



998  
40 GWSW ST  
CMN 15-01

December 31, 2015

Mr. Danny Anderson, P.E.  
Manager, Solid Waste Branch  
Division of Waste Management  
200 Fair Oaks Lane  
2<sup>nd</sup> Floor  
Frankfort, KY 40601

RE: Advanced Disposal Services Blue Ridge Landfill, Inc.  
4<sup>th</sup> Quarter 2015 Surface Water Report  
Permit # 033-00004  
AI # 998

Dear Mr. Anderson:

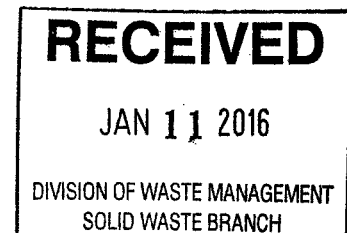
Please find attached the 4<sup>th</sup> Quarter 2015 surface water report for the Advanced Disposal Services Blue Ridge landfill site in Irvine, Estill County, Kentucky.

If you have any questions or require additional information, please contact me at (606) 723-5559.

Sincerely,  
BLUE RIDGE LANDFILL, INC.

A handwritten signature in cursive script that reads 'Dan Fleshour'.

Dan Fleshour  
East Region Compliance Manager





# FACILITY INFORMATION SHEET

Sampling Date: 11/11/15 County: Estill Permit No.: 033-00004

Facility Name Advanced Disposal Services Blue Ridge Landfill, Inc.

Site Address: 2700 Winchester Road Irvine KY 40336  
Street City State Zip

Phone No.: (606) 723-5559 Latitude 34° 44' 45" Longitude 83° 56' 10"

## OWNER INFORMATION

Facility Owner: Advanced Disposal Services Blue Ridge Landfill, Inc. Phone No.: (606) 723-5559

Contact Person: Billy Bowles Phone No.: (606) 723-5559

Contact Person Title: Landfill Operations Manager

Mailing Address 2700 Winchester Road Irvine KY 40336  
Street City State Zip

## SAMPLING PERSONNEL

*(IF OTHER THAN LANDFILL OR LABORATORY)*

Company: Cornerstone Environmental Group, LLC

Contact Person: Kari Wallover Phone No.: (630) 410-7229

Mailing Address: 2456 Fortune Drive, Ste. 170 Lexington KY 40509  
Street City State Zip

## LABORATORY RECORD #1

Laboratory: Pace Analytical Services, Inc. Lab ID No.: \_\_\_\_\_

Contact Person: Cindy Varga Phone No.: (920) 321-9460

Mailing Address: 1241 Bellevue St. Green Bay WI 54302  
Street City State Zip

## LABORATORY RECORD #2

Laboratory: \_\_\_\_\_ Lab ID No \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
Street City State Zip

Solid Waste Branch

Permit Number: 033-00004

200 Fair Oaks Lane

Facility: BLUE RIDGE LANDFILL

FINDS/UNIT: KY0000470336 /1

Frankfort, KY 40601 (502)564-6716

LAB ID: \_\_\_\_\_

For Official Use Only

## SURFACE WATER SAMPLE ANALYSIS (W)

Monitoring Point (KPDES Discharge Number, or "Upstream", or "Downstream")						SWM-1	SWM-2	SWM-3	SWM-4				
Sample Sequence #						N/A	N/A	N/A	N/A				
If sample is a Blank specify type: (F)ield, (T)rip, (M)ethod, or (E)quipment						N/A	N/A	N/A	N/A				
Sample Date and Time (Month/Day/Year hour:minutes)						11/11/2015	11/11/2015	11/11/2015	11/11/2015				
Duplicate ("Y" or "N") <sup>1</sup>						N/A	N/A	N/A	N/A				
Split ("Y" or "N") <sup>2</sup>						N/A	N/A	N/A	N/A				
Facility Sample ID Number (if applicable)						N/A	N/A	N/A	N/A				
Laboratory Sample ID Number (if applicable)						N/A	N/A	N/A	N/A				
Date of Analysis (Month/Day/Year)						N/A	N/A	N/A	N/A				
CAS RN <sup>3</sup>		Constituent	T D <sup>4</sup>	Unit of Measure	Method	Detected Value or PQL <sup>5</sup>	F L A G S	Detected Value or PQL <sup>5</sup>	F L A G S	Detected Value or PQL <sup>5</sup>	F L A G S	Detected Value or PQL <sup>5</sup>	F L A G S
A200-00-0	0	Flow	T	FT/SEC.	FIELD	No Flow		No Flow		No Flow		No Flow	
16887-00-6	2	Chloride(s)	T	mg/L	9251								
14808-79-8	0	Sulfate	T	mg/L	9038								
7439-89-6	0	Iron	T	mg/L	6010								
7440-23-5	0	Sodium	T	mg/L	6010								
S0268- -	0	Organic Carbon <sup>6</sup>	T	mg/L	9060								
S0097- -	0	BOD <sup>6</sup>	-	MG/L	N/A								
S0130- -	0	Chemical Oxygen Demand	T	mg/L	410.4								

**STANDARD FLAGS:**

- J = Estimated Value
- B = Analyte found in blank
- A = Average value
- N = Presumptive ID
- D = Concentration from analysis of a secondary dilution factor

<sup>1</sup>Respond "Y" if the sample was a duplicate of another sample in this report.

<sup>2</sup>Respond "Y" if the sample was split and analyzed by separate laboratories.

<sup>3</sup>Chemical Abstracts Service Registry Number or unique identifier number assigned by agency.

<sup>4</sup>"T" = Total; "D" = Dissolved

<sup>5</sup>"<" indicates a non-detect; do not use "ND" or "BDL". Value then shown is Practical Quantification Limit.

<sup>6</sup>Facility has either/or option on Organic Carbon and (BOD) Biochemical Oxygen Demand - both are not required.





January 8, 2016

Mr. Danny Anderson, P.E.  
Manager, Solid Waste Branch  
Division of Waste Management  
200 Fair Oaks Lane  
2<sup>nd</sup> Floor  
Frankfort, KY 40601

RE: Advanced Disposal Services Blue Ridge Landfill, Inc.  
4<sup>th</sup> Quarter 2015 Groundwater Statistical Analysis Report  
Permit # 033-00004  
AI # 998

Dear Mr. Anderson:

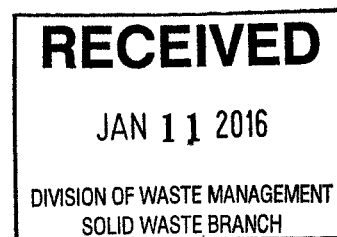
Please find attached the 4<sup>th</sup> Quarter 2015 groundwater statistical analysis report for the Advanced Disposal Services Blue Ridge landfill site in Irvine, Estill County, Kentucky.

If you have any questions or require additional information, please contact me at (606) 723-5559.

Sincerely,  
BLUE RIDGE LANDFILL, INC.

A handwritten signature in cursive script that reads 'Dan Fleshour'.

Dan Fleshour  
East Region Compliance Manager



# 4<sup>th</sup> Quarter 2015

## Groundwater Statistical Analysis Report

### Blue Ridge Landfill

January 2016

**Prepared for:**  
Advanced Disposal Services  
2700 Winchester Road  
Irvine, KY 40336



2456 Fortune Drive, Suite 170  
Lexington, KY 40509  
(630) 410-7229

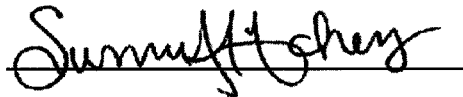
## REPORT CERTIFICATION

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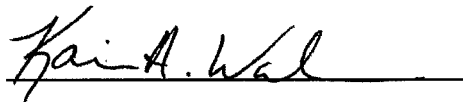
**4<sup>th</sup> Quarter Groundwater Statistical Report**  
**Advanced Disposal Services Blue Ridge Landfill**  
**Irvine, Kentucky**

The material and data in this report were prepared under the supervision and direction of the undersigned.

Cornerstone Environmental Group, LLC



Summer Hitchens, M.P.H.  
Project Scientist



Kari A. Wallover, PG  
Project Manager

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## **1 INTRODUCTION**

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The Advanced Disposal Services Blue Ridge Landfill is located at the following address:

Advanced Disposal Services Blue Ridge Landfill, Inc.  
2700 Winchester Road  
Estill County  
Irvine, Kentucky 40336

On behalf of Advanced Disposal Services Blue Ridge Landfill, Inc., Cornerstone Environmental Group, LLC (Cornerstone) conducted groundwater sampling at the Blue Ridge landfill on November 11, 2015. Cornerstone has performed a statistical analysis on the data from this fourth quarter 2015 sampling event. A discussion regarding sample collection procedures, laboratory analytical results, and statistical analysis results is presented herein.

## **2 GROUNDWATER MONITORING/REPORTING REQUIREMENTS**

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Kentucky Administrative Regulations (KAR), specifically 401 KAR 48:300, require regular groundwater monitoring and reporting for solid waste disposal facilities such as the Blue Ridge Landfill. The purpose of this monitoring is to help evaluate if landfill operations are impacting water quality in the vicinity of the landfill.

## **3 AREA AND SITE GEOLOGY/HYDROGEOLOGY**

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Estill County is located within parts of both the Outer Bluegrass and the Eastern Kentucky Coal Field physiographic regions. The oldest rocks found on the surface in the County are sedimentary rocks that were deposited in shallow seas during the Ordovician Period approximately 490 million years ago. The Devonian-aged New Albany Shale lies above the Ordovician rocks and was formed when the deep sea floor became covered with an organic black muck. The muck is now a hard black oil shale and is one of the most distinctive of all geologic formations in Kentucky. Mississippian-aged sandstones, siltstone, and limestones lie above the New Albany Shale.

The geologic unit that is currently being monitored at the site is the New Albany Shale. The site is located on the U. S. Geological Survey Geologic Map of the Irvine Quadrangle (1976), and according to this map the New Albany Shale is defined as the following:

Shale and dolomite: Shale is grayish-black, locally olive-gray; the grayish-black shale weathers to shades of gray, locally to dark brown, and to dark yellowish brown where stained by limonite; carbonaceous; abundant disseminated grains of iron sulfides and a few nodular concretions as much as 4 inches in diameter and 2 inches thick; phosphatic nodules, 2 to 4 inches in diameter, common in upper 15 feet; commonly fissile; contains a few silty layers; locally contains sparse well-rounded grains of quartz, particularly in lower 15 feet; locally crossbedded and interbedded with dolomite in lower 15 feet; sparse phosphatic nodules in upper 10 feet. Olive-gray shale occurs in a few layers, 1/2 to 4 inches thick in upper 40 feet, and in layers as much as 1 foot thick in upper 10 feet. The dolomite consists of two varieties: (1) medium-dark-gray to grayish-brown, very fine to fine-grained, carbonaceous; containing sparse grains of iron sulfides and well-rounded medium grains of quartz; in layers from less than 1 inch to more than 2 feet thick; locally present in lower 15 feet; (2) dark-gray, mottled with variegated shades of brown, very fine to fine-grained; at places containing fragments of dolomite, chert, and fossils which impart a breccia-like appearance; carbonaceous; contains sparse well-rounded medium grains of quartz and chert, and very fine grains of iron sulfides; locally present at base. The Unit is commonly well exposed except on hilltops and gentle slopes. It forms broad, flat valleys, steep dissected hillsides and bluffs along streams, and flat hilltops. The contact with underlying Boyle Dolomite is conformable; the contact with the underlying Bisher Limestone and Crab Orchard Formation is unconformable. The Unit thins slightly southwestward.

According to the Kentucky Geological Survey (KGS) County Report #33, Series XII, issued in 2005, and titled "Groundwater Resources of Estill County, Kentucky," the New Albany Shale yields 100 to 500 gallons per day to wells in valley bottoms and on uplands, usually at depths of less than 50 feet. Water from great depths in this formation is highly mineralized. Salt, hydrogen sulfide, and iron are common objectionable constituents found in groundwater from the New Albany Shale.

## **4 MONITORING POINTS AND REQUIREMENTS**

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There is one groundwater-bearing zone being monitored at the Blue Ridge landfill site. This zone is the New Albany Shale and downgradient wells completed in this formation are MW-7, MW-10, MW-13, and MW-15R. Monitoring well MW-17R is the upgradient monitoring point installed in the New Albany Shale for the landfill. The existing groundwater monitoring points are shown on Figure 1.

As stated in the Kentucky Department for Environmental Protection (KDEP) approved "Groundwater Monitoring Plan-Update" for the facility prepared by Herst & Associates,

Inc. and dated August 2009, the sampling program consists of annual sampling for parameters in 401 KAR Chapter 48:300 Section 11(3)(a) and (b) during the second quarter of each year, and quarterly sampling for parameters in 401 KAR Chapter 48:300 Section 11(3)(f) during the first, third, and fourth quarters of each year. During the fourth quarter 2015 sampling event, the parameters analyzed were those from 401 KAR Chapter 48:300 Section 11(3)(f).

## **5 SAMPLING EVENT**

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This fourth quarter 2015 sampling event was conducted by Cornerstone field personnel at the Blue Ridge landfill on November 11, 2015. A sampling checklist summary is located in Table 1, and Table 2 contains a summary of monitoring well specifications (groundwater monitoring well number, reference casing elevation, depth of well, static groundwater level, static groundwater elevation, zone monitored). All five monitoring wells were purged and sampled on the same day that they were purged. No problems were encountered during the sampling event.

Water levels were first collected from all of the wells and then the purging and sampling were conducted utilizing dedicated bladder pumps. Low-flow purging methods were utilized to purge the wells. Field parameters including pH, temperature, and specific conductivity were monitored and recorded during the low-flow purging activities and purging took place until equilibrium of these parameters was attained or the well went dry. Equilibrium was attained when the field parameters stabilized for at least three consecutive readings within the following limits: pH within plus or minus 0.1 standard units, specific conductance between plus or minus 3%, and temperature within plus or minus 1 degree Celsius. Purge rates were utilized that allowed for water level stabilization.

## **6 GROUNDWATER FLOW RATE AND DIRECTION**

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The groundwater flow rate and flow direction were estimated for the New Albany Shale zone that is being monitored at the Blue Ridge Landfill. Calculations for the hydraulic gradients and flow rates for this flow zone are displayed in Appendix A.

As shown on Figure 1, the groundwater flow direction in the New Albany Shale flows towards the northwest. This flow direction is consistent with historic evaluations of groundwater flow at the facility. Water levels collected during the fourth quarter 2015 event were consistent with historical values measured at the monitoring wells.

## 7 STATISTICAL ANALYSIS PROCEDURES

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The statistical analysis software package entitled *Sanitas* was utilized to analyze the data. This program follows a documented decision logic that incorporates the following applicable guidance documents: EPA's "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Interim Final Guidance," dated April 1989; the "Addendum" to the EPA document dated July 1992; and ASTM D6312-98 titled "Standard Guide for Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs," dated December 1998.

As presented in the "Groundwater Monitoring Plan-Update" dated August 2009, the method of statistical analyses utilized is dictated by the characteristics (i.e., size, number of non-detects, distribution, etc.) of the background data sets in accordance with EPA protocol. In general, control charts were selected as the methods of analysis and have been used in previous evaluations of the groundwater monitoring data. However, other methods (prediction limits, rank sum) have been utilized as dictated by the data characteristics.

Samples were collected this quarter for the parameters specified in 401 KAR Chapter 48:300 Section 11(3)(f). This list includes the parameters sampled every quarter [temperature, chloride, chemical oxygen demand (COD), total dissolved solids (TDS), total organic carbon (TOC), specific conductance (conductivity), pH, iron, sodium, and total organic halides (TOX)].

### 7.1 Intra-well Prediction Limits

Intra-well prediction limits were revised during the fourth quarter 2015 to include data through third quarter 2015. During parametric prediction interval analysis, the mean and the standard deviation are calculated for the raw or transformed background data. The number of comparison observations is defined to be included in the interval. If less than 15% of the background observations are nondetects, the nondetects are replaced with one half of the reporting limit prior to performing the analysis. If more than 15% but less than 50% of the background data are below the reporting limit, the sample mean and standard deviation of the data are adjusted according to the Cohen's Adjustment. However, when the background data are not transformed-normal or contain greater than 50% observations below the reporting limit, the program automatically constructs a nonparametric prediction interval. During nonparametric analysis, the highest value from the background data is used to set the upper limit of the prediction interval.

### 7.2 Site Background

The background period for statistical analysis is in general defined as samples previously taken from each well at the Blue Ridge facility from May 1993 through the September 2015

event, with the exception of MW-15R and MW-7. Chloride, sodium, TDS, and conductivity data in samples collected from MW-15R from February 2000 through August 2006 were lower than from November 2006 through March 2014. The November 2006 through March 2014 concentrations for these parameters in samples collected from MW-15R have been detected at consistent levels with no upward/downward trends. Therefore, for this analysis the statistical background for chloride, sodium, TDS, and conductivity at well MW-15R consist of data from November 2006 through March 2014 only. In addition, the background period for chloride, conductivity, and TDS at MW-7 consists of data from May 1993 through July 2013 as statistical differences began to occur for these parameters after July 2013. An evaluation for outliers has also been performed on background data and detected outliers have been removed from statistical analysis computations.

### 7.3 Statistical Results Summary

During the fourth quarter 2015 event, statistical differences occurred for chloride and TDS at MW-7 utilizing prediction limits. Statistical charts and graphs are located in Appendix D.

Monitoring well MW-7 has historically contained high levels of salt water; however, as shown in the table below the average concentrations of chloride, conductivity and TDS in MW-7 are lower than or similar to the concentrations in the upgradient well (MW-17R) that exists at the site.

Average Concentrations (mg/L)			
	Chloride	Conductivity	TDS
MW-7	598	3,336	2,042
MW-10	359	2,599	1,788
MW-13	5,316	13,929	9,137
MW-15R	47	2,259	1,808
MW-17R*	534	4,760	3,202

\*average of last three years of data - when concentrations had stabilized

According to the publication by the KGS titled "Groundwater Resources of Estill County, Kentucky," water from great depths in the New Albany Shale formation is highly mineralized and salt is a common objectionable constituent. Salt water is found below fresh groundwater at variable depths throughout the entire state of Kentucky. According to the KGS, in Estill County the fresh-saline interface ranges from elevations of less than 500 feet mean sea level in the northwestern part of the county up to 900 feet in the mountainous southern end of the county. The elevated concentrations of chloride and TDS in monitoring well MW-7 is therefore anticipated to be associated with naturally occurring saline conditions.

KDEP personnel indicated in a letter dated November 19, 2014, the split-sample results for

chloride and TDS collected by KDEP at MW-7 during the 1st quarter 2014 event confirmed the statistical exceedances reported for the 3<sup>rd</sup> quarter 2014 event. The letter indicated that a Groundwater Assessment Plan (GAP) was required to be prepared for monitoring well MW-7. A GAP for MW-7 was submitted to KDEP on February 6, 2015. The GAP was approved by the KDEP on October 27, 2015. Implementation of the GAP has occurred at Blue Ridge.

## **8 CONCLUSIONS**

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During the November 2015 monitoring event, two statistical differences occurred using prediction limits, which were chloride and TDS in monitoring well MW-7. Monitoring well MW-7 is currently in groundwater assessment and as required in a letter issued by KDEP on November 19, 2014, a GAP was submitted for the well in February 2015. The GAP was approved by the KDEP in a letter dated October 27, 2015. GAP implementation has begun at the facility.

## LIMITATIONS

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The work product included in the attached was undertaken in full conformity with generally accepted professional consulting principles and practices and to the fullest extent as allowed by law we expressly disclaim all warranties, express or implied, including warranties of merchantability or fitness for a particular purpose. The work product was completed in full conformity with the contract with our client and this document is solely for the use and reliance of our client (unless previously agreed upon that a third party could rely on the work product) and any reliance on this work product by an unapproved outside party is at such party's risk.

The work product herein (including opinions, conclusions, suggestions, etc.) was prepared based on the situations and circumstances as found at the time, location, scope and goal of our performance and thus should be relied upon and used by our client recognizing these considerations and limitations. Cornerstone shall not be liable for the consequences of any change in environmental standards, practices, or regulations following the completion of our work and there is no warrant to the veracity of information provided by third parties, or the partial utilization of this work product.

## TABLES

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**TABLE 1 - SAMPLING CHECKLIST**

Sampling Point ID	Well Purged			Sample Collected			Comments
	Yes	No	Purge Date	Full List <sup>1</sup>	None	Sample Date	
MW-7	✓		11/11/15	✓		11/11/15	No problems encountered during sampling
MW-10	✓		11/11/15	✓		11/11/15	No problems encountered during sampling
MW-13	✓		11/11/15	✓		11/11/15	No problems encountered during sampling
MW-15R	✓		11/11/15	✓		11/11/15	No problems encountered during sampling
MW-17R	✓		11/11/15	✓		11/11/15	No problems encountered during sampling

<sup>1</sup>Parameters in 401 KAR 48:300, Section 11.

**TABLE 2 - STATIC GROUNDWATER LEVELS**

Monitoring Well	AKGWA #	Top PVC Casing Elevation (ft MSL <sup>1</sup> )	Total Well Depth from Top PVC Casing <sup>2</sup> (ft)	Depth to Static Groundwater (ft) <sup>3</sup>	Static Groundwater Elevation (ft MSL)
MW-7	8001-0205	784.37	110.00	75.56	708.81
MW-10	8001-0201	801.16	70.00	61.06	740.10
MW-13	8001-0233	766.14	64.50	52.21	713.93
MW-15R	8003-3579	763.99	76.00	57.02	706.97
MW-17R	8003-8393	821.82	93.49	77.15	744.67

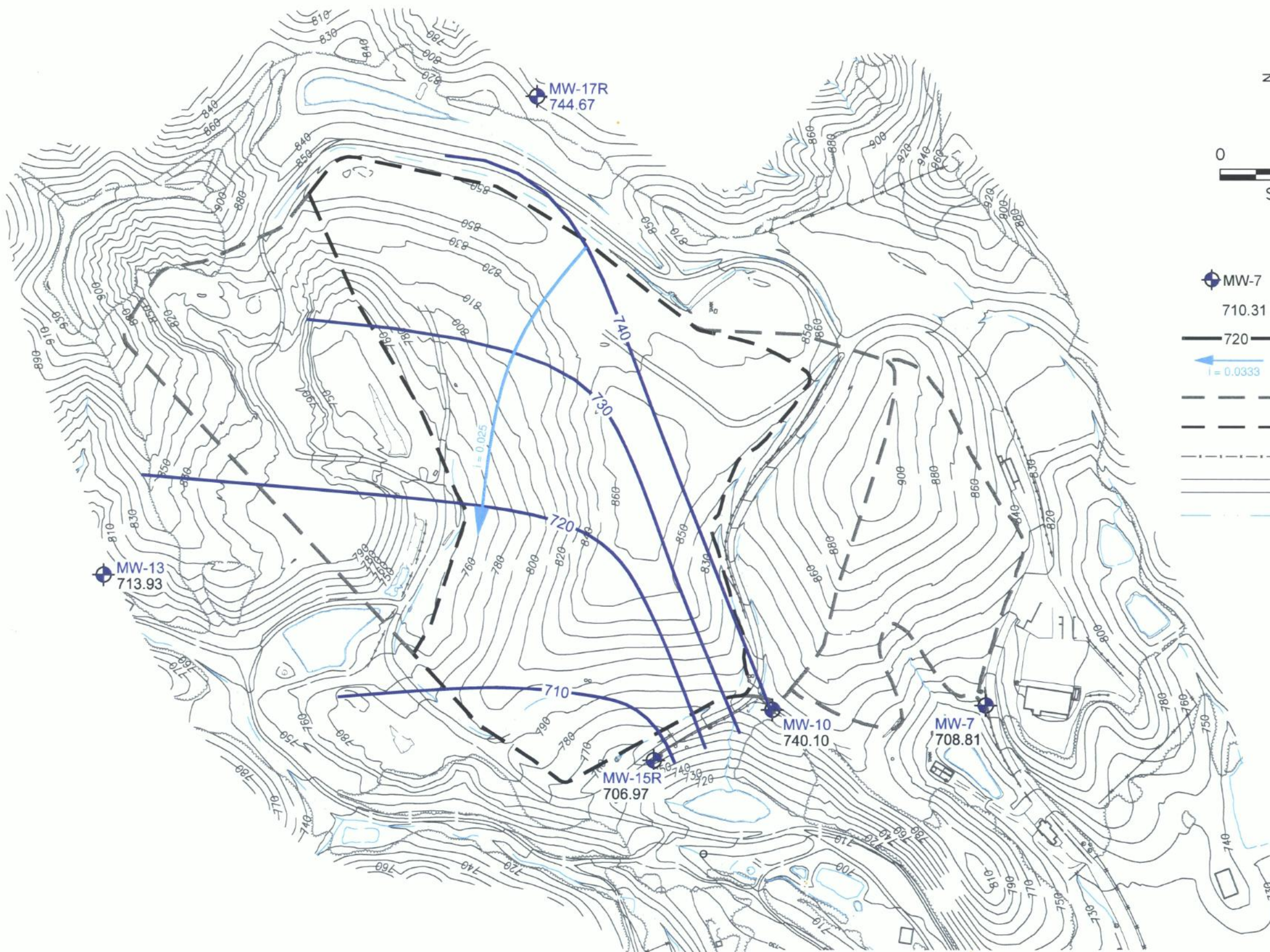
<sup>1</sup>Feet above Mean Sea Level

<sup>2</sup>Depths taken from well construction logs

<sup>3</sup>Values measured by Cornerstone Environmental Group, LLC on November 11, 2015

## FIGURES

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**LEGEND**

- MW-7 GROUNDWATER MONITORING WELL
- 710.31 GROUNDWATER ELEVATION (FMSL)
- 720 INFERRED POTENTIOMETRIC SURFACE CONTOUR (FMSL)
- $i = 0.0333$  HYDRAULIC GRADIENT & INFERRED GROUNDWATER FLOW DIRECTION
- APPROXIMATE DESIGN WASTE LIMIT
- APPROXIMATE CONSTRUCTED WASTE LIMIT
- EXISTING FENCE
- EXISTING ACCESS ROAD
- EXISTING WATER COURSE

*Kari A. Wallover*  
 KARI A. WALLOVER  
 Registered Professional Geologist  
 Kentucky Board of Registration for Professional Geologists  
 PG-2347  
 12-17-15

**NOTE:**

STATIC GROUNDWATER DATA COLLECTED BY CORNERSTONE ENVIRONMENTAL GROUP PERSONNEL ON NOVEMBER 11, 2015.

**cornerstone**  
environmental

PREPARED BY:  
CORNERSTONE ENVIRONMENTAL GROUP, LLC

This drawing represents intellectual property of Cornerstone Environmental Group LLC. Any modification to the original by other than Cornerstone Environmental Group LLC personnel violates its original purpose and as such is rendered void. Cornerstone Environmental Group LLC will not be held liable for any changes made to this document without express written consent of the originator.

ADVANCED DISPOSAL SERVICES  
 BLUE RIDGE LANDFILL  
 ESTILL COUNTY, KENTUCKY  
**POTENTIOMETRIC MAP**  
 4TH QUARTER 2015

FIGURE NO.  
**1**  
 PROJECT NO.  
 150184.01

***APPENDIX A***  
**FLOW RATE AND FLOW DIRECTION CALCULATIONS**

---

# FACILITY INFORMATION SHEET

Sampling Date: 11/11/2015 County: Estill Permit No.: 033-00004

Facility Name Advanced Disposal Services Blue Ridge Landfill, Inc.

Site Address: 2700 Winchester Road Irvine KY 40336  
Street City State Zip

Phone No.: (606) 723-5559 Latitude 34° 44' 45" Longitude 83° 56' 10"

## OWNER INFORMATION

Facility Owner: Advanced Disposal Services Phone No.: (606) 723-5559

Contact Person: Billy Bowles Phone No.: (606) 723-5559

Contact Person Title: Landfill Operations Manager

Mailing Address 2700 Winchester Road Irvine KY 40336  
Street City State Zip

## SAMPLING PERSONNEL

*(IF OTHER THAN LANDFILL OR LABORATORY)*

Company: Cornerstone Environmental Group, LLC

Contact Person: Kari Wallover Phone No.: (630) 410-7229

Mailing Address: 2456 Fortune Drive, Ste. 170 Lexington KY 40509  
Street City State Zip

## LABORATORY RECORD #1

Laboratory: Pace Analytical Services, Inc. Lab ID No.: \_\_\_\_\_

Contact Person: Cindy Varga Phone No.: (920) 321-9460

Mailing Address: 1241 Bellevue Street Green Bay WI 54302  
Street City State Zip

## LABORATORY RECORD #2

Laboratory: \_\_\_\_\_ Lab ID No. \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
Street City State Zip

**Groundwater Flow Velocity Calculations  
Blue Ridge Landfill, Kentucky  
Fourth Quarter 2015 Event**

***FLOW VELOCITY OF NEW ALBANY SHALE***

*Parameters:*

Saturated Thickness (b) = average saturated thickness is approximately 13.39 ft.

Well	Well Depth (ft)	Depth to Water (ft)	Saturated Thickness (ft)
MW-10	70.00	61.06	8.94
MW-13	64.50	55.21	9.29
MW-15R	76.00	57.02	18.98
MW-17R	93.49	77.15	16.34
Average Saturated Thickness =			13.39

Transmissivity (T) = Transmissivity values for the New Albany Shale are listed as ranging from 110 to 1,130 gpd/ft as noted in Table 4 of "Ground-Water Resources in the White and West Fork White River Basin, Indiana," State of Indiana Department of Natural Resources-Division of Water, Water Resource Assessment 2002-6.

Hydraulic Conductivity (k) = transmissivity (T) x saturated thickness (b)  
 Minimum k = (110 gpd/ft) / 14.94 ft = 14.7 ft<sup>2</sup>/d / 13.39 ft = 1.10 ft/d  
 Maximum k = (1,130 gpd/ft) / 14.94 ft = 151 ft<sup>2</sup>/d / 14.94 ft = 11.28 ft/d

Conversion factor = ft<sup>2</sup>/day = gpd/ft / 7.481

Effective Porosity (n<sub>e</sub>) = assumed to be approximately 0.15 for shale bedrock according to the USEPA "Interim Final RCRA Facility Investigation Guidance Document", May 1989, EPA 530/SW-89-031, p 10-51.

Gradient (i) = calculated from the gradient at the site using the Fourth Quarter 2015 potentiometric map.

- Gradient (i) = Change in groundwater elevation along flow path i:  
 From 740 contour to 720 contour = 20ft / 796ft = 0.0251

*Calculations:*

Minimum Velocity

$$V = [(k)(i)] / n_e$$

$$V = [(1.10 \text{ ft/d})(0.0251)] / 0.15$$

$$V = 0.18 \text{ ft/d}$$

Maximum Velocity

$$V = [(k)(i)] / n_e$$

$$V = [(11.28 \text{ ft/d})(0.0251)] / 0.15$$

$$V = 1.89 \text{ ft/d}$$

***APPENDIX B***  
**CERTIFICATION**

---



***APPENDIX C***

**DWM GROUNDWATER SAMPLE ANALYSIS**

---

Solid Waste Branch

Permit Number: 033-00004

200 Fair Oaks Lane

Facility: BLUE RIDGE LANDFILL

FINDS/UNIT: \_\_\_\_\_/1

Frankfort, KY 40601 (502)564-6716

LAB ID: \_\_\_\_\_

For Official Use Only

# GROUNDWATER SAMPLE ANALYSIS (S)

AKGWA NUMBER <sup>1</sup> Facility Well/Spring Number						8001-0205	8001-0201	8001-0223	8003-3579				
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, MW-3, etc.)						MW-7	MW-10	MW-13	MW-15R				
Sample Sequence #						1	1	1	1				
If sample is a Blank, specify Type: (F)ield, (T)rip, (M)ethod, or (E)quipment						NA	NA	NA	NA				
Sample Date and Time (Month/Day/Year hour:minutes)						11/11/2015 15:40	11/11/2015 14:50	11/11/2015 13:15	11/11/2015 14:00				
Duplicate ("Y" or "N") <sup>2</sup>						N	N	N	N				
Split ("Y" or "N") <sup>3</sup>						N	N	N	N				
Facility Sample ID Number (if applicable)						NA	NA	NA	NA				
Laboratory Sample ID Number (if applicable)						40124604001	40124604002	40124604003	40124604004				
Date of Analysis (Month/Day/Year)						VARIES	VARIES	VARIES	VARIES				
Gradient with respect to Monitored Unit (UP, DOWN, SIDE, UNKNOWN)						DOWN	DOWN	DOWN	DOWN				
CAS RN <sup>4</sup>		Constituent	T D <sup>5</sup>	Unit of Measure	Method	Detected Value or PQL <sup>6</sup>	F L A G S	Detected Value or PQL <sup>6</sup>	F L A G S	Detected Value or PQL <sup>6</sup>	F L A G S	Detected Value or PQL <sup>6</sup>	F L A G S
	0	Static Water Level Elevation	T	Ft. MSL	FIELD	708.81		740.10		713.93		706.97	
S0907- -	2	Temperature	T	°C	FIELD	15.04		15.66		13.75		23.41	
16887-00-6	2	Chloride (s)	T	mg/L	9251	1170		183		5210		74.1	
S0130	0	Chemical Oxygen Demand	T	mg/L	410.4	74.3		154		262		<50.0	
S0266	0	Total Dissolved Solids	T	mg/L	160.1	3130		1350		8430		2670	
S0268	1	Total Organic Carbon	T	mg/L	9060	<0.50		55.5		<0.50		11.4	

**STANDARD FLAGS:**

- J = Estimated Value
- B = Analyte found in blank
- A = Average value
- N = Presumptive ID
- D = Concentration from analysis of a secondary dilution factor

<sup>1</sup>AKGWA # is 0000-0000 for any type of blank.

<sup>2</sup>Respond "Y" if the sample was a duplicate of another sample in this report.

<sup>3</sup>Respond "Y" if the sample was split and analyzed by separate laboratories.

<sup>4</sup>Chemical Abstracts Service registry Number or unique identifier number assigned by agency.

<sup>5</sup>"T" = Total; "D" = Dissolved









Solid Waste Branch

Permit Number: 033-00004

200 Fair Oaks Lane

Facility: BLUE RIDGE LANDFILL

FINDS/UNIT: \_\_\_\_\_/1

Frankfort, KY 40601 (502)564-6716

LAB ID: \_\_\_\_\_

For Official Use Only

# GROUNDWATER SAMPLE ANALYSIS (S)

AKGWA NUMBER <sup>1</sup> Facility Well/Spring Number						8003-8393							
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, MW-3, etc.)						MW-17R							
Sample Sequence #						1							
If sample is a Blank, specify Type: (F)ield, (T)rip, (M)ethod, or (E)quipment						NA							
Sample Date and Time (Month/Day/Year hour:minutes)						11/11/2015 12:30							
Duplicate ("Y" or "N") <sup>2</sup>						N							
Split ("Y" or "N") <sup>3</sup>						N							
Facility Sample ID Number (if applicable)						NA							
Laboratory Sample ID Number (if applicable)						40124604005							
Date of Analysis (Month/Day/Year)						VARIES							
Gradient with respect to Monitored Unit (UP, DOWN, SIDE, UNKNOWN)						DOWN							
CAS RN <sup>4</sup>		Constituent	T D <sup>5</sup>	Unit of Measure	Method	Detected Value or PQL <sup>6</sup>	F L A G S	Detected Value or PQL <sup>6</sup>	F L A G S	Detected Value or PQL <sup>6</sup>	F L A G S	Detected Value or PQL <sup>6</sup>	F L A G S
	0	Static Water Level Elevation	T	Ft. MSL	FIELD	744.67							
S0907- -	2	Temperature	T	°C	FIELD	14.88							
16887-00-6	2	Chloride (s)	T	mg/L	9251	97							
S0130	0	Chemical Oxygen Demand	T	mg/L	410.4	<50.0							
S0266	0	Total Dissolved Solids	T	mg/L	160.1	2160							
S0268	1	Total Organic Carbon	T	mg/L	9060	6.8							

**STANDARD FLAGS:**

- J = Estimated Value
- B = Analyte found in blank
- A = Average value
- N = Presumptive ID
- D = Concentration from analysis of a secondary dilution factor

<sup>1</sup>AKGWA # is 0000-0000 for any type of blank.

<sup>2</sup>Respond "Y" if the sample was a duplicate of another sample in this report.

<sup>3</sup>Respond "Y" if the sample was split and analyzed by separate laboratories.

<sup>4</sup>Chemical Abstracts Service registry Number or unique identifier number assigned by agency.

<sup>5</sup>"T" = Total; "D" = Dissolved

<sup>6</sup>"<" indicates a non-detect; do not use "ND" or "BDL". Value then shown is Practical Quantification Limit









***APPENDIX D***  
**STATISTICAL EVALUATIONS**

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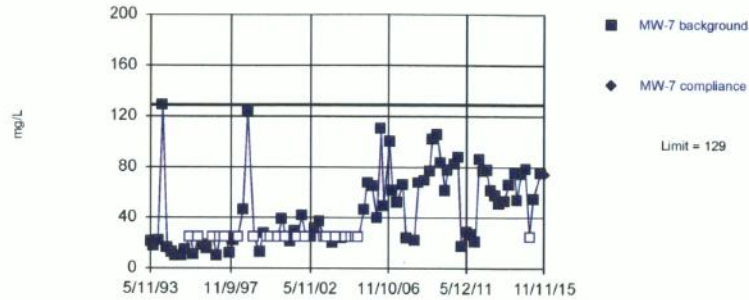
# Prediction Limit

Blue Ridge Client: Cornerstone Environmental Group, LLC Data: Historical Database - Blue Ridge Printed 1/4/2016, 9:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bq N	Bq Wells	Bq Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chemical Oxygen Demand (mg/L)	MW-7	129	n/a	11/11/2015	74.3	No	89	n/a	n/a	n/a	23.6	n/a	n/a	0.01111	NP Intra (normality)
Chemical Oxygen Demand (mg/L)	MW-10	498.1	n/a	11/11/2015	154	No	85	n/a	13.55	3.676	0	None	sqrt(x)	0.01	Param Intra
Chemical Oxygen Demand (mg/L)	MW-13	1500	n/a	11/11/2015	262	No	82	n/a	n/a	n/a	0	n/a	n/a	0.01205	NP Intra (normality)
Chemical Oxygen Demand (mg/L)	MW-15R	240	n/a	11/11/2015	26.3ND	No	61	n/a	n/a	n/a	34.43	n/a	n/a	0.01613	NP Intra (normality)
Chemical Oxygen Demand (mg/L)	MW-17R	5492	n/a	11/11/2015	26.3ND	No	20	n/a	5.404	1.232	5	None	ln(x)	0.01	Param Intra
<b>Chloride (mg/L)</b>	<b>MW-7</b>	<b>912</b>	<b>n/a</b>	<b>11/11/2015</b>	<b>1170</b>	<b>Yes</b>	<b>82</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01205</b>	<b>NP Intra (normality)</b>
Chloride (mg/L)	MW-10	991.2	n/a	11/11/2015	183	No	83	n/a	18.62	5.387	0	None	sqrt(x)	0.01	Param Intra
Chloride (mg/L)	MW-13	6390	n/a	11/11/2015	5210	No	79	n/a	72.76	3.006	0	None	sqrt(x)	0.01	Param Intra
Chloride (mg/L)	MW-15R	80	n/a	11/11/2015	74.1	No	57	n/a	n/a	n/a	1.754	n/a	n/a	0.01724	NP Intra (normality)
Chloride (mg/L)	MW-17R	14000	n/a	11/11/2015	96.6	No	20	n/a	n/a	n/a	0	n/a	n/a	0.04762	NP Intra (normality)
Iron (mg/L)	MW-7	6.162	n/a	11/11/2015	5.73	No	89	n/a	0.5814	0.5192	0	None	ln(x)	0.01	Param Intra
Iron (mg/L)	MW-10	21.8	n/a	11/11/2015	0.217	No	85	n/a	n/a	n/a	2.353	n/a	n/a	0.01163	NP Intra (normality)
Iron (mg/L)	MW-13	11.5	n/a	11/11/2015	9.46	No	84	n/a	n/a	n/a	30.95	n/a	n/a	0.01176	NP Intra (normality)
Iron (mg/L)	MW-15R	54.65	n/a	11/11/2015	6.48	No	59	n/a	2.1	0.7023	0	None	x^(1/3)	0.01	Param Intra
Iron (mg/L)	MW-17R	24.9	n/a	11/11/2015	0.323	No	20	n/a	n/a	n/a	25	n/a	n/a	0.04762	NP Intra (Cohens/xform)
pH (SU)	MW-7	8.5	6.62	11/11/2015	7.2	No	92	n/a	n/a	n/a	0	n/a	n/a	0.02151	NP Intra (normality)
pH (SU)	MW-10	7.946	6.13	11/11/2015	7.2	No	88	n/a	2.647	0.06476	0	None	sqrt(x)	0.005	Param Intra
pH (SU)	MW-13	7.55	6.13	11/11/2015	7.2	No	82	n/a	n/a	n/a	0	n/a	n/a	0.0241	NP Intra (normality)
pH (SU)	MW-15R	8.54	6.31	11/11/2015	7.2	No	62	n/a	n/a	n/a	0	n/a	n/a	0.03175	NP Intra (normality)
pH (SU)	MW-17R	9.07	5.775	11/11/2015	7.4	No	18	n/a	7.422	0.5532	0	None	No	0.005	Param Intra
Sodium (mg/L)	MW-7	1290	n/a	11/11/2015	1290	No	85	n/a	n/a	n/a	0	n/a	n/a	0.01163	NP Intra (normality)
Sodium (mg/L)	MW-10	853.5	n/a	11/11/2015	494	No	81	n/a	23.47	2.407	0	None	sqrt(x)	0.01	Param Intra
Sodium (mg/L)	MW-13	4400	n/a	11/11/2015	3110	No	81	n/a	n/a	n/a	0	n/a	n/a	0.0122	NP Intra (normality)
Sodium (mg/L)	MW-15R	351.2	n/a	11/11/2015	326	No	56	n/a	5.378	0.2001	0	None	ln(x)	0.01	Param Intra
Sodium (mg/L)	MW-17R	9850	n/a	11/11/2015	737	No	19	n/a	n/a	n/a	0	n/a	n/a	0.05	NP Intra (normality)
Specific Conductance (umhos/cm)	MW-7	4724	n/a	11/11/2015	4239	No	84	n/a	3193	641.6	0	None	No	0.01	Param Intra
Specific Conductance (umhos/cm)	MW-10	5111	n/a	11/11/2015	1699	No	86	n/a	50.59	8.764	0	None	sqrt(x)	0.01	Param Intra
Specific Conductance (umhos/cm)	MW-13	17917	n/a	11/11/2015	11840	No	72	n/a	15341	1075	0	None	No	0.01	Param Intra
Specific Conductance (umhos/cm)	MW-15R	3432	n/a	11/11/2015	3315	No	55	n/a	45.88	5.25	0	None	sqrt(x)	0.01	Param Intra
Specific Conductance (umhos/cm)	MW-17R	20000	n/a	11/11/2015	2430	No	19	n/a	n/a	n/a	0	n/a	n/a	0.05	NP Intra (normality)
Temperature (degree-C)	MW-7	19.38	n/a	11/11/2015	16.52	No	83	n/a	15.26	1.728	0	None	No	0.01	Param Intra Deseas
Temperature (degree-C)	MW-10	26.14	n/a	11/11/2015	17.55	No	79	n/a	n/a	n/a	0	n/a	n/a	0.0125	NP Intra (normality) Deseas
Temperature (degree-C)	MW-13	18.4	n/a	11/11/2015	14.75	No	77	n/a	n/a	n/a	0	n/a	n/a	0.01282	NP Intra (normality) Deseas
Temperature (degree-C)	MW-15R	27.86	n/a	11/11/2015	23.41	No	50	n/a	11060	4347	0	None	x^3	0.01	Param Intra
Temperature (degree-C)	MW-17R	16.54	n/a	11/11/2015	15.91	No	18	n/a	15.07	0.5596	0	None	No	0.01	Param Intra Deseas
<b>Total Dissolved Solids (mg/L)</b>	<b>MW-7</b>	<b>2720</b>	<b>n/a</b>	<b>11/11/2015</b>	<b>3130</b>	<b>Yes</b>	<b>82</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01205</b>	<b>NP Intra (normality)</b>
Total Dissolved Solids (mg/L)	MW-10	3100	n/a	11/11/2015	1350	No	86	n/a	n/a	n/a	0	n/a	n/a	0.01149	NP Intra (normality)
Total Dissolved Solids (mg/L)	MW-13	10600	n/a	11/11/2015	8430	No	83	n/a	n/a	n/a	0	n/a	n/a	0.0119	NP Intra (normality)
Total Dissolved Solids (mg/L)	MW-15R	3241	n/a	11/11/2015	2670	No	55	n/a	40.87	6.641	0	None	sqrt(x)	0.01	Param Intra
Total Dissolved Solids (mg/L)	MW-17R	32100	n/a	11/11/2015	2160	No	20	n/a	n/a	n/a	0	n/a	n/a	0.04762	NP Intra (normality)
Total Organic Carbon (mg/L)	MW-7	19.4	n/a	11/11/2015	0.5ND	No	92	n/a	n/a	n/a	13.04	n/a	n/a	0.01075	NP Intra (normality)
Total Organic Carbon (mg/L)	MW-10	176.2	n/a	11/11/2015	55.5	No	89	n/a	7.605	2.379	0	None	sqrt(x)	0.01	Param Intra
Total Organic Carbon (mg/L)	MW-13	5.3	n/a	11/11/2015	2.5ND	No	84	n/a	n/a	n/a	57.14	n/a	n/a	0.01176	NP Intra (NDs)
Total Organic Carbon (mg/L)	MW-15R	15.43	n/a	11/11/2015	11.4	No	59	n/a	7.631	3.233	0	None	No	0.01	Param Intra
Total Organic Carbon (mg/L)	MW-17R	125	n/a	11/11/2015	6.8	No	20	n/a	5.613	2.139	0	None	sqrt(x)	0.01	Param Intra
TOX [Total Organic Halides] (mg/L)	MW-7	5	n/a	11/11/2015	0.053	No	88	n/a	n/a	n/a	32.95	n/a	n/a	0.01124	NP Intra (normality)
TOX [Total Organic Halides] (mg/L)	MW-10	0.7363	n/a	11/11/2015	0.2	No	77	n/a	0.6568	0.1029	0	None	x^(1/3)	0.01	Param Intra
TOX [Total Organic Halides] (mg/L)	MW-13	5	n/a	11/11/2015	0.077	No	83	n/a	n/a	n/a	6.024	n/a	n/a	0.0119	NP Intra (normality)
TOX [Total Organic Halides] (mg/L)	MW-15R	5	n/a	11/11/2015	0.028	No	59	n/a	n/a	n/a	28.81	n/a	n/a	0.01667	NP Intra (normality)
TOX [Total Organic Halides] (mg/L)	MW-17R	27.8	n/a	11/11/2015	0.035	No	20	n/a	-0.3328	1.406	0	None	ln(x)	0.01	Param Intra

Within Limit

Prediction Limit  
Intrawell Non-parametric

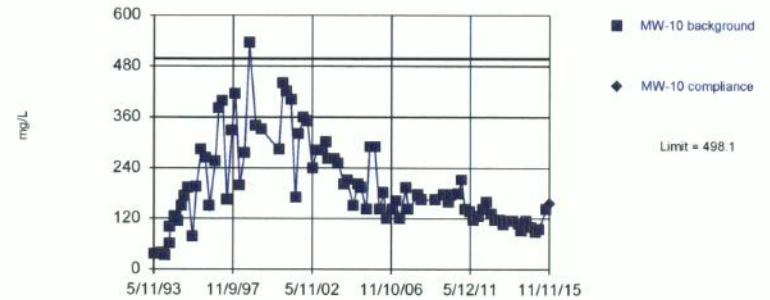


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 89 background values. 23.6% NDs. Report alpha = 0.01111. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Chemical Oxygen Demand Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

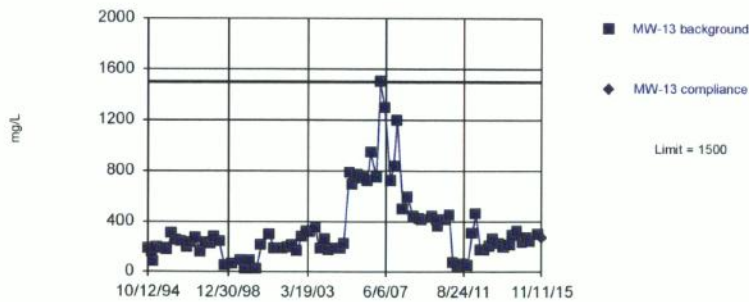


Background Data Summary (based on square root transformation): Mean=13.55, Std. Dev.=3.676, n=85. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9784, critical = 0.972. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Chemical Oxygen Demand Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric

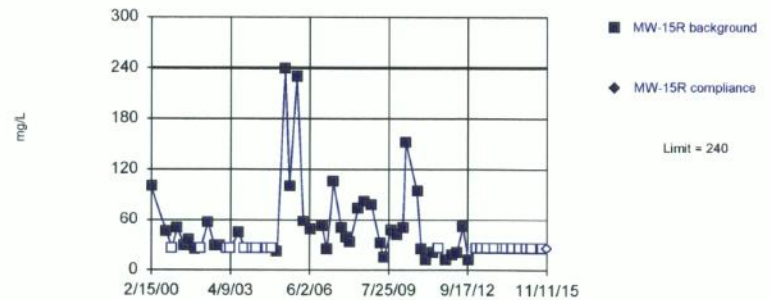


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 82 background values. Report alpha = 0.01205. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Chemical Oxygen Demand Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 61 background values. 34.43% NDs. Report alpha = 0.01613. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Chemical Oxygen Demand Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Chemical Oxygen Demand    Analysis Run 1/4/2016 8:48 AM    View: Short List 2

Blue Ridge    Client: Cornerstone    Data: Historical Database - Blue Ridge

	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R
5/11/1993	21		35					
7/16/1993	17							
8/4/1993			36					
10/11/1993	22		38					
1/13/1994	129		32					
3/29/1994			61					
4/20/1994	16		98					
7/13/1994	13		125					
10/12/1994	10		112		184			
12/6/1994			148					
12/23/1994					149			
1/23/1995	10		173		80			
4/13/1995	14		192		187			
8/2/1995	<50		76		184			
10/18/1995	11		195		176			
1/18/1996	<50		282		300			
4/17/1996	18		264		243			
7/17/1996	15		148		234			
11/7/1996	<50		256		188			
1/22/1997	10		382		229			
4/8/1997	<50		398		263			
7/14/1997	<50		162		156			
10/22/1997	12		329		228			
1/7/1998	22		414		218			
4/6/1998	<50		197		276			
7/14/1998	46		274		235			
10/20/1998	124		535		52			
3/3/1999	<50		338		57			
6/22/1999	12.4		332					
8/31/1999	27.1				88			
11/30/1999	<50				21			
2/15/2000	<50				92		100	
6/27/2000	<50		283		27			
9/26/2000	39		440		210		45	
12/12/2000	<50		420				<52.6	
2/27/2001	21		400		290		50	
6/6/2001	29		170		180		29	
8/15/2001	<50		320		180		36	
11/7/2001	41		360		180		24	
2/6/2002	<50		350		190		<52.6	
5/22/2002	25		240		210		57	
8/21/2002	31		280		160		29	
11/7/2002	37		280		270		28	
2/21/2003	<50		300		320		<52.6	
4/16/2003	<50		260		310		<52.6	
8/14/2003					350		44	
8/15/2003	20		260					
11/12/2003	<50		250		180		<52.6	
3/3/2004	24		200		260		<52.6	
5/4/2004	<50		210		170		<52.6	
9/21/2004	<50		150		180		<52.6	
12/15/2004	<50		200		180		<52.6	

# Prediction Limit

Constituent: Chemical Oxygen Demand Analysis Run 1/4/2016 8:48 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R
2/22/2005	<50		190		220		22	
6/16/2005	46		140		790			
6/17/2005							240	
8/17/2005	67		290		690		100	
11/30/2005	65				770			
12/1/2005			290				230	
3/7/2006							58	
3/8/2006			140		740			
3/9/2006	40							
6/5/2006					720			
6/6/2006	110		180				48	
8/10/2006	49		120		940			
11/30/2006							53	
12/1/2006	100		140		750			
2/12/2007	61						25	
2/13/2007			160		1500			
5/14/2007	52		120		1300		105	
9/10/2007	66		190		720		49	
11/11/2007			140		830			
11/12/2007							39	
11/13/2007	24							
1/15/2008					1200		33	
5/6/2008					502			
5/7/2008	21.9		175				72.8	
8/5/2008			163		587		81.3	
8/6/2008	67.2							
11/19/2008					443		77.4	
11/20/2008	69							
3/23/2009					426			
3/24/2009	76.8						31.6	
5/20/2009	102		164		412		14.6	
9/10/2009	106						47	
11/23/2009	83.2		175		444		41.4	
2/23/2010	60.6		157		417		49.3	
4/6/2010	77.7		174		360		152	
9/13/2010	82.7		177		414		93.8	
11/17/2010					455		24.2	
11/18/2010	88.3		211					
1/27/2011			140		68		11.8	
1/28/2011	17.3							
4/29/2011	28		135		45.7		19.9	
7/26/2011			116		64.6		<52.6	
7/27/2011	26.3							
11/10/2011	21.2		125		50.6		11.7	
1/31/2012	85.8		140		300			
2/1/2012							17	
4/17/2012	77.2		157		458		19.8	
7/17/2012	77.5		131		169		51.3	
10/4/2012	60.8		116		168		11.3	
1/24/2013	57.6		117		196		<52.6	
4/4/2013	50.8		105		257		<52.6	
7/11/2013	53		112		220		<52.6	

# Prediction Limit

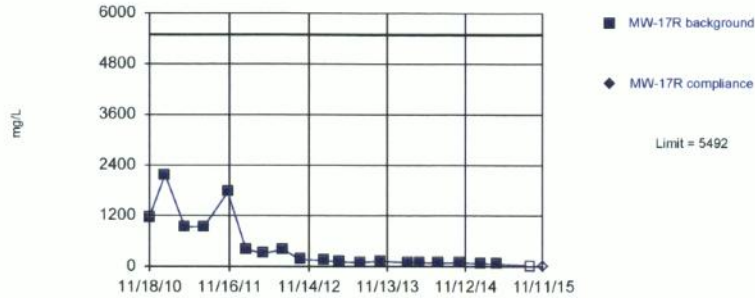
Constituent: Chemical Oxygen Demand Analysis Run 1/4/2016 8:48 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R
10/14/2013	65.4		114		189		<52.6	
2/17/2014	75.1		108		206		<52.6	
4/10/2014	53.2		89.6		285		<52.6	
7/8/2014	73.6		112		317		<52.6	
10/13/2014	78.2		98.7		224		<52.6	
1/21/2015	<50		89		269		<52.6	
4/6/2015	54.3		93.6		237		<52.6	
9/14/2015	75.2				293		<52.6	
9/15/2015			140					
11/11/2015		74.3		154		262		<52.6

Within Limit

Prediction Limit  
Intrawell Parametric

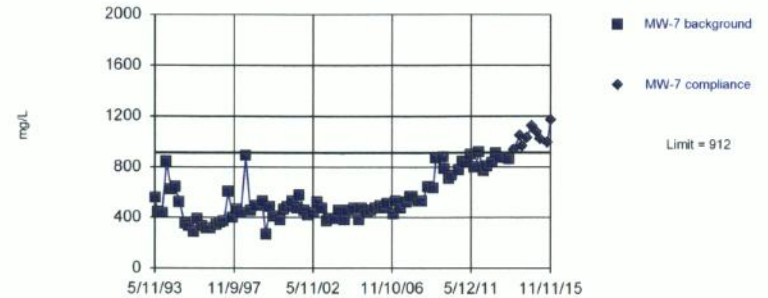


Background Data Summary (based on natural log transformation): Mean=5.404, Std. Dev.=1.232, n=20, 5% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9199, critical = 0.905. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Chemical Oxygen Demand Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Exceeds Limit

Prediction Limit  
Intrawell Non-parametric

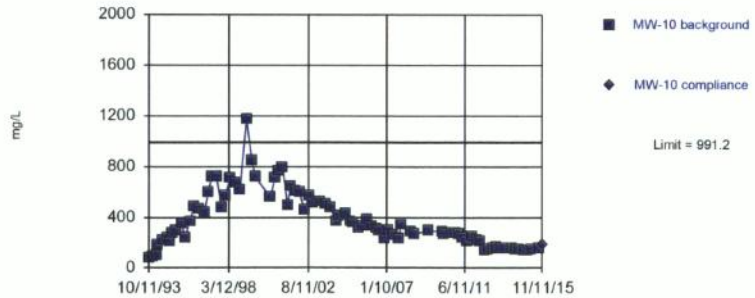


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 82 background values. Report alpha = 0.01205. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Chloride Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

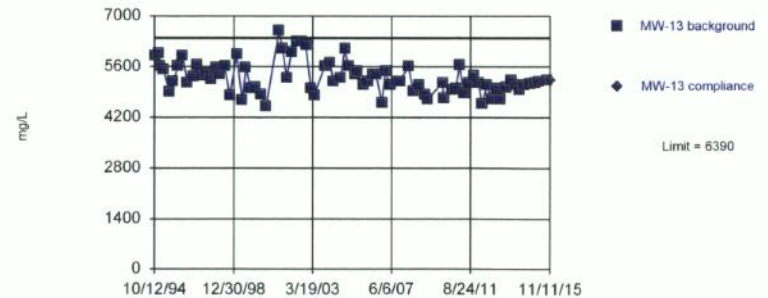


Background Data Summary (based on square root transformation): Mean=18.62, Std. Dev.=5.387, n=83. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9739, critical = 0.971. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Chloride Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=72.76, Std. Dev.=3.006, n=79. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9731, critical = 0.97. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Chloride Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Chemical Oxygen Demand, Chloride Analysis Run 1/4/2016 8:48 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13
8/17/2005			450		330		5500	
11/30/2005			470				5100	
12/1/2005					390			
3/8/2006					330		5200	
3/9/2006			490					
6/5/2006							5400	
6/6/2006			470		310			
8/10/2006			510		290		5400	
12/1/2006			420		230		4600	
2/12/2007			530					
2/13/2007					290		5500	
5/14/2007			470		260		5100	
9/10/2007			520		230		5200	
11/11/2007					340		5200	
11/13/2007			560					
1/15/2008			560					
5/6/2008							5620	
5/7/2008			524		288			
8/5/2008					267		4940	
8/6/2008			525					
11/19/2008							5080	
11/20/2008			640					
3/23/2009							4820	
3/24/2009			627					
5/20/2009			873		294		4720	
10/21/2009			883					
11/23/2009			783					
2/23/2010			699		286		5150	
4/6/2010			732		269		4750	
9/13/2010			775		272		4950	
11/17/2010							4990	
11/18/2010	1160		843		270			
1/27/2011					267		5640	
1/28/2011	2170		830					
4/29/2011	933		895		234		4870	
7/26/2011	946				211		5150	
7/27/2011			792					
11/10/2011	1760		912		242		5370	
1/5/2012			797					
1/31/2012	414		767		217		5150	
4/17/2012	312		806		212		4580	
7/17/2012	410		830		131		5110	
10/4/2012	175		910		140		4700	
1/24/2013	151		869		157		5000	
4/4/2013	112				161		4700	
7/11/2013	103		859		157		5040	
10/14/2013	128			933	153		5220	
2/17/2014	98.7			1050	156		5090	
4/10/2014	98.7			967	141		4950	
7/8/2014	85			1030	141		5090	
10/13/2014	94.1			1120	136		5120	
1/21/2015	77.4			1070	138		5170	

# Prediction Limit

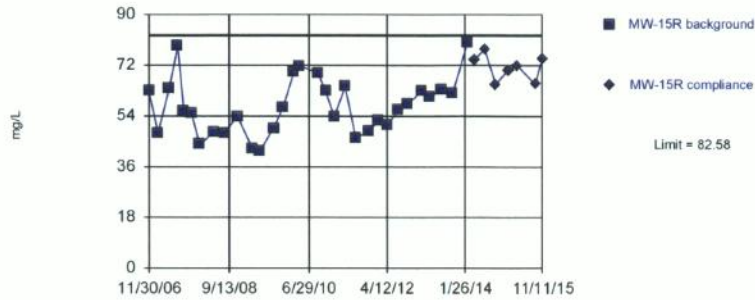
Constituent: Chemical Oxygen Demand, Chloride    Analysis Run 1/4/2016 8:48 AM    View: Short List 2  
Blue Ridge    Client: Cornerstone    Data: Historical Database - Blue Ridge

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	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13
4/6/2015	68.2			1020	145		5200	
9/14/2015	<52.6			990			5210	
9/15/2015					153			
11/11/2015		<52.6		1170		183		5210

Within Limit

Prediction Limit  
Intrawell Parametric

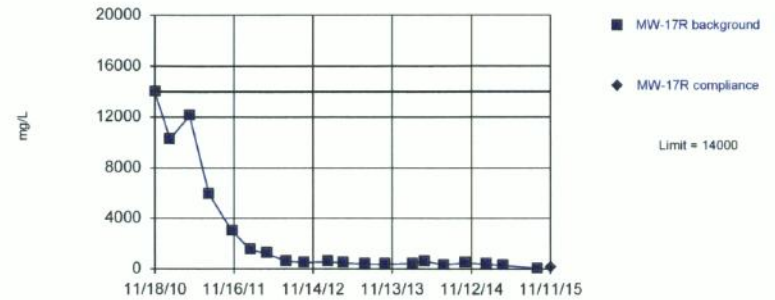


Background Data Summary: Mean=57.56, Std. Dev.=10.02, n=31. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9611, critical = 0.929. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Chloride Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric

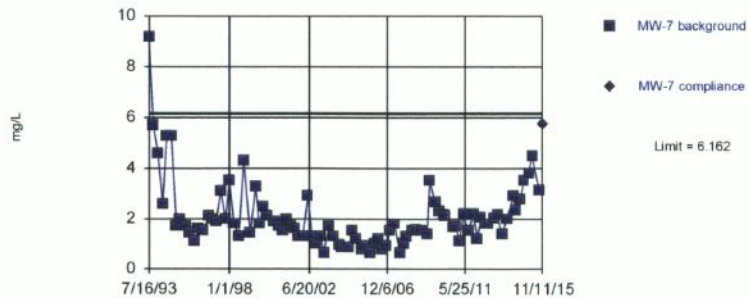


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Report alpha = 0.04762. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Chloride Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

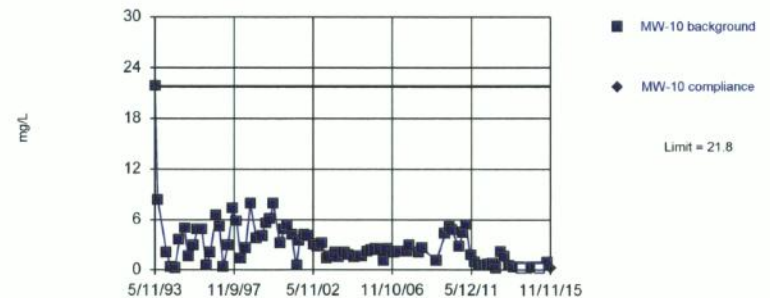


Background Data Summary (based on natural log transformation): Mean=0.5814, Std. Dev.=0.5192, n=89. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.976, critical = 0.972. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Iron Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 85 background values. 2.353% NDs. Report alpha = 0.01163. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Iron Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge





# Prediction Limit

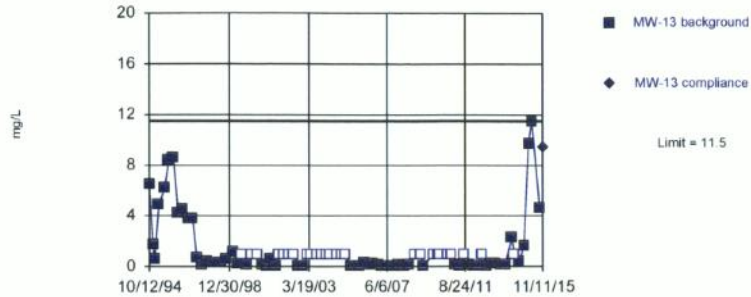
Constituent: Chloride, Iron Analysis Run 1/4/2016 8:48 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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11/11/2015	MW-15R	MW-15R	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10
		74.1		96.6		5.73		0.217

Within Limit

Prediction Limit  
Intrawell Non-parametric

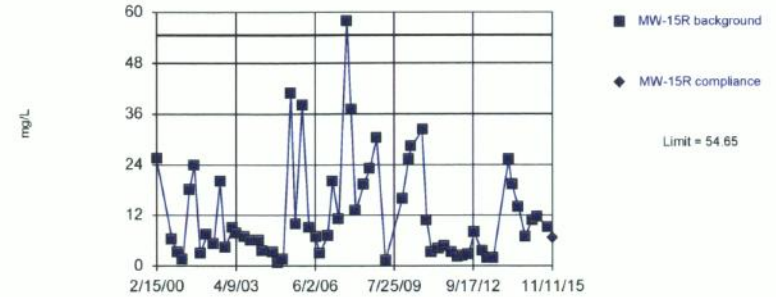


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 84 background values. 30.95% NDs. Report alpha = 0.01176. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Iron Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=2.1, Std. Dev.=0.7023, n=59. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9703, critical = 0.962. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Iron Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric

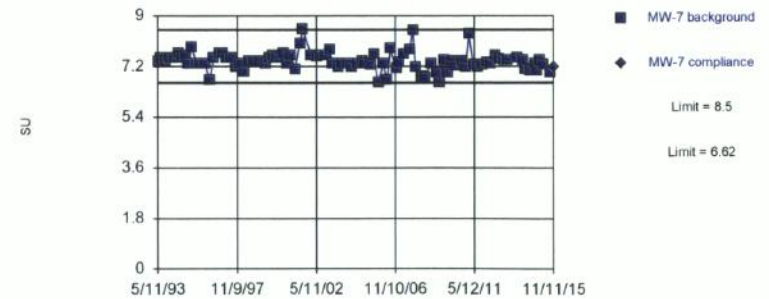


Non-parametric test used in lieu of parametric prediction limit because the data required both a power transformation and Cohen's adjustment. Limit is highest of 20 background values. 25% NDs. Report alpha = 0.04762. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Iron Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limits

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 92 background values. Report alpha = 0.02151. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: pH Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Iron, pH    Analysis Run 1/4/2016 8:48 AM    View: Short List 2  
 Blue Ridge    Client: Cornerstone    Data: Historical Database - Blue Ridge

	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R	MW-7	MW-7
5/11/1993							7.4	
7/16/1993							7.5	
8/4/1993							7.4	
10/11/1993							7.4	
1/13/1994							7.5	
4/20/1994							7.5	
7/13/1994							7.7	
10/12/1994	6.43						7.5	
12/6/1994							7.6	
12/23/1994	1.7							
1/23/1995	0.561						7.3	
4/13/1995	4.89						7.9	
8/2/1995	6.17						7.3	
10/18/1995	8.41						7.3	
1/18/1996	8.59						7.3	
4/17/1996	4.19						6.7	
7/17/1996	4.47						7.5	
11/7/1996	3.75						7.7	
1/22/1997	3.77						7.7	
4/8/1997	0.667						7.5	
7/14/1997	0.178						7.5	
10/22/1997	0.388						7.2	
1/7/1998	0.339						7.3	
4/6/1998	0.356						7	
7/14/1998	0.292						7.4	
10/20/1998	0.56						7.4	
3/3/1999	1.2						7.4	
6/22/1999	0.21						7.3	
8/31/1999	<2						7.5	
11/30/1999	0.12						7.6	
2/15/2000	<2		25.6				7.5	
6/27/2000	<2						7.7	
9/26/2000	0.1		6.2				7.3	
12/12/2000	0.092		3.2				7.6	
2/27/2001	0.59		1.5				7.1	
6/6/2001	0.083		18				8	
8/15/2001	<2		24				8.5	
11/7/2001	<2		2.8					
2/6/2002	<2		7.3				7.6	
5/22/2002	<2		5.3				7.54	
8/21/2002	0.03		20				7.6	
11/7/2002	0.02		4.2				7.6	
2/21/2003	<2		9				7.8	
4/16/2003	<2		7.6				7.3	
8/14/2003	<2		6.8					
8/15/2003							7.2	
11/12/2003	<2		6				7.3	
3/3/2004	<2		6				7.3	
5/4/2004	<2		3.4				7.2	
9/21/2004	<2		3.2				7.3	
12/15/2004	<2		0.7				7.4	
2/22/2005	<2		1.5				7.3	

# Prediction Limit

Constituent: Iron, pH Analysis Run 1/4/2016 8:48 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R	MW-7	MW-7
6/16/2005	0.021						7.28	
6/17/2005			41					
8/17/2005	0.039		10				7.64	
11/30/2005	0.08						6.62	
12/1/2005			38					
3/7/2006			9.2					
3/8/2006	0.28							
3/9/2006							7.3	
6/5/2006	0.12							
6/6/2006			6.9				6.7	
8/10/2006	0.23		3				7.85	
11/30/2006			7.2					
12/1/2006	0.098						7.12	
2/12/2007			20				7.33	
2/13/2007	0.058							
5/14/2007	0.046		11				7.63	
9/10/2007	0.077		58				7.8	
11/11/2007	0.083							
11/12/2007			37					
11/13/2007							8.49	
1/15/2008	0.095		13				7.19	
5/6/2008	0.042							
5/7/2008			19				6.85	
8/5/2008	0.1		23					
8/6/2008							6.8	
11/19/2008	<2		30.4					
11/20/2008							7.3	
3/23/2009	<2							
3/24/2009			1.3				6.96	
5/20/2009	0.071						6.65	
9/10/2009							7.44	
10/21/2009							7.1	
11/23/2009	<2		15.8				6.99	
2/23/2010	<2		25.2				7.39	
4/6/2010	<2		28.2				7.23	
9/13/2010	<2		32.1				7.37	
11/17/2010	<2		10.8					
11/18/2010					0.585		7.18	
1/27/2011	0.13		3.1					
1/28/2011					0.53		8.34	
4/29/2011	0.079		4		3.4		7.26	
7/26/2011	<2		4.5		11.5			
7/27/2011							7.16	
11/10/2011	0.16		3.2		24.9		7.26	
1/31/2012	0.051				15.7		7.33	
2/1/2012			2					
4/17/2012	0.091		2.33		17.9		7.29	
7/17/2012	<2		2.6		3.58		7.58	
10/4/2012	0.0377		7.93		2.06		7.47	
1/24/2013	0.193		3.44		0.928		7.44	
4/4/2013	0.253		1.86		0.336		7.45	
7/11/2013	0.142		1.89		0.248			

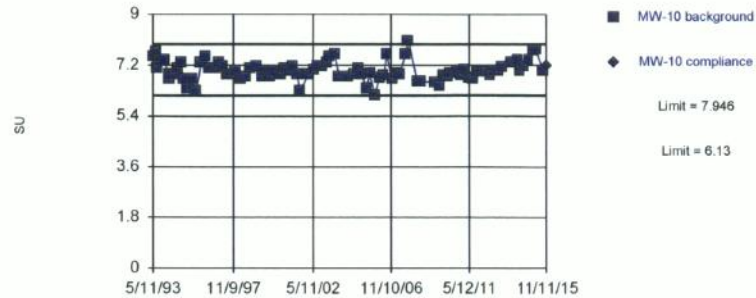
# Prediction Limit

Constituent: Iron, pH Analysis Run 1/4/2016 8:48 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R	MW-7	MW-7
10/14/2013	0.17				0.156		7.52	
2/17/2014	2.24		25.2		0.284		7.41	
4/10/2014	<2		19.1		<2		7.08	
7/8/2014	0.423		13.9		<2		7.07	
10/13/2014	1.6		6.93		<2		7.31	
12/16/2014							7.05	
1/21/2015	9.74		10.8		<2		7.44	
4/6/2015	11.5		11.6		<2		7.28	
9/14/2015	4.58		9.16		0.38		6.99	
11/11/2015		9.46		6.48		0.323		7.2

Within Limits

Prediction Limit  
Intrawell Parametric

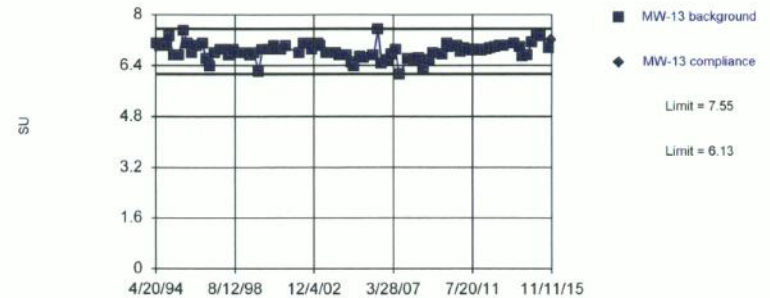


Background Data Summary (based on square root transformation): Mean=2.647, Std. Dev.=0.06476, n=88. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9723, critical = 0.972. Report alpha = 0.01. Most recent point compared to limit.

Constituent: pH Analysis Run 1/4/2016 8:46 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limits

Prediction Limit  
Intrawell Non-parametric

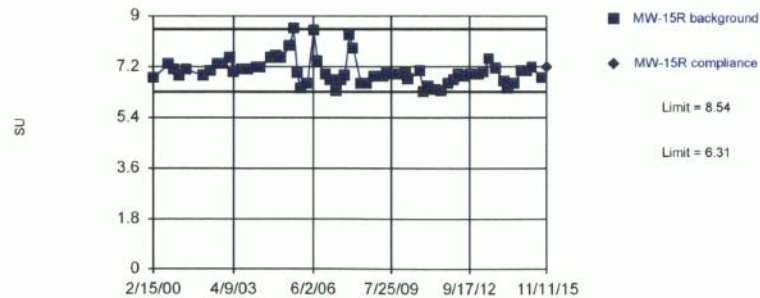


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 82 background values. Report alpha = 0.0241. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: pH Analysis Run 1/4/2016 8:46 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limits

Prediction Limit  
Intrawell Non-parametric

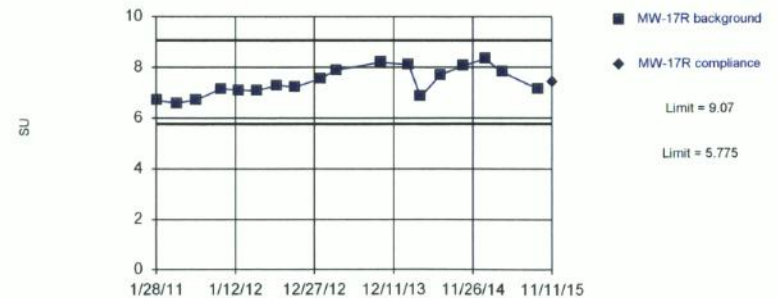


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 62 background values. Report alpha = 0.03175. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: pH Analysis Run 1/4/2016 8:46 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limits

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=7.422, Std. Dev.=0.5532, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9408, critical = 0.897. Report alpha = 0.01. Most recent point compared to limit.

Constituent: pH Analysis Run 1/4/2016 8:46 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: pH Analysis Run 1/4/2016 8:48 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R
5/11/1993	7.5							
7/16/1993	7.7							
8/4/1993	7.1							
10/11/1993	7.4							
1/13/1994	7.4							
3/29/1994	6.7							
4/20/1994	6.9		7.1					
7/13/1994	6.9		7					
10/12/1994	7.1		7					
12/6/1994	7.3		7.1					
1/23/1995	6.7		7.3					
4/13/1995	6.4		6.7					
8/2/1995	6.7		6.7					
10/18/1995	6.3		7.5					
1/18/1996	7.3		7.1					
4/17/1996	7.5		6.8					
7/17/1996	7.1		7					
11/7/1996	7.1		7.1					
1/22/1997	7.3		6.6					
4/8/1997	7.2		6.4					
7/14/1997	6.9		6.8					
10/22/1997	6.9		6.9					
1/7/1998	7		6.9					
4/6/1998	6.7		6.7					
7/14/1998	6.8		6.9					
10/20/1998	7.1		6.8					
3/3/1999	7.2		6.8					
6/22/1999	6.8		6.7					
8/31/1999	7		6.8					
11/30/1999	6.8		6.2					
2/15/2000	7		6.9		6.8			
6/27/2000	6.9		6.9					
9/26/2000	7.1		7		7.3			
12/12/2000	7		6.9		7.1			
2/27/2001	7.2		6.9		6.9			
6/6/2001	6.9		7		7.1			
8/15/2001	6.3							
2/6/2002	6.9		6.8		6.9			
5/22/2002	7.04		7.07					
8/21/2002	7.2		7.1		7.3			
11/7/2002	7.2		6.9		7.3			
2/21/2003	7.3		7.1		7.5			
4/16/2003	7.5		7		7			
8/14/2003			6.8		7.1			
8/15/2003	7.6							
11/12/2003	6.8		6.8		7.1			
3/3/2004	6.8		6.8		7.2			
5/4/2004	6.8		6.7		7.2			
9/21/2004	6.9		6.7		7.5			
12/15/2004	7.1		6.5		7.6			
2/22/2005	6.9		6.4		7.5			
6/16/2005	6.37		6.69					

# Prediction Limit

Constituent: pH Analysis Run 1/4/2016 8:48 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R
6/17/2005					7.92			
8/17/2005	6.94		6.63		8.54			
10/12/2005					6.98			
12/1/2005	6.12				6.41			
3/7/2006					6.6			
3/8/2006	6.78		6.72					
6/5/2006			7.55					
6/6/2006	6.84				8.46			
8/10/2006	7.6		6.46		7.37			
11/30/2006					6.92			
12/1/2006	6.71		6.57					
2/12/2007					6.72			
2/13/2007	6.94		6.77					
5/14/2007	6.89		6.92		6.33			
7/23/2007			6.13		6.72			
9/10/2007	7.59				6.9			
11/11/2007	8.07							
11/12/2007					8.31			
1/15/2008			6.62		7.86			
5/6/2008			6.58					
5/7/2008	6.65				6.6			
7/24/2008			6.56					
8/5/2008	6.64		6.63		6.58			
11/19/2008			6.32		6.85			
3/23/2009			6.55					
3/24/2009					6.86			
5/20/2009	6.6		6.8		7.01			
9/9/2009	6.48							
9/10/2009					6.94			
11/23/2009	6.85		6.75		6.92			
2/23/2010	6.79		7.1		6.98			
4/6/2010	6.93		6.97		6.76			
9/13/2010	7.01		7.02		7.07			
11/17/2010			6.84		6.31			
11/18/2010	6.83							
1/27/2011	7.07		6.94		6.52			
1/28/2011							6.71	
4/29/2011	6.78		6.89		6.37		6.6	
7/26/2011	6.73		6.86		6.34		6.73	
11/10/2011	6.95		6.91		6.59		7.16	
1/31/2012	6.95		6.87				7.11	
2/1/2012					6.71			
4/17/2012	6.98		6.89		6.91		7.09	
7/17/2012	6.84		6.94		6.84		7.29	
10/4/2012	7		6.98		6.92		7.23	
1/24/2013	7.03		7.01		6.92		7.56	
4/4/2013	7.14		7.02		7		7.9	
7/11/2013					7.46			
10/14/2013	7.29		7.1		7.13		8.2	
2/17/2014	7.37		6.99		6.66		8.11	
4/10/2014	7		6.69		6.42		6.85	
7/8/2014	7.19		6.71		6.61		7.71	

# Prediction Limit

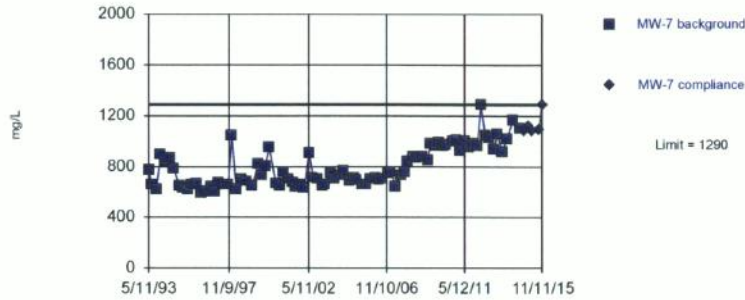
Constituent: pH Analysis Run 1/4/2016 8:48 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R
10/13/2014	7.4		7.14		7.05		8.05	
1/21/2015	7.74		7.4		7.06		8.34	
4/6/2015	7.77		7.32		7.16		7.82	
9/14/2015			6.93		6.82		7.14	
9/15/2015	7.03							
11/11/2015		7.2		7.2		7.2		7.4

Within Limit

Prediction Limit  
Intrawell Non-parametric

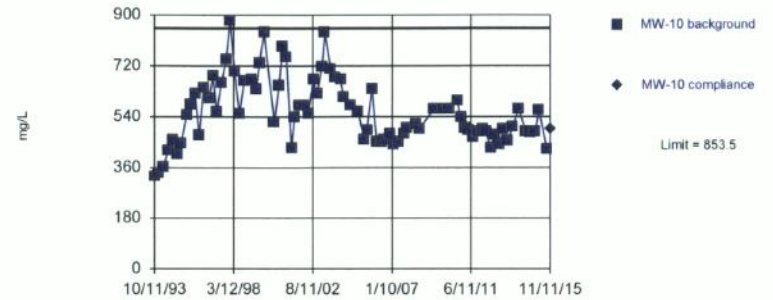


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 85 background values. Report alpha = 0.01163. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Sodium Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

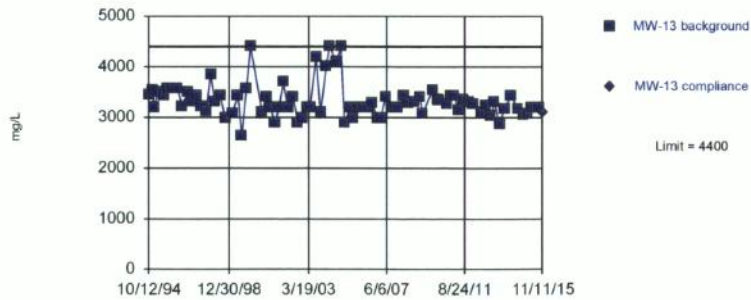


Background Data Summary (based on square root transformation): Mean=23.47, Std. Dev.=2.407, n=81. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9784, critical = 0.97. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Sodium Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric

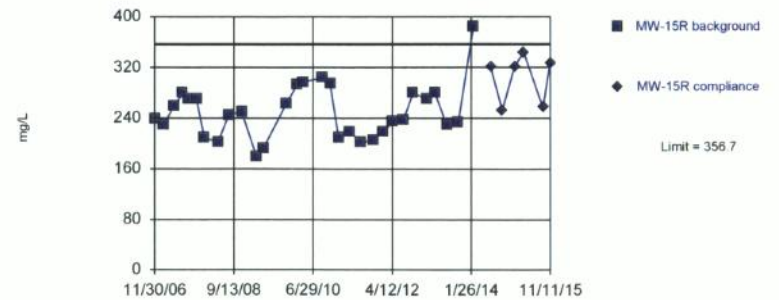


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 81 background values. Report alpha = 0.0122. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Sodium Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=249.6, Std. Dev.=42.76, n=30. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9425, critical = 0.927. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Sodium Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Sodium Analysis Run 1/4/2016 8:48 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R
5/11/1993	773							
7/16/1993	659							
10/11/1993	622		327					
1/13/1994	895		342					
4/20/1994	844		363					
7/13/1994	872		420					
10/12/1994	783		458		3450			
12/23/1994					3550			
1/23/1995	651		407		3200			
4/13/1995	624		444		3510			
8/2/1995	619		545		3440			
10/18/1995	652		585		3560			
1/18/1996	668		623		3580			
4/17/1996	594		477		3580			
7/17/1996	596		643		3230			
11/7/1996	637		606		3510			
1/22/1997	596		686		3310			
4/8/1997	672		557		3420			
7/14/1997	660		658		3230			
10/22/1997	653		743		3120			
1/7/1998	1050		882		3860			
4/6/1998	620		702		3310			
7/14/1998	701		550		3440			
10/20/1998	683		666		2980			
3/3/1999	649		670		3090			
6/22/1999	820		639		3430			
8/31/1999	726		732		2630			
11/30/1999	808		839		3580			
2/15/2000	956				4400			
6/27/2000	664		521					
9/26/2000	650		650		3100			
12/12/2000	760		790		3400			
2/27/2001	700		750		3200			
6/6/2001	670		430		2900			
8/15/2001	640		540		3200			
11/7/2001	660		580		3700			
2/6/2002	630		580		3200			
5/22/2002	910		550		3400			
8/21/2002	710		670		2900			
11/7/2002	700		620		3000			
2/21/2003	650		720		3200			
4/16/2003	660		840		3200			
8/14/2003					4200			
8/15/2003	750		710					
11/12/2003	700		680		3100			
3/3/2004	730		670		4000			
5/4/2004	770		610		4400			
9/21/2004	680		580		4100			
12/15/2004	710				4400			
2/22/2005	690		560		2900			
6/16/2005	660		460		3200			
8/17/2005	660		490		3000			

# Prediction Limit

Constituent: Sodium Analysis Run 1/4/2016 8:48 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R
11/30/2005	700				3200			
12/1/2005			640					
3/8/2006			450		3200			
3/9/2006	710							
6/5/2006					3200			
6/6/2006	690		450					
8/10/2006	700		460		3300			
11/30/2006							240	
12/1/2006	750		480		3000			
2/12/2007	760						230	
2/13/2007			440		3000			
5/14/2007	640		450		3400		260	
7/23/2007							280	
9/10/2007	730		480		3200		270	
11/11/2007			500		3200			
11/12/2007							270	
11/13/2007	760							
1/15/2008	840				3200		210	
5/6/2008					3440			
5/7/2008	875		513				202	
8/5/2008			498		3280		245	
8/6/2008	868							
11/19/2008					3310		251	
11/20/2008	879							
3/23/2009					3400			
3/24/2009	850						179	
5/20/2009	978		566		3070		193	
9/10/2009	966							
11/23/2009	994		566		3550		264	
2/23/2010	960		567		3360		293	
4/6/2010	976		568		3340		297	
9/13/2010	1000		595		3270		304	
11/17/2010					3440		295	
11/18/2010	1010		537					
1/27/2011			500		3440		210	
1/28/2011	930							
4/29/2011	1000		491		3160		219	
7/26/2011			467		3350		202	
7/27/2011	952							
11/10/2011	985		487		3320		206	
1/31/2012	964		494		3270			
2/1/2012							218	
4/17/2012	1290		486				235	
7/17/2012	1050		429		3100		238	
10/4/2012	1030		476		3240		280	
1/24/2013	936		442		3030		270	
4/4/2013	1060		495		3310		280	
7/11/2013	915		454		2870		229	
10/14/2013	1020		506		3180		234	
2/17/2014	1170		567		3430		385	
7/8/2014	1100		487		3170			320
10/13/2014		1080	485		3050			253

# Prediction Limit

Constituent: Sodium Analysis Run 1/4/2016 8:48 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R
1/21/2015		1120	489		3080			321
4/6/2015		1080	562		3200			344
9/14/2015		1090			3200			257
9/15/2015			424					
11/11/2015		1290		494		3110		326

Within Limit

Prediction Limit  
Intrawell Non-parametric

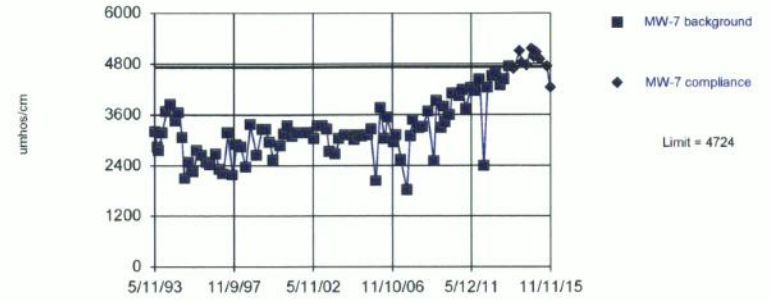


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 19 background values. Report alpha = 0.05. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Sodium Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

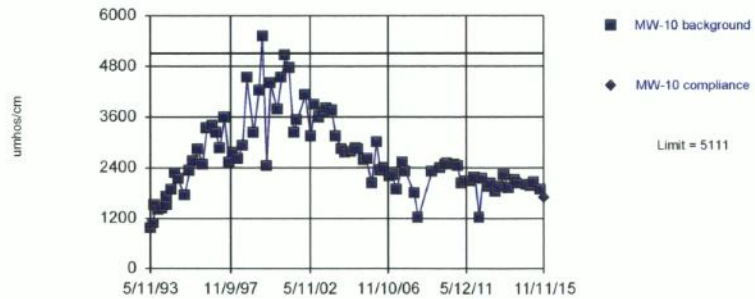


Background Data Summary: Mean=3193, Std. Dev.=641.6, n=84. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9812, critical = 0.971. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Specific Conductance Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

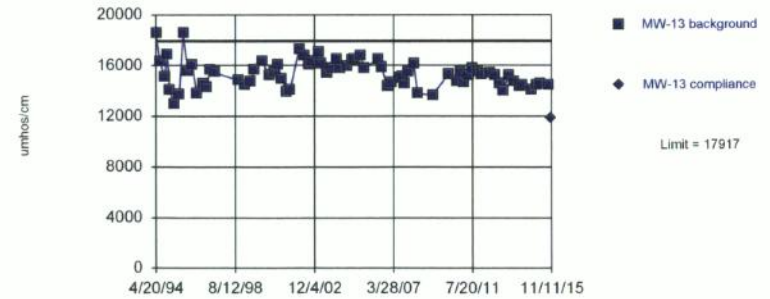


Background Data Summary (based on square root transformation): Mean=50.59, Std. Dev.=8.764, n=86. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9788, critical = 0.972. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Specific Conductance Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=15341, Std. Dev.=1075, n=72. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9691, critical = 0.968. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Specific Conductance Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Sodium, Specific Conductance    Analysis Run 1/4/2016 8:48 AM    View: Short List 2  
 Blue Ridge    Client: Cornerstone    Data: Historical Database - Blue Ridge

	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13
5/11/1993			3190		966			
7/16/1993			2830		1080			
8/4/1993			2740		1510			
10/11/1993			3160		1400			
1/13/1994			3670		1450			
3/29/1994					1532			
4/20/1994			3840		1730		18600	
7/13/1994			3440		1870		16300	
10/12/1994			3640		2280		15100	
12/6/1994			3050		2130		16900	
1/23/1995			2080				14060	
4/13/1995			2470		1745		12980	
8/2/1995			2260		2340		13730	
10/18/1995			2750		2560		18530	
1/18/1996			2630		2820		15620	
4/17/1996			2470		2480		16030	
7/17/1996			2420		3340		13780	
11/7/1996			2670		3400		14580	
1/22/1997			2310		3210		14250	
4/8/1997			2200		2870		15720	
7/14/1997			3170		3580		15450	
10/22/1997			2170		2530			
1/7/1998			2890		2750			
4/6/1998			2840		2610			
7/14/1998			2370		2920			
10/20/1998			3350		4530		14860	
3/3/1999			2650		3220		14460	
6/22/1999			3260		4220		14780	
8/31/1999			3250		5520		15690	
11/30/1999			2950		2430			
2/15/2000			2520		4400		16290	
6/27/2000			2860		3770		15170	
9/26/2000			3150		4530		15530	
12/12/2000			3340		5060		16040	
2/27/2001			3070		4750		14970	
6/6/2001			3180		3210		13930	
8/15/2001			3160		3540		14090	
2/6/2002			3170		4125		17240	
5/22/2002			3020		3140		16770	
8/21/2002			3330		3890		16010	
11/7/2002			3330		3590		16340	
2/21/2003			3240		3690		17110	
4/16/2003			2720		3810		16100	
8/14/2003							15380	
8/15/2003			2670		3740			
11/12/2003			3040		3150		15760	
3/3/2004			3110		2820		16550	
5/4/2004			3100		2750		15730	
9/21/2004			2990		2770		15940	
12/15/2004			3120		2850		16380	
2/22/2005			3080		2820		16500	
6/16/2005			3114		2584		16760	

# Prediction Limit

Constituent: Sodium, Specific Conductance Analysis Run 1/4/2016 8:48 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13
8/17/2005			3261		2601		15770	
11/30/2005			2014					
12/1/2005					2025			
3/8/2006					3010			
3/9/2006			3750					
6/5/2006							16545	
6/6/2006			3034		2330			
8/10/2006			3523		2393		15837	
12/1/2006			2936		2197		14336	
2/12/2007			3103					
2/13/2007					2216		14681	
5/14/2007			2524		1872			
7/23/2007							15010	
9/10/2007			1794		2519		15129	
11/11/2007					2311		14601	
11/13/2007			3084					
1/15/2008			3465				15516	
5/6/2008							16110	
5/7/2008			3273		1808			
7/24/2008							13792	
8/5/2008					1209			
8/6/2008			3301					
11/20/2008			3660					
3/24/2009			2488					
5/20/2009			3919		2299		13669	
9/10/2009			3274					
10/21/2009			3768					
11/23/2009			3413		2396			
2/23/2010			3580		2480			
4/6/2010			4090		2500		15340	
9/13/2010			4040		2480		14780	
11/17/2010							15490	
11/18/2010	8740		4160		2430			
1/27/2011					2020		14620	
1/28/2011	9850		3730					
4/29/2011	7240		4230		2090		15250	
7/26/2011	4140				2090		15790	
7/27/2011			4140					
11/10/2011	2340		4430		2150		15460	
1/31/2012	1640		2390		1220		15290	
4/17/2012	2470		4240		2140			
7/17/2012	1180		4510		1930		15410	
10/4/2012	1260		4600		2010		15210	
1/24/2013	1170		4290		1840		14530	
4/4/2013	1250		4430		1930		14040	
7/11/2013	1110		4729		2210		15180	
10/14/2013	1250			4661	1925		14760	
2/17/2014	1340			5097	2094		14400	
4/10/2014				4826	2023		14430	
7/8/2014	1140			4750				
10/13/2014	1120			5155	1996		14110	
12/16/2014				4953				

# Prediction Limit

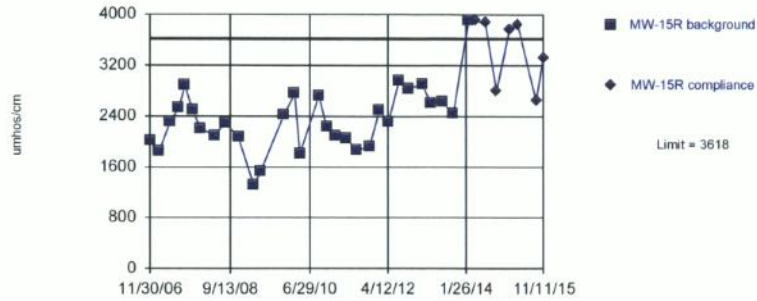
Constituent: Sodium, Specific Conductance Analysis Run 1/4/2016 8:48 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13
1/21/2015	1190			5057	1976		14430	
4/6/2015	1170			4900	2044		14560	
9/14/2015	703			4720			14440	
9/15/2015					1890			
11/11/2015		737		4239		1699		11840

Within Limit

Prediction Limit  
Intrawell Parametric

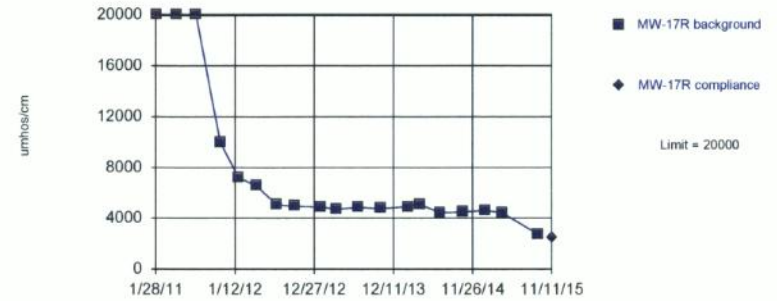


Background Data Summary: Mean=2357, Std. Dev.=503.8, n=30. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9636, critical = 0.927. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Specific Conductance Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric

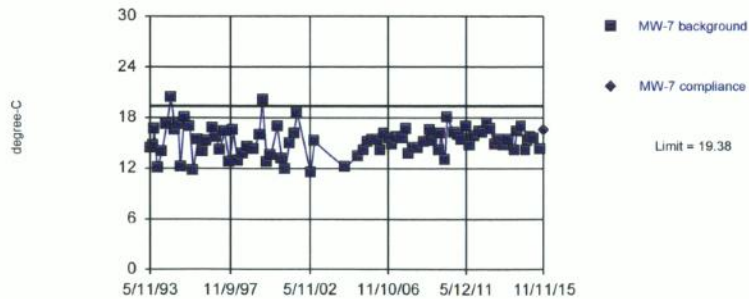


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 19 background values. Report alpha = 0.05. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Specific Conductance Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

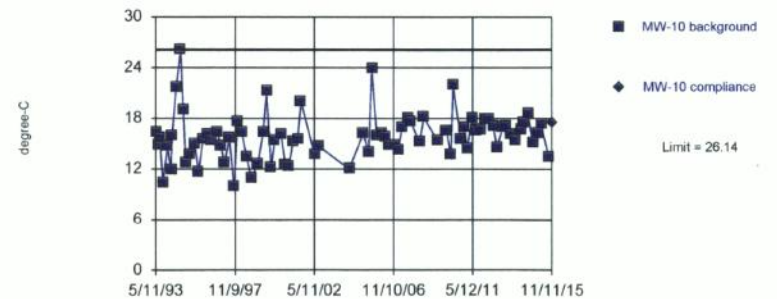


Background Data Summary: Mean=15.26, Std. Dev.=1.728, n=83. Seasonality was detected with 95% confidence and data were deseasonalized. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9762, critical = 0.971. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Temperature Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 79 background values. Report alpha = 0.0125. Most recent point compared to limit. Data were deseasonalized.

Constituent: Temperature Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Specific Conductance, Temperature Analysis Run 1/4/2016 8:48 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-15R	MW-15R	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10
5/11/1993					15.8		16.443125	
7/16/1993					16.1		14.843125	
8/4/1993					18.1		15.636125	
10/11/1993					13.4		10.436125	
1/13/1994					12.5		14.690625	
3/29/1994							11.930125	
4/20/1994					16.1		16.030125	
7/13/1994					21.8		21.743125	
10/12/1994					17.9		26.136125	
12/6/1994					15.8		18.990625	
1/23/1995					10.7		12.790625	
4/13/1995					17		13.730125	
8/2/1995					18.4		14.936125	
10/18/1995					13.2		11.636125	
1/18/1996					13.9		15.490625	
4/17/1996					12.9		16.130125	
7/17/1996					16.6		15.443125	
11/7/1996					15.3		16.390625	
1/22/1997					14.2		14.790625	
4/8/1997					13.1		12.730125	
7/14/1997					17.7		15.643125	
10/22/1997					14.1		9.936	
1/7/1998					15		17.690625	
4/6/1998					11.9		16.330125	
7/14/1998					15.1		13.443125	
10/20/1998					15.9		10.936125	
3/3/1999					13.2		12.630125	
6/22/1999					17.3		16.443125	
8/31/1999					21.5		21.236125	
11/30/1999					11.3		12.190625	
2/15/2000					12.5		15.430125	
6/27/2000					18.3		16.143125	
9/26/2000					14.6		12.536125	
12/12/2000					10.5		12.290625	
2/27/2001					13.9		15.230125	
6/6/2001					17.5		15.543125	
8/15/2001					20		20.036125	
5/22/2002					12.9		13.743125	
8/21/2002					16.6		14.736125	
5/4/2004					13.5		12.043125	
2/22/2005					12.4		16.230125	
6/16/2005					15.46		14.013125	
8/17/2005					16.52		23.936125	
11/30/2005					13.91			
12/1/2005							15.980625	
3/8/2006							16.230125	
3/9/2006					14.4			
6/6/2006					15.49		15.843125	
8/10/2006					17.5		14.836125	
11/30/2006	2011							
12/1/2006					14.03		14.830625	
2/12/2007	1843				13.76			

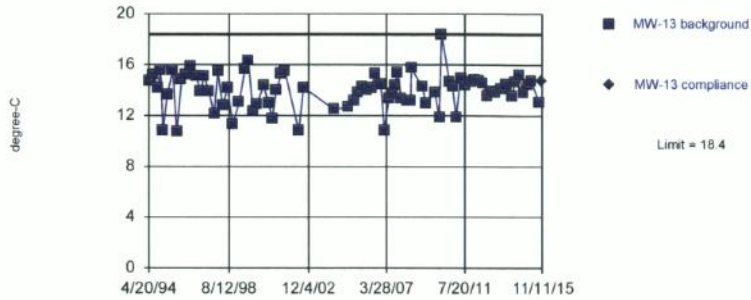
# Prediction Limit

Constituent: Specific Conductance, Temperature Analysis Run 1/4/2016 8:48 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-15R	MW-15R	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10
2/13/2007							14.340125	
5/14/2007	2320				17.04		16.913125	
7/23/2007	2531							
9/10/2007	2890				16.9		18.036125	
11/11/2007							17.620625	
11/12/2007	2496							
11/13/2007					15.26			
1/15/2008	2213				12.32			
5/7/2008	2101				15.8		15.243125	
8/5/2008	2298						18.146125	
8/6/2008					15.76			
11/19/2008	2070							
11/20/2008					13.7			
3/24/2009	1310				15.5			
5/20/2009	1536				16.6		15.403125	
10/21/2009					15.56			
11/23/2009	2429				14.6		16.590625	
2/23/2010	2760				12		13.730125	
4/6/2010	1820				17		21.930125	
9/13/2010	2730				17.6		15.536125	
11/17/2010	2250							
11/18/2010					14.5		16.990625	
1/27/2011	2100						14.490625	
1/28/2011			20000		14			
4/29/2011	2060		20000		15.9		18.030125	
7/26/2011	1870		20000				16.543125	
7/27/2011					16			
11/10/2011	1930		9980		14.4		16.690625	
1/31/2012			7210		14.9		17.990625	
2/1/2012	2510							
4/17/2012	2310		6550		15.2		17.930125	
7/17/2012	2970		5070		18.7		17.043125	
10/4/2012	2840		4940		18.1		14.636125	
1/24/2013	2920		4910		13.4		16.890625	
4/4/2013	2620		4710		14.4		17.130125	
7/11/2013	2625		4870		15.98		16.073125	
10/14/2013	2446		4753		16.85		15.406125	
2/17/2014	3912		4930		13.08		16.630125	
4/10/2014		3908	5071		15.3		17.530125	
7/8/2014		3871	4440		18.27		18.673125	
10/13/2014		2800	4492		15.59		15.096125	
12/16/2014					13.85			
1/21/2015		3763	4616		14.15		16.280625	
4/6/2015		3839	4445		14.5		17.340125	
9/14/2015		2659	2732		15.73			
9/15/2015							13.396125	
11/11/2015		3315		2430		15.04		17.550625

Within Limit

Prediction Limit  
Intrawell Non-parametric

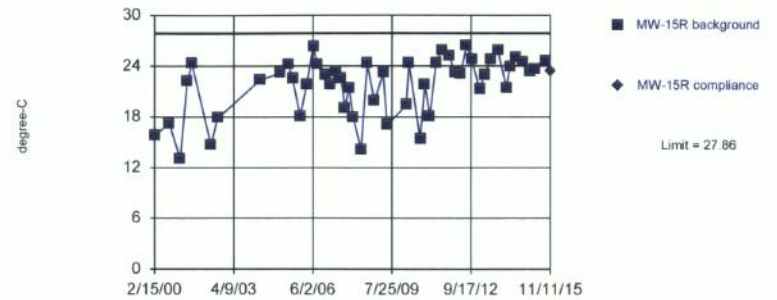


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 77 background values. Report alpha = 0.01282. Most recent point compared to limit. Data were deseasonalized.

Constituent: Temperature Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=11060, Std. Dev.=4347, n=50. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9617, critical = 0.953. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Temperature Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

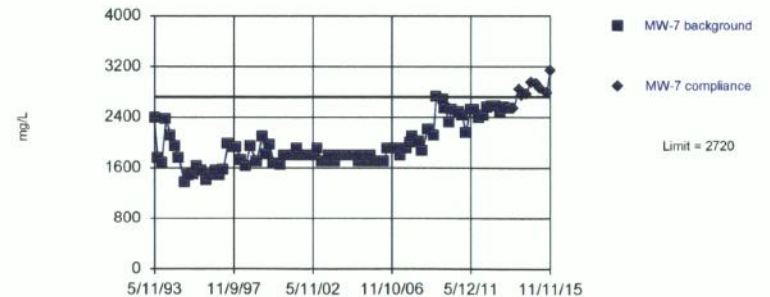


Background Data Summary: Mean=15.07, Std. Dev.=0.5596, n=18. Seasonality was detected with 95% confidence and data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.958, critical = 0.897. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Temperature Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Exceeds Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 82 background values. Report alpha = 0.01205. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Total Dissolved Solids Analysis Run 1/4/2016 8:46 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Temperature, Total Dissolved Solids    Analysis Run 1/4/2016 8:49 AM    View: Short List 2

Blue Ridge    Client: Cornerstone    Data: Historical Database - Blue Ridge

	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R	MW-7	MW-7
5/11/1993							2400	
7/16/1993							1750	
10/11/1993							1680	
1/13/1994							2370	
4/20/1994	14.7						2120	
7/13/1994	15.2						1950	
10/12/1994	14.22						1750	
12/6/1994	15.6							
1/23/1995	10.8						1370	
4/13/1995	13.6						1480	
8/2/1995	15.62						1490	
10/18/1995	10.72						1620	
1/18/1996	14.8						1550	
4/17/1996	15.2						1410	
7/17/1996	15.9						1470	
11/7/1996	15.1						1560	
1/22/1997	13.9						1480	
4/8/1997	15.1						1570	
7/14/1997	13.9						1980	
10/22/1997	12.12						1930	
1/7/1998	15.5						1930	
4/6/1998	12.8						1720	
7/14/1998	14.2						1630	
10/20/1998	11.32						1940	
3/3/1999	13.1						1710	
6/22/1999	15.7						2100	
8/31/1999	16.32						1820	
11/30/1999	12.3						1960	
2/15/2000	12.9		15.9				1660	
6/27/2000	14.4						1650	
9/26/2000	13.02		17.2				1800	
12/12/2000	11.8						1800	
2/27/2001	14		13.1				1800	
6/6/2001	15.3		22.2				1900	
8/15/2001	15.52		24.3				1800	
11/7/2001							1800	
2/6/2002							1800	
5/22/2002	10.8		14.7				1800	
8/21/2002	14.22		17.9				1900	
11/7/2002							1700	
2/21/2003							1700	
4/16/2003							1800	
8/15/2003							1700	
11/12/2003							1800	
3/3/2004							1800	
5/4/2004	12.5		22.4				1800	
9/21/2004							1800	
12/15/2004							1700	
2/22/2005	12.7		23.2				1800	
6/16/2005	13.14						1700	
6/17/2005			24.18					
8/17/2005	13.82		22.48				1800	

# Prediction Limit

Constituent: Temperature, Total Dissolved Solids Analysis Run 1/4/2016 8:49 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R	MW-7	MW-7
11/30/2005	14.25						1700	
12/1/2005			18.11					
3/7/2006			21.9					
3/8/2006	14							
3/9/2006							1700	
6/5/2006	14.22							
6/6/2006			26.28				1700	
8/10/2006	15.33		24.26				1900	
11/30/2006			23.01					
12/1/2006	14.5						1900	
2/12/2007			21.78				1900	
2/13/2007	10.85							
5/14/2007	13.35		23.4				1800	
7/23/2007	13.69		22.54					
9/10/2007	14.42		19.1				1900	
11/11/2007	15.39							
11/12/2007			21.47					
11/13/2007							2000	
1/15/2008	13.38		17.87				2100	
5/6/2008	13.2							
5/7/2008			14.2				2010	
7/24/2008	13.13							
8/5/2008	15.75		24.32					
8/6/2008							1870	
11/19/2008			19.9					
11/20/2008							2210	
3/23/2009	14.24							
3/24/2009			23.2				2120	
5/20/2009	12.99		17.1				2720 (i)	
10/21/2009							2690 (i)	
11/23/2009	13.8						2540	
2/23/2010	11.9		19.4				2320	
4/6/2010	18.4		24.4				2520	
9/13/2010	14.62		15.4				2480	
11/17/2010	14.3		21.9					
11/18/2010							2430	
1/27/2011	11.9		18.1					
1/28/2011							2150	
4/29/2011	14.9		24.4		15.4		2520	
7/26/2011	14.4		25.9		17.5			
7/27/2011							2530	
11/10/2011	14.7		25.2		14.3		2400	
1/31/2012	14.8				14.1		2420	
2/1/2012			23.2					
4/17/2012	14.7		23.1		14.7		2550	
7/17/2012	14.6		26.4		16.2		2580	
10/4/2012	13.52		24.7		15.1		2570	
1/24/2013	13.9		21.3		12.9		2480	
4/4/2013	13.8		22.9		14		2560	
7/11/2013	14.1		24.79		17.24		2540	
10/14/2013	14.5		25.93		15.52			2540
2/17/2014	13.58		21.47		13.66			2830

# Prediction Limit

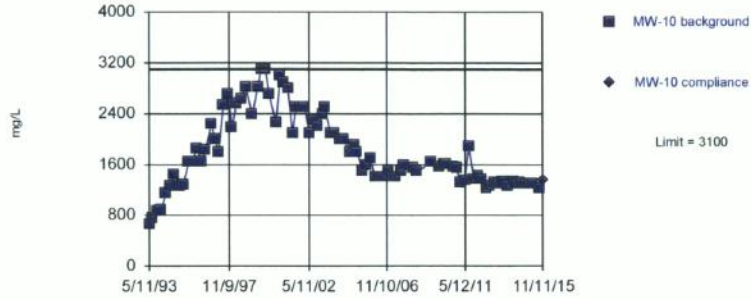
Constituent: Temperature, Total Dissolved Solids Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R	MW-7	MW-7
4/10/2014	14.68		23.95		15.35			2750
7/8/2014	15.23		25.11		16.51			2770
10/13/2014	13.83		24.42		15.74			2950
1/21/2015	14.51		23.39		14.25			2930
4/6/2015	14.76		23.7		14.68			2860
9/14/2015	13.11		24.56		15.09			2780
11/11/2015		14.75		23.41		14.88		3130

Within Limit

Prediction Limit  
Intrawell Non-parametric

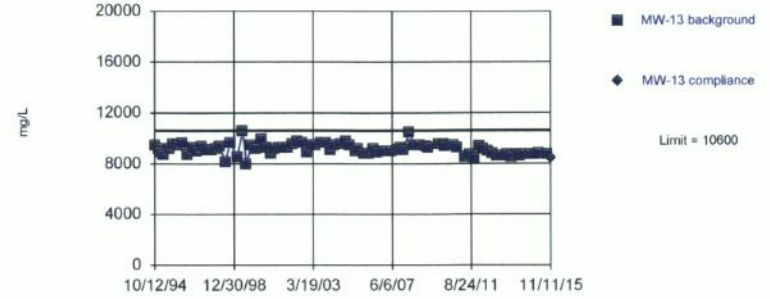


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 86 background values. Report alpha = 0.01149. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Total Dissolved Solids Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric

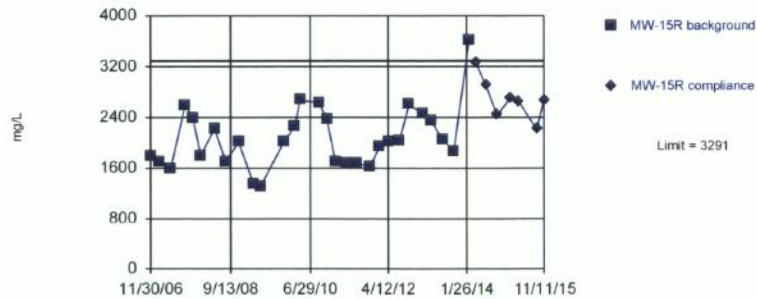


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 83 background values. Report alpha = 0.0119. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Total Dissolved Solids Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

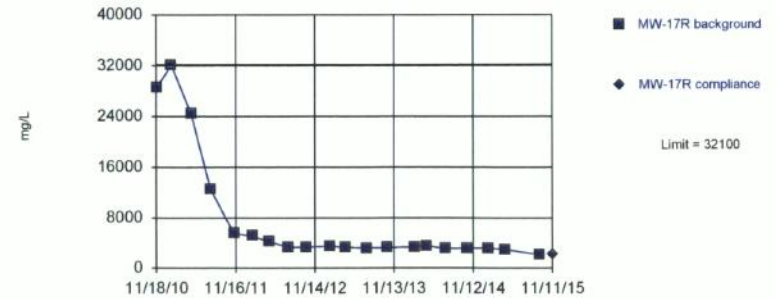


Background Data Summary: Mean=2074, Std. Dev.=484.8, n=29. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9267, critical = 0.926. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Total Dissolved Solids Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Report alpha = 0.04762. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Total Dissolved Solids Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Total Dissolved Solids Analysis Run 1/4/2016 8:49 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R
5/11/1993	661							
7/16/1993	746							
10/11/1993	867							
1/13/1994	890							
4/20/1994	1140							
7/13/1994	1260							
10/12/1994	1440		9400					
12/23/1994			9190					
1/23/1995	1260		8880					
4/13/1995	1280		8740					
8/2/1995	1640		9180					
10/18/1995	1650		9540					
1/18/1996	1860		9420					
4/17/1996	1640		9640					
7/17/1996	1840		8720					
11/7/1996	2250		9230					
1/22/1997	2000		8950					
4/8/1997	1790		9380					
7/14/1997	2540		9060					
10/22/1997	2700		9080					
1/7/1998	2180		9150					
4/6/1998	2550		9390					
7/14/1998	2630		8170					
10/20/1998	2810		9670					
3/3/1999	2390		8550					
6/22/1999	2820		10600					
8/31/1999	3100		7990					
11/30/1999	3090		9450					
2/15/2000	2700		9200					
6/27/2000	2260		9950					
9/26/2000	3000		9300					
12/12/2000	2900		8800					
2/27/2001	2800		9200					
6/6/2001	2100		9300					
8/15/2001	2500		9300					
11/7/2001	2500		9300					
2/6/2002	2500		9500					
5/22/2002	2100		9700					
8/21/2002	2300		9600					
11/7/2002	2200		8900					
2/21/2003	2400		9400					
4/16/2003	2500		9400					
8/14/2003			9600					
8/15/2003	2100							
11/12/2003	2100		9600					
3/3/2004	2000		9100					
5/4/2004	2000		9400					
9/21/2004	1800		9500					
12/15/2004	1900		9700					
2/22/2005	1800		9400					
6/16/2005	1500		9000					
8/17/2005	1600		9200					

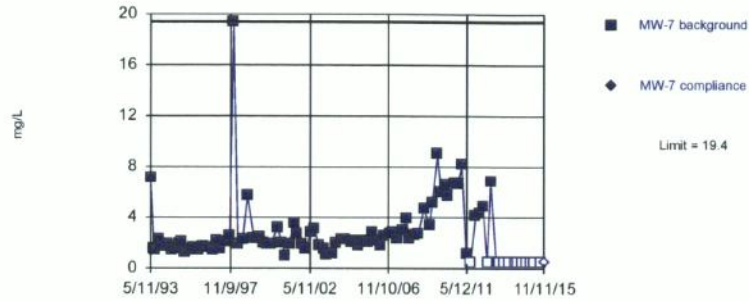
# Prediction Limit

Constituent: Total Dissolved Solids Analysis Run 1/4/2016 8:49 AM View: Short List 2  
 Blue Ridge Client: Comerstone Data: Historical Database - Blue Ridge

	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R	MW-17R	MW-17R
11/30/2005			8800					
12/1/2005	1700							
3/8/2006	1400		8800					
6/5/2006			9200					
6/6/2006	1400							
8/10/2006	1400		8900					
11/30/2006					1800			
12/1/2006	1500		9000					
2/12/2007					1700			
2/13/2007	1400		9000					
5/14/2007	1400		9000		1600			
9/10/2007	1500		9100		2600 (i)			
11/11/2007	1600		9300					
11/12/2007					2400			
1/15/2008			9100		1800			
5/6/2008			10500					
5/7/2008	1560				2230			
8/5/2008	1490		9440		1710			
11/19/2008			9430		2010			
3/23/2009			9380					
3/24/2009					1340			
5/20/2009	1640		9220		1320			
11/23/2009	1580		9530		2020			
2/23/2010	1610		9510		2260			
4/6/2010	1610		9340		2680			
9/13/2010	1580		9410		2630			
11/17/2010			9240		2380			
11/18/2010	1560						28500	
1/27/2011	1320				1710			
1/28/2011							32100	
4/29/2011	1350		8550		1690		24400	
7/26/2011	1880		8700		1690		12600	
11/10/2011	1360		8420		1620		5480	
1/31/2012	1430		9340				5030	
2/1/2012					1940			
4/17/2012	1370		9192		2010		4180	
7/17/2012	1220		8960		2040		3260	
10/4/2012	1250		8790		2610		3300	
1/24/2013	1320		8610		2460		3460	
4/4/2013	1290		8560		2360		3250	
7/11/2013	1330		8730		2050		3150	
10/14/2013	1260		8520		1870		3200	
2/17/2014	1330		8730		3620		3330	
4/10/2014	1290		8650			3270	3520	
7/8/2014	1310		8720			2910	3040	
10/13/2014	1290		8720			2440	3140	
1/21/2015	1290		8710			2700	3150	
4/6/2015	1290		8750			2660	2950	
9/14/2015			8700			2220	2110	
9/15/2015	1220							
11/11/2015		1350		8430		2670		2160

Within Limit

Prediction Limit  
Intrawell Non-parametric

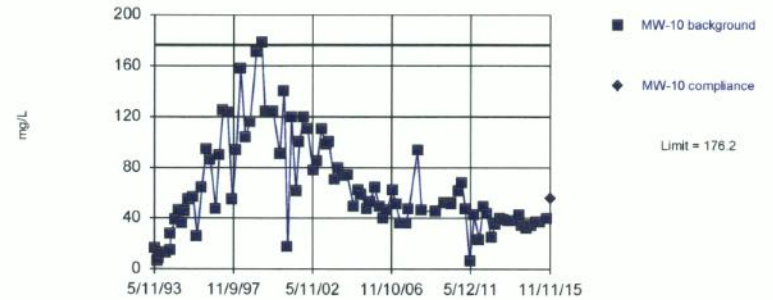


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 92 background values. 13.04% NDs. Report alpha = 0.01075. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Total Organic Carbon Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric

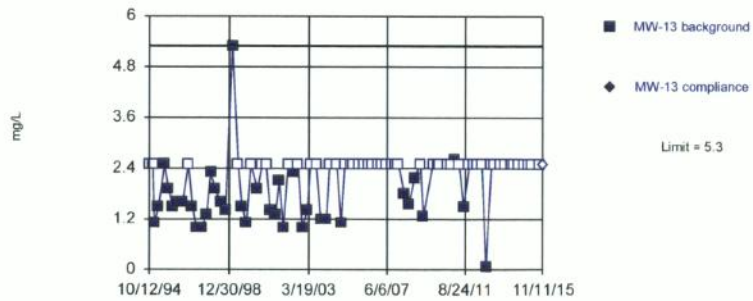


Background Data Summary (based on square root transformation): Mean=7.605, Std. Dev.=2.379, n=89. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9794, critical = 0.972. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Total Organic Carbon Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Non-parametric

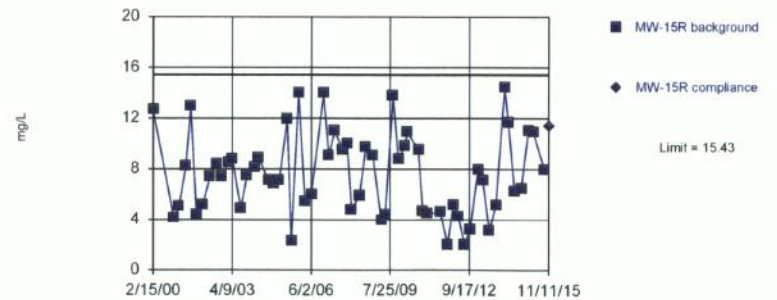


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 84 background values. 57.14% NDs. Report alpha = 0.01176. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Total Organic Carbon Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=7.631, Std. Dev.=3.233, n=59. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.9808, critical = 0.962. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Total Organic Carbon Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Total Organic Carbon Analysis Run 1/4/2016 8:49 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R
5/11/1993	7.1		15.9					
7/16/1993	1.5		6					
8/4/1993	1.4		8.1					
10/11/1993	2.3		12.5					
1/13/1994	1.7		12.8					
3/29/1994			14.1					
4/20/1994	1.9		27.5					
7/13/1994	1.4		38.6					
10/12/1994	1.5		45.6		<5			
12/6/1994	1.9		35.4					
12/23/1994					<5			
1/23/1995	2.1		45.3		1.1			
4/13/1995	1.3		54.6		1.5			
8/2/1995	1.4		56.4		2.5			
10/18/1995	1.6		25.9		1.9			
1/18/1996	1.4		63.4		1.5			
4/17/1996	1.7		94		1.6			
7/17/1996	1.6		86		1.6			
11/7/1996	1.4		46.8		<5			
1/22/1997	2.2		90		1.5			
4/8/1997	1.5		125		1			
7/14/1997	2.1		123		1			
10/22/1997	2.6		54.3		1.3			
1/7/1998	19.4		93.9		2.3			
4/6/1998	1.9		157.5		1.9			
7/14/1998	2.3		104		1.6			
10/20/1998	5.7		116		1.4			
3/3/1999	2.35		171		5.3			
6/22/1999	2.5		178		<5			
8/31/1999	2		124		1.5			
11/30/1999	1.9		123		1.1			
2/15/2000	1.9		124		<5		12.7	
6/27/2000	3.2		90.9		1.9			
9/26/2000	2		140		<5			
12/12/2000	1		17		<5		4.1	
2/27/2001	1.9		120		1.4		5.1	
6/6/2001	3.6		61		1.3		8.2	
8/15/2001	2.7		100		2.1		13	
11/7/2001	1.9		120		1		4.4	
2/6/2002	1.5		110		<5		5.2	
5/22/2002	2.8		78		2.3		7.4	
8/21/2002	3.1		85		<5		8.4	
11/7/2002	1.8		110		1		7.4	
2/21/2003	1.5		98		1.4		8.5	
4/16/2003	1.1		100		<5		8.8	
8/14/2003					<5		4.9	
8/15/2003	1.2		70					
11/12/2003	2		80		1.2		7.5	
3/3/2004	2.3		73		1.2		8.1	
5/4/2004	2.3		74		<5		8.9	
9/21/2004	2.1		49		<5		7.1	
12/15/2004	2.2		62		1.1		6.8	

# Prediction Limit

Constituent: Total Organic Carbon Analysis Run 1/4/2016 8:49 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R
2/22/2005	1.8		58		<5		7.1	
6/16/2005	2.2		47		<5			
6/17/2005							12	
8/17/2005	2.1		53		<5		2.3	
11/30/2005	2.8				<5			
12/1/2005			64				14	
3/7/2006							5.4	
3/8/2006			49		<5			
3/9/2006	2.2							
6/5/2006					<5			
6/6/2006	1.8		40				6	
8/10/2006	2.6		46		<5			
11/30/2006							14	
12/1/2006	2.7		62		<5			
2/12/2007	2.8						9.1	
2/13/2007			51		<5			
5/14/2007	2.4		36		<5		11	
9/10/2007	3		36		<5		9.5	
11/11/2007			47		<5			
11/12/2007							10	
11/13/2007	4							
1/15/2008	2.4				<5		4.8	
5/6/2008					1.81			
5/7/2008	2.66		93.6				5.94	
8/5/2008			46		1.55		9.72	
8/6/2008	2.79							
11/19/2008					2.17		9.04	
11/20/2008	4.67							
3/23/2009					<5			
3/24/2009	3.41						3.93	
5/20/2009	5.18		45.3		1.26		4.41	
9/10/2009	9.03						13.8	
11/23/2009	5.96		51.6		<5		8.75	
2/23/2010	6.52		51.7		<5		9.78	
4/6/2010	5.69		50.9		<5		10.9	
9/13/2010	6.78		61		<5		9.58	
11/17/2010					<5		4.68	
11/18/2010	6.64		67.9					
1/27/2011			46.6		2.6		4.5	
1/28/2011	8.2							
4/29/2011	1.2		5.9		<5			
7/26/2011			42.1		1.5		4.6	
7/27/2011	<1							
11/10/2011	4.1		23		<5		2	
1/31/2012	4.33		48.5		<5			
2/1/2012							5.16	
4/17/2012	4.87		43		<5		4.24	
7/17/2012	<1		24.4		<5		2	
10/4/2012	6.8		35.2		0.072		3.2	
1/24/2013	0.51		39.4		<5		8	
4/4/2013	<1		38.3		<5		7.1	
7/11/2013	<1		37.6		<5		3.1	

# Prediction Limit

Constituent: Total Organic Carbon Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

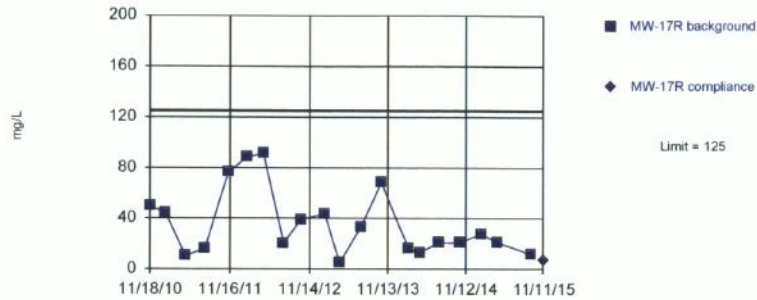
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	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13	MW-15R	MW-15R
10/14/2013	<1		37.9		<5		5.2	
2/17/2014	<1		41.9		<5		14.5	
4/10/2014	<1		34.4		<5		11.7	
7/8/2014	<1		32.2		<5		6.3	
10/13/2014	<1		33.9		<5		6.5	
1/21/2015	<1		36.8		<5		11	
4/6/2015	<1		37.1		<5		10.9	
9/14/2015	<1				<5		8	
9/15/2015			39.9					
11/11/2015		<1		55.5		<5		11.4

Within Limit

Prediction Limit

Intrawell Parametric



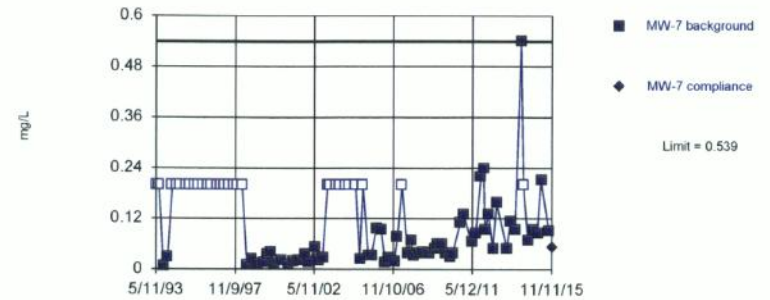
Background Data Summary (based on square root transformation): Mean=5.613, Std. Dev.=2.139, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9401, critical = 0.905. Report alpha = 0.01. Most recent point compared to limit.

Constituent: Total Organic Carbon Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit

Intrawell Non-parametric



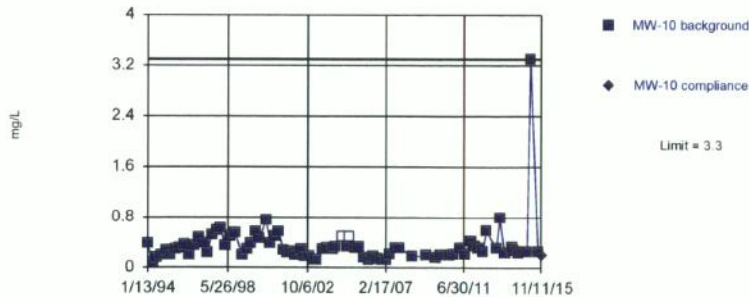
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 88 background values. 32.95% NDs. Report alpha = 0.01124. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: TOX [Total Organic Halides] Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit

Intrawell Non-parametric



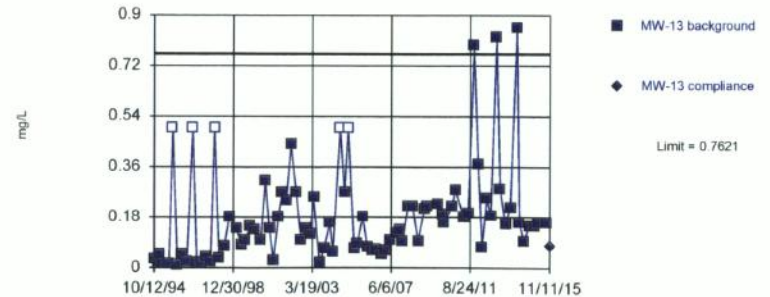
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 80 background values. 2.5% NDs. Report alpha = 0.01235. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: TOX [Total Organic Halides] Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.5197, Std. Dev.=0.165, n=83, 6.024% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.05, calculated = 0.976, critical = 0.971. Report alpha = 0.01. Most recent point compared to limit.

Constituent: TOX [Total Organic Halides] Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: Total Organic Carbon, TOX [Total Organic Halides] Analysis Run 1/4/2016 8:49 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13
5/11/1993			<0.4					
7/16/1993			<0.4					
10/11/1993			0.008					
1/13/1994			0.028		0.384			
4/20/1994			<0.4		0.08			
7/13/1994			<0.4		0.166			
10/12/1994			<0.4		0.203		0.033	
12/23/1994							0.014	
1/23/1995			<0.4		0.271		0.048	
4/13/1995			<0.4		0.195		0.016	
8/2/1995			<0.4		0.287		0.013	
10/18/1995			<0.4		0.305		<1	
1/18/1996			<0.4		0.369		0.011	
4/17/1996			<0.4		0.193		0.047	
7/17/1996			<0.4		0.352		0.022	
11/7/1996			<0.4		0.469		<1	
1/22/1997			<0.4		0.379		0.02	
4/8/1997			<0.4		0.231		0.015	
7/14/1997			<0.4		0.505		0.041	
10/22/1997			<0.4		0.588		0.0225	
1/7/1998			<0.4		0.621		<1	
4/6/1998			<0.4		0.345		0.036	
7/14/1998			0.011		0.487		0.077	
10/20/1998			0.023		0.552		0.183	
3/3/1999			0.012		0.203		0.14	
6/22/1999			0.016		0.295		0.081	
8/31/1999			0.034		0.38		0.098	
11/30/1999			0.04		0.56		0.15	
2/15/2000			0.0114		0.457		0.136	
6/27/2000			0.0222		0.757		0.1	
9/26/2000					0.39		0.31	
12/12/2000			0.011		0.5		0.14	
2/27/2001			0.018		0.57		0.028	
6/6/2001			0.02		0.268		0.184	
8/15/2001			0.021		0.224		0.271	
11/7/2001			0.036		0.26		0.24	
2/6/2002			0.015		0.19		0.44	
5/22/2002			0.053		0.28		0.27	
8/21/2002			0.021		0.17		0.1	
11/7/2002			0.026		0.17		0.14	
2/21/2003			<0.4		0.12		0.12	
4/16/2003			<0.4		0.12		0.253	
8/14/2003							0.019	
8/15/2003			<0.4		0.29			
11/12/2003			<0.4		0.31		0.068	
3/3/2004			<0.4		0.29		0.16	
5/4/2004			<0.4		0.33		0.058	
9/21/2004			<0.4		<1		<1	
12/15/2004			0.025		0.33		0.27	
2/22/2005			<0.4		<1		<1	
6/16/2005			0.032		0.298		0.069	
8/17/2005			0.031		0.327		0.085	

# Prediction Limit

Constituent: Total Organic Carbon, TOX [Total Organic Halides] Analysis Run 1/4/2016 8:49 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13
11/30/2005			0.096				0.184	
12/1/2005					0.151			
3/8/2006					0.119		0.072	
3/9/2006			0.094					
6/5/2006							0.06	
6/6/2006			0.014		0.174			
8/10/2006			0.027		0.145		0.063	
12/1/2006			0.019		0.13		0.047	
2/12/2007			0.077					
2/13/2007					0.114		0.059	
5/14/2007			<0.4		0.223		0.098	
9/10/2007			0.038		0.303		0.122	
11/11/2007					0.315		0.136	
11/13/2007			0.069					
1/15/2008			0.032				0.096	
5/6/2008							0.22	
5/7/2008			0.038					
8/5/2008					0.18		0.22	
8/6/2008			0.041					
11/19/2008							0.096	
11/20/2008			0.039					
3/23/2009							0.21	
3/24/2009			0.048					
5/20/2009			0.061		0.19		0.22	
9/10/2009			0.059					
11/23/2009			0.038		0.15		0.23	
2/23/2010			0.028		0.2		0.19	
4/6/2010			0.038		0.19		0.16	
9/13/2010			0.11		0.2		0.22	
11/17/2010							0.28	
11/18/2010	49.8		0.13		0.22			
1/28/2011	44							
4/29/2011	10.5		0.0655		0.313		0.184	
7/26/2011	16.3				0.221		0.193	
7/27/2011			0.0841					
11/10/2011	76.4		0.219		0.417		0.793	
1/5/2012			0.24					
1/31/2012	88.7		0.094		0.34		0.37	
4/17/2012	91.3		0.13		0.31		0.075	
7/17/2012	20.3		0.0495		0.258		0.247	
10/4/2012	38.9		0.157		0.591		0.187	
1/24/2013	43.5						0.822	
4/4/2013	5						0.282	
5/1/2013			0.05		0.298			
7/11/2013	33		0.114		0.787		0.159	
10/14/2013	68.3		0.0943		0.226		0.214	
2/17/2014	16.1		0.539				0.856	
3/11/2014					0.32			
4/10/2014	12.9		<0.4		0.27		0.16	
7/8/2014	20.8		0.069		0.24		0.094	
10/13/2014	20.7		0.093		0.26		0.15	
1/21/2015	27.8		0.084		0.26		0.15	

# Prediction Limit

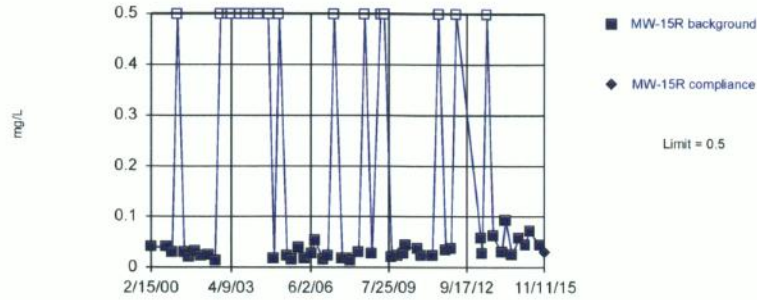
Constituent: Total Organic Carbon, TOX [Total Organic Halides] Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-17R	MW-17R	MW-7	MW-7	MW-10	MW-10	MW-13	MW-13
4/6/2015	21.2		0.21		3.3		0.16	
9/14/2015	11.6		0.092				0.16	
9/15/2015					0.25			
11/11/2015		6.8		0.053		0.2		0.077

Within Limit

Prediction Limit  
Intrawell Non-parametric

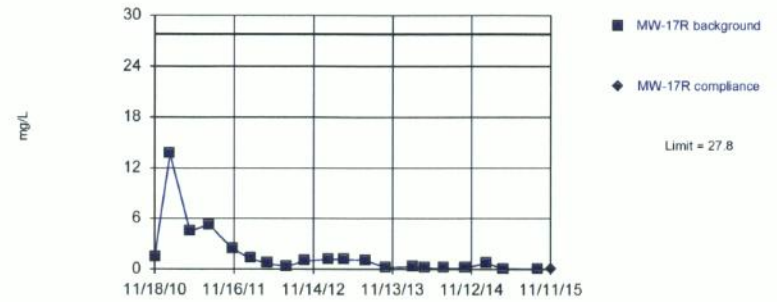


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 59 background values. 28.81% NDs. Report alpha = 0.01667. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: TOX [Total Organic Halides] Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-0.3328, Std. Dev.=1.406, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9771, critical = 0.905. Report alpha = 0.01. Most recent point compared to limit.

Constituent: TOX [Total Organic Halides] Analysis Run 1/4/2016 8:47 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Prediction Limit

Constituent: TOX [Total Organic Halides] Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-15R	MW-15R	MW-17R	MW-17R
2/15/2000	0.04			
9/26/2000	0.04			
12/12/2000	0.03			
2/27/2001	<1			
6/6/2001	0.03			
8/15/2001	0.02			
11/7/2001	0.032			
2/6/2002	0.022			
5/22/2002	0.024			
8/21/2002	0.012			
11/7/2002	<1			
2/21/2003	<1			
4/16/2003	<1			
8/14/2003	<1			
11/12/2003	<1			
3/3/2004	<1			
5/4/2004	<1			
9/21/2004	<1			
12/15/2004	0.018			
2/22/2005	<1			
6/17/2005	0.023			
8/17/2005	0.015			
12/1/2005	0.038			
3/7/2006	0.017			
6/6/2006	0.026			
8/10/2006	0.052			
11/30/2006	0.015			
2/12/2007	0.022			
5/14/2007	<1			
9/10/2007	0.018			
11/12/2007	0.018			
1/15/2008	0.013			
5/7/2008	0.029			
8/5/2008	<1			
11/19/2008	0.026			
3/24/2009	<1			
5/20/2009	<1			
9/10/2009	0.02			
11/23/2009	0.021			
2/23/2010	0.026			
4/6/2010	0.042			
9/13/2010	0.036			
11/17/2010	0.023			
11/18/2010			1.4	
1/28/2011			13.7	
4/29/2011	0.0215		4.52	
7/26/2011	<1		5.3	
11/10/2011	0.0329		2.45	
1/31/2012			1.3	
2/1/2012	0.035			
4/17/2012	<1		0.7	
7/17/2012			0.359	

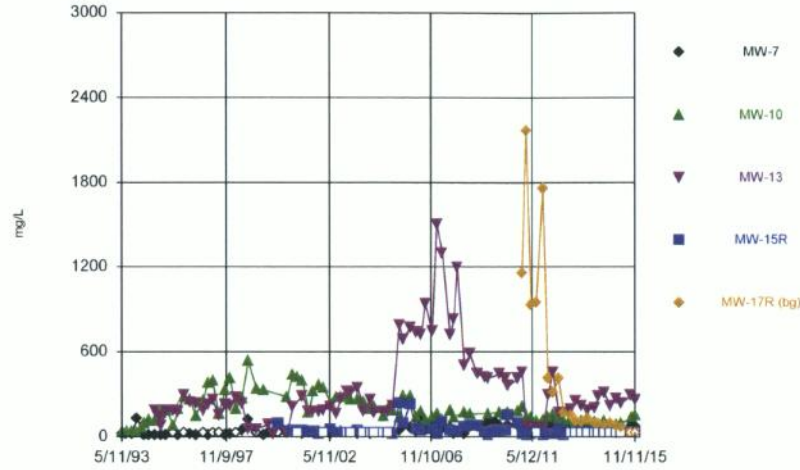
# Prediction Limit

Constituent: TOX [Total Organic Halides] Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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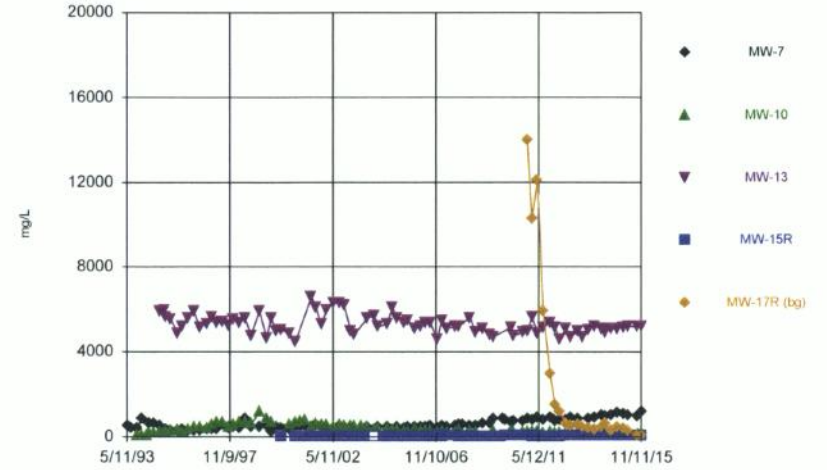
	MW-15R	MW-15R	MW-17R	MW-17R
10/4/2012			1	
1/24/2013			1.23	
4/4/2013	0.058		1.21	
5/1/2013	0.0274			
7/11/2013	<1		1.09	
10/14/2013	0.0614		0.247	
2/17/2014	0.0286		0.351	
4/10/2014	0.092		0.2	
7/8/2014	0.024		0.14	
10/13/2014	0.056		0.16	
1/21/2015	0.043		0.79	
4/6/2015	0.071		0.13	
9/14/2015	0.043		0.054	
11/11/2015		0.028		0.035

### Time Series



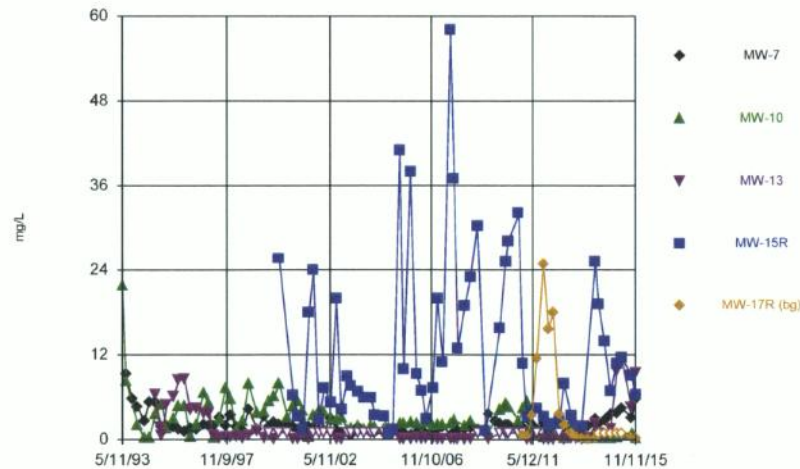
Constituent: Chemical Oxygen Demand Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

### Time Series



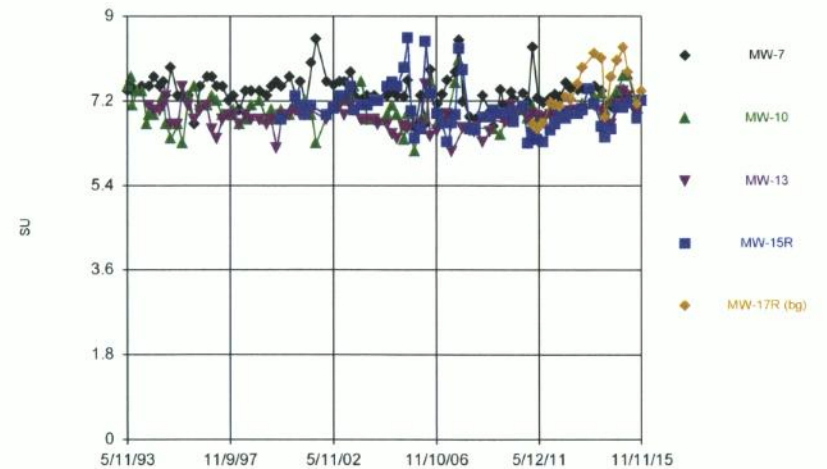
Constituent: Chloride Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

### Time Series



Constituent: Iron Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

### Time Series



Constituent: pH Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

## Time Series

Constituent: Chemical Oxygen Demand (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993	21	35			
7/16/1993	17				
8/4/1993		36			
10/11/1993	22	38			
1/13/1994	129	32			
3/29/1994		61			
4/20/1994	16	98			
7/13/1994	13	125			
10/12/1994	10	112	184		
12/6/1994		148			
12/23/1994			149		
1/23/1995	10	173	80		
4/13/1995	14	192	187		
8/2/1995	<52.6	76	184		
10/18/1995	11	195	176		
1/18/1996	<52.6	282	300		
4/17/1996	18	264	243		
7/17/1996	15	148	234		
11/7/1996	<52.6	256	188		
1/22/1997	10	382	229		
4/8/1997	<52.6	398	263		
7/14/1997	<52.6	162	156		
10/22/1997	12	329	228		
1/7/1998	22	414	218		
4/6/1998	<52.6	197	276		
7/14/1998	46	274	235		
10/20/1998	124	535	52		
3/3/1999	<52.6	338	57		
6/22/1999	12.4	332			
8/31/1999	27.1		88		
11/30/1999	<52.6		21		
2/15/2000	<52.6		92	100	
6/27/2000	<52.6	283	27		
9/26/2000	39	440	210	45	
12/12/2000	<52.6	420		<52.6	
2/27/2001	21	400	290	50	
6/6/2001	29	170	180	29	
8/15/2001	<52.6	320	180	36	
11/7/2001	41	360	180	24	
2/6/2002	<52.6	350	190	<52.6	
5/22/2002	25	240	210	57	
8/21/2002	31	280	160	29	
11/7/2002	37	280	270	28	
2/21/2003	<52.6	300	320	<52.6	
4/16/2003	<52.6	260	310	<52.6	
8/14/2003			350	44	
8/15/2003	20	260			
11/12/2003	<52.6	250	180	<52.6	
3/3/2004	24	200	260	<52.6	
5/4/2004	<52.6	210	170	<52.6	
9/21/2004	<52.6	150	180	<52.6	
12/15/2004	<52.6	200	180	<52.6	

# Time Series

Constituent: Chemical Oxygen Demand (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
2/22/2005	<52.6	190	220	22	
6/16/2005	46	140	790		
6/17/2005				240	
8/17/2005	67	290	690	100	
11/30/2005	65		770		
12/1/2005		290		230	
3/7/2006				58	
3/8/2006		140	740		
3/9/2006	40				
6/5/2006			720		
6/6/2006	110	180		48	
8/10/2006	49	120	940		
11/30/2006				53	
12/1/2006	100	140	750		
2/12/2007	61			25	
2/13/2007		160	1500		
5/14/2007	52	120	1300	105	
9/10/2007	66	190	720	49	
11/11/2007		140	830		
11/12/2007				39	
11/13/2007	24				
1/15/2008			1200	33	
5/6/2008			502		
5/7/2008	21.9	175		72.8	
8/5/2008		163	587	81.3	
8/6/2008	67.2				
11/19/2008			443	77.4	
11/20/2008	69				
3/23/2009			426		
3/24/2009	76.8			31.6	
5/20/2009	102	164	412	14.6	
9/10/2009	106			47	
11/23/2009	83.2	175	444	41.4	
2/23/2010	60.6	157	417	49.3	
4/6/2010	77.7	174	360	152	
9/13/2010	82.7	177	414	93.8	
11/17/2010			455	24.2	
11/18/2010	88.3	211			1160
1/27/2011		140	68	11.8	
1/28/2011	17.3				2170
4/29/2011	28	135	45.7	19.9	933
7/26/2011		116	64.6	<52.6	946
7/27/2011	26.3				
11/10/2011	21.2	125	50.6	11.7	1760
1/31/2012	85.8	140	300		414
2/1/2012				17	
4/17/2012	77.2	157	458	19.8	312
7/17/2012	77.5	131	169	51.3	410
10/4/2012	60.8	116	168	11.3	175
1/24/2013	57.6	117	196	<52.6	151
4/4/2013	50.8	105	257	<52.6	112
7/11/2013	53	112	220	<52.6	103

# Time Series

Constituent: Chemical Oxygen Demand (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
10/14/2013	65.4	114	189	<52.6	128
2/17/2014	75.1	108	206	<52.6	98.7
4/10/2014	53.2	89.6	285	<52.6	98.7
7/8/2014	73.6	112	317	<52.6	85
10/13/2014	78.2	98.7	224	<52.6	94.1
1/21/2015	<52.6	89	269	<52.6	77.4
4/6/2015	54.3	93.6	237	<52.6	68.2
9/14/2015	75.2		293	<52.6	<52.6
9/15/2015		140			
11/11/2015	74.3	154	262	<52.6	<52.6

# Time Series

Constituent: Chloride (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993	554				
7/16/1993	438				
10/11/1993	435	79			
1/13/1994	842	92			
3/29/1994		95			
4/20/1994	622	179			
7/13/1994	639	214			
10/12/1994	519	236	5910		
12/6/1994		211			
12/23/1994			5990		
1/23/1995	347	274	5630		
4/13/1995	331	297	5520		
8/2/1995	287	352	4890		
10/18/1995	386	238	5200		
1/18/1996	329	372	5610		
4/17/1996	314	490	5910		
7/17/1996	307	474	5170		
11/7/1996	336	438	5330		
1/22/1997	358	598	5650		
4/8/1997	364	722	5360		
7/14/1997	600	718	5430		
10/22/1997	397	479	5250		
1/7/1998	457	572	5570		
4/6/1998	435	713	5400		
7/14/1998	889	674	5600		
10/20/1998	452	614	4790		
3/3/1999	484	1180	5940		
6/22/1999	522	850	4660		
8/31/1999	262	718	5590		
11/30/1999	479		5010		
2/15/2000	409		5040	27.4	
6/27/2000	377	564	4850		
9/26/2000	460	710	4500	27	
12/12/2000	480	770		24	
2/27/2001	530	800		34	
6/6/2001	470	500	6600	29	
8/15/2001	570	650	6100	22	
11/7/2001	450	610	5300	21	
2/6/2002	410	600	6000	22	
5/22/2002	430	460	6300	23	
8/21/2002	520	570	6300	27	
11/7/2002	470	520	6200	25	
2/21/2003	370	530	5000	25	
4/16/2003	390	530	4800	25	
8/14/2003				28	
8/15/2003	390	510			
11/12/2003	450	480	5600	21	
3/3/2004	380	370	5700	<50	
5/4/2004	450	410	5200	26	
9/21/2004	470	430	5300	25	
12/15/2004	380	370	6100	26	
2/22/2005	470	360	5600	25	

# Time Series

Constituent: Chloride (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
6/16/2005	430	310	5400		
6/17/2005				30	
8/17/2005	450	330	5500	35	
11/30/2005	470		5100		
12/1/2005		390		46	
3/7/2006				36	
3/8/2006		330	5200		
3/9/2006	490				
6/5/2006			5400		
6/6/2006	470	310		45	
8/10/2006	510	290	5400	39	
11/30/2006				63	
12/1/2006	420	230	4600		
2/12/2007	530			48	
2/13/2007		290	5500		
5/14/2007	470	260	5100	64	
7/23/2007				79	
9/10/2007	520	230	5200	56	
11/11/2007		340	5200		
11/12/2007				55	
11/13/2007	560				
1/15/2008	560			44	
5/6/2008			5620		
5/7/2008	524	288		48.2	
8/5/2008		267	4940	48	
8/6/2008	525				
11/19/2008			5080	54	
11/20/2008	640				
3/23/2009			4820		
3/24/2009	627			42.3	
5/20/2009	873	294	4720	41.5	
9/10/2009				49.8	
10/21/2009	883				
11/23/2009	783			57.1	
2/23/2010	699	286	5150	69.6	
4/6/2010	732	269	4750	72	
9/13/2010	775	272	4950	69.3	
11/17/2010			4990	62.8	
11/18/2010	843	270			14000
1/27/2011		267	5640	54	
1/28/2011	830				10300
4/29/2011	895	234	4870	64.5	12100
7/26/2011		211	5150	46.4	5950
7/27/2011	792				
11/10/2011	912	242	5370	48.6	3000
1/5/2012	797				
1/31/2012	767	217	5150		1540
2/1/2012				52.4	
4/17/2012	806	212	4580	50.8	1210
7/17/2012	830	131	5110	56.3	622
10/4/2012	910	140	4700	58.5	517
1/24/2013	869	157	5000	62.8	576

# Time Series

Constituent: Chloride (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
4/4/2013		161	4700	60.8	490
7/11/2013	859	157	5040	63.4	392
10/14/2013	933	153	5220	62.2	382
2/17/2014	1050	156	5090	80	456
4/10/2014	987	141	4950	74	651
7/8/2014	1030	141	5090	77.8	331
10/13/2014	1120	136	5120	65.3	497
1/21/2015	1070	138	5170	70.3	395
4/6/2015	1020	145	5200	72	300
9/14/2015	990		5210	65.4	85.4
9/15/2015		153			
11/11/2015	1170	183	5210	74.1	96.6

## Time Series

Constituent: Iron (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993		21.8			
7/16/1993	9.2	8.3			
10/11/1993	5.7				
1/13/1994	4.6	2.06			
4/20/1994	2.6	0.295			
7/13/1994	5.3	0.234			
10/12/1994	5.3	3.51	6.43		
12/23/1994			1.7		
1/23/1995	1.7	4.95	0.561		
4/13/1995	2	1.67	4.89		
8/2/1995	1.7	2.87	6.17		
10/18/1995	1.4	4.8	8.41		
1/18/1996	1.1	4.77	8.59		
4/17/1996	1.6	0.477	4.19		
7/17/1996	1.5	2.09	4.47		
11/7/1996	2.1	6.54	3.75		
1/22/1997	2	5.15	3.77		
4/8/1997	1.9	0.33	0.667		
7/14/1997	3.1	2.92	0.178		
10/22/1997	2	7.29	0.388		
1/7/1998	3.5	5.76	0.339		
4/6/1998	1.8	1.37	0.356		
7/14/1998	1.3	2.61	0.292		
10/20/1998	4.3	7.9	0.56		
3/3/1999	1.4	3.7	1.2		
6/22/1999	3.3	4	0.21		
8/31/1999	1.8	5.5	<2		
11/30/1999	2.5	6.1	0.12		
2/15/2000	2.1	7.9	<2	25.6	
6/27/2000	1.9	3.1	<2		
9/26/2000	1.7	4.8	0.1	6.2	
12/12/2000	1.5	5.4	0.092	3.2	
2/27/2001	2	4.1	0.59	1.5	
6/6/2001	1.7	0.42	0.083	18	
8/15/2001	1.6	3.4	<2	24	
11/7/2001	1.3	4.1	<2	2.8	
2/6/2002	1.3	4	<2	7.3	
5/22/2002	2.9	3	<2	5.3	
8/21/2002	1.3	2.7	0.03	20	
11/7/2002	1	3.1	0.02	4.2	
2/21/2003	1.3	1.3	<2	9	
4/16/2003	0.61	1.6	<2	7.6	
8/14/2003			<2	6.8	
8/15/2003	1.7	2			
11/12/2003	1.3	1.5	<2	6	
3/3/2004	0.94	2	<2	6	
5/4/2004	0.88	1.7	<2	3.4	
9/21/2004	0.85	1.5	<2	3.2	
12/15/2004	1.5	1.6	<2	0.7	
2/22/2005	1.2	1.6	<2	1.5	
6/16/2005	0.79	2.2	0.021		
6/17/2005				41	

# Time Series

Constituent: Iron (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
8/17/2005	0.89	2.3	0.039	10	
11/30/2005	0.62		0.08		
12/1/2005		2.4		38	
3/7/2006				9.2	
3/8/2006		2.3	0.28		
3/9/2006	0.98				
6/5/2006			0.12		
6/6/2006	1.2	1		6.9	
8/10/2006	0.79	2.5	0.23	3	
11/30/2006				7.2	
12/1/2006	0.93	2	0.098		
2/12/2007	1.5			20	
2/13/2007		2.1	0.058		
5/14/2007	1.8	2.1	0.046	11	
9/10/2007	0.62	2.2	0.077	58	
11/11/2007		2.8	0.083		
11/12/2007				37	
11/13/2007	1				
1/15/2008	1.3		0.095	13	
5/6/2008			0.042		
5/7/2008	1.49	1.96		19	
8/5/2008		2.53	0.1	23	
8/6/2008	1.58				
11/19/2008			<2	30.4	
11/20/2008	1.5				
3/23/2009			<2		
3/24/2009	1.39			1.3	
5/20/2009	3.51	1.09	0.071		
9/10/2009	2.66				
11/23/2009	2.32	4.25	<2	15.8	
2/23/2010	2.16	5.16	<2	25.2	
4/6/2010	2.1	4.67	<2	28.2	
9/13/2010	1.64	2.66	<2	32.1	
11/17/2010			<2	10.8	
11/18/2010	1.7	4.43			0.585
1/27/2011		5.4	0.13	3.1	
1/28/2011	1.1				0.53
4/29/2011	2.2	1.7	0.079	4	3.4
7/26/2011		0.84	<2	4.5	11.5
7/27/2011	1.5				
11/10/2011	2.2	0.43	0.16	3.2	24.9
1/31/2012	1.19	0.477	0.051		15.7
2/1/2012				2	
4/17/2012	2.05	0.583	0.091	2.33	17.9
7/17/2012	1.78	0.716	<2	2.6	3.58
10/4/2012	1.8	0.276	0.0377	7.93	2.06
1/24/2013	2.02	2.23	0.193	3.44	0.928
4/4/2013	2.14	1.57	0.253	1.86	0.336
7/11/2013	1.36	0.455	0.142	1.89	0.248
10/14/2013	1.97	0.315	0.17		0.156
2/17/2014	2.89	0.319	2.24	25.2	0.284
4/10/2014	2.33	<2	<2	19.1	<2

# Time Series

Constituent: Iron (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Comerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
7/8/2014	2.77	0.251	0.423	13.9	<2
10/13/2014	3.52	0.284	1.6	6.93	<2
1/21/2015	3.79	0.348	9.74	10.8	<2
4/6/2015	4.49	<2	11.5	11.6	<2
9/14/2015	3.13		4.58	9.16	0.38
9/15/2015		0.96			
11/11/2015	5.73	0.217	9.46	6.48	0.323

# Time Series

Constituent: pH (SU) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993	7.4	7.5			
7/16/1993	7.5	7.7			
8/4/1993	7.4	7.1			
10/11/1993	7.4	7.4			
1/13/1994	7.5	7.4			
3/29/1994		6.7			
4/20/1994	7.5	6.9	7.1		
7/13/1994	7.7	6.9	7		
10/12/1994	7.5	7.1	7		
12/6/1994	7.6	7.3	7.1		
1/23/1995	7.3	6.7	7.3		
4/13/1995	7.9	6.4	6.7		
8/2/1995	7.3	6.7	6.7		
10/18/1995	7.3	6.3	7.5		
1/18/1996	7.3	7.3	7.1		
4/17/1996	6.7	7.5	6.8		
7/17/1996	7.5	7.1	7		
11/7/1996	7.7	7.1	7.1		
1/22/1997	7.7	7.3	6.6		
4/8/1997	7.5	7.2	6.4		
7/14/1997	7.5	6.9	6.8		
10/22/1997	7.2	6.9	6.9		
1/7/1998	7.3	7	6.9		
4/6/1998	7	6.7	6.7		
7/14/1998	7.4	6.8	6.9		
10/20/1998	7.4	7.1	6.8		
3/3/1999	7.4	7.2	6.8		
6/22/1999	7.3	6.8	6.7		
8/31/1999	7.5	7	6.8		
11/30/1999	7.6	6.8	6.2		
2/15/2000	7.5	7	6.9	6.8	
6/27/2000	7.7	6.9	6.9		
9/26/2000	7.3	7.1	7	7.3	
12/12/2000	7.6	7	6.9	7.1	
2/27/2001	7.1	7.2	6.9	6.9	
6/6/2001	8	6.9	7	7.1	
8/15/2001	8.5	6.3			
2/6/2002	7.6	6.9	6.8	6.9	
5/22/2002	7.54	7.04	7.07	7.06	
8/21/2002	7.6	7.2	7.1	7.3	
11/7/2002	7.6	7.2	6.9	7.3	
2/21/2003	7.8	7.3	7.1	7.5	
4/16/2003	7.3	7.5	7	7	
8/14/2003			6.8	7.1	
8/15/2003	7.2	7.6			
11/12/2003	7.3	6.8	6.8	7.1	
3/3/2004	7.3	6.8	6.8	7.2	
5/4/2004	7.2	6.8	6.7	7.2	
9/21/2004	7.3	6.9	6.7	7.5	
12/15/2004	7.4	7.1	6.5	7.6	
2/22/2005	7.3	6.9	6.4	7.5	
6/16/2005	7.28	6.37	6.69		

# Time Series

Constituent: pH (SU) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
6/17/2005				7.92	
8/17/2005	7.64	6.94	6.63	8.54	
10/12/2005				6.98	
11/30/2005	6.62				
12/1/2005		6.12		6.41	
3/7/2006				6.6	
3/8/2006		6.78	6.72		
3/9/2006	7.3				
6/5/2006			7.55		
6/6/2006	6.7	6.84		8.46	
8/10/2006	7.85	7.6	6.46	7.37	
11/30/2006				6.92	
12/1/2006	7.12	6.71	6.57		
2/12/2007	7.33			6.72	
2/13/2007		6.94	6.77		
5/14/2007	7.63	6.89	6.92	6.33	
7/23/2007			6.13	6.72	
9/10/2007	7.8	7.59		6.9	
11/11/2007		8.07			
11/12/2007				8.31	
11/13/2007	8.49				
1/15/2008	7.19		6.62	7.86	
5/6/2008			6.58		
5/7/2008	6.85	6.65		6.6	
7/24/2008			6.56		
8/5/2008		6.64	6.63	6.58	
8/6/2008	6.8				
11/19/2008			6.32	6.85	
11/20/2008	7.3				
3/23/2009			6.55		
3/24/2009	6.96			6.86	
5/20/2009	6.65	6.6	6.8	7.01	
9/9/2009		6.48			
9/10/2009	7.44			6.94	
10/21/2009	7.1				
11/23/2009	6.99	6.85	6.75	6.92	
2/23/2010	7.39	6.79	7.1	6.98	
4/6/2010	7.23	6.93	6.97	6.76	
9/13/2010	7.37	7.01	7.02	7.07	
11/17/2010			6.84	6.31	
11/18/2010	7.18	6.83			
1/27/2011		7.07	6.94	6.52	
1/28/2011	8.34				6.71
4/29/2011	7.26	6.78	6.89	6.37	6.6
7/26/2011		6.73	6.86	6.34	6.73
7/27/2011	7.16				
11/10/2011	7.26	6.95	6.91	6.59	7.16
1/31/2012	7.33	6.95	6.87		7.11
2/1/2012				6.71	
4/17/2012	7.29	6.98	6.89	6.91	7.09
7/17/2012	7.58	6.84	6.94	6.84	7.29
10/4/2012	7.47	7	6.98	6.92	7.23

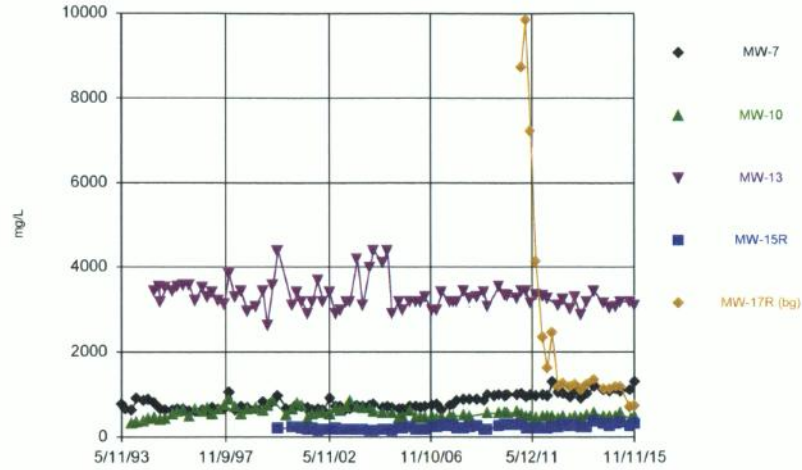
# Time Series

Constituent: pH (SU) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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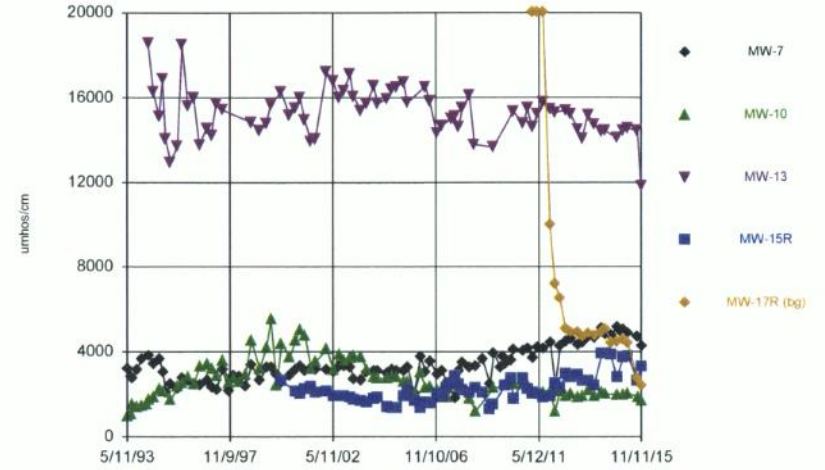
	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
1/24/2013	7.44	7.03	7.01	6.92	7.56
4/4/2013	7.45	7.14	7.02	7	7.9
7/11/2013				7.46	
10/14/2013	7.52	7.29	7.1	7.13	8.2
2/17/2014	7.41	7.37	6.99	6.66	8.11
4/10/2014	7.08	7	6.69	6.42	6.85
7/8/2014	7.07	7.19	6.71	6.61	7.71
10/13/2014	7.31	7.4	7.14	7.05	8.05
12/16/2014	7.05				
1/21/2015	7.44	7.74	7.4	7.06	8.34
4/6/2015	7.28	7.77	7.32	7.16	7.82
9/14/2015	6.99		6.93	6.82	7.14
9/15/2015		7.03			
11/11/2015	7.2	7.2	7.2	7.2	7.4

### Time Series



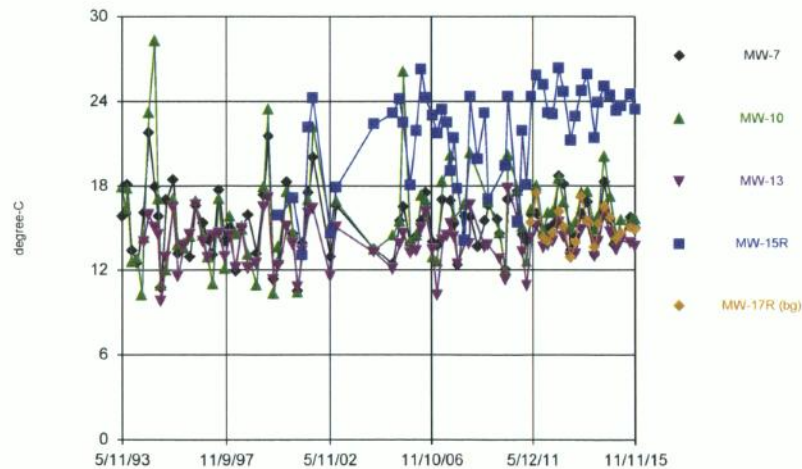
Constituent: Sodium Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

### Time Series



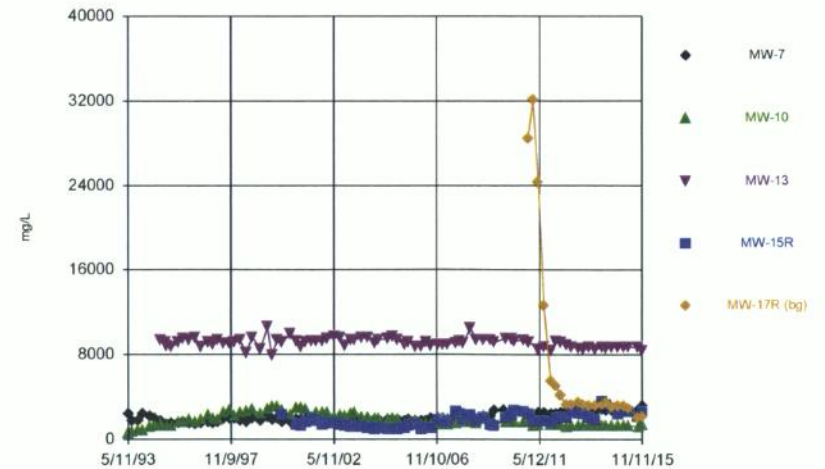
Constituent: Specific Conductance Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

### Time Series



Constituent: Temperature Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

### Time Series



Constituent: Total Dissolved Solids Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

# Time Series

Constituent: Sodium (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993	773				
7/16/1993	659				
10/11/1993	622	327			
1/13/1994	895	342			
4/20/1994	844	363			
7/13/1994	872	420			
10/12/1994	783	458	3450		
12/23/1994			3550		
1/23/1995	651	407	3200		
4/13/1995	624	444	3510		
8/2/1995	619	545	3440		
10/18/1995	652	585	3560		
1/18/1996	668	623	3580		
4/17/1996	594	477	3580		
7/17/1996	596	643	3230		
11/7/1996	637	606	3510		
1/22/1997	596	686	3310		
4/8/1997	672	557	3420		
7/14/1997	660	658	3230		
10/22/1997	653	743	3120		
1/7/1998	1050	882	3860		
4/6/1998	620	702	3310		
7/14/1998	701	550	3440		
10/20/1998	683	666	2980		
3/3/1999	649	670	3090		
6/22/1999	820	639	3430		
8/31/1999	726	732	2630		
11/30/1999	808	839	3580		
2/15/2000	956		4400	202	
6/27/2000	664	521			
9/26/2000	650	650	3100	230	
12/12/2000	760	790	3400	230	
2/27/2001	700	750	3200	200	
6/6/2001	670	430	2900	190	
8/15/2001	640	540	3200	200	
11/7/2001	660	580	3700	160	
2/6/2002	630	580	3200	170	
5/22/2002	910	550	3400	190	
8/21/2002	710	670	2900	200	
11/7/2002	700	620	3000	170	
2/21/2003	650	720	3200	170	
4/16/2003	660	840	3200	180	
8/14/2003			4200	170	
8/15/2003	750	710			
11/12/2003	700	680	3100	180	
3/3/2004	730	670	4000	160	
5/4/2004	770	610	4400	160	
9/21/2004	680	580	4100	170	
12/15/2004	710		4400	180	
2/22/2005	690	560	2900	160	
6/16/2005	660	460	3200		
6/17/2005				200	

# Time Series

Constituent: Sodium (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
8/17/2005	660	490	3000	210	
11/30/2005	700		3200		
12/1/2005		640		240	
3/7/2006				190	
3/8/2006		450	3200		
3/9/2006	710				
6/5/2006			3200		
6/6/2006	690	450		180	
8/10/2006	700	460	3300	190	
11/30/2006				240	
12/1/2006	750	480	3000		
2/12/2007	760			230	
2/13/2007		440	3000		
5/14/2007	640	450	3400	260	
7/23/2007				280	
9/10/2007	730	480	3200	270	
11/11/2007		500	3200		
11/12/2007				270	
11/13/2007	760				
1/15/2008	840		3200	210	
5/6/2008			3440		
5/7/2008	875	513		202	
8/5/2008		498	3280	245	
8/6/2008	868				
11/19/2008			3310	251	
11/20/2008	879				
3/23/2009			3400		
3/24/2009	850			179	
5/20/2009	978	566	3070	193	
9/10/2009	966				
11/23/2009	994	566	3550	264	
2/23/2010	960	567	3360	293	
4/6/2010	976	568	3340	297	
9/13/2010	1000	595	3270	304	
11/17/2010			3440	295	
11/18/2010	1010	537			8740
1/27/2011		500	3440	210	
1/28/2011	930				9850
4/29/2011	1000	491	3160	219	7240
7/26/2011		467	3350	202	4140
7/27/2011	952				
11/10/2011	985	487	3320	206	2340
1/31/2012	964	494	3270		1640
2/1/2012				218	
4/17/2012	1290	486		235	2470
7/17/2012	1050	429	3100	238	1180
10/4/2012	1030	476	3240	280	1260
1/24/2013	936	442	3030	270	1170
4/4/2013	1060	495	3310	280	1250
7/11/2013	915	454	2870	229	1110
10/14/2013	1020	506	3180	234	1250
2/17/2014	1170	567	3430	385	1340

# Time Series

Constituent: Sodium (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
7/8/2014	1100	487	3170	320	1140
10/13/2014	1080	485	3050	253	1120
1/21/2015	1120	489	3080	321	1190
4/6/2015	1080	562	3200	344	1170
9/14/2015	1090		3200	257	703
9/15/2015		424			
11/11/2015	1290	494	3110	326	737

# Time Series

Constituent: Specific Conductance (umhos/cm) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Comerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993	3190	966			
7/16/1993	2830	1080			
8/4/1993	2740	1510			
10/11/1993	3160	1400			
1/13/1994	3670	1450			
3/29/1994		1532			
4/20/1994	3840	1730	18600		
7/13/1994	3440	1870	16300		
10/12/1994	3640	2280	15100		
12/6/1994	3050	2130	16900		
1/23/1995	2080		14060		
4/13/1995	2470	1745	12980		
8/2/1995	2260	2340	13730		
10/18/1995	2750	2560	18530		
1/18/1996	2630	2820	15620		
4/17/1996	2470	2480	16030		
7/17/1996	2420	3340	13780		
11/7/1996	2670	3400	14580		
1/22/1997	2310	3210	14250		
4/8/1997	2200	2870	15720		
7/14/1997	3170	3580	15450		
10/22/1997	2170	2530			
1/7/1998	2890	2750			
4/6/1998	2840	2610			
7/14/1998	2370	2920			
10/20/1998	3350	4530	14860		
3/3/1999	2650	3220	14460		
6/22/1999	3260	4220	14780		
8/31/1999	3250	5520	15690		
11/30/1999	2950	2430			
2/15/2000	2520	4400	16290	2650	
6/27/2000	2860	3770	15170		
9/26/2000	3150	4530	15530	2140	
12/12/2000	3340	5060	16040	2060	
2/27/2001	3070	4750	14970	2230	
6/6/2001	3180	3210	13930	2350	
8/15/2001	3160	3540	14090	2070	
2/6/2002	3170	4125	17240	2160	
5/22/2002	3020	3140	16770	1907	
8/21/2002	3330	3890	16010	1941	
11/7/2002	3330	3590	16340	1940	
2/21/2003	3240	3690	17110	1869	
4/16/2003	2720	3810	16100	1742	
8/14/2003			15380	1710	
8/15/2003	2670	3740			
11/12/2003	3040	3150	15760	1652	
3/3/2004	3110	2820	16550	1783	
5/4/2004	3100	2750	15730	1840	
9/21/2004	2990	2770	15940	1412	
12/15/2004	3120	2850	16380	1384	
2/22/2005	3080	2820	16500	1370	
6/16/2005	3114	2584	16760		

# Time Series

Constituent: Specific Conductance (umhos/cm) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
6/17/2005				1907	
8/17/2005	3261	2601	15770	2184	
11/30/2005	2014				
12/1/2005		2025		1672	
3/7/2006				1390	
3/8/2006		3010			
3/9/2006	3750				
6/5/2006			16545		
6/6/2006	3034	2330		1616	
8/10/2006	3523	2393	15837	1575	
11/30/2006				2011	
12/1/2006	2936	2197	14336		
2/12/2007	3103			1843	
2/13/2007		2216	14681		
5/14/2007	2524	1872		2320	
7/23/2007			15010	2531	
9/10/2007	1794	2519	15129	2890	
11/11/2007		2311	14601		
11/12/2007				2496	
11/13/2007	3084				
1/15/2008	3465		15516	2213	
5/6/2008			16110		
5/7/2008	3273	1808		2101	
7/24/2008			13792		
8/5/2008		1209		2298	
8/6/2008	3301				
11/19/2008				2070	
11/20/2008	3660				
3/24/2009	2488			1310	
5/20/2009	3919	2299	13669	1536	
9/10/2009	3274				
10/21/2009	3768				
11/23/2009	3413	2396		2429	
2/23/2010	3580	2480		2760	
4/6/2010	4090	2500	15340	1820	
9/13/2010	4040	2480	14780	2730	
11/17/2010			15490	2250	
11/18/2010	4160	2430			
1/27/2011		2020	14620	2100	
1/28/2011	3730				20000
4/29/2011	4230	2090	15250	2060	20000
7/26/2011		2090	15790	1870	20000
7/27/2011	4140				
11/10/2011	4430	2150	15460	1930	9980
1/31/2012	2390	1220	15290		7210
2/1/2012				2510	
4/17/2012	4240	2140		2310	6550
7/17/2012	4510	1930	15410	2970	5070
10/4/2012	4600	2010	15210	2840	4940
1/24/2013	4290	1840	14530	2920	4910
4/4/2013	4430	1930	14040	2620	4710
7/11/2013	4729	2210	15180	2625	4870

# Time Series

Constituent: Specific Conductance (umhos/cm) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
10/14/2013	4661	1925	14760	2446	4753
2/17/2014	5097	2094	14400	3912	4930
4/10/2014	4826	2023	14430	3908	5071
7/8/2014	4750			3871	4440
10/13/2014	5155	1996	14110	2800	4492
12/16/2014	4953				
1/21/2015	5057	1976	14430	3763	4616
4/6/2015	4900	2044	14560	3839	4445
9/14/2015	4720		14440	2659	2732
9/15/2015		1890			
11/11/2015	4239	1699	11840	3315	2430

# Time Series

Constituent: Temperature (degree-C) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993	15.8	17.9			
7/16/1993	16.1	16.3			
8/4/1993	18.1	17.8			
10/11/1993	13.4	12.6			
1/13/1994	12.5	12.8			
3/29/1994		10.2			
4/20/1994	16.1	14.3	14.1		
7/13/1994	21.8	23.2	16		
10/12/1994	17.9	28.3	15.1		
12/6/1994	15.8	17.1	14.6		
1/23/1995	10.7	10.9	9.8		
4/13/1995	17	12	13		
8/2/1995	18.4	17.1	16.5		
10/18/1995	13.2	13.8	11.6		
1/18/1996	13.9	13.6	13.8		
4/17/1996	12.9	14.4	14.6		
7/17/1996	16.6	16.9	16.7		
11/7/1996	15.3	14.5	14.1		
1/22/1997	14.2	12.9	12.9		
4/8/1997	13.1	11	14.5		
7/14/1997	17.7	17.1	14.7		
10/22/1997	14.1	12.1	13		
1/7/1998	15	15.8	14.5		
4/6/1998	11.9	14.6	12.2		
7/14/1998	15.1	14.9	15		
10/20/1998	15.9	13.1	12.2		
3/3/1999	13.2	10.9	12.5		
6/22/1999	17.3	17.9	16.5		
8/31/1999	21.5	23.4	17.2		
11/30/1999	11.3	10.3	11.3		
2/15/2000	12.5	13.7	12.3	15.9	
6/27/2000	18.3	17.6	15.2		
9/26/2000	14.6	14.7	13.9	17.2	
12/12/2000	10.5	10.4	10.8		
2/27/2001	13.9	13.5	13.4	13.1	
6/6/2001	17.5	17	16.1	22.2	
8/15/2001	20	22.2	16.4	24.3	
5/22/2002	12.9	15.2	11.6	14.7	
8/21/2002	16.6	16.9	15.1	17.9	
5/4/2004	13.5	13.5	13.3	22.4	
2/22/2005	12.4	14.5	12.1	23.2	
6/16/2005	15.46	15.47	13.94		
6/17/2005				24.18	
8/17/2005	16.52	26.1	14.7	22.48	
11/30/2005	13.91		13.25		
12/1/2005		14.09		18.11	
3/7/2006				21.9	
3/8/2006		14.5	13.4		
3/9/2006	14.4				
6/5/2006			15.02		
6/6/2006	15.49	17.3		26.28	
8/10/2006	17.5	17	16.21	24.26	

# Time Series

Constituent: Temperature (degree-C) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
11/30/2006				23.01	
12/1/2006	14.03	12.94	13.5		
2/12/2007	13.76			21.78	
2/13/2007		12.61	10.25		
5/14/2007	17.04	18.37	14.15	23.4	
7/23/2007			14.49	22.54	
9/10/2007	16.9	20.2	15.3	19.1	
11/11/2007		15.73	14.39		
11/12/2007				21.47	
11/13/2007	15.26				
1/15/2008	12.32		12.38	17.87	
5/6/2008			14		
5/7/2008	15.8	16.7		14.2	
7/24/2008			13.93		
8/5/2008		20.31	16.63	24.32	
8/6/2008	15.76				
11/19/2008				19.9	
11/20/2008	13.7				
3/23/2009			13.64		
3/24/2009	15.5			23.2	
5/20/2009	16.6	16.86	13.79	17.1	
10/21/2009	15.56				
11/23/2009	14.6	14.7	12.8		
2/23/2010	12	12	11.3	19.4	
4/6/2010	17	20.2	17.8	24.4	
9/13/2010	17.6	17.7	15.5	15.4	
11/17/2010			13.3	21.9	
11/18/2010	14.5	15.1			
1/27/2011		12.6	10.9	18.1	
1/28/2011	14				
4/29/2011	15.9	16.3	14.3	24.4	15.4
7/26/2011		18	15.2	25.9	17.5
7/27/2011	16				
11/10/2011	14.4	14.8	13.7	25.2	14.3
1/31/2012	14.9	16.1	13.8		14.1
2/1/2012				23.2	
4/17/2012	15.2	16.2	14.1	23.1	14.7
7/17/2012	18.7	18.5	15.4	26.4	16.2
10/4/2012	18.1	16.8	14.4	24.7	15.1
1/24/2013	13.4	15	12.9	21.3	12.9
4/4/2013	14.4	15.4	13.2	22.9	14
7/11/2013	15.98	17.53	14.9	24.79	17.24
10/14/2013	16.85	17.57	15.38	25.93	15.52
2/17/2014	13.08	14.9	12.98	21.47	13.66
4/10/2014	15.3	15.8	14.08	23.95	15.35
7/8/2014	18.27	20.13	16.03	25.11	16.51
10/13/2014	15.59	17.26	14.71	24.42	15.74
12/16/2014	13.85				
1/21/2015	14.15	14.39	13.51	23.39	14.25
4/6/2015	14.5	15.61	14.16	23.7	14.68
9/14/2015	15.73		13.99	24.56	15.09
9/15/2015		15.56			

# Time Series

Constituent: Temperature (degree-C) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
11/11/2015	15.04	15.66	13.75	23.41	14.88

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993	2400	661			
7/16/1993	1750	746			
10/11/1993	1680	867			
1/13/1994	2370	890			
4/20/1994	2120	1140			
7/13/1994	1950	1260			
10/12/1994	1750	1440	9400		
12/23/1994			9190		
1/23/1995	1370	1260	8880		
4/13/1995	1480	1280	8740		
8/2/1995	1490	1640	9180		
10/18/1995	1620	1650	9540		
1/18/1996	1550	1860	9420		
4/17/1996	1410	1640	9640		
7/17/1996	1470	1840	8720		
11/7/1996	1560	2250	9230		
1/22/1997	1480	2000	8950		
4/8/1997	1570	1790	9380		
7/14/1997	1980	2540	9060		
10/22/1997	1930	2700	9080		
1/7/1998	1930	2180	9150		
4/6/1998	1720	2550	9390		
7/14/1998	1630	2630	8170		
10/20/1998	1940	2810	9670		
3/3/1999	1710	2390	8550		
6/22/1999	2100	2820	10600		
8/31/1999	1820	3100	7990		
11/30/1999	1960	3090	9450		
2/15/2000	1660	2700	9200	2290	
6/27/2000	1650	2260	9950		
9/26/2000	1800	3000	9300	1400	
12/12/2000	1800	2900	8800	1300	
2/27/2001	1800	2800	9200	1600	
6/6/2001	1900	2100	9300	2000	
8/15/2001	1800	2500	9300	1700	
11/7/2001	1800	2500	9300	1400	
2/6/2002	1800	2500	9500	1500	
5/22/2002	1800	2100	9700	1500	
8/21/2002	1900	2300	9600	1400	
11/7/2002	1700	2200	8900	1300	
2/21/2003	1700	2400	9400	1200	
4/16/2003	1800	2500	9400	1300	
8/14/2003			9600	1200	
8/15/2003	1700	2100			
11/12/2003	1800	2100	9600	1100	
3/3/2004	1800	2000	9100	1000	
5/4/2004	1800	2000	9400	1100	
9/21/2004	1800	1800	9500	960	
12/15/2004	1700	1900	9700	930	
2/22/2005	1800	1800	9400	910	
6/16/2005	1700	1500	9000		
6/17/2005				1100	

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
8/17/2005	1800	1600	9200	1300	
11/30/2005	1700		8800		
12/1/2005		1700		1400	
3/7/2006				1000	
3/8/2006		1400	8800		
3/9/2006	1700				
6/5/2006			9200		
6/6/2006	1700	1400		1100	
8/10/2006	1900	1400	8900	1100	
11/30/2006				1800	
12/1/2006	1900	1500	9000		
2/12/2007	1900			1700	
2/13/2007		1400	9000		
5/14/2007	1800	1400	9000	1600	
9/10/2007	1900	1500	9100	2600 (i)	
11/11/2007		1600	9300		
11/12/2007				2400	
11/13/2007	2000				
1/15/2008	2100		9100	1800	
5/6/2008			10500		
5/7/2008	2010	1560		2230	
8/5/2008		1490	9440	1710	
8/6/2008	1870				
11/19/2008			9430	2010	
11/20/2008	2210				
3/23/2009			9380		
3/24/2009	2120			1340	
5/20/2009	2720 (i)	1640	9220	1320	
10/21/2009	2690 (i)				
11/23/2009	2540	1580	9530	2020	
2/23/2010	2320	1610	9510	2260	
4/6/2010	2520	1610	9340	2680	
9/13/2010	2480	1580	9410	2630	
11/17/2010			9240	2380	
11/18/2010	2430	1560			28500
1/27/2011		1320		1710	
1/28/2011	2150				32100
4/29/2011	2520	1350	8550	1690	24400
7/26/2011		1880	8700	1690	12600
7/27/2011	2530				
11/10/2011	2400	1360	8420	1620	5480
1/31/2012	2420	1430	9340		5030
2/1/2012				1940	
4/17/2012	2550	1370	9192	2010	4180
7/17/2012	2580	1220	8960	2040	3260
10/4/2012	2570	1250	8790	2610	3300
1/24/2013	2480	1320	8610	2460	3460
4/4/2013	2560	1290	8560	2360	3250
7/11/2013	2540	1330	8730	2050	3150
10/14/2013	2540	1260	8520	1870	3200
2/17/2014	2830	1330	8730	3620	3330
4/10/2014	2750	1290	8650	3270	3520

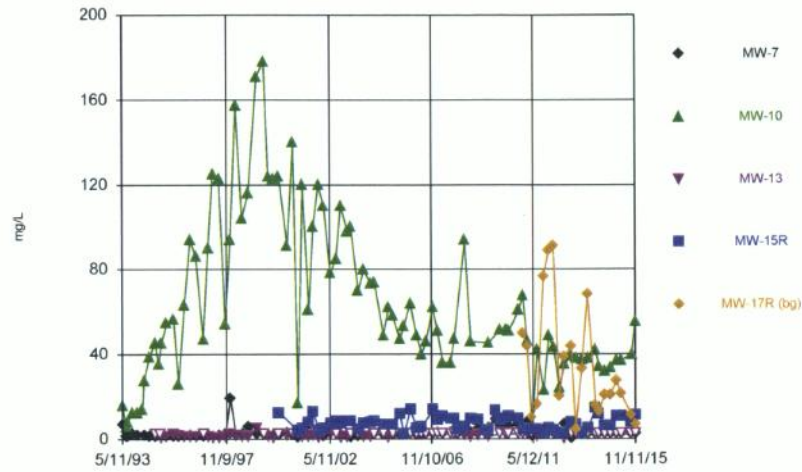
# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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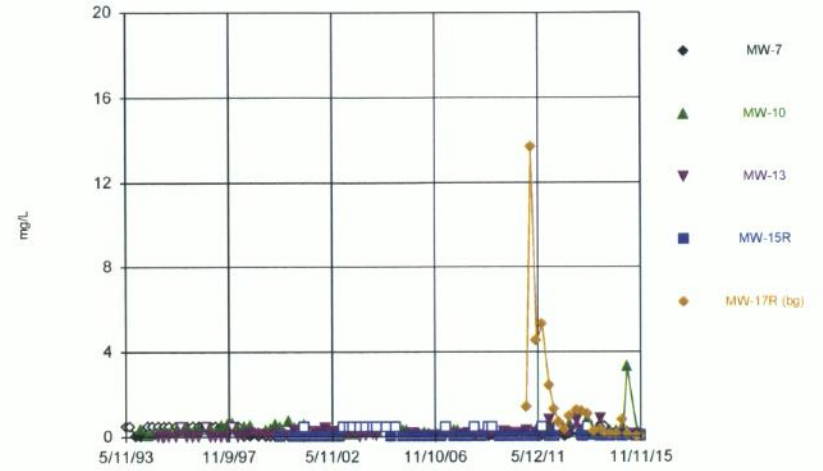
	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
7/8/2014	2770	1310	8720	2910	3040
10/13/2014	2950	1290	8720	2440	3140
1/21/2015	2930	1290	8710	2700	3150
4/6/2015	2860	1290	8750	2660	2950
9/14/2015	2780		8700	2220	2110
9/15/2015		1220			
11/11/2015	3130	1350	8430	2670	2160

### Time Series



Constituent: Total Organic Carbon Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

### Time Series



Constituent: TOX [Total Organic Halides] Analysis Run 1/4/2016 8:49 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

## Time Series

Constituent: Total Organic Carbon (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993	7.1	15.9			
7/16/1993	1.5	6			
8/4/1993	1.4	8.1			
10/11/1993	2.3	12.5			
1/13/1994	1.7	12.8			
3/29/1994		14.1			
4/20/1994	1.9	27.5			
7/13/1994	1.4	38.6			
10/12/1994	1.5	45.6	<5		
12/6/1994	1.9	35.4			
12/23/1994			<5		
1/23/1995	2.1	45.3	1.1		
4/13/1995	1.3	54.6	1.5		
8/2/1995	1.4	56.4	2.5		
10/18/1995	1.6	25.9	1.9		
1/18/1996	1.4	63.4	1.5		
4/17/1996	1.7	94	1.6		
7/17/1996	1.6	86	1.6		
11/7/1996	1.4	46.8	<5		
1/22/1997	2.2	90	1.5		
4/8/1997	1.5	125	1		
7/14/1997	2.1	123	1		
10/22/1997	2.6	54.3	1.3		
1/7/1998	19.4	93.9	2.3		
4/6/1998	1.9	157.5	1.9		
7/14/1998	2.3	104	1.6		
10/20/1998	5.7	116	1.4		
3/3/1999	2.35	171	5.3		
6/22/1999	2.5	178	<5		
8/31/1999	2	124	1.5		
11/30/1999	1.9	123	1.1		
2/15/2000	1.9	124	<5	12.7	
6/27/2000	3.2	90.9	1.9		
9/26/2000	2	140	<5		
12/12/2000	1	17	<5	4.1	
2/27/2001	1.9	120	1.4	5.1	
6/6/2001	3.6	61	1.3	8.2	
8/15/2001	2.7	100	2.1	13	
11/7/2001	1.9	120	1	4.4	
2/6/2002	1.5	110	<5	5.2	
5/22/2002	2.8	78	2.3	7.4	
8/21/2002	3.1	85	<5	8.4	
11/7/2002	1.8	110	1	7.4	
2/21/2003	1.5	98	1.4	8.5	
4/16/2003	1.1	100	<5	8.8	
8/14/2003			<5	4.9	
8/15/2003	1.2	70			
11/12/2003	2	80	1.2	7.5	
3/3/2004	2.3	73	1.2	8.1	
5/4/2004	2.3	74	<5	8.9	
9/21/2004	2.1	49	<5	7.1	
12/15/2004	2.2	62	1.1	6.8	

# Time Series

Constituent: Total Organic Carbon (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
2/22/2005	1.8	58	<5	7.1	
6/16/2005	2.2	47	<5		
6/17/2005				12	
8/17/2005	2.1	53	<5	2.3	
11/30/2005	2.8		<5		
12/1/2005		64		14	
3/7/2006				5.4	
3/8/2006		49	<5		
3/9/2006	2.2				
6/5/2006			<5		
6/6/2006	1.8	40		6	
8/10/2006	2.6	46	<5		
11/30/2006				14	
12/1/2006	2.7	62	<5		
2/12/2007	2.8			9.1	
2/13/2007		51	<5		
5/14/2007	2.4	36	<5	11	
9/10/2007	3	36	<5	9.5	
11/11/2007		47	<5		
11/12/2007				10	
11/13/2007	4				
1/15/2008	2.4		<5	4.8	
5/6/2008			1.81		
5/7/2008	2.66	93.6		5.94	
8/5/2008		46	1.55	9.72	
8/6/2008	2.79				
11/19/2008			2.17	9.04	
11/20/2008	4.67				
3/23/2009			<5		
3/24/2009	3.41			3.93	
5/20/2009	5.18	45.3	1.26	4.41	
9/10/2009	9.03			13.8	
11/23/2009	5.96	51.6	<5	8.75	
2/23/2010	6.52	51.7	<5	9.78	
4/6/2010	5.69	50.9	<5	10.9	
9/13/2010	6.78	61	<5	9.58	
11/17/2010			<5	4.68	
11/18/2010	6.64	67.9			49.8
1/27/2011		46.6	2.6	4.5	
1/28/2011	8.2				44
4/29/2011	1.2	5.9	<5		10.5
7/26/2011		42.1	1.5	4.6	16.3
7/27/2011	<5				
11/10/2011	4.1	23	<5	2	76.4
1/31/2012	4.33	48.5	<5		88.7
2/1/2012				5.16	
4/17/2012	4.87	43	<5	4.24	91.3
7/17/2012	<5	24.4	<5	2	20.3
10/4/2012	6.8	35.2	0.072	3.2	38.9
1/24/2013	0.51	39.4	<5	8	43.5
4/4/2013	<5	38.3	<5	7.1	5
7/11/2013	<5	37.6	<5	3.1	33

# Time Series

Constituent: Total Organic Carbon (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
10/14/2013	<5	37.9	<5	5.2	68.3
2/17/2014	<5	41.9	<5	14.5	16.1
4/10/2014	<5	34.4	<5	11.7	12.9
7/8/2014	<5	32.2	<5	6.3	20.8
10/13/2014	<5	33.9	<5	6.5	20.7
1/21/2015	<5	36.8	<5	11	27.8
4/6/2015	<5	37.1	<5	10.9	21.2
9/14/2015	<5		<5	8	11.6
9/15/2015		39.9			
11/11/2015	<5	55.5	<5	11.4	6.8

# Time Series

Constituent: TOX [Total Organic Halides] (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2

Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
5/11/1993	<1				
7/16/1993	<1				
10/11/1993	0.008				
1/13/1994	0.028	0.384			
4/20/1994	<1	0.08			
7/13/1994	<1	0.166			
10/12/1994	<1	0.203	0.033		
12/23/1994			0.014		
1/23/1995	<1	0.271	0.048		
4/13/1995	<1	0.195	0.016		
8/2/1995	<1	0.287	0.013		
10/18/1995	<1	0.305	<1		
1/18/1996	<1	0.369	0.011		
4/17/1996	<1	0.193	0.047		
7/17/1996	<1	0.352	0.022		
11/7/1996	<1	0.469	<1		
1/22/1997	<1	0.379	0.02		
4/8/1997	<1	0.231	0.015		
7/14/1997	<1	0.505	0.041		
10/22/1997	<1	0.588	0.0225		
1/7/1998	<1	0.621	<1		
4/6/1998	<1	0.345	0.036		
7/14/1998	0.011	0.487	0.077		
10/20/1998	0.023	0.552	0.183		
3/3/1999	0.012	0.203	0.14		
6/22/1999	0.016	0.295	0.081		
8/31/1999	0.034	0.38	0.098		
11/30/1999	0.04	0.56	0.15		
2/15/2000	0.0114	0.457	0.136	0.04	
6/27/2000	0.0222	0.757	0.1		
9/26/2000		0.39	0.31	0.04	
12/12/2000	0.011	0.5	0.14	0.03	
2/27/2001	0.018	0.57	0.028	<1	
6/6/2001	0.02	0.268	0.184	0.03	
8/15/2001	0.021	0.224	0.271	0.02	
11/7/2001	0.036	0.26	0.24	0.032	
2/6/2002	0.015	0.19	0.44	0.022	
5/22/2002	0.053	0.28	0.27	0.024	
8/21/2002	0.021	0.17	0.1	0.012	
11/7/2002	0.026	0.17	0.14	<1	
2/21/2003	<1	0.12	0.12	<1	
4/16/2003	<1	0.12	0.253	<1	
8/14/2003			0.019	<1	
8/15/2003	<1	0.29			
11/12/2003	<1	0.31	0.068	<1	
3/3/2004	<1	0.29	0.16	<1	
5/4/2004	<1	0.33	0.058	<1	
9/21/2004	<1	<1	<1	<1	
12/15/2004	0.025	0.33	0.27	0.018	
2/22/2005	<1	<1	<1	<1	
6/16/2005	0.032	0.298	0.069		
6/17/2005				0.023	

# Time Series

Constituent: TOX [Total Organic Halides] (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
 Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
8/17/2005	0.031	0.327	0.085	0.015	
11/30/2005	0.096		0.184		
12/1/2005		0.151		0.038	
3/7/2006				0.017	
3/8/2006		0.119	0.072		
3/9/2006	0.094				
6/5/2006			0.06		
6/6/2006	0.014	0.174		0.026	
8/10/2006	0.027	0.145	0.063	0.052	
11/30/2006				0.015	
12/1/2006	0.019	0.13	0.047		
2/12/2007	0.077			0.022	
2/13/2007		0.114	0.059		
5/14/2007	<1	0.223	0.098	<1	
9/10/2007	0.038	0.303	0.122	0.018	
11/11/2007		0.315	0.136		
11/12/2007				0.018	
11/13/2007	0.069				
1/15/2008	0.032		0.096	0.013	
5/6/2008			0.22		
5/7/2008	0.038			0.029	
8/5/2008		0.18	0.22	<1	
8/6/2008	0.041				
11/19/2008			0.096	0.026	
11/20/2008	0.039				
3/23/2009			0.21		
3/24/2009	0.048			<1	
5/20/2009	0.061	0.19	0.22	<1	
9/10/2009	0.059			0.02	
11/23/2009	0.038	0.15	0.23	0.021	
2/23/2010	0.028	0.2	0.19	0.026	
4/6/2010	0.038	0.19	0.16	0.042	
9/13/2010	0.11	0.2	0.22	0.036	
11/17/2010			0.28	0.023	
11/18/2010	0.13	0.22			1.4
1/28/2011					13.7
4/29/2011	0.0655	0.313	0.184	0.0215	4.52
7/26/2011		0.221	0.193	<1	5.3
7/27/2011	0.0841				
11/10/2011	0.219	0.417	0.793	0.0329	2.45
1/5/2012	0.24				
1/31/2012	0.094	0.34	0.37		1.3
2/1/2012				0.035	
4/17/2012	0.13	0.31	0.075	<1	0.7
7/17/2012	0.0495	0.258	0.247		0.359
10/4/2012	0.157	0.591	0.187		1
1/24/2013			0.822		1.23
4/4/2013			0.282	0.058	1.21
5/1/2013	0.05	0.298		0.0274	
7/11/2013	0.114	0.787	0.159	<1	1.09
10/14/2013	0.0943	0.226	0.214	0.0614	0.247
2/17/2014	0.539		0.856	0.0286	0.351

# Time Series

Constituent: TOX [Total Organic Halides] (mg/L) Analysis Run 1/4/2016 8:50 AM View: Short List 2  
Blue Ridge Client: Cornerstone Data: Historical Database - Blue Ridge

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	MW-7	MW-10	MW-13	MW-15R	MW-17R (bg)
3/11/2014		0.32			
4/10/2014	<1	0.27	0.16	0.092	0.2
7/8/2014	0.069	0.24	0.094	0.024	0.14
10/13/2014	0.093	0.26	0.15	0.056	0.16
1/21/2015	0.084	0.26	0.15	0.043	0.79
4/6/2015	0.21	3.3	0.16	0.071	0.13
9/14/2015	0.092		0.16	0.043	0.054
9/15/2015		0.25			
11/11/2015	0.053	0.2	0.077	0.028	0.035

***APPENDIX E***  
**LABORATORY ANALYTICAL REPORT**

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Pace Analytical Services, Inc.  
1241 Bellevue Street - Suite 9  
Green Bay, WI 54302  
(920)469-2436

December 09, 2015

Dan Fleshour  
Advanced Disposal Blue Ridge Landfill, LLC  
2700 Winchester Rd  
Irvine, KY 40336

RE: Project: 150184 BLUE RIDGE GW Q4 2015  
Pace Project No.: 40124604

Dear Dan Fleshour:

Enclosed are the analytical results for sample(s) received by the laboratory on November 12, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Cindy Varga  
cindy.varga@pacelabs.com  
Project Manager

Enclosures

cc: Kari Wallover, Cornerstone Environmental Group, LLC



### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### CERTIFICATIONS

Project: 150184 BLUE RIDGE GW Q4 2015  
Pace Project No.: 40124604

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#### New Orleans Certification IDs

California Env. Lab Accreditation Program Branch:  
11277CA  
Florida Department of Health (NELAC): E87595  
Illinois Environmental Protection Agency: 0025721  
Kansas Department of Health and Environment (NELAC):  
E-10266  
Louisiana Dept. of Environmental Quality (NELAC/LELAP):  
02006

Pennsylvania Dept. of Env Protection (NELAC): 68-04202  
Texas Commission on Env. Quality (NELAC):  
T104704405-09-TX  
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-  
00119

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#### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
Virginia VELAP ID: 460263

North Dakota Certification #: R-150  
South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
US Dept of Agriculture #: S-76505  
Virginia VELAP Certification ID: 460263  
Virginia VELAP ID: 460263  
Wisconsin Certification #: 405132750

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### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: 150184 BLUE RIDGE GW Q4 2015  
Pace Project No.: 40124604

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40124604001	MW-7	Water	11/11/15 15:40	11/12/15 10:05
40124604002	MW-10	Water	11/11/15 14:50	11/12/15 10:05
40124604003	MW-13	Water	11/11/15 13:15	11/12/15 10:05
40124604004	MW-15R	Water	11/11/15 14:00	11/12/15 10:05
40124604005	MW-17R	Water	11/11/15 12:30	11/12/15 10:05
40124604006	FIELD DUPLICATE	Water	11/11/15 14:05	11/12/15 10:05

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**SAMPLE ANALYTE COUNT**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40124604001	MW-7	EPA 6010	DLB	2	PASI-G
			JLJ	2	PASI-G
		SM 2540C	TMK	1	PASI-G
		SM 4500-H+B	ALY	1	PASI-G
		EPA 410.4	TJJ	1	PASI-G
		SM 5310C	TJJ	1	PASI-G
		EPA 9020B	JRP	1	PASI-N
		EPA 9056	HMB	1	PASI-G
40124604002	MW-10	EPA 6010	DLB	2	PASI-G
			JLJ	2	PASI-G
		SM 2540C	TMK	1	PASI-G
		SM 4500-H+B	ALY	1	PASI-G
		EPA 410.4	TJJ	1	PASI-G
		SM 5310C	TJJ	1	PASI-G
		EPA 9020B	JRP	1	PASI-N
		EPA 9056	HMB	1	PASI-G
40124604003	MW-13	EPA 6010	DLB	2	PASI-G
			JLJ	2	PASI-G
		SM 2540C	TMK	1	PASI-G
		SM 4500-H+B	ALY	1	PASI-G
		EPA 410.4	TJJ	1	PASI-G
		SM 5310C	TJJ	1	PASI-G
		EPA 9020B	JRP	1	PASI-N
		EPA 9056	HMB	1	PASI-G
40124604004	MW-15R	EPA 6010	DLB	2	PASI-G
			JLJ	2	PASI-G
		SM 2540C	TMK	1	PASI-G
		SM 4500-H+B	ALY	1	PASI-G
		EPA 410.4	TJJ	1	PASI-G
		SM 5310C	TJJ	1	PASI-G
		EPA 9020B	JRP	1	PASI-N
		EPA 9056	HMB	1	PASI-G
40124604005	MW-17R	EPA 6010	DLB	2	PASI-G
			JLJ	2	PASI-G
		SM 2540C	TMK	1	PASI-G
		SM 4500-H+B	ALY	1	PASI-G
		EPA 410.4	TJJ	1	PASI-G

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**SAMPLE ANALYTE COUNT**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	TJJ	1	PASI-G
		EPA 9020B	JRP	1	PASI-N
		EPA 9056	HMB	1	PASI-G
40124604006	FIELD DUPLICATE	EPA 6010	DLB	2	PASI-G
		SM 2540C	TMK	1	PASI-G
		SM 4500-H+B	ALY	1	PASI-G
		EPA 410.4	TJJ	1	PASI-G
		SM 5310C	TJJ	1	PASI-G
		EPA 9020B	JRP	1	PASI-N
		EPA 9056	HMB	1	PASI-G

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### ANALYTICAL RESULTS

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

Sample: MW-7		Lab ID: 40124604001	Collected: 11/11/15 15:40	Received: 11/12/15 10:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron	5730	ug/L	100	1	11/17/15 09:43	11/18/15 17:15	7439-89-6	
Sodium	1290000	ug/L	10000	10	11/17/15 09:43	11/19/15 18:19	7440-23-5	
<b>Field Data</b>		Analytical Method:						
Field Specific Conductance	4239	umhos/cm		1		11/11/15 15:40		
Temperature, Water (C)	15.04	deg C		1		11/11/15 15:40		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	3130	mg/L	20.0	1		11/17/15 19:28		
<b>4500H+ pH, Electrometric</b>		Analytical Method: SM 4500-H+B						
pH	7.2	Std. Units	0.10	1		11/13/15 10:15		H6
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	74.3	mg/L	52.6	1	11/18/15 10:55	11/18/15 14:33		
<b>5310C TOC</b>		Analytical Method: SM 5310C						
Total Organic Carbon	<0.50	mg/L	0.50	1		11/16/15 19:12	7440-44-0	M0
<b>Total Organic Halides</b>		Analytical Method: EPA 9020B						
Total Organic Halides	0.053	mg/L	0.020	1		12/04/15 13:44		
<b>9056 IC Anions</b>		Analytical Method: EPA 9056						
Chloride	1170	mg/L	200	50		12/01/15 01:11	16887-00-6	

Sample: MW-10		Lab ID: 40124604002	Collected: 11/11/15 14:50	Received: 11/12/15 10:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron	217	ug/L	100	1	11/17/15 09:43	11/18/15 17:18	7439-89-6	
Sodium	494000	ug/L	10000	10	11/17/15 09:43	11/19/15 18:22	7440-23-5	
<b>Field Data</b>		Analytical Method:						
Field Specific Conductance	1699	umhos/cm		1		11/11/15 14:50		
Temperature, Water (C)	15.66	deg C		1		11/11/15 14:50		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	1350	mg/L	20.0	1		11/17/15 19:28		
<b>4500H+ pH, Electrometric</b>		Analytical Method: SM 4500-H+B						
pH	7.2	Std. Units	0.10	1		11/13/15 10:15		H6

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### ANALYTICAL RESULTS

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

Sample: MW-10		Lab ID: 40124604002	Collected: 11/11/15 14:50	Received: 11/12/15 10:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	154	mg/L	52.6	1	11/18/15 10:55	11/18/15 14:33		
<b>5310C TOC</b>		Analytical Method: SM 5310C						
Total Organic Carbon	55.5	mg/L	15.0	30		11/18/15 12:22	7440-44-0	
<b>Total Organic Halides</b>		Analytical Method: EPA 9020B						
Total Organic Halides	0.20	mg/L	0.020	1		12/04/15 14:55		
<b>9056 IC Anions</b>		Analytical Method: EPA 9056						
Chloride	183	mg/L	20.0	5		12/01/15 01:49	16887-00-6	

Sample: MW-13		Lab ID: 40124604003	Collected: 11/11/15 13:15	Received: 11/12/15 10:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron	9460	ug/L	100	1	11/17/15 09:43	11/18/15 17:20	7439-89-6	
Sodium	3110000	ug/L	100000	100	11/17/15 09:43	11/20/15 10:50	7440-23-5	
<b>Field Data</b>		Analytical Method:						
Field Specific Conductance	11840	umhos/cm		1		11/11/15 13:15		
Temperature, Water (C)	13.75	deg C		1		11/11/15 13:15		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	8430	mg/L	20.0	1		11/17/15 19:29		
<b>4500H+ pH, Electrometric</b>		Analytical Method: SM 4500-H+B						
pH	7.2	Std. Units	0.10	1		11/13/15 10:15		H6
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	262	mg/L	50.0	1	11/18/15 10:55	11/18/15 14:33		
<b>5310C TOC</b>		Analytical Method: SM 5310C						
Total Organic Carbon	<0.50	mg/L	0.50	1		11/18/15 12:41	7440-44-0	
<b>Total Organic Halides</b>		Analytical Method: EPA 9020B						
Total Organic Halides	0.077	mg/L	0.020	1		12/04/15 15:19		
<b>9056 IC Anions</b>		Analytical Method: EPA 9056						
Chloride	5210	mg/L	400	100		12/01/15 02:26	16887-00-6	

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### ANALYTICAL RESULTS

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

Sample: MW-15R		Lab ID: 40124604004	Collected: 11/11/15 14:00	Received: 11/12/15 10:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron	6480	ug/L	100	1	11/18/15 09:14	11/19/15 22:38	7439-89-6	
Sodium	326000	ug/L	10000	10	11/18/15 09:14	11/20/15 11:00	7440-23-5	
<b>Field Data</b>		Analytical Method:						
Field Specific Conductance	3315	umhos/cm		1		11/11/15 14:00		
Temperature, Water (C)	23.41	deg C		1		11/11/15 14:00		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	2670	mg/L	20.0	1		11/17/15 19:29		
<b>4500H+ pH, Electrometric</b>		Analytical Method: SM 4500-H+B						
pH	7.2	Std. Units	0.10	1		11/13/15 10:15		H6
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<50.0	mg/L	50.0	1	11/18/15 10:55	11/18/15 14:33		
<b>5310C TOC</b>		Analytical Method: SM 5310C						
Total Organic Carbon	11.4	mg/L	5.0	10		11/18/15 13:22	7440-44-0	
<b>Total Organic Halides</b>		Analytical Method: EPA 9020B						
Total Organic Halides	0.028	mg/L	0.020	1		12/04/15 16:18		
<b>9056 IC Anions</b>		Analytical Method: EPA 9056						
Chloride	74.1	mg/L	20.0	5		12/01/15 02:39	16887-00-6	

Sample: MW-17R		Lab ID: 40124604005	Collected: 11/11/15 12:30	Received: 11/12/15 10:05	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron	323	ug/L	100	1	11/18/15 09:14	11/19/15 22:40	7439-89-6	
Sodium	737000	ug/L	10000	10	11/18/15 09:14	11/20/15 11:02	7440-23-5	
<b>Field Data</b>		Analytical Method:						
Field Specific Conductance	2430	umhos/cm		1		11/11/15 12:30		
Temperature, Water (C)	14.88	deg C		1		11/11/15 12:30		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	2160	mg/L	20.0	1		11/17/15 19:29		
<b>4500H+ pH, Electrometric</b>		Analytical Method: SM 4500-H+B						
pH	7.4	Std. Units	0.10	1		11/13/15 10:15		H6

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**ANALYTICAL RESULTS**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

<b>Sample: MW-17R</b>		<b>Lab ID: 40124604005</b>	Collected: 11/11/15 12:30		Received: 11/12/15 10:05		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<b>&lt;50.0</b>	mg/L	50.0	1	11/18/15 10:55	11/18/15 14:34		
<b>5310C TOC</b>		Analytical Method: SM 5310C						
Total Organic Carbon	<b>6.8</b>	mg/L	1.5	3		11/18/15 13:40	7440-44-0	
<b>Total Organic Halides</b>		Analytical Method: EPA 9020B						
Total Organic Halides	<b>0.035</b>	mg/L	0.020	1		12/08/15 10:57		
<b>9056 IC Anions</b>		Analytical Method: EPA 9056						
Chloride	<b>96.6</b>	mg/L	40.0	10		12/01/15 02:51	16887-00-6	

<b>Sample: FIELD DUPLICATE</b>		<b>Lab ID: 40124604006</b>	Collected: 11/11/15 14:05		Received: 11/12/15 10:05		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron	<b>2510</b>	ug/L	200	2	11/18/15 09:14	11/20/15 11:05	7439-89-6	
Sodium	<b>259000</b>	ug/L	2000	2	11/18/15 09:14	11/20/15 11:05	7440-23-5	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>2370</b>	mg/L	20.0	1		11/17/15 19:30		
<b>4500H+ pH, Electrometric</b>		Analytical Method: SM 4500-H+B						
pH	<b>7.2</b>	Std. Units	0.10	1		11/13/15 10:15		H6
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<b>&lt;50.0</b>	mg/L	50.0	1	11/18/15 10:55	11/18/15 14:34		
<b>5310C TOC</b>		Analytical Method: SM 5310C						
Total Organic Carbon	<b>8.1</b>	mg/L	1.5	3		11/18/15 13:59	7440-44-0	
<b>Total Organic Halides</b>		Analytical Method: EPA 9020B						
Total Organic Halides	<b>0.024</b>	mg/L	0.020	1		12/08/15 11:57		
<b>9056 IC Anions</b>		Analytical Method: EPA 9056						
Chloride	<b>75.3</b>	mg/L	40.0	10		12/01/15 03:04	16887-00-6	

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**QUALITY CONTROL DATA**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

QC Batch: MPRP/12924 Analysis Method: EPA 6010  
 QC Batch Method: EPA 3010 Analysis Description: 6010 MET  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003

METHOD BLANK: 1260276 Matrix: Water  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	<100	100	11/18/15 15:59	
Sodium	ug/L	<1000	1000	11/18/15 15:59	

LABORATORY CONTROL SAMPLE: 1260277

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	5000	5100	102	80-120	
Sodium	ug/L	5000	5070	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1260278 1260279

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40124422001 Result	Spike Conc.	Spike Conc.	MS Result						
Iron	ug/L	63500	5000	5000	70800	71900	146	167	75-125	1	20 P6
Sodium	ug/L	4760000	5000	5000	4940000	4970000	3600	4100	75-125	1	20 P6

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**QUALITY CONTROL DATA**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

QC Batch: MPRP/12934 Analysis Method: EPA 6010  
 QC Batch Method: EPA 3010 Analysis Description: 6010 MET  
 Associated Lab Samples: 40124604004, 40124604005, 40124604006

METHOD BLANK: 1261326 Matrix: Water  
 Associated Lab Samples: 40124604004, 40124604005, 40124604006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	<100	100	11/19/15 22:21	
Sodium	ug/L	<1000	1000	11/19/15 22:21	

LABORATORY CONTROL SAMPLE: 1261327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	5000	4670	93	80-120	
Sodium	ug/L	5000	4720	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1261328 1261329

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40124715001 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
Iron	ug/L	233	5000	5000	5010	4930	96	94	75-125	2	20	
Sodium	ug/L	538000	5000	5000	526000	526000	-222	-236	75-125	0	20 P6	

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**QUALITY CONTROL DATA**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

QC Batch: WET/23813 Analysis Method: SM 2540C  
 QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004, 40124604005, 40124604006

METHOD BLANK: 1260732 Matrix: Water  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004, 40124604005, 40124604006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<20.0	20.0	11/17/15 19:25	

LABORATORY CONTROL SAMPLE: 1260733

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	562	592	105	80-120	

SAMPLE DUPLICATE: 1260734

Parameter	Units	40124584014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1170	1180	0	5	

SAMPLE DUPLICATE: 1260735

Parameter	Units	40124604002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1350	1370	2	5	

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**QUALITY CONTROL DATA**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

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QC Batch: WET/23777 Analysis Method: SM 4500-H+B  
 QC Batch Method: SM 4500-H+B Analysis Description: 4500H+B pH  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004, 40124604005, 40124604006

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SAMPLE DUPLICATE: 1258617

Parameter	Units	40124604001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH	Std. Units	7.2	7.2	0	5	H6

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**QUALITY CONTROL DATA**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

QC Batch: WETA/31302 Analysis Method: EPA 410.4  
 QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004, 40124604005, 40124604006

METHOD BLANK: 1261243 Matrix: Water  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004, 40124604005, 40124604006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	<50.0	50.0	11/18/15 14:33	

LABORATORY CONTROL SAMPLE: 1261244

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	511	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1261245 1261246

Parameter	Units	40124604001		40124604002		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Chemical Oxygen Demand	mg/L	74.3	526	526	587	582	97	96	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1261247 1261248

Parameter	Units	40124604002		40124604003		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Chemical Oxygen Demand	mg/L	154	526	526	674	684	99	101	90-110	1	10	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: 150184 BLUE RIDGE GW Q4 2015  
Pace Project No.: 40124604

QC Batch: WETA/31251 Analysis Method: SM 5310C  
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon  
Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004, 40124604005, 40124604006

METHOD BLANK: 1259576 Matrix: Water  
Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004, 40124604005, 40124604006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	<0.50	0.50	11/16/15 18:34	

LABORATORY CONTROL SAMPLE: 1259577

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	2.5	2.4	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1259578 1259579

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40124604001 Result	Spike Conc.	Spike Conc.	Result						
Total Organic Carbon	mg/L	<0.50	2.5	2.5	<0.50	<0.50	8	11	80-120	20	M0

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**QUALITY CONTROL DATA**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

QC Batch: WETA/8178 Analysis Method: EPA 9020B  
 QC Batch Method: EPA 9020B Analysis Description: 9020B W TOX  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004

METHOD BLANK: 180646 Matrix: Water  
 Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Halides	mg/L	<0.020	0.020	12/04/15 09:28	

LABORATORY CONTROL SAMPLE: 180647

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Halides	mg/L	.1	0.10	102	85-115	

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**QUALITY CONTROL DATA**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

QC Batch: WETA/8218 Analysis Method: EPA 9020B  
 QC Batch Method: EPA 9020B Analysis Description: 9020B W TOX  
 Associated Lab Samples: 40124604005, 40124604006

METHOD BLANK: 181791 Matrix: Water  
 Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Halides	mg/L	<0.020	0.020	12/08/15 09:46	

LABORATORY CONTROL SAMPLE: 181792

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Halides	mg/L	.1	0.095	95	85-115	

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**QUALITY CONTROL DATA**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

QC Batch: WETA/31451 Analysis Method: EPA 9056  
 QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004, 40124604005, 40124604006

METHOD BLANK: 1266263 Matrix: Water  
 Associated Lab Samples: 40124604001, 40124604002, 40124604003, 40124604004, 40124604005, 40124604006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<4.0	4.0	11/30/15 16:24	

LABORATORY CONTROL SAMPLE: 1266264

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.9	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1266265 1266266

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40124604001 Result	Spike Conc.	Spike Conc.	Result						
Chloride	mg/L	1170	1000	1000	2200	2200	104	104	90-110	0	20

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## QUALIFIERS

Project: 150184 BLUE RIDGE GW Q4 2015  
Pace Project No.: 40124604

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.  
ND - Not Detected at or above adjusted reporting limit.  
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.  
MDL - Adjusted Method Detection Limit.  
PQL - Practical Quantitation Limit.  
RL - Reporting Limit.  
S - Surrogate  
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.  
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.  
LCS(D) - Laboratory Control Sample (Duplicate)  
MS(D) - Matrix Spike (Duplicate)  
DUP - Sample Duplicate  
RPD - Relative Percent Difference  
NC - Not Calculable.  
SG - Silica Gel - Clean-Up  
U - Indicates the compound was analyzed for, but not detected.  
N-Nitrosodiphenylamine decomposes to and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.  
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.  
TNI - The NELAC Institute.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay  
PASI-N Pace Analytical Services - New Orleans

### BATCH QUALIFIERS

Batch: WETA/8178  
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

H6 Analysis initiated outside of the 15 minute EPA recommended holding time.  
M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.  
P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 150184 BLUE RIDGE GW Q4 2015  
 Pace Project No.: 40124604

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40124604001	MW-7	EPA 3010	MPRP/12924	EPA 6010	ICP/11478
40124604002	MW-10	EPA 3010	MPRP/12924	EPA 6010	ICP/11478
40124604003	MW-13	EPA 3010	MPRP/12924	EPA 6010	ICP/11478
40124604004	MW-15R	EPA 3010	MPRP/12934	EPA 6010	ICP/11489
40124604005	MW-17R	EPA 3010	MPRP/12934	EPA 6010	ICP/11489
40124604006	FIELD DUPLICATE	EPA 3010	MPRP/12934	EPA 6010	ICP/11489
40124604001	MW-7		PM/		
40124604002	MW-10		PM/		
40124604003	MW-13		PM/		
40124604004	MW-15R		PM/		
40124604005	MW-17R		PM/		
40124604001	MW-7	SM 2540C	WET/23813		
40124604002	MW-10	SM 2540C	WET/23813		
40124604003	MW-13	SM 2540C	WET/23813		
40124604004	MW-15R	SM 2540C	WET/23813		
40124604005	MW-17R	SM 2540C	WET/23813		
40124604006	FIELD DUPLICATE	SM 2540C	WET/23813		
40124604001	MW-7	SM 4500-H+B	WET/23777		
40124604002	MW-10	SM 4500-H+B	WET/23777		
40124604003	MW-13	SM 4500-H+B	WET/23777		
40124604004	MW-15R	SM 4500-H+B	WET/23777		
40124604005	MW-17R	SM 4500-H+B	WET/23777		
40124604006	FIELD DUPLICATE	SM 4500-H+B	WET/23777		
40124604001	MW-7	EPA 410.4	WETA/31302	EPA 410.4	WETA/31324
40124604002	MW-10	EPA 410.4	WETA/31302	EPA 410.4	WETA/31324
40124604003	MW-13	EPA 410.4	WETA/31302	EPA 410.4	WETA/31324
40124604004	MW-15R	EPA 410.4	WETA/31302	EPA 410.4	WETA/31324
40124604005	MW-17R	EPA 410.4	WETA/31302	EPA 410.4	WETA/31324
40124604006	FIELD DUPLICATE	EPA 410.4	WETA/31302	EPA 410.4	WETA/31324
40124604001	MW-7	SM 5310C	WETA/31251		
40124604002	MW-10	SM 5310C	WETA/31251		
40124604003	MW-13	SM 5310C	WETA/31251		
40124604004	MW-15R	SM 5310C	WETA/31251		
40124604005	MW-17R	SM 5310C	WETA/31251		
40124604006	FIELD DUPLICATE	SM 5310C	WETA/31251		
40124604001	MW-7	EPA 9020B	WETA/8178		
40124604002	MW-10	EPA 9020B	WETA/8178		
40124604003	MW-13	EPA 9020B	WETA/8178		
40124604004	MW-15R	EPA 9020B	WETA/8178		
40124604005	MW-17R	EPA 9020B	WETA/8218		
40124604006	FIELD DUPLICATE	EPA 9020B	WETA/8218		
40124604001	MW-7	EPA 9056	WETA/31451		
40124604002	MW-10	EPA 9056	WETA/31451		
40124604003	MW-13	EPA 9056	WETA/31451		

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 150184 BLUE RIDGE GW Q4 2015  
Pace Project No.: 40124604

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40124604004	MW-15R	EPA 9056	WETA/31451		
40124604005	MW-17R	EPA 9056	WETA/31451		
40124604006	FIELD DUPLICATE	EPA 9056	WETA/31451		

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# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

## RETURN TO PACE GREEN BAY

40124604  
Page 23 of 24

<b>Section A</b> Required Client Information: ADS Blue Ridge 2700 Winchester Road Irvine, KY 40336 Email To: Dan Fleshour Phone: _____ Fax: _____ Requested Due Date/TAT: <i>standard</i>	<b>Section B</b> Required Project Information: Report To: Same Copy To: Karl Wallover Cornerstone Purchase Order No.: _____ Project Name: Blue Ridge GW Project Number: <i>150184</i>	<b>Section C</b> Invoice Information: Attention: Same Company Name: _____ Address: _____ Pace Quote Reference: _____ Pace Project Manager: Cindy Varga Pace Profile #: _____	<b>REGULATORY AGENCY</b> ___ NPDES ___ X GROUND WATER ___ DRINKING WATER ___ UST ___ RCRA OTHER _____ <b>SITE LOCATION</b> ___ GA ___ IL ___ IN ___ MI ___ NC ___ OH ___ SC ___ WI OTHER KY _____ Filtered (Y/N) N N N N N N Requested Analytes: _____ TOC, TOH, COD, TDS, CL, 8010 Na, Fe, PH, Residual Chlorine (Y/N)
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ITEM #	Section D Required Client Information	Valid Matrix Codes	MATRIX CODE	SAMPLE TYPE G-GRAB C-COMP	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives			Filtered (Y/N)	Requested Analytes	Pace Project Number Lab I.D.							
					COMPOSITE START		COMPOSITE END/GRAB				UNPRESERVED	HCL	H2SO4				HNO3	TOC, TOH	COD	TDS, CL	8010 Na, Fe	PH	Residual Chlorine (Y/N)
					DATE	TIME	DATE	TIME															
1	MW-7 field pH — Spec Cond			G			11-11-15	1540	6	1	4	1		X X X X X									
2	MW-10 field pH Spec Cond temp									1	4	1		X X X X									
3	MW-13 field pH — Spec Cond			G			11-11-15	1315	6	1	4	1		X X X X X									
4	NW-15R field pH Spec Cond temp									1	4	1		X X X X									
5	MW-17R field pH — Spec Cond			G			11-11-15	1230	6	1	4	1		X X X X X									
6	FIELD DUPLICATE									1	4	1		X X X X									
7																							
8																							
9																							
10																							
11																							
12																							

Additional Comments:	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS								
Return to Pace Green Bay pH meter malfunctioning in the field, please run pH analysis for all samples.	<i>John Mautz / Cornerstone</i>	11-11-15	1715				Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact	Y/N	Y/N	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE  
 PRINT Name of SAMPLER: *John Mautz*  
 SIGNATURE of SAMPLER: *John Mautz*  
 DATE Signed (MM/DD/YY): *11-11-15*



Sample Condition Upon Receipt

Pace Analytical Services, Inc. 4044 Ballistic Street, Suite 0

WO#: 40124604



Project #:

Client Name: ADS Blue Ridge

Courier: Fed Ex UPS Client Pace Other:

Tracking #: 1390E6F32310007522, 1390E6F32310007531

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR-51e Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 0.0 /Corr: 0.0 Biological Tissue is Frozen: yes

Temp Blank Present: yes no

Person examining contents: Date: 11/12/15 Initials: [Signature]

Temp should be above freezing to 6°C for all sample except Biota. Frozen Biota Samples should be received ≤ 0°C.

Comments:

Table with 2 columns: Question/Requirement and Answer/Status. Includes items like Chain of Custody Present, Short Hold Time Analysis, Sample Labels match COC, etc.

Client Notification/ Resolution: Person Contacted: Date/Time: Comments/ Resolution:

Project Manager Review: [Signature] Date: 11/12/15