710	502.2	9.170	502.2	10.100
502.2	6.949	524.2	7.860	502.2	8.490	524.2	9.000	other	9.240	502.1	10.400
524.1	7.040	524.2	7.990	524.2	8.500	524.2	9.020	524.2	9.400	502.2	10.500
502.1	7.360	524.2	8.010	524.2	8.520	524.2	9.060	524.2	9.480	502.2	11.000

**Water Study: 32****True Value: 14.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	10.800	524.2	13.400	524.2	13.800	other	14.4000	524.2	15.100	502.2	15.900
524.2	11.000	524.2	13.400	502.2	13.800	524.2	14.500	502.2	15.200	524.2	16.100
502.1	11.100	502.2	13.400	502.2	13.900	524.2	14.500	524.2	15.230	502.2	16.200
502.2	11.600	502.2	13.500	502.2	13.900	524.2	14.530	502.2	15.300	524.2	16.200
502.2	11.900	524.2	13.600	502.2	14.000	524.2	14.580	524.2	15.340	524.1	16.700
502.2	12.300	524.2	13.600	502.2	14.000	524.2	14.600	502.2	15.400	524.2	17.700
524.2	12.700	524.2	13.700	other	14.000	524.2	14.600	502.2	15.500	524.2	17.700
502.2	12.800	502.1	13.700	524.2	14.200	524.2	14.700	524.2	15.600	524.2	17.900
524.2	12.800	524.2	13.800	502.1	14.200	502.1	14.800	524.2	15.700		
524.2	12.900	502.2	13.800	502.2	14.300	524.2	14.930	524.2	15.900		
502.2	13.000	502.2	13.800	502.2	14.400	524.2	15.100	other	15.900		

**Water Study: 33****True Value: 13.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.460	524.1	12.100	502.2	13.000	502.2	13.700	524.2	14.600	502.1	15.400
other	10.530	502.2	12.600	524.2	13.100	502.2	13.800	524.2	14.600	524.2	16.000
502.2	10.800	502.2	12.600	502.2	13.100	524.2	14.000	524.2	14.600	524.2	16.100
502.1	11.000	524.2	12.690	524.2	13.500	524.2	14.000	502.2	14.900	524.2	21.400
502.2	11.570	502.2	12.700	524.2	13.600	524.2	14.200	524.2	15.030		
502.2	11.700	524.2	12.970	502.2	13.600	502.2	14.500	502.2	15.100		

**Water Study: 34****True Value: 6.27 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.710	502.2	5.560	524.2	5.860	524.2	6.080	502.2	6.490	524.2	6.800
524.2	4.750	524.2	5.600	524.2	5.880	502.2	6.090	524.2	6.550	502.2	6.910
524.2	4.960	524.2	5.650	524.2	5.910	other	6.100	524.2	6.580	524.2	7.010
502.2	4.980	502.2	5.660	524.2	5.960	502.2	6.170	524.2	6.600	502.2	7.030
502.2	5.010	524.2	5.720	502.2	5.960	502.2	6.240	524.2	6.600	524.2	7.130
502.2	5.450	502.2	5.728	502.2	5.970	524.2	6.250	502.2	6.620	524.2	7.200
502.1	5.460	502.2	5.760	524.2	6.000	524.2	6.260	502.2	6.630	502.2	7.210
502.2	5.490	524.2	5.820	524.2	6.000	524.2	6.290	502.2	6.640	524.2	7.380
other	5.500	502.2	5.840	502.2	6.030	502.2	6.340	524.2	6.800	524.2	7.670
502.1	5.530	524.2	5.850	502.2	6.070	524.2	6.460	502.2	6.800	524.2	7.830

**Water Study: 35****True Value: 10.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	6.990	524.2	10.000	502.2	10.380	524.2	11.000	524.2	11.700	other	12.200
502.2	8.500	524.2	10.100	502.2	10.500	524.2	11.000	524.2	11.800	524.2	12.200
502.2	8.563	502.2	10.100	502.2	10.650	524.2	11.160	502.2	11.800	524.2	12.490
other	9.958	502.2	10.200	524.2	10.700	524.2	11.200	502.2	11.900	502.2	13.500
502.2	9.960	524.2	10.200	502.2	10.700	502.2	11.500	502.2	12.000		
524.2	10.000	524.2	10.300	524.2	10.900	524.2	11.500	524.2	12.000		

**Water Study: 36****True Value: 12.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.760	502.2	11.500	524.2	11.800	502.2	12.200	524.2	12.730	524.2	13.400
502.2	10.300	524.2	11.500	524.2	11.900	502.2	12.200	502.2	12.800	524.2	13.500
502.2	10.400	524.2	11.500	524.2	11.900	524.2	12.200	524.2	12.860	other	13.600
502.2	10.600	524.2	11.530	524.2	11.900	524.2	12.300	502.2	12.900	524.2	13.700
524.2	10.700	524.2	11.600	502.2	11.900	502.2	12.320	524.2	12.900	other	13.700
502.2	10.900	502.2	11.600	502.2	11.900	524.2	12.400	524.2	12.900	502.2	14.000
502.2	10.900	524.2	11.600	502.2	12.000	502.2	12.400	502.2	13.000	524.2	14.570
524.2	11.300	524.2	11.700	524.2	12.000	524.2	12.500	524.2	13.000	other	15.000
524.2	11.400	524.2	11.730	524.2	12.000	524.2	12.600	502.2	13.200	524.2	15.630
502.2	11.400	524.2	11.800	502.2	12.100	524.2	12.700	524.2	13.200		



**Water Study: 37****True Value: 12.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	10.200	502.2	12.100	524.2	12.500	524.2	12.800	524.2	13.420	524.2	15.200
524.2	10.600	502.2	12.100	524.2	12.500	502.2	12.800	524.2	13.600	524.2	15.300
502.2	11.000	524.2	12.200	502.2	12.500	524.2	12.900	524.2	13.820	524.2	16.000
502.2	11.300	502.2	12.200	524.2	12.500	524.2	12.900	502.2	13.900	502.2	16.400
524.2	11.300	524.2	12.200	524.2	12.600	524.2	13.000	502.2	14.200	524.2	19.400
502.2	11.400	524.2	12.300	524.2	12.600	524.2	13.100	other	14.300	502.2	19.900
524.2	11.730	524.2	12.300	502.2	12.700	502.2	13.300	other	14.600	524.2	27.600
524.2	11.900	502.2	12.400	502.2	12.700	524.2	13.300	524.2	14.800		

**Water Study: 38****True Value: 15.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	10.100	other	13.700	502.2	14.900	502.2	15.500	524.2	16.000	524.2	16.800
502.2	12.200	other	13.800	502.2	15.000	502.2	15.500	502.2	16.100	502.2	16.900
524.2	12.700	524.2	14.100	524.2	15.000	524.2	15.600	524.2	16.200	524.2	17.200
502.2	12.800	524.2	14.200	524.2	15.030	524.2	15.600	524.2	16.400	524.2	17.400
524.2	12.900	502.2	14.200	502.2	15.300	524.2	15.600	524.2	16.400	524.2	17.700
502.2	12.900	502.2	14.600	524.2	15.300	524.2	15.600	524.2	16.400	524.2	18.000
524.2	12.900	524.2	14.600	524.2	15.400	502.2	15.700	524.2	16.500	524.2	18.200
524.2	13.100	502.2	14.860	502.2	15.400	502.2	15.700	502.2	16.500	524.2	18.680
502.2	13.600	524.2	14.900	524.2	15.500	524.2	16.000	524.2	16.700	524.2	18.800

**Water Study: 39****True Value: 19.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	14.300	524.2	17.900	524.2	18.500	524.2	19.200	524.2	20.100	524.2	21.500
502.2	14.800	502.2	17.900	524.2	18.500	524.2	19.300	524.2	20.100	524.2	22.000
524.2	15.200	524.2	17.900	524.2	18.800	502.2	19.500	502.2	20.100	524.2	22.500
502.2	15.800	524.2	18.000	524.2	18.880	502.2	19.700	502.2	20.200	524.2	23.100
524.2	16.000	502.2	18.000	502.2	18.900	524.2	19.700	524.2	20.700	524.2	23.300
524.2	16.400	524.2	18.200	502.2	19.000	502.2	20.000	524.2	20.700	524.2	34.900
502.2	16.700	502.2	18.300	524.2	19.100	524.2	20.000	524.2	21.500	524.2	65.140

**Water Study: 40****True Value: 8.90 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	6.380	524.2	8.050	524.2	8.400	502.2	8.720	502.2	9.100	502.2	9.970
502.2	6.800	524.2	8.110	524.2	8.420	524.2	8.730	other	9.140	502.2	10.000
524.2	6.800	524.2	8.150	524.2	8.520	502.2	8.760	502.2	9.150	524.2	10.400
524.2	6.920	524.2	8.160	524.2	8.560	524.2	8.760	524.2	9.160	524.2	10.600
524.2	6.980	524.2	8.200	502.2	8.580	502.2	8.810	502.2	9.210	524.2	10.680
524.2	7.530	524.2	8.200	524.2	8.640	524.2	8.900	524.2	9.240	524.2	11.500
524.2	7.580	524.2	8.270	524.2	8.640	524.2	8.950	524.2	9.260	524.2	20.700
other	7.870	524.2	8.270	524.2	8.680	502.2	8.970	524.2	9.320		
524.2	7.910	524.2	8.360	524.2	8.680	524.2	8.970	502.2	9.360		
502.2	8.000	524.2	8.400	502.2	8.680	502.2	9.060	524.2	9.670		

**Water Study: 41****True Value: 14.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	11.400	524.2	12.600	524.2	13.500	524.2	13.900	524.2	14.300	524.2	15.800
524.2	11.600	502.2	12.600	502.2	13.600	524.2	14.000	502.2	14.600	524.2	15.800
502.2	11.800	502.2	12.700	524.2	13.600	502.2	14.000	524.2	14.700	502.2	15.900
502.2	12.200	524.2	12.900	524.2	13.800	524.2	14.100	524.2	14.720	524.2	16.700
524.2	12.400	524.2	13.100	524.2	13.800	524.2	14.200	524.2	14.800	502.2	16.800
524.2	12.500	524.2	13.400	524.2	13.800	524.2	14.300	502.2	15.500		
524.2	12.500	524.2	13.400	524.2	13.800	other	14.300	502.2	15.500		

**Chlordane****Water Study: 24a****True Value: 1.32 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.102	505	0.954	other	1.100	505	1.180	505	1.332	505	1.440
other	0.234	other	1.000	other	1.120	other	1.200	505	1.370	505	1.470
505	0.410	505	1.000	505	1.120	other	1.210	505	1.380	other	1.500
505	0.736	other	1.040	505	1.130	505	1.230	505	1.380	505	1.950
other	0.860	other	1.040	505	1.150	505	1.280	other	1.400	505	554.000
505	0.881	other	1.070	other	1.160	505	1.280	other	1.400		
505	0.936	other	1.094	other	1.170	other	1.320	505	1.408		

**Water Study: 24b****True Value: 4.86 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.378	505	3.490	other	4.190	other	4.470	other	4.800	other	5.270
other	0.854	other	3.780	other	4.280	other	4.500	505	4.800	505	5.450
505	0.978	505	3.790	505	4.297	other	4.597	505	4.830	505	5.530
505	2.280	other	3.930	505	4.311	505	4.610	505	4.850	505	7.920
505	3.140	other	4.120	other	4.319	505	4.640	other	4.870	505	3680.000
other	3.170	505	4.120	505	4.330	505	4.780	other	5.000		
505	3.280	505	4.130	other	4.420	other	4.790	505	5.004		

**Water Study: 25a****True Value: 3.30 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	1.310	other	2.660	other	2.780	508	2.910	508	3.221	508	3.370
508	2.300	508	2.700	508	2.810	505	3.020	other	3.290	505	4.010
505	2.350	508	2.760	505	2.820	508	3.060	505	3.340		
508	2.530	other	2.770	508	2.840	other	3.080	508	3.360		

**Water Study: 25b****True Value: 12.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	7.320	505	9.600	other	10.530	508	11.730	508	12.400	505	14.200
508	8.300	508	9.770	508	11.000	508	12.100	508	12.500	505	14.900
other	9.140	other	10.300	508	11.400	508	12.100	other	12.900		
508	9.450	other	10.400	508	11.700	508	12.200	505	13.290		

**Water Study: 26b****True Value: 9.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	2.780	other	7.690	508	8.610	508	9.030	508	9.720	505	11.100
505	7.251	505	8.010	other	8.617	505	9.079	508	9.760	508	12.000
other	7.400	other	8.030	other	8.660	505	9.270	508	9.830	505	12.100
505	7.520	other	8.070	508	8.700	508	9.530	508	9.830	508	12.500
other	7.540	505	8.163	505	8.740	other	9.540	505	9.850		
505	7.540	508	8.550	505	8.780	508	9.550	other	9.870		
505	7.670	525.1	8.552	508	8.840	505	9.610	505	10.300		

**Water Study: 26a****True Value: 2.70 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	1.870	other	2.280	other	2.575	508	2.690	505	3.000	505	3.615
505	2.060	505	2.360	other	2.580	505	2.710	other	3.020	508	3.740
other	2.110	508	2.380	other	2.580	508	2.710	505	3.020	508	3.960
505	2.179	508	2.400	508	2.630	508	2.720	505	3.130	508	32.600
525.1	2.200	505	2.420	505	2.670	505	2.760	other	3.200		
other	2.240	508	2.430	508	2.670	508	2.840	505	3.200		
other	2.270	508	2.460	505	2.680	505	2.877	505	3.450		

**Water Study: 27****True Value: 1.84 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	1.220	508	1.500	505	1.760	508	1.899	other	1.980	other	2.420
other	1.360	other	1.595	508	1.840	508	1.910	508	2.010	508	2.600
508	1.370	508	1.600	508	1.850	other	1.931	508	2.020	508	2.800
508	1.410	other	1.610	508	1.860	508	1.960	508	2.080		
508	1.470	505	1.620	505	1.860	other	1.970	505	2.260		

**Water Study: 29****True Value: 0.833 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.646	508	0.727	508	0.782	other	0.830	508	1.060		
508	0.677	505	0.748	508	0.785	505	0.830	other	1.120		
508	0.688	508	0.760	508	0.802	508	0.841	505	1.830		
508	0.696	other	0.763	508	0.806	508	0.894	508	4.710		
505	0.720	other	0.767	other	0.810	other	0.939	other	5.739		

**Water Study: 30****True Value: 4.20 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	1.340	505	3.280	508	3.790	508	3.990	other	4.290	other	5.080
505	1.700	508	3.341	505	3.810	508	4.000	other	4.300	505	5.150
other	1.865	508	3.350	508	3.870	other	4.000	508	4.340	505	5.930
508	2.310	508	3.420	508	3.870	505	4.080	508	4.380	508	5.970
508	3.060	other	3.640	505	3.880	508	4.200	other	4.490		
508	3.100	508	3.690	508	3.880	other	4.230	505	4.490		
508	3.180	505	3.700	508	3.920	other	4.240	508	4.550		
508	3.230	508	3.710	508	3.980	508	4.280	other	4.911		
505	3.260	other	3.730	other	3.990	508	4.290	508	4.930		

**Water Study: 31****True Value: 5.16 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.787	508	3.160	508	4.040	508	4.539	505	4.890	508	5.240
505	2.340	508	3.480	508	4.100	508	4.570	508	5.000	508	5.280
508	2.360	505	3.610	505	4.370	508	4.600	505	5.050	other	5.650
508	2.400	508	3.780	508	4.464	508	4.730	other	5.130	508	5.800
508	2.660	508	3.810	508	4.500	508	4.850	508	5.240	other	6.360

**Water Study: 32****True Value: 5.33 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	1.010	508	4.060	other	4.560	508	4.9560	other	5.310	505	5.930
525.1	1.060	508	4.109	508	4.600	508	4.980	508	5.360	505	6.090
525.1	1.348	505	4.136	508	4.610	508	5.020	508	5.400	508	6.320
525.1	1.740	508	4.190	508	4.690	508	5.100	505	5.450	505	6.490
508	2.190	other	4.250	508	4.780	505	5.100	505	5.500	505	7.800
508	2.580	508	4.290	508	4.840	505	5.160	other	5.570	505	8.010
525.1	2.920	508	4.310	508	4.850	508	5.180	505	5.620		
505	3.790	508	4.370	508	4.860	508	5.220	505	5.630		
508	3.800	508	4.500	505	4.890	508	5.230	508	5.640		
508	3.870	508	4.520	508	4.940	508	5.300	508	5.680		

**Water Study: 33****True Value: 2.76 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	0.680	508	2.350	508	2.500	508	2.630	505	2.900	505	3.660
508	1.720	508	2.360	508	2.540	508	2.640	508	2.940	other	3.750
505	2.130	525.1	2.370	508	2.600	other	2.690	508	2.950	525.1	3.900
508	2.180	508	2.370	508	2.610	508	2.730	508	3.000	508	4.550
525.1	2.270	508	2.400	505	2.620	508	2.730	508	3.200	508	4.630
508	2.290	505	2.400	508	2.620	508	2.872	508	3.460	505	6.180

**Water Study: 34****True Value: 7.26 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.740	508	5.595	508	6.270	508	6.840	505	7.349	508	8.040
525.1	1.250	508	5.630	508	6.580	505	6.850	other	7.350	508	8.070
525.1	3.460	505	5.760	508	6.580	508	6.860	505	7.380	508	8.410
508	4.390	508	5.790	505	6.680	508	6.910	508	7.390	505	8.410
508	4.640	other	6.000	525.1	6.690	508	6.920	505	7.470	505	10.400
508	4.990	508	6.010	508	6.740	505	6.930	525.1	7.520	508	10.670
508	5.080	508	6.090	505	6.800	other	6.970	508	7.590	508	13.100
508	5.210	505	6.130	508	6.810	508	7.060	505	7.700		
508	5.220	508	6.190	508	6.820	508	7.110	505	7.979		

**Water Study: 35****True Value: 13.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	2.930	508	11.000	508	11.800	505	13.400	508	14.400	505	17.630
525.1	9.000	505	11.100	505	12.200	505	13.430	508	14.600	508	17.700
508	9.590	508	11.600	508	12.300	508	13.500	508	14.700	other	20.200
508	9.595	508	11.620	508	12.400	508	13.700	508	14.900		
505	10.100	508	11.700	505	12.600	508	13.700	508	15.700		
508	10.800	508	11.800	505	13.400	508	13.900	508	17.530		

**Water Study: 36****True Value: 16.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	5.300	508	13.200	508	15.300	505	16.100	505	16.600	508	18.800
other	7.000	508	13.200	508	15.400	505	16.100	508	16.600	508	18.900
508	10.000	508.1	13.300	525.2	15.400	508.1	16.200	508	16.600	508	19.000
508	11.500	508	13.500	505	15.500	508	16.300	508	16.700	other	21.440
508	12.200	508	14.000	508	15.600	505	16.400	508.1	16.800	505	22.400
505	12.400	508.1	14.000	508	15.700	other	16.410	505	17.300	508	24.200
508.1	12.400	508	14.000	508	15.900	505	16.480	505	17.600	525.2	24.500
508	12.900	508	14.000	505	16.000	505	16.500	505	17.900		
508	13.100	508	14.500	508	16.000	508	16.500	505	17.920		

**Water Study: 37****True Value: 4.44 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.679	505	3.800	508	4.170	508	4.370	505	4.650	525.2	5.390
505	1.159	508	3.800	508	4.170	505	4.450	505	4.800	505	5.640
other	1.260	508	3.840	508	4.200	505	4.450	505	4.910	508	5.920
508	3.270	508	3.900	508	4.300	other	4.470	508	4.930	505	5.970
508	3.420	505	3.950	508	4.300	525.2	4.520	505	4.940	525.2	6.200
508	3.650	508	3.990	508	4.350	508.1	4.570	508	4.970	508	6.420
508	3.670	508.1	4.010	508	4.350	508	4.590	508.1	5.100		
other	3.780	508	4.160	508	4.360	505	4.630	508	5.260		

**Water Study: 38****True Value: 8.20 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	2.960	508	6.150	525.2	7.220	508	7.900	508	8.250	508.1	9.150
508	4.800	508.1	6.400	508	7.240	508	7.950	508	8.280	525.2	9.150
508	4.830	508	6.420	508	7.290	508	7.960	505	8.360	505	9.200
other	5.330	508	6.530	508	7.490	508	7.990	508	8.430	508	9.610
508	5.660	508	6.720	505	7.490	525.2	8.040	505	8.470	505	10.100
508.1	5.680	508	6.760	525.2	7.500	505	8.060	other	8.710	505	10.290
508	5.890	508	6.870	508	7.650	508.1	8.100	505	8.720		
508	6.118	508	7.080	505	7.720	505	8.110	508	8.730		
508	6.130	508.1	7.180	508	7.800	508	8.210	other	8.940		

**Water Study: 39****True Value: 3.57 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.000	508	3.020	508	3.430	508	3.780	505	3.980	525.2	4.360
other	0.603	508	3.200	505	3.500	505	3.820	508	3.980	508	4.510
508.1	2.790	508	3.250	505	3.520	525.2	3.880	508	3.980	505	4.560
508.1	2.820	508.1	3.255	505	3.530	508	3.940	525.2	4.040	525.2	4.620
508	2.840	508	3.270	505	3.540	508	3.950	508	4.078	other	5.030
508.1	2.910	508	3.430	508	3.600	508	3.950	505	4.080	508	5.030
508	2.930	525.2	3.430	508	3.680	505	3.970	508.1	4.090		

**Water Study: 40****True Value: 11.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	5.280	508	9.980	508	10.700	508	11.700	508	12.800	508	14.400
508	6.930	508	10.000	508	10.800	508	11.700	505	13.000	other	14.600
508	6.960	508	10.200	508.1	10.870	505	11.800	505	13.200	505	15.270
508	7.580	508	10.300	508	10.900	505	11.900	505	13.400	508	16.300
508	8.000	508.1	10.400	525.2	11.000	508	12.100	505	13.400	other	17.500
508.1	8.130	525.2	10.500	other	11.200	525.2	12.200	508.1	13.400	508.1	21.000
508	8.290	508	10.600	508	11.200	508	12.300	508	13.700		
508.1	8.560	508	10.600	505	11.300	525.2	12.500	508	13.700		
505	9.210	508	10.600	other	11.330	508	12.700	525.2	13.900		
508	9.410	508	10.600	505	11.500	508	12.700	525.2	14.200		

**Water Study: 41****True Value: 2.90 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508.1	1.140	508	2.400	508.1	2.540	508	2.740	505	2.960	505	3.330
508.1	1.740	508	2.420	508	2.540	508	2.770	other	2.990	other	3.410
508	1.780	505	2.420	508.1	2.550	525.2	2.830	508.1	2.990	505	3.420
508	2.110	508	2.430	508	2.560	525.2	2.850	505	3.040	505	3.560
508	2.140	508	2.470	508	2.630	525.2	2.870	505	3.040	505	4.180
508.1	2.160	525.2	2.470	508	2.710	505	2.910	508	3.083	508	4.740
508	2.220	525.2	2.500	508	2.720	508	2.930	525.2	3.220		

**Chromium****Water Study: 24a****True Value: 127 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7A	12.800	218.2	117.000	218.2	125.000	218.2	128.000	200.7A	132.000	218.1	137.800
218.1	26.600	218.2	117.700	218.2	125.000	200.7A	128.000	218.2	132.000	218.2	138.000
218.2	86.000	other	119.000	218.2	125.000	218.2	129.000	218.2	132.000	218.1	140.000
218.2	90.800	218.2	119.300	218.2	126.000	200.7A	129.000	218.2	132.500	218.1	140.000
218.2	93.000	218.2	120.000	other	126.500	200.7A	129.000	218.2	132.900	218.2	146.000
218.2	111.000	200.7A	122.000	200.7A	127.000	218.1	130.000	218.1	133.000	other	153.000
218.2	113.000	218.1	122.000	200.7A	127.000	218.2	130.000	218.2	133.000	218.1	164.000
218.2	113.000	218.1	123.000	200.7A	127.000	other	130.000	218.2	133.700		
200.7A	114.000	200.7A	123.000	218.2	128.000	218.2	130.000	218.2	133.900		
218.2	115.000	218.2	124.000	218.1	128.000	200.7A	130.200	218.2	134.000		
218.1	117.000	200.7A	125.000	200.7A	128.000	other	131.000	218.2	137.000		



**Water Study: 24b****True Value: 25.5ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
218.2	18.500	218.2	23.700	218.2	24.800	218.2	25.700	218.1	26.100	218.2	28.000
218.2	19.000	218.2	23.800	218.2	24.800	200.7A	25.800	218.2	26.200	218.2	28.000
218.2	20.000	200.7A	24.000	200.7A	24.900	200.7A	25.800	218.1	26.400	218.2	28.800
218.1	21.000	218.1	24.000	218.2	25.000	218.1	25.900	218.2	26.400	other	29.000
200.7A	21.800	200.7A	24.100	200.7A	25.100	other	26.000	218.1	26.400	218.1	29.000
218.2	22.500	218.1	24.100	other	25.200	200.7A	26.000	218.2	26.600	218.1	32.000
other	22.900	200.7A	24.300	218.2	25.200	218.2	26.000	218.2	26.800	218.1	126.000
218.2	23.000	218.2	24.500	other	25.300	200.7A	26.000	218.2	26.800		
218.2	23.200	200.7A	24.600	200.7A	25.400	218.2	26.000	218.2	27.200		
218.2	23.500	200.7A	24.600	218.2	25.500	218.2	26.060	218.2	27.300		
218.1	23.700	218.2	24.700	218.2	25.700	200.7A	26.100	218.2	27.500		

**Water Study: 25a****True Value: 15.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
218.1	1.700	218.2	14.000	200.7A	14.600	200.7A	15.000	218.2	15.400	other	16.000
218.2	3.070	218.1	14.000	200.7A	14.800	218.1	15.200	218.2	15.500	218.2	16.070
218.1	11.000	218.2	14.000	200.7A	14.800	218.2	15.200	218.2	15.500	218.2	16.200
218.2	13.000	218.2	14.200	218.2	14.800	218.2	15.200	218.2	15.700	218.2	16.300
218.2	13.000	218.2	14.380	218.2	15.000	218.2	15.400	218.2	15.900	200.7A	16.400
218.2	13.700	218.1	14.500	200.7A	15.000	200.7A	15.400	218.2	15.910	200.7A	16.400
218.2	14.000	218.2	14.500	other	15.000	218.1	15.400	218.2	16.000		

**Water Study: 25b****True Value: 60 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
218.1	7.300	218.2	56.500	218.2	58.800	218.1	60.700	218.2	62.000	218.2	64.400
218.2	11.000	218.1	57.000	200.7A	58.900	218.2	60.900	200.7A	62.000	218.2	65.000
218.2	52.000	218.1	57.100	218.2	59.500	218.2	61.000	218.2	62.100	218.2	65.300
218.2	52.500	218.1	57.200	218.2	59.600	218.2	61.000	200.7A	62.500	218.2	65.900
200.7A	54.800	218.2	57.200	218.2	59.700	218.2	61.000	218.2	63.200	200.7A	66.200
218.2	55.000	218.1	58.000	200.7A	60.000	other	61.200	200.7A	63.300	218.2	66.300
200.7A	55.500	218.2	58.210	218.1	60.000	218.2	61.200	218.2	63.900	other	68.000

**Water Study: 26b****True Value: 94.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.094	200.7A	90.800	218.1	92.500	218.2	94.500	218.1	96.000	200.7A	101.000
218.2	77.500	200.7A	91.000	218.2	92.900	218.1	94.600	200.7A	96.100	218.2	102.000
200.7A	82.100	218.2	91.190	218.1	93.000	218.2	94.700	other	96.100	218.1	102.000
218.2	82.900	218.1	91.400	218.2	93.000	200.7A	94.800	200.7A	96.200	218.2	103.000
218.2	83.800	218.2	91.700	218.2	93.100	200.7A	94.800	218.1	96.600	200.7A	104.000
200.7A	84.000	other	91.900	other	93.300	218.2	94.900	200.7A	97.000	218.2	105.000
218.2	84.900	200.7A	92.000	218.2	93.480	218.2	95.000	218.2	97.200	200.7A	107.000
218.2	84.900	200.7A	92.400	200.7A	93.500	218.2	95.800	218.2	97.500	218.1	113.600
218.2	87.000	218.1	92.400	218.2	93.800	200.7A	95.880	218.1	98.000	218.1	114.000
218.2	87.500	218.2	92.500	218.2	93.800	other	96.000	200.7A	98.600		
200.7A	90.000	200.7A	92.500	218.2	93.800	other	96.000	218.2	100.000		

**Water Study: 26a****True Value: 50.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.054	200.7A	48.000	200.7A	49.300	other	50.300	200.7A	51.000	218.1	53.000
218.2	39.100	other	48.100	200.7A	49.300	218.2	50.300	200.7A	51.160	218.1	53.400
200.7A	43.200	other	48.300	200.7A	49.500	218.2	50.400	218.2	51.300	218.1	54.000
200.7A	44.000	218.2	48.600	200.7A	49.600	218.2	50.400	200.7A	51.400	218.2	54.000
218.2	45.000	218.1	48.900	218.1	49.700	218.2	50.400	218.2	51.500	218.1	54.300
218.2	45.550	218.2	49.000	218.2	49.900	218.2	50.500	200.7A	51.700	200.7A	54.800
218.2	45.780	218.2	49.000	200.7A	50.000	218.2	50.800	other	52.000	218.1	55.000
218.2	46.000	218.2	49.000	200.7A	50.000	200.7A	51.000	218.2	52.000	218.1	55.200
218.2	46.000	200.7A	49.000	218.1	50.000	218.1	51.000	218.2	52.100	218.1	60.000
218.2	46.100	218.2	49.200	218.2	50.200	other	51.000	200.7A	52.200		
200.7A	47.200	218.2	49.300	218.2	50.300	200.7A	51.000	218.2	52.800		

**Water Study: 27****True Value: 75.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
218.2	19.100	218.2	72.000	200.7A	73.400	200.7A	74.700	other	75.800	218.2	80.200
218.2	56.500	218.1	72.300	other	73.900	200.7A	74.700	218.2	76.000	218.2	81.000
200.7A	65.400	218.2	72.400	200.7A	74.000	200.7A	74.900	200.7A	76.600	218.2	81.900
200.7A	65.900	218.2	72.600	200.7A	74.000	218.2	75.300	218.2	77.200	218.1	82.000
218.2	70.000	200.7A	72.600	218.2	74.000	218.2	75.400	218.1	78.000	218.2	83.300
218.2	70.600	200.7A	73.000	200.7A	74.200	200.7A	75.800	other	79.000		

**Water Study: 29****True Value: 110 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
218.1	73.000	218.2	102.500	other	107.000	200.7A	110.000	218.2	112.000	other	118.000
218.2	76.000	200.7A	104.000	218.2	108.000	200.7A	110.000	200.7A	113.000	218.2	125.000
218.2	81.100	218.1	104.000	200.7A	108.000	218.2	110.000	other	113.000	218.2	125.000
other	92.000	200.7A	105.000	other	108.000	200.7A	111.000	218.2	113.000		
200.7A	101.000	218.2	106.000	200.7A	108.000	200.7A	111.000	218.1	115.000		
200.7A	102.000	218.2	106.000	218.2	108.500	200.7A	112.000	218.2	115.000		

**Water Study: 30****True Value: 200 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
218.2	40.000	218.2	189.000	218.2	197.000	218.2	199.000	218.2	202.000	other	207.000
218.1	116.000	218.2	190.000	218.1	197.800	218.2	200.000	218.2	202.100	200.7A	209.000
218.2	175.000	200.7A	192.000	200.7A	198.000	200.7A	200.000	200.7A	204.000	218.1	212.000
other	175.000	200.7A	192.000	218.2	198.000	200.7A	200.000	218.2	205.000	218.2	213.000
218.2	178.000	200.7A	192.800	200.7A	198.000	218.1	200.000	218.2	205.000	200.7A	214.000
200.7A	181.000	218.1	195.000	200.7A	198.000	200.7A	200.000	218.2	205.000	200.7A	218.000
218.1	185.000	other	195.000	200.7A	198.000	200.7A	200.000	218.2	205.500	218.1	220.000
218.2	185.000	218.2	195.000	other	198.000	218.2	200.000	218.2	206.000	218.2	227.500
218.2	188.000	218.1	195.000	218.2	199.000	200.7A	201.000	218.1	206.000	200.7A	230.000
200.7A	188.500	218.2	195.000	200.7A	199.000	200.7A	201.000	other	206.000	218.1	285.000
218.2	189.000	218.2	197.000	other	199.000	200.7A	201.000	218.2	207.000	218.2	294.000

**Water Study: 31****True Value: 81.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
218.2	68.000	other	77.000	218.1	79.000	200.7A	80.900	218.2	83.000	other	92.700
218.1	73.000	other	77.100	218.2	79.000	218.2	81.000	other	83.200	200.7A	113.000
218.2	73.200	200.7A	77.300	200.7A	79.800	200.7A	81.000	218.2	83.700	218.2	122.300
200.7A	73.300	218.2	78.000	218.2	79.800	218.2	81.500	218.2	84.000		
200.7A	74.000	218.2	78.000	218.1	80.000	218.2	81.900	other	86.500		
200.7A	75.000	218.2	78.000	other	80.000	218.2	82.000	218.2	86.600		
other	77.000	200.7A	78.600	218.2	80.900	200.7A	82.800	200.7A	86.800		

**Water Study: 32****True Value: 68.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7	59.400	200.7	64.900	218.2	66.800	200.7	68.8000	218.2	70.000	218.2	74.000
218.2	59.800	200.7	65.000	200.7	67.000	200.7	68.800	218.2	70.200	200.7	76.900
200.7	60.000	other	65.000	218.2	67.300	218.2	68.900	200.7	70.600	218.2	77.900
218.2	61.000	200.7	65.100	218.2	67.300	218.2	68.900	218.2	71.100	218.2	78.200
218.2	61.500	200.7	65.700	218.2	67.600	218.2	69.000	218.2	71.150	200.7	80.900
218.2	61.500	200.7	66.000	200.7	67.600	200.7	69.000	other	71.300	218.2	86.500
218.1	61.600	200.7	66.000	200.7	67.900	218.2	69.000	218.2	71.700	218.2	99.780
218.2	61.600	200.7	66.000	200.7	68.000	200.7	69.000	218.2	72.100		
218.2	62.800	200.7	66.100	200.7	68.000	218.2	69.200	218.2	72.500		
218.2	63.600	200.7	66.100	218.2	68.100	200.7	69.200	200.7	72.500		
218.1	64.000	218.2	66.600	200.7	68.360	200.7	69.300	218.2	72.700		
200.7	64.000	218.2	66.600	218.2	68.500	218.1	69.500	218.2	73.500		

**Water Study: 33****True Value: 159 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7	120.000	200.7	154.000	200.7	157.000	200.7	159.000	218.2	166.000	200.7	176.000
218.1	125.000	200.7	154.000	200.7	157.000	other	160.000	218.2	167.800	218.2	176.600
other	144.000	200.7	156.000	200.7	157.000	200.7	160.000	200.7	171.000	218.2	177.000
218.2	144.900	200.7	156.000	200.7	158.000	218.2	160.000	218.2	172.000	218.2	181.000
other	150.000	200.7	156.000	200.7	159.000	218.2	160.000	218.2	172.000	218.2	187.500
other	152.000	200.7	157.000	200.7	159.000	218.2	163.000	218.2	175.000		

**Water Study: 34****True Value: 11.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
218.2	9.000	200.7	11.000	other	11.530	218.2	11.800	218.2	12.300	200.7	12.600
218.1	10.000	200.7	11.000	218.2	11.600	200.7	11.900	218.2	12.300	218.2	12.700
200.7	10.200	other	11.200	200.7	11.600	200.7	11.900	218.2	12.400	200.7	12.700
218.2	10.200	200.7	11.200	200.7	11.600	200.7	11.900	218.2	12.400	other	12.700
218.2	10.500	200.7	11.300	200.7	11.600	218.2	12.000	200.7	12.500	218.2	13.000
218.2	10.700	200.7	11.300	200.7	11.600	200.7	12.000	200.7	12.500	200.7	13.000
218.2	10.700	218.2	11.300	200.7	11.700	218.2	12.000	218.2	12.500	218.2	13.000
218.2	10.700	218.2	11.400	200.7	11.700	218.2	12.000	200.7	12.600	200.7	13.400
200.7	10.800	218.2	11.500	other	11.700	218.2	12.100	218.2	12.600	218.2	13.800
218.2	10.900	218.2	11.500	other	11.700	218.2	12.200	218.2	12.600	200.7	21.100
218.2	11.000	218.2	11.500	218.2	11.800	218.2	12.200	218.2	12.600		

**Water Study: 35****True Value: 119 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
218.1	99.000	200.7	113.000	200.7	117.000	200.7	118.000	218.2	124.000	200.7	139.000
other	106.000	200.7	114.400	other	117.000	200.7	120.000	218.2	125.000	218.2	140.000
200.7	108.000	200.7	115.000	200.7	117.000	200.7	120.000	200.7	125.000	other	147.000
other	108.800	other	115.000	218.2	117.400	other	120.000	200.7	126.000		
218.2	112.000	200.7	115.000	200.7	118.000	200.7	121.000	other	128.000		
218.2	112.000	218.2	115.000	200.7	118.000	218.2	121.000	200.7	129.000		
200.7	113.000	200.7	116.000	218.2	118.000	218.2	122.000	200.7	130.000		
218.2	113.000	218.2	116.000	other	118.000	218.2	122.500	218.2	130.700		

**Water Study: 36****True Value: 37.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	32.100	200.7	36.000	200.8	37.300	200.7	38.000	201	38.700	other	40.500
200.9	32.400	3113B	36.100	200.7	37.400	other	38.000	200.9	38.800	200.7	40.700
200.7	34.400	200.7	36.100	3113B	37.500	200.8	38.100	200.7	38.800	200.7	40.800
200.9	34.600	other	36.100	200.7	37.500	other	38.100	200.7	39.100	200.9	41.000
200.8	34.900	200.7	36.200	200.9	37.500	200.7	38.300	200.8	39.100	200.7	41.000
200.7	35.000	other	36.300	200.7	37.500	other	38.300	200.7	39.300	3113B	41.300
200.7	35.000	200.7	36.600	200.7	37.700	200.7	38.400	200.9	39.700	3113B	41.400
200.7	35.200	200.7	37.100	other	37.700	3113B	38.500	3113B	40.000	3113B	42.700
200.8	35.600	200.7	37.100	200.8	37.800	3113B	38.600	200.8	40.000	3113B	48.000
3113B	35.800	200.8	37.100	3113B	38.000	3113B	38.600	200.9	40.000	200.8	337.900
3113B	35.900	200.7	37.300	other	38.000	200.7	38.600	3113B	40.300		

**Water Study: 37****True Value: 72.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	59.300	200.9	68.500	200.9	70.890	200.8	72.000	200.7	73.000	200.7	75.500
other	60.000	200.7	68.600	200.8	71.000	200.8	72.000	200.9	73.000	200.7	75.800
200.7	64.200	3113B	68.800	200.9	71.200	200.7	72.200	200.8	73.100	3113B	77.000
200.7	64.900	200.7	70.000	200.7	71.300	200.7	72.400	200.9	73.300	3113B	77.200
200.7	66.600	200.7	70.100	200.7	71.500	200.7	72.400	200.7	73.700	200.7	80.300
200.7	67.000	3113B	70.100	200.7	71.600	200.7	72.500	200.7	73.800	3113B	84.600
other	67.900	200.7	70.400	200.7	71.800	200.8	72.600	200.7	73.900		
200.7	68.400	3113B	70.700	200.9	72.000	200.7	72.900	3113B	75.000		
200.9	68.500	200.8	70.700	200.9	72.000	200.9	73.000	200.8	75.100		



**Water Study: 41****True Value: 55.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	47.800	200.8	51.900	200.7	53.300	200.7	54.700	200.9	55.900	3113B	57.300
200.8	49.400	200.9	52.000	200.7	53.500	200.7	54.800	200.8	56.000	200.8	57.700
200.7	50.900	200.7	52.600	200.9	54.000	200.9	55.000	200.8	56.400	200.8	58.000
other	51.000	200.9	52.800	200.7	54.000	200.7	55.100	200.8	56.500	200.7	58.270
200.8	51.100	200.7	52.900	200.8	54.300	200.7	55.400	200.7	57.000	3113B	58.600
200.8	51.300	200.7	53.000	200.7	54.400	200.7	55.500	200.9	57.000	3113B	59.800
200.7	51.700	3113B	53.100	200.7	54.500	200.9	55.700	200.8	57.100	3113B	63.000
200.7	51.900	200.7	53.300	200.8	54.600	200.7	55.900	200.9	57.300		

**1,2-Dibromo-3-chloropropane (DBCP)****Water Study: 26****True Value: 1.13 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.661	other	0.910	other	1.000	other	1.050	504	1.120	504	1.260
504	0.808	504	0.920	504	1.000	504	1.070	504	1.120	504	1.420
other	0.830	504	0.932	504	1.003	504	1.080	other	1.140	other	3.970
other	0.860	504	0.950	504	1.017	504	1.080	504	1.140	504	5.478
504	0.874	504	0.980	504	1.030	504	1.100	504	1.150	other	7.820
504	0.904	504	0.998	504	1.046	other	1.100	504	1.160		

**Water Study: 27****True Value: 0.653 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.473	504	0.560	504	0.580	other	0.624	other	0.674	504	0.847
504	0.479	504	0.564	504	0.584	504	0.650	504	0.677	504	1.110
other	0.537	504	0.568	504	0.600	504	0.660	504	0.702	504	3.490

**Water Study: 29****True Value: 1.91 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.952	504	1.480	504	1.640	504	1.680	other	1.710	504	1.810
504	1.400	504	1.560	504	1.640	504	1.680	504	1.740	504	2.020
504	1.407	504	1.620	504	1.660	551	1.690	504	1.750	504	2.810
504	1.480	other	1.635	504	1.670	504	1.700	other	1.760		

**Water Study: 30****True Value: 0.98 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.621	504	0.780	504	0.820	504	0.864	504	0.923	504	1.050
504	0.660	504	0.786	504	0.830	504	0.870	other	0.929	other	1.420
504	0.680	504	0.790	504	0.832	504	0.870	504	0.930	504	2.200
504	0.732	504	0.800	other	0.841	504	0.875	504	0.936	504	4.880
other	0.735	504	0.807	504	0.850	504	0.897	504	0.948		
504	0.736	504	0.810	504	0.858	504	0.908	504	0.954		
504	0.760	other	0.819	504	0.859	504	0.920	504	0.990		

**Water Study: 31****True Value: 2.65 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	1.710	504	2.110	504	2.200	504	2.300	504	2.375	504	2.429
504	1.760	other	2.110	504	2.250	504	2.320	504	2.400	504	2.970
504	1.890	other	2.130	504	2.260	504	2.361	504	2.410	504	12.000
504	2.020	504	2.160	504	2.290	504	2.370	504	2.420	504	17.200

**Water Study: 32****True Value: 1.78 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.560	504	1.380	504	1.490	504	1.600	504	1.700	504	1.920
other	1.090	504	1.400	504	1.500	504	1.630	504	1.700	504	1.940
504	1.200	504	1.400	504	1.500	504	1.630	504	1.730	504	1.970
504	1.270	504	1.412	504	1.500	504	1.640	504	1.750	504	2.460
other	1.290	504	1.421	504	1.570	504	1.650	504	1.760		
504	1.330	other	1.450	504	1.570	504	1.660	504	1.790		
504	1.360	504	1.470	504	1.580	504	1.670	504	1.790		
504	1.370	504	1.470	504	1.600	504	1.680	504	1.800		



**Water Study: 34****True Value: 0.363 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.067	504	0.281	other	0.312	other	0.333	504	0.354	504	0.420
504	0.078	504	0.284	504	0.313	504	0.333	504	0.360	504	0.455
504	0.130	504	0.284	504	0.317	504	0.336	504	0.373	504	0.463
504	0.239	504	0.289	504	0.318	504	0.336	504	0.377	504	1.530
504	0.251	504	0.304	504	0.320	other	0.340	504	0.385	other	1.900
504	0.269	504	0.305	504	0.323	504	0.341	504	0.388		
504	0.276	other	0.306	504	0.325	504	0.350	504	0.390		
504	0.280	504	0.307	504	0.327	504	0.352	504	0.390		

**Water Study: 35****True Value: 0.589 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.350	504	0.454	504	0.500	504	0.527	504	0.567		
504	0.394	504	0.465	504	0.504	504	0.530	other	0.592		
504	0.408	504	0.473	504	0.508	504	0.539	504	0.663		
other	0.438	504	0.476	504	0.510	504	0.540	other	2.907		
other	0.443	504	0.481	504	0.519	504	0.545	504	7.000		
504	0.446	504	0.500	other	0.524	504	0.557				

**Water Study: 36****True Value: 0.196 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.127	504.1	0.176	504.1	0.190	504.1	0.199	504.1	0.210	504.1	0.259
504.1	0.135	504.1	0.179	551	0.192	504.1	0.200	504.1	0.212	504.1	0.272
504.1	0.145	504.1	0.180	504.1	0.192	504.1	0.201	504.1	0.214	504.1	0.308
504.1	0.156	504.1	0.182	504.1	0.192	other	0.201	504.1	0.217	504.1	0.357
other	0.157	504.1	0.182	504.1	0.192	504.1	0.203	other	0.220	other	0.580
504.1	0.158	504.1	0.187	other	0.193	other	0.205	504.1	0.224		
504.1	0.170	504.1	0.188	504.1	0.193	504.1	0.206	504.1	0.227		
504.1	0.172	504.1	0.189	504.1	0.195	504.1	0.210	504.1	0.235		
504.1	0.175	504.1	0.190	504.1	0.196	504.1	0.210	other	0.242		

**Water Study: 37****True Value: 0.286 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504.1	0.112	504.1	0.256	504.1	0.273	504.1	0.283	other	0.302	504.1	0.364
504.1	0.229	504.1	0.259	504.1	0.275	504.1	0.284	504.1	0.303	504.1	0.365
other	0.231	504.1	0.260	504.1	0.275	504.1	0.286	504.1	0.309	504.1	0.377
504.1	0.240	504.1	0.263	other	0.275	504.1	0.289	504.1	0.316	504.1	0.410
504.1	0.245	504.1	0.265	504.1	0.279	504.1	0.295	other	0.316	504.1	0.468
504.1	0.248	other	0.268	504.1	0.281	504.1	0.295	551	0.354	504.1	0.843
504.1	0.250	504.1	0.270	other	0.281	504.1	0.299	504.1	0.354	504.1	1.410

**Water Study: 38****True Value: 0.429 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504.1	0.305	504.1	0.367	504.1	0.404	504.1	0.420	504.1	0.449	504.1	0.502
504.1	0.318	504.1	0.370	504.1	0.408	504.1	0.426	504.1	0.450	other	0.512
504.1	0.331	504.1	0.376	504.1	0.410	504.1	0.437	551	0.456	504.1	0.513
504.1	0.338	504.1	0.400	504.1	0.412	504.1	0.437	504.1	0.469	504.1	0.522
504.1	0.347	504.1	0.400	504.1	0.416	504.1	0.438	504.1	0.471	504.1	0.542
504.1	0.350	504.1	0.401	504.1	0.416	504.1	0.439	504.1	0.473	504.1	0.555
504.1	0.350	other	0.403	551	0.417	other	0.445	504.1	0.486	504.1	0.562
504.1	0.355	504.1	0.404	other	0.419	504.1	0.449	504.1	0.494	504.1	3.960

**Water Study: 39****True Value: 0.246 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.175	504.1	0.214	504.1	0.238	504.1	0.250	504.1	0.258	504.1	0.284
504.1	0.184	504.1	0.224	504.1	0.238	504.1	0.254	504.1	0.269	504.1	0.285
504.1	0.193	504.1	0.226	504.1	0.239	504.1	0.255	504.1	0.275	other	0.308
504.1	0.194	504.1	0.226	504.1	0.239	other	0.255	504.1	0.277	504.1	0.348
504.1	0.212	504.1	0.227	504.1	0.242	504.1	0.255	504.1	0.280	504.1	2.150
504.1	0.212	504.1	0.234	504.1	0.244	504.1	0.255	504.1	0.280	551	2.280

**Water Study: 40****True Value: 0.527 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504.1	0.262	504.1	0.457	504.1	0.491	504.1	0.508	504.1	0.530	504.1	0.545
504.1	0.381	504.1	0.457	504.1	0.494	other	0.511	504.1	0.534	other	0.581
other	0.430	504.1	0.472	504.1	0.495	504.1	0.516	504.1	0.535	504.1	0.643
504.1	0.431	504.1	0.474	504.1	0.496	504.1	0.518	other	0.537	504.1	0.645
504.1	0.445	504.1	0.474	504.1	0.496	504.1	0.519	504.1	0.537	504.1	0.650
504.1	0.446	504.1	0.475	504.1	0.501	504.1	0.521	504.1	0.538		
504.1	0.452	504.1	0.483	504.1	0.502	504.1	0.524	504.1	0.538		
504.1	0.453	504.1	0.486	504.1	0.502	504.1	0.529	504.1	0.543		
504.1	0.454	other	0.487	other	0.504	504.1	0.530	504.1	0.547		

**Water Study: 41****True Value: 0.451 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504.1	0.333	504.1	0.380	504.1	0.399	504.1	0.413	504.1	0.447	504.1	0.520
504.1	0.356	504.1	0.392	504.1	0.403	504.1	0.425	504.1	0.450	504.1	0.526
504.1	0.360	504.1	0.394	504.1	0.406	504.1	0.432	504.1	0.470	504.1	0.532
504.1	0.361	504.1	0.399	504.1	0.409	other	0.432	504.1	0.475	504.1	0.532
504.1	0.370	504.1	0.399	504.1	0.410	504.1	0.434	504.1	0.491		
504.1	0.377	504.1	0.399	504.1	0.412	504.1	0.446	other	0.516		

**1,4-Dichlororbenzene****Water Study: 24****True Value: 2.50 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	1.100	502.1	1.970	503.1	2.300	502.2	2.420	524.2	2.520	524.2	2.820
502.1	1.200	502.2	2.020	502.2	2.300	524.2	2.430	524.2	2.530	502.1	2.900
524.1	1.670	524.2	2.106	524.2	2.300	502.2	2.470	502.2	2.580	502.2	2.930
502.2	1.710	524.2	2.180	524.2	2.300	502.2	2.480	524.2	2.580	502.2	3.000
502.2	1.730	524.2	2.200	524.1	2.320	502.2	2.493	524.2	2.590	502.2	3.000
524.2	1.870	502.2	2.200	502.2	2.330	other	2.500	502.2	2.600	524.2	3.160
524.1	1.900	524.2	2.220	502.2	2.360	524.1	2.500	524.2	2.700	524.2	3.310
502.2	1.900	503.1	2.260	502.2	2.370	524.2	2.520	502.2	2.730		
502.2	1.940	524.1	2.280	524.2	2.390	524.2	2.520	524.2	2.759		
502.1	1.960	502.2	2.290	other	2.400	524.1	2.520	502.2	2.770		

**Water Study: 25****True Value: 20.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	13.840	524.2	18.720	502.2	20.000	524.2	20.900	502.1	21.900	other	26.800
524.2	15.600	502.2	19.000	502.2	20.000	524.2	20.900	other	22.400	524.2	28.000
502.2	15.600	502.1	19.300	other	20.070	524.2	21.300	502.2	23.400		
502.2	16.200	524.2	19.59	524.2	20.380	524.1	21.400	524.1	23.400		
502.2	17.000	524.1	19.600	502.2	20.400	502.2	21.400	502.2	24.000		
524.2	18.600	502.2	19.900	502.2	20.410	524.2	21.800	502.2	24.400		
524.1	18.700	524.1	20.000	524.2	20.600	524.2	21.800	502.2	24.600		

**Water Study: 26****True Value: 14.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.520	502.2	13.100	502.2	14.100	502.2	14.500	502.2	15.300	524.2	16.000
524.1	10.600	502.2	13.100	524.2	14.100	524.2	14.600	502.2	15.300	503.1	16.100
502.1	11.500	502.2	13.400	502.2	14.100	502.2	14.800	502.2	15.400	502.2	16.190
502.1	11.700	502.2	13.400	502.2	14.150	502.2	14.800	502.2	15.500	524.2	16.200
524.2	12.300	503.1	13.500	524.2	14.180	502.2	14.800	524.2	15.500	524.2	16.500
524.2	12.800	524.2	13.800	503.1	14.200	524.2	14.800	524.2	15.500	524.1	16.900
other	12.800	524.2	13.900	524.2	14.210	524.2	14.900	524.2	15.600	502.1	16.900
502.2	12.800	524.2	14.000	524.2	14.300	502.2	15.100	524.2	15.700	524.1	17.500
524.2	12.810	524.2	14.000	524.2	14.400	502.2	15.100	524.2	15.700	502.2	17.500
502.2	13.000	524.1	14.100	other	14.400	524.2	15.100	502.2	15.900	524.1	22.100

**Water Study: 27****True Value: 9.58 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	7.570	524.2	8.810	524.2	9.280	524.2	9.750	524.2	10.200	502.2	11.000
502.2	7.650	502.2	8.840	502.2	9.320	524.2	9.780	502.2	10.300	524.2	12.030
502.2	7.850	524.2	8.930	502.2	9.340	524.2	9.800	524.2	10.300	524.2	12.820
524.2	8.290	other	9.000	502.2	9.530	524.1	9.820	502.2	10.500		
502.2	8.320	other	9.060	other	9.550	502.2	9.900	524.1	10.600		
502.2	8.600	502.2	9.090	502.2	9.630	524.2	9.950	524.1	10.700		
524.2	8.800	502.2	9.210	502.2	9.720	524.2	10.100	502.2	10.900		

**Water Study: 29****True Value: 6.60 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.420	524.2	5.700	502.2	6.177	524.2	6.800	502.2	7.360	524.1	7.910
524.2	4.660	other	5.950	other	6.240	502.2	6.810	502.2	7.480	524.2	8.300
524.2	5.000	524.1	6.040	524.2	6.420	502.2	6.980	524.2	7.600	502.2	8.960
502.2	5.150	524.2	6.040	502.2	6.498	other	7.013	524.2	7.700	524.2	10.600
502.2	5.170	502.2	6.070	524.2	6.620	524.2	7.030	502.2	7.730		
502.2	5.680	other	6.120	502.2	6.620	502.2	7.180	524.2	7.800		

**Water Study: 30****True Value: 16.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.1	10.800	502.1	14.210	502.2	15.300	502.2	16.000	502.2	16.510	524.2	17.100
524.2	11.400	502.2	14.400	524.1	15.500	524.2	16.000	502.2	16.600	524.2	17.200
524.2	11.500	524.2	14.400	524.2	15.500	502.2	16.000	524.1	16.700	502.2	17.500
524.2	12.200	524.2	14.420	524.2	15.500	524.2	16.100	502.2	16.700	524.2	18.100
502.2	12.500	524.2	14.700	524.2	15.500	502.2	16.110	524.2	16.800	502.2	18.300
502.2	12.700	524.2	14.760	524.2	15.700	502.2	16.200	524.2	16.800	524.2	19.400
524.2	13.740	524.2	14.980	524.2	15.700	other	16.200	503.1	16.820	502.2	20.100
524.2	13.900	524.2	15.100	502.2	15.800	524.1	16.300	524.2	16.900	502.2	22.500
502.2	14.000	524.2	15.100	502.2	15.800	502.2	16.300	502.2	16.900		
502.2	14.100	502.2	15.300	other	15.980	502.2	16.500	502.2	17.000		

**Water Study: 31****True Value: 9.40 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	6.610	524.2	8.000	524.2	8.680	524.2	9.200	524.2	9.770	524.2	10.100
503.1	7.630	524.2	8.080	502.1	8.890	502.2	9.270	524.2	9.830	524.2	10.200
502.2	7.840	524.1	8.200	502.2	8.990	502.2	9.300	502.2	9.940	524.2	10.220
502.2	7.850	502.2	8.260	524.2	8.990	524.2	9.590	502.1	9.940	502.2	11.000
502.2	7.880	502.2	8.356	502.2	9.090	503.1	9.600	502.2	10.000	502.2	11.700
502.2	7.900	524.1	8.390	502.2	9.180	524.2	9.620	524.2	10.000	other	14.900

**Water Study: 32****True Value: 13.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	7.150	502.2	12.200	524.2	12.760	other	13.4000	502.2	13.800	502.2	15.200
502.1	10.600	502.2	12.300	524.2	12.800	524.2	13.400	524.2	13.800	502.2	15.400
502.2	10.800	524.2	12.340	502.2	12.800	524.2	13.500	524.2	13.900	502.2	15.500
502.2	11.100	524.2	12.400	503.1	12.900	other	13.500	502.2	14.000	524.2	15.800
502.2	11.700	524.2	12.600	524.2	12.900	502.2	13.500	524.2	14.000	524.2	15.900
524.2	11.800	524.2	12.700	524.2	12.900	502.2	13.600	524.2	14.140	502.2	19.200
524.2	11.800	524.2	12.700	524.2	13.000	502.2	13.600	524.2	14.400		
524.2	12.000	502.2	12.700	502.2	13.100	502.2	13.600	524.2	14.400		
524.1	12.000	502.1	12.700	502.2	13.200	524.2	13.630	502.2	14.500		
502.2	12.100	502.1	12.700	524.2	13.270	524.2	13.700	524.2	14.900		
502.2	12.200	524.2	12.700	524.2	13.360	502.2	13.700	524.2	15.000		

**Water Study: 33****True Value: 15.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.980	524.2	12.810	524.2	13.800	524.2	14.800	524.2	15.200	524.2	17.000
other	10.730	502.2	13.000	502.2	14.000	502.2	14.900	502.2	15.500	524.2	17.400
524.2	11.500	524.2	13.300	524.2	14.200	524.2	14.990	502.1	16.000	524.2	19.000
502.2	11.800	502.2	13.400	524.2	14.400	502.2	15.000	502.2	16.100		
502.2	12.190	524.2	13.600	502.2	14.420	502.2	15.000	502.1	16.200		
524.1	12.500	502.2	13.600	502.2	14.500	502.2	15.200	502.2	16.800		

**Water Study: 34****True Value: 5.78 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	3.750	502.2	4.888	502.2	5.250	502.2	5.490	502.2	5.800	524.2	6.110
524.2	3.760	502.2	4.970	524.2	5.260	502.2	5.490	502.2	5.820	524.2	6.130
524.2	4.300	524.2	5.040	524.2	5.260	524.2	5.510	502.2	5.840	524.2	6.130
524.2	4.530	524.2	5.060	502.2	5.290	502.2	5.530	524.2	5.860	502.2	6.160
502.2	4.580	502.2	5.060	524.2	5.300	524.2	5.580	524.2	5.900	502.2	6.160
502.2	4.710	524.2	5.080	524.2	5.330	524.2	5.600	502.2	5.920	524.2	6.530
502.2	4.780	502.2	5.080	524.2	5.400	524.2	5.620	524.2	5.940	other	6.800
502.2	4.800	502.2	5.130	502.2	5.430	524.2	5.700	524.2	5.990	524.2	7.060
502.2	4.800	502.2	5.150	524.2	5.440	524.2	5.700	524.2	6.000	524.2	7.790
524.2	4.860	502.2	5.250	524.2	5.460	502.2	5.800	502.2	6.030		

**Water Study: 35****True Value: 16.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	13.300	524.2	14.700	524.2	15.600	524.2	16.100	524.2	16.700	524.2	18.200
502.2	13.800	502.2	15.000	524.2	15.800	524.2	16.200	524.2	16.700	524.2	18.290
502.2	13.800	524.2	15.000	524.2	16.000	502.2	16.370	524.2	16.800	502.2	22.300
502.2	13.930	524.2	15.400	502.2	16.000	502.2	16.400	502.2	16.900		
502.2	14.560	502.2	15.600	502.2	16.000	524.2	16.400	502.2	17.700		
other	14.620	524.2	15.600	502.2	16.100	524.2	16.600	524.2	17.700		

**Water Study: 36****True Value: 11.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.390	524.2	10.500	524.2	11.000	524.2	11.500	502	11.900	other	12.400
524.2	9.220	502.2	10.600	524.2	11.000	502.2	11.500	524.2	12.000	other	12.500
502.2	10.000	502.2	10.610	524.2	11.090	524.2	11.600	502.2	12.000	524.2	12.500
524.2	10.010	524.2	10.800	524.2	11.100	502.2	11.600	524.2	12.090	502.2	12.600
524.2	10.100	524.2	10.900	524.2	11.100	502.2	11.700	502.2	12.100	524.2	12.800
502.2	10.100	502.2	10.900	502.2	11.200	524.2	11.700	524.2	12.110	502.2	13.000
524.2	10.200	524.2	10.950	502.2	11.300	524.2	11.700	502.2	12.200	502.2	13.100
524.2	10.300	502.2	11.000	524.2	11.300	524.2	11.740	524.2	12.300	other	13.200
524.2	10.300	524.2	11.000	524.2	11.400	524.2	11.800	524.2	12.300	524.2	14.000
502.2	10.300	524.2	11.000	524.2	11.400	502.2	11.900	502.2	12.300	524.2	15.800

**Water Study: 37****True Value: 7.31 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.730	524.2	6.010	524.2	6.500	524.2	7.000	502.2	7.570	524.2	8.180
502.2	4.870	502.2	6.100	524.2	6.500	502.2	7.060	524.2	7.830	524.2	8.280
524.2	5.280	502.2	6.240	502.2	6.520	502.2	7.060	502.2	7.840	524.2	8.470
502.2	5.370	524.2	6.340	502.2	6.570	502.2	7.180	502.2	7.890	other	9.500
524.2	5.480	502.2	6.360	524.2	6.630	524.2	7.230	502.2	7.920	524.2	9.580
524.2	5.560	502.2	6.390	524.2	6.690	524.2	7.260	524.2	8.000	524.2	11.500
524.2	5.670	524.2	6.390	524.2	6.920	524.2	7.350	524.2	8.110	524.2	14.200
524.2	5.800	502.2	6.460	524.2	7.000	502.2	7.450	other	8.150		

**Water Study: 38****True Value: 14.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	8.890	502.2	10.300	502.2	11.000	524.2	11.600	524.2	12.000	502.2	12.600
524.2	9.370	524.2	10.400	524.2	11.100	524.2	11.600	502.2	12.000	524.2	12.700
524.2	9.560	524.2	10.500	524.2	11.100	524.2	11.600	502.2	12.100	502.2	12.800
524.2	9.630	502.2	10.500	502.2	11.100	502.2	11.600	502.2	12.100	524.2	13.000
524.2	9.860	524.2	10.500	524.2	11.100	502.2	11.600	524.2	12.100	524.2	13.000
524.2	9.980	other	10.600	524.2	11.200	524.2	11.640	524.2	12.300	524.2	13.000
502.2	10.000	502.2	10.750	524.2	11.400	502.2	11.700	524.2	12.300	524.2	13.100
502.2	10.000	502.2	10.800	524.2	11.500	524.2	11.900	502.2	12.400	524.2	13.500
502.2	10.300	524.2	11.000	other	11.500	524.2	12.000	524.2	12.500	524.2	13.630

**Water Study: 39****True Value: 17.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	11.200	524.2	15.800	502.2	16.500	524.2	17.000	524.2	17.700	524.2	18.600
524.2	12.200	502.2	15.900	502.2	16.500	524.2	17.100	524.2	17.770	502.2	18.700
502.2	14.200	524.2	15.900	524.2	16.600	524.2	17.100	502.2	18.000	524.2	19.200
524.2	15.300	524.2	16.200	524.2	16.800	502.2	17.200	524.2	18.000	524.2	19.300
502.2	15.300	524.2	16.200	524.2	16.800	502.2	17.300	502.2	18.000	524.2	20.100
524.2	15.600	524.2	16.400	502.2	16.900	524.2	17.600	524.2	18.300	524.2	22.800
524.2	15.700	524.2	16.400	524.2	17.000	502.2	17.600	502.2	18.300	524.2	40.170

**Water Study: 40****True Value: 11.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	7.930	524.2	10.000	502.2	10.700	524.2	11.100	524.2	11.500	502.2	12.300
502.2	8.100	524.2	10.100	524.2	10.700	524.2	11.200	524.2	11.600	524.2	13.400
524.2	8.240	502.2	10.400	524.2	10.700	524.2	11.200	502.2	11.600	524.2	13.600
502.2	9.210	524.2	10.500	524.2	10.800	502.2	11.200	524.2	11.800	524.2	13.800
524.2	9.320	502.2	10.500	524.2	10.800	524.2	11.200	524.2	11.800	524.2	14.200
502.2	9.500	524.2	10.500	other	10.800	524.2	11.300	502.2	11.900	502.2	14.500
524.2	9.880	524.2	10.600	502.2	10.800	502.2	11.300	524.2	12.100	524.2	15.000
524.2	9.910	524.2	10.600	524.2	10.800	524.2	11.400	502.2	12.100		
524.2	9.940	524.2	10.600	524.2	11.000	524.2	11.400	502.2	12.200		
524.2	10.000	524.2	10.700	524.2	11.100	524.2	11.500	524.2	12.200		



**Water Study: 41****True Value: 15.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.800	524.2	13.800	502.2	14.300	524.2	15.090	502.2	15.400	524.2	16.000
524.2	11.900	524.2	13.800	524.2	14.400	524.2	15.100	524.2	15.400	502.2	16.100
524.2	12.000	524.2	13.900	524.2	14.500	524.2	15.100	other	15.400	502.2	16.200
524.2	12.800	524.2	14.000	502.2	14.700	502.2	15.200	524.2	15.500	524.2	16.800
524.2	13.000	524.2	14.100	502.2	14.800	524.2	15.300	524.2	15.700	524.2	17.000
502.2	13.700	502.2	14.100	502.2	14.800	524.2	15.300	524.2	15.800	524.2	17.300
524.2	13.800	524.2	14.100	524.2	15.000	502.2	15.400	524.2	15.900	502.2	18.100

**1,2-Dichloroethane****Water Study: 24****True Value: 13.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	7.750	502.2	11.400	524.2	12.140	502.2	12.900	502.2	13.600	524.2	14.200
502.1	9.100	502.2	11.600	502.1	12.200	524.2	12.900	524.2	13.680	502.1	14.300
502.2	9.220	502.2	11.700	524.1	12.200	502.2	13.000	524.2	13.700	502.2	14.700
524.1	9.820	502.2	11.800	524.2	12.200	524.2	13.000	524.2	13.700	502.2	14.700
502.1	10.000	502.2	11.900	502.2	12.300	502.2	13.200	524.1	13.700	other	15.500
other	10.600	524.2	11.900	524.2	12.500	502.2	13.200	524.2	13.700	502.2	17.000
524.1	10.660	524.2	12.000	524.1	12.600	524.2	13.500	502.1	13.900		
524.2	10.700	524.2	12.030	502.2	12.600	502.2	13.500	524.2	14.000		
502.2	11.000	524.2	12.100	524.2	12.600	502.2	13.500	524.2	14.000		
502.2	11.100	502.2	12.100	502.1	12.900	502.2	13.510	524.2	14.000		

**Water Study: 25****True Value: 15.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	11.000	524.2	14.260	502.2	15.000	502.1	15.800	524.1	16.600	502.2	18.500
502.2	11.200	502.1	14.500	502.2	15.130	other	15.900	524.2	16.800	other	19.700
524.2	12.610	524.1	14.500	524.2	15.380	502.2	16.300	524.2	16.900	524.2	21.000
502.2	13.350	524.1	14.500	502.2	15.400	502.1	16.400	502.2	17.000		
502.2	13.500	524.2	14.530	524.2	15.600	502.2	16.400	524.2	17.000		
other	13.910	524.1	14.600	502.2	15.600	502.2	16.400	502.2	17.700		
524.2	14.200	502.2	14.900	524.2	15.600	524.2	16.600	502.2	18.100		

**Water Study: 26****True Value: 10.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.140	502.1	10.400	524.2	11.000	524.2	11.350	502.2	12.000	524.2	12.300
524.2	9.730	502.2	10.400	524.2	11.000	524.2	11.400	524.2	12.000	524.1	12.400
524.1	9.800	502.2	10.500	502.2	11.000	524.2	11.400	502.2	12.000	524.2	12.400
524.2	9.800	502.2	10.500	524.2	11.100	524.2	11.500	524.2	12.000	502.1	12.500
502.2	9.810	other	10.500	524.2	11.100	other	11.600	502.1	12.100	502.1	12.500
524.2	9.960	524.1	10.500	502.2	11.100	502.2	11.600	502.2	12.100	502.2	12.600
524.2	10.100	502.2	10.700	502.2	11.200	502.2	11.700	524.2	12.200	502.2	12.750
502.2	10.200	524.2	10.780	502.2	11.200	502.1	11.700	524.1	12.200	524.2	13.800
502.2	10.200	524.2	10.800	502.2	11.300	524.1	11.900	502.2	12.200	502.2	17.300
524.2	10.400	524.2	11.000	502.1	11.300	524.2	11.900	502.2	12.300		

**Water Study: 27****True Value: 4.88 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.080	524.2	4.600	524.2	5.000	524.2	5.300	502.2	5.650	524.1	6.610
502.2	4.360	502.2	4.630	524.2	5.090	524.2	5.310	502.2	5.730	other	6.610
524.2	4.490	524.2	4.740	502.2	5.100	524.2	5.360	502.2	5.780		
502.2	4.500	502.2	4.790	524.1	5.150	other	5.390	other	5.800		
502.2	4.500	502.2	4.800	502.2	5.160	502.1	5.400	524.2	5.920		
524.2	4.510	502.2	4.800	524.2	5.260	502.2	5.460	502.2	6.230		
502.2	4.530	524.2	4.800	524.2	5.270	524.2	5.560	502.2	6.350		

**Water Study: 29****True Value: 12.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	10.360	524.2	12.400	502.2	12.800	524.1	13.300	524.1	14.200	524.2	16.400
502.2	10.650	502.2	12.500	524.2	13.000	524.2	13.760	other	14.670	524.2	16.500
524.2	11.100	502.2	12.700	502.2	13.100	502.2	13.800	502.2	14.800	502.2	17.700
524.2	12.000	502.2	12.700	502.2	13.170	524.2	13.800	524.2	15.800	other	17.800
524.2	12.290	502.2	12.700	524.2	13.200	other	13.800	502.2	16.000		
524.2	12.300	502.2	12.700	524.2	13.200	502.2	13.880	524.2	16.100		

**Water Study: 30****True Value: 7.69 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.1	6.210	502.2	7.300	524.2	7.600	524.2	7.800	502.2	7.900	502.2	8.610
502.2	6.400	524.2	7.340	524.2	7.610	502.2	7.800	502.2	7.900	524.1	8.650
524.2	6.580	502.2	7.370	502.2	7.700	524.2	7.800	502.2	8.010	502.1	8.740
502.2	6.600	524.2	7.400	524.2	7.700	524.2	7.800	524.2	8.030	502.2	8.770
524.2	6.700	524.2	7.460	502.1	7.710	524.2	7.800	other	8.130	524.2	8.800
502.2	6.880	524.2	7.500	other	7.725	524.1	7.830	524.2	8.140	502.2	8.870
524.2	6.930	524.2	7.500	502.2	7.740	524.1	7.850	502.2	8.160	502.2	9.330
524.2	6.980	524.2	7.530	502.2	7.753	524.2	7.850	502.2	8.160	524.2	10.030
502.2	7.020	524.2	7.540	524.2	7.770	524.2	7.860	other	8.390	502.2	19.820
502.2	7.220	502.2	7.600	524.2	7.790	502.2	7.870	502.2	8.510		

**Water Study: 31****True Value: 9.25 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	6.240	524.2	8.610	524.1	9.060	502.2	9.320	502.2	9.720	502.2	10.100
502.1	7.470	502.2	8.620	502.2	9.060	524.2	9.460	524.2	9.730	502.1	10.300
524.2	8.200	502.1	8.850	524.2	9.130	524.2	9.480	502.1	9.890	524.2	10.300
502.2	8.350	502.2	8.876	524.2	9.200	502.2	9.500	524.2	9.890	other	10.300
524.2	8.380	502.2	8.930	524.2	9.200	502.2	9.590	524.2	9.900	524.2	10.310
524.2	8.510	502.2	8.970	524.2	9.270	502.2	9.660	502.2	9.980	502.2	11.300

**Water Study: 32****True Value: 13.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	9.450	524.2	12.300	502.2	12.900	524.2	13.300	524.2	14.100	524.2	14.660
502.1	9.960	502.2	12.400	524.2	12.900	502.2	13.300	502.2	14.100	524.2	15.100
502.2	11.200	502.2	12.500	524.2	13.000	other	13.500	524.2	14.200	524.2	15.300
502.2	11.400	502.1	12.600	502.2	13.000	524.2	13.500	502.2	14.300	502.2	15.400
502.2	11.400	502.1	12.700	524.2	13.000	502.2	13.600	524.2	14.300	524.2	15.600
524.2	11.400	524.2	12.700	502.1	13.000	524.2	13.600	524.2	14.320	524.2	15.600
524.2	11.500	524.2	12.700	502.2	13.200	502.2	13.700	502.2	14.400	other	16.200
502.2	11.700	502.2	12.700	524.2	13.250	524.2	13.720	other	14.400	524.2	16.500
524.2	12.100	524.2	12.800	502.2	13.300	524.2	13.800	502.2	14.400		
502.2	12.200	502.2	12.800	524.2	13.300	524.2	13.900	502.2	14.500		
524.2	12.240	524.2	12.900	524.1	13.300	524.2	14.000	502.2	14.600		

**Water Study: 33****True Value: 16.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	11.800	524.2	15.300	524.2	16.400	502.2	17.100	524.2	17.900	502.2	18.900
other	14.270	524.2	15.340	524.2	16.500	502.2	17.100	524.2	18.100	502.1	19.500
502.1	14.600	502.2	15.500	524.2	16.520	502.2	17.200	524.2	18.100	502.2	19.570
524.2	14.700	502.2	15.570	524.1	16.600	524.2	17.230	502.2	18.200	524.2	19.800
502.2	15.200	502.2	16.200	502.2	16.700	502.2	17.700	524.2	18.300	524.2	20.000
524.2	15.300	502.2	16.300	502.2	17.100	524.2	17.800	524.2	18.700		

**Water Study: 34****True Value: 12.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	9.480	502.2	11.000	502.2	11.700	524.2	12.100	502.2	12.430	524.2	12.900
other	9.700	524.2	11.200	524.2	11.700	502.2	12.100	524.2	12.500	502.2	12.900
502.2	10.000	502.2	11.200	524.2	11.800	502.2	12.150	502.2	12.500	524.2	13.000
524.2	10.200	524.2	11.300	502.2	11.900	524.2	12.200	524.2	12.600	other	13.100
524.2	10.300	502.2	11.400	524.2	11.900	524.2	12.300	502.2	12.600	524.2	13.200
502.1	10.300	524.2	11.400	502.2	11.900	502.2	12.300	524.2	12.600	502.2	13.200
502.2	10.400	524.2	11.570	502.2	12.000	524.2	12.400	524.2	12.790	524.2	13.400
502.2	10.600	502.2	11.600	502.2	12.000	524.2	12.400	524.2	12.800	502.2	13.500
524.2	10.990	502.2	11.600	524.2	12.000	524.2	12.400	524.2	12.870	524.2	13.500
502.2	11.000	524.2	11.700	524.2	12.100	502.2	12.400	502.2	12.900	502.2	14.400

**Water Study: 35****True Value: 14.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.520	502.2	13.400	502.2	13.800	524.2	14.700	502.2	15.300	502.2	15.700
502.2	11.900	524.2	13.500	other	13.860	524.2	14.800	524.2	15.300	502.2	16.400
524.2	13.000	524.2	13.650	524.2	14.100	502.2	15.010	502.2	15.400	524.2	16.400
524.2	13.000	524.2	13.700	502.2	14.100	502.2	15.020	502.2	15.500	524.2	17.700
502.2	13.200	524.2	13.700	524.2	14.200	524.2	15.200	524.2	15.500		
502.2	13.380	524.2	13.700	524.2	14.700	502.2	15.300	other	15.600		

**Water Study: 36****True Value: 9.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.240	502.2	8.270	524.2	8.600	524.2	8.950	524.2	9.220	502.2	9.870
524.2	7.490	524.2	8.300	524.2	8.640	524.2	9.000	524.2	9.220	502.2	9.880
524.2	7.820	502.2	8.300	524.2	8.680	524.2	9.030	502.2	9.300	524.2	9.900
502.2	7.840	524.2	8.340	524.2	8.690	502.2	9.040	524.2	9.480	other	10.100
502.2	7.840	524.2	8.350	524.2	8.700	502.2	9.080	524.2	9.670	502.2	10.400
524.2	7.890	524.2	8.350	524.2	8.740	502.2	9.090	502.2	9.700	524.2	10.480
524.2	7.930	524.2	8.450	502.2	8.790	524.2	9.100	502.2	9.710	502.2	11.300
524.2	7.950	502.2	8.460	524.2	8.840	524.2	9.120	502.2	9.710	other	11.500
524.2	8.130	524.2	8.490	502.2	8.900	502.2	9.120	502.2	9.740	524.2	11.820
502.2	8.240	524.2	8.570	other	8.930	524.2	9.200	502.2	9.770		

**Water Study: 37****True Value: 13.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	11.800	524.2	13.100	524.2	13.400	502.2	14.200	524.2	14.700	524.2	16.900
524.2	11.900	524.2	13.100	502.2	13.400	524.2	14.200	502.2	15.000	524.2	17.000
524.2	11.920	524.2	13.100	502.2	13.500	524.2	14.230	502.2	15.100	524.2	17.150
502.2	12.000	524.2	13.100	524.2	13.600	524.2	14.300	502.2	15.100	524.2	17.600
502.2	12.100	524.2	13.100	524.2	13.700	524.2	14.400	524.2	15.200	502.2	18.800
524.2	12.400	524.2	13.260	524.2	13.700	524.2	14.400	502	15.800	524.2	20.600
524.2	12.500	524.2	13.300	502.2	14.000	502.2	14.400	other	15.900	524.2	27.500
502.2	12.800	502.2	13.400	502.2	14.200	502.2	14.700	other	16.600		

**Water Study: 38****True Value: 15.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.210	524.2	14.900	502.2	15.300	524.2	15.900	502.2	16.100	524.2	16.750
524.2	12.100	524.2	15.000	524.2	15.400	524.2	15.900	502.2	16.100	524.2	16.800
502.2	13.380	524.2	15.000	524.2	15.600	502.2	15.900	524.2	16.200	502.2	17.300
524.2	14.400	524.2	15.000	502.2	15.600	502.2	16.000	other	16.300	502.2	17.400
502.2	14.400	502.2	15.100	524.2	15.700	502.2	16.000	524.2	16.300	524.2	17.400
524.2	14.500	524.2	15.100	other	15.800	502.2	16.000	524.2	16.500	502.2	17.500
524.2	14.700	524.2	15.200	502.2	15.800	524.2	16.080	524.2	16.500	524.2	17.800
524.2	14.800	524.2	15.200	524.2	15.800	524.2	16.100	502.2	16.700	524.2	18.900
524.2	14.900	524.2	15.300	502.2	15.800	524.2	16.100	524.2	16.700	524.2	21.200

**Water Study: 39****True Value: 17.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	12.200	524.2	16.700	524.2	17.100	524.2	17.900	524.2	18.600	524.2	19.700
524.2	13.500	524.2	16.700	524.2	17.100	502.2	18.000	502.2	18.800	524.2	20.100
502.2	15.500	502.2	16.800	524.2	17.300	524.2	18.070	524.2	18.800	524.2	20.700
502.2	15.700	524.2	16.800	524.2	17.400	502.2	18.100	524.2	18.800	524.2	21.200
502.2	15.900	524.2	16.900	502.2	17.500	524.2	18.100	524.2	18.900	524.2	21.400
524.2	15.900	502.2	17.000	524.2	17.500	524.2	18.200	502.2	19.400	524.2	21.600
524.2	16.400	524.2	17.100	502.2	17.800	502.2	18.400	502.2	19.500	524.2	28.500

**Water Study: 40****True Value: 15.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	14.000	524.2	16.700	524.2	17.100	524.2	17.600	524.2	18.300	502.2	20.100
524.2	14.700	502.2	16.800	524.2	17.200	502.2	17.700	other	18.300	524.2	20.300
524.2	14.700	524.2	16.800	524.2	17.260	524.2	17.800	524.2	18.400	524.2	20.500
524.2	15.200	524.2	16.800	524.2	17.300	502.2	17.900	502.2	18.500	524.2	20.600
524.2	15.400	524.2	16.900	524.2	17.300	524.2	17.900	524.2	18.600	524.2	20.600
524.2	16.200	502.2	16.900	524.2	17.400	524.2	18.000	524.2	18.700	524.2	21.200
502.2	16.200	502.2	16.900	502.2	17.400	524.2	18.000	524.2	18.800	524.2	23.300
524.2	16.300	524.2	16.900	502.2	17.500	524.2	18.200	502.2	18.900		
524.2	16.300	502.2	17.000	502.2	17.500	524.2	18.300	502.2	19.300		
other	16.500	502.2	17.100	524.2	17.500	524.2	18.300	524.2	19.600		

**Water Study: 41****True Value: 13.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	12.000	524.2	13.100	524.2	13.500	524.2	13.920	524.2	14.230	524.2	15.300
524.2	12.200	524.2	13.300	524.2	13.600	524.2	14.000	524.2	14.300	502.2	15.800
524.2	12.300	524.2	13.300	524.2	13.600	524.2	14.000	502.2	14.500	524.2	16.300
502.2	12.600	502.2	13.400	524.2	13.700	502.2	14.100	502.2	14.600	502.2	16.700
524.2	12.600	524.2	13.500	524.2	13.700	502.2	14.200	524.2	14.700	524.2	17.000
502.2	12.800	524.2	13.500	524.2	13.700	524.2	14.200	502.2	15.100	502.2	18.000
524.2	12.800	524.2	13.500	524.2	13.800	other	14.200	524.2	15.100		

**1,1-Dichloroethylene**

**Water Study: 24**

**True Value: 5.36ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.000	524.2	4.900	524.2	5.220	502.2	5.430	502.1	5.990	502.2	8.290
524.1	4.060	524.2	4.900	502.1	5.250	502.2	5.500	524.2	6.100	502.2	8.400
524.2	4.250	502.2	4.950	502.2	5.290	502.2	5.550	524.1	6.200	502.2	8.660
502.1	4.290	502.2	4.993	524.2	5.300	524.2	5.600	524.1	6.420	502.1	8.880
502.2	4.420	524.2	5.000	502.2	5.350	other	5.600	502.2	6.500	524.2	9.510
502.2	4.480	524.2	5.030	524.2	5.380	524.2	5.680	502.2	6.750	other	10.600
524.1	4.520	502.1	5.100	524.1	5.380	502.2	5.710	502.2	6.800	524.2	10.800
502.2	4.880	502.2	5.180	502.2	5.380	502.2	5.720	524.1	6.810		
524.2	4.890	502.1	5.200	524.2	5.400	524.2	5.742	524.2	7.210		
502.2	4.900	other	5.200	524.2	5.430	524.2	5.820	524.2	7.333		

**Water Study: 25**

**True Value: 14.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	10.500	524.2	13.610	524.1	15.100	other	16.500	524.2	17.900	524.1	20.100
524.2	12.100	502.2	13.700	524.2	15.200	524.2	16.800	502.2	18.300	other	29.700
502.2	12.600	502.2	14.500	502.2	15.700	524.2	17.010	502.2	18.600	524.2	38.200
502.2	12.700	524.2	14.600	502.2	15.800	502.1	17.100	502.2	18.800		
502.1	13.400	502.2	14.810	other	15.970	524.2	17.130	524.2	18.800		
502.2	13.400	502.1	15.000	524.1	16.300	524.1	17.300	502.2	19.000		
502.2	13.610	524.2	15.100	524.2	16.300	502.2	17.400	502.2	19.500		

**Water Study: 26**

**True Value: 6.64 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.583	502.2	6.450	524.2	6.740	502.1	7.380	524.1	7.790	524.2	8.420
524.2	5.600	524.2	6.500	502.2	6.790	524.2	7.390	502.2	7.820	524.2	8.590
524.2	5.640	502.2	6.560	502.2	6.850	502.1	7.390	502.1	7.820	524.2	8.600
502.2	5.700	502.2	6.580	524.1	6.980	other	7.390	502.1	7.870	524.2	8.900
502.2	5.730	502.2	6.590	524.2	6.980	524.2	7.400	524.2	7.894	524.1	8.930
502.1	6.030	502.2	6.600	524.2	6.980	502.2	7.550	524.2	7.920	524.2	9.000
524.1	6.050	other	6.700	502.2	7.060	524.2	7.580	502.2	7.960	502.1	9.200
524.2	6.100	524.2	6.710	524.1	7.130	502.2	7.600	524.2	8.000	502.2	9.380
502.2	6.200	502.2	6.730	524.2	7.170	524.2	7.630	524.2	8.300	502.2	9.490
502.2	6.400	502.2	6.730	524.2	7.180	524.2	7.690	502.2	8.300	502.2	15.900

**Water Study: 27****True Value: 9.45 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	4.180	524.2	9.050	502.2	9.500	other	10.100	502.2	11.100	524.1	15.700
524.2	6.580	524.2	9.160	524.2	9.500	524.2	10.200	524.1	11.200	502.2	16.400
502.2	7.380	502.2	9.300	524.2	9.560	524.2	10.200	502.2	11.400		
524.2	8.040	502.2	9.400	other	9.580	502.2	10.300	502.2	11.400		
524.2	8.260	524.2	9.430	502.1	9.780	502.2	10.400	502.2	12.000		
524.2	8.300	502.2	9.470	502.2	9.980	502.2	10.400	524.2	12.110		
524.2	8.950	502.2	9.500	502.2	10.000	524.2	10.610	502.2	13.300		

**Water Study: 29****True Value: 11.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	10.200	502.2	11.600	502.2	12.100	502.2	12.500	524.2	13.900	502.2	15.800
502.2	10.500	524.1	11.700	502.2	12.100	other	12.500	other	13.960	502.2	16.000
524.2	10.600	other	11.700	524.2	12.200	524.2	12.700	502.2	14.600	524.2	16.500
502.2	10.800	502.2	11.800	524.2	12.200	524.2	12.740	524.1	14.600	502.2	16.900
524.2	11.300	524.2	12.000	524.2	12.400	524.2	12.750	502.2	15.500	502.2	17.390
524.2	11.300	524.2	12.000	524.2	12.400	502.2	13.700	502.2	15.650		

**Water Study: 30****True Value: 14.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.950	502.2	13.400	524.2	14.000	502.2	14.800	502.2	15.700	502.1	17.100
502.2	11.400	524.2	13.600	502.2	14.100	524.2	15.000	502.2	15.780	502.2	17.200
524.2	11.940	524.2	13.600	524.2	14.100	524.2	15.000	524.2	15.800	502.2	17.300
524.2	12.300	524.2	13.700	524.2	14.200	502.2	15.300	524.2	15.900	other	17.440
524.2	12.910	524.2	13.800	524.1	14.400	502.2	15.300	502.2	15.900	524.2	17.800
502.2	13.000	502.2	13.810	502.2	14.500	524.1	15.400	524.2	16.000	502.2	17.900
524.2	13.000	other	13.900	524.2	14.520	502.1	15.420	524.2	16.300	502.1	19.330
502.2	13.100	502.2	13.900	524.2	14.600	502.2	15.500	502.2	16.600	524.2	20.300
502.2	13.300	other	13.900	524.2	14.720	524.2	15.500	524.1	16.800	502.1	20.600
502.2	13.400	524.2	14.000	524.2	14.800	502.2	15.600	524.2	16.800		



**Water Study: 31****True Value: 7.02 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	3.400	502.2	6.812	502.1	7.480	502.2	7.670	502.2	8.470	502.2	9.420
524.2	5.803	524.2	6.820	502.2	7.500	524.2	7.800	502.2	8.480	502.1	9.800
524.2	6.130	524.2	6.830	502.2	7.560	502.2	7.980	524.2	8.500		
502.2	6.410	524.2	6.880	502.2	7.600	502.2	7.990	524.2	8.500		
502.2	6.450	502.1	7.010	524.2	7.600	502.1	8.000	502.2	8.620		
other	6.460	524.2	7.200	524.2	7.650	524.2	8.120	502.2	8.710		
524.2	6.790	524.2	7.420	524.1	7.670	502.2	8.330	524.2	8.860		

**Water Study: 32****True Value: 9.13 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	7.740	other	8.900	502.2	9.280	524.2	9.540	524.2	9.980	502.1	10.800
524.2	7.800	524.2	8.960	502.2	9.290	524.2	9.650	524.2	10.100	502.2	10.800
524.2	8.090	524.2	9.000	502.2	9.350	502.2	9.700	502.2	10.200	524.2	11.000
502.2	8.450	524.2	9.100	524.2	9.380	524.2	9.700	502.2	10.300	524.2	11.500
502.2	8.490	502.2	9.130	524.2	9.380	other	9.700	502.2	10.400	524.2	11.700
502.2	8.510	524.2	9.160	502.1	9.390	524.2	9.800	502.2	10.400	524.2	12.000
502.2	8.550	502.2	9.230	524.2	9.460	524.2	9.920	502.2	10.400	502.2	12.100
502.2	8.620	524.2	9.240	524.2	9.470	524.2	9.930	524.2	10.500	524.1	12.100
524.2	8.730	524.2	9.240	502.1	9.470	524.2	9.940	524.2	10.500		
502.1	8.750	524.2	9.260	524.2	9.480	502.2	9.940	524.2	10.600		
502.2	8.810	524.2	9.260	502.2	9.530	502.2	9.960	other	10.600		

**Water Study: 33****True Value: 12.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.670	524.2	12.000	502.2	13.300	502.2	14.100	524.2	15.000	524.2	17.500
502.2	9.950	502.2	12.000	502.2	13.400	502.2	14.400	502.2	15.100	502.2	17.800
502.1	10.500	502.2	12.500	524.2	13.600	524.2	14.500	502.2	15.400	524.2	19.400
502.2	10.800	524.2	12.760	524.2	13.600	524.1	14.800	502.1	15.900		
other	11.850	524.2	13.100	524.2	13.790	524.2	14.900	502.2	15.900		
524.2	11.900	502.2	13.150	502.2	13.800	524.2	15.000	524.2	16.800		

**Water Study: 34****True Value: 7.64 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.860	other	7.200	502.2	7.450	524.2	7.950	524.2	8.380	502.2	8.880
502.2	6.260	524.2	7.200	524.2	7.450	524.2	7.950	524.2	8.400	502.2	9.000
524.2	6.400	502.2	7.270	502.1	7.520	502.2	7.960	524.2	8.400	502.2	9.090
524.2	6.580	other	7.300	502.2	7.610	524.2	8.000	502.2	8.420	524.2	9.200
502.2	6.720	524.2	7.300	524.2	7.670	502.2	8.010	524.2	8.450	524.2	9.320
524.2	6.720	502.2	7.303	524.2	7.680	502.2	8.050	502.2	8.450	502.2	9.400
502.2	6.840	502.2	7.340	524.2	7.740	502.2	8.060	524.2	8.500	502.2	9.420
524.2	7.100	524.2	7.380	502.2	7.900	502.2	8.240	524.2	8.610	524.2	9.900
524.2	7.160	502.2	7.390	524.2	7.920	524.2	8.340	524.2	8.620	524.2	10.500
502.2	7.180	524.2	7.440	502.2	7.940	502.2	8.360	524.2	8.670	524.2	12.100

**Water Study: 35****True Value: 13.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	6.320	502.2	13.400	524.2	14.200	502.2	15.100	524.2	15.600	524.2	16.500
502.2	10.000	524.2	13.400	502.2	14.500	502.2	15.200	524.2	15.600	524.2	16.500
502.2	11.600	502.2	13.700	502.2	14.590	502.2	15.200	524.2	15.600	502.2	16.500
other	12.720	524.2	14.000	502.2	14.630	524.2	15.500	524.2	15.650	524.2	16.830
524.2	13.000	524.2	14.100	524.2	14.800	524.2	15.500	502.2	15.700	502.2	16.960
502.2	13.300	524.2	14.200	524.2	15.100	other	15.600	524.2	15.900		

**Water Study: 36****True Value: 8.49 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.990	524.2	8.230	524.2	8.580	other	9.100	524.2	9.470	524.2	10.100
524.2	7.510	502.2	8.260	524.2	8.600	502.2	9.100	524.2	9.500	other	10.200
524.2	7.670	524.2	8.280	524.2	8.780	502.2	9.120	524.2	9.750	502.2	10.200
524.2	7.720	502.2	8.310	502.2	8.820	524.2	9.200	502.2	9.750	524.2	10.300
502.2	7.730	502.2	8.340	524.2	8.860	502.2	9.220	other	9.760	524.2	10.300
524.2	7.730	524.2	8.420	524.2	8.900	524.2	9.290	524.2	9.760	502.2	10.400
502.2	7.940	502.2	8.450	524.2	8.910	502.2	9.340	524.2	9.860	524.2	10.470
524.2	7.950	502.2	8.470	502.2	8.970	524.2	9.340	524.2	9.910	502.2	11.100
502.2	8.120	524.2	8.480	524.2	8.980	524.2	9.340	524.2	9.990	502.2	11.100
524.2	8.150	524.2	8.540	524.2	8.980	502.2	9.410	502.2	10.000	other	12.100

**Water Study: 37****True Value: 16.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	13.200	502.2	15.500	524.2	16.400	524.2	17.400	502.2	18.300	524.2	20.500
524.2	14.500	524.2	15.500	524.2	16.460	502.2	17.600	502.2	18.500	502.2	20.600
502.2	14.600	502.2	16.100	other	16.600	524.2	17.700	524.2	18.500	other	20.700
502.2	14.700	524.2	16.200	524.2	16.700	524.2	17.800	524.2	18.700	502.2	20.800
524.2	15.100	502.2	16.200	524.2	16.800	524.2	17.900	502.2	18.700	502.2	20.800
524.2	15.300	524.2	16.270	524.2	16.800	524.2	18.000	524.2	18.800	524.2	21.700
502.2	15.400	524.2	16.400	502.2	17.000	524.2	18.000	502.2	19.300	524.2	22.000
502.2	15.400	502.2	16.400	524.2	17.170	524.2	18.300	other	19.400	524.2	48.200

**Water Study: 38****True Value: 11.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	8.000	524.2	13.800	524.2	14.900	502.2	15.700	524.2	16.400	524.2	17.600
524.2	8.640	524.2	13.800	524.2	15.000	other	15.800	524.2	16.600	502.2	17.800
502.2	12.100	524.2	13.900	524.2	15.100	524.2	15.800	524.2	16.700	502.2	17.900
524.2	13.000	524.2	14.100	502.2	15.100	other	15.900	502.2	16.800	524.2	18.000
502.2	13.000	524.2	14.180	524.2	15.200	524.2	16.000	524.2	17.000	524.2	18.700
502.2	13.100	524.2	14.400	502.2	15.300	524.2	16.100	524.2	17.200	502.2	22.800
502.2	13.100	502.2	14.400	502.2	15.400	524.2	16.200	502.2	17.200		
524.2	13.400	524.2	14.500	502.2	15.400	524.2	16.300	502.2	17.300		
524.2	13.700	502.2	14.800	502.2	15.410	502.2	16.400	524.2	17.300		
other	13.800	524.2	14.900	524.2	15.500	524.2	16.400	524.2	17.490		

**Water Study: 39****True Value: 12.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.070	524.2	11.400	502.2	12.500	524.2	13.400	502.2	14.400	524.2	22.500
524.2	9.980	502.2	11.900	524.2	12.500	524.2	13.500	524.2	14.400	524.2	23.000
524.2	10.400	524.2	11.900	other	12.600	524.2	13.600	524.2	14.400	524.2	35.240
524.2	10.900	524.2	12.000	502.2	12.800	524.2	13.600	524.2	15.800		
524.2	11.200	502.2	12.300	502.2	13.000	524.2	13.800	524.2	16.100		
524.2	11.200	502.2	12.400	524.2	13.200	524.2	13.900	524.2	16.800		
524.2	11.200	524.2	12.400	502.2	13.300	502.2	14.000	502.2	17.400		
502.2	11.300	524.2	12.500	502.2	13.300	524.2	14.000	524.2	18.750		

**Water Study: 40****True Value: 18.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	12.500	524.2	17.100	502.2	18.100	502.2	19.000	524.2	19.500	524.2	21.900
524.2	13.800	524.2	17.600	524.2	18.100	502.2	19.000	524.2	19.600	524.2	21.900
524.2	14.700	524.2	17.700	502.2	18.200	502.2	19.100	524.2	19.600	524.2	22.600
502.2	15.000	524.2	17.700	502.2	18.400	524.2	19.200	502.2	19.700	other	22.800
524.2	15.200	524.2	17.700	524.2	18.600	524.2	19.200	502.2	20.200	524.2	22.900
524.2	15.500	524.2	17.800	524.2	18.800	524.2	19.310	524.2	20.200	524.2	23.000
524.2	15.700	524.2	18.000	524.2	18.800	502.2	19.400	524.2	20.500	502.2	23.000
524.2	16.000	524.2	18.000	other	18.800	524.2	19.400	502.2	20.700	502.2	25.000
524.2	16.400	524.2	18.000	502.2	18.800	524.2	19.500	524.2	20.900		
other	16.900	524.2	18.000	524.2	18.900	524.2	19.500	502.2	21.800		

**Water Study: 41****True Value: 5.25 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.670	524.2	5.400	524.2	5.610	524.2	5.800	524.2	5.900	502.2	6.480
502.2	4.720	524.2	5.440	524.2	5.680	524.2	5.810	502.2	6.050	524.2	6.480
502.2	4.760	524.2	5.480	524.2	5.690	524.2	5.830	524.2	6.070	524.2	6.540
502.2	5.010	524.2	5.530	524.2	5.720	524.2	5.860	524.2	6.110	524.2	6.600
524.2	5.020	524.2	5.560	other	5.750	524.2	5.900	502.2	6.210	502.2	7.170
524.2	5.100	502.2	5.570	502.2	5.780	502.2	5.900	524.2	6.260	524.2	9.280
524.2	5.350	524.2	5.600	524.2	5.790	502.2	5.900	524.2	6.390		

**Dichloromethane****Water Study: 26****True Value: 15.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	9.000	502.2	12.900	524.2	14.500	524.2	15.140	524.2	16.200	524.2	18.300
524.1	9.400	502.2	13.000	524.2	14.600	502.2	15.200	502.1	16.280	502.2	18.400
other	9.900	502.2	13.400	524.2	14.700	524.1	15.200	524.1	16.400	502.2	18.700
524.2	11.100	502.2	13.900	502.2	14.700	502.2	15.200	524.2	16.500	502.1	18.800
524.2	11.100	524.2	13.930	other	14.800	502.2	15.800	502.2	17.070	502.2	19.000
524.2	11.700	524.1	14.200	502.2	14.800	524.2	15.800	502.2	17.200	502.2	22.500
502.2	11.700	502.2	14.200	524.2	14.800	524.2	15.800	502.1	17.600		
524.2	11.700	other	14.300	502.1	14.900	524.2	15.800	524.1	17.700		
502.2	12.000	502.2	14.400	502.2	14.900	502.2	16.000	502.2	18.100		

**Water Study: 29****True Value: 14.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	11.800	502.2	14.400	502.2	14.720	524.2	15.360	524.1	15.900	524.2	17.100
502.2	13.230	502.2	14.500	524.2	14.740	524.2	15.400	524.2	16.000	524.2	17.500
524.2	13.280	other	14.540	502.2	14.800	502.2	15.600	502.2	16.100	502.2	21.100
524.2	13.500	524.2	14.600	502.2	14.900	502.2	15.670	524.2	16.700		
524.1	14.000	502.2	14.600	524.2	15.200	502.2	15.800	502.2	16.800		
524.2	14.300	502.2	14.700	502.2	15.300	502.2	15.820	other	17.000		

**Water Study: 32****True Value: 7.77 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	3.260	502.2	6.920	502.2	7.350	502.2	7.840	524.2	8.500	502.2	9.190
524.2	4.430	502.2	7.000	524.2	7.400	other	7.850	502.1	8.600	502.2	9.420
502.2	5.090	502.1	7.050	502.2	7.430	524.2	7.970	502.2	8.660	524.2	9.720
524.2	6.250	other	7.100	524.2	7.480	524.2	8.020	524.1	8.660	524.2	10.400
other	6.340	524.2	7.200	524.2	7.520	524.2	8.070	502.2	8.740	502.2	10.600
502.2	6.370	524.2	7.300	524.2	7.580	524.2	8.200	524.2	8.820	524.2	12.100
524.2	6.450	502.2	7.320	502.2	7.620	502.2	8.220	524.2	8.950		
502.2	6.630	502.2	7.340	502.2	7.630	524.2	8.300	502.1	9.100		
502.2	6.910	524.2	7.340	524.2	7.840	524.2	8.480	524.2	9.100		

**Water Study: 33****True Value: 12.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	9.192	502.2	11.500	524.2	12.000	502.2	12.800	502.2	13.700	502.2	15.000
502.2	9.920	other	11.800	524.2	12.300	502.2	12.900	524.2	13.740	502.2	15.280
524.2	10.700	502.2	11.800	524.2	12.500	502.1	13.200	502.2	14.200	502.2	15.500
502.2	11.100	502.2	11.990	524.1	12.500	524.2	13.290	524.2	14.200	524.2	16.400
502.2	11.100	524.2	12.000	524.2	12.700	524.2	13.460	502.2	14.200		
502.2	11.400	502.2	12.000	524.2	12.700	524.2	13.500	524.2	14.700		

**Water Study: 34**

**True Value: 18.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	14.100	524.2	17.000	502.2	17.900	502.2	19.000	502.2	19.400	524.2	20.600
524.2	14.100	502.2	17.300	524.2	17.900	502.2	19.000	502.2	19.500	524.2	20.700
524.2	14.200	502.2	17.300	502.2	17.900	524.2	19.050	524.2	19.800	524.2	21.200
524.2	14.500	524.2	17.300	502.2	18.000	502.2	19.100	524.2	19.900	502.1	21.600
524.2	15.100	524.2	17.400	524.2	18.100	502.2	19.100	524.2	20.000	524.2	21.710
524.2	15.700	502.2	17.500	524.2	18.100	524.2	19.200	524.2	20.000	other	22.200
524.2	15.790	524.2	17.600	524.2	18.300	502.2	19.200	502.2	20.000	502.2	22.200
502.2	16.100	502.2	17.600	524.2	18.500	502.2	19.250	524.2	20.000	502.2	25.200
502.2	16.720	502.2	17.700	524.2	18.600	502.2	19.300	524.2	20.270	502.2	33.100
502.2	16.800	524.2	17.900	502.2	18.900	502.2	19.400	524.2	20.500		

**Water Study: 35**

**True Value: 5.83 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.510	502.2	5.490	502.2	5.600	524.2	5.990	524.2	6.300	524.2	6.560
524.2	4.570	524.2	5.500	524.2	5.620	524.2	6.100	524.2	6.300	502.2	6.600
502.2	4.690	524.2	5.530	502.2	5.640	502.2	6.157	502.2	6.370	502.2	7.070
524.2	4.960	502.2	5.530	502.2	5.770	502.2	6.180	502.2	6.380	524.2	7.200
other	5.030	524.2	5.550	524.2	5.800	524.2	6.220	502.2	6.380	502.2	13.200
524.2	5.400	502.2	5.580	524.2	5.970	502.2	6.280	524.2	6.470		

**Water Study: 36**

**True Value: 12.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.700	524.2	11.000	524.2	11.400	524.2	12.100	524.2	12.400	524.2	13.200
524.2	7.930	524.2	11.050	524.2	11.500	524.2	12.100	524.2	12.500	502.2	13.200
524.2	8.340	524.2	11.100	524.2	11.580	524.2	12.150	502.2	12.500	502.2	13.400
524.2	9.400	524.2	11.100	502.2	11.600	524.2	12.160	other	12.600	524.2	13.670
524.2	9.960	502.2	11.200	502.2	11.700	other	12.200	502.2	12.600	502.2	14.300
524.2	9.980	502.2	11.200	524.2	11.700	502.2	12.200	524.2	12.600	502.2	14.400
524.2	10.000	524.2	11.200	502.2	11.900	502.2	12.200	524.2	12.700	502.2	14.500
524.2	10.300	524.2	11.300	502.2	12.000	502.2	12.210	502.2	12.700	524.2	15.100
other	10.900	502.2	11.300	502.2	12.000	524.2	12.300	524.2	12.700	502.2	15.800
524.2	11.000	524.2	11.400	524.2	12.100	502.2	12.400	502.2	13.000		

**Water Study: 37****True Value: 8.41 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	6.900	502.2	8.040	502.2	8.420	other	8.610	502.2	9.260	524.2	10.740
502.2	7.210	524.2	8.070	524.2	8.420	524.2	8.660	502.2	9.360	other	10.800
524.2	7.280	502.2	8.110	524.2	8.420	524.2	8.740	502.2	9.370	524.2	10.800
524.2	7.350	502.2	8.250	524.2	8.450	524.2	8.750	502.2	9.640	502.2	11.900
524.2	7.540	524.2	8.270	524.2	8.500	502.2	9.100	524.2	9.710	524.2	12.300
524.2	7.790	502.2	8.280	524.2	8.520	524.2	9.150	502.2	9.760	524.2	12.700
524.2	7.900	524.2	8.310	524.2	8.590	524.2	9.150	524.2	10.400	502.2	14.200
502.2	8.020	524.2	8.330	502.2	8.600	524.2	9.170	502.2	10.500		

**Water Study: 38****True Value: 14.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.970	524.2	13.200	other	13.800	524.2	14.200	524.2	14.900	502.2	15.400
other	12.500	524.2	13.300	502.2	13.800	524.2	14.200	524.2	14.900	502.2	15.500
502.2	12.500	524.2	13.400	524.2	13.800	524.2	14.400	524.2	15.000	502.2	15.600
524.2	12.500	502.2	13.400	524.2	13.800	502.2	14.600	502.2	15.000	524.2	16.000
524.2	12.800	502.2	13.500	524.2	14.000	524.2	14.700	524.2	15.100	502.2	16.120
524.2	13.100	502.2	13.600	524.2	14.000	502.2	14.700	524.2	15.200	524.2	16.200
524.2	13.100	524.2	13.600	524.2	14.000	524.2	14.700	524.2	15.200	502.2	16.400
524.2	13.100	524.2	13.600	502.2	14.100	502.2	14.700	524.2	15.200	502.2	16.600
502.2	13.200	524.2	13.760	524.2	14.200	502.2	14.800	524.2	15.370	524.2	17.400

**Water Study: 39****True Value: 7.31 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.750	524.2	7.000	524.2	7.200	524.2	7.550	524.2	8.070	524.2	8.600
502.2	5.500	524.2	7.020	524.2	7.300	524.2	7.620	524.2	8.080	524.2	8.600
524.2	5.970	502.2	7.080	524.2	7.370	524.2	7.700	524.2	8.140	524.2	9.260
524.2	6.030	524.2	7.100	524.2	7.430	502.2	7.750	524.2	8.150	524.2	9.522
502.2	6.300	502.2	7.120	524.2	7.440	502.2	7.940	502.2	8.350	524.2	9.640
524.2	6.420	502.2	7.160	502.2	7.540	524.2	8.040	524.2	8.500	502.2	9.890
524.2	6.950	502.2	7.170	524.2	7.540	524.2	8.060	502.2	8.550	524.2	9.920

**Water Study: 40**

**True Value: 6.20 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.540	524.2	5.900	502.2	6.240	502.2	6.500	other	6.990	524.2	7.860
524.2	4.910	524.2	5.910	524.2	6.250	524.2	6.530	502.2	7.000	524.2	8.000
524.2	5.350	other	5.940	524.2	6.310	524.2	6.550	524.2	7.010	502.2	8.010
524.2	5.440	524.2	6.000	524.2	6.320	524.2	6.550	524.2	7.060	524.2	8.490
524.2	5.580	524.2	6.010	524.2	6.330	524.2	6.690	502.2	7.100	502.2	8.630
524.2	5.600	502.2	6.070	502.2	6.390	502.2	6.710	524.2	7.120	524.2	9.400
524.2	5.740	524.2	6.080	524.2	6.420	524.2	6.780	524.2	7.170	502.2	10.300
524.2	5.740	502.2	6.100	524.2	6.440	524.2	6.800	502.2	7.480		
524.2	5.780	502.2	6.120	502.2	6.460	524.2	6.890	524.2	7.570		
524.2	5.860	524.2	6.230	524.2	6.480	502.2	6.920	524.2	7.600		

**Water Study: 41**

**True Value: 15.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	6.380	524.2	14.000	524.2	15.100	524.2	15.400	502.2	16.200	502.2	17.500
524.2	10.000	502.2	14.000	524.2	15.100	524.2	15.500	502.2	16.600	524.2	18.200
524.2	11.500	524.2	14.600	524.2	15.200	502.2	15.600	502.2	16.600	502.2	18.900
524.2	12.500	502.2	14.700	524.2	15.300	524.2	15.760	524.2	16.600	502.2	19.800
524.2	13.400	524.2	14.800	other	15.300	524.2	15.850	524.2	16.800	524.2	19.800
524.2	13.800	502.2	14.900	524.2	15.300	524.2	15.900	524.2	17.300		
524.2	13.900	524.2	14.900	524.2	15.400	524.2	16.200	502.2	17.400		

**1,2-Dichloropropane**

**Water Study: 29**

**True Value: 15.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	10.800	524.2	14.500	524.2	15.100	524.2	15.700	524.2	16.500	502.2	18.800
502.2	11.050	524.1	14.700	502.2	15.100	other	15.700	502.2	17.000	524.2	19.600
524.2	12.900	524.2	14.750	502.2	15.300	502.2	15.800	502.2	17.000	502.2	21.080
524.1	13.700	524.2	14.820	other	15.600	524.2	16.000	other	17.080		
502.2	13.700	502.2	14.970	502.2	15.600	524.2	16.100	502.2	17.600		
502.2	14.400	502.2	15.000	524.2	15.600	502.2	16.300	502.2	18.070		



**Water Study: 30****True Value: 10.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.690	502.2	9.773	502.2	10.200	502.2	10.600	524.2	10.900	524.2	11.400
524.2	8.780	502.2	9.800	524.2	10.200	502.2	10.700	524.1	10.900	other	11.400
524.2	8.940	524.2	9.900	524.2	10.290	524.2	10.700	502.2	10.900	524.2	11.400
502.1	9.290	524.2	9.960	524.2	10.300	other	10.710	524.2	10.900	524.2	11.400
502.2	9.490	524.2	10.000	524.2	10.300	502.2	10.800	524.2	11.000	502.2	11.500
502.1	9.590	524.2	10.000	502.2	10.300	502.2	10.800	502.2	11.020	524.2	11.600
524.2	9.600	other	10.000	524.2	10.400	502.2	10.800	524.2	11.100	502.2	11.600
502.2	9.700	524.2	10.100	524.2	10.480	502.2	10.800	502.2	11.100	502.2	11.700
524.2	9.710	502.2	10.100	502.2	10.500	524.2	10.900	524.2	11.200		
502.2	9.740	524.1	10.200	524.1	10.600	502.2	10.900	524.2	11.200		

**Water Study: 32****True Value: 6.46 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.540	502.2	5.690	524.2	5.970	other	6.250	524.2	6.440	524.2	6.910
502.2	4.970	524.2	5.700	502.2	5.980	524.2	6.280	524.2	6.460	524.2	7.070
502.2	4.970	502.1	5.700	524.2	6.000	524.2	6.280	524.2	6.460	other	7.210
524.2	5.000	502.2	5.760	502.2	6.000	502.2	6.280	524.2	6.480	524.2	7.520
524.2	5.090	502.2	5.760	524.2	6.110	524.2	6.310	524.2	6.600	502.2	7.700
502.2	5.260	502.2	5.880	524.2	6.120	524.2	6.350	524.2	6.630	524.2	8.710
524.2	5.300	502.2	5.900	502.1	6.130	502.2	6.370	524.1	6.680		
502.2	5.410	524.2	5.900	502.2	6.130	502.2	6.370	502.2	6.720		
502.1	5.500	524.2	5.900	502.1	6.160	524.2	6.380	524.2	6.750		
502.2	5.600	524.2	5.920	502.2	6.160	524.2	6.430	502.2	6.780		
502.2	5.640	524.2	5.960	502.2	6.190	524.2	6.434	524.2	6.900		

**Water Study: 33****True Value: 14.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	10.700	524.2	12.900	502.2	13.900	524.2	14.200	502.2	14.800	502.1	15.700
502.2	11.180	524.2	13.200	502.2	13.900	524.2	14.500	524.2	14.900	524.2	16.500
524.1	12.100	524.2	13.300	502.1	14.000	502.2	14.600	524.2	15.100		
502.2	12.400	502.2	13.300	502.2	14.000	502.2	14.700	502.2	15.200		
other	12.890	502.2	13.500	502.2	14.000	524.2	14.700	524.2	15.500		
524.2	12.900	524.2	13.700	502.2	14.030	502.2	14.800	524.2	15.700		

**Water Study: 34****True Value: 12.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	8.480	502.2	10.700	502.2	11.600	524.2	11.800	502.2	12.300	524.2	12.900
502.2	9.250	524.2	10.900	524.2	11.600	524.2	11.800	524.2	12.300	524.2	13.000
524.2	10.100	502.2	11.000	524.2	11.600	524.2	11.900	502.2	12.500	502.2	13.100
524.2	10.390	524.2	11.200	502.2	11.600	502.2	11.900	502.2	12.600	524.2	13.100
502.2	10.400	502.2	11.200	524.2	11.600	524.2	12.000	524.2	12.600	502.2	13.100
502.1	10.400	524.2	11.200	502.2	11.600	524.2	12.070	524.2	12.600	502.2	13.200
502.2	10.500	524.2	11.490	other	11.700	524.2	12.100	524.2	12.600	502.2	13.370
502.2	10.500	524.2	11.500	502.2	11.700	524.2	12.100	524.2	12.690	524.2	13.400
502.2	10.600	502.2	11.510	524.2	11.800	502.2	12.100	502.2	12.700	502.2	13.400
524.2	10.600	524.2	11.600	524.2	11.800	502.2	12.200	524.2	12.800		

**Water Study: 35****True Value: 9.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	6.140	524.2	8.000	524.2	8.440	524.2	8.820	524.2	9.160	524.2	10.100
502.2	7.346	524.2	8.080	502.2	8.460	524.2	8.830	524.2	9.320	502.2	10.200
other	7.720	502.2	8.300	502.2	8.500	524.2	8.880	524.2	9.390	502.2	10.900
502.2	7.870	524.2	8.320	524.2	8.580	524.2	8.900	524.2	9.700	502.2	12.000
502.2	7.880	524.2	8.360	524.2	8.700	524.2	9.000	524.2	9.760		
502.2	8.000	524.2	8.390	502.2	8.800	524.2	9.050	502.2	9.790		

**Water Study: 36****True Value: 16.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	11.700	524.2	14.600	502.2	15.200	502.2	15.700	502.2	16.100	524.2	16.700
524.2	12.900	502.2	14.600	524.2	15.280	502.2	15.700	502.2	16.100	502.2	16.800
524.2	13.000	502.2	14.600	502.2	15.300	524.2	15.800	502.2	16.200	524.2	17.200
502.2	13.300	524.2	14.700	524.2	15.300	524.2	15.800	524.2	16.200	524.2	17.400
502.2	13.400	502.2	14.700	502.2	15.400	other	15.900	524.2	16.400	524.2	17.450
524.2	14.100	524.2	14.700	524.2	15.500	524.2	15.900	other	16.400	524.2	18.300
502.2	14.200	524.2	14.700	524.2	15.500	502.2	15.900	other	16.400	524.2	18.800
502.2	14.320	524.2	14.800	502.2	15.500	524.2	15.960	524.2	16.600	524.2	19.340
524.2	14.400	524.2	15.000	524.2	15.600	502.2	16.000	524.2	16.600	502.2	20.200
524.2	14.500	502.2	15.000	524.2	15.600	524.2	16.000	524.2	16.680		

**Water Study: 37****True Value: 14.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	11.000	524.2	13.100	524.2	13.400	502.2	14.000	502.2	14.400	502.2	15.500
502.2	11.600	524.2	13.200	524.2	13.500	502.2	14.100	524.2	14.400	524.2	15.800
502.2	12.400	524.2	13.200	502.2	13.500	524.2	14.200	524.2	14.500	524.2	16.100
524.2	12.700	524.2	13.200	524.2	13.700	524.2	14.300	502.2	14.500	524.2	16.110
524.2	12.800	524.2	13.250	other	13.800	524.2	14.300	502.2	14.900	524.2	18.400
524.2	12.800	524.2	13.300	524.2	13.800	502.2	14.400	502.2	14.900	524.2	18.600
502.2	13.000	502.2	13.300	524.2	13.900	502.2	14.400	502.2	15.100	524.2	19.600
524.2	13.000	502.2	13.400	524.2	13.930	other	14.400	524.2	15.200		

**Water Study: 38****True Value: 18.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	13.000	502.2	16.100	502.2	16.900	502.2	17.400	524.2	18.300	502.2	19.500
524.2	15.600	524.2	16.300	524.2	16.900	502.2	17.500	524.2	18.400	524.2	19.600
502.2	15.700	502.2	16.300	other	17.000	524.2	17.500	524.2	18.400	502.2	19.800
524.2	15.700	502.2	16.700	524.2	17.000	524.2	17.600	524.2	18.500	502.2	22.100
502.2	15.700	524.2	16.800	524.2	17.100	other	17.600	524.2	18.700	524.2	24.500
524.2	15.900	524.2	16.800	524.2	17.200	524.2	17.600	524.2	18.750		
524.2	15.900	502.2	16.800	524.2	17.200	524.2	502.2.7	502.2	18.800		
524.2	16.000	524.2	16.800	524.2	17.300	524.2	17.800	524.2	18.900		
524.2	16.000	502.2	16.800	502.2	17.300	502.2	17.900	524.2	19.000		
524.2	16.060	524.2	16.900	524.2	17.300	502.2	18.300	524.2	19.500		

**Water Study: 39****True Value: 12.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	8.530	524.2	11.100	502.2	11.800	524.2	12.200	524.2	12.500	524.2	14.300
524.2	10.300	502.2	11.200	524.2	11.800	524.2	12.200	502.2	12.600	524.2	14.990
524.2	10.400	502.2	11.300	524.2	11.800	502.2	12.300	502.2	12.600	524.2	15.800
524.2	10.800	524.2	11.300	524.2	11.800	524.2	12.300	502.2	12.600		
502.2	10.800	524.2	11.400	524.2	11.830	524.2	12.300	502.2	12.900		
524.2	11.000	524.2	11.400	524.2	11.900	524.2	12.300	524.2	13.300		
502.2	11.000	524.2	11.500	524.2	12.000	502.2	12.400	502.2	13.800		
524.2	11.100	502.2	11.600	524.2	12.100	502.2	12.400	524.2	14.000		

**Water Study: 40****True Value: 19.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	11.500	502.2	17.100	502.2	17.800	524.2	18.200	524.2	19.000	524.2	20.300
524.2	11.600	502.2	17.400	524.2	17.800	524.2	18.400	502.2	19.200	524.2	20.500
524.2	15.800	524.2	17.500	524.2	17.900	524.2	18.400	502.2	19.400	524.2	21.700
524.2	15.800	524.2	17.700	502.2	17.900	524.2	18.600	524.2	19.600	524.2	21.800
524.2	16.000	502.2	17.700	524.2	18.000	502.2	18.600	other	19.600	524.2	21.900
524.2	16.500	524.2	17.700	524.2	18.000	524.2	18.800	502.2	19.800	524.2	22.300
524.2	16.700	524.2	17.700	524.2	18.000	524.2	18.800	524.2	19.900	502.2	23.000
524.2	16.800	524.2	17.700	502.2	18.100	524.2	18.800	502.2	19.900		
502.2	16.800	524.2	17.700	502.2	18.100	502.2	18.900	524.2	20.000		
other	17.100	524.2	17.800	524.2	18.100	524.2	18.900	524.2	20.300		

**Water Study: 41****True Value: 15.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	12.900	524.2	14.200	502.2	15.000	524.2	15.400	524.2	15.800	502.2	17.000
502.2	13.400	524.2	14.500	other	15.000	524.2	15.460	502.2	15.900	524.2	17.200
502.2	13.600	524.2	14.600	502.2	15.100	524.2	15.500	524.2	16.000	524.2	18.000
524.2	13.700	524.2	14.600	524.2	15.300	524.2	15.500	524.2	16.200	502.2	18.000
524.2	14.000	524.2	14.600	502.2	15.300	524.2	15.500	502.2	16.200	502.2	18.100
502.2	14.100	524.2	14.700	524.2	15.300	524.2	15.500	502.2	16.300		
524.2	14.200	524.2	14.800	524.2	15.400	524.2	15.600	524.2	16.390		

**Diquat****Water Study: 32****True Value: 28.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
549	6.300	549	18.000	other	22.300	549	25.6000	549	40.800	549	101.000
549	18.000	549	19.000	other	24.100	549	38.800	549	43.900		

**Water Study: 34****True Value: 29.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
549	1.000	549	9.590	549	17.600	549	24.100	549	29.900	549	35.600
549	5.820	549	12.500	549	20.200	549	25.600	549	31.100	549	38.100
549	5.950	549	14.200	other	24.100	549	26.150	549	31.700		

**Water Study: 35****True Value: 37.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
549	10.200	549	19.000	549	24.300	549	29.100	other	44.000		
549	11.900	549	20.700	549	27.600	549	32.800	549	125.000		
549	12.300	549	23.000	549	28.900	549	36.590	549	7230.000		

**Water Study: 36****True Value: 14.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
549.1	7.460	549.1	12.900	other	15.400	549.1	16.400	549.1	20.300	549.1	33.000
549.1	9.600	549.1	13.200	549.1	15.500	549.1	16.700	549.1	20.370	549.1	34.300
549.1	11.600	549.1	14.200	549.1	16.000	other	17.300	549.1	20.700	other	38.600
549.1	11.600	549.1	14.600	549.1	16.200	549.1	18.800	other	21.300		
549.1	11.700	549.1	15.000	549.1	16.300	549.1	19.600	549.1	23.300		

**Water Study: 37****True Value: 8.41 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
549.1	3.890	other	6.100	549.1	6.680	549.1	7.300	549.1	8.290	549.1	17.300
549.1	5.070	549.1	6.180	549.1	6.720	549.1	7.770	549.1	9.070		
549.1	5.080	549.1	6.430	549.1	6.900	549.1	8.050	549.1	9.160		
549.1	5.360	549.1	6.460	549.1	7.020	other	8.140	549.1	9.500		

**Water Study: 38****True Value: 23.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
549.1	2.090	549.1	13.600	549.1	16.500	549.1	18.200	549.1	20.800	549.1	30.150
other	7.830	549.1	15.000	549.1	17.200	549.1	18.600	other	22.400	549.1	31.900
549.1	8.500	549.1	15.400	549.1	18.200	549.1	19.500	549.1	24.100		
549.1	12.700	549.1	16.100	549.1	18.200	549.1	20.500	549.1	26.200		

**Water Study: 39****True Value: 32.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
549.1	8.520	549.1	19.700	549.1	26.500	549.1	29.500	549.1	31.900	549.1	97.700
549.1	11.700	549.1	24.000	549.1	27.100	549.1	30.200	549.1	32.590		
549.1	15.000	549.1	24.200	549.1	28.500	549.1	30.200	549.1	35.900		
549.1	17.700	549.1	24.500	549.1	29.300	549.1	31.500	549.1	44.800		

**Water Study: 40****True Value: 14.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
549.1	5.300	549.1	8.570	549.1	11.200	549.1	12.800	549.1	14.400	549.1	26.600
549.1	5.400	549.1	9.310	549.1	11.500	549.1	12.900	549.1	15.900	549.1	30.600
549.1	5.740	549.1	9.750	549.1	11.500	549.1	13.300	549.1	16.700		
549.1	6.320	549.1	10.100	549.1	12.100	549.1	13.300	549.1	18.000		
549.1	7.550	549.1	10.200	549.1	12.200	other	14.200	549.1	21.300		

**Water Study: 41****True Value: 44.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
549.1	24.400	549.1	33.800	549.1	35.900	549.1	39.200	549.1	44.100	549.1	45.100
549.1	31.500	549.1	35.000	549.1	37.200	549.1	39.300	549.1	45.000	549.1	46.150
549.1	33.400	549.1	35.350	549.1	39.200	549.1	40.000	549.1	45.100		

**Ethylene Dibromide****Water Study: 24****True Value: 0.480 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.352	504	0.406	504	0.452	other	0.484	504	0.515	504	0.600
504	0.380	other	0.408	504	0.453	502.1	0.488	504	0.515	other	0.660
504	0.390	504	0.410	504	0.453	504	0.494	504	0.516		
other	0.397	502.2	0.420	524.1	0.470	504	0.505	502.2	0.520		
504	0.400	504	0.420	504	0.477	504	0.508	504	0.538		
504	0.401	504	0.440	504	0.478	other	0.513	504	0.562		

**Water Study: 25****True Value: 0.944 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.747	504	0.820	504	0.910	504	0.941	504	0.997	504	1.070
504	0.778	504	0.900	504	0.913	504	0.979	other	1.030	504	1.250
504	0.817	504	0.908	other	0.930	504	0.986	other	1.060	other	1.300

**Water Study: 26****True Value: 0.434 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.363	504	0.407	other	0.449	504	0.462	504	0.491	504	0.582
504	0.365	504	0.410	504	0.450	504	0.464	504	0.491	504	0.590
504	0.365	504	0.423	504	0.452	504	0.465	504	0.522	other	0.710
504	0.370	504	0.427	other	0.456	504	0.483	504	0.528	504	2.378
504	0.392	504	0.440	504	0.459	504	0.488	other	0.530	other	3.430
504	0.407	504	0.441	504	0.460	other	0.490	other	0.542		

**Water Study: 27****True Value: 1.45 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	1.010	504	1.190	504	1.350	other	1.420	504	1.500	504	2.190
other	1.030	504	1.227	504	1.350	504	1.430	other	1.540	504	2.530
504	1.170	504	1.300	504	1.400	other	1.450	504	1.900		

**Water Study: 29****True Value: 0.850 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.420	504	0.760	504	0.844	504	0.891	other	1.050		
504	0.533	other	0.799	other	0.846	504	0.922	other	1.104		
504	0.651	504	0.800	504	0.852	504	0.968	504	1.580		
other	0.669	504	0.812	504	0.860	other	1.000	504	2.180		
504	0.751	504	0.820	504	0.874	504	1.010	504	20.200		

**Water Study: 30****True Value: 1.39 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.989	502.2	1.230	other	1.300	504	1.340	524.2	1.400	504	1.590
504	1.120	504	1.240	504	1.300	504	1.370	504	1.430	504	2.480
502.2	1.150	504	1.250	504	1.320	504	1.380	504	1.450	504	7.370
504	1.180	504	1.270	504	1.320	504	1.380	other	1.479	504	14.800
other	1.180	504	1.280	504	1.320	504	1.380	504	1.480		
504	1.200	502.1	1.290	504	1.320	504	1.380	504	1.530		
504	1.210	504	1.300	other	1.330	504	1.400	504	1.570		

**Water Study: 31****True Value: 0.637 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.368	504	0.564	504	0.619	504	0.647	504	0.737		
504	0.528	504	0.580	504	0.620	504	0.653	504	0.750		
504	0.534	504	0.592	504	0.628	504	0.655	504	0.998		
504	0.549	504	0.600	504	0.628	504	0.660	504	2.900		
504	0.560	other	0.604	504	0.638	504	0.670	504	5.860		

**Water Study: 32****True Value: 2.29 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	0.676	504	1.910	504	2.080	504	2.2000	504	2.330	504	2.560
504	1.440	504	1.910	other	2.080	504	2.200	504	2.380	504	2.700
other	1.750	504	1.930	504	2.130	504	2.240	504	2.380	504	2.910
504	1.830	504	1.930	504	2.130	504	2.250	504	2.380	504	3.170
504	1.870	other	1.990	504	2.150	504	2.260	504	2.400		
504	1.877	504	2.044	504	2.160	504	2.260	504	2.400		
504	1.900	504	2.050	504	2.180	504	2.290	504	2.410		
504	1.900	504	2.080	504	2.190	504	2.300	504	2.470		

**Water Study: 33****True Value: 0.143 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.142	504	0.173	504	0.176	504	0.185	504	0.198	504	0.220
504	0.150	504	0.173	504	0.176	504	0.189	504	0.200	504	0.220
other	0.167	504	0.175	504	0.177	504	0.190	504	0.204	504	1.000
504	0.169	504	0.175	504	0.177	504	0.195	504	0.210	504	1.090

**Water Study: 34****True Value: 0.406 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.091	504	0.371	other	0.392	504	0.402	504	0.435	504	0.570
504	0.281	504	0.375	504	0.392	504	0.406	504	0.438	504	0.623
504	0.321	504	0.376	504	0.393	504	0.407	504	0.439	504	0.670
504	0.326	504	0.377	504	0.394	504	0.410	504	0.440	other	0.890
504	0.344	504	0.377	504	0.395	504	0.411	504	0.440	504	2.040
504	0.347	504	0.379	504	0.399	504	0.420	504	0.445		
504	0.354	other	0.386	other	0.400	504	0.423	504	0.457		
504	0.357	other	0.389	504	0.402	504	0.423	504	0.486		

**Water Study: 35**



**True Value: 0.609 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504	0.360	504	0.528	504	0.572	other	0.601	504	0.641	504	0.691
504	0.400	504	0.549	504	0.583	504	0.608	504	0.646	other	0.695
504	0.446	504	0.551	504	0.590	504	0.617	504	0.656	504	0.766
504	0.498	504	0.567	504	0.596	504	0.620	504	0.679	other	3.135
504	0.511	other	0.571	504	0.598	504	0.639	other	0.689	504	7.030

**Water Study: 36****True Value: 0.283 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.171	504.1	0.261	504.1	0.274	504.1	0.280	504.1	0.311	other	0.338
504.1	0.216	504.1	0.262	504.1	0.274	504.1	0.280	504.1	0.312	other	0.360
504.1	0.230	504.1	0.263	504.1	0.274	other	0.282	504.1	0.322	504.1	0.363
504.1	0.231	504.1	0.266	504.1	0.275	504.1	0.285	504.1	0.323	504.1	0.403
551	0.246	504.1	0.268	504.1	0.276	504.1	0.287	504.1	0.325	504.1	0.473
other	0.251	504.1	0.270	504.1	0.276	524.2	0.300	504.1	0.325	504.1	0.476
504.1	0.251	other	0.270	504.1	0.278	504.1	0.310	other	0.333		
504.1	0.259	504.1	0.271	504.1	0.280	504.1	0.310	504.1	0.335		
504.1	0.260	504.1	0.272	504.1	0.280	504.1	0.311	504.1	0.336		

**Water Study: 37****True Value: 0.138 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504.1	0.123	other	0.133	other	0.139	other	0.146	other	0.157	504.1	0.205
504.1	0.125	other	0.135	504.1	0.141	504.1	0.148	504.1	0.160	504.1	0.233
504.1	0.126	504.1	0.136	504.1	0.141	504.1	0.149	504.1	0.165	551	0.243
504.1	0.130	504.1	0.136	504.1	0.143	504.1	0.149	504.1	0.165	504.1	0.246
504.1	0.131	504.1	0.138	504.1	0.145	504.1	0.149	504.1	0.170	504.1	0.271
504.1	0.133	504.1	0.138	504.1	0.146	504.1	0.150	504.1	0.188	504.1	0.494
504.1	0.133	504.1	0.139	504.1	0.146	524.2	0.150	504.1	0.192	504.1	0.705

**Water Study: 38****True Value: 0.336 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504.1	0.130	504.1	0.300	504.1	0.320	504.1	0.348	504.1	0.359	504.1	0.390
504.1	0.245	504.1	0.301	504.1	0.330	504.1	0.348	504.1	0.361	504.1	0.397
504.1	0.257	504.1	0.303	504.1	0.333	504.1	0.349	504.1	0.361	504.1	0.399
504.1	0.276	504.1	0.304	504.1	0.333	504.1	0.351	524.2	0.364	504.1	0.404
504.1	0.282	504.1	0.304	504.1	0.337	504.1	0.351	504.1	0.367	504.1	0.408
504.1	0.286	504.1	0.313	551	0.338	504.1	0.354	504.1	0.368	504.1	0.426
other	0.287	other	0.314	other	0.342	551	0.356	504.1	0.370	504.1	0.438
504.1	0.292	504.1	0.320	504.1	0.343	504.1	0.357	504.1	0.376	504.1	1.890

**Water Study: 39****True Value: 0.227 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504.1	0.137	504.1	0.195	504.1	0.208	504.1	0.223	504.1	0.242	504.1	0.263
504.1	0.174	504.1	0.196	504.1	0.213	504.1	0.228	524.2	0.243	504.1	0.267
504.1	0.185	504.1	0.196	504.1	0.214	504.1	0.231	504.1	0.247	504.1	0.287
504.1	0.185	504.1	0.203	504.1	0.216	504.1	0.234	504.1	0.250	other	0.302
504.1	0.190	504.1	0.205	504.1	0.216	504.1	0.237	504.1	0.254	504.1	1.950
504.1	0.194	other	0.205	504.1	0.222	504.1	0.239	504.1	0.259	504.1	2.500

**Water Study: 40****True Value: 0.638 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504.1	0.297	504.1	0.571	504.1	0.599	504.1	0.630	504.1	0.658	504.1	0.720
other	0.447	other	0.576	504.1	0.601	504.1	0.631	504.1	0.668	504.1	0.742
504.1	0.455	504.1	0.581	504.1	0.601	other	0.634	504.1	0.671	504.1	0.759
504.1	0.530	504.1	0.588	504.1	0.608	504.1	0.636	504.1	0.675	504.1	0.762
504.1	0.531	504.1	0.591	504.1	0.612	504.1	0.641	504.1	0.677	504.1	0.826
504.1	0.541	504.1	0.595	504.1	0.616	551	0.641	other	0.678		
504.1	0.543	504.1	0.596	504.1	0.621	504	0.642	504.1	0.696		
504.1	0.548	504.1	0.597	504.1	0.623	551	0.648	504.1	0.700		
504.1	0.569	504.1	0.598	504.1	0.628	504.1	0.653	551	0.702		

**Water Study: 41****True Value: 0.344 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
504.1	0.280	504.1	0.308	504.1	0.329	504.1	0.339	other	0.368	504.1	0.389
504.1	0.290	504.1	0.318	504.1	0.329	504.1	0.342	504.1	0.375	504.1	0.390
504.1	0.297	504.1	0.319	504.1	0.331	504.1	0.345	504.1	0.380	504.1	0.394
504.1	0.299	504.1	0.320	504.1	0.332	504.1	0.349	504.1	0.385	504.1	0.395
504.1	0.307	504.1	0.323	504.1	0.336	504.1	0.361	other	0.385		
504.1	0.307	504.1	0.325	504.1	0.336	504.1	0.365	504.1	0.389		

**Fluoride****Water Study: 24b****True Value: 1.30 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
414B	0.640	340.3	1.260	340.2	1.280	340.2	1.290	340.2	1.310	340.2	1.330
340.2	1.040	340.2	1.270	340.2	1.280	340.2	1.296	380-75WE	1.310	340.2	1.330
340.2	1.190	380-75WE	1.270	340.2	1.290	380-75WE	1.299	414B	1.310	other	1.340
340.2	1.200	340.2	1.270	340.2	1.290	340.2	1.300	other	1.310	340.2	1.350
340.2	1.210	340.2	1.270	129-71W	1.290	340.2	1.300	414B	1.310	340.2	1.350
other	1.220	340.2	1.270	129-71W	1.290	340.2	1.300	other	1.310	340.3	1.360
380-75WE	1.220	340.2	1.270	340.2	1.290	other	1.300	340.2	1.320	340.2	1.390
340.3	1.220	other	1.280	380-75WE	1.290	340.2	1.300	340.2	1.320		
340.2	1.230	340.2	1.280	340.2	1.290	other	1.300	340.2	1.330		
380-75WE	1.240	340.2	1.280	340.2	1.290	340.2	1.300	414B	1.330		
340.3	1.240	340.1	1.280	340.2	1.290	340.2	1.300	340.2	1.330		

**Water Study: 24a**

**True Value: 1.72 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
414B	0.850	340.2	1.640	340.2	1.700	other	1.720	340.2	1.740	other	1.780
340.2	0.950	340.2	1.650	380-75WE	1.700	340.2	1.720	340.2	1.750	340.3	1.780
340.2	1.470	380-75WE	1.660	340.2	1.700	340.2	1.720	340.2	1.750	340.2	1.800
other	1.580	380-75WE	1.660	340.2	1.700	340.2	1.720	129-71W	1.750	340.1	1.800
340.2	1.600	340.2	1.660	other	1.700	340.2	1.724	340.2	1.750	340.2	1.810
340.2	1.600	340.3	1.660	340.2	1.700	340.2	1.730	340.2	1.750	340.2	1.850
380-75WE	1.610	other	1.680	other	1.700	340.2	1.730	340.2	1.750	129-71W	1.940
340.3	1.620	340.2	1.680	340.2	1.700	340.2	1.730	340.2	1.760		
340.2	1.630	340.2	1.680	340.3	1.700	414B	1.740	340.2	1.760		
414B	1.640	380-75WE	1.689	340.2	1.710	340.2	1.740	340.2	1.760		
340.2	1.640	340.2	1.690	380-75WE	1.710	other	1.740	414B	1.770		

**Water Study: 25a**

**True Value: 2.50 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
340.2	2.100	129-71W	2.340	340.2	2.440	340.2	2.490	340.2	2.520	340.2	2.550
414B	2.140	other	2.340	380-75WE	2.450	340.2	2.490	340.2	2.520	340.2	2.590
129-71W	2.160	340.2	2.380	380-75WE	2.460	340.2	2.500	340.1	2.520	340.2	2.600
340.2	2.190	380-75WE	2.397	340.2	2.460	340.2	2.500	340.2	2.520	340.2	2.650
340.3	2.220	340.2	2.400	340.2	2.480	414B	2.500	other	2.530	other	3.500
340.2	2.260	340.2	2.420	340.2	2.487	340.2	2.500	340.2	2.540		
603	2.320	340.2	2.430	other	2.490	340.2	2.510	340.3	2.550		

**Water Study: 25b**

**True Value: 1.50 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
340.2	1.300	other	1.440	340.2	1.480	340.2	1.500	340.2	1.520	380-75WE	1.550
340.3	1.300	other	1.450	340.2	1.490	340.2	1.500	340.2	1.530	340.2	1.550
340.2	1.310	380-75WE	1.450	340.2	1.490	340.2	1.500	380-75WE	1.534	340.2	1.550
414B	1.330	340.2	1.450	340.2	1.490	340.2	1.500	340.2	1.540	340.3	1.600
129-71W	1.340	340.2	1.460	340.2	1.490	414B	1.510	129-71W	1.540	340.1	1.640
340.2	1.380	340.2	1.460	340.2	1.500	340.2	1.520	340.2	1.540		
603	1.380	other	1.480	340.2	1.500	other	1.520	340.2	1.550		

**Water Study: 26b**

**True Value: 3.41 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	1.210	340.2	3.280	340.2	3.340	129-71W	3.390	380-75WE	3.445	340.2	3.550
340.2	2.910	other	3.280	340.2	3.350	340.2	3.390	340.2	3.450	other	3.550
340.2	3.200	340.2	3.290	340.1	3.350	129-71W	3.390	340.2	3.450	340.2	3.600
380-75WE	3.200	340.2	3.300	414B	3.350	other	3.390	340.2	3.460	340.2	3.600
340.2	3.200	340.2	3.300	340.2	3.350	414B	3.400	other	3.460	414B	3.760
340.3	3.200	other	3.300	340.2	3.350	340.2	3.400	340.2	3.460	340.3	3.770
340.2	3.229	340.2	3.300	380-75WE	3.357	340.2	3.420	340.2	3.480	340.2	3.800
340.2	3.260	340.2	3.300	340.2	3.360	340.2	3.420	340.2	3.480	340.2	4.350
380-75WE	3.260	414B	3.320	340.2	3.380	340.2	3.420	340.2	3.500	340.2	4.350
340.2	3.270	340.2	3.320	340.2	3.380	129-71W	3.420	340.3	3.500		
340.2	3.270	340.2	3.330	340.2	3.390	340.2	3.430	other	3.540		

**Water Study: 26a**

**True Value: 1.25 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
340.2	1.108	340.2	1.210	340.2	1.240	340.2	1.260	340.2	1.270	340.2	1.340
340.2	1.140	340.2	1.210	340.2	1.240	340.2	1.260	340.2	1.270	340.2	1.350
340.2	1.140	380-75WE	1.218	340.2	1.240	340.2	1.260	340.2	1.270	414B	1.360
340.2	1.160	340.2	1.220	340.2	1.240	380-75WE	1.260	340.2	1.280	340.1	1.370
340.2	1.190	129-71W	1.220	340.2	1.250	340.2	1.260	340.2	1.280	129-71W	1.380
340.2	1.200	340.2	1.220	340.2	1.250	340.2	1.260	380-75WE	1.287	340.2	1.420
other	1.200	414B	1.230	other	1.250	129-71W	1.260	414B	1.300	340.3	1.470
340.2	1.200	340.2	1.230	414B	1.250	other	1.270	340.2	1.300	other	3.480
340.2	1.210	340.2	1.240	340.2	1.250	other	1.270	340.3	1.300		
380-75WE	1.210	340.2	1.240	340.2	1.260	other	1.270	340.3	1.300		
other	1.210	340.2	1.240	340.2	1.260	340.2	1.270	340.2	1.310		

**Water Study: 27**

**True Value: 4.35 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
340.2	1.100	other	4.100	340.2	4.300	340.2	4.330	414B	4.440	129-71W	4.650
340.2	2.100	414B	4.190	340.2	4.300	340.3	4.330	340.2	4.450	340.2	4.720
340.2	2.170	340.2	4.200	340.2	4.300	other	4.340	380-75WE	4.450		
414B	2.190	340.1	4.250	340.2	4.310	340.2	4.350	129-71W	4.470		
340.2	3.810	D1179-72B	4.250	340.2	4.320	380-75WE	4.360	other	4.520		
340.2	3.920	340.2	4.250	340.2	4.330	other	4.378	340.2	4.530		
603	4.030	340.2	4.260	340.2	4.330	340.2	4.400	340.2	4.550		

**Water Study: 29**

**True Value: 0.330 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
340.2	0.266	340.3	0.305	340.3	0.315	129-71W	0.330	340.2	0.340	380-75WE	0.360
340.2	0.270	380-75WE	3.070	340.2	0.320	340.2	0.332	340.2	0.340	other	0.360
340.2	0.290	340.2	3.100	340.2	0.320	413B	0.332	340.2	0.340	340.2	0.393
340.2	0.290	other	0.310	other	0.320	380-75WE	0.338	129-71W	0.340		
380-75WE	0.302	340.2	0.310	other	0.330	340.2	0.340	340.2	0.350		
340.2	0.303	340.2	0.314	340.2	0.330	414B	0.340	340.2	0.350		

**Water Study: 30**

**True Value: 7.90 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
380-75WE	1.520	340.2	7.570	340.2	7.780	340.2	7.850	340.2	8.000	413E	8.170
340.2	5.540	340.2	7.650	340.2	7.800	340.2	7.860	380-75WE	8.000	other	8.180
340.2	6.180	340.2	7.650	340.2	7.800	340.2	7.900	340.2	8.000	340.2	8.190
other	7.190	380-75WE	7.650	340.2	7.800	340.2	7.900	340.2	8.030	414B	8.225
340.2	7.200	340.2	7.680	340.2	7.810	340.2	7.910	340.2	8.040	340.2	8.550
other	7.500	340.2	7.700	340.2	7.810	380-75WE	7.930	340.2	8.050	340.2	16.800
other	7.500	340.2	7.720	340.2	7.820	340.2	7.940	380-75WE	8.060		
340.3	7.510	380-75WE	7.721	340.2	7.830	380-75WE	7.940	340.2	8.060		
414B	7.540	340.2	7.750	340.2	7.830	340.3	7.950	other	8.080		
other	7.540	129-71W	7.760	414B	7.840	380-75WE	7.980	414B	8.105		
340.1	7.550	340.2	7.770	340.2	7.850	340.2	7.990	340.2	8.125		

**Water Study: 31****True Value: 5.70 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
340.1	4.200	340.2	5.440	340.2	5.544	380-75WE	5.650	340.2	5.700	340.2	5.830
340.2	5.300	340.2	5.440	414B	5.560	340.2	5.660	other	5.780	340.2	6.000
other	5.340	380-75WE	5.450	340.2	5.600	340.2	5.662	414B	5.790	other	6.130
340.3	5.370	340.2	5.500	340.2	5.640	340.3	5.670	other	5.800		
340.2	5.420	129-71W	5.520	340.2	5.640	340.2	5.690	340.2	5.800		
340.2	5.430	340.2	5.540	340.2	5.650	340.2	5.690	129-71W	5.800		

**Water Study: 32****True Value: 2.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	1.340	340.2	1.930	340.2	1.970	340.2	1.990	340.2	2.020	340.2	2.060
340.1	1.640	340.3	1.930	340.2	1.970	414B	2.000	340.2	2.020	340.2	2.070
129-71W	1.790	380-75WE	1.940	380-75WE	1.975	340.2	2.000	340.2	2.020	340.2	2.070
340.2	1.800	340.2	1.940	414B	1.975	340.2	2.000	340.2	2.030	340.2	2.077
340.2	1.800	340.2	1.950	340.2	1.980	380-75WE	2.000	340.3	2.030	340.2	2.140
340.2	1.860	380-75WE	1.950	414B	1.980	340.2	2.000	other	2.038	340.2	3.340
380-75WE	1.860	340.2	1.950	340.2	1.980	340.2	2.000	340.2	2.040	340.2	4.700
413E	1.880	340.2	1.950	380-75WE	1.990	340.2	2.009	340.2	2.040		
340.2	1.890	380-75WE	1.960	414B	1.990	340.2	2.010	340.2	2.040		
340.2	1.900	340.2	1.960	340.1	1.990	380-75WE	2.010	other	2.040		
340.2	1.930	340.2	1.960	380-75WE	1.990	340.2	2.020	340.2	2.040		
other	1.930	340.2	1.970	340.3	1.990	340.2	2.020	340.2	2.050		



**Water Study: 33****True Value: 6.60 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
340.2	5.590	340.2	6.240	414B	6.450	340.2	6.500	129-71W	6.560	340.2	6.670
340.1	5.930	other	6.300	340.2	6.480	414B	6.510	340.2	6.573	other	6.690
340.1	6.340.2	other	6.320	380-75WE	6.480	340.2	6.530	340.2	6.585	340.2	6.720
340.2	6.170	340.2	6.370	other	6.490	414B	6.540	340.2	6.610	340.2	6.750
340.2	6.190	340.2	6.400	340.2	6.500	340.2	6.550	340.2	6.610	340.2	6.800
340.3	6.200	340.2	6.440	380-75WE	6.500	340.2	6.560	340.2	6.643		

**Water Study: 34****True Value: 1.10 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
340.1	0.870	380-75WE	1.060	340.2	1.080	340.2	1.090	340.2	1.120	340.2	1.140
380-75WE	0.959	340.2	1.060	340.2	1.080	340.2	1.100	340.2	1.120	other	1.142
300	0.960	340.2	1.060	other	1.080	340.2	1.100	380-75WE	1.120	340.2	1.150
340.2	1.000	380-75WE	1.060	340.2	1.080	340.2	1.100	413E	1.120	340.1	1.160
other	1.020	340.3	1.070	340.2	1.080	340.3	1.100	340.2	1.120	29	1.160
340.2	1.030	414B	1.070	380-75WE	1.084	other	1.100	340.2	1.120	340.2	1.180
340.2	1.040	340.1	1.070	340.2	1.090	340.2	1.100	340.2	1.130	other	1.190
340.2	1.040	414B	1.072	340.2	1.090	340.2	1.100	340.2	1.130	340.2	1.230
other	1.050	340.2	1.080	340.2	1.090	340.2	1.102	340.2	1.130	340.2	1.620
340.2	1.050	380-75WE	1.080	340.2	1.090	340.2	1.110	340.2	1.140	340.2	21.080
other	1.060	340.2	1.080	340.2	1.090	340.2	1.120	380-75WE	1.140		

**Water Study: 35****True Value: 3.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
380-75WE	1.770	340.1	3.610	340.2	3.750	340.2	3.800	340.2	3.880	other	3.960
340.2	3.450	340.2	3.680	340.1	3.760	340.2	3.800	340.2	3.900	340.2	3.980
other	3.470	413E	3.680	340.2	3.780	340.2	3.810	340.2	3.900	other	3.980
380-75WE	3.490	340.1	3.700	414B	3.780	603	3.810	340.2	3.900		
340.2	3.520	380-75WE	3.700	other	3.790	340.2	3.830	340.2	3.900		
380-75WE	3.540	340.2	3.710	other	3.790	340.2	3.840	340.2	3.920		
340.3	3.560	340.2	3.720	340.2	3.790	340.2	3.840	340.2	3.926		
340.2	3.570	340.2	3.740	340.2	3.790	340.2	3.880	414B	3.930		

**Water Study: 36****True Value: 7.20 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	1.600	Manual Elec.	7.060	Manual Elec.	7.220	Manual Elec.	7.280	300	7.360	Manual Elec.	7.530
413E	6.640	380-75WE	7.090	300	7.230	340.2	7.280	Manual Elec.	7.370	Manual Elec.	7.600
other	6.660	300	7.110	340.2	7.230	Manual Elec.	7.280	300	7.380	other	7.690
Manual Elec.	6.680	Manual Elec.	7.130	340.2	7.240	Manual Elec.	7.300	414B	7.380	380-75WE	7.750
Manual Elec.	6.800	other	7.150	380-75WE	7.240	other	7.300	other	7.383	Manual Elec.	7.990
other	6.840	Manual Elec.	7.160	Manual Elec.	7.250	340.2	7.300	300	7.390	Manual Elec.	8.050
Manual Elec.	6.950	Manual Elec.	7.170	Manual Elec.	7.250	Manual Elec.	7.310	300	7.390		
380-75WE	6.960	300	7.180	380-75WE	7.260	other	7.320	340.2	7.410		
other	6.970	380-75WE	7.190	Manual Elec.	7.260	380-75WE	7.340	Manual Elec.	7.420		
129-71W	7.010	300	7.190	129-71W	7.260	Manual Elec.	7.350	Manual Elec.	7.450		
380-75WE	7.010	340.1	7.200	380-75WE	7.270	Manual Elec.	7.350	380-75WE	7.460		

**Water Study: 37**

**True Value: 1.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
Manual Elec.	0.871	Manual Elec.	1.660	Manual Elec.	1.690	Auto Aliza	1.730	Manual Elec.	1.770	Manual Elec.	1.820
300	1.536	300	1.660	Manual Elec.	1.700	Manual Elec.	1.740	Manual Elec.	1.780	other	1.830
300	1.600	380-75WE	1.660	380-75WE	1.700	380-75WE	1.740	Manual Elec.	1.789	Manual Elec.	1.840
Manual Elec.	1.600	380-75WE	1.660	300	1.710	Auto Aliza	1.740	Manual Elec.	1.790	other	1.940
Manual Elec.	1.605	Manual Elec.	1.670	Manual Elec.	1.710	other	1.740	Manual Elec.	1.790	Manual Elec.	2.050
Manual Elec.	1.610	300	1.670	Manual Elec.	1.710	300	1.740	Manual Elec.	1.790		
other	1.630	380-75WE	1.680	Manual Elec.	1.720	340.2	1.750	other	1.800		
340.2	1.640	300	1.680	Manual Elec.	1.730	Manual Elec.	1.750	Manual Elec.	1.800		
Manual Elec.	1.640	300	1.690	129-71W	1.730	380-75WE	1.750	Manual Elec.	1.802		
Manual Elec.	1.650	Manual Elec.	1.690	380-75WE	1.730	300	1.760	Manual Elec.	1.810		

**Water Study: 38****True Value: 4.70 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	4.060	300	4.490	129-71W	4.550	Manual Elec.	4.600	Auto Aliza	4.730	Manual Elec.	4.842
300	4.330	Manual Elec.	4.500	380-75WE	4.550	Manual Elec.	4.600	Manual Elec.	4.735	340.2	4.850
Manual Elec.	4.380	129-71W	4.500	other	4.560	380-75WE	4.600	Manual Elec.	4.740	300	4.860
Manual Elec.	4.410	Manual Elec.	4.500	380-75WE	4.580	Manual Elec.	4.610	Manual Elec.	4.740	300	4.870
Manual Elec.	4.430	Manual Elec.	4.510	Manual Elec.	4.580	Auto Aliza	4.610	Manual Elec.	4.740	Manual Elec.	4.890
other	4.440	Manual Elec.	4.520	Manual Elec.	4.590	other	4.610	Manual Elec.	4.750	Manual Elec.	4.900
Manual Elec.	4.450	Manual Elec.	4.530	Manual Elec.	4.600	300	4.620	300	4.770	Manual Elec.	4.920
Manual Elec.	4.460	Manual Elec.	4.530	Manual Elec.	4.600	300	4.650	380-75WE	4.780	300	4.940
Manual Elec.	4.480	340.2	4.540	380-75WE	4.600	other	4.701	Manual Elec.	4.780	300	4.990
Manual Elec.	4.490	Auto Aliza	4.540	Manual Elec.	4.600	300	4.720	other	4.800	300	5.110
340.2	4.490	Manual Elec.	4.550	Manual Elec.	4.600	Manual Elec.	4.730	Manual Elec.	4.800		

**Water Study: 39****True Value: 2.90 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
300	2.470	Manual Elec.	2.660	Manual Elec.	2.700	Manual Elec.	2.740	Manual Elec.	2.820	300	2.880
Manual Elec.	2.580	Manual Elec.	2.660	Manual Elec.	2.700	Manual Elec.	2.740	Auto Aliza	2.820	Manual Elec.	2.890
Manual Elec.	2.590	300	2.670	Manual Elec.	2.700	other	2.740	Manual Elec.	2.820	Manual Elec.	2.900
other	2.600	Manual Elec.	2.670	Manual Elec.	2.700	other	2.750	Manual Elec.	2.840	Manual Elec.	2.910
300	2.610	380-75WE	2.670	other	2.720	Manual Elec.	2.760	Manual Elec.	2.850	Manual Elec.	2.920
Manual Elec.	2.640	380-75WE	2.670	300	2.730	380-75WE	2.760	380-75WE	2.850	Manual Elec.	2.940
Manual Elec.	2.650	Manual Elec.	2.680	Manual Elec.	2.740	Manual Elec.	2.770	Manual Elec.	2.850	300	2.960
Manual Elec.	2.650	other	2.680	Manual Elec.	2.740	380-75WE	2.810	Manual Elec.	2.850	Manual Elec.	3.050
300	2.650	Manual Elec.	2.690	Manual Elec.	2.740	other	2.820	300	2.860	300	3.170

**Water Study: 40****True Value: 1.40 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
Manual Elec.	1.140	Manual Elec.	1.230	Manual Elec.	1.250	300	1.270	Manual Elec.	1.300	Manual Elec.	1.310
Manual Elec.	1.160	Manual Elec.	1.230	Manual Elec.	1.250	Auto Aliza	1.270	Manual Elec.	1.300	Manual Elec.	1.320
Manual Elec.	1.180	Manual Elec.	1.230	Manual Elec.	1.250	Auto Aliza	1.270	Manual Elec.	1.300	Auto Aliza	1.320
Manual Elec.	1.180	300	1.240	380-75WE	1.250	Manual Elec.	1.270	380-75WE	1.300	380-75WE	1.330
300	1.200	Manual Elec.	1.240	300	1.260	300	1.280	Manual Elec.	1.300	Manual Elec.	1.350
Manual Elec.	1.200	other	1.240	Manual Elec.	1.260	300	1.280	Manual Elec.	1.300	other	1.360
380-75WE	1.200	other	1.240	300	1.260	380-75WE	1.280	Manual Elec.	1.309	Manual Elec.	1.360
380-75WE	1.210	300	1.240	300	1.260	380-75WE	1.280	Manual Elec.	1.310	Manual Elec.	1.380
other	1.210	Manual Elec.	1.240	Manual Elec.	1.260	Manual Elec.	1.290	340.2	1.310	Manual Elec.	1.390
Manual Elec.	1.210	300	1.250	300	1.260	Manual Elec.	1.290	300	1.310	300	1.400
Manual Elec.	1.220	380-75WE	1.250	Manual Elec.	1.270	Manual Elec.	1.297	other	1.310	Manual Elec.	1.440

**Water Study: 41****True Value: 6.20 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
Manual Elec.	1.240	Manual Elec.	5.870	Manual Elec.	5.950	Manual Elec.	6.030	380-75WE	6.200	380-75WE	6.490
other	5.700	300	5.890	300	5.960	Manual Elec.	6.050	Manual Elec.	6.200	Manual Elec.	6.570
300	5.750	Manual Elec.	5.890	300	5.970	300	6.060	300	6.210	Manual Elec.	6.590
Manual Elec.	5.800	Manual Elec.	5.902	380-75WE	5.980	380-75WE	6.090	380-75WE	6.240	Manual Elec.	6.670
Manual Elec.	5.800	Manual Elec.	5.920	Manual Elec.	6.000	300	6.140	other	6.240	300	7.070
Manual Elec.	5.810	other	5.930	Manual Elec.	6.010	300	6.170	Manual Elec.	6.270	Manual Elec.	8.040
other	5.820	Manual Elec.	5.930	Manual Elec.	6.020	Manual Elec.	6.170	Manual Elec.	6.390		
Manual Elec.	5.850	Auto Aliza	5.950	380-75WE	6.030	Manual Elec.	6.200	300	6.480		

**Glyphosate****Water Study: 32****True Value: 447 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
547	360.000	547	428.000	547	443.000	547	461.000	547	483.000		
547	360.000	547	438.300	547	446.000	547	476.000	other	490.000		
547	411.000	547	440.000	547	459.000	547	482.000	547	512.000		

**Water Study: 33****True Value: 308 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	192.000	other	255.000	547	268.000	547	306.000	547	317.000	547	326.3999
547	248.000	547	263.000	547	287.000	547	307.000	547	323.000		

**Water Study: 34****True Value: 438 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
547	284.000	547	398.000	547	420.000	547	428.000	547	454.000	547	510.000
547	397.000	547	407.000	547	420.000	547	441.400	547	463.000	547	728.000
547	396.000	547	416.000	547	424.000	547	446.000	547	464.000		
other	390.000	547	416.000	547	425.000	547	453.000	547	490.000		

**Water Study: 35****True Value: 665 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
547	57.200	547	609.000	547	637.000	547	654.000	547	732.000		
547	562.000	547	623.000	547	650.000	547	682.000	547	750.000		
547	573.000	547	626.000	547	651.000	547	690.000	other	1515.000		

**Water Study: 36****True Value: 528 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
547	356.000	547	490.000	547	513.000	547	525.000	other	559.000	547	579.000
6651	453.000	547	492.000	547	515.000	547	536.000	6651	562.000	547	584.000
other	468.000	other	502.000	547	518.000	547	538.000	547	567.000		
547	478.000	547	505.000	547	520.000	547	552.500	other	570.000		
547	490.000	547	512.000	547	520.000	547	554.000	547	572.000		

**Water Study: 37****True Value: 780 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
547	7.940	547	663.000	547	740.000	547	785.000	547	802.000	547	861.000
547	74.800	other	720.000	547	751.000	547	785.000	547	808.100	547	1590.000
547	605.000	6651	725.000	547	777.000	547	786.000	547	815.000		
547	628.000	547	739.000	547	781.000	547	798.000	547	820.000		

**Water Study: 38****True Value: 410 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
547	292.000	547	409.000	547	430.000	547	450.000	547	481.000		
other	345.000	547	410.000	547	435.000	547	455.000	547	486.000		
547	399.000	547	411.000	547	443.000	547	461.000	547	489.000		
547	401.000	other	420.000	547	444.000	547	473.000	other	535.000		
547	406.400	547	420.000	547	445.000	547	473.000	other	580.000		

**Water Study: 39****True Value: 620 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
547	450.000	547	599.000	547	631.000	547	639.000	547	658.000	6651	712.000
547	545.000	547	612.000	547	633.000	547	640.000	547	659.000	547	726.000
547	580.000	547	622.000	547	637.000	547	648.000	547	677.000		
547	583.000	547	623.000	547	638.000	547	652.000	547	683.000		

**Water Study: 40****True Value: 375 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
547	239.500	547	360.600	547	381.000	547	394.000	547	403.000	547	416.000
547	336.000	547	369.000	other	385.000	547	394.000	other	405.000	547	416.000
547	340.000	547	370.000	547	385.000	547	396.000	547	408.000	547	433.000
547	355.000	547	377.000	547	386.000	547	398.000	547	411.000	547	435.000
547	360.000	547	380.000	547	388.000	547	399.000	547	415.000	547	460.000

**Water Study: 41****True Value: 560 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
547	487.000	547	519.000	547	561.900	547	571.000	547	604.000	547	607.000
547	512.000	547	538.000	547	564.000	547	572.900	547	606.000	547	644.000
547	515.000	547	538.000	547	567.000	547	576.000	547	606.000		

## Heptachlor

### Water Study: 24b

True Value: 3.15 ug/L

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.953	508	2.560	other	2.660	505	2.831	505	3.250	505	4.034
508	2.124	505	2.570	other	2.660	508	2.840	505	3.260	505	4.130
other	2.220	other	2.570	other	2.680	505	2.870	505	3.270	505	6.010
505	2.260	508	2.580	508	2.680	other	2.900	other	3.300		
other	2.340	508	2.580	508	2.710	505	3.010	505	3.348		
505	2.370	508	2.650	505	2.720	505	3.150	505	3.740		

### Water Study: 24a

True Value: 0.263 ug/L

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.065	508	0.208	505	0.229	508	0.244	other	0.267	508	0.335
505	0.186	505	0.216	505	0.234	505	0.250	505	0.272	505	0.350
other	0.193	508	0.219	505	0.238	505	0.251	505	0.280	505	1.777
other	0.196	other	0.220	other	0.240	508	0.260	505	0.290		
505	0.198	508	0.224	508	0.241	505	0.262	505	0.294		
other	0.206	other	0.225	508	0.242	505	0.265	other	0.310		

### Water Study: 25b

True Value: 0.113 ug/L

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.071	508	0.079	505	0.086	other	0.096	505	0.114	505	0.117
508	0.074	other	0.0827	505	0.089	other	0.0974	508	0.115	508	0.127
508	0.078	508	0.084	508	0.090	508	0.111	other	0.116	508	0.132

### Water Study: 25a

True Value: 1.42 ug/L

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.972	508	1.140	508	1.230	508	1.390	505	1.520		
other	1.020	505	1.187	505	1.260	508	1.400	other	1.530		
other	1.050	508	1.190	508	1.291	508	1.430	508.1	1.640		
508	1.090	508	1.210	other	1.330	505	1.460				



**Water Study: 26****True Value: 2.27 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.514	other	1.750	525	2.030	505	2.200	505	2.350	525.1	4.516
505	1.178	508	1.760	505	2.101	505	2.210	505	2.390		
other	1.510	508	1.860	other	2.140	508	2.230	other	2.400		
508.1	1.530	505	1.910	508	2.150	505	2.240	508	2.460		
other	1.650	508	1.930	other	2.168	508	2.320	505	2.880		
505	1.690	508	1.980	505	2.190	525	2.340	505	3.090		

**Water Study: 27****True Value: 0.642 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.381	525	0.421	508	0.530	505	0.577	508	0.638	508	0.678
508	0.411	505	0.430	508	0.543	508	0.618	508	0.639	505	0.698
508	0.413	508	0.437	508	0.550	505	0.628	508	0.660	508	0.817
other	0.415	508	0.492	505	0.576	508	0.630	other	0.669	505	1.040

**Water Study: 29****True Value: 0.370 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.150	508	0.246	508	0.290	508	0.315	other	0.330	508	0.380
other	0.232	508	0.258	508	0.294	other	0.317	other	0.340	508	0.381
508	0.238	508	0.264	other	0.310	508	0.318	505	0.350	505	0.395
508	0.240	508	0.284	505	0.310	508	0.326	505	0.358	508	0.400

**Water Study: 30****True Value: 1.38 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.506	other	0.958	505	1.100	508	1.200	508	1.260	508	1.420
505	0.663	505	0.988	508	1.100	other	1.202	508	1.270	other	1.480
505	0.720	other	0.990	508	1.110	other	1.210	508	1.287	505	1.500
508	0.847	508	1.000	other	1.130	other	1.210	508	1.320	508	1.520
508	0.875	508	1.030	505	1.160	508	1.230	other	1.330	508	1.520
508	0.933	508	1.030	508	1.170	508	1.230	508	1.330	505	1.530
508	0.940	508	1.070	505	1.180	505	1.240	other	1.350	508	1.530
508	0.949	505	1.090	508	1.190	508	1.260	508	1.390		

**Water Study: 31****True Value: 1.44 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.514	508	0.890	508	0.985	other	1.220	508	1.340	508	1.680
505	0.523	505	0.924	508	1.040	508	1.224	508	1.390		
505	0.531	508	0.948	508	1.120	508	1.252	508	1.430		
525.1	0.654	508	0.968	508	1.150	508	1.330	508	1.510		
508	0.875	508	0.980	508	1.220	508	1.340	other	1.600		

**Water Study: 32****True Value: 0.443 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.070	508	0.330	508	0.369	other	0.399	508	0.462	505	0.529
508	0.107	525.1	0.332	508	0.380	508	0.405	505	0.467	505	0.532
508	0.251	508	0.337	505	0.383	508	0.408	508	0.469	525.1	0.590
525.1	0.288	508	0.349	508	0.384	508	0.426	505	0.472	508	0.620
508	0.288	508	0.349	508	0.386	505	0.433	508	0.481	508	0.636
508	0.310	508	0.352	other	0.386	508	0.445	508	0.489	525.1	0.860
508	0.321	other	0.353	508	0.390	508	0.446	505	0.493		
505	0.323	505	0.356	525.1	0.394	505	0.450	525.1	0.503		
508	0.324	505	0.358	508	0.395	508	0.452	505	0.508		
525.1	0.330	508	0.363	525.1	0.395	508	0.460	505	0.510		

**Water Study: 33****True Value: 1.73 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.020	508	1.200	508	1.280	525.1	1.420	508	1.500	508	1.780
other	0.608	508	1.220	508	1.290	508	1.430	508	1.550	505	1.980
508	0.810	508	1.250	505	1.300	508	1.450	505	1.560		
508	1.060	525.1	1.250	505	1.314	525.1	1.460	525.1	1.580		
508	1.060	508	1.260	508	1.370	525.1	1.490	508	1.700		
508	1.190	508	1.280	508	1.402	525.1	1.490	505	1.710		

**Water Study: 34****True Value: 0.914 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.351	508	0.618	505	0.724	508	0.800	525.1	0.862	508	0.930
505	0.358	other	0.620	508	0.728	525.1	0.812	525.1	0.871	other	0.970
525.1	0.490	505	0.638	525.1	0.734	508	0.819	505	0.883	505	1.005
508	0.495	508	0.639	505	0.736	508	0.822	525.1	0.885	525.1	1.090
525.1	0.546	508	0.707	508	0.751	508	0.823	505	0.899	508	1.220
508	0.548	508	0.713	508	0.758	505	0.830	505	0.905	508	1.490
508	0.567	508	0.714	505	0.770	508	0.840	505	0.906		
508	0.588	505	0.720	508	0.775	525.1	0.850	505	0.911		
508	0.595	505	0.720	508	0.780	508	0.853	508	0.916		

**Water Study: 35****True Value: 2.54 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	1.080	508	1.820	508	2.100	508	2.310	505	2.470	525.1	2.610
525.1	1.344	508	1.893	508	2.130	508	2.350	505	2.500	other	2.720
508	1.360	508	1.900	505	2.190	525.1	2.390	508	2.540	other	3.100
508	1.440	505	1.920	508	2.240	508	2.410	508	2.560		
508	1.670	508	1.990	525.1	2.270	505	2.420	505	2.570		
508	1.700	other	2.050	508	2.310	525.1	2.460	508	2.600		

**Water Study: 36****True Value: 0.751 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.172	508	0.594	525.2	0.660	508	0.727	508	0.800	505	0.936
508.1	0.440	508	0.622	508	0.660	508	0.730	505	0.801	525.2	0.947
508	0.480	505	0.624	other	0.661	508	0.730	505	0.816	508.1	1.070
508	0.504	508	6.320	508	0.673	525.2	0.733	525.2	0.825	505	1.310
508	0.530	525.1	0.640	508	0.675	505	0.736	508.1	0.828	525.2	2.200
508	0.562	505	0.640	525.2	0.676	505	0.746	508	0.828		
525.2	0.566	508	0.640	508	0.676	505	0.750	505	0.829		
508	0.570	525.2	0.650	525.2	0.714	508	0.784	505	0.840		
525.2	0.574	508	0.654	other	0.721	508	0.785	505	0.882		
other	0.585	508	0.659	508	0.726	525.2	0.791	508	0.896		

**Water Study: 37****True Value: 0.563 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.010	508	0.412	508	0.450	505	0.501	508	0.559	505	0.675
508	0.322	508	0.422	525.2	0.457	505	0.513	505	0.565	505	0.695
508	0.350	other	0.423	508	0.471	508	0.524	525.2	0.570	505	0.702
508.1	0.355	508	0.425	508	0.472	505	0.529	other	0.602	525.2	0.802
508	0.371	525.2	0.428	508	0.484	508	0.534	505	0.605	508	1.080
508	0.380	508	0.430	505	0.487	505	0.540	525.2	0.612		
525.2	0.393	508.1	0.435	508	0.500	other	0.549	other	0.619		
508	0.402	525.2	0.435	525.2	0.500	508	0.550	508	0.620		

**Water Study: 38****True Value: 1.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	0.581	508	0.885	508	1.000	508	1.120	505	1.180	508.1	1.310
508	0.601	525.2	0.900	508	1.040	508	1.120	505	1.200	508	1.430
508	0.707	508	0.901	508	1.040	508	1.130	other	1.200	505	1.430
508.1	0.770	508	0.935	525.2	1.050	505	1.140	525.2	1.220	508	1.430
525.2	0.796	508	0.938	508	1.060	other	1.150	508	1.230	525.2	1.810
508	0.806	508.1	0.953	505	1.080	508	1.160	505	1.230		
other	0.850	508	0.965	505	1.090	525.2	1.160	508	1.270		
505	0.855	508	0.967	508	1.090	508	1.170	525.2	1.280		
525.2	0.883	508	0.992	508	1.100	508	1.170	505	1.310		

**Water Study: 39****True Value: 0.687 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.280	508	0.497	508	0.551	508	0.610	505	0.670	525.2	0.718
508	0.422	525.2	0.506	other	0.560	525.2	0.620	505	0.674	508.1	0.735
508	0.458	508	0.525	508	0.560	508.1	0.630	508	0.681	508	0.739
525.2	0.460	525.2	0.529	525.2	0.560	other	0.647	508	0.682	525.2	0.740
508	0.467	508	0.535	508	0.560	508	0.650	505	0.697	508	0.749
508	0.470	505	0.542	525.2	0.565	525.2	0.654	505	0.700	508	0.785
other	0.484	525.2	0.549	505	0.583	505	0.658	525.2	0.710	508	0.919

**Water Study: 40****True Value: 2.33 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.980	other	1.640	508	1.950	525.2	2.100	508	2.320	other	2.440
508	1.060	508	1.740	525.2	1.960	508	2.140	525.2	2.330	508	2.460
508	1.070	508.1	1.810	525.2	1.980	505	2.140	508	2.340	505	2.470
525.2	1.140	508	1.810	508	1.980	other	2.142	508	2.360	505	2.520
508	1.140	525.2	1.850	505	1.990	525.2	2.170	508	2.360	525.2	2.550
508	1.290	525.2	1.850	505	2.010	508	2.190	508.1	2.380	505	2.550
508	1.390	525.2	1.880	508	2.030	525.2	2.260	508	2.400	525.2	2.810
508	1.550	508	1.900	508.1	2.040	508	2.270	505	2.400	505	2.810
508	1.630	other	1.950	508	2.050	508	2.300	508	2.400	525.2	3.680

**Water Study: 41****True Value: 0.83 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508.1	0.165	525.2	0.578	525.2	0.649	508	0.674	505	0.742	505	0.865
525.2	0.370	525.2	0.579	525.2	0.650	508	0.675	other	0.747	525.2	0.868
505	0.458	508	0.587	508.1	0.658	508	0.690	508	0.760	505	0.898
508	0.548	other	0.590	508	0.659	505	0.690	other	0.770	508.1	0.915
525.2	0.550	508	0.634	other	0.664	508	0.694	505	0.777	508	1.330
508	0.560	508	0.636	525.2	0.667	508.1	0.730	508	0.812		
508	0.561	525.2	0.640	525.2	0.668	505	0.735	505	0.827		
508.1	0.567	508	0.647	525.2	0.670	508	0.737	508	0.828		

**Heptachlor Epoxide****Water Study: 24a****True Value: 0.161 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.046	505	0.133	other	0.145	505	0.157	505	0.170	508	0.207
505	0.116	508	0.137	508	0.145	505	0.158	508	0.173	other	0.310
508	0.120	other	0.140	505	0.149	505	0.161	508	0.174	505	0.514
other	0.124	other	0.141	505	0.155	505	0.163	508	0.180		
505	0.130	505	0.142	other	0.155	505	0.164	508	0.188		
505	0.130	other	0.143	505	0.155	505	0.166	other	0.201		

**Water Study: 24b****True Value: 1.61 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.624	505	1.401	505	1.460	other	1.560	505	1.660	508	2.350
505	1.200	505	1.430	505	1.460	505	1.560	505	1.680	other	3.000
508	1.380	508	1.440	505	1.510	508	1.590	505	1.690	505	3.050
505	1.380	508	1.440	other	1.520	505	1.600	505	1.710		
other	1.390	508	1.450	508	1.530	505	1.606	other	1.940		
other	1.400	other	1.450	other	1.540	505	1.620	508	2.150		

**Water Study: 25a****True Value: 0.771 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.597	other	0.715	508	0.757	508	0.798	other	0.817	508	0.885
505	0.646	other	0.726	508	0.763	508.1	0.800	505	0.838		
508	0.685	505	0.732	508	0.774	508	0.802	other	0.850		
508	0.699	other	0.752	508	0.780	505	0.809	508	0.865		

**Water Study: 25b****True Value: 0.094 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.075	508	0.080	other	0.0843	508	0.098	other	0.110		
505	0.076	other	0.0802	505	0.085	505	0.101	505	0.110		
508	0.078	505	0.081	508	0.092	508	0.104	508	0.110		
508	0.080	508	0.084	508	0.096	other	0.108	508	0.123		

**Water Study: 26a****True Value: 0.198 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.074	508	0.180	other	0.190	508	0.204	505	0.228	505	1.770
other	0.148	525	0.181	505	0.195	525	0.208	505	0.243		
other	0.159	505	0.183	508	0.195	other	0.220	505	0.254		
508	0.171	508	0.184	505	0.195	505	0.223	508	0.285		
508	0.172	505	0.184	other	0.197	505	0.223	505	0.356		
525	0.179	525.1	0.186	505	0.199	508	0.227	508	0.542		

**Water Study: 26b****True Value: 1.81 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.402	505	1.540	other	1.640	525.1	1.717	505	1.840	505	1.980
other	1.400	525	1.540	508	1.640	505	1.727	525	1.850	508	2.060
525	1.420	508	1.590	505	1.648	505	1.760	505	1.880	505	2.090
other	1.460	other	1.630	508	1.700	505	1.789	505	1.940	505	2.120
508	1.530	505	1.636	508	1.700	other	1.800	508	1.960	other	2.300

**Water Study: 27****True Value: 0.533 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.272	508	0.419	505	0.452	505	0.493	505	0.524	other	0.578
525	0.275	508	0.436	505	0.453	508	0.499	508	0.540	505	0.606
508	0.384	other	0.442	508	0.459	508	0.500	508	0.548	508	0.650
508	0.393	508	0.450	508	0.469	508	0.521	508	0.568	508	0.878

**Water Study: 29****True Value: 0.267 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.110	505	0.200	508	0.226	other	0.250	505	0.266		
508	0.133	508	0.204	508	0.234	508	0.250	508	0.286		
other	0.157	508	0.205	508	0.236	508	0.252	505	0.298		
505	0.194	508	0.218	508	0.246	other	0.254	508	0.310		
508	0.199	508	0.220	other	0.249	other	0.260	505	0.360		

**Water Study: 30****True Value: 0.85 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.463	508	0.678	other	0.760	508	0.800	508	0.842	508	0.900
505	0.512	508	0.681	505	0.770	508	0.810	508	0.855	508	0.930
508	0.548	other	0.686	508	0.780	508	0.812	508	0.858	508	0.950
505	0.550	other	0.714	505	0.781	508	0.815	508	0.858	508	0.964
508	0.636	508	0.724	other	0.790	505	0.824	508	0.862	505	1.010
508	0.664	525	0.728	508	0.796	505	0.826	other	0.875	508	1.040
508	0.671	505	0.748	505	0.800	other	0.830	other	0.876	508	1.048
505	0.672	508	0.757	other	0.800	508	0.834	508	0.882		

**Water Study: 31****True Value: 1.92 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.810	505	1.270	508	1.480	other	1.690	508	1.790	508	2.210
505	0.868	508	1.300	508	1.570	508	1.710	508	1.800	508	2.630
508	0.869	508	1.320	508	1.662	508	1.730	508	1.910		
508	0.940	508	1.370	508	1.670	508	1.755	508	2.040		
508	0.974	508	1.460	other	1.680	508	1.780	508	2.130		

**Water Study: 32****True Value: 0.346 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.073	508	0.300	508	0.336	525.1	0.353	508	0.372	508	0.448
508	0.206	508	0.304	508	0.336	508	0.354	505	0.376	508	0.471
508	0.210	508	0.320	505	0.337	508	0.357	505	0.382	525.1	0.480
505	0.272	other	0.321	508	0.340	508	0.360	505	0.383	505	0.519
other	0.279	505	0.322	508	0.343	508	0.360	508	0.387	508	0.582
508	0.285	525.1	0.324	508	0.345	508	0.367	505	0.390		
508	0.287	525.1	0.325	505	0.345	508	0.369	505	0.394		
508	0.292	508	0.327	other	0.347	508	0.370	505	0.400		
508	0.297	525.1	0.331	505	0.350	508	0.370	525.1	0.420		
508	0.297	508	0.333	508	0.351	505	0.372	525.1	0.440		

**Water Study: 33****True Value: 0.679 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	0.170	508	0.525	508	0.602	505	0.651	505	0.681	508	0.830
other	0.346	505	0.540	508	0.605	508	0.662	505	0.700		
508	0.380	525.1	0.560	525.1	0.617	508	0.665	525.1	0.705		
508	0.436	508	0.583	508	0.625	508	0.670	525.1	0.737		
508	0.513	508	0.583	508	0.631	508	0.670	505	0.738		
508	0.522	505	0.601	508	0.639	508	0.674	508	0.800		



**Water Study: 34****True Value: 0.550 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.200	525.1	0.425	525.1	0.486	505	0.512	505	0.546	508	0.604
505	0.277	other	0.427	508	0.488	508	0.514	505	0.550	505	0.622
525.1	0.326	508	0.438	508	0.496	508	0.520	505	0.552	508	0.625
508	0.329	508	0.446	508	0.499	505	0.525	508	0.556	505	0.627
508	0.349	508	0.447	508	0.500	508	0.526	525.1	0.560	525.1	0.630
505	0.380	508	0.448	505	0.503	525.1	0.526	505	0.562	525.1	1.090
505	0.415	other	0.450	508	0.508	508	0.528	508	0.563		
508	0.421	508	0.450	508	0.508	508	0.540	508	0.579		
525.1	0.424	505	0.458	525.1	0.511	505	0.543	508	0.590		

**Water Study: 35****True Value: 1.49 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	0.917	508	1.300	508	1.390	508	1.470	505	1.610	508	1.920
508	1.040	508	1.300	508	1.400	505	1.530	525.1	1.650	525.1	1.984
525.1	1.140	508	1.320	508	1.420	other	1.530	other	1.660	508	3.030
508	1.180	505	1.320	508	1.420	508	1.550	525.1	1.670		
508	1.250	505	1.330	508	1.460	505	1.560	other	1.700		
508	1.280	508	1.370	508	1.460	508	1.594	525.1	1.860		

**Water Study: 37****True Value: 0.403 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.039	525.2	0.312	525.2	0.350	505	0.369	other	0.380	505	0.406
525.2	0.211	508.1	0.317	508	0.350	508	0.370	508	0.387	508	0.450
505	0.235	525.2	0.333	508	0.354	525.2	0.370	508	0.389	other	0.531
508	0.257	505	0.334	508	0.357	525.2	0.372	505	0.390	505	0.536
508	0.262	508	0.336	505	0.360	508	0.375	505	0.391	508	0.952
508.1	0.283	508	0.340	508	0.361	505	0.375	505	0.392		
525.2	0.297	525.2	0.340	508	0.363	508	0.375	508	0.400		
other	0.311	other	0.346	508	0.365	508	0.380	508	0.401		

**Water Study: 38****True Value: 0.742 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.400	508.1	0.616	508	0.660	508	0.681	525	0.735	508	0.860
525.2	0.520	508	0.616	508	0.662	508	0.683	508	0.749	508	0.890
508	0.528	508	0.619	508	0.662	505	0.690	505	0.750	508	0.967
525.2	0.534	525.2	0.620	508	0.663	505	0.693	508	0.751	508	0.996
525.2	0.538	508.1	0.630	505	0.665	505	0.699	525.2	0.753	508	1.110
505	0.542	508	0.631	525.2	0.670	other	0.705	525.2	0.756	525.2	1.130
508	0.563	508	0.633	508	0.675	508	0.719	508	0.758		
508	0.584	525.2	0.636	508	0.675	505	0.721	other	0.765		
505	0.614	508	0.643	505	0.680	other	0.722	508.1	0.765		

**Water Study: 39****True Value: 0.340 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	0.148	525.2	0.268	508	0.291	508	0.318	525.2	0.350	508	0.414
508	0.217	505	0.270	505	0.300	508	0.324	508	0.350	508	0.452
508	0.236	525.2	0.270	525.2	0.300	508.1	0.327	508	0.352	508	0.468
505	0.249	508	0.274	508	0.303	505	0.333	525.2	0.355		
505	0.250	525.2	0.275	508	0.303	508	0.337	508	0.369		
505	0.253	other	0.278	505	0.306	508	0.343	525.2	0.370		
508	0.259	525.2	0.278	508.1	0.309	525.2	0.345	525.2	0.373		
508	0.263	other	0.283	505	0.316	525.2	0.350	508	0.384		

**Water Study: 40****True Value: 1.48 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.770	508	1.200	505	1.320	505	1.390	508.1	1.480	508	1.520
508	0.975	508	1.210	508	1.320	508	1.400	508	1.500	508	1.550
525.2	1.010	525.2	1.240	508	1.320	508	1.400	505	1.500	525.2	1.560
508	1.090	508	1.250	525.2	1.330	525.2	1.400	508	1.500	505	1.560
508	1.100	525.2	1.280	other	1.340	508	1.420	508	1.500	505	1.570
508	1.100	525.2	1.300	525.2	1.340	508	1.440	525.2	1.500	508.1	1.700
other	1.140	525.2	1.300	508	1.340	505	1.440	508	1.500	505	1.820
508	1.140	508	1.310	508	1.360	other	1.440	508	1.510	525.2	2.230
508.1	1.160	508	1.320	525.2	1.360	other	1.476	505	1.510	525.2	2.340

**Water Study: 41****True Value: 0.630 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508.1	0.179	508.1	0.541	525.2	0.580	other	0.615	505	0.640	505	0.712
525.2	0.310	508.1	0.544	508	0.585	508	0.623	505	0.655	508	0.719
508.1	0.368	508	0.549	525.2	0.585	508	0.625	505	0.661	508	0.756
525.2	0.420	508	0.561	other	0.589	508	0.630	508	0.665		
505	0.455	other	0.568	508	0.589	508	0.633	505	0.680		
505	0.530	other	0.569	525.2	0.593	505	0.633	508	0.684		
508	0.530	525.2	0.570	525.2	0.600	505	0.636	525.2	0.710		
508	0.534	525.2	0.573	508.1	0.608	508	0.640	525.2	0.712		

**Hexachlorobenzene****Water Study: 27****True Value: 0.483 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.235	508	0.380	508	0.410	505	0.479	505	0.542		
508	0.303	508	0.383	508	0.413	505	0.483	508	0.554		
505	0.366	508	0.393	508	0.450	508	0.503	508	0.593		

**Water Study: 29****True Value: 0.417 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.130	508	0.274	508	0.337	508	0.358	505	0.401	508	0.435
508	0.170	other	0.298	508	0.342	505	0.360	508	0.408	505	0.493
508	0.259	508	0.322	508	0.350	508	0.390	505	0.413	other	0.692

**Water Study: 30****True Value: 0.667 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.315	other	0.478	508	0.531	508	0.585	505	0.700	508	0.880
505	0.329	505	0.490	508	0.538	other	0.590	other	0.716	508	0.966
505	0.360	508	0.496	other	0.558	508	0.606	505	0.730	508	1.716
508	0.406	505	0.505	508	0.569	508	0.623	508	0.738		
other	0.425	508	0.506	505	0.580	508	0.630	508	0.752		
508	0.450	508	0.517	505	0.580	508	0.651	508	0.785		
508	0.452	505	0.523	other	0.580	505	0.659	508	0.812		

**Water Study: 31****True Value: 2.40 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.820	508	1.140	508	1.630	505	1.810	508	2.029	508	2.220
505	0.830	508	1.440	508	1.650	508	1.840	508	2.180	508	2.400
505	0.921	508	1.520	508	1.736	508	1.930	508	2.200	508	3.040
508	1.120	508	1.540	other	1.770	508	1.990	508	2.200		

**Water Study: 32****True Value: 0.857 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.154	other	0.600	508	0.734	508	0.810	525.1	0.880	508	1.010
508	0.155	525.1	0.638	508	0.749	505	0.818	508	0.885	505	1.030
508	0.175	508	0.646	505	0.753	508	0.825	505	0.935	505	1.210
508	0.437	508	0.667	508	0.754	505	0.832	525.1	0.938	508	1.430
508	0.450	508	0.693	508	0.755	525.1	0.853	508	0.943		
other	0.538	508	0.696	508	0.760	505	0.860	505	0.962		
525.1	0.538	508	0.696	508	0.779	505	0.872	525.1	0.969		
525.1	0.570	508	0.722	505	0.809	505	0.880	525.1	0.990		

**Water Study: 33****True Value: 1.32 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.620	508	0.940	508	1.060	505	1.310	505	1.590		
other	0.799	508	0.947	508	1.150	508	1.340	525.1	1.590		
505	0.858	508	1.014	525.1	1.190	525.1	1.360	508	1.600		
508	0.892	508	1.020	505	1.220	525.1	1.370	505	1.940		
508	0.915	505	1.050	508	1.250	525.1	1.390	508	2.850		
508	0.929	508	1.060	505	1.290	508	1.500				

**Water Study: 34****True Value: 3.57 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	2.050	505	2.830	508	2.960	505	3.280	505	3.630	505	4.340
525.1	2.340	508	2.860	525.1	2.970	525.1	3.300	508	3.670	508	4.640
505	2.400	505	2.870	508	2.977	505	3.325	505	3.700	505	5.726
508	2.440	508	2.909	508	2.980	505	3.340	525.1	3.720	508	7.300
508	2.660	508	2.920	508	3.020	525.1	3.380	505	3.860	508	13.400
508	2.670	508	2.930	508	3.070	525.1	3.380	525.1	3.890	525.1	13.600
525.1	2.710	505	2.930	505	3.080	508	3.430	508	4.000		
508	2.740	508	2.960	505	3.080	505	3.460	508	4.310		

**Water Study: 35****True Value: 0.635 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.346	525.1	0.442	508	0.567	505	0.631	505	0.710	508	1.160
508	0.353	508	0.475	508	0.568	525.1	0.640	525.1	0.728		
508	0.360	508	0.480	508	0.577	505	0.685	525.1	0.736		
508	0.401	other	0.520	508	0.582	508	0.696	505	0.808		
508	0.407	508	0.529	505	0.620	508	0.700	other	0.930		
508	0.436	525.1	0.555	505	0.620	525.1	0.706	505	1.050		

**Water Study: 36****True Value: 0.847 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.261	508	0.630	508	0.739	other	0.790	505	0.901	525.1	1.080
508.1	0.342	508	0.671	525.2	0.739	505	0.804	505	0.914	508.1	1.200
508	0.410	508	0.685	525.2	0.741	525.2	0.811	508	0.918	508.1	1.700
508	0.456	525.2	0.692	505	0.749	508	0.824	508	0.920	508	3.520
525.2	0.510	505	0.700	508	0.761	525.2	0.830	525.2	0.925	505	4.960
508	0.556	508	0.708	525.2	0.765	505	0.835	505	0.940		
508	0.558	525.2	0.708	508	0.769	505	0.840	505	0.942		
508	0.559	525.2	0.725	508	0.778	505	0.854	525.2	0.960		
508	0.597	508	0.737	505	0.785	508	0.857	525.2	1.010		

**Water Study: 37****True Value: 0.806 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508.1	0.023	508	0.579	508	0.722	508	0.756	525.2	0.799	505	0.877
508	0.091	525.2	0.612	508	0.723	508	0.760	505	0.803	505	0.880
508	0.460	508.1	0.643	525.2	0.738	505	0.779	525.2	0.810	505	0.896
508.1	0.528	508	0.650	505	0.739	508	0.786	525.2	0.825	505	0.920
508	0.551	508	0.680	508	0.746	525.2	0.790	525.2	0.832	525.2	0.958
508	0.562	508	0.686	508	0.746	505	0.791	508	0.837	505	0.964
508	0.570	525.2	0.710	508	0.750	505	0.795	other	0.866	525.2	1.000

**Water Study: 38****True Value: 0.538 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.204	505	0.344	508	0.408	525.2	0.480	508	0.523	505	0.600
508	0.264	508	0.350	508	0.422	508	0.480	508	0.525	508.1	0.620
525.2	0.324	508	0.361	525.2	0.442	508	0.489	508	0.531	525.2	0.690
508	0.328	525.2	0.370	525.2	0.445	508	0.498	525.2	0.535	508	0.913
525.2	0.329	508.1	0.370	525.2	0.452	508	0.504	505	0.539	508	1.110
508	0.332	508	0.370	508	0.453	505	0.507	505	0.547		
508	0.337	508.1	0.396	505	0.473	505	0.512	525.2	0.567		
508	0.339	other	0.396	525.2	0.479	505	0.520	508	0.570		

**Water Study: 39****True Value: 1.68 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.970	505	1.230	505	1.440	525.2	1.610	508.1	1.750	508	2.210
508	0.995	505	1.230	508	1.450	508	1.620	525.2	1.760	525.2	2.290
508	1.090	508	1.240	505	1.470	525.2	1.630	508	1.770		
508	1.100	525.2	1.270	508	1.520	525.2	1.660	505	1.770		
508.1	1.130	525.2	1.370	525.2	1.560	505	1.660	505	1.780		
508	1.160	525.2	1.390	525.2	1.560	525.2	1.700	525.2	1.880		
508	1.160	525.2	1.425	505	1.590	other	1.750	505	1.900		

**Water Study: 40****True Value: 2.90 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.910	525.2	2.100	525.2	2.400	525.2	2.670	508	2.880	505	3.100
508	1.030	508.1	2.130	508	2.460	525.2	2.670	525.2	2.940	508	3.150
508	1.170	508	2.140	508.1	2.460	525.2	2.680	525.2	2.940	505	3.160
508	1.800	508	2.200	525.2	2.460	525.2	2.710	508	2.970	508	3.200
508	1.850	525.2	2.290	508	2.490	508	2.780	508	2.990	505	3.390
508	1.870	508	2.330	525.2	2.600	505	2.800	505	3.060	505	3.510
508	1.930	505	2.370	525.2	2.620	525.2	2.800	505	3.080	525.2	3.670
508	1.950	508	2.380	525.2	2.630	508.1	2.880	other	3.080	505	4.100

**Water Study: 41****True Value: 1.03 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.420	508	0.653	508	0.762	505	0.882	505	0.925	525.2	1.100
508	0.530	525.2	0.664	508	0.779	508	0.883	505	0.970	other	1.200
508.1	0.570	508.1	0.709	525.2	0.800	505	0.885	505	0.984	525.2	1.250
525.2	0.605	525.2	0.721	508	0.830	505	0.900	508	0.985		
505	0.617	508.1	0.730	508	0.830	508	0.918	other	0.992		
508	0.636	525.2	0.740	525.2	0.840	525.2	0.920	525.2	1.030		
508	0.646	508	0.750	other	0.848	508	0.920	505	1.070		

**Hexachlorocyclopentadiene****Water Study: 24a****True Value: 4.42 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	1.550	505	3.010	other	3.390	505	3.890	505	4.780	505	14.000
505	1.950	505	3.120	505	3.440	505	4.020	505	5.050		
505	2.720	other	3.140	505	3.780	505	4.030	505	5.075		
other	2.730	525	3.160	505	3.870	other	4.310	505	5.680		

**Water Study: 24b****True Value: 0.736 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.159	505	0.503	525	0.547	505	0.696	505	0.750	505	2.500
505	0.450	505	0.521	other	0.550	505	0.700	505	0.762		
505	0.472	other	0.529	other	0.550	505	0.706	505	0.807		
505	0.493	505	0.532	505	0.609	505	0.731	other	0.871		

**Water Study: 25a****True Value: 1.87 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.610	508.1	1.040	505	1.125	other	1.690	505	1.870	508.1	2.400
508	0.836	508	1.060	508	1.380	other	1.718	505	2.080	508	3.300

**Water Study: 25b****True Value: 0.267 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.074	508.1	0.093	508	0.156	508	0.218	505	0.226	508	0.494
508	0.091	505	0.133	other	0.506	other	0.220	505	0.268		

**Water Study: 26a****True Value: 2.47 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.912	other	1.450	other	1.900	508.1	2.290	other	2.770	505	5.670
505	0.931	525	1.540	505	1.960	505	2.568	505	3.290		
505	1.200	other	1.770	505	2.058	505	2.600	505	3.370		
525	1.200	505	1.820	505	2.240	505	2.730	505	3.700		

**Water Study: 26b****True Value: 0.367 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525	0.143	other	0.219	505	0.290	505	0.309	other	0.515	505	1.350
505	0.167	505	0.251	505	0.292	505	0.322	505	0.529		
other	0.201	508.1	0.256	525	0.298	505	0.334	505	0.591		
505	0.201	other	0.267	505	0.301	other	0.347	505	0.605		

**Water Study: 27****True Value: 0.774 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.423	508	0.511	505	0.629	525	0.664	508	0.706		
other	0.440	508	0.550	505	0.631	505	0.676	505	0.788		
508	0.482	other	0.568	505	0.660	505	0.680	505	0.908		

**Water Study: 29****True Value: 0.313 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508.1	0.132	508	0.169	other	0.211	505	0.285	other	0.437		
508	0.142	other	0.182	508	0.230	505	0.297	508	0.443		
505	0.150	508	0.185	other	0.250	505	0.330				

**Water Study: 30****True Value: 1.72 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.266	other	0.650	505	0.900	505	1.230	other	1.460	other	1.840
505	0.268	508	0.666	505	0.975	505	1.260	505	1.540	508	1.940
other	0.360	505	0.766	other	1.030	other	1.280	508	1.569	other	1.970
508	0.380	other	0.856	other	1.100	505	1.360	505	1.700	508	2.270
other	0.400	other	0.866	505	1.120	other	1.370	508	1.790	505	2.430
508	0.638	505	0.880	other	1.191	505	1.440	other	1.840		



**Water Study: 31****True Value: 1.11 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.237	other	0.462	other	0.701	508	0.736	508	0.842	other	1.840
508	0.310	other	0.496	505	0.702	505	0.740	505	0.970		
other	0.362	508	0.696	other	0.710	505	0.749	505	1.000		

**Water Study: 32****True Value: 0.823 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.066	525.1	0.420	505	0.592	525.1	0.676	505	0.783	508	1.000
other	0.177	508	0.433	505	0.597	505	0.700	505	0.830	505	1.120
505	0.282	other	0.489	other	0.600	505	0.704	508	0.831	other	1.240
525.1	0.297	525.1	0.503	505	0.604	505	0.710	505	0.842	other	1.800
525.1	0.328	525.1	0.510	508	0.636	525.1	0.745	505	0.851	525.1	1.970
508	0.336	other	0.522	505	0.648	other	0.761	505	0.879	505	2.780
other	0.403	other	0.559	505	0.672	other	0.772	505	0.885		

**Water Study: 33****True Value: 2.92 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.528	525.1	1.290	505	1.580	505	1.740	505	2.610	other	7.700
other	0.860	505	1.320	505	1.590	508	1.970	525.1	2.870		
508	1.000	505	1.500	508	1.670	525.1	2.230	505	2.990		
other	1.020	505	1.540	other	1.680	505	2.280	525.1	3.040		
other	1.170	505	1.570	525.1	1.690	505	2.420	other	3.160		

**Water Study: 34****True Value: 2.14 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.377	525.1	1.010	other	1.350	505	1.650	505	2.040	505	2.850
508	0.555	525.1	1.090	525.1	1.380	other	1.740	505	2.090	505	4.310
525.1	0.626	508	1.170	505	1.390	505	1.750	other	2.150	other	18.300
other	0.750	other	1.240	505	1.410	525.1	1.760	505	2.240		
other	0.823	other	1.270	505	1.420	other	1.780	505	2.247		
525.1	0.826	525.1	1.280	505	1.440	505	1.900	525.1	2.580		
505	0.961	505	1.330	505	1.450	505	1.980	505	2.610		
505	0.970	505	1.350	other	1.602	505	1.990	505	2.780		

**Water Study: 35****True Value: 1.84 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.380	505	0.820	505	0.932	other	1.330	other	1.790	505	2.460
525.1	0.387	other	0.855	525.1	0.968	505	1.520	505	1.810	other	3.200
505	0.583	505	0.902	other	1.060	505	1.540	505	2.000		
508	0.606	505	0.930	525.1	1.140	508	1.540	505	2.090		
525.1	0.728	525.1	0.930	505	1.210	other	1.750	525.1	2.180		

**Water Study: 36****True Value: 4.71 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.028	508.1	1.920	505	2.650	525.2	3.520	505	4.020	505	4.600
508	0.726	525.2	1.940	525.2	2.770	508	3.590	525.2	4.090	525.1	4.640
other	0.802	525.2	1.960	508	3.050	525.2	3.640	505	4.210	505	4.960
508	1.180	508	2.340	525.2	3.070	525.2	3.890	508	4.310	505	5.010
525.2	1.240	508	2.400	508	3.220	505	3.900	505	4.320	508	6.280
508	1.500	525.2	2.460	505	3.260	505	3.900	505	4.530	525.2	7.910
508	1.880	508	2.490	508	3.280	525.2	3.930	505	4.590	505	8.110
508	1.885	other	2.510	505	3.330	508.1	3.940	508	4.600		

**Water Study: 37****True Value: 2.49 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.004	525.2	0.265	525.2	0.609	525.2	0.935	505	1.600	508	2.160
508	0.116	508	0.320	508	0.705	525.2	0.962	508	1.610	505	2.230
508.1	0.152	other	0.335	508	0.705	525.2	1.060	525.2	1.680	505	3.050
508.1	0.205	525.2	0.374	525.2	0.750	508	1.090	505	1.910		
505	0.230	505	0.443	525.2	0.806	505	1.120	505	2.060		
508	0.235	508	0.470	508	0.860	505	1.130	505	2.100		
508	0.238	508.1	0.590	508	0.900	508	1.340	508	2.120		

**Water Study: 38****True Value: 1.47 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.037	525.2	0.725	525.2	0.829	525.2	1.070	505	1.260	505	1.520
508	0.421	508	0.735	525.2	0.870	508.1	1.090	508	1.280	525.2	2.000
508.1	0.505	other	0.750	508	0.913	505	1.090	505	1.280	508	2.030
508	0.555	508.1	0.760	505	0.940	508	1.130	505	1.290	508	4.920
525.2	0.676	508	0.780	508	0.999	525.2	1.140	505	1.330		
508	0.686	508	0.795	508	1.010	505	1.150	508	1.390		
508	0.697	525.2	0.821	505	1.020	525.2	1.180	505	1.430		
525.2	0.721	525.2	0.828	505	1.060	525.2	1.190	525.2	1.440		

**Water Study: 39****True Value: 3.26 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.145	508	1.360	525.2	1.830	525.2	2.170	505	2.550	505	3.440
508	0.145	508.1	1.540	508.1	1.910	525.2	2.230	525.2	2.670	505	3.720
525.2	0.460	525.2	1.700	505	1.950	525.2	2.260	505	2.750	525.2	3.920
525.2	0.710	505	1.720	525.2	1.960	525.2	2.260	505	3.060	505	4.670
508	0.794	508	1.750	505	2.030	508	2.410	508	3.150	508	6.050
508	1.090	525.2	1.780	525.2	2.110	525.2	2.474	505	3.160		

**Water Study: 40****True Value: 1.22 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.163	525.2	0.610	525.2	0.830	508	0.956	508	1.080	525.2	1.320
508	0.300	508	0.615	525.2	0.843	525.2	0.965	525.2	1.120	505	1.380
505	0.462	508	0.667	508.1	0.856	525.2	0.982	508	1.130	525.2	1.420
508	0.469	508	0.695	508.1	0.865	508	0.983	505	1.170	508	1.460
508	0.488	525.2	0.748	525.2	0.875	505	1.020	505	1.180	505	1.590
508	0.510	525.2	0.750	525.2	0.912	525.2	1.030	other	1.180	505	1.660
525.2	0.540	525.2	0.770	505	0.932	508	1.080	508.1	1.180	505	1.700
508	0.543	508	0.826	508	0.940	525.2	1.080	525.2	1.290		

**Water Study: 41**

**True Value: 1.93 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	0.190	525.2	0.933	508	1.110	525.2	1.360	505	1.670	other	2.110
508	0.677	525.2	0.950	508.1	1.130	525.2	1.490	other	1.680	505	2.120
508.1	0.786	508	0.951	525.2	1.150	508	1.510	508	1.730	other	2.140
508	0.828	508	1.020	525.2	1.260	505	1.560	505	1.730	505	2.240
508	0.857	525.2	1.040	508	1.290	505	1.610	505	1.770	505	2.560
508.1	0.919	525.2	1.070	505	1.300	508	1.620	525.2	1.990		

**Mercury**

**Water Study: 24a**

**True Value: 5.76 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	3.800	245.1	5.230	245.1	5.510	245.1	5.700	245.1	5.910	245.1	6.210
245.1	4.200	245.2	5.260	245.1	5.560	245.1	5.710	other	5.960	245.1	6.340
245.1	4.500	245.1	5.280	other	5.580	245.1	5.740	245.1	5.980	245.1	6.400
245.1	4.780	245.1	5.350	245.1	5.600	245.1	5.780	245.1	6.000	other	6.460
245.2	4.970	245.2	5.400	245.1	5.600	245.1	5.790	245.1	6.000	245.1	6.480
245.1	5.070	245.1	5.400	245.1	5.620	245.1	5.800	245.1	6.030	other	6.800
245.1	5.110	245.2	5.410	245.1	5.650	245.2	5.900	245.1	6.100	245.1	7.050
245.1	5.120	245.1	5.430	245.1	5.690	245.1	5.900	other	6.100	245.1	7.100
245.1	5.120	245.1	5.500	245.1	5.700	245.1	5.900	245.1	6.130	other	8.510
245.1	5.200	245.1	5.500	245.1	5.700	245.1	5.900	245.1	6.190		

**Water Study: 24b**

**True Value: 2.16ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	1.400	245.1	1.780	245.1	2.000	245.1	2.040	245.1	2.190	245.1	2.400
245.1	1.500	245.1	1.850	245.1	2.000	245.1	2.050	245.2	2.200	245.1	2.400
245.1	1.520	245.1	1.890	245.2	2.000	245.1	2.090	245.1	2.230	245.1	2.410
245.1	1.540	245.2	1.900	245.1	2.000	other	2.100	245.1	2.270	245.1	2.500
245.1	1.580	245.1	1.900	245.1	2.000	245.1	2.100	245.1	2.280	other	2.610
245.1	1.600	245.1	1.920	245.2	2.005	245.1	2.110	245.1	2.300	245.1	2.700
other	1.700	245.1	1.960	245.1	2.010	other	2.130	245.1	2.300	245.1	2.800
245.1	1.700	245.1	1.960	245.2	2.020	other	2.160	245.1	2.340	245.1	2.950
245.1	1.740	245.1	2.000	245.1	2.040	245.1	2.170	245.1	2.350	other	3.430
245.1	1.750	245.1	2.000	245.1	2.040	245.1	2.190	245.1	2.360		

**Water Study: 25a****True Value: 0.72 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.320	245.1	0.545	245.1	0.646	245.1	0.710	245.1	0.800	245.1	1.000
245.1	0.360	245.1	0.580	245.1	0.670	245.1	0.716	245.1	0.800	245.1	1.300
245.1	0.400	245.2	0.580	245.1	0.670	245.1	0.728	245.1	0.800		
301A-VI	0.400	245.1	0.597	245.1	0.670	245.1	0.730	245.1	0.900		
245.1	0.470	245.1	0.600	245.1	0.690	245.1	0.750	245.2	0.900		
245.1	0.480	other	0.600	245.1	0.690	245.1	0.785	other	0.940		
245.1	0.500	245.1	0.600	245.1	0.700	other	0.790	245.1	0.950		

**Water Study: 25b****True Value: 4.32 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	2.540	245.1	3.770	other	4.130	245.1	4.420	245.1	4.610	245.1	5.200
245.1	2.700	245.1	3.970	245.1	4.180	245.1	4.430	245.1	4.720	245.1	5.750
245.1	3.300	245.1	3.990	245.1	4.270	245.1	4.450	245.2	4.720		
245.1	3.530	245.1	4.050	301A-VI	4.280	245.1	4.540	245.1	4.750		
245.1	3.630	245.1	4.060	245.2	4.300	245.1	4.550	245.1	5.035		
other	3.700	245.1	4.100	other	4.300	245.1	4.600	245.1	5.100		
245.1	3.700	245.1	4.120	245.1	4.420	245.1	4.600	other	5.130		

**Water Study: 26a****True Value: 4.56 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.2	2.200	245.1	4.060	245.1	4.300	245.2	4.510	245.2	4.720	245.1	5.100
245.1	3.280	245.1	4.080	245.1	4.330	245.1	4.520	245.1	4.800	245.1	5.170
245.1	3.425	245.1	4.100	245.1	4.350	245.1	4.600	245.1	4.840	245.1	5.170
245.1	3.500	245.1	4.200	245.1	4.400	245.1	4.600	245.1	4.870	245.1	5.350
245.1	3.510	245.1	4.200	245.1	4.400	245.1	4.600	245.1	4.900	245.1	5.600
245.1	3.770	245.1	4.200	245.1	4.400	245.1	4.600	245.1	4.930	245.1	7.100
245.1	3.800	245.2	4.240	245.1	4.400	245.1	4.630	245.1	4.940		
245.1	3.800	245.1	4.240	245.1	4.420	245.1	4.690	245.1	4.960		
245.1	3.950	245.1	4.280	245.1	4.490	245.2	4.700	245.1	4.990		
245.1	4.000	245.1	4.300	245.1	4.500	245.1	4.700	245.1	5.000		
245.1	4.010	other	4.300	other	4.500	245.1	4.710	245.1	5.100		

**Water Study: 26b****True Value: 2.47 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.2	1.000	245.1	2.100	245.1	2.290	245.2	2.440	other	2.580	245.1	2.740
245.1	1.500	245.1	2.130	245.1	2.300	245.1	2.480	245.1	2.600	245.1	2.800
245.1	1.565	245.1	2.170	245.1	2.300	245.2	2.480	245.1	2.600	245.1	2.800
245.1	1.800	245.1	2.170	245.1	2.340	245.2	2.480	245.1	2.600	245.1	2.950
245.1	1.900	245.1	2.200	245.1	2.340	245.1	2.480	245.1	2.600	245.1	3.050
245.1	2.000	245.2	2.200	245.1	2.340	245.1	2.500	245.1	2.600	245.1	3.270
245.1	2.000	245.1	2.200	245.2	2.350	245.1	2.510	245.1	2.600		
245.1	2.000	245.1	2.200	245.1	2.400	245.1	2.510	245.1	2.630		
245.1	2.010	245.1	2.200	other	2.400	245.1	2.550	245.1	2.640		
245.1	2.070	245.1	2.240	245.1	2.400	245.1	2.550	245.1	2.700		
245.1	2.070	245.1	2.250	245.1	2.420	245.1	2.550	245.1	2.700		

**Water Study: 27****True Value: 1.29 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	0.970	245.1	1.200	245.1	1.260	245.1	1.330	245.2	1.460	245.1	1.600
245.2	1.000	245.1	1.200	245.1	1.290	245.1	1.350	245.1	1.490	245.1	1.660
245.1	1.000	245.2	1.230	245.1	1.310	other	1.370	245.1	1.500	245.1	2.250
245.1	1.090	245.1	1.250	245.1	1.310	245.1	1.370	301A-VI	1.530		
245.1	1.110	245.1	1.260	245.1	1.310	245.1	1.400	245.1	1.560		
245.1	1.130	245.1	1.260	245.2	1.320	245.1	1.400	245.1	1.580		

**Water Study: 29****True Value: 0.506 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	0.300	245.2	0.420	245.1	0.478	245.2	0.500	245.1	0.544	245.1	0.721
245.1	0.352	245.1	0.422	245.1	0.481	245.1	0.500	245.1	0.550		
245.1	0.380	245.2	0.440	245.1	0.485	245.1	0.500	245.1	0.550		
245.1	0.395	other	0.450	245.1	0.486	245.1	0.518	245.1	0.629		
245.1	0.397	245.1	0.450	245.2	0.488	245.1	0.530	245.1	0.640		
other	0.400	245.2	0.467	245.2	0.500	245.1	0.540	245.1	0.700		

**Water Study: 30****True Value: 3.46 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	2.720	303F	3.120	245.1	3.260	245.1	3.436	245.1	3.570	245.1	3.760
245.1	2.800	245.1	3.126	245.1	3.290	245.1	3.450	245.1	3.570	245.2	3.784
245.1	2.820	245.1	3.130	245.1	3.300	245.1	3.490	245.1	3.600	245.2	3.790
245.1	2.820	245.1	3.130	245.1	3.320	245.1	3.500	245.1	3.600	245.1	3.797
245.2	2.880	245.1	3.160	245.1	3.350	245.1	3.500	245.1	3.610	245.2	3.800
245.1	2.920	245.1	3.180	245.1	3.350	245.1	3.500	245.1	3.619	other	3.920
245.1	3.030	245.1	3.180	245.1	3.370	245.2	3.500	245.2	3.640	245.2	4.100
245.2	3.070	245.2	3.200	245.1	3.385	245.1	3.500	245.1	3.700		
245.1	3.080	245.1	3.200	245.2	3.400	245.1	3.530	245.1	3.700		
245.1	3.100	245.1	3.220	245.1	3.400	245.1	3.540	245.1	3.700		
245.1	3.100	245.1	3.250	245.1	3.410	245.1	3.550	245.1	3.700		

**Water Study: 31****True Value: 0.908 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	0.471	245.1	0.872	245.1	0.890	245.1	0.940	245.1	0.969	245.1	1.200
245.1	0.700	245.1	0.874	245.1	0.895	245.1	0.946	245.1	1.000		
other	0.780	245.1	0.877	245.2	0.900	245.1	0.950	245.1	1.020		
245.1	0.800	245.2	0.880	245.2	0.906	245.1	0.950	245.1	1.080		
245.1	0.800	245.2	0.880	245.1	0.930	245.1	0.950	245.2	1.190		
245.1	0.860	245.1	0.890	245.1	0.940	245.1	0.953	245.1	1.200		

**Water Study: 32****True Value: 6.23 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	0.574	245.2	5.800	245.2	6.100	245.1	6.270	245.1	6.500	245.1	6.800
245.1	4.300	245.2	5.800	245.1	6.110	245.2	6.280	245.1	6.530	245.2	6.920
245.1	4.940	245.1	5.880	245.1	6.120	245.1	6.300	245.2	6.540	245.1	6.969
245.2	5.100	245.1	5.890	245.1	6.120	245.1	6.300	245.1	6.540	245.1	7.000
245.1	5.380	3112B	5.900	245.2	6.140	245.1	6.300	245.1	6.540	245.1	7.050
245.1	5.400	245.2	6.000	other	6.150	245.2	6.400	245.1	6.570	245.2	7.100
245.1	5.490	3112B	6.050	245.1	6.160	245.1	6.410	245.1	6.580	245.1	7.140
245.2	5.500	245.1	6.056	245.1	6.200	245.1	6.460	245.2	6.600	245.1	7.500
245.1	5.600	245.1	6.060	245.1	6.200	245.1	6.480	245.1	6.610	245.1	7.800
245.1	5.620	245.1	6.090	245.1	6.200	245.1	6.480	245.1	6.660		
245.1	5.730	245.1	6.100	245.1	6.210	245.1	6.500	245.1	6.710		

**Water Study: 33****True Value: 1.77 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	1.560	245.1	1.670	245.1	1.780	245.1	1.830	245.1	1.930	245.1	2.070
245.1	1.608	245.1	1.680	245.1	1.800	245.1	1.857	3112B	1.950	245.1	2.240
245.2	1.620	245.2	1.700	245.1	1.800	245.2	1.860	other	1.970	245.1	3.350
245.1	1.630	245.1	1.730	245.1	1.800	245.1	1.870	245.1	2.000	245.2	1958.000
245.1	1.640	245.1	1.740	245.1	1.810	other	1.880	3112B	2.010		
245.2	1.660	245.1	1.750	245.1	1.830	245.1	1.900	245.2	2.030		

**Water Study: 34****True Value: 5.09 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	3.850	245.1	4.740	245.1	4.900	245.1	5.060	245.1	5.310	245.1	5.800
245.1	4.160	245.2	4.790	245.1	4.900	245.2	5.070	3112B	5.350	245.1	5.810
245.1	4.180	245.1	4.800	245.2	4.900	245.1	5.070	245.1	5.370	245.2	5.970
3112B	4.400	245.1	4.800	245.1	4.910	245.2	5.100	245.1	5.400	245.1	5.980
245.1	4.490	245.2	4.810	245.2	4.930	245.1	5.130	245.1	5.410	245.1	6.230
245.2	4.580	245.1	4.840	245.1	4.950	245.1	5.150	245.1	5.417	245.1	6.400
245.1	4.600	245.1	4.850	245.2	4.980	245.1	5.180	245.2	5.460		
245.1	4.620	245.2	4.850	245.1	5.000	245.1	5.200	245.1	5.600		
245.1	4.697	245.2	4.860	245.1	5.000	245.1	5.220	245.1	5.640		
245.1	4.700	245.1	4.870	245.1	5.020	245.1	5.230	245.1	5.650		
245.1	4.700	245.1	4.900	245.1	5.030	245.1	5.270	245.1	5.700		

**Water Study: 35****True Value: 0.897 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.500	245.1	0.800	245.1	0.860	245.2	0.930	245.1	0.986	245.1	1.100
245.1	0.700	245.1	0.820	3112B	0.863	245.1	0.940	245.1	1.000	245.1	1.440
245.2	0.750	245.2	0.840	245.2	0.865	245.1	0.956	245.1	1.010		
245.1	0.766	245.1	0.845	245.1	0.897	245.1	0.960	245.1	1.030		
245.1	0.781	245.1	0.850	245.2	0.900	245.1	0.963	245.1	1.040		
245.1	0.800	245.1	0.860	245.1	0.900	245.1	0.975	245.1	1.040		
245.1	0.800	245.1	0.860	3112B	0.900	245.1	0.979	245.1	1.060		



**Water Study: 36****True Value: 3.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	1.924	3112B	2.640	245.2	2.820	245.2	2.910	245.1	3.070	other	3.300
245.1	2.300	245.2	2.700	245.2	2.820	245.1	2.920	245.1	3.100	245.1	3.420
245.1	2.400	200.8	2.740	245.1	2.840	245.2	2.950	245.1	3.120	other	3.490
245.2	2.440	245.1	2.770	245.2	2.840	245.1	2.960	245.1	3.120	245.2	3.900
245.1	2.500	other	2.790	3112B	2.840	3112B	3.000	245.1	3.150	245.1	3.940
245.1	2.560	245.1	2.800	245.1	2.850	245.1	3.000	245.1	3.150	3112B	4.240
245.2	2.580	245.1	2.800	245.1	2.850	245.2	3.000	245.2	3.180		
3112B	2.590	245.1	2.800	245.2	2.860	245.1	3.000	245.1	3.200		
245.2	2.600	245.1	2.800	3112B	2.880	245.1	3.020	245.2	3.200		
245.2	2.620	245.1	2.800	245.1	2.900	245.2	3.030	245.2	3.220		
245.1	2.640	245.1	2.820	other	2.900	3112B	3.060	245.2	3.240		

**Water Study: 37****True Value: 8.16 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.2	5.300	3112B	7.340	245.1	7.700	245.2	7.900	245.1	8.140	245.2	8.660
245.1	5.600	245.1	7.440	245.1	7.720	245.1	7.920	245.1	8.150	245.1	8.660
245.1	6.360	245.1	7.500	245.1	7.730	245.1	7.950	3112B	8.170	245.1	8.680
3112B	6.490	245.1	7.570	245.1	7.730	245.1	7.980	245.2	8.180	245.1	8.743
245.2	7.100	245.1	7.590	245.2	7.760	245.2	8.000	245.1	8.200	245.2	8.820
245.2	7.270	245.2	7.640	245.1	7.800	245.1	8.040	245.2	8.600	245.1	13.400
245.2	7.300	245.1	7.650	245.1	7.820	3112B	8.080	245.1	8.600	245.1	80.400
245.1	7.300	245.2	7.660	3112B	7.900	245.1	8.100	245.2	8.620		

**Water Study: 38****True Value: 6.39 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	3.280	245.1	5.430	245.1	5.750	245.1	5.900	other	6.040	245.2	6.470
200.8	4.200	245.2	5.510	245.2	5.750	245.2	5.920	245.1	6.100	245.1	6.500
245.2	4.260	245.2	5.530	3112B	5.760	245.2	5.930	245.1	6.150	245.1	6.500
other	5.020	245.1	5.540	245.2	5.760	245.1	5.980	245.1	6.210	3112B	6.530
245.1	5.040	245.2	5.550	245.1	5.780	245.2	5.990	245.2	6.240	245.2	6.530
245.1	5.150	245.1	5.570	245.1	5.800	245.1	6.000	245.2	6.330	245.1	6.600
245.1	5.200	200.8	5.630	3112B	5.800	245.1	6.000	3112B	6.340	245.2	6.800
245.1	5.250	245.1	5.640	245.1	5.860	245.1	6.020	245.1	6.340	245.1	6.980
245.1	5.309	245.2	5.680	245.2	5.870	245.2	6.020	245.2	6.400	245.2	7.520
245.2	5.400	245.1	5.690	245.2	5.900	245.1	6.030	245.1	6.420	other	8.020

**Water Study: 39****True Value: 3.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	1.400	245.1	2.960	3112B	3.200	245.1	3.400	3112B	3.520	245.1	3.840
245.1	1.690	245.2	2.980	3112B	3.230	245.2	3.430	245.2	3.600	200.8	3.840
245.2	1.820	245.1	3.000	245.2	3.300	245.1	3.450	245.2	3.620	245.1	3.890
245.2	1.890	245.1	3.000	245.1	3.350	245.1	3.460	245.2	3.630	245.2	3.900
245.1	2.140	245.1	3.000	245.2	3.390	245.2	3.470	245.1	3.650	245.1	3.940
245.1	2.280	3112B	3.080	245.1	3.390	245.1	3.480	245.1	3.700	245.1	4.010
245.1	2.570	245.1	3.170	245.2	3.390	245.2	3.500	245.1	3.790	245.2	4.030
245.2	2.620	3112B	3.180	245.2	3.400	245.1	3.500	245.1	3.810		

**Water Study: 40****True Value: 1.50 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.2	0.833	3112B	1.250	other	1.330	245.1	1.380	245.1	1.420	245.1	1.490
245.1	0.900	245.2	1.250	245.2	1.340	245.2	1.390	245.2	1.440	245.1	1.510
245.2	1.100	245.2	1.260	245.1	1.340	245.1	1.390	3112B	1.440	245.1	1.580
245.1	1.100	245.2	1.260	245.1	1.340	245.1	1.400	245.2	1.450	other	1.600
245.2	1.120	245.2	1.290	245.2	1.350	245.1	1.400	245.1	1.460	245.2	1.700
200.8	1.140	245.2	1.290	245.1	1.350	245.1	1.400	245.1	1.460	245.1	1.700
other	1.160	245.1	1.300	245.2	1.360	3112B	1.400	245.2	1.470	245.2	1.790
245.2	1.180	245.2	1.310	3112B	1.360	245.1	1.400	245.1	1.470	245.1	1.900
200.8	1.210	245.2	1.320	245.2	1.360	245.1	1.410	3112B	1.480	245.2	2.070
245.1	1.240	245.1	1.320	other	1.370	245.1	1.420	245.1	1.490	245.1	14.500

**Water Study: 41****True Value: 5.82 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
245.1	4.450	245.2	5.160	245.2	5.400	245.1	5.690	245.2	5.820	245.1	6.180
3112B	4.510	245.1	5.200	245.2	5.420	245.2	5.700	245.2	5.860	245.1	6.240
245.2	4.870	245.2	5.300	245.2	5.500	245.1	5.700	3112B	5.910	245.1	6.460
245.1	4.900	245.1	5.320	245.1	5.530	245.2	5.740	245.2	5.950	245.1	6.570
245.1	4.950	200.8	5.350	3112B	5.550	245.1	5.780	245.2	6.100		
245.1	5.010	245.1	5.350	245.1	5.610	245.1	5.780	245.2	6.120		
245.1	5.030	245.2	5.360	245.2	5.620	245.2	5.800	200.8	6.120		
3112B	5.140	245.2	5.400	245.2	5.620	245.1	5.800	245.1	6.150		

**Methoxychlor**

**Water Study: 24a**

**True Value: 73.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	4.190	509A	52.700	p. 1	59.000	509A	63.900	p. 1	69.020	other	77.700
p. 1	4.780	p. 1	53.800	p. 1	59.500	p. 1	64.000	p. 1	69.200	p. 1	77.800
other	30.000	509A	54.200	other	60.000	p. 1	64.400	509A	69.300	other	78.000
509A	40.200	other	55.000	p. 1	60.600	p. 1	65.300	other	72.900	other	83.000
p. 1	40.900	p. 1	56.100	p. 1	61.000	other	65.700	525.1	73.300	p. 1	101.000
525.1	41.500	p. 1	56.450	p. 1	61.450	other	66.700	p. 1	73.500	509A	105.000
D3086-79	42.000	525.1	56.850	525.1	62.150	p. 1	67.400	p. 1	74.400	509A	1930.000
p. 1	44.800	p. 1	57.300	p. 1	62.400	p. 1	67.900	p. 1	74.700		
p. 1	47.000	509A	58.500	p. 1	62.500	other	68.300	p. 1	74.850		
509A	47.110	p. 1	58.500	p. 1	63.560	p. 1	68.300	p. 1	76.300		
p. 1	52.600	other	58.800	p. 1	63.570	other	68.990	p. 1	77.500		

**Water Study: 24b**

**True Value: 5.37 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	2.362	p. 1	4.300	p. 1	4.490	p. 1	4.890	p. 1	5.350	p. 1	5.770
p. 1	3.360	p. 1	4.310	other	4.500	p. 1	4.970	p. 1	5.360	other	5.780
p. 1	3.480	p. 1	4.320	other	4.500	509A	4.990	509A	5.380	other	7.100
p. 1	3.550	p. 1	4.390	other	4.500	p. 1	5.050	other	5.388	p. 1	10.100
525.1	3.700	p. 1	4.400	p. 1	4.520	p. 1	5.060	525.1	5.456	other	61.000
509A	3.790	p. 1	4.410	509A	4.590	p. 1	5.100	p. 1	5.460	509A	6660.000
p. 1	3.990	p. 1	4.410	509A	4.640	525.1	5.120	p. 1	5.470		
509A	4.000	other	4.430	509A	4.670	D3086-79	5.140	509A	5.550		
p. 1	4.030	p. 1	4.440	p. 1	4.790	525.1	5.171	p. 1	5.700		
p. 1	4.080	other	4.450	other	4.820	p. 1	5.190	p. 1	5.706		
p. 1	4.250	p. 1	4.460	other	4.850	p. 1	5.194	other	5.710		

**Water Study: 25a**

**True Value: 3.17 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
p. 1	0.117	509A	2.570	505	2.710	505	2.810	D3086-79	3.090	p. 1	3.990
SPE-500	1.600	other	2.600	p. 1	2.720	p. 1	2.860	509A	3.160	other	4.000
509A	2.020	509A	2.607	p. 1	2.730	other	2.920	p. 1	3.200		
D3086-79	2.060	p. 1	2.640	SPE-500	2.754	508	3.000	509A	3.200		
other	2.060	p. 1	2.680	p. 1	2.800	p. 1	3.007	other	3.200		
509A	2.310	p. 1	2.687	other	2.800	509A	3.010	D3086-79	3.240		
p. 1	2.380	p. 1	2.690	p. 1	2.800	509A	3.080	p. 1	3.270		

**Water Study: 25b**

**True Value: 48.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
p. 1	2.360	505	36.900	other	40.800	509A	43.300	other	46.000	p. 1	51.420
509A	23.800	other	37.000	other	42.100	p. 1	43.500	p. 1	46.000	other	62.200
p. 1	28.020	p. 1	37.400	509A	42.200	509A	43.800	p. 1	46.300		
SPE-500	30.000	509A	39.100	p. 1	42.260	D3086-79	45.000	p. 1	47.800		
SPE-500	34.720	D3086-79	39.100	p. 1	42.300	509A	45.600	509A	48.200		
p. 1	35.000	other	39.900	p. 1	42.700	p. 1	45.600	p. 1	48.210		
D3086-79	35.100	505	40.300	508	43.000	509A	45.800	p. 1	48.400		

**Water Study: 26a**

**True Value: 92.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
509A	9.130	other	72.300	p. 1	82.400	509A	87.400	p. 1	94.600	D3086-79	101.000
other	20.900	p. 1	72.800	other	83.500	p. 1	87.500	p. 1	95.000	p. 1	102.000
D3086-79	44.500	p. 1	73.100	p. 1	83.900	p. 1	89.300	other	95.000	p. 1	104.000
p. 1	46.100	p. 1	79.200	other	84.000	p. 1	89.500	509A	95.140	p. 1	104.000
SPE-500	55.000	509A	79.300	SPE-500	84.440	p. 1	91.600	SPE-500	96.360	509A	105.000
other	59.600	p. 1	80.500	p. 1	84.870	p. 1	91.900	p. 1	96.600	p. 1	106.000
SPE-500	60.320	other	80.600	509A	85.500	p. 1	91.990	p. 1	96.700	other	106.800
other	60.900	p. 1	82.000	p. 1	86.100	508	92.800	p. 1	98.100	509A	124.000
p. 1	64.000	p. 1	82.100	other	86.200	505	92.900	p. 1	99.100	525.1	130.100
other	68.900	p. 1	82.300	other	86.900	p. 1	93.300	other	100.000		

**Water Study: 26b**

**True Value: 2.18 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
SPE-500	0.242	p. 1	1.850	other	2.030	other	2.180	p. 1	2.290	other	2.590
SPE-500	1.200	p. 1	1.930	p. 1	2.040	p. 1	2.183	p. 1	2.300	p. 1	2.600
509A	1.220	p. 1	1.970	D3086-79	2.040	other	2.200	SPE-500	2.309	p. 1	2.610
509A	1.560	other	1.970	p. 1	2.092	p. 1	2.220	p. 1	2.350	509A	2.700
505	1.590	p. 1	1.980	other	2.100	other	2.250	p. 1	2.380	other	2.700
p. 1	1.690	p. 1	1.980	other	2.150	p. 1	2.250	p. 1	2.400	p. 1	2.920
p. 1	1.690	p. 1	2.000	SPE-500	2.159	D3086-79	2.260	p. 1	2.480	other	3.040
other	1.700	p. 1	2.010	p. 1	2.160	509A	2.280	525.1	2.483	p. 1	3.720
other	1.730	509A	2.030	p. 1	2.170	p. 1	2.280	509A	2.540	p. 1	3.970
509A	1.820	p. 1	2.030	other	2.180	p. 1	2.290	508	2.560		

**Water Study: 27****True Value: 16.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
509A	2.620	508	14.000	509A	15.500	p. 1	16.500	other	17.400	D3086-79	19.300
p. 1	4.040	p. 1	14.500	p. 1	15.700	other	16.600	509A	17.700	other	19.530
other	8.540	p. 1	14.900	p. 1	15.810	509A	16.700	509A	17.800	p. 1	23.100
p. 1	9.230	other	14.900	p. 1	15.840	p. 1	16.800	p. 1	18.070	p. 1	75.090
505	9.400	p. 1	15.000	other	16.000	509A	17.000	p. 1	18.100		
508	12.500	508	15.500	other	16.200	p. 1	17.110	p. 1	18.610		
p. 1	13.000	other	15.500	p. 1	16.400	505	17.400	p. 1	19.000		

**Water Study: 29****True Value: 5.21 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	2.830	508	4.080	D3086-79	4.560	508	4.820	508	5.600	508	6.020
p. 1	3.280	other	4.087	other	4.700	508	4.870	508	5.700	p. 1	6.130
p. 1	3.570	p. 1	4.300	505	4.760	508	4.930	508	5.800	508	6.300
508	3.620	p. 1	4.331	508	4.780	508	5.270	509A	5.808		
508	3.910	508	4.400	other	4.800	p. 1	5.400	505	5.920		
p. 1	4.080	SPE-500	4.403	other	4.811	other	5.530	p. 1	5.960		

**Water Study: 30****True Value: 34.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.839	other	24.700	508	29.810	505	32.400	other	35.000	other	37.200
other	3.691	other	25.200	other	29.900	p. 1	32.800	505	35.100	p. 1	37.500
505	13.720	508	26.700	508	30.100	505	33.200	508	35.500	508	38.500
505	14.300	505	27.000	p. 1	30.200	508	33.500	other	35.600	508	39.100
508	15.800	508	27.200	508	31.100	D3086-79	34.300	508	35.900	508	39.600
508	20.400	508	28.800	p. 1	31.200	other	34.300	other	36.400	508	40.700
p. 1	21.560	508	29.100	p. 1	31.500	p. 1	34.600	505	36.500	508	41.700
505	22.600	508	29.440	508	31.700	508	34.700	508	36.700	508	42.670
505	24.000	508	29.500	505	32.300	508	35.000	p. 1	37.000	508	55.100

**Water Study: 31****True Value: 12.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.962	508	7.780	508	11.400	508	11.600	other	12.600	p. 1	14.120
508	4.860	508	9.420	508	11.500	508	11.700	other	12.700	508	16.400
508	5.170	505	10.100	508	11.500	508	11.900	508	12.800		
508	5.300	508	10.560	508	11.500	508	12.300	508	12.800		
505	6.440	other	11.000	508	11.500	508	12.400	p. 1	13.100		
508	6.690	other	11.200	505	11.600	508	12.500	other	13.400		

**Water Study: 32****True Value: 17.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	1.700	508	13.300	525.1	14.900	508	16.000	508	16.800	508	19.700
508	5.350	other	14.100	508	15.000	508	16.100	508	17.200	508	19.900
508	7.320	508	14.200	508	15.100	525.1	16.200	508	17.200	508	20.300
525.1	8.610	505	14.240	508	15.300	505	16.200	505	17.200	other	20.400
other	9.600	508	14.400	508	15.400	other	16.300	505	17.600	505	21.100
505	10.800	508	14.400	525.1	15.450	other	16.500	508	17.900	505	21.400
525.1	10.900	505	14.500	508	15.500	508	16.600	508	17.940	505	29.800
505	11.100	525.1	14.600	525.1	15.500	508	16.620	508	18.200	525.1	30.080
508	13.000	508	14.700	508	15.700	other	16.700	508	18.900	508	31.490
508	13.200	508	14.770	508	16.000	505	16.790	508	19.600		

**Water Study: 33****True Value: 42.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	27.200	525.1	33.100	508	37.900	508	41.100	505	44.100	505	48.800
508	27.700	508	34.800	other	38.900	other	41.300	other	44.200	508	50.200
508	28.600	505	35.800	508	39.080	508	41.300	508	44.800	508	51.600
508	29.700	525.1	37.100	505	39.500	508	42.100	508	44.900	525.1	52.830
508	29.900	525.1	37.500	508	39.900	525.1	42.300	505	44.900	525.1	100.000
508	32.000	508	37.600	508	40.200	505	42.300	508	45.300		

**Water Study: 34****True Value: 14.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	1.540	505	11.200	508	12.200	508	13.900	505	14.800	other	16.800
508	6.470	508	11.300	525.1	12.700	505	14.020	508	14.900	508	16.850
525.1	9.380	505	11.350	other	13.000	508	14.400	505	15.100	508	17.100
525.1	9.980	508	11.500	525.1	13.000	508	14.400	505	15.200	508	18.500
508	10.900	508	11.600	508	13.100	508	14.500	525.1	15.500	508	19.100
525.1	10.900	505	11.700	525.1	13.100	508	14.600	508	15.700	508	19.600
505	10.970	505	11.900	505	13.200	505	14.600	508	15.840	508	22.300
other	11.200	525.1	12.000	508	13.200	508	14.600	505	16.200	508	24.500
other	11.200	525.1	12.200	508	13.500	505	14.600	508	16.600		



**Water Study: 35****True Value: 62.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	34.900	508	44.200	525.1	51.400	508	55.700	525.1	60.700	525.1	63.200
508	39.900	505	47.100	508	52.000	508	57.600	505	60.800	508	69.700
525.1	40.300	505	47.580	508	52.600	508	59.400	508	61.060	508	70.400
other	41.000	508	49.800	508	52.900	508	59.500	508	61.200	508	72.600
508	44.000	525.1	50.500	505	53.650	505	59.800	other	63.100	other	90.800

**Water Study: 36****True Value: 28.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	12.700	508	22.400	525.2	26.040	508	27.600	508	29.600	525.2	33.100
508	15.680	508.1	22.600	525.2	26.100	505	27.600	505	29.600	525.2	33.400
505	17.110	525.2	23.100	525.2	26.300	505	27.700	508	30.000	508.1	39.300
508.1	19.200	508.1	23.200	508	26.300	other	28.000	525.2	30.000	508	40.900
508	19.200	508	23.700	508	26.400	508	28.000	508	30.650	505	42.500
525.2	20.800	508	24.400	508	26.800	505	28.200	508	30.900	505	84.900
525.2	20.800	505	25.180	other	26.900	508	28.600	525.2	31.600		
508	20.900	525.2	25.300	525.1	27.000	other	28.800	508	32.100		
508	21.900	508	25.400	508	27.300	508	29.200	508	32.500		
other	22.140	505	26.000	508	27.500	505	29.400	505	32.900		

**Water Study: 37****True Value: 18.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.754	525.2	14.800	other	16.400	505	18.700	505	20.100	other	23.600
508	7.880	508	15.100	505	16.800	508	19.100	508	20.200	525.2	23.800
508	10.200	525.2	15.700	505	17.000	505	19.100	505	20.400	508	25.600
508	12.100	508	15.800	525.2	17.600	505	19.200	508.1	20.400	505	26.150
508	12.800	508	15.900	508	17.900	508	19.300	508.1	21.100	525.2	27.300
508	13.000	508	16.000	525.2	17.900	505	19.400	other	22.100		
508	13.500	525.2	16.000	525.2	18.350	508	19.700	508	22.700		
508	13.900	525.2	16.000	508	18.400	505	19.800	525	23.500		

**Water Study: 38****True Value: 34.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	14.000	other	24.260	505	30.800	508.1	32.700	508	35.000	508	40.350
508	16.400	508	25.400	508	31.100	505	33.000	525.2	35.390	505	40.700
508	17.700	508.1	27.000	508	31.200	525.2	33.100	525.2	35.400	508	42.900
525.2	17.900	508	28.500	508	31.500	505	33.700	508	35.700	508	43.600
525.2	18.000	508	29.300	508	31.800	508	34.000	505	36.100	525.2	48.400
508	19.600	508	29.400	508	31.900	508	34.050	525.2	37.400	525.2	51.800
508	22.500	525.2	30.100	505	32.000	508	34.100	508	37.420		
505	23.400	508.1	30.200	505	32.100	other	34.500	505	38.600		
525.2	23.400	508	30.500	508	32.600	508	34.600	525.2	40.100		

**Water Study: 39****True Value: 53.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	16.100	508	45.000	525.2	49.600	505	52.600	508	56.300	525.2	71.800
508	28.000	525.2	45.100	505	49.900	other	53.200	505	56.800	508.1	76.400
525.2	35.300	505	45.800	525.2	51.000	525.2	53.200	508	57.000	525.2	79.800
508	36.800	508	45.960	other	51.300	other	53.500	525.2	57.900		
508	40.200	508	47.000	508	51.500	508	53.600	525.2	59.300		
505	41.050	505	47.100	508	51.500	525.2	54.100	505	61.200		
508	41.500	508	47.400	508	51.800	525.2	54.100	505	63.000		
508	44.600	525.2	47.600	525.2	51.820	508.1	54.300	508	67.800		

**Water Study: 40****True Value: 42.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	4.420	508	34.700	508	38.100	508	40.100	505	43.400	other	47.600
508	22.900	505	35.800	505	38.400	525.2	42.000	508	43.500	508	48.800
508	23.700	508	36.700	508	38.600	505	42.000	508	43.500	508	49.100
other	26.800	525.2	36.800	525.2	39.100	508	42.000	other	43.690	505	49.800
508	28.000	508.1	37.000	508	39.300	508	42.100	525.2	44.100	525.2	50.100
508	28.800	525.2	37.200	508	39.400	508	42.200	508.1	44.900	508	50.800
525.2	32.000	525.2	37.400	525.2	39.540	508	43.000	508	45.600	525.2	51.500
508	33.300	508.1	37.700	other	39.800	508	43.000	508	46.200	525.2	51.800
505	33.900	525.2	37.800	525.2	40.100	505	43.200	505	46.500	525.2	54.600

**Water Study: 41****True Value: 26.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508.1	5.060	505	22.200	508	26.000	508	27.400	505	28.400	508	37.000
508.1	9.950	508	22.500	508	26.100	525.2	27.600	525.2	29.500	508.1	39.100
508	18.700	508	22.500	508	26.300	505	27.900	525.2	30.300	508	39.200
525.2	18.900	other	23.300	505	26.300	other	28.000	525.2	30.500		
508	19.000	508	24.400	505	26.500	525.2	28.000	508.1	31.800		
505	20.900	508	24.400	other	26.800	525.2	28.100	505	32.200		
525.2	21.200	508.1	24.600	505	26.800	508	28.400	505	34.200		
508	22.200	525.2	25.280	other	27.400	508	28.400	525.2	36.000		

**Oxamyl****Water Study: 24a****True Value: 12.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	10.000	531.1	12.300	531.1	12.800	other	13.150				
531.1	12.000	531.1	12.500	531.1	12.900	531.1	14.300				

**Water Study: 24b****True Value: 31.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	22.800	531.1	29.100	531.1	32.000	531.1	32.600				
531.1	24.700	other	30.500	531.1	32.100	531.1	33.100				

**Water Study: 25a****True Value: 17.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	4.770	531.1	16.900	531.1	17.970	531.1	18.140	531.1	26.900		

**Water Study: 25b****True Value: 53.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	50.700	531.1	52.700	531.1	56.730	531.1	58.300	531.1	92.600		

**Water Study: 26a**

**True Value: 22.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	9.270	531.1	18.700	other	21.500	531.1	23.000	531.1	25.530		
531.1	16.800	other	20.100	531.1	22.000	531.1	23.100				
531.1	16.900	531.1	21.500	531.1	22.400	531.1	23.800				

**Water Study: 26b**

**True Value: 46.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	25.500	other	41.400	531.1	44.600	531.1	46.800	531.1	52.640		
531.1	31.900	531.1	42.500	other	44.800	531.1	47.500				
531.1	33.000	531.1	43.300	531.1	46.600	531.1	48.000				

**Water Study: 27**

**True Value: 12.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	3.330	531.1	11.500	531.1	16.600	531.1	19.400				
531.1	10.500	531.1	13.000	531.1	17.900	531.1	34.700				

**Water Study: 29**

**True Value: 4.60 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	3.180	531.1	4.340	531.1	4.400	other	5.260	531.1	5.620		
531.1	4.050	531.1	4.390	531.1	4.800	531.1	5.280	531.1	8.650		

**Water Study: 30**

**True Value: 6.47 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	4.600	531.1	5.980	531.1	6.570	531.1	6.840	531.1	7.570		
531.1	5.080	531.1	6.060	531.1	6.660	531.1	6.920	531.1	7.680		
531.1	5.240	531.1	6.260	531.1	6.660	531.1	7.210	531.1	7.840		
531.1	5.390	531.1	6.260	531.1	6.720	531.1	7.320	531.1	9.150		
531.1	5.450	531.1	6.460	531.1	6.740	531.1	7.530	531.1	9.490		

**Water Study: 31**

**True Value: 5.72 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	2.000	531.1	4.840	531.1	5.070	531.1	6.070	531.1	9.140		
531.1	2.740	531.1	4.900	531.1	5.300	531.1	7.150	531.1	11.200		
531.1	3.010	531.1	4.960	531.1	5.900	531.1	7.370				

**Water Study: 32****True Value: 12.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	0.897	531.1	8.800	531.1	9.400	531.1	10.100	531.1	10.590	531.1	11.600
531.1	7.370	531.1	8.850	531.1	9.480	other	10.290	531.1	10.600	531.1	11.660
531.1	8.194	531.1	9.080	531.1	9.540	531.1	10.370	531.1	10.600	531.1	12.300
531.1	8.500	531.1	9.340	531.1	9.660	531.1	10.400	531.1	11.000	531.1	12.500
531.1	8.530	531.1	9.380	531.1	9.790	531.1	10.500	531.1	11.340	531.1	13.600
531.1	8.650	531.1	9.390	531.1	9.910	531.1	10.500	531.1	11.500	531.1	14.400

**Water Study: 33****True Value: 26.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	2.690	531.1	22.800	531.1	25.800	531.1	26.200	531.1	27.200	531.1	34.220
531.1	8.450	531.1	24.100	531.1	25.800	531.1	26.200	531.1	27.300	531.1	40.300
531.1	19.500	531.1	24.290	531.1	25.900	531.1	26.300	531.1	27.600	531.1	41.800
531.1	22.150	531.1	25.400	531.1	25.900	531.1	26.600	531.1	28.000		
531.1	22.300	531.1	25.400	531.1	26.100	531.1	26.800	531.1	28.100		
531.1	22.700	531.1	25.600	other	26.100	531.1	26.900	531.1	32.000		

**Water Study: 34****True Value: 22.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	0.021	531.1	21.300	531.1	22.000	531.1	23.500	531.1	24.300	531.1	30.400
531.1	17.800	531.1	21.450	531.1	22.300	531.1	23.500	531.1	24.400	531.1	34.300
531.1	18.100	531.1	21.600	531.1	22.500	531.1	23.600	531.1	24.400	531.1	45.900
531.1	19.100	531.1	21.700	531.1	22.700	531.1	23.700	531.1	26.700		
531.1	20.100	531.1	21.720	531.1	22.900	531.1	23.900	531.1	26.800		
531.1	20.400	531.1	21.900	531.1	23.000	531.1	24.000	531.1	28.400		
531.1	20.800	531.1	22.000	531.1	23.000	531.1	24.300	531.1	28.900		
531.1	21.300	531.1	22.000	531.1	23.100	531.1	24.300	531.1	30.400		

**Water Study: 35****True Value: 47.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	24.700	531.1	39.200	531.1	43.670	531.1	44.700	other	46.400	531.1	52.400
531.1	28.100	531.1	39.900	531.1	44.300	531.1	45.200	531.1	47.400	531.1	53.100
531.1	34.300	531.1	41.700	531.1	44.400	531.1	45.800	531.1	47.600	531.1	53.400
531.1	34.900	531.1	42.020	531.1	44.400	531.1	46.200	531.1	50.000	531.1	53.500
531.1	39.010	531.1	42.300	531.1	44.700	531.1	46.300	531.1	51.300	531.1	58.400

**Water Study: 36**

**True Value: 34.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	20.000	531.1	29.400	531.1	32.500	531.1	33.500	531.1	35.700	531.1	38.400
531.1	22.500	531.1	29.700	531.1	32.500	531.1	33.800	531.1	36.000	other	38.700
531.1	24.300	other	31.400	531.1	32.600	531.1	33.900	531.1	36.400	531.1	39.100
531.1	24.700	531.1	31.400	531.1	32.600	531.1	34.000	531.1	36.400	531.1	39.600
531.1	24.900	531.1	31.600	531.1	32.800	531.1	34.500	531.1	36.600	531.1	44.700
531.1	24.900	531.1	31.900	531.1	33.100	531.1	34.500	531.1	37.500	531.1	45.400
531.1	28.000	531.1	32.100	531.1	33.100	531.1	35.000	531.1	38.000	531.1	397.000
531.1	29.200	531.1	32.400	531.1	33.400	531.1	35.600	531.1	38.100		

**Water Study: 37****True Value: 46.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	9.750	531.1	39.800	531.1	42.700	531.1	44.800	531.1	46.180	531.1	48.400
531.1	10.600	531.1	40.800	531.1	42.800	531.1	45.200	531.1	46.200	531.1	48.730
531.1	10.600	531.1	41.000	531.1	43.100	531.1	45.300	other	46.300	531.1	49.100
531.1	31.200	531.1	41.600	531.1	43.300	531.1	45.500	531.1	47.600	531.1	55.300
531.1	38.900	531.1	41.900	531.1	43.800	531.1	45.700	531.1	48.300	531.1	66.700
531.1	39.200	531.1	42.300	531.1	43.900	531.1	46.100	531.1	48.400	531.1	71.100

**Water Study: 38****True Value: 58.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	6.050	531.1	53.500	531.1	59.000	531.1	60.600	531.1	62.500	531.1	65.900
531.1	48.400	531.1	55.600	531.1	59.200	531.1	61.300	531.1	62.700	531.1	67.400
531.1	49.400	531.1	55.800	531.1	59.500	531.1	61.500	531.1	63.200	531.1	67.500
other	51.600	531.1	56.000	531.1	59.600	531.1	62.000	531.1	63.400	531.1	68.800
531.1	52.000	531.1	57.900	531.1	60.100	531.1	62.000	531.1	64.000	531.1	74.200
531.1	52.100	531.1	58.200	531.1	60.100	531.1	62.300	531.1	64.980	531.1	79.000
531.1	53.400	531.1	58.300	531.1	60.100	531.1	62.300	531.1	65.300	531.1	84.500

**Water Study: 39****True Value: 78.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	36.000	531.1	72.020	531.1	77.900	531.1	80.000	531.1	87.400	531.1	97.900
531.1	60.400	531.1	72.500	531.1	78.000	531.1	80.400	531.1	88.400	531.1	109.000
531.1	63.000	531.1	72.500	531.1	78.200	531.1	80.500	531.1	88.900		
531.1	68.100	531.1	73.000	531.1	79.000	531.1	81.840	531.1	89.500		
531.1	68.700	531.1	74.800	531.1	79.000	531.1	83.600	531.1	89.700		
531.1	70.800	531.1	76.100	531.1	79.900	531.1	85.400	531.1	93.000		

**Water Study: 40****True Value: 42.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	28.700	531.1	37.100	531.1	39.000	531.1	40.000	531.1	42.700	531.1	44.200
6610	32.100	531.1	37.600	531.1	39.200	531.1	40.100	531.1	43.300	531.1	44.600
531.1	32.700	531.1	37.900	531.1	39.300	531.1	40.400	531.1	43.510	531.1	45.300
531.1	33.600	531.1	38.200	531.1	39.400	531.1	40.500	531.1	43.700	531.1	45.400
531.1	35.800	531.1	38.500	531.1	39.700	531.1	41.000	531.1	43.800	531.1	46.800
531.1	36.500	531.1	38.800	531.1	39.900	531.1	42.300	531.1	43.900	531.1	48.900
531.1	36.800	531.1	38.900	531.1	40.000	531.1	42.600	531.1	44.100	531.1	49.000

**Water Study: 41****True Value: 33.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
531.1	17.800	531.1	30.000	531.1	31.700	531.1	32.700	531.1	33.900		
531.1	24.700	531.1	30.900	531.1	31.700	531.1	33.100	531.1	34.000		
531.1	25.200	531.1	31.000	531.1	31.800	531.1	33.600	531.1	34.400		
531.1	27.600	531.1	31.200	531.1	32.000	531.1	33.690	531.1	36.700		
531.1	27.800	531.1	31.200	531.1	32.200	531.1	33.700	531.1	522.00		
531.1	28.800	531.1	31.600	531.1	32.600	531.1	33.900				

**PCBs****Water Study: 31****True Value: 0.445 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508A	0.220	other	0.421	508A	0.509	508A	0.900	508A	3.900		
508A	0.290	508A	0.430	508A	0.600	508A	0.935				
508A	0.360	other	0.496	other	0.615	508A	1.220				

**Water Study: 32****True Value: 0.959 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508A	0.294	508A	0.814	other	0.968	other	1.080	508A	1.120	508A	1.480
508A	0.406	508A	0.835	508A	0.980	508A	1.080	508A	1.180	508A	6.820
508A	0.495	508A	0.882	508A	1.000	508A	1.095	508A	1.281		
508A	0.797	508A	0.901	508A	1.000	other	1.100	508A	1.380		

**Water Study: 33****True Value: 0.807 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508A	0.407	508A	0.574	508A	1.030	other	1.160	other	1.320		
other	0.511	other	0.690	508A	1.052	508A	1.220	other	2.430		
508A	0.532	508A	1.010	508A	1.110	508A	1.220				

**Water Study: 34****True Value: 1.08 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508A	0.113	other	0.688	508A	0.860	508A	0.939	508A	1.060	508A	13.200
508A	0.417	508A	0.723	508A	0.865	508A	0.941	508A	1.104		
508A	0.460	508A	0.786	other	0.900	other	1.010	508A	1.110		
508A	0.596	508A	0.843	other	0.911	other	1.020	other	1.230		
508A	0.670	other	0.850	508A	0.935	508A	1.030	508A	1.290		

**Water Study: 35****True Value: 0.596 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.025	508A	0.271	508A	0.537	508A	0.706	508A	1.250		
508A	0.088	other	0.333	508A	0.550	508A	0.720	other	1.313		
508A	0.164	508A	0.394	508A	0.666	other	1.070	508A	3.560		

**Water Study: 36****True Value: 1.13 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.380	508A	0.637	508A	0.748	508A	0.958	508A	1.140	508A	1.620
other	0.474	508A	0.690	508A	0.774	508A	0.986	508A	1.140	508A	1.640
508A	0.502	508A	0.700	other	0.873	other	1.090	508A	1.150	508A	1.860
other	0.548	508A	0.705	508A	0.912	508A	1.100	508A	1.270	other	3.960
508A	0.589	508A	0.720	508A	0.944	other	1.100	other	1.440	other	6.400



**Water Study: 37****True Value: 0.527 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.249	508A	0.372	508A	0.456	508A	0.563	508A	0.853	other	2.020
other	0.249	508A	0.404	508A	0.457	508A	0.566	508A	0.866	508A	9.610
508A	0.310	other	0.413	508A	0.480	508A	0.664	508A	1.030		
508A	0.318	508A	0.422	508A	0.508	508A	0.686	508A	1.060		
508A	0.360	508A	0.451	508A	0.554	508A	0.690	other	1.550		

**Water Study: 38****True Value: 0.733 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.100	other	0.541	other	0.650	508A	0.720	508A	0.951	508A	1.660
508A	0.436	other	0.558	508A	0.659	508A	0.787	508A	1.120	other	14.900
508A	0.480	508A	0.590	508A	0.668	508A	0.860	508A	1.200		
508A	0.523	508A	0.593	508A	0.671	508A	0.874	508A	1.340		
508A	0.531	508A	0.611	508A	0.674	508A	0.909	508A	1.400		

**Water Study: 39****True Value: 0.667 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.197	other	0.507	508A	0.592	508A	0.739	other	0.809	508A	3.720
508A	0.310	508A	0.513	508A	0.606	508A	0.746	508A	0.815		
508A	0.392	508A	0.526	508A	0.664	other	0.756	508A	0.860		
508A	0.432	508A	0.533	508A	0.700	508A	0.765	508A	0.945		
other	0.504	508A	0.580	508A	0.715	508A	0.770	508A	0.992		

**Water Study: 40****True Value: 1.23 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508A	0.100	other	0.703	other	0.854	508A	0.905	508A	1.080	other	1.400
508A	0.506	508A	0.730	other	0.883	other	0.985	508A	1.090	508A	1.570
other	0.520	508A	0.760	other	0.885	other	1.000	other	1.120		
508A	0.555	508A	0.774	other	0.877	508A	1.020	508A	1.190		
508A	0.646	508A	0.788	508A	0.901	508A	1.030	508A	1.210		

**Water Study: 41****True Value: 1.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508A	0.149	508A	0.837	508A	1.140	508A	1.460	508A	1.970	508A	2.240
508A	0.240	other	0.906	508A	1.140	508A	1.590	508A	1.980		
508A	0.710	other	0.987	508A	1.240	other	1.690	508A	2.100		
508A	0.712	508A	1.050	other	1.400	508A	1.790	508A	2.110		

**Pentachlorophenol****Water Study: 24a****True Value: 0.924 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	0.067	515.1	0.649	525	0.693	other	0.770	515.1	0.898		
other	0.428	515.1	0.672	515.1	0.735	other	0.860				
other	0.468	525	0.685	515.1	0.760	other	0.895				

**Water Study: 24b****True Value: 16.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	0.596	other	8.750	515.1	11.300	525	14.200	515.1	17.200		
515.1	7.120	515.1	10.200	515.1	11.400	other	14.500				
other	7.770	525	10.800	other	14.000	other	14.900				

**Water Study: 26a****True Value: 3.75 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	0.214	515.1	2.100	other	2.440	515.1	3.190	515.1	3.940	515.1	5.050
515.1	1.730	525	2.100	515.1	2.820	515.1	3.470	515.1	3.980		
515.1	1.950	515.1	2.410	other	3.140	515.1	3.670	other	4.400		

**Water Study: 26b****True Value: 38.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	11.500	515.1	18.490	other	24.400	other	31.000	515.1	34.500	515.1	41.320
515.1	12.700	515.1	21.800	515.1	24.500	515.1	33.400	515.1	37.000		
515.1	18.300	525	23.700	515.1	29.700	515.1	34.400	other	37.300		

**Water Study: 29****True Value: 6.73 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	2.150	other	3.190	515.1	4.620	515.1	6.310	515.1	7.000	other	7.840
other	2.162	other	4.500	515.1	5.820	other	6.990	515.1	7.030		

**Water Study: 31****True Value: 11.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	1.300	515.1	4.460	other	6.360	515.1	8.830	other	10.340	515.1	16.100
515.1	3.000	515.1	4.500	515.1	7.430	515.1	9.280	525	10.500		
515.1	4.320	515.1	4.870	515.1	8.690	other	9.990	515.1	10.800		

**Water Study: 32****True Value: 10.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	1.240	515.1	6.140	other	7.440	515.1	9.720	515.1	10.300	515.1	12.300
other	1.650	515.1	6.600	515.1	7.920	515.1	9.810	515.1	10.400	515.1	13.400
515.1	3.120	515.1	6.980	515.1	8.260	515.1	9.875	other	10.400	515.1	20.000
other	3.780	515.1	7.360	515.1	8.500	515.1	10.200	515.1	10.500	515.1	20.700
515.1	4.950	515.1	7.361	other	8.720	515.1	10.200	other	10.720	515.1	23.400
515.1	5.820	515.1	7.390	515.1	8.970	515.1	10.300	other	11.700		

**Water Study: 33****True Value: 2.72 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	1.020	515.1	2.340	515.1	2.520	515.1	2.730	515.1	3.010	other	5.350
515.1	1.400	515.1	2.380	515.1	2.540	515.1	2.760	515.1	3.010	other	6.000
515.1	1.400	other	2.400	515.1	2.600	515.1	2.811	515.1	3.110	515.1	8.500
other	1.810	515.1	2.490	515.1	2.640	other	2.840	515.1	4.140		
515.1	2.280	515.1	2.520	515.1	2.710	515.1	3.000	other	4.370		

**Water Study: 34****True Value: 22.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	1.010	515.1	8.860	515.1	14.700	515.1	18.700	other	21.900	other	25.700
515.1	3.140	515.1	8.910	515.2	15.800	515.1	18.800	515.1	22.500	515.1	27.600
515.1	3.170	515.1	8.950	other	17.100	other	19.100	515.1	22.600	515.1	30.500
515.1	3.320	515.1	10.600	515.1	17.400	515.1	19.500	515.2	22.600	515.1	61.100
515.1	3.360	515.1	11.100	515.1	17.400	other	19.750	other	22.950	515.1	80.000
515.1	5.650	other	11.200	other	17.500	515.1	19.900	515.1	24.600		
other	6.603	515.1	11.500	515.1	18.020	515.1	20.100	515.1	24.800		
515.1	7.800	other	12.500	515.1	18.400	515.1	21.000	other	25.300		

**Water Study: 35****True Value: 8.91 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	2.860	515.1	5.810	515.1	7.000	515.1	7.900	other	9.760	other	12.000
515.1	3.190	515.1	5.970	515.1	7.370	other	7.910	515.1	10.100	515.1	17.500
515.1	3.230	515.1	6.290	515.1	7.430	515.1	7.979	515.1	10.500	515.1	32.800
515.1	3.770	515.1	6.710	515.1	7.600	other	8.220	515.1	10.800	515.1	36.800
515.1	4.420	515.1	6.920	other	7.730	515.1	8.850	other	10.850	515.1	73.500
515.1	5.580	other	6.940	515.1	7.894	other	9.440	other	11.200		

**Water Study: 36****True Value: 14.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	1.650	515.1	9.940	515.1	11.500	515.1	12.500	515	14.200	515.1	18.600
515.1	3.850	other	9.960	515.1	11.500	525.2	12.700	515.2	14.300	555	20.500
515.1	4.420	other	10.000	555	11.500	515.2	12.800	515	14.370	525.2	21.000
other	5.390	515.1	10.400	515.1	11.800	515.1	12.800	555	14.800	515.2	21.400
515.2	7.750	515.1	10.400	555	12.000	515.2	12.900	555	14.900	515.1	22.000
515.1	8.540	515.2	10.500	515.1	12.000	515.1	13.500	other	15.100	515.1	28.500
other	8.620	515.1	10.500	515.1	12.000	515.2	13.600	515.1	15.700		
515.1	8.890	515.1	10.600	515.1	12.200	515.2	13.900	515.2	18.000		

**Water Study: 37****True Value: 6.59 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	0.203	515.1	2.630	515.2	4.650	515.2	5.070	555	6.110	515.1	8.950
515.2	1.090	other	3.600	515.1	4.660	555	5.080	555	6.390	other	9.070
515.1	1.200	515.2	3.860	515.2	4.770	515.1	5.100	555	6.540	other	9.540
other	1.270	other	3.940	515.2	4.870	515.1	5.370	other	6.680	555	16.900
515.1	1.380	515.1	3.950	515.1	4.910	515.1	5.750	515.1	6.750	515.1	22.000
515.1	1.490	515.1	4.020	515.1	4.930	515.2	5.930	515.2	7.440		
515.1	1.840	515.1	4.170	515.1	4.970	other	6.070	555	8.140		

**Water Study: 38****True Value: 14.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.2	2.730	515.1	10.300	515.2	13.300	515.1	14.500	515.1	16.000	525.2	18.000
515.1	5.150	other	11.200	515.1	13.300	515.2	15.000	555	16.200	525.2	18.800
515.1	6.110	515.1	11.700	515.1	13.400	515.1	15.100	555	16.200	515.2	19.300
other	9.530	515.1	12.200	515.1	13.400	515.2	15.100	515.1	16.500	515.2	19.500
other	9.600	515.1	12.600	515.1	13.400	other	15.200	515.1	16.500	515.1	19.800
515.2	10.100	other	12.700	555	13.600	515.1	15.400	515.1	16.700	515.1	23.200
515.1	10.100	515.1	12.700	515.1	14.200	other	15.700	515.2	17.000	515.1	27.800
515.1	10.300	515.1	12.800	515.2	14.340	515.2	15.900	515.1	17.400	515.1	46.800

**Water Study: 39****True Value: 43.7ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	2.030	515.1	25.120	515.1	32.400	515.1	38.000	555	40.800	other	44.300
515.1	15.100	515.1	26.300	515.2	32.700	515.1	39.000	555	41.500	other	44.400
515.1	15.500	other	28.400	515.1	33.400	515.1	39.000	other	41.600	515.1	45.600
515.1	15.500	515.2	29.000	515.2	35.810	515.1	39.300	525.2	42.200	515.1	48.900
515.1	17.200	515.2	29.700	515.1	37.100	515.1	39.500	other	42.300	515.2	51.600
515.1	19.400	other	30.100	515.1	37.100	555	39.600	515.1	42.500	555	53.700
515.1	24.600	515.2	30.500	515.2	38.000	other	39.900	515.2	43.260		

**Water Study: 40****True Value: 22.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
555	10.200	515.1	16.000	515.1	17.600	515.1	20.100	515.2	22.500	other	27.100
515.1	12.700	other	16.200	515.2	17.800	other	20.100	515.1	22.900	515.2	27.390
515.1	14.400	515.1	16.500	515.1	17.800	555	20.500	515.1	22.900	515.1	28.200
515.1	14.500	515.1	17.000	515.2	18.100	515.2	20.600	other	23.100	515.1	28.900
515.1	14.900	515.1	17.200	515.1	18.800	other	21.200	525.2	23.400	525.2	31.300
515.2	15.000	other	17.400	515.1	18.900	515.1	21.300	515.1	23.600	515.2	32.900
515.1	15.900	515.1	17.500	515.1	19.600	515.2	21.400	515.1	23.800	515.2	40.300
515.2	15.900	555	17.600	515.1	19.600	515.1	22.300	515.1	24.200		

**Water Study: 41****True Value: 34.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	3.110	515.1	21.800	515.1	27.900	515.2	30.890	515.1	32.400	other	38.600
515.1	10.800	555	21.800	515.1	29.700	other	31.100	other	33.000	525.2	39.300
515.1	18.000	515.2	24.600	515.2	30.000	other	31.400	555	33.000	515.2	41.900
515.1	19.300	515.2	25.300	515.1	30.100	555	31.500	515.1	33.000	515.1	46.100
515.2	20.900	other	27.000	515.1	30.300	515.2	32.000	other	33.200	515.1	48.400
515.1	20.900	515.1	27.800	515.1	30.600	555	32.270	515.1	34.000	other	57.600

**Picloram****Water Study: 24a****True Value: 17.5ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	1.480	other	9.590	other	10.900	515.1	12.100	other	14.400	515.1	25.600
515.1	6.500	other	10.900	515.1	11.800	other	13.300	515.1	19.000		

**Water Study: 24b****True Value: 2.63 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	0.360	other	1.550	other	1.950	other	2.410	515.1	3.650	515.1	4.460
515.1	1.500	other	1.790	other	2.400	515.1	3.120	515.1	3.960		

**Water Study: 26a****True Value: 31.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	0.433	515.1	15.900	515.1	16.800	515.1	21.700	515.1	26.500	other	30.270
other	1.130	515.1	16.200	other	20.000	515.1	23.300	515.1	28.400	515.1	50.840

**Water Study: 26b****True Value: 1.33 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.023	515.1	0.688	other	0.996	515.1	1.220	515.1	1.290	515.1	2.190
515.1	0.270	515.1	0.790	other	1.140	515.1	1.270	515.1	1.380		

**Water Study: 30****True Value: 22.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	0.0412	515.1	11.000	515.1	16.200	other	18.650	other	25.690	515.1	40.800
515.1	5.600	515.1	12.000	515.1	16.500	515.1	21.200	other	25.700		
515.1	7.470	other	13.100	515.1	17.200	515.1	21.220	515.1	27.600		
515.1	9.930	515.1	13.400	other	17.600	515.1	21.900	other	29.600		
515.1	10.700	other	15.590	515.1	18.200	other	25.500	other	35.100		

**Water Study: 31****True Value: 26.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	5.320	515.1	9.960	515.1	11.400	515.1	15.000	515.1	18.600	515.1	32.750
515.1	9.600	515.1	10.200	515.1	11.800	other	17.730	other	19.900	515.1	69.200

**Water Study: 32****True Value: 10.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.889	515.1	6.690	515.1	8.110	515.1	10.200	515.1	12.900	515.1	20.300
515.1	2.100	515.1	7.040	515.1	8.250	515.1	11.000	515.1	13.100	515.1	21.400
515.1	2.880	515.1	7.150	515.1	8.652	515.1	11.200	515.1	13.400		
515.1	2.910	515.1	7.760	515.1	8.730	515.1	11.300	other	15.200		
515.1	3.070	515.1	7.810	515.1	8.900	515.1	11.400	515.1	15.700		
515.1	6.530	515.1	7.900	515.1	9.820	515.1	11.900	other	16.260		

**Water Study: 33****True Value: 17.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	7.730	515.1	9.350	515.1	12.000	515.1	13.900	515.1	14.900	515.1	23.700
other	8.000	515.1	9.360	other	12.100	515.1	14.500	515.1	17.700	515.1	32.400
515.1	8.070	515.1	10.100	515.1	12.400	515.1	14.800	515.1	18.200	515.1	46.300
515.1	9.170	515.1	11.400	515.1	13.060	515.1	14.900	other	20.000	515.1	149.000

**Water Study: 34****True Value: 13.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.1	0.542	515.1	6.190	515.1	8.700	515.1	10.200	515.1	12.400	515.2	15.950
515.2	0.577	515.1	6.830	515.1	9.310	515.1	10.800	other	12.700	515.1	16.800
515.1	3.060	other	6.860	other	9.390	other	10.800	515.1	13.100	515.2	28.800
other	3.340	515.1	6.990	515.2	9.450	515.1	11.300	515.1	13.700		
515.1	4.410	515.1	7.000	515.1	9.940	515.1	11.500	515.1	13.700		
515.1	5.220	515.1	7.320	515.1	9.980	other	11.930	515.1	14.970		
515.1	5.470	515.1	7.540	515.1	9.990	515.2	12.100	515.1	15.280		
515.1	5.640	515.1	7.980	515.1	10.150	515.1	12.100	other	15.400		

**Water Study: 35****True Value: 62.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.2	3.760	515.1	19.700	515.1	44.700	515.1	51.600	515.1	60.500	515.1	83.900
515.1	11.920	515.1	28.000	515.1	44.900	515.1	52.500	other	64.100	515.1	85.000
515.1	13.400	515.1	36.060	515.1	47.300	515.1	54.800	515.2	67.860	other	132.000
515.1	14.990	515.1	44.600	515.1	50.100	515.1	57.000	515.1	83.000	515.2	149.600

**Water Study: 36****True Value: 42.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.2	1.500	515.1	15.000	515.1	22.200	515.1	30.700	515	34.800	515.1	41.400
515.1	3.440	515.1	16.500	515.1	22.400	515.1	31.400	555	35.700	515.1	44.000
515.2	4.830	515.1	16.700	515.1	25.200	515.1	32.000	515.1	36.900	515.2	53.000
515.2	7.630	other	17.100	515.1	25.920	515.1	32.400	515.2	37.400	515.2	54.100
515.2	8.250	515.2	19.100	555	27.500	515.1	32.900	515.1	37.700	other	63.000
515.1	9.280	515.1	19.500	515.1	28.800	515.1	33.600	515.1	39.000		
515.1	13.100	515.1	20.100	515.1	29.000	515.1	33.800	555	39.300		
515.1	13.900	515.2	22.000	other	29.900	515.1	34.200	555	39.800		



**Water Study: 37****True Value: 23.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.2	0.907	other	8.750	other	16.800	515.2	19.100	555	22.000	555	25.900
other	1.630	515.2	13.600	515.2	17.200	other	19.300	other	22.300	other	26.700
515.2	2.880	other	13.900	555	17.700	other	19.800	other	22.300	other	32.900
other	4.120	other	13.900	other	17.700	other	20.000	555	23.300		
515.2	5.500	other	14.200	555	18.100	other	20.200	other	23.600		
other	8.360	other	14.300	515.2	18.500	other	20.700	other	24.500		
555	8.540	other	14.500	other	18.600	other	20.900	other	25.400		

**Water Study: 38****True Value: 56.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	6.070	other	22.200	555	35.000	other	41.600	other	49.600	515.2	79.100
other	10.400	other	26.900	other	35.800	515.2	41.600	515.2	49.700	515.2	108.800
other	12.100	other	28.800	other	36.200	other	44.800	other	51.900	515.2	256.000
515.2	15.400	other	30.600	other	38.400	515.2	45.360	other	53.100		
555	16.000	other	32.400	other	38.400	515.2	46.700	other	53.100		
515.2	17.500	other	33.000	other	39.600	other	47.300	other	61.300		
555	19.000	other	33.500	other	40.200	other	47.800	other	71.300		
other	20.800	other	34.000	other	41.400	other	49.000	515.2	72.100		

**Water Study: 39****True Value: 74.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
515.2	1.830	515.2	18.500	555	41.900	other	51.000	other	63.200	other	73.400
515.2	2.010	other	27.800	other	42.230	other	51.300	555	64.300	other	78.500
other	2.320	other	29.700	515.2	43.040	other	51.400	other	69.400		
555	7.250	515.2	30.200	other	45.900	other	52.300	515.2	70.250		
other	12.200	515.2	35.400	other	45.900	555	56.100	other	70.700		
515.2	12.900	other	37.400	other	46.200	other	59.800	555	70.800		
other	17.900	other	41.200	other	46.300	other	60.900	other	72.800		

**Water Study: 40****True Value: 44.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
555	1.080	other	21.400	other	27.400	555	31.800	other	36.300	515.2	53.000
515.2	8.780	515.2	22.000	other	27.600	other	32.300	555	37.900	other	78.700
other	10.900	other	22.200	other	29.100	other	33.400	515.2	38.500	other	97.700
515.2	12.900	other	22.400	other	29.500	515.2	33.700	other	38.700		
515.2	13.600	other	23.300	other	30.800	other	34.900	515.2	40.800		
other	13.700	other	24.200	515.2	31.200	other	35.200	other	42.200		
515.2	17.700	other	24.500	other	31.300	other	35.500	other	43.800		
other	18.200	other	27.200	other	31.600	other	35.900	other	48.200		

**Water Study: 41****True Value: 62.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	0.852	515.2	25.100	other	35.000	515.2	41.900	other	50.800	555	58.080
515.2	4.040	other	26.000	other	37.700	other	43.300	other	51.800	other	59.800
other	8.720	515.2	29.000	other	39.500	other	44.100	other	52.600	other	63.700
other	21.100	other	32.500	other	41.000	555	48.800	other	52.900	other	75.000
515.2	21.400	other	33.300	515.2	41.100	515.2	50.160	other	53.200	other	96.400
555	23.100	other	34.000	other	41.700	other	50.200	other	54.100		

**Tetrachloroethylene****Water Study: 27****True Value: 7.76 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	5.870	502.2	6.800	524.2	6.900	502.2	7.590	502.2	8.030	524.2	9.030
other	6.000	524.2	6.820	524.2	7.040	524.1	7.600	502.2	8.380	502.2	9.080
502.2	6.400	502.2	6.860	502.2	7.090	502.2	7.700	502.2	8.500	524.2	9.150
502.2	6.660	524.2	6.860	524.2	7.140	524.2	7.700	524.1	8.580	524.1	10.600
502.2	6.660	502.2	6.890	524.2	7.400	524.2	7.810	502.2	8.610	502.2	10.770
502.1	6.710	502.2	6.900	502.2	7.490	502.2	8.020	other	8.630		

**Water Study: 29****True Value: 15.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	10.250	524.1	14.000	524.2	14.850	502.2	15.700	502.2	16.600	other	18.800
502.2	12.800	502.2	14.100	502.2	15.200	524.2	16.000	502.2	16.700	502.2	19.000
524.2	13.300	524.2	14.200	502.2	15.200	502.2	16.190	524.2	16.800	524.2	19.500
502.2	13.600	524.2	14.600	502.2	15.400	524.2	16.200	other	16.820	502.2	21.100
502.2	13.900	524.2	14.680	524.2	15.600	502.2	16.300	524.2	16.900		
524.2	13.900	524.2	14.800	other	15.600	502.2	16.300	524.1	17.000		

**Water Study: 30****True Value: 9.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.1	5.690	524.2	7.880	other	8.430	502.2	8.810	502.2	9.040	524.2	9.580
502.2	6.381	502.2	7.920	524.2	8.580	502.2	8.820	502.2	9.070	524.2	9.700
524.2	6.800	524.2	8.010	524.2	8.580	524.1	8.880	524.2	9.170	524.2	9.710
other	6.850	524.2	8.230	524.2	8.590	524.2	8.900	502.2	9.240	524.2	9.800
524.2	7.110	524.2	8.250	524.2	8.600	502.2	8.900	502.2	9.250	other	10.020
524.2	7.200	502.2	8.270	524.1	8.610	524.2	8.900	other	9.270	524.2	10.200
502.2	7.330	502.2	8.340	502.2	8.610	524.2	8.900	524.2	9.400	502.2	10.200
502.2	7.330	502.2	8.370	524.2	8.640	502.2	8.920	502.2	9.420	524.2	10.300
524.2	7.620	502.2	8.420	other	8.720	524.2	8.940	524.2	9.490	502.2	10.400
524.2	7.770	502.2	8.430	502.2	8.800	524.1	8.990	other	9.520	502.2	11.900

**Water Study: 31****True Value: 11.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.305	502.2	10.600	502.1	11.300	502.2	11.600	502.2	12.000	502.1	12.600
502.2	9.410	other	10.600	524.2	11.360	502.2	11.700	524.2	12.200	524.2	13.100
524.2	9.900	524.2	10.900	502.2	11.400	524.2	11.800	524.2	12.300	502.2	14.800
502.2	10.400	524.2	10.900	502.2	11.500	524.2	11.800	524.2	12.300		
524.2	10.500	502.2	11.000	502.1	11.500	502.2	11.900	524.2	12.400		
524.2	10.500	524.1	11.200	other	11.600	524.2	11.910	524.2	12.540		

**Water Study: 32****True Value: 7.43 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.590	524.2	6.700	524.2	7.010	502.2	7.390	524.2	7.670	524.2	8.060
502.2	5.260	524.2	6.800	524.2	7.010	502.2	7.440	502.2	7.700	502.2	8.300
502.2	5.690	502.2	6.840	502.2	7.020	524.2	7.450	524.2	7.700	524.2	8.500
524.2	6.000	502.2	6.850	502.2	7.040	502.1	7.460	524.2	7.700	502.1	8.800
502.2	6.010	524.2	6.860	502.1	7.100	502.2	7.490	524.2	7.720	524.2	8.970
other	6.280	other	6.900	502.2	7.180	524.2	7.500	502.1	7.740	524.2	9.040
524.2	6.410	502.2	6.930	524.2	7.258	524.1	7.570	524.2	7.770	524.2	9.200
502.2	6.450	524.2	6.980	524.2	7.310	524.2	7.620	502.2	7.770	502.2	10.400
502.2	6.530	524.2	7.000	524.2	7.310	502.2	7.620	524.2	7.840		
524.2	6.560	502.2	7.000	524.2	7.350	502.2	7.620	502.2	7.870		
524.2	6.700	other	7.000	502.2	7.370	502.2	7.650	524.2	7.900		

**Water Study: 33****True Value: 12.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.540	502.2	11.610	524.2	12.400	524.2	13.000	502.2	13.600	other	14.300
502.2	9.970	502.2	11.700	502.2	12.500	502.2	13.100	524.2	13.800	524.2	14.400
524.2	10.670	524.2	11.800	other	12.500	502.2	13.400	524.2	13.800	524.2	15.400
524.1	11.100	524.2	11.900	502.1	12.700	502.2	13.400	502.2	13.800	502.2	17.600
other	11.150	524.2	12.000	502.2	12.800	502.2	13.400	524.2	13.900		
524.2	11.510	502.2	12.300	524.2	12.900	502.2	13.400	502.2	14.000		

**Water Study: 34****True Value: 16.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	12.500	502.1	14.600	524.2	15.400	524.2	16.000	524.2	16.500	524.2	17.100
524.2	12.700	524.2	14.600	524.2	15.400	524.2	16.100	502.2	16.500	524.2	17.200
502.2	13.300	524.2	14.900	502.2	15.600	502.2	16.100	524.2	16.600	524.2	17.300
524.2	14.100	502.2	15.000	502.2	15.600	524.2	16.100	524.2	16.620	502.2	17.400
502.2	14.100	502.2	15.000	other	15.800	524.2	16.100	502.2	16.700	524.2	17.400
502.2	14.100	other	15.100	502.2	15.800	502.2	16.200	502.2	16.700	524.2	17.500
524.2	14.100	524.2	15.100	502.2	15.800	524.2	16.300	524.2	16.770	502.2	17.540
524.2	14.200	502.2	15.200	524.2	15.900	502.2	16.300	502.2	16.900	524.2	17.870
524.2	14.400	524.2	15.200	502.2	15.900	524.2	16.400	502.2	17.100	524.2	17.900
502.2	14.520	502.2	15.300	524.2	15.900	524.2	16.480	502.2	17.100	502.2	19.000

**Water Study: 35****True Value: 11.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.070	524.2	10.380	502.2	10.900	524.2	11.400	502.2	11.600	524.2	12.400
524.2	9.510	502.2	10.400	524.2	11.000	502.2	11.400	524.2	11.600	502.2	12.500
524.2	10.000	524.2	10.600	524.2	11.000	524.2	11.400	other	11.620	other	12.800
502.2	10.100	524.2	10.700	524.2	11.100	502.2	11.500	524.2	11.800	524.2	12.900
524.2	10.200	502.2	10.710	524.2	11.200	524.2	11.500	524.2	12.000	524.2	14.930
502.2	10.200	502.2	10.800	524.2	11.300	502.2	11.510	524.2	12.200	502.2	20.800

**Water Study: 36****True Value: 18.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	7.510	524.2	16.500	502.2	17.000	502.2	17.800	other	18.400	524.2	19.900
524.2	14.200	524.2	16.700	502.2	17.100	502.2	17.900	524.2	18.500	524.2	20.380
524.2	14.600	502.2	16.780	524.2	17.200	524.2	18.000	524.2	18.500	524.2	20.500
524.2	14.800	524.2	16.800	524.2	17.200	502.2	18.000	other	18.600	524.2	21.100
524.2	15.100	524.2	16.800	524.2	17.300	502.2	18.100	524.2	18.600	502.2	22.500
502.2	15.200	502.2	16.800	524.2	17.350	502.2	18.100	502.2	18.600	524.2	22.800
502.2	15.300	524.2	16.920	524.2	17.400	502.2	18.200	502.2	18.600		
502.2	15.800	524.2	16.970	524.2	17.600	524.2	18.300	524.2	18.800		
502.2	15.800	other	17.000	502.2	17.700	524.2	18.300	524.2	18.980		
524.2	16.260	502.2	17.000	524.2	17.700	524.2	18.300	524.2	19.100		
502.2	16.400	524.2	17.000	524.2	17.800	other	18.400	502.2	19.300		

**Water Study: 37****True Value: 9.60 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.820	524.2	8.690	524.2	9.060	other	9.340	524.2	9.560	524.2	9.930
502.2	8.060	502.2	8.700	502.2	9.100	524.2	9.350	524.2	9.560	524.2	9.990
524.2	8.060	524.2	8.820	524.2	9.210	502.2	9.390	502.2	9.620	502.2	10.500
other	8.100	502.2	8.860	524.2	9.220	524.2	9.390	524.2	9.620	502.2	11.000
502.2	8.170	524.2	8.900	524.2	9.24	502.2	9.390	502.2	9.660	524.2	11.100
524.2	8.230	524.2	8.910	524.2	9.300	502.2	9.420	other	9.780	524.2	11.900
502.2	8.290	524.2	8.960	524.2	9.330	502.2	9.450	502.2	9.890	524.2	12.400
524.2	8.620	524.2	9.020	502.2	9.330	502.2	9.510	524.2	9.920	524.2	13.300

**Water Study: 38****True Value: 14.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	6.720	524.2	12.700	502.2	13.200	524.2	13.600	524.2	14.270	524.2	15.000
524.2	11.200	524.2	12.800	524.2	13.200	other	13.800	502.2	14.300	524.2	15.500
524.2	11.300	502.2	12.800	524.2	13.200	524.2	13.800	524.2	14.300	524.2	15.600
524.2	11.300	524.2	12.900	524.2	13.300	524.2	13.900	524.2	14.660	524.2	16.000
524.2	11.600	502.2	12.900	524.2	13.300	524.2	13.900	502.2	14.700	524.2	16.400
502.2	11.700	524.2	13.000	other	13.400	502.2	13.980	524.2	14.800	502.2	19.700
502.2	11.800	502.2	13.000	524.2	13.500	524.2	14.000	502.2	14.800		
524.2	12.700	524.2	13.000	524.2	13.600	524.2	14.100	502.2	14.900		
524.2	12.700	502.2	13.200	other	13.600	524.2	14.100	502.2	14.900		
502.2	12.700	524.2	13.200	502.2	13.600	502.2	14.200	502.2	15.000		

**Water Study: 39****True Value: 7.60 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.400	524.2	6.610	524.2	7.200	524.2	7.480	524.2	7.900	524.2	8.400
524.2	5.680	524.2	6.840	502.2	7.240	524.2	7.500	524.2	7.980	524.2	8.560
524.2	5.770	502.2	6.900	524.2	7.350	524.2	7.510	524.2	8.000	502.2	8.560
502.2	5.950	524.2	6.920	524.2	7.350	502.2	7.580	524.2	8.020	502.2	8.770
524.2	6.510	524.2	6.930	524.2	7.400	524.2	7.600	524.2	8.050	524.2	31.770
524.2	6.520	524.2	6.960	524.2	7.400	502.2	7.790	502.2	8.090		
524.2	6.570	524.2	7.100	524.2	7.420	502.2	7.820	524.2	8.150		
502.2	6.590	other	7.170	502.2	7.480	502.2	7.870	524.2	8.250		

**Water Study: 40****True Value: 14.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	6.000	524.2	12.900	524.2	13.800	524.2	14.500	502.2	15.000	524.2	15.800
502.2	11.200	524.2	13.100	524.2	13.800	502.2	14.500	502.2	15.000	502.2	15.900
524.2	11.800	524.2	13.100	other	14.000	502.2	14.500	524.2	15.000	502.2	16.000
524.2	12.000	other	13.200	524.2	14.100	524.2	14.500	502.2	15.100	502.2	16.200
524.2	12.100	524.2	13.200	524.2	14.100	502.2	14.800	502.2	15.200	524.2	16.700
524.2	12.600	524.2	13.300	524.2	14.300	other	14.800	502.2	15.200	524.2	17.600
524.2	12.620	524.2	13.500	524.2	14.300	502.2	14.900	524.2	15.300	502.2	17.800
524.2	12.800	524.2	13.600	524.2	14.400	524.2	14.900	524.2	15.300	524.2	18.000
524.2	12.900	524.2	13.700	524.2	14.400	524.2	14.900	524.2	15.400		
524.2	12.900	502.2	13.700	524.2	14.500	524.2	15.000	524.2	15.700		

**Water Study: 41****True Value: 11.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	6.720	502.2	10.200	524.2	10.900	other	11.200	524.2	11.600	524.2	12.200
524.2	9.490	524.2	10.200	502.2	10.900	524.2	11.200	502.2	11.700	502.2	12.300
502.2	9.680	502.2	10.300	524.2	10.900	524.2	11.230	502.2	11.700	524.2	13.000
524.2	9.730	524.2	10.600	524.2	11.000	524.2	11.300	524.2	11.740	502.2	13.100
524.2	9.850	524.2	10.800	524.2	11.100	524.2	11.300	524.2	11.800	524.2	14.000
524.2	9.970	524.2	10.800	502.2	11.200	502.2	11.400	524.2	11.800	502.2	14.500
524.2	10.000	524.2	10.900	524.2	11.200	502.2	11.600	524.2	12.000		

**Thallium****Water Study: 24a****True Value: 2.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
279.2	1.100	279.2	1.770	279.2	1.900	279.2	2.030	279.2	2.300	279.2	2.610
279.2	1.530	279.2	1.800	200.7A	1.900	279.1	2.100	279.1	2.400	279.2	3.000
279.2	1.730	279.2	1.800	279.2	1.920	279.2	2.140	200.7A	2.400	other	4.000
279.2	1.740	279.2	1.830	279.2	2.000	200.7A	2.160	279.2	2.570	other	6.150
279.2	1.760	279.2	1.870	279.2	2.000	279.2	2.200	279.2	2.600	279.2	16.500

**Water Study: 24b****True Value: 18.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
279.2	2.000	279.2	15.700	200.7A	17.400	279.2	18.000	279.2	18.600	279.2	19.900
279.2	9.600	279.1	16.000	other	17.500	279.2	18.200	279.2	18.600	other	20.700
279.2	12.000	279.2	16.600	279.2	18.000	279.1	18.300	279.2	18.600	279.1	20.700
279.2	14.500	279.2	16.600	279.2	18.000	200.7A	18.500	279.2	18.900	279.2	21.900
279.2	14.800	279.2	16.900	279.2	18.000	200.7A	18.500	279.2	19.000	279.2	24.700
200.7A	15.600	279.2	17.000	279.2	18.000	279.2	18.600	279.2	19.100		

**Water Study: 25a****True Value: 36.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
279.2	3.700	279.2	33.000	279.2	34.900	279.1	36.000	279.2	36.600	279.2	41.600
279.2	28.000	279.2	33.000	279.2	35.000	279.2	36.000	279.2	36.900		
279.2	31.000	279.2	33.900	279.2	35.000	279.2	36.000	279.2	37.000		
279.1	31.200	279.2	34.700	279.2	35.000	279.1	36.100	279.2	37.000		
279.2	32.000	279.2	34.800	279.2	35.200	279.2	36.500	other	37.800		

**Water Study: 25b****True Value: 3.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
279.2	2.000	279.2	2.590	279.2	3.000	279.2	3.100	279.2	3.470	279.2	37.000
279.2	2.040	279.2	2.780	279.2	3.000	279.1	3.210	279.2	3.600		
279.2	2.400	279.2	2.800	279.2	3.000	279.2	3.280	279.2	3.900		
other	2.550	279.2	2.900	279.2	3.020	279.2	3.320	279.2	4.000		

**Water Study: 26****True Value: 4.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
279.2	1.900	279.2	3.300	279.2	3.600	279.2	4.200	279.2	4.390	279.2	6.300
279.2	1.960	279.2	3.450	279.2	3.620	200.7A	4.200	200.7A	4.400	279.2	7.300
279.2	2.670	279.2	3.470	279.2	3.670	279.2	4.200	other	4.500		
279.2	3.040	279.2	3.480	279.2	3.840	279.2	4.240	279.2	4.500		
279.2	3.200	279.2	3.500	279.2	3.950	279.2	4.250	279.2	4.560		
279.2	3.200	279.2	3.500	279.2	4.000	279.2	4.260	200.7A	4.610		
279.2	3.250	279.2	3.510	279.2	4.110	279.2	4.370	279.2	5.040		

**Water Study: 27****True Value: 26.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
279.2	7.200	279.2	24.900	279.2	25.700	279.2	27.000	279.2	27.600	279.2	29.000
279.2	13.500	279.2	25.200	279.2	25.800	279.2	27.000	279.2	28.200	279.2	29.000
other	20.600	279.2	25.300	279.2	25.900	279.2	27.200	other	28.800	279.2	32.100
279.2	24.700	279.2	25.300	279.2	26.200	279.2	27.500	279.2	29.000		

**Water Study: 29****True Value: 9.74 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
279.2	5.400	279.2	8.700	279.2	9.500	279.2	9.700	279.2	10.200	279.2	11.000
279.2	7.100	279.2	8.820	279.2	9.570	279.2	9.700	279.2	10.200		
other	7.300	279.2	9.100	279.2	9.600	279.2	9.900	279.2	10.300		
279.2	8.300	other	9.380	other	9.600	200.9	9.900	279.2	10.700		



**Water Study: 30****True Value: 5.30 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.7	4.100	279.2	4.980	279.2	5.150	279.2	5.320	279.2	5.600	279.2	7.000
279.2	4.580	200.9	4.980	279.2	5.200	279.2	5.350	279.2	5.600	279.2	7.140
200.9	4.590	279.2	5.000	279.2	5.200	279.2	5.370	200.9	5.750	279.2	7.500
279.2	4.640	279.2	5.010	279.2	5.200	279.2	5.400	279.2	5.800		
279.2	4.650	279.2	5.070	279.2	5.200	279.2	5.458	279.2	5.820		
200.9	4.780	279.2	5.070	279.2	5.230	279.2	5.500	200.9	5.900		
279.2	4.830	200.9	5.080	279.2	5.260	279.2	5.500	200.9	6.200		
279.2	4.880	279.2	5.100	279.2	5.300	279.2	5.500	200.9	6.300		
279.2	4.920	279.2	5.110	200.7	5.300	200.9	5.500	279.2	7.000		

**Water Study: 31****True Value: 1.48 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
279.2	1.010	279.2	1.340	279.2	1.480	200.9	1.600	279.2	1.700	279.2	2.300
279.2	1.050	200.9	1.400	279.2	1.500	200.9	1.600	279.2	1.760	200.9	3.000
279.2	1.100	279.2	1.400	200.9	1.530	279.2	1.635	other	2.000		
279.2	1.200	200.9	1.400	279.2	1.590	200.9	1.650	200.9	2.040		
279.2	1.280	279.2	1.450	279.2	1.600	200.9	1.690	200.9	2.100		

**Water Study: 32****True Value: 2.56 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	1.000	200.9	2.100	279.2	2.350	200.9	2.460	279.2	2.600	279.2	2.960
200.9	1.260	279.2	2.200	279.2	2.370	279.2	2.460	279.2	2.628	279.2	2.978
200.9	1.700	279.2	2.230	279.2	2.400	200.9	2.460	279.2	2.650	200.9	2.980
200.8	1.750	200.9	2.300	279.2	2.400	200.9	2.470	200.9	2.650	200.9	3.000
200.9	1.780	279.2	2.300	279.2	2.400	200.9	2.470	200.9	2.700	200.9	3.000
279.2	1.800	279.2	2.300	279.2	2.400	200.8	2.480	200.9	2.700	279.2	3.100
279.2	1.900	279.2	2.310	279.2	2.410	279.2	2.540	200.9	2.720	other	3.100
279.2	1.900	279.2	2.310	279.2	2.430	279.2	2.550	200.9	2.780	200.9	3.300
200.8	1.960	279.2	2.340	279.2	2.450	200.9	2.600	200.9	2.880	279.2	4.400
279.2	2.060	279.2	2.350	279.2	2.460	279.2	2.600	200.9	2.900	279.2	5.000

**Water Study: 33****True Value: 9.56 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
3113	5.230	279.2	7.660	200.9	9.000	279.2	9.530	279.2	10.000	279.2	10.900
279.2	6.000	279.2	8.400	200.9	9.000	279.2	9.538	200.9	10.300	200.8	10.900
3113	6.400	279.2	8.700	279.2	9.100	279.2	9.610	279.2	10.300		
279.2	6.880	279.2	8.940	279.2	9.160	279.2	9.700	200.9	10.300		
279.2	7.400	other	8.980	200.9	9.500	279.2	10.000	279.2	10.400		
279.2	7.580	200.9	9.000	279.2	9.510	279.2	10.000	200.9	10.700		

**Water Study: 34****True Value: 6.19 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	3.800	200.9	5.330	200.9	5.940	200.9	6.200	200.9	6.500	200.9	6.700
279.2	4.580	200.9	5.470	279.2	6.000	279.2	6.200	279.2	6.500	200.9	6.760
200.8	4.760	279.2	5.520	279.2	6.000	279.2	6.240	279.2	6.500	279.2	6.800
3113	4.800	200.9	5.600	200.9	6.000	279.2	6.260	279.2	6.520	279.2	6.840
279.2	4.860	279.2	5.650	200.9	6.000	279.2	6.270	200.9	6.610	279.2	7.100
279.2	4.890	279.2	5.700	200.8	6.060	279.2	6.300	200.8	6.620	200.9	7.340
279.2	5.130	200.9	5.700	279.2	6.100	279.2	6.320	279.2	6.630	200.9	8.000
279.2	5.300	200.9	5.780	200.8	6.117	279.2	6.340	200.9	6.640	200.8	9.950
200.9	5.300	279.2	5.800	279.2	6.160	200.9	6.400	200.9	6.680		
279.2	5.300	279.2	5.860	279.2	6.170	200.9	6.440	other	6.700		

**Water Study: 35****True Value: 8.00 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	5.200	279.2	7.210	200.8	7.600	279.2	7.900	279.2	8.130	279.2	8.780
279.2	5.430	200.9	7.300	200.8	7.600	200.9	7.900	200.9	8.190	279.2	8.810
other	5.760	200.9	7.390	279.2	7.600	200.9	7.920	200.9	8.200	279.2	9.000
3113	6.000	200.9	7.400	200.8	7.670	279.2	7.950	200.9	8.230	279.2	9.100
200.9	6.000	other	7.400	3113	7.770	279.2	8.030	200.8	8.250	200.9	10.100
279.2	6.020	279.2	7.500	279.2	7.800	279.2	8.100	279.2	8.500	200.9	10.700
200.9	6.300	200.9	7.600	200.9	7.800	200.9	8.120	279.2	8.600		

**Water Study: 36**

**True Value: 4.50 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	3.440	200.9	4.310	200.9	4.580	200.8	4.730	200.9	4.940	200.9	5.300
3113	3.600	279.2	4.330	200.8	4.580	200.9	4.740	other	4.980	200.9	5.300
200.9	3.700	200.9	4.400	200.9	4.590	200.9	4.740	200.9	5.000	200.9	5.320
200.9	4.000	200.9	4.430	200.9	4.600	200.8	4.750	200.9	5.000	200.8	5.420
200.8	4.040	200.9	4.440	other	4.600	200.8	4.770	200.8	5.000	200.9	5.620
other	4.100	200.9	4.450	other	4.600	other	4.780	200.9	5.000	200.9	33.100
200.9	4.200	279.2	4.460	200.9	4.650	200.9	4.800	200.8	5.120		
279.2	4.200	200.9	4.500	200.9	4.670	200.9	4.800	279.2	5.120		
200.9	4.230	200.9	4.550	other	4.680	200.9	4.810	200.9	5.150		
200.8	4.280	other	4.560	200.8	4.700	200.9	4.870	other	5.200		
200.8	4.290	other	4.580	200.9	4.720	200.9	4.900	200.9	5.250		

**Water Study: 37**

**True Value: 2.38 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	0.816	200.9	2.000	200.9	2.260	200.9	2.440	200.9	2.540	200.9	2.690
3113	1.000	other	2.100	200.9	2.270	200.8	2.440	200.9	2.550	200.9	2.810
200.9	1.120	200.9	2.130	200.9	2.280	200.9	2.450	200.8	2.560	200.9	2.930
279.2	1.200	200.9	2.200	200.9	2.290	200.8	2.460	200.8	2.570		
200.9	1.900	200.9	2.200	200.9	2.300	200.9	2.470	200.8	2.570		
200.9	1.920	200.9	2.200	200.9	2.300	200.9	2.500	200.9	2.600		
200.9	2.000	200.9	2.220	200.9	2.350	200.8	2.500	200.8	2.600		
200.9	2.000	200.9	2.230	200.9	2.390	200.9	2.540	200.9	2.670		

**Water Study: 38**

**True Value: 8.91 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	1.060	200.9	7.800	200.9	8.260	200.8	8.580	200.9	8.900	200.8	9.110
200.9	3.370	200.9	7.890	200.8	8.300	other	8.600	200.8	8.900	200.8	9.130
200.9	4.350	200.9	7.920	200.9	8.300	200.9	8.650	200.9	8.990	200.8	9.210
200.9	6.200	200.9	8.080	200.8	8.300	200.9	8.650	200.9	9.000	200.9	9.520
200.9	6.600	200.9	8.100	200.8	8.350	200.9	8.650	200.9	9.000	200.9	9.570
200.9	7.000	200.8	8.100	200.9	8.460	200.8	8.700	200.8	9.000	200.9	9.600
other	7.190	200.8	8.110	200.9	8.490	200.8	8.700	200.8	9.010	other	9.660
200.9	7.490	200.9	8.130	200.9	8.490	other	8.720	200.8	9.050	200.9	10.000
200.9	7.550	200.9	8.200	200.9	8.520	200.9	8.790	200.9	9.080	279.2	10.100
200.9	7.630	other	8.250	200.9	8.530	200.8	8.880	200.9	9.100		

**Water Study: 39****True Value: 5.60 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	4.060	200.9	5.220	200.9	5.400	200.9	5.560	200.8	5.900	200.9	6.100
200.9	4.690	200.9	5.260	200.9	5.400	200.9	5.580	200.8	5.900	other	6.100
200.9	4.850	200.9	5.280	200.8	5.400	200.9	5.590	200.9	5.930	200.9	6.180
200.9	4.900	200.9	5.300	200.9	5.440	200.9	5.600	200.9	5.940	200.9	6.500
200.9	4.900	200.9	5.320	200.9	5.440	200.9	5.680	other	5.970	200.9	6.950
200.9	5.000	200.8	5.320	200.8	5.470	200.9	5.800	200.9	5.980	200.9	7.000
200.9	5.120	200.9	5.350	200.9	5.500	200.9	5.800	200.9	6.000	200.8	7.600
200.9	5.160	200.9	5.390	200.9	5.560	200.8	5.800	200.8	6.050		

**Water Study: 40****True Value: 10.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	7.170	200.9	9.650	200.8	9.940	200.8	10.300	200.8	10.600	other	10.900
200.9	9.040	200.9	9.670	200.8	9.950	200.9	10.400	200.9	10.600	200.9	11.000
200.9	9.300	200.8	9.760	200.8	9.960	200.9	10.400	200.9	10.700	200.9	11.000
200.9	9.370	200.8	9.770	200.8	9.980	200.9	10.400	200.9	10.700	200.8	11.000
200.9	9.380	200.9	9.800	200.9	10.000	200.8	10.400	200.8	10.700	200.9	11.000
200.9	9.420	200.9	9.800	200.8	10.000	200.8	10.500	200.9	10.800	200.9	11.300
200.9	9.490	200.9	9.900	200.9	10.200	279.2	10.500	200.8	10.800	200.9	11.600
200.8	9.500	200.9	9.920	other	10.200	200.9	10.600	200.9	10.800	200.9	12.300
other	9.540	200.9	9.930	200.8	10.200	other	10.600	200.9	10.900	other	18.100
200.8	9.620	200.9	9.930	200.8	10.280	200.9	10.600	other	10.900		

**Water Study: 41****True Value: 3.50 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
200.9	2.700	200.9	3.000	200.8	3.160	200.9	3.260	200.9	3.340	other	3.590
200.9	2.720	200.9	3.000	279.2	3.170	200.9	3.270	200.9	3.350	200.8	3.610
200.8	2.820	200.9	3.070	200.9	3.180	200.9	3.280	200.8	3.410	200.9	5.800
200.9	2.900	200.9	3.070	200.9	3.200	200.9	3.300	200.9	3.440	other	408.000
200.9	2.930	200.9	3.090	200.9	3.230	200.9	3.300	200.9	3.470		
200.8	2.960	200.9	3.100	200.9	3.240	200.8	3.310	200.9	3.500		
200.8	2.990	200.8	3.120	200.8	3.250	200.8	3.310	200.9	3.500		
200.9	3.000	200.9	3.140	200.8	3.250	200.8	3.340	200.9	3.500		

**Toluene**

**Water Study: 29**

**True Value: 11.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	7.640	502.2	10.680	502.2	11.400	502.2	11.400	502.2	12.100	524.2	12.800
524.2	9.820	502.2	10.900	524.2	11.400	524.2	11.400	524.1	12.100	524.2	13.200
524.2	10.200	524.2	10.900	502.2	11.400	524.2	11.500	502.2	12.300	524.2	13.400
524.1	10.400	502.2	11.000	502.2	11.400	524.2	11.600	502.2	12.500	502.2	13.500
524.2	10.500	502.2	11.100	other	11.400	other	11.640	other	12.600	524.2	14.700
524.2	10.600	524.2	11.160	502.2	11.400	502.2	11.740	502.2	12.640		

**Water Study: 30**

**True Value: 8.02 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	6.190	502.2	7.450	524.2	7.700	524.2	8.000	524.1	8.300	502.2	8.540
502.2	6.420	524.2	7.500	524.2	7.730	502.2	8.010	524.2	8.300	524.2	8.570
524.2	6.430	524.2	7.500	524.2	7.740	502.2	8.010	502.2	8.320	524.2	8.600
524.2	6.500	502.2	7.540	other	7.760	524.2	8.020	502.2	8.330	524.2	8.640
502.2	7.030	524.2	7.540	other	7.780	524.1	8.070	524.2	8.330	524.2	8.670
524.2	7.150	502.2	7.550	524.2	7.780	502.2	8.110	524.2	8.400	502.2	8.800
524.2	7.210	524.2	7.630	502.2	7.860	502.2	8.200	other	8.420	502.2	9.050
other	7.386	502.2	7.630	503.1	7.890	524.2	8.200	524.2	8.420	524.2	9.100
524.2	7.400	502.2	7.630	502.2	7.930	502.2	8.200	503.1	8.440	other	23.800
502.2	7.401	524.1	7.680	502.2	7.960	502.2	8.250	502.2	8.510		

**Water Study: 31**

**True Value: 15.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	12.330	524.2	14.100	502.2	14.400	524.2	14.800	524.2	15.200	524.2	16.000
502.2	12.600	524.2	14.200	524.2	14.400	502.2	14.900	502.2	15.400	502.2	16.000
other	13.200	502.2	14.200	524.2	14.400	other	15.000	502.2	15.700	502.2	16.100
524.2	13.500	524.2	14.200	502.2	14.400	502.1	15.000	502.2	15.700	502.2	16.500
524.2	13.700	524.1	14.300	503.1	14.600	524.2	15.060	524.2	15.800	502.2	16.600
503.1	14.000	524.2	14.300	502.2	14.700	524.2	15.200	524.2	15.920		

**Water Study: 32****True Value: 6.54 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.000	502.2	5.840	502.2	6.160	524.2	6.380	524.2	6.680	502.2	7.000
503.1	5.340	524.2	5.900	502.2	6.170	502.2	6.400	524.2	6.730	502.2	7.070
502.2	5.410	other	5.900	524.2	6.190	524.2	6.420	524.2	6.730	524.2	7.300
524.2	5.500	524.2	5.910	503.1	6.190	524.2	6.440	524.2	6.750	502.2	7.370
524.2	5.610	524.2	5.970	524.2	6.200	524.2	6.460	502.2	6.800	524.2	7.530
502.2	5.620	502.2	6.010	524.2	6.220	524.2	6.500	502.2	6.800	502.2	7.760
524.2	5.710	502.2	6.010	502.2	6.230	524.2	6.500	524.2	6.840	524.2	8.000
524.2	5.800	other	6.020	other	6.300	524.2	6.530	524.2	6.860	other	8.700
502.2	5.820	524.2	6.030	502.2	6.300	524.2	6.600	502.2	6.890		
502.2	5.830	other	6.060	502.2	6.320	524.1	6.650	524.2	6.890		
502.2	5.830	524.2	6.130	502.2	6.360	524.2	6.670	502.2	6.930		

**Water Study: 33****True Value: 12.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.170	502.2	11.100	other	11.900	502.2	12.300	524.2	12.800	502.1	14.100
other	9.890	524.2	11.300	524.2	12.000	502.2	12.300	524.2	12.900	502.2	15.200
524.2	10.930	524.2	11.500	502.2	12.100	524.2	12.300	502.2	13.000	other	15.200
524.2	10.940	524.2	11.600	502.2	12.200	502.2	12.500	502.2	13.160		
524.2	11.000	524.2	11.800	502.2	12.200	502.2	12.500	524.2	13.600		
502.2	11.010	502.2	11.800	502.1	12.300	502.2	12.600	524.2	13.800		

**Water Study: 34****True Value: 15.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	10.100	502.2	14.500	other	15.100	502.2	15.600	524.2	15.900	503.1	16.200
524.2	12.700	524.2	14.600	502.2	15.120	524.2	15.600	502.2	15.900	524.2	16.300
524.2	12.800	502.2	14.700	502.2	15.200	524.2	15.650	524.2	15.900	502.2	16.400
502.2	13.300	524.2	14.800	524.2	15.300	502.2	15.700	524.2	16.000	524.2	16.400
524.2	13.900	502.2	14.900	524.2	15.310	502.2	15.700	502.2	16.000	502.2	16.500
524.2	14.000	502.2	14.900	524.2	15.350	502.2	15.800	524.2	16.000	524.2	16.500
524.2	14.000	524.2	14.900	502.2	15.400	524.2	15.800	502.2	16.000	524.2	16.700
502.2	14.100	524.2	14.900	502.2	15.400	502.2	15.800	502.2	16.080	502.2	16.800
other	14.200	524.2	14.900	524.2	15.400	524.2	15.800	524.2	16.100	502.2	17.200
524.2	14.500	524.2	15.000	524.2	15.500	502.2	15.800	524.2	16.200	other	17.400

**Water Study: 35****True Value: 9.92 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.160	524.2	9.150	502.2	9.580	502.2	9.810	524.2	10.100	524.2	10.500
502.2	8.660	524.2	9.190	524.2	9.590	502.2	9.840	524.2	10.100	524.2	10.800
524.2	8.940	524.2	9.300	502.2	9.600	524.2	9.960	524.2	10.200	524.2	11.200
524.2	8.950	524.2	9.300	other	9.622	524.2	10.000	other	10.300	502.2	11.500
524.2	9.090	524.2	9.500	524.2	9.660	502.2	10.090	524.2	10.410	502.2	12.700
502.2	9.120	502.2	9.580	524.2	9.750	502.2	10.090	502.2	10.500		

**Water Study: 36****True Value: 13.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	11.200	502.2	12.500	524.2	13.100	524.2	13.300	524.2	13.700	524.2	14.300
502.2	11.400	524.2	12.600	502.2	13.200	524.2	13.300	524.2	13.700	524.2	14.600
502.2	11.600	524.2	12.700	502.2	13.200	502.2	13.400	502.2	13.700	502.2	14.700
502.2	11.900	502.2	12.800	524.2	13.200	502.2	13.400	502.2	13.900	524.2	15.050
524.2	12.000	502.2	12.800	502.2	13.240	502.2	13.400	other	14.000	524.2	15.100
524.2	12.040	524.2	12.850	524.2	13.300	524.2	13.490	524.2	14.000	524.2	15.150
502.2	12.200	524.2	12.900	other	13.300	524.2	13.500	502.2	14.000	524.2	15.200
other	12.300	524.2	12.900	502.2	13.300	524.2	13.600	524.2	14.100	524.2	15.300
502.2	12.300	502.2	13.000	524.2	13.300	524.2	13.700	502.2	14.200	524.2	16.500
524.2	12.350	524.2	13.000	524.2	13.300	524.2	13.700	other	14.200	502.2	16.600

**Water Study: 37****True Value: 5.70 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.750	524.2	5.230	524.2	5.400	502.2	5.620	524.2	5.840	524.2	6.120
502.2	5.050	524.2	5.230	524.2	5.400	524.2	5.620	502.2	5.870	502.2	6.200
524.2	5.080	524.2	5.240	524.2	5.450	524.2	5.670	524.2	5.900	other	6.360
502.2	5.100	524.2	5.240	524.2	5.480	502.2	5.670	502.2	5.910	524.2	6.460
502.2	5.160	502.2	5.270	524.2	5.500	524.2	5.680	524.2	5.980	502.2	6.540
502.2	5.160	524.2	5.340	502.2	5.510	other	5.700	502.2	6.010	524.2	7.050
524.2	5.190	502.2	5.380	502.2	5.530	502.2	5.780	524.2	6.060	524.2	7.450
502.2	5.200	524.2	5.390	524.2	5.580	524.2	5.830	other	6.100	524.2	7.600

**Water Study: 38****True Value: 22.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	14.000	524.2	15.500	502.2	16.200	other	16.700	502.2	17.100	502.2	17.800
524.2	14.700	524.2	15.600	524.2	16.200	524.2	16.700	502.2	17.300	502.2	18.000
502.2	14.800	502.2	15.700	524.2	16.300	502.2	16.700	524.2	17.300	524.2	18.200
524.2	14.900	other	15.800	other	16.300	502.2	16.800	502.2	17.400	524.2	18.300
524.2	15.000	524.2	15.800	502.2	16.300	524.2	16.800	502.2	17.600	502.2	20.600
524.2	15.000	524.2	15.800	524.2	16.340	524.2	16.800	524.2	17.600	524.2	21.100
524.2	15.100	524.2	15.900	502.2	16.400	524.2	16.800	502.2	17.700		
502.2	15.200	524.2	16.000	524.2	16.400	524.2	16.900	524.2	17.700		
524.2	15.400	502.2	16.030	524.2	16.500	524.2	17.000	524.2	17.800		
524.2	15.400	524.2	16.100	502.2	16.600	524.2	17.100	524.2	17.800		

**Water Study: 39****True Value: 7.31 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	5.520	502.2	6.860	524.2	7.150	524.2	7.360	524.2	7.610	524.2	8.550
524.2	6.190	524.2	6.860	524.2	7.190	524.2	7.400	502.2	7.700	524.2	8.920
524.2	6.270	524.2	6.950	524.2	7.270	524.2	7.430	524.2	7.950	524.2	17.390
524.2	6.330	other	7.050	502.2	7.290	524.2	7.500	524.2	8.000		
502.2	6.400	524.2	7.050	524.2	7.300	524.2	7.540	502.2	8.060		
524.2	6.740	502.2	7.100	524.2	7.300	502.2	7.590	502.2	8.090		
502.2	6.790	502.2	7.140	502.2	7.310	524.2	7.600	524.2	8.290		
524.2	6.830	502.2	7.150	502.2	7.340	524.2	7.600	524.2	8.300		

**Water Study: 40****True Value: 14.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	5.800	other	13.300	524.2	14.100	502.2	14.500	502.2	14.900	524.2	15.200
502.2	11.800	524.2	13.400	524.2	14.100	other	14.500	524.2	14.900	524.2	15.300
524.2	12.000	524.2	13.500	524.2	14.200	524.2	14.600	524.2	14.900	502.2	15.500
524.2	12.300	524.2	13.600	524.2	14.300	524.2	14.600	524.2	14.900	502.2	15.700
524.2	12.890	524.2	13.600	502.2	14.300	502.2	14.600	502.2	15.000	524.2	15.900
524.2	12.900	524.2	13.700	524.2	14.300	524.2	14.600	524.2	15.000	502.2	16.000
524.2	13.000	524.2	13.800	502.2	14.300	502.2	14.700	502.2	15.000	524.2	17.400
524.2	13.000	502.2	13.800	524.2	14.400	524	14.700	502.2	15.000	524.2	17.700
524.2	13.100	other	14.100	524.2	14.400	524.2	14.800	502.2	15.100		
524.2	13.200	524.2	14.100	524.2	14.500	524.2	14.800	524.2	15.100		



**Water Study: 41**

**True Value: 18.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	15.300	524.2	17.300	524.2	17.900	502.2	18.500	524.2	18.800	other	19.400
524.2	16.400	524.2	17.500	502.2	18.000	524.2	18.600	524.2	18.900	524.2	19.600
524.2	16.500	524.2	17.540	502.2	18.100	502.2	18.700	524.2	18.900	502.2	19.700
502.2	16.700	524.2	17.600	524.2	18.200	524.2	18.700	524.2	19.000	502.2	19.800
524.2	16.700	524.2	17.600	524.2	18.200	502.2	18.700	524.2	19.130	502.2	20.900
502.2	17.100	524.2	17.600	other	18.300	524.2	18.700	524.2	19.200	524.2	22.500
524.2	17.200	502.2	17.600	524.2	18.300	502.2	18.700	524.2	19.300	524.2	23.000

**Toxaphene**

**Water Study: 24a**

**True Value: 7.58 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	1.800	p. 1	6.100	other	6.970	p. 1	7.270	other	7.700	D3086-79	8.500
p. 1	2.340	P. 24	6.110	other	7.010	other	7.326	p. 1	7.810	p. 1	8.510
p. 1	2.390	p. 1	6.110	p. 1	7.100	SPE-500	7.400	p. 1	7.820	p. 1	8.550
p. 1	4.160	p. 1	6.440	p. 1	7.130	p. 1	7.480	other	7.840	p. 1	8.600
p. 1	4.360	p. 1	6.510	SPE-500	7.130	p. 1	7.490	p. 1	8.000	other	8.945
p. 1	5.880	p. 1	6.658	p. 1	7.166	p. 1	7.580	other	8.000	509A	9.420
D3086-79	5.970	509A	6.710	p. 1	7.180	p. 1	7.600	p. 1	8.000	other	9.500
other	6.000	p. 1	6.800	other	7.200	p. 1	7.680	other	8.180	p. 1	10.600
509A	6.010	p. 1	6.860	509A	7.220	p. 1	7.680	p. 1	8.320	509A	10.800
SPE-500	6.098	p. 1	6.930	SPE-500	7.264	p. 1	7.700	other	8.500	p. 1	18.200

**Water Study: 24b****True Value: 2.33 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
p. 1	0.213	509A	2.040	p. 1	2.260	p. 1	2.460	p. 1	2.630	p. 1	3.020
509A	1.530	SPE-500	2.080	p. 1	2.280	p. 1	2.460	509A	2.710	p. 1	3.090
D3086-79	1.600	p. 1	2.090	other	2.300	p. 1	2.500	p. 1	2.720	other	3.180
SPE-500	1.780	p. 1	2.110	other	2.300	p. 1	2.500	other	2.730	p. 1	3.224
p. 1	1.800	p. 1	2.110	p. 1	2.300	other	2.500	p. 1	2.730	p. 1	3.300
p. 1	1.880	p. 1	2.140	p. 1	2.320	D3086-	2.580	other	2.759	509A	3.520
p. 1	1.920	p. 1	2.150	other	2.320	p. 1	2.600	P. 24	2.800	other	5.700
p. 1	2.000	p. 1	2.170	other	2.379	SPE-500	2.600	p. 1	2.820	p. 1	6.230
other	2.010	p. 1	2.240	p. 1	2.400	other	2.610	other	2.880	p. 1	7.020
p. 1	2.020	509A	2.250	SPE-500	2.411	p. 1	2.610	other	2.900		

**Water Study: 25a****True Value: 4.22 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
509A	0.310	P. 24	3.610	509A	3.960	other	4.120	p. 1	4.200	p. 1	4.500
p. 1	1.740	p. 1	3.610	505	3.990	p. 1	4.150	p. 1	4.260	p. 1	4.790
p. 1	2.400	508	3.670	509A	4.010	509A	4.160	other	4.300	p. 1	4.891
p. 1	2.690	other	3.840	509A	4.040	p. 1	4.170	other	4.330	p. 1	5.220
p. 1	3.500	other	3.900	SPE-500	4.040	509A	4.200	p. 1	4.340	other	5.660
p. 1	3.600	p. 1	3.940	P. 24	4.050	509A	4.200	p. 1	4.440		

**Water Study: 25b****True Value: 1.41 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
509A	0.130	p. 1	1.130	other	1.280	p. 1	1.390	p. 1	1.540	509A	1.660
other	0.922	other	1.190	p. 1	1.300	p. 1	1.423	p. 1	1.550	P. 24	1.720
p. 1	1.020	p. 1	1.220	505	1.320	509A	1.430	509A	1.560	p. 1	1.940
p. 1	1.040	509A	1.240	508	1.320	p. 1	1.435	other	1.600	other	1.940
509A	1.070	other	1.260	P. 24	1.350	509A	1.440	p. 1	1.620	p. 1	1.980
p. 1	1.110	p. 1	1.260	p. 1	1.370	p. 1	1.520	SPE-500	1.635		

**Water Study: 26a****True Value: 10.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
p. 1	6.950	p. 1	8.910	p. 1	9.865	p. 1	10.500	other	11.100	p. 1	13.100
p. 1	8.180	other	8.980	other	9.980	p. 1	10.600	p. 1	11.100	509A	13.100
p. 1	8.210	other	9.010	other	10.000	p. 1	10.600	509A	11.200	p. 1	13.400
p. 1	8.390	other	9.220	p. 1	10.100	508	10.660	525.1	11.240	p. 1	13.590
p. 1	8.680	p. 1	9.470	other	10.100	p. 1	10.800	p. 1	11.900	p. 1	15.100
p. 1	8.700	SPE-500	9.551	p. 1	10.200	p. 1	10.900	p. 1	12.100	p. 1	15.300
other	8.710	p. 1	9.580	other	10.300	509A	10.900	SPE-500	12.200	p. 1	16.500
509A	8.750	P. 24	9.600	p. 1	10.300	other	10.900	other	12.300	p. 1	17.400
p. 1	8.880	SPE-500	9.660	p. 1	10.400	SPE-500	10.940	505	12.700		
509A	8.890	509A	9.700	509A	10.400	p. 1	11.000	other	13.000		

**Water Study: 26b****True Value: 3.68 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	2.340	509A	2.930	p. 1	3.350	p. 1	3.620	p. 1	3.820	other	4.350
509A	2.360	other	2.960	p. 1	3.400	p. 1	3.637	p. 1	3.820	p. 1	4.619
other	2.490	509A	2.960	other	3.430	509A	3.650	other	3.820	P. 24	4.750
p. 1	2.540	p. 1	3.010	other	3.480	SPE-500	3.670	p. 1	3.850	p. 1	4.770
other	2.720	p. 1	3.110	other	3.490	p. 1	3.680	508	3.860	p. 1	4.870
p. 1	2.730	p. 1	3.170	SPE-500	3.507	509A	3.690	505	3.893	p. 1	5.740
p. 1	2.770	other	3.180	p. 1	3.520	SPE-500	3.700	p. 1	3.990	p. 1	5.820
other	2.800	p. 1	3.230	p. 1	3.560	other	3.780	525.1	4.018	p. 1	6.740
p. 1	2.900	p. 1	3.270	p. 1	3.590	509A	3.790	p. 1	4.030		
SPE-500	2.920	p. 1	3.280	509A	3.610	p. 1	3.800	p. 1	4.280		

**Water Study: 27****True Value: 6.39 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
p. 1	4.240	509A	5.160	P. 24	5.600	508	5.900	p. 1	6.660	505	7.850
p. 1	4.310	p. 1	5.190	other	5.660	p. 1	5.960	p. 1	6.820	p. 1	10.600
other	4.820	other	5.200	508	5.700	509A	5.990	other	7.000	p. 1	10.900
p. 1	4.950	p. 1	5.210	other	5.800	p. 1	6.050	p. 1	7.175	p. 1	16.500
509A	5.040	509A	5.380	p. 1	5.810	509A	6.220	p. 1	7.190		
p. 1	5.050	other	5.550	p. 1	5.820	508	6.240	other	7.230		

**Water Study: 29****True Value: 7.60 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	3.850	505	6.500	other	7.115	505	7.560	505	7.690	508	8.950
508	5.790	508	6.700	other	7.160	508	7.560	other	7.700	505	9.300
508	5.800	508	6.760	p. 1	7.170	508	7.580	other	7.941	508	9.710
508	5.950	508	6.940	509A	7.197	p. 1	7.590	508	8.020		
508	6.220	other	6.940	p. 1	7.300	505	7.650	508	8.100		
p. 1	6.370	p. 24	6.990	SPE-500	7.385	508	7.670	p. 1	8.300		

**Water Study: 30****True Value: 2.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	0.871	508	2.090	other	2.400	505	2.550	p. 1	2.700	508	2.970
508	1.490	p. 1	2.100	508	2.420	505	2.550	other	2.720	508	3.020
508	1.520	505	2.130	508	2.450	other	2.600	508	2.740	508	3.040
508	1.590	SPE-500	2.250	508	2.450	505	2.630	508	2.740	508	3.040
505	1.690	other	2.280	p. 1	2.460	p. 1	2.630	508	2.790	other	3.060
p. 24	1.730	508	2.280	508	2.480	508	2.630	508	2.810	508	3.190
other	1.860	508	2.330	p. 1	2.490	other	2.659	other	2.840	p. 1	3.200
508	1.880	505	2.340	508	2.520	508	2.680	508	2.940	other	3.960
508	1.935	other	2.390	p. 1	2.540	p. 1	2.700	508	2.970	505	12.600

**Water Study: 31****True Value: 3.31 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	1.570	505	2.400	other	3.060	p. 1	3.330	508	3.500	505	16.500
508	1.910	508	2.750	other	3.120	508	3.340	other	3.530		
508	1.960	505	2.810	508	3.120	508	3.420	508	3.710		
508	2.070	508	2.830	508	3.130	p. 1	3.440	508	3.850		
508	2.130	508	2.900	508	3.200	508	3.440	508	4.030		
508	2.300	505	2.930	508	3.220	508	3.490	p. 1	4.100		

**Water Study: 32****True Value: 3.71 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	2.230	508	2.820	508	3.290	other	3.6900	SPE-500	3.900	505	4.370
other	2.350	525.1	2.830	508	3.429	508	3.700	other	3.900	508	5.130
508	2.410	SPE-500	2.920	508	3.490	505	3.700	505	3.956	505	5.770
508	2.490	508	2.980	508	3.500	508	3.720	508	3.960	508	6.110
508	2.590	505	3.010	508	3.550	508	3.740	508	3.970	525.1	6.200
508	2.600	508	3.060	508	3.580	508	3.750	505	3.970	505	7.360
508	2.640	508	3.120	508	3.590	508	3.800	505	4.000		
508	2.640	other	3.200	508	3.590	508	3.800	508	4.000		
508	2.700	508	3.230	508	3.620	other	3.830	505	4.180		
other	2.810	508	3.240	508	3.680	505	3.830	525.1	4.270		

**Water Study: 33****True Value: 9.23 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	4.960	505	7.610	other	8.640	508	9.020	508	10.000	other	12.400
508	5.760	505	7.690	508	8.690	508	9.030	508	10.500	525.1	13.600
508	6.840	508	7.920	508	8.750	508	9.240	505	10.800	other	26.300
505	7.110	508	8.050	508	8.780	508	9.630	505	10.900		
508	7.120	508	8.380	other	8.900	508	9.840	508	11.300		
other	7.500	508	8.520	508	9.000	508	9.880	508	11.960		

**Water Study: 34****True Value: 5.37 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.1	2.850	508	4.460	508	5.070	508	5.340	505	5.795	525.1	6.420
505	3.290	508	4.480	505	5.100	508	5.480	508	5.800	508	6.670
other	3.430	505	4.650	508	5.140	508	5.480	508	5.810	505	6.790
505	3.520	508	4.750	508	5.170	508	5.490	508	5.960	508	6.985
508	3.590	508	4.860	508	5.210	508	5.550	508	6.090	508	7.030
508	3.830	508	4.900	508	5.230	508	5.560	508	6.150	other	7.070
505	4.170	508	4.930	other	5.280	505	5.560	508	6.180	508	7.230
525.1	4.280	508	4.950	505	5.280	other	5.570	508	6.230	508	10.400
508	4.340	525.1	5.000	505	5.330	508	5.630	505	6.320	505	23.890

**Water Study: 35****True Value: 18.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	1.810	508	14.380	508	16.000	508	17.100	505	18.200	505	22.300
508	11.300	505	14.400	505	16.200	508	17.100	508	19.400	508	22.500
508	11.400	505	14.700	508	16.400	508	17.780	508	19.800	other	23.200
508	13.100	505	14.900	525.1	16.700	508	17.900	508	20.000	508	26.100
508	13.300	508	14.900	505	16.800	508	17.900	508	20.400		
508	13.490	508	15.750	508	17.000	525.1	18.100	508	21.300		

**Water Study: 36****True Value: 14.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	5.570	508	11.000	other	13.200	525.2	13.900	508	14.700	505	16.000
508	8.050	other	11.030	other	13.250	508	14.000	508	14.800	505	17.300
508	8.900	505	11.300	508	13.400	505	14.000	505	14.800	508	19.370
508	9.570	508	11.800	508	13.400	505	14.000	505	14.800	525.2	20.600
505	10.180	508	11.900	508	13.500	508	14.000	525.2	14.900	505	22.600
508	10.500	508	12.000	508	13.600	508	14.200	508	15.300	508	28.000
other	10.700	505	12.100	505	13.800	508	14.200	525.2	15.500	508	28.700
505	10.700	other	12.300	508	13.800	508	14.300	508	15.600		
508	10.800	508	12.900	505	13.800	508	14.700	508	15.800		

**Water Study: 37****True Value: 8.81 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
505	1.470	other	6.770	508	8.130	508	8.930	508	9.890	508	11.400
508	4.010	508	7.150	505	8.210	525.2	8.940	508	10.050	508	11.500
525.2	4.800	525.2	7.510	other	8.240	505	9.000	508	10.100	508	11.800
505	5.630	508	7.560	505	8.300	508	9.140	508	10.110	525	13.100
508	6.520	508	7.570	508	8.330	505	9.140	508	10.200	508	14.000
508	6.700	508	7.760	508	8.560	other	9.480	505	10.300	508	14.000
other	6.700	508	7.800	505	8.740	508	9.730	505	10.660		
508	6.740	505	7.860	508	8.800	505	9.740	505	11.000		

**Water Study: 38****True Value: 12.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	0.970	508	9.700	508	11.600	505	12.500	505	13.200	525.2	16.200
505	6.210	508	10.360	508	11.700	508	12.500	508	13.500	other	16.300
525.2	6.220	505	10.400	508	11.800	508	12.600	508	13.500	508	16.600
508	7.510	508	10.600	508	11.800	508	12.900	505	13.600	508	18.400
508	7.570	505	10.600	508	11.800	508	12.900	505	13.700	508	32.300
505	7.860	508	10.700	505	11.900	508	12.900	508	13.960		
508	8.080	other	11.160	508	12.000	505	12.900	525.2	14.000		
12	8.400	508	11.400	508	12.300	505	13.100	505	14.250		
508	9.620	508	11.400	505	12.400	508	13.200	508	14.300		

**Water Study: 39****True Value: 3.65 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	2.140	508	3.540	508	3.860	508	3.990	508	4.140	525.2	4.930
505	2.600	508	3.550	508	3.860	508	4.010	508	4.140	508	4.960
508	2.700	508	3.580	505	3.880	508	4.030	505	4.300	508	5.280
508	2.890	other	3.740	505	3.880	508	4.038	505	4.320	525.2	5.500
505	3.010	508	3.810	505	3.890	508	4.070	505	4.650	525.2	5.690
508	3.180	508	3.820	508	3.950	525.2	4.120	508	4.740	508	7.300
508	3.420	525.2	3.860	508	3.960	505	4.130	508	4.780		

**Water Study: 40****True Value: 16.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
508	10.000	other	13.700	508	15.400	525.2	16.500	505	17.600	508	19.200
525.2	10.700	508	13.800	508	15.400	508	16.600	505	17.600	505	19.500
508	10.600	508	13.900	505	15.600	508	16.600	508	17.700	508	19.600
508	11.000	508	14.300	508	15.600	525.2	16.700	other	17.800	505	20.700
508	11.800	505	14.310	508	16.000	508	16.800	other	17.930	other	27.400
505	11.800	525.2	14.400	505	16.100	508	17.000	508	18.000	508	29.500
508	11.900	508	14.500	508	16.100	other	17.300	508	18.000		
508	13.500	508	14.600	508	16.400	508	17.300	505	18.800		
505	13.600	508	14.800	508	16.400	508	17.560	508	18.900		
508	13.700	525.2	15.000	508	16.500	505	17.600	508	19.100		

**Water Study: 41****True Value: 6.90 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
525.2	2.890	508	4.930	508	5.520	508	6.430	505	7.090	505	8.160
other	3.460	508	5.024	508	5.530	505	6.650	525.2	7.190	508	8.490
505	4.080	other	5.050	508	5.550	508	6.660	508	7.270	508	10.000
505	4.520	508	5.190	508	5.730	508	6.700	525.2	7.630	other	10.200
other	4.740	508	5.290	525.2	5.770	505	6.950	508	7.850		
505	4.880	505	5.310	508	5.850	505	7.010	508	7.900		
508	4.920	other	5.410	508	6.010	508	7.020	508	8.070		

**1,1,1-Trichloroethane****Water Study: 24****True Value: 3.21 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	1.960	524.2	2.830	524.2	2.990	502.2	3.130	502.2	3.320	502.1	3.730
502.2	2.050	524.1	2.850	524.2	3.000	524.2	3.150	524.2	3.390	502.2	3.800
502.2	2.410	524.2	2.860	524.2	3.010	524.1	3.150	502.2	3.420	502.2	3.880
524.1	2.430	502.2	2.890	502.2	3.020	524.2	3.200	524.2	3.490	other	4.000
502.2	2.600	524.2	2.900	524.2	3.070	502.2	3.210	502.1	3.490	502.2	4.100
524.2	2.630	other	2.900	524.2	3.090	502.2	3.210	502.2	3.500	502.2	4.100
502.1	2.690	502.2	2.915	524.2	3.100	502.2	3.220	524.2	3.607	524.2	7.040
524.2	2.700	502.1	2.920	502.1	3.100	502.2	3.300	524.2	3.620		
502.2	2.760	502.2	2.960	other	3.100	502.1	3.300	524.1	3.660		
524.1	2.820	524.2	2.990	502.2	3.100	502.2	3.300	524.2	3.710		

**Water Study: 25****True Value: 11.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	6.400	502.2	10.400	502.2	10.800	524.2	11.100	502.2	12.200	other	21.900
502.2	9.000	524.1	10.500	other	10.830	502.2	11.110	502.2	12.600	524.2	71.600
502.2	9.000	502.2	10.500	524.2	10.900	524.1	11.300	502.2	12.800		
524.2	9.730	524.2	10.600	502.2	10.900	524.2	11.360	524.2	12.800		
502.2	9.760	524.2	10.630	524.1	10.900	524.2	11.400	502.2	13.000		
other	10.100	502.2	10.700	502.1	11.100	502.1	11.600	524.1	13.100		
524.2	10.150	524.2	10.800	502.2	11.100	502.2	11.800	524.2	14.000		



**Water Study: 26****True Value: 13.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.160	502.2	12.000	524.2	12.700	502.1	13.500	524.2	14.000	524.2	15.000
502.2	9.620	502.2	12.000	524.1	12.800	524.2	13.500	524.2	14.080	502.2	15.300
502.2	10.000	524.2	12.100	524.2	13.100	502.1	13.500	524.2	14.100	502.2	15.500
524.2	10.700	other	12.100	524.1	13.100	524.2	13.500	502.2	14.100	502.1	15.600
502.2	11.100	524.2	12.100	502.2	13.200	502.1	13.700	524.2	14.200	524.2	16.200
524.2	11.200	502.2	12.200	524.2	13.200	502.2	13.800	502.2	14.300	502.2	16.800
502.2	11.570	524.2	12.310	524.2	13.200	502.2	13.800	524.2	14.300	502.2	17.490
524.1	11.800	502.2	12.400	524.1	13.400	524.2	13.960	502.1	14.400	524.2	18.900
502.2	11.800	524.1	12.400	502.2	13.400	502.2	14.000	524.2	14.700	524.2	21.400
other	11.900	502.1	12.630	502.2	13.500	524.2	14.000	524.2	14.800		

**Water Study: 27****True Value: 7.38 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	3.140	502.2	6.200	502.2	6.730	502.2	7.160	502.2	7.460	502.2	9.630
502.2	5.300	502.2	6.330	524.2	6.880	524.1	7.200	524.2	7.620	524.1	9.730
other	5.450	524.2	6.420	other	6.900	524.2	7.200	other	8.230		
502.2	5.470	524.2	6.590	502.2	6.980	524.2	7.210	524.2	8.460		
524.2	5.570	502.1	6.600	524.2	7.010	524.2	7.350	502.2	8.470		
502.2	5.730	502.2	6.600	524.2	7.130	524.2	7.400	502.2	8.860		
524.2	6.200	502.2	6.650	502.2	7.150	502.2	7.450	502.2	9.450		

**Water Study: 29****True Value: 8.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	6.560	502.2	7.660	524.2	8.110	524.2	8.700	502.2	9.270	502.2	9.450
524.2	6.600	other	7.800	other	8.310	524.2	8.960	524.1	9.320	524.2	9.700
502.2	7.076	502.2	7.879	502.2	8.390	524.2	9.000	502.2	9.330	524.2	9.780
524.2	7.130	524.2	7.900	502.2	8.610	502.2	9.040	other	9.389	502.2	9.930
other	7.300	524.2	7.920	524.2	8.630	502.2	9.080	524.1	9.420	524.2	10.500
502.2	7.650	524.2	8.080	524.2	8.700	502.2	9.210	502.2	9.420		

**Water Study: 30****True Value: 7.13 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	5.200	502.2	6.350	502.2	6.720	524.2	7.080	502.2	7.250	502.2	7.600
502.2	5.310	524.2	6.380	502.2	6.730	524.2	7.100	524.2	7.280	502.2	7.670
524.2	5.780	502.2	6.380	502.2	6.750	524.2	7.100	524.2	7.360	524.2	7.800
502.1	5.780	524.2	6.400	524.2	6.790	other	7.120	502.2	7.400	502.2	8.000
524.2	5.790	502.2	6.420	502.1	6.820	524.1	7.150	other	7.407	524.2	8.190
502.2	5.840	524.2	6.450	other	6.840	524.2	7.170	502.2	7.420	502.2	8.300
502.2	6.000	524.2	6.600	524.2	6.930	502.2	7.180	524.1	7.500	502.1	8.660
524.2	6.100	524.2	6.650	524.2	6.940	524.2	7.200	524.2	7.500	502.2	8.740
524.2	6.300	524.1	6.670	524.2	6.950	502.2	7.200	524.2	7.540	502.2	10.620
502.2	6.310	502.2	6.700	502.2	6.990	524.2	7.240	502.2	7.548		

**Water Study: 31****True Value: 13.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.230	524.2	11.300	502.2	11.900	524.2	12.300	502.2	13.200	524.2	13.400
502.2	9.896	524.2	11.400	502.2	12.000	502.2	12.400	524.2	132.000	502.1	13.500
502.1	10.300	524.2	11.600	502.2	12.100	502.2	12.400	524.2	13.300	502.2	13.600
524.2	10.670	502.2	11.600	524.1	12.100	524.2	12.700	502.1	13.300	524.2	13.770
502.2	11.100	524.2	11.700	other	12.100	524.2	12.900	502.2	13.400	524.2	14.600
502.2	11.100	524.2	11.800	502.1	12.200	524.2	12.900	502.2	13.400	502.2	14.600

**Water Study: 32****True Value: 10.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.1	7.310	524.2	8.900	502.1	9.450	502.2	9.884	502.2	10.400	524.1	11.000
502.2	7.760	502.2	8.950	524.2	9.500	502.1	9.880	524.2	10.410	502.2	11.200
502.2	8.200	502.2	9.020	502.2	9.530	524.2	9.910	502.2	10.500	524.2	11.500
502.2	8.280	502.2	9.040	502.2	9.590	524.2	9.910	524.2	10.500	other	11.600
502.2	8.300	524.2	9.090	524.2	9.690	524.2	9.950	502.2	10.600	524.2	11.700
502.2	8.370	502.2	9.220	502.2	9.690	524.2	9.970	other	10.600	502.2	11.700
502.1	8.400	524.2	9.250	524.2	9.750	other	10.000	502.2	10.600	524.2	12.500
524.2	8.450	502.2	9.300	524.2	9.780	524.2	10.000	502.2	10.600		
502.2	8.500	502.2	9.350	524.2	9.780	524.2	10.200	524.2	10.600		
524.2	8.640	524.2	9.360	524.2	9.810	524.2	10.200	524.2	10.700		
524.2	8.800	524.2	9.440	524.2	9.820	524.2	10.400	524.2	10.900		

**Water Study: 33****True Value: 14.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.680	524.2	13.100	502.2	13.800	502.2	14.660	502.2	15.000	524.2	17.100
other	11.660	502.2	13.300	502.2	14.200	524.2	14.800	502.2	15.200	524.2	19.600
502.2	11.700	502.2	13.400	502.2	14.300	524.2	14.900	502.2	15.600	524.2	20.000
502.2	12.000	502.2	13.500	524.2	14.400	524.2	14.900	524.2	15.700		
502.1	12.300	524.2	13.540	524.2	14.500	524.1	14.900	502.1	15.800		
524.2	12.950	524.2	13.600	502.2	14.600	524.2	15.000	502.2	15.900		

**Water Study: 34****True Value: 5.73 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.100	other	4.800	502.2	5.270	502.2	5.510	524.2	5.790	502.2	5.890
502.2	4.370	502.2	4.840	524.2	5.280	502.2	5.510	524.2	5.790	502.2	5.900
524.2	4.580	502.2	4.850	524.2	5.330	502.2	5.550	502.2	5.800	502.2	6.010
524.2	4.610	502.2	4.860	524.2	5.340	524.2	5.570	524.2	5.800	524.2	6.080
502.1	4.650	524.2	4.950	524.2	5.360	502.2	5.580	524.2	5.810	524.2	6.100
502.2	4.700	502.2	4.986	502.2	5.380	524.2	5.600	524.2	5.810	502.2	6.130
524.2	4.700	524.2	5.080	502.2	5.400	524.2	5.640	502.2	5.810	524.2	6.200
502.2	4.720	524.2	5.100	502.2	5.420	502.2	5.700	502.2	5.850	524.2	6.300
502.2	4.740	524.2	5.150	502.2	5.480	524.2	5.720	524.2	5.870	524.2	6.920
502.2	4.780	524.2	5.170	524.2	5.490	524.2	5.730	524.2	5.870		

**Water Study: 35****True Value: 8.78 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.900	502.2	7.850	502.2	8.210	524.2	8.500	502.2	8.700	524.2	9.280
502.2	6.580	524.2	7.880	524.2	8.280	524.2	8.500	502.2	8.900	524.2	9.550
502.2	6.610	524.2	7.900	524.2	8.300	502.2	8.590	other	9.000	502.2	9.570
502.2	6.896	502.2	7.910	502.2	8.300	524.2	8.600	502.2	9.020	524.2	9.570
524.2	7.510	524.2	8.110	524.2	8.320	524.2	8.630	524.2	9.100		
502.2	7.741	other	8.126	524.2	8.350	524.2	8.680	502.2	9.120		

**Water Study: 36****True Value: 14.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	11.200	524.2	13.080	524.2	13.600	502.2	13.890	524.2	14.600	502.2	15.200
502.2	11.500	502.2	13.100	524.2	13.600	524.2	14.100	524.2	14.600	524.2	15.200
524.2	12.300	502.2	13.200	502.2	13.600	524.2	14.200	502.2	14.700	502.2	15.400
524.2	12.400	524.2	13.200	524.2	13.610	524.2	14.300	502.2	14.800	524.2	15.400
524.2	12.500	502.2	13.200	502.2	13.700	524.2	14.400	502.2	15.000	502.2	15.400
524.2	12.600	502.2	13.200	502.2	13.700	524.2	14.400	524.2	15.000	524.2	15.500
524.2	12.800	524.2	13.500	502.2	13.700	524.2	14.420	524.2	15.100	524.2	15.720
524.2	12.900	524.2	13.500	502.2	13.800	524.2	14.500	other	15.200	524.2	16.570
502.2	12.900	524.2	13.530	502.2	13.800	524.2	14.500	other	15.200	other	16.600
524.2	12.900	524.2	13.600	524.2	13.800	502.2	14.600	502.2	15.200		

**Water Study: 37****True Value: 10.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.280	502.2	9.600	524.2	10.100	524.2	10.600	524	10.900	524.2	12.100
502.2	8.710	524.2	9.760	502.2	10.100	524.2	10.600	other	11.100	524.2	12.900
524.2	8.720	524.2	9.840	524.2	10.110	524.2	10.700	502.2	11.100	502.2	13.400
524.2	8.920	502.2	9.860	524.2	10.200	524.2	10.700	502.2	11.200	524.2	13.900
502.2	9.350	524.2	9.890	502.2	10.200	524.2	10.700	524.2	11.360	524.2	14.600
524.2	9.420	502.2	9.960	524.2	10.280	502.2	10.800	other	11.800	502.2	16.600
524.2	9.460	524.2	10.100	502.2	10.400	524.2	10.800	502.2	11.900	524.2	21.800
524.2	9.550	524.2	10.100	502.2	10.400	502.2	10.900	524	11.900		

**Water Study: 38****True Value: 17.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	10.600	other	15.500	524.2	16.100	524.2	16.700	524	17.300	524.2	18.000
524.2	13.500	502.2	15.500	502.2	16.100	502.2	16.800	502.2	17.300	502.2	18.000
502.2	13.900	524.2	15.500	524.2	16.100	502.2	16.800	524.2	17.300	524.2	18.200
502.2	14.100	524.2	15.500	524.2	16.300	524.2	16.800	524.2	17.400	524.2	18.400
502.2	14.400	524.2	15.600	502.2	16.400	524.2	16.900	524.2	17.400	502.2	18.500
524.2	14.500	524.2	15.800	502.2	16.500	524.2	16.930	502.2	17.500	524.2	19.000
524.2	14.600	502.2	15.800	502.2	16.500	524.2	17.000	524.2	17.700	524.2	19.140
524.2	15.000	524.2	15.900	502.2	16.600	502.2	17.200	524.2	17.800	524.2	19.400
other	15.300	524.2	15.900	502.2	16.700	524.2	17.200	524.2	17.800	524.2	19.400

**Water Study: 39****True Value: 11.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.440	524.2	10.100	502.2	11.000	502.2	11.500	502.2	12.100	524.2	12.800
524.2	8.610	524.2	10.200	524.2	11.000	524.2	11.500	524.2	12.100	524.2	19.900
524.2	8.960	524.2	10.300	524.2	11.100	502.2	11.500	524.2	12.100	524.2	27.900
524.2	9.070	524.2	10.700	524.2	11.100	502.2	11.500	524.2	12.100		
524.2	9.560	524.2	10.800	502.2	11.200	524.2	11.600	524.2	12.200		
502.2	9.700	502.2	10.800	524.2	11.200	502.2	11.900	524.2	12.620		
524.2	9.830	524.2	10.800	524.2	11.200	502.2	11.900	524.2	12.700		
502.2	10.000	524.2	10.900	524.2	11.500	502.2	12.000	524.2	12.800		

**Water Study: 40****True Value: 7.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.730	524.2	6.320	524.2	6.770	524.2	7.020	502.2	7.360	502.2	8.250
524.2	5.790	524.2	6.400	524.2	6.800	524.2	7.020	524.2	7.370	502.2	8.260
524.2	5.790	502.2	6.400	524.2	6.800	524.2	7.040	524.2	7.400	502.2	8.280
524.2	5.810	524.2	6.470	524.2	6.800	524.2	7.110	524.2	7.460	524.2	8.390
524.2	5.860	524.2	6.500	502.2	6.840	502.2	7.110	524.2	7.530	502.2	8.900
524.2	6.090	524.2	6.640	524.2	6.840	other	7.110	502.2	7.550	524.2	9.100
524.2	6.200	524.2	6.650	524.2	6.880	524.2	7.140	524.2	7.590	524.2	12.100
502.2	6.230	524.2	6.650	524.2	6.890	524.2	7.160	502.2	7.780		
524.2	6.280	524.1	6.660	502.2	6.930	502.2	7.310	524.2	7.900		
other	6.300	524.1	6.680	524.2	6.970	524.2	7.320	502.2	8.100		

**Water Study: 41****True Value: 12.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	10.500	502.2	11.400	524.2	11.600	524.2	12.000	524.2	12.500	524.2	13.500
502.2	10.500	524.2	11.400	524.2	11.600	524.2	12.000	524.2	12.520	502.2	13.700
524.2	10.500	524.2	11.400	524.2	11.600	524.2	12.000	524.2	12.700	524.2	14.000
524.2	10.900	502.2	11.400	524.2	11.700	524.2	12.000	524.2	12.800	502.2	14.500
524.2	11.100	524.2	11.500	502.2	11.900	524.2	12.100	502.2	12.900	502.2	14.700
524.2	11.200	524.2	11.600	other	11.900	524.2	12.300	502.2	13.200	502.2	15.000
524.2	11.300	524.2	11.600	502.2	11.900	524.2	12.330	524.2	13.200		

**1,1,2-Trichloroethane**

**Water Study: 26**

**True Value: 26.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	19.100	524.2	24.500	502.1	25.200	502.2	26.200	502.1	28.200	502.2	29.600
502.2	20.100	524.1	24.600	524.2	25.400	502.1	26.380	502.2	28.300	524.1	29.900
502.1	20.700	524.2	24.600	524.2	25.580	502.2	26.500	502.1	28.400	524.2	30.100
524.2	21.800	502.2	24.700	524.2	25.730	502.2	26.800	502.2	28.400	502.2	30.200
502.2	21.960	524.2	24.760	502.2	25.730	524.2	26.900	524.2	28.600	524.2	30.400
502.2	22.600	502.2	24.800	524.2	25.800	502.2	27.100	524.1	28.600	524.1	30.600
524.2	23.200	502.2	24.900	524.2	25.800	524.2	27.700	524.1	28.800	524.2	31.100
502.2	23.300	502.2	25.000	524.2	25.900	524.2	27.800	502.2	29.200	other	32.400
other	23.500	502.2	25.000	524.2	26.000	502.2	27.900	502.2	29.400	502.2	32.900

**Water Study: 30**

**True Value: 11.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.1	8.360	502.2	10.500	524.2	11.020	524.2	11.300	524.2	11.600	other	12.500
502.2	8.550	other	10.580	524.2	11.160	524.2	11.300	524.2	11.600	502.2	12.700
524.2	9.850	524.2	10.600	524.2	11.200	502.2	11.400	other	11.600	524.2	13.100
502.2	10.200	502.2	10.600	524.2	11.200	524.1	11.400	502.1	11.840	502.2	13.100
524.2	10.200	502.2	10.700	524.2	11.200	502.2	11.400	502.2	12.000	502.2	14.200
524.2	10.290	524.2	10.700	502.2	11.200	502.2	11.500	502.2	12.000		
502.2	10.370	502.2	10.900	524.2	11.300	524.2	11.500	502.2	12.200		
502.2	10.400	other	10.900	524.2	11.300	502.2	11.500	other	12.300		
502.2	10.500	524.2	11.000	502.2	11.300	524.2	11.500	524.2	12.400		

**Water Study: 32**

**True Value: 13.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	7.510	502.2	11.400	524.2	11.900	524.2	12.900	524.2	13.100	524.2	14.360
524.2	10.300	524.2	11.400	502.2	12.000	502.2	12.900	524.2	13.200	524.2	14.600
524.2	10.300	502.2	11.500	502.2	12.200	524.2	12.900	524.2	13.200	502.2	14.800
502.2	10.400	524.1	11.600	524.2	12.220	524.2	12.900	other	13.500	524.2	14.900
502.2	10.700	524.2	11.600	524.2	12.470	other	13.000	502.2	13.500	524.2	15.000
502.2	10.800	524.2	11.700	524.2	12.500	502.2	13.000	502.2	13.600	502.1	15.300
502.2	11.200	502.2	11.700	other	12.520	524.2	13.040	524.2	13.600	502.2	15.500
502.1	11.300	502.2	11.800	502.2	12.600	502.2	13.100	502.2	13.900	524.2	16.600
502.1	11.300	524.2	11.900	524.2	12.600	502.1	13.100	524.2	14.000		

**Water Study: 33**

**True Value: 15.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	10.980	524.2	14.200	524.2	14.900	524.2	15.560	524.2	16.100	524.2	17.100
524.1	11.800	524.2	14.400	524.2	14.930	502.2	15.600	502.1	16.100	524.2	17.200
502.1	12.900	502.2	14.400	524.2	14.980	524.2	15.700	524.2	16.500	502.2	17.600
502.2	13.000	502.2	14.600	502.2	15.000	524.2	15.900	502.2	16.500	524.2	18.300
other	13.100	502.2	14.680	502.2	15.200	502.2	15.900	524.2	16.600	502.2	21.230
502.2	13.400	502.2	14.700	502.2	15.200	502.2	16.000	other	17.000		

**Water Study: 34**

**True Value: 8.50 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	6.480	524.2	7.720	524.2	8.020	524.2	8.200	524.2	8.480	524.2	8.760
502.2	6.510	524.2	7.750	502.2	8.050	502.2	8.230	524.2	8.500	502.2	8.880
524.2	6.760	524.2	7.800	502.2	8.060	502.2	8.260	502.2	8.510	524.2	8.950
502.2	6.770	502.2	7.800	502.2	8.080	524.2	8.300	524.2	8.520	524.2	9.160
502.2	7.410	524.2	7.800	524.2	8.080	524.2	8.300	502.2	8.530	524.2	9.180
502.2	7.510	502.2	7.880	502.2	8.100	524.2	8.320	502.2	8.560	other	9.420
502.2	7.560	524.2	7.950	502.2	8.104	502.2	8.330	524.2	8.630	524.2	9.510
524.2	7.600	524.2	7.960	524.2	8.110	524.2	8.360	502.2	8.670	524.2	9.900
524.2	7.620	502.2	7.970	502.2	8.130	524.2	8.360	other	8.700	502.2	10.300
524.2	7.650	502.2	7.990	524.2	8.180	502.2	8.370	524.2	8.700		

**Water Study: 35**

**True Value: 12.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	8.170	524.2	12.000	502.2	12.700	524.2	13.000	502.2	13.300	524.2	14.600
502.2	10.800	other	12.160	502.2	12.700	524.2	13.100	524.2	13.300	502.2	15.800
524.2	10.900	502.2	12.180	524.2	12.700	524.2	13.100	524.2	13.500	524.2	17.000
502.2	10.900	502.2	12.200	524.2	12.700	502.2	13.200	502.2	13.770		
502.2	11.200	524.2	12.400	524.2	12.800	502.2	13.200	502.2	13.900		
524.2	11.200	524.2	12.600	502.2	12.800	524.2	13.200	524.2	14.000		

**Water Study: 36****True Value: 6.46 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.930	524.2	5.680	524.2	5.900	524.2	6.120	502.2	6.420	502.2	6.700
524.2	5.100	524.2	5.700	524.2	5.910	524.2	6.150	524.2	6.430	524.2	6.740
524.2	5.160	502.2	5.700	524.2	5.940	524.2	6.190	524.2	6.450	502.2	6.760
524.2	5.180	502.2	5.700	524.2	5.940	502.2	6.210	524.2	6.490	524.2	6.830
502.2	5.370	524.2	5.720	502.2	5.980	524.2	6.260	other	6.530	524.2	7.130
502.2	5.500	524.2	5.720	502.2	5.980	502.2	6.320	502.2	6.540	other	7.300
524.2	5.550	524.2	5.770	502.2	6.000	502.2	6.340	524.2	6.570	524.2	7.400
502.2	5.580	524.2	5.830	524.2	6.010	524.2	6.340	other	6.600	502.2	7.940
524.2	5.600	524.2	5.840	502.2	6.030	502.2	6.340	502.2	6.610	502.2	8.000
502.2	5.600	524.2	5.900	524.2	6.050	502.2	6.380	524.2	6.620	524.2	9.490

**Water Study: 37****True Value: 10.7 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	9.090	502.2	10.400	524.2	10.900	524.2	11.300	502.2	12.000	524.2	15.700
524.2	9.510	524.2	10.500	524.2	10.900	524.2	11.380	502.2	12.100	524.2	21.200
524.2	9.560	524.2	10.600	524.2	11.000	502.2	11.400	other	12.200		
524.2	9.590	524.2	10.600	524.2	11.100	502.2	11.500	524.2	12.400		
524.2	10.100	502.2	10.600	524.2	11.180	502.2	11.600	524.2	12.600		
502.2	10.100	524.2	10.700	524.2	11.190	502.2	11.600	other	12.700		
524.2	10.100	524.2	10.800	502.2	11.200	524.2	11.700	524.2	12.900		
502.2	10.300	524.2	10.800	524.2	11.200	502.2	11.900	524.2	13.100		
502.2	10.400	502.2	10.900	502.2	11.300	502.2	11.900	524.2	13.800		

**Water Study: 38****True Value: 16.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	13.900	524.2	14.700	502.2	15.300	other	15.800	502.2	16.300	524.2	17.000
524.2	14.000	524.2	14.700	524.2	15.300	524.2	15.800	502.2	16.400	524.2	17.100
524.2	14.300	524.2	14.800	524.2	15.400	502.2	15.900	524.2	16.400	502.2	17.200
502.2	14.300	502.2	14.900	524.2	15.600	524.2	15.970	502.2	16.400	524.2	17.200
502.2	14.400	524.2	14.900	502.2	15.600	524.2	16.000	524.2	16.400	502.2	17.300
502.2	14.500	524.2	14.900	524.2	15.650	other	16.100	524.2	16.400	524.2	17.300
502.2	14.500	502.2	15.000	524.2	15.700	524.2	16.100	524.2	16.500	524.2	17.700
502.2	14.540	524.2	15.000	502.2	15.700	502.2	16.200	524.2	16.700	524.2	18.600
524.2	14.600	502.2	15.100	524.2	15.800	524.2	16.300	524.2	17.000	524.2	20.900



**Water Study: 39****True Value: 12.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	8.070	502.2	10.500	502.2	11.300	524.2	11.700	524.2	12.200	524.2	12.400
524.2	9.850	524.2	10.600	524.2	11.300	502.2	11.800	524.2	12.200	502.2	12.500
502.2	10.100	502.2	11.000	502.2	11.400	524.2	11.800	524.2	12.270	524.2	13.400
524.2	10.250	524.2	11.000	502.2	11.400	502.2	11.900	524.2	12.300	502.2	13.500
524.2	10.300	502.2	11.000	524.2	11.400	502.2	11.900	524.2	12.300	524.2	13.600
502.2	10.400	524.2	11.300	524.2	11.500	524.2	12.100	524.2	12.300	524.2	13.800
524.2	10.400	524.2	11.300	524.2	11.500	524.2	12.200	524.2	12.400	524.2	14.300

**Water Study: 40****True Value: 17.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	11.200	502.2	15.500	524.2	16.400	502.2	16.600	502.2	17.300	502.2	18.300
524.2	13.900	502.2	15.600	502.2	16.400	524.2	16.600	502.2	17.400	502.2	18.400
524.2	14.000	other	15.700	524.2	16.400	524.2	16.600	502.2	17.400	524.2	18.800
524.2	14.300	524.2	15.700	524.2	16.400	524.2	17.000	524.2	17.400	502.2	19.000
524.2	14.300	524.2	15.800	502.2	16.400	524.2	17.000	other	17.400	524.2	19.500
524.2	14.500	524.2	16.000	524.2	16.400	524.2	17.000	524.2	17.500	524.2	20.100
524.2	15.000	524.2	16.000	524.2	16.400	524.2	17.100	502.2	17.600	524.2	20.200
524.2	15.100	502.2	16.200	524.2	16.400	524.2	17.100	524.2	17.800		
502.2	15.100	524.2	16.300	524.2	16.500	502.2	17.200	524.2	17.900		
524.2	15.210	524.2	16.400	524.2	16.600	524.2	17.200	524.2	18.000		

**Water Study: 41****True Value: 13.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	10.500	524.2	12.300	524.2	12.900	524.2	13.400	524.2	13.800	502.2	14.600
524.2	11.200	524.2	12.400	502.2	13.000	524.2	13.500	502.2	13.800	502.2	14.900
502.2	12.000	524.2	12.400	524.2	13.100	524.2	13.500	502.2	13.900	524.2	15.000
502.2	12.200	524.2	12.500	524.2	13.100	524.2	13.500	524.2	14.000	524.2	15.000
524.2	12.200	524.2	12.700	524.2	13.200	524.2	13.500	502.2	14.100	524.2	15.000
524.2	12.200	524.2	12.800	524.2	13.300	502.2	13.700	524.2	14.100	502.2	16.500
502.2	12.300	502.2	12.900	other	13.400	524.2	13.790	524.2	14.300		

**Trichloroethylene**

**Water Study: 24**

**True Value: 7.36 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	4.640	502.2	6.740	502.2	7.130	524.2	7.340	502.1	7.600	524.2	8.180
502.2	5.650	524.2	6.840	524.2	7.130	502.2	7.340	524.2	7.600	502.2	8.210
524.1	5.680	502.2	6.900	524.2	7.170	524.2	7.360	524.2	7.610	502.2	8.550
502.1	5.830	502.1	6.930	524.1	7.260	502.2	7.398	524.2	7.750	502.2	9.100
502.1	6.100	524.2	6.938	524.2	7.270	other	7.400	502.2	7.800	524.2	9.190
502.2	6.330	502.2	6.960	524.2	7.280	502.2	7.430	502.1	7.850	502.2	9.550
502.1	6.360	524.2	6.980	524.2	7.300	502.2	7.460	other	7.900	524.2	9.850
524.1	6.500	502.2	7.000	other	7.300	524.1	7.560	502.2	7.970		
524.2	6.590	524.2	7.042	502.2	7.300	502.2	7.580	502.2	8.000		
524.1	6.637	502.2	7.100	524.2	7.300	502.2	7.580	524.2	8.100		

**Water Study: 25**

**True Value: 10.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.1	6.700	502.2	9.700	502.2	10.200	502.2	10.500	524.2	11.200	502.2	13.000
502.2	7.890	524.2	9.730	524.2	10.200	502.2	10.500	502.2	11.200	other	13.100
524.2	9.069	502.2	9.800	524.2	10.400	502.1	10.600	502.2	11.300		
524.1	9.240	524.2	9.850	524.2	10.400	502.2	10.850	524.1	11.900		
524.2	9.320	other	10.100	502.2	10.400	524.1	11.000	524.2	12.400		
524.2	9.480	524.2	10.110	502.2	10.400	524.2	11.000	524.1	12.500		
502.2	9.650	other	10.150	502.2	10.410	502.1	11.100	502.2	12.700		

**Water Study: 26**

**True Value: 6.63 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.1	5.000	524.1	5.990	524.2	6.500	502.2	6.730	502.2	7.100	502.1	7.390
502.2	5.230	524.2	6.022	502.2	6.500	524.2	6.740	502.1	7.110	524.2	7.400
524.2	5.610	524.1	6.080	524.2	6.520	524.2	6.780	524.2	7.140	524.2	7.400
524.2	5.680	524.2	6.160	502.1	6.540	524.1	6.910	502.2	7.180	524.2	7.490
502.2	5.760	other	6.200	524.2	6.550	502.2	6.930	502.2	7.190	524.1	7.550
524.2	5.860	524.2	6.300	524.2	6.650	502.2	7.000	502.1	7.210	502.2	7.590
524.2	5.880	524.2	6.310	502.2	6.660	502.2	7.000	524.1	7.230	524.2	7.700
502.2	5.900	502.2	6.310	524.2	6.700	other	7.030	502.2	7.270	524.2	7.800
502.2	5.910	524.2	6.480	524.2	6.700	502.2	7.030	502.2	7.310	502.2	8.409
502.2	5.950	502.1	6.500	502.2	6.700	524.2	7.090	502.2	7.360		

**Water Study: 27****True Value: 14.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	10.000	502.2	13.000	524.2	13.690	502.2	14.100	502.2	14.600	502.2	16.300
524.2	11.100	502.2	13.000	524.2	13.800	502.2	14.100	502.2	14.700	524.1	21.600
502.2	11.600	524.2	13.100	502.2	13.900	524.2	14.200	524.2	15.200		
524.2	12.000	524.2	13.240	502.2	13.900	524.1	14.200	other	15.360		
502.2	12.100	502.2	13.300	524.2	13.900	502.2	14.300	502.2	15.900		
other	12.300	524.2	13.300	502.2	14.000	502.1	14.400	502.2	15.900		
524.2	12.500	524.2	13.620	other	14.000	502.2	14.600	524.2	16.070		

**Water Study: 29****True Value: 15.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	11.100	524.2	14.600	524.2	15.900	other	16.800	524.2	17.900	524.2	20.000
502.2	12.790	502.2	14.700	502.2	16.000	502.2	17.100	502.2	18.100	524.2	20.000
502.2	13.100	524.2	14.800	524.1	16.200	other	17.100	other	18.390	502.2	20.500
502.2	13.800	524.2	14.970	524.2	16.200	502.2	17.400	502.2	18.540	502.2	22.600
502.2	14.220	524.2	15.660	524.2	16.500	524.2	17.600	502.2	18.690		
524.2	14.500	502.2	15.900	524.2	16.800	524.1	17.800	502.2	18.700		

**Water Study: 30****True Value: 9.45 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	6.430	524.2	8.190	524.2	9.000	502.2	9.425	524.2	9.700	502.2	10.300
502.1	7.290	502.2	8.220	524.2	9.140	524.2	9.450	other	9.797	502.2	10.300
524.2	7.440	524.1	8.530	524.2	9.170	other	9.490	502.2	9.800	502.2	10.400
524.2	7.470	524.2	8.600	502.2	9.170	524.2	9.510	524.2	9.860	524.2	10.400
502.2	7.600	502.2	8.660	502.2	9.180	502.2	9.550	502.2	9.910	524.2	10.400
524.2	7.880	502.2	8.680	502.2	9.200	524.2	9.580	524.2	10.060	502.2	10.400
524.2	7.900	502.1	8.710	524.2	9.230	other	9.590	502.2	10.100	502.2	10.400
502.2	7.920	524.2	8.810	524.2	9.250	524.2	9.600	524.1	10.100	502.2	10.430
524.2	8.000	524.2	8.900	502.2	9.310	502.2	9.620	524.2	10.200	502.2	10.700
502.1	8.160	502.2	8.950	524.1	9.370	502.2	9.700	524.2	10.200		

**Water Study: 31****True Value: 7.46 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.280	524.2	6.800	502.1	7.300	524.2	7.470	524.2	7.600	524.2	7.800
524.2	6.400	502.2	6.830	502.2	7.330	524.2	7.470	524.2	7.600	524.2	7.954
502.2	6.477	other	7.010	502.2	7.350	524.2	7.480	502.2	7.640	524.2	7.990
524.2	6.500	502.2	7.060	524.1	7.370	524.2	7.480	502.2	7.670	502.2	8.430
524.2	6.720	502.2	7.070	502.2	7.400	502.2	7.540	502.1	7.700	502.1	8.480
502.1	6.730	502.2	7.200	524.2	7.460	502.2	7.550	524.2	7.720	502.2	8.550

**Water Study: 32****True Value: 11.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	8.300	502.2	10.300	524.2	10.800	502.2	11.300	502.2	11.700	502.2	12.300
502.2	8.800	502.2	10.400	524.2	11.000	502.2	11.300	502.2	11.700	502.2	12.300
502.2	9.230	524.2	10.500	524.2	11.070	502.2	11.300	524.2	11.800	524.2	12.400
524.2	9.350	524.2	10.600	502.1	11.100	524.2	11.300	502.1	11.800	524.2	12.500
502.1	9.400	524.2	10.600	502.2	11.100	other	11.300	524.2	11.800	502.2	12.600
524.2	9.460	502.2	10.600	524.2	11.100	524.2	11.400	524.1	11.900	502.2	12.800
524.2	9.500	524.2	10.600	502.2	11.100	524.2	11.400	524.2	12.000	524.2	13.100
524.2	9.850	524.2	10.640	524.2	11.100	524.2	11.400	502.2	12.000	502.2	13.700
524.2	9.930	524.2	10.700	502.2	11.200	524.2	11.470	502.2	12.000		
524.2	10.100	502.1	10.700	other	11.200	524.2	11.600	524.2	12.000		
502.2	10.100	502.2	10.800	502.2	11.200	524.2	11.630	other	12.200		

**Water Study: 33****True Value: 14.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.770	502.2	13.600	502.2	14.500	524.2	15.000	524.2	15.500	524.2	16.600
502.2	11.200	502.2	13.750	524.2	14.500	502.2	15.100	502.2	15.600	502.2	17.000
502.2	12.300	524.2	14.000	502.2	14.600	502.2	15.100	524.2	16.000	502.2	17.000
other	12.570	524.1	14.100	524.2	14.900	502.2	15.360	502.2	16.000	502.1	17.200
502.1	13.200	524.2	14.130	502.2	14.900	502.2	15.400	524.2	16.000		
524.2	13.380	502.2	14.300	other	14.900	524.2	15.400	524.2	16.400		

**Water Study: 34****True Value: 8.89 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	6.600	502.2	8.210	502.2	8.510	502.2	8.730	524.2	9.070	524.2	9.490
524.2	6.930	524.2	8.330	502.2	8.540	524.2	8.750	524.2	9.100	524.2	9.670
524.2	7.060	502.2	8.330	502.2	8.550	502.2	8.860	524.2	9.120	502.2	9.700
other	7.200	524.2	8.330	502.2	8.550	524.2	8.900	502.2	9.120	502.2	9.750
502.2	7.200	502.1	8.400	524.2	8.590	524.2	8.900	502.2	9.150	502.2	9.780
524.2	7.700	524.2	8.440	524.2	8.620	502.2	8.930	502.2	9.160	502.2	9.970
524.2	7.700	502.2	8.450	502.2	8.640	502.2	8.990	524.2	9.260	524.2	10.130
502.2	7.710	524.2	8.470	524.2	8.660	524.2	9.000	502.2	9.300	502.2	10.300
524.2	7.850	502.2	8.490	524.2	8.700	524.2	9.000	524.2	9.320	524.2	10.400
524.2	8.010	524.2	8.500	524.2	8.700	502.2	9.020	524.2	9.320	502.2	10.690

**Water Study: 35****True Value: 6.13 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.950	502.2	5.710	502.2	5.900	524.2	6.180	524.2	6.370	524.2	6.710
502.2	5.330	502.2	5.740	502.2	6.010	524.2	6.200	524.2	6.510	502.2	6.910
502.2	5.460	524.2	5.800	524.2	6.050	524.2	6.210	524.2	6.530	502.2	7.260
502.2	5.465	502.2	5.830	502.2	6.070	524.2	6.240	other	6.600	502.2	8.730
524.2	5.700	524.2	5.860	524.2	6.090	524.2	6.270	502.2	6.640		
502.2	5.700	other	5.896	524.2	6.150	524.2	6.300	524.2	6.700		

**Water Study: 36****True Value: 17.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	9.260	524.2	15.500	524.2	16.040	524.2	16.700	502.2	17.400	other	17.900
524.2	13.900	524.2	15.700	524.2	16.100	502.2	16.800	other	17.400	502.2	18.100
502.2	14.500	524.2	15.700	524.2	16.200	502.2	16.800	524.2	17.400	502.2	18.200
524.2	14.700	502.2	15.700	502.2	16.200	524.2	16.800	502.2	17.600	524.2	19.010
524.2	14.700	524.2	15.800	502.2	16.300	524.2	16.900	524.2	17.600	other	19.100
524.2	14.900	524.2	15.800	524.2	16.480	502.2	16.900	524.2	17.600	502.2	19.100
524.2	14.900	524.2	15.900	502.2	16.500	502.2	17.200	524.2	17.700		
524.2	15.200	502.2	15.900	524.2	16.500	524.2	17.200	524.2	17.700		
524.2	15.200	502.2	15.900	502.2	16.600	502.2	17.200	524.2	17.700		
524.2	15.240	502.2	15.970	524.2	16.660	524.2	17.220	other	17.800		
502.2	15.500	524.2	16.000	502.2	16.700	502.2	17.300	524.2	17.800		

**Water Study: 37****True Value: 8.70 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	7.220	502.2	8.070	524.2	8.440	524.2	8.630	524.2	9.000	502.2	9.540
524.2	7.290	524.2	8.240	524.2	8.440	524.2	8.650	502.2	9.110	524.2	9.800
524.2	7.290	502.2	8.250	524.2	8.480	524.2	8.700	502.2	9.150	524.2	10.300
502.2	7.620	other	8.280	524.2	8.480	502.2	8.740	502.2	9.370	other	10.400
524.2	7.780	524.2	8.290	524.2	8.480	524.2	8.780	524.2	9.370	524.2	10.700
524.2	7.840	502.2	8.300	other	8.500	502.2	8.900	502.2	9.400	502.2	11.100
524.2	7.850	524.2	8.330	524.2	8.510	502.2	8.910	524.2	9.460	524.2	11.700
502.2	7.870	524.2	8.430	502.2	8.580	502.2	8.960	502.2	9.530	524.2	16.600

**Water Study: 38****True Value: 12.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	9.130	502.2	11.000	524.2	11.600	524.2	12.000	502.2	12.400	524.2	13.000
524.2	9.790	524.2	11.000	502.2	11.600	524.2	12.100	502.2	12.500	524.2	13.000
524.2	10.400	502.2	11.050	other	11.700	524.2	12.160	502.2	12.500	502.2	13.200
502.2	10.500	502.2	11.200	502.2	11.800	524.2	12.200	524.2	12.600	524.2	13.600
502.2	10.500	524.2	11.300	524.2	11.900	502.2	12.200	502.2	12.600	524.2	15.600
other	10.700	524.2	11.400	524.2	11.900	524.2	12.250	524.2	12.600		
524.2	10.700	524.2	11.400	524.2	11.900	524.2	12.300	502.2	12.800		
524.2	10.700	524.2	11.500	524.2	11.900	502.2	12.300	502.2	12.900		
524.2	10.800	524.2	11.500	524.2	11.900	524.2	12.300	524.2	12.900		
502.2	10.800	524.2	11.600	other	12.000	502.2	12.400	524.2	12.900		

**Water Study: 39****True Value: 16.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	13.400	524.2	14.700	524.2	15.500	502.2	16.000	524.2	16.900	524.2	18.600
502.2	13.900	524.2	14.900	524.2	15.530	524.2	16.100	524.2	17.200	524.2	18.800
524.2	13.900	524.2	14.900	other	15.600	524.2	16.200	502.2	17.200	524.2	29.600
524.2	14.000	50.2	15.100	524.2	15.600	524.2	16.200	502.2	17.300	524.2	42.560
524.2	14.000	502.2	15.200	524.2	15.800	502.2	16.300	502.2	17.300		
524.2	14.400	502.2	15.200	524.2	15.800	502.2	16.300	524.2	17.400		
524.2	14.500	524.2	15.400	524.2	15.800	502.2	16.400	502.2	18.100		
524.2	14.600	524.2	15.400	524.2	15.900	524.2	16.400	524.2	18.200		

**Water Study: 40****True Value: 5.80 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.200	524.2	5.200	524.2	5.520	524.2	5.700	524.2	5.880	502.2	6.150
524.2	4.410	524.2	5.220	524.2	5.530	524.2	5.720	502.2	5.920	502.2	6.400
502.2	4.660	524.2	5.290	524.2	5.600	502.2	5.720	524.2	5.940	502.2	6.510
524.2	4.850	524.2	5.300	other	5.620	524.2	5.720	502.2	6.000	524.2	6.830
524.2	4.860	524.2	5.300	524.2	5.660	524.2	5.730	502.2	6.000	502.2	7.160
524.2	4.980	524.2	5.300	524.2	5.660	502.2	5.750	502.2	6.010	524.2	7.310
524.2	5.060	524.2	5.320	524.2	5.670	524.2	5.750	502.2	6.040	502.2	7.700
524.2	5.140	524.2	5.360	other	5.670	524.2	5.810	524.2	6.060	524.2	16.500
524.2	5.150	524.2	5.410	524.2	5.670	524	5.840	524.2	6.100		
other	5.180	524.2	5.450	502.2	5.680	524.2	5.860	502.2	6.110		

**Water Study: 41****True Value: 6.87 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	5.390	502.2	6.330	524.2	6.500	524.2	6.710	524.2	7.060	502.2	7.270
524.2	5.660	524.2	6.340	502.2	6.500	502.2	6.760	524.2	7.080	502.2	7.300
524.2	5.720	524.2	6.350	524.2	6.550	524.2	6.810	502.2	7.180	502.2	7.410
524.2	5.910	524.2	6.400	524.2	6.600	524.2	6.890	524.2	7.200	502.2	7.430
524.2	6.000	524.2	6.440	524.2	6.600	other	6.910	502.2	7.210	524.2	7.600
524.2	6.060	524.2	6.460	524.2	6.660	502.2	7.040	524.2	7.210	502.2	7.800
502.2	6.250	524.2	6.500	524.2	6.700	524.2	7.060	524.2	7.220		

**Vinyl Chloride****Water Study: 24****True Value: 4.35 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	1.540	502.2	3.480	502.2	3.850	502.1	4.300	502.2	4.940	524.2	6.390
524.2	1.720	502.2	3.545	502.1	3.890	502.1	4.300	524.2	5.040	524.2	6.800
other	2.000	502.2	3.670	524.2	3.900	502.1	4.400	502.2	5.100	502.2	6.900
other	2.500	524.2	3.700	524.2	3.930	524.2	4.433	other	5.140	502.2	7.800
502.2	3.070	524.2	3.700	502.2	3.950	524.2	4.480	502.2	5.240	other	8.400
502.2	3.210	502.1	3.700	524.2	4.010	524.1	4.480	524.2	5.360	524.2	9.052
524.1	3.320	524.1	3.800	502.2	4.090	502.2	4.500	524.1	5.470	524.1	10.300
502.2	3.370	502.2	3.800	502.2	4.200	502.2	4.500	502.2	5.480		
524.2	3.400	502.2	3.820	524.2	4.200	524.1	4.560	524.2	5.610		
524.2	3.460	502.1	3.850	524.1	4.200	502.2	4.710	524.2	5.880		

**Water Study: 25****True Value: 12.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.580	other	10.300	524.2	11.240	524.2	12.940	524.2	14.600	524.1	21.300
502.2	6.480	524.2	10.400	502.1	11.400	524.2	13.000	502.2	15.000	524.1	21.800
502.2	8.400	other	10.750	502.2	11.500	524.2	13.100	524.1	15.900	other	41.700
other	8.540	502.2	10.800	524.2	11.900	502.2	13.300	502.2	16.000		
524.1	9.200	502.2	11.000	524.2	12.500	524.2	13.390	502.1	16.100		
502.2	9.950	524.2	11.200	524.2	12.620	524.1	13.600	502.2	16.100		
502.2	10.000	502.2	11.200	524.2	12.900	502.2	14.000	502.2	16.640		

**Water Study: 26****True Value: 8.70 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.600	524.2	7.850	502.1	8.540	524.2	9.150	502.1	10.100	524.2	11.700
502.2	5.640	524.2	7.930	524.1	8.600	502.2	9.200	524.2	10.100	524.2	12.200
502.2	6.350	524.2	8.070	502.2	8.700	502.2	9.200	524.2	10.160	524.2	12.420
502.2	6.480	502.2	8.100	502.2	8.810	524.1	9.440	524.2	10.200	524.2	12.520
524.2	6.520	502.2	8.180	502.2	8.860	524.2	9.640	524.2	10.500	502.2	12.600
524.2	6.540	524.2	8.200	524.1	9.000	502.1	9.680	524.2	10.600	524.2	13.500
502.1	6.570	524.2	8.230	502.2	9.000	502.2	9.690	502.2	10.700	502.2	15.700
524.2	7.240	502.1	8.370	502.2	9.020	502.2	9.740	502.2	10.900	524.2	22.000
502.2	7.580	524.1	8.420	524.2	9.040	524.1	10.000	524.2	11.300	502.2	30.030
502.1	7.750	other	8.500	other	9.120	524.2	10.000	502.2	11.500		

**Water Study: 27****True Value: 3.57 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	1.740	524.2	3.290	other	3.700	524.2	4.200	524.2	4.660	524.2	6.200
524.2	1.850	524.2	3.300	524.2	3.700	502.2	4.310	524.2	4.700	502.2	6.210
other	2.280	502.2	3.390	502.2	3.730	524.1	4.430	502.2	4.840	524.1	10.100
502.2	2.970	502.2	3.420	524.2	3.750	502.2	4.510	502.2	4.890	502.2	11.000
502.2	3.020	524.2	3.450	524.2	3.960	524.2	4.580	524.2	4.950		
502.2	3.160	502.1	3.450	502.2	4.080	502.2	4.620	502.2	5.400		
502.2	3.250	502.2	3.700	502.2	4.130	524.2	4.640	other	5.730		



**Water Study: 29****True Value: 14.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	3.920	502.2	12.400	524.2	14.400	524.1	15.500	502.2	17.700	502.2	22.100
524.2	7.400	502.2	13.060	502.2	14.600	524.2	15.900	524.2	18.400	502.2	22.800
502.2	8.130	524.2	13.200	524.2	14.600	502.2	16.400	502.2	20.300	other	26.700
502.2	11.800	524.2	13.600	524.2	14.700	524.2	16.800	524.2	20.400		
502.2	12.070	524.2	13.700	524.2	14.710	524.2	16.900	502.2	20.400		
502.2	12.100	502.2	13.790	524.2	15.030	524.2	17.200	524.1	20.900		
502.2	12.400	502.2	14.200	502.2	15.200	502.2	17.400	other	21.160		

**Water Study: 30****True Value: 5.48 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	3.200	502.2	4.880	502.2	5.480	524.2	5.950	524.2	6.440	524.2	7.800
502.2	4.000	524.2	4.980	502.2	5.490	502.2	5.950	524.2	6.480	524.2	7.850
524.2	4.250	502.2	5.040	524.2	5.500	524.2	6.000	other	6.498	524.2	7.990
502.1	4.300	502.2	5.050	502.2	5.530	524.2	6.010	524.2	6.630	524.1	9.350
other	4.390	502.2	5.077	502.2	5.600	502.2	6.090	502.2	6.700	502.2	12.900
502.1	4.460	502.2	5.100	524.1	5.730	502.2	6.160	502.2	6.710	524.1	13.400
524.2	4.500	502.2	5.190	502.1	5.780	524.2	6.230	524.2	6.790	502.2	16.890
524.2	4.640	524.2	5.200	524.2	5.800	524.2	6.300	502.2	7.160	524.2	20.300
502.2	4.700	524.2	5.400	502.2	5.850	other	6.350	502.2	7.280		
524.2	4.710	524.2	5.410	524.2	5.950	502.2	6.400	524.2	7.700		

**Water Study: 31****True Value: 11.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	0.500	502.2	10.300	524.2	11.800	524.2	12.310	524.2	14.000	524.2	16.900
502.2	3.100	524.2	10.490	502.2	12.100	502.2	12.400	524.2	14.000	502.2	20.100
502.2	6.528	502.2	10.500	524.2	12.100	524.2	12.600	524.2	14.200	502.2	26.100
other	6.600	502.2	10.700	502.2	12.200	502.2	12.700	502.1	14.500	502.2	27.000
502.1	9.410	524.2	10.790	502.2	12.200	524.2	12.900	502.1	14.600		
502.1	9.720	502.2	11.400	524.2	12.300	524.1	13.100	502.1	15.700		
502.2	10.200	524.2	11.700	524.2	12.300	502.2	13.400	524.2	16.300		

**Water Study: 32****True Value: 2.57 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	1.770	524.2	2.440	524.2	2.680	502.2	2.780	524.2	3.130	524.2	3.660
502.2	1.900	502.2	2.440	524.2	2.690	524.2	2.810	524.2	3.200	524.2	3.730
502.2	1.900	524.2	2.460	502.2	2.690	524.2	2.820	524.2	3.200	502.2	3.930
502.2	1.910	502.2	2.500	502.1	2.700	524.2	2.860	502.2	3.220	524.2	4.350
502.2	1.910	502.2	2.520	other	2.700	524.2	2.863	other	3.230	524.1	4.500
502.2	1.950	502.2	2.570	524.2	2.710	524.2	2.890	502.2	3.250	502.1	5.400
502.1	2.080	524.2	2.600	502.2	2.730	524.2	2.940	524.2	3.400	502.2	6.020
502.2	2.100	other	2.630	524.2	2.730	524.2	2.940	524.2	3.400	502.1	6.940
524.2	2.200	524.2	2.640	502.2	2.750	524.2	3.000	524.2	3.460		
524.2	2.200	524.2	2.650	524.2	2.760	502.2	3.020	502.2	3.600		
524.2	2.430	502.2	2.670	502.2	2.780	502.2	3.080	524.2	3.650		

**Water Study: 33****True Value: 7.35 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.590	502.2	7.400	502.2	8.410	524.2	8.940	502.2	9.780	524.2	11.900
502.2	4.960	502.2	7.520	502.2	8.460	502.2	8.940	524.2	10.200	other	12.210
502.2	6.100	524.2	7.680	524.2	8.500	524.2	9.050	502.2	10.200	502.2	13.300
502.1	6.140	524.2	7.780	524.2	8.500	502.2	9.240	524.1	10.300	502.1	29.800
502.2	7.100	524.2	7.900	502.2	8.580	524.2	9.380	524.2	10.600		
524.2	7.260	524.2	8.320	524.2	8.790	524.2	9.700	502.2	11.200		

**Water Study: 34****True Value: 14.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	10.000	502.2	14.010	502.2	14.800	524.2	15.500	524.2	16.900	502.2	18.500
524.2	10.800	524.2	14.100	524.2	15.000	524.2	15.500	502.2	16.900	524.2	18.500
502.2	11.000	524.2	14.200	524.2	15.000	502.2	15.500	524.2	17.500	524.2	19.000
502.2	11.100	502.1	14.200	524.2	15.000	524.2	16.000	502.2	17.500	502.2	19.100
502.2	11.100	524.2	14.400	502.2	15.000	502.2	16.170	524.2	17.600	502.2	19.300
502.2	11.700	524.2	14.400	502.2	15.100	524.2	16.300	502.2	17.600	524.2	20.020
other	12.400	524.2	14.600	524.2	15.300	524.2	16.500	502.2	17.600	524.2	20.500
524.2	12.670	524.2	14.620	502.2	15.300	502.2	16.600	502.2	17.700	524.2	20.670
524.2	13.000	502.2	14.700	other	15.400	524.2	16.700	502.2	18.100	524.2	22.200
502.2	13.400	524.2	14.700	502.2	15.500	524.2	16.700	524.2	18.400		

**Water Study: 35****True Value: 4.91 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	3.470	524.2	4.450	524.2	5.000	524.2	5.600	502.2	6.010	524.2	6.300
502.2	3.780	other	4.490	502.2	5.000	524.2	5.690	502.2	6.060	524.2	6.340
502.2	4.254	502.2	4.510	524.2	5.350	524.2	5.710	524.2	6.110	502.2	6.350
524.2	4.260	524.2	4.700	524.2	5.400	524.2	5.720	502.2	6.160	524.2	6.390
502.2	4.310	524.2	4.700	502.2	5.410	524.2	5.750	524.2	6.230	524.2	6.800
502.2	4.360	other	4.800	502.2	5.480	524.2	5.910	502.2	6.260	502.2	6.870

**Water Study: 36****True Value: 9.47 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	6.430	524.2	8.560	524.2	9.700	524.2	10.370	524.2	11.000	other	11.900
502.2	6.960	502.2	8.600	524.2	9.700	524.2	10.580	502.2	11.100	524.2	11.960
502.2	7.560	502.2	8.720	524.2	9.720	502.2	10.600	524.2	11.100	524.2	13.200
524.2	7.600	502.2	8.790	502.2	9.770	524.2	10.600	524.2	11.300	502.2	13.900
524.2	7.900	524.2	8.880	502.2	9.850	524.2	10.700	524.2	11.300	524.2	14.000
524.2	8.140	524.2	8.900	524.2	9.890	502.2	10.700	502.2	11.500	502.2	14.000
502.2	8.140	524.2	8.990	other	10.000	502.2	10.700	502.2	11.600	524.2	14.000
502.2	8.340	502.2	9.030	524.2	10.000	other	10.900	524.2	11.600	524.2	14.300
524.2	8.400	524.2	9.130	other	10.100	524.2	10.900	502.2	11.800	524.2	14.500
502.2	8.560	502.2	9.660	524.2	10.320	524.2	11.000	524.2	11.800	524.2	17.140

**Water Study: 37****True Value: 14.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	10.100	502.2	13.600	other	15.100	524.2	16.300	524	17.910	502.2	22.100
524.2	11.000	502.2	13.700	524.2	15.200	524.2	16.470	524.2	18.000	502.2	26.600
502.2	11.300	524.2	14.080	524.2	15.400	502.2	16.500	524.2	18.600	524.2	26.900
502.2	11.300	524.2	14.200	502.2	15.400	524.2	16.500	502.2	18.700	502.2	29.700
524.2	11.900	524.2	14.400	524.2	15.500	524.2	17.000	524.2	18.900	524.2	47.700
524.2	12.000	524.2	14.500	502.2	15.600	524.2	17.000	524.2	19.400		
502.2	12.400	524.2	14.530	524.2	15.700	502.2	17.700	524.2	20.200		
502.2	12.400	524.2	14.700	other	16.000	524.2	17.800	524.2	20.200		
502.2	12.700	other	15.100	502.2	16.100	other	17.800	524.2	21.000		

**Water Study: 38**

**True Value: 17.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	11.800	502.2	15.700	524.2	16.900	524.2	18.200	524.2	19.500	502.2	21.400
502.2	13.900	524.2	15.800	502.2	16.900	524.2	18.200	524.2	19.560	502.2	21.400
502.2	13.900	524.2	16.400	524.2	17.200	other	18.300	524.2	19.770	524.2	21.600
502.2	14.000	524.2	16.400	524.2	17.600	524.2	18.500	502.2	20.000	524.2	22.400
502.2	14.300	502.2	16.400	other	17.700	502.2	18.600	502.2	20.100	524.2	22.900
other	14.600	524.2	16.500	502.2	17.770	524.2	18.900	524.2	20.200	524.2	24.100
502.2	15.100	524.2	16.500	524.2	18.100	524.2	19.000	502.2	20.700	524.2	24.200
524.2	15.200	524.2	16.600	524.2	18.100	502.2	19.500	502.2	20.700	524.2	26.900
524.2	15.600	502.2	16.700	524.2	18.200	524.2	19.500	524.2	21.100	524.2	28.300

**Water Study: 39**

**True Value: 6.19 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	4.720	524.2	5.690	524.2	6.410	524.2	6.780	524.2	7.200	524.2	8.040
502.2	4.740	502.2	5.790	524.2	6.600	524.2	6.800	502.2	7.240	502.2	9.820
502.2	4.800	524.2	5.890	524.2	6.610	502.2	6.810	524.2	7.300	524.2	9.830
524.2	5.020	524.2	6.070	502.2	6.680	502.2	6.820	502.2	7.330	524.2	16.500
524.2	5.140	524.2	6.090	524.2	6.730	524.2	6.900	524.2	7.460	524.2	16.540
524.2	5.320	524.2	6.200	524.2	6.730	524.2	7.090	524.2	7.500		
502.2	5.390	524.2	6.260	524.2	6.750	502.2	7.100	524.2	7.530		
other	5.620	502.2	6.400	524.2	6.770	502.2	7.180	524.2	7.670		

**Water Study: 40**

**True Value: 27.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	6.280	524.2	24.040	524.2	26.100	524.2	27.100	502.2	29.000	524.2	31.300
524.2	19.200	524.2	24.200	524.2	26.100	502.2	27.300	524.2	29.200	524.2	32.800
524.2	19.400	524.2	24.400	other	26.100	524.2	27.400	502.2	29.200	502.2	33.200
524.2	21.300	524.2	24.800	524.2	26.300	502.2	27.500	524.2	29.200	524.2	34.900
502.2	22.200	502.2	25.000	524.2	26.400	524.2	27.500	524.2	30.200	524.2	35.000
502.2	22.300	other	25.300	524.2	26.900	502.2	28.000	502.2	30.400	524.2	36.300
502.2	23.000	524.2	25.400	524.2	26.900	524.2	28.300	502.2	30.400	524.2	46.200
524.2	23.200	524.2	25.900	502.2	27.000	524.2	28.400	524.2	30.700	502.2	47.100
524.2	23.200	524.2	25.900	524.2	27.000	524.2	28.500	524.2	31.000		
524.2	24.000	502.2	26.100	524.2	27.000	other	28.900	524.2	31.100		

**Water Study: 41****True Value: 22.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	15.700	524.2	21.120	524.2	23.000	524.2	23.900	524.2	25.990	524.2	29.000
524.2	16.000	other	21.300	524.2	23.300	502.2	24.000	502.2	26.200	502.2	29.500
502.2	17.400	524.2	21.300	524.2	23.300	502.2	24.200	524.2	26.500	524.2	29.800
524.2	18.200	502.2	21.800	524.2	23.400	524.2	24.900	524.2	26.800	524.2	33.600
524.2	19.100	502.2	22.900	524.2	23.600	524.2	25.000	524.2	27.000	502.2	35.700
502.2	19.600	524.2	22.900	502.2	23.800	524.2	25.100	524.2	27.400	524.2	45.100
524.2	20.100	502.2	23.000	524.2	23.800	524.2	25.900	524.2	28.000		

**Total Xylenes****Water Study: 24****True Value: 14.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.600	524.2	12.400	524.1	13.060	524.2	13.600	503.1	14.700	524.2	16.000
524.2	6.330	524.1	12.500	524.2	13.230	524.2	13.600	524.1	14.750	524.2	16.700
524.2	8.350	502.2	12.500	502.2	13.300	524.2	13.800	502.2	14.900	524.2	17.700
other	9.900	524.1	12.700	524.2	13.400	502.2	14.000	524.2	15.000	503.1	20.200
503.1	10.200	502.2	12.800	502.2	13.400	502.2	14.400	502.2	15.000	other	24.400
524.2	10.500	524.2	12.900	502.2	13.400	524.2	14.400	502.2	15.100		
524.2	11.400	502.2	12.910	524.2	13.400	524.2	14.500	503.1	15.500		
502.2	12.200	524.2	13.010	502.2	13.500	other	14.530	502.2	15.800		

**Water Study: 25****True Value: 12.5 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	9.520	502.2	11.300	502.2	11.750	524.1	12.400	524.2	13.400	502.2	14.300
other	9.700	502.2	11.300	502.2	11.900	524.1	12.600	524.2	13.570	other	17.000
524.2	10.800	502.2	11.500	502.2	12.000	502.2	12.800	524.1	13.600	other	18.200
524.2	11.150	502.2	11.500	524.2	12.100	502.2	13.000	524.2	13.990		
502.2	11.200	other	11.510	524.2	12.200	other	13.100	502.2	14.000		
503.1	11.200	502.2	11.520	524.2	12.330	503.1	13.200	502.2	14.100		

**Water Study: 27****True Value: 8.45 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	6.700	502.2	7.780	502.2	8.000	524.2	8.600	502.2	8.960	524.2	10.610
524.2	6.800	502.2	7.790	502.2	8.040	524.1	8.610	524.2	8.990	502.2	24.840
other	7.410	502.2	7.890	524.2	8.170	524.2	8.630	524.1	9.240		
503.1	7.510	502.2	7.940	524.1	8.210	524.2	8.880	502.2	9.490		
524.2	7.530	502.2	7.980	502.2	8.270	524.2	8.900	502.2	9.600		
502.2	7.600	502.2	8.000	other	8.530	502.2	8.940	524.2	9.800		

**Water Study: 29****True Value: 12.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	2.890	502.2	10.900	502.2	11.520	502.2	12.000	524.2	12.600	502.2	14.100
524.2	9.220	524.2	10.990	502.2	11.600	524.2	12.000	502.2	12.800	502.2	14.400
502.2	9.691	524.1	11.000	524.2	11.900	524.2	12.100	524.2	12.800	524.2	16.400
502.2	10.100	524.1	11.100	502.2	11.900	503.1	12.100	502.2	13.190	524.2	18.280
524.2	10.800	other	11.300	502.2	12.000	502.2	12.400	524.2	13.900		
other	10.800	524.2	11.500	524.2	12.000	502.2	12.400	other	14.040		

**Water Study: 30****True Value: 15.0 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	7.740	524.2	13.400	502.2	14.100	503.1	14.600	524.2	15.600	502.2	16.200
524.2	9.760	502.2	13.470	502.2	14.100	524.2	14.600	other	15.600	524.2	16.800
524.2	11.200	502.2	13.600	502.2	14.200	502.2	14.800	502.2	15.600	502.2	17.000
524.2	11.800	503.1	13.600	502.2	14.200	502.2	14.900	524.2	15.600	524.2	18.100
524.2	12.600	524.2	13.600	502.2	14.200	524.2	15.000	524.2	15.600	524.2	18.200
other	12.600	524.2	13.800	524.2	14.300	502.2	15.100	524.2	15.700	524.2	20.600
524.2	12.800	524.2	13.840	524.2	14.390	other	15.150	524.1	15.700	502.2	27.400
502.2	13.200	502.2	13.900	524.2	14.600	502.2	15.300	502.2	15.700	524.2	35.300
502.2	13.300	502.2	13.900	524.2	14.600	524.1	15.400	524.2	15.800	other	37.000
524.1	13.350	524.2	14.000	524.1	14.600	524.2	15.470	524.2	16.200		

**Water Study: 31****True Value: 13.2 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
other	6.570	502.2	11.900	503.1	12.400	502.2	12.700	524.2	13.700	524.2	16.990
524.2	10.000	502.2	12.000	524.2	12.400	524.2	12.800	524.2	13.840	524.2	25.800
524.2	11.000	502.2	12.100	502.2	12.500	524.2	12.900	502.2	14.300	502.2	28.600
502.2	11.010	524.2	12.200	524.2	12.500	502.2	13.000	524.2	14.700		
524.1	11.500	524.2	12.300	524.2	12.700	502.1	13.000	502.2	14.700		
524.2	11.600	524.2	12.350	503.1	12.700	524.2	13.200	502.2	15.200		
524.2	11.600	503.1	12.400	524.2	12.700	502.2	13.300	502.2	16.100		

**Water Study: 32****True Value: 7.54 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	3.400	524.2	6.660	524.2	7.090	502.2	7.440	524.2	7.700	524.2	9.250
502.2	5.950	other	6.800	524.2	7.100	502.2	7.450	502.2	7.850	502.2	9.260
502.2	6.260	502.2	6.840	502.2	7.130	503.1	7.500	524.2	7.850	502.2	9.300
503.1	6.370	502.2	6.880	other	7.160	524.2	7.500	524.2	7.880	524.2	9.950
502.2	6.500	524.2	6.890	524.1	7.200	524.2	7.510	524.2	7.976	524.2	17.200
502.2	6.540	502.2	6.930	502.1	7.200	524.2	7.580	502.2	8.070	524.2	18.600
502.2	6.560	524.2	6.970	524.2	7.260	524.2	7.580	524.2	8.110		
524.2	6.580	502.2	6.990	502.2	7.290	524.2	7.600	524.2	8.180		
524.2	6.600	502.2	7.000	502.2	7.330	502.2	7.600	524.2	8.220		
524.2	6.620	other	7.000	502.2	7.330	524.2	7.600	524.2	8.620		
502.2	6.620	524.2	7.000	524.2	7.400	524.2	7.670	524.2	8.980		

**Water Study: 33****True Value: 11.6 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	3.900	524.2	10.300	502.2	10.700	502.2	11.300	524.2	12.400	502.2	13.300
502.2	9.310	524.2	10.380	502.2	10.800	502.2	11.600	502.2	12.500	502.2	13.800
524.2	9.600	502.2	10.590	502.2	10.900	502.1	11.700	502.2	12.600	502.1	14.200
524.1	9.670	524.2	10.600	502.2	11.080	524.2	11.700	524.2	12.630	502.2	26.900
502.2	10.100	other	10.600	524.2	11.200	524.2	11.800	524.2	12.700		
524.2	10.110	other	10.670	502.2	11.300	524.2	11.900	524.2	12.800		

**Water Study: 34****True Value: 13.1 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	4.730	524.2	11.800	502.2	12.500	524.2	12.800	524.2	13.200	502.2	13.700
524.2	6.580	502.2	11.800	524.2	12.600	524.2	12.900	524.2	13.200	502.2	13.800
524.2	8.620	524.2	11.900	502.2	12.600	502.2	12.900	502.2	13.200	524.2	13.800
524.2	10.600	502.2	11.900	524.2	12.600	502.2	12.900	524.2	13.200	524.2	13.900
524.1	10.900	other	12.000	524.2	12.600	502.2	12.900	524.2	13.300	524.2	13.960
502.2	11.300	524.2	12.100	502.2	12.700	524.2	13.050	502.2	13.300	502.2	14.100
502.2	11.400	524.2	12.100	other	12.700	524.2	13.100	503.1	13.400	502.2	14.500
524.1	11.500	502.2	12.200	524.2	12.740	524.2	13.200	524.2	13.700	502.2	16.300
502.2	11.500	524.2	12.400	524.2	12.800	524.2	13.200	502.2	13.700	524.2	17.080
524.2	11.700	502.2	12.500	502.2	12.800	502.2	13.200	524.2	13.700	502.2	27.200

**Water Study: 35****True Value: 17.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	7.930	524.2	16.000	524.2	17.000	other	18.000	524.2	18.400	524.2	20.810
524.2	8.530	502.2	16.500	other	17.010	524.2	18.000	524.2	18.400	502.2	23.000
524.2	14.100	524.2	16.700	524.2	17.200	524.2	18.000	524.2	18.800		
502.2	14.600	524.2	16.700	524.2	17.300	524.2	18.000	502.2	18.870		
524.2	15.070	524.2	16.800	502.2	17.300	502.2	18.200	502.2	19.900		
524.2	15.200	502.2	16.800	524.2	17.500	502.2	18.300	502.2	20.400		
502.2	15.300	502.2	16.900	502.2	17.840	524.2	18.300	524.2	20.600		

**Water Study: 36****True Value: 10.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	8.280	524.2	9.800	524.2	10.200	524.2	10.500	other	11.000	524.2	11.900
502.2	8.790	524.2	9.800	502.2	10.300	502.2	10.600	502.2	11.100	502.2	12.000
524.2	8.840	524.2	9.810	502.2	10.300	524.2	10.600	other	11.100	524.2	12.100
502.2	8.970	524.2	9.860	502.2	10.300	502.2	10.600	524.2	11.100	524.2	12.420
other	9.300	524.2	9.870	524.2	10.300	502.2	10.600	502.2	11.200	502.2	13.300
502.2	9.440	524.2	9.890	524.2	10.400	524.2	10.760	502.2	11.300	524.2	14.500
524.2	9.580	502.2	9.910	524.2	10.400	502.2	10.800	502.2	11.300		
502.2	9.610	524.2	9.940	other	10.500	524.2	10.800	524.2	11.300		
524.2	9.700	502.2	9.990	524.2	10.500	524.2	10.840	524.2	11.300		
524.2	9.700	502.2	10.100	524.2	10.500	524.2	10.900	524.2	11.400		
524.2	9.730	524.2	10.100	524.2	10.500	502.2	11.000	524.2	11.530		



**Water Study: 37****True Value: 12.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
502.2	5.300	502.2	12.100	524.2	12.800	502.2	13.200	502.2	13.700	524.2	16.300
524.2	9.720	502.2	12.100	502.2	12.800	502.2	13.300	524.2	13.800	524.2	16.600
524.2	11.100	502.2	12.200	502.2	12.900	524.2	13.400	524.2	13.800	524.2	17.300
524.2	11.200	524.2	12.200	502.2	12.900	524.2	13.460	524.2	13.880	524.2	17.400
other	11.400	502.2	12.400	502.2	13.000	524.2	13.500	524.2	14.000		
524.2	11.400	524.2	12.600	other	13.000	524.2	13.600	502.2	14.400		
524.2	11.600	502.2	12.600	524.2	13.000	502.2	13.600	502	14.500		
524.2	11.900	524.2	12.600	502.2	13.100	other	13.600	524.2	14.700		
502.2	12.000	524.2	12.690	524.2	13.100	524.2	13.600	524	14.740		

**Water Study: 38****True Value: 22.9 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	18.100	524.2	20.600	524.2	22.600	502.2	23.200	502	24.300	524.2	25.200
524.2	18.300	524.2	20.900	524.2	22.630	524.2	23.200	524.2	24.300	524.2	25.200
524.2	18.500	524.2	21.000	502.2	22.900	524.2	23.300	524.2	24.400	502.2	26.600
524.2	19.400	502.2	21.200	524.2	22.900	524.2	23.300	502.2	24.500	524.2	26.800
524.2	19.500	524.2	21.500	524.2	22.960	524.2	23.300	502.2	24.600	524.2	28.100
502.2	19.520	other	21.700	524.2	23.000	502.2	23.500	502.2	24.800	524.2	29.700
524.2	19.700	other	21.800	524.2	23.000	502.2	23.500	502.2	24.800		
502.2	20.100	other	22.300	502.2	23.000	502.2	23.700	524.2	24.800		
524.2	20.400	524.2	22.300	502.2	23.000	524.2	23.800	502.2	24.900		
524.2	20.600	524.2	22.400	524.2	23.100	524.2	24.000	502.2	24.900		

**Water Study: 39****True Value: 24.4 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	13.800	524.2	22.500	524.2	23.700	502.2	24.500	524.2	25.600	524.2	28.200
502.2	14.200	502.2	22.500	524.2	23.700	524.2	24.500	524.2	25.700	502.2	28.300
524.2	19.300	524.2	22.700	502.2	23.900	524.2	24.620	502.2	25.700	502.2	30.200
524.2	20.200	other	22.800	502.2	23.900	524.2	24.700	524.2	26.200	524.2	45.760
524.2	20.900	524.2	22.900	524.2	24.000	524.2	24.800	524.2	26.400		
524.2	21.600	502.2	23.200	502.2	24.200	524.2	25.100	524.2	26.800		
524.2	22.200	524.2	23.300	524.2	24.400	524.2	25.200	524.2	27.500		
502.2	22.300	524.2	23.300	502.2	24.500	502.2	25.300	524.2	28.000		

**Water Study: 40****True Value: 30.3 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	16.100	other	27.800	524.2	29.100	524.2	30.000	502.2	31.100	502.2	32.800
524.2	23.400	524.2	28.000	524.2	29.200	524.2	30.100	524.2	31.200	524.2	33.400
524.2	24.000	524.2	28.200	502.2	29.400	other	30.100	502.2	31.400	502.2	33.600
502.2	24.800	524.2	28.500	524.2	29.500	502.2	30.100	524.2	31.700	524.2	33.600
524.2	24.800	other	28.500	502.2	29.500	502.2	30.200	524.2	31.800	524.2	33.700
524.2	25.800	502.2	28.600	524.2	29.700	524	30.200	524.2	32.100	502.2	34.500
502.2	26.800	524.2	28.700	502.2	29.800	524.2	30.300	502.2	32.300	524.2	37.000
524.2	26.800	524.2	28.800	524.2	29.800	524.2	30.300	502.2	32.400	524.2	38.100
524.2	27.000	524.2	28.950	524.2	29.800	524.2	30.600	524.2	32.600		
524.2	27.400	524.2	29.000	524.2	29.900	524.2	30.900	524.2	32.700		

**Water Study: 41****True Value: 30.8 ug/L**

Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value	Method	Reported Value
524.2	25.900	524.2	28.500	502.2	30.600	524.2	31.000	524.2	31.760	524.2	34.000
524.2	26.600	524.2	28.800	524.2	30.600	524.2	31.130	other	31.800	502.2	34.900
524.2	26.700	502.2	28.900	524.2	30.700	502.2	31.200	502.2	31.800	524.2	44.300
524.2	27.600	502.2	30.000	other	30.700	502.2	31.200	524.2	32.200		
524.2	27.700	524.2	30.100	524.2	30.800	524.2	31.300	524.2	32.500		
502.2	27.800	524.2	30.100	524.2	30.800	524.2	31.600	502.2	33.000		
502.2	28.300	524.2	30.100	524.2	30.900	524.2	31.700	524.2	33.600		
524.2	28.400	502.2	30.300	524.2	31.000	502.2	31.700	524.2	34.000		



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