Huntington Power Plant
Water Quality Analysis

Prepared for:

Huntington Power Plant
P.O. Box 826
Castle Dale, UT 84513

Prepared by:

Water & Environmental Technologies, PC
480 East Park Street
Butte, MT 59701
Phone (406) 782-5220
www.wet-llc.com

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1.0   INTRODUCTION

Water & Environmental Technologies was contracted to perform a water quality analysis of monitoring data from the Huntington Power Plant (HPP) and evaluate historic to recent data trends in both surface water and ground water. Multiple analyses were performed to complete this evaluation including:
1. Hydraulic Flow Characteristics
2. Analytical Data Trends
3. Geochemical Analysis
4. Statistical Analysis

The methodology and results of these analyses are detailed in this report.

2.0   SITE DESCRIPTION

2.1 Location
The Huntington Power Plant facility (**Figure 1**) is located on Highway #31 in Emery County, Utah; approximately nine miles west of the town of Huntington.   The community of Huntington is located at the junction of Highway #31 and Highway #10, approximately 20 miles south-southwest of Price, Utah. The plant site is located in the Huntington Creek Valley and is located at a mean elevation of 6,450 feet above sea level.

2.2 Climate
Average precipitation is between 6 and 10 inches per year, mainly in late July through October. Ten to 20 inches of snow can be expected in the winter, representing between one and two inches of the annual precipitation. Skies are clear about 225 days per year. Winds are generally light to moderate in all seasons and predominantly blow from the northwest. The temperature range is normally from a low of 10° (F) in January to the high 80's in July.

2.3 Site History
The Huntington Power Plant (HPP), owned and operated by Rocky Mountain Power, is a two-unit coal-fired electrical generation plant that was originally constructed and operated by UP&L until 1989. Unit 1 of the Plant began operation in 1977, while Unit 2 started in 1974. The coal-fired boilers produce steam used to power turbine generators producing electricity.

The Plant is required to remove sulfur oxide emissions from both units using wet scrubbers, as mandated by State and Federal Regulations. Flue gas from the boilers is routed through wet flue gas de-sulfurization (FGD) scrubbers that remove sulfur dioxide. The scrubbers use limestone as an alkaline sorbent. This process precipitates calcium sulfate/sulfite and this is converted into synthetic gypsum by oxidizing it in the wet solution. This FGD solution has a blowdown stream of slurry which is then concentrated. In 2006 the waste handling procedure was updated to reduce free water in the Combustion Waste (CW) Landfill. New waste handling equipment was purchased to condition the FGD concentrate from the Unit 1 thickener and Unit 2 hydro cyclones with fly ash and lime in pug mills. In 2010 new vacuum drum filters where installed to further dewater the FGD concentrate (gypsum). The FGD slurry is divided into two streams the majority going to the vacuum drum filters for dewatering and the balance going to the pug mills for flyash stabilization. Excess fluids from the dewatering process are sent to the waste water decanting basins where it is either reused in the plant or sent to the Irrigation Storage Pond and the dewatered waste material is trucked for disposal in the Combustion Waste Landfill.

Water handling procedures at the Plant are complex, thus a simplified flow diagram (**Figure 2**) was created to illustrate the overall water handling process. In general, water from multiple sources (in blue) is used for Plant operations and multiple wastewater sources (in green) are collected for re-use in plant processes or irrigation of the Research Farm. Wastewater includes normal blowdown from plant processes such as cooling tower circulation water, FGD wastewater, ash handling system water, and boiler blowdown, etc. In addition to water treatment wastes and sewage treatment effluents, water from storm drains, building roofs and floor drains is also collected. These combine as mixed wastewater in the waste water decanting basins where it is either reused in the plant or sent and stored in the Irrigation Storage Pond for later use on the Research Farm.

2.4 Geology and Hydrogeology

The HPP is located in the northwestern portion of the Colorado Plateau physiographic province and within the Mancos Shale Lowlands (Stokes 1986). The Mancos Shale Lowlands are characterized by sloping, gravel-covered pediments, rugged badlands and narrow, flat-bottomed alluvial valleys. HPP is located in the Huntington Creek valley, which is incised into the Wasatch Plateau, draining east into the Castle Valley.

The Mancos Shale, a dark gray to black, ridge forming marine shale deposit, because of its geochemical composition and erodibility, provides a natural source of soluble salts. It was deposited in a transgressive/regressive coastal-marine environment and is a known source of sodium-sulfate minerals, such as mirabilite ($Na_2SO_4*10H_2O$) and thenardite (Na_2SO_4) (Waddell et al.1979)

Figures 3a and 3b indicate the regional and local geologic formations encountered beneath and surrounding the Plant site. The Plant itself is principally built upon alluvial fan deposits at the confluence of Deer and Huntington Creeks. The uplands on both sides of Huntington Creek are composed of the Masuk Member of the Mancos Shale with scattered remnants of Quaternary pediments.

Based on previous site work and a review of monitoring well lithology logs, the site ground water monitoring wells can be broken into two broad classifications: alluvial/colluvial monitoring wells and Mancos Shale monitoring wells. The majority of the monitoring wells are screened across the alluvial/shale contact. Exceptions include some wells along Deer Creek, which are completed in alluvium and some within the CW Landfill areas, which are completed in competent Mancos Shale. Lithologic logs from the shale wells note a light gray to dark gray or gray-black shale in various stages of weathering from very weathered to hard and unweathered. Alluvial well descriptions describe a tan, orange-brown, and red mixture of fine to medium grained sand and sandstone boulders. Well development and monitoring procedures, in general, indicate higher permeability in the alluvial wells as compared to the shale wells. However, though some shale wells recharge very slowly and take more than 24 hours to recover from sample purging, others located in fractured shale recover very quickly. Gypsum is noted in both shale and alluvial well lithologic logs, indicating minerals and salts are readily available for dissolution. Ground water in the shale shows degradation (increased concentrations of minerals) along flow paths because of the high concentration of soluble minerals in the shale and the long residence time of water due to its low permeability. Ground water in the alluvium may show similar degradation, but with much lower concentrations due to lower mineral content and shorter residence times.

2.5 Site Soils
The surface soils (**Figure 4**) in the valley bottom in vicinity of the Huntington Power Plant are generally alluvial fans of well drained calcareous soils that are loamy textured mixed clay, silt, sand, and cobbles; mostly derived locally from the upgradient Mancos Shale. The Smithpond, Shupert-Dancehall and Kitipes soils generally occur along alluvial fan remnants or structural benches or mesas. At HPP, these soils occur along Huntington Creek and generally are coarser grained with a lower clay content than the upgradient Gerst-Strych-Badland Complex and Porser series soils that occur along the valley slopes.

2.6 Water Resources
There are five main sources of water at the HPP facility:
- Stream inflow
- Imported water from Huntington Creek
- Wastewater

- Ground water base flow; and
- Applied water (precipitation, irrigation and other applied waters, inluding dust suppression and waste disposal)

2.6.1 Stream Inflow

The USGS topographic map indicates Huntington Creek and Deer Creek are perennial streams, although Deer Creek has been dry through the Plant site since the mine closed. Surface water in Huntington Creek has been sampled for many years. Surface water samples (**Figure 1**) are collected from one upgradient (H-1), one cross gradient (H-2) and one downgradient (UPL-9) location. **Figure 5** compares water quality data collected at the upgradient location in 1979 to recent water quality data. Trends indicate similar water quality in 1979 to recent water quality data. **Figures 6 and 7** indicate similar trends for the other surface water monitoring locations. Boron, chloride and TDS long term trend analysis graphs for H-1, H-2 and UPL-9 are included as **Appendix A- Figure A-15**. These data also indicate stable trends over the 11-yr monitoring period. Geochemically, the Huntington Creek monitoring points plot near each other in the calcium bicarbonate water type area of the trilinear diagram (**Appendix B; Figures B-12 through B-14**).

Table I. indicates median laboratory analytical results for Huntington Creek (not including the 1979 data). This table shows slightly lower concentrations in H-1, as compared to H-2 and UPL-9; and H-2 as compared to UPL-9. These data when considered along with **Figures 5 through 7** indicate that concentrations in H-2 and UPL-9 were slightly higher than upgradient H-1 even in 1979, thus suggesting a natural explanation for the increasing concentrations in the creek. Springs seeping into the creek along the section from H-1 to UPL-9 show evident salt mobilization and ground water quality in monitoring wells (NH-1W, NH-2W and NH-4W) along the bottom of the hillside along this stretch indicate saline seeps from the Mancos Shale may be the reason for the concentration increases.

2.6.2 Imported Water

Water is imported to HPP from Huntington Creek and also from the mine. The imported water is used in plant operations and stored onsite in the raw water storage pond (Settling Basin). The quality of the raw water has significantly lower mineral concentrations as compared to other site waters (with the exception of stream inflow). Previous geochemical work indicates that the raw water type is predominantly calcium/bicarbonate, while other site waters are calcium to sodium-sulfate type waters. Seepage from the raw water ponds may result in localized ground water mounding. Although the raw water is of higher quality, additional water added to the shale aquifer system may dissolve natural salts and result in natural degradation of water quality.

Table I. Huntington Creek
Surface Water Quality Comparison

Mean Constituent Concentration (mg/L)	H-1 (Upgradient)	H-2 (Cross gradient)	UPL-9 (Downgradient)
TDS	240	260	305
Bicarb	196	200	200
Sulfate	36	45	62
Chloride	11	16	22
Magnesium	23	25	27
Calcium	57	57	59
Sodium	11	15	20
Nitrogen	0.12	0.14	0.14
Boron	<0.50	<0.50	<0.50

2.6.3 Wastewater

Wastewater is generated by normal blowdown from plant processes such as cooling tower circulation water, liquid ash handling systems and boiler blowdown. Water treatment wastes and sewage treatment effluent also contribute to wastewater flow, as do storm drains, building roof and floor drains. These combine as mixed wastewater and are collected in the Irrigation Storage Pond (**Figure 1**). This wastewater is used beneficially to irrigate the Research Farm.

Long term ground water quality near the Irrigation Storage Pond is monitored using well HWW-7. Ground water elevations and concentrations of analytes of interest are presented in **Figure A-11**. Monitoring well HWW-7 results indicate elevated concentrations of chloride and boron, which increased between the second quarter and fourth quarter monitoring events of 2008. This is most likely due to the change in chemistry in the upgradient Irrigation Storage Pond that occurred in 2006/2007 (Section 3.2 Farm Wells). Water infiltration moving through the pond liner and Mancos Shale aquifer material accounts for the time lag of the chemistry change in this well.

2.6.4 Ground Water

Ground water at the facility originates from three sources, listed in order of highest contribution:

- Inflow of ground water along upgradient facility boundaries,
- Seepage from surface water (both streams, ponds); and
- Infiltration (precipitation, dust and combustion suppression, liquid disposal and irrigation).

In general, ground water flows in the same direction as surface water, exiting along the southeastern boundary of the Plant site. Spring and fall 2015 ground water elevation contours (**Figures 8 and 9**) indicate that ground water discharges to Huntington Creek via seeps along the south escarpment at the contact of the alluvium and the shale, making this stream generally a gaining stream as it flows through the plant site (**Figure 10**). The solid line is the furthest downstream monitoring point and most of the upstream flow measurements fall beneath this line. The flow monitoring data from 2010 to April 2015 (**Table II**) show that the creek gains flow within this reach over the monitoring period, indicating that ground water is discharging to surface water.

Table II. Huntington Creek
Flow Measurement Comparison

Sampling Date	H-1 Flow (CFS)	H-2 Flow (CFS)	UPL-9 Flow (CFS)
2nd Qt. 2010	17.62	18.12	17.63
4th Qt. 2010	28.62	37.20	44.28
2nd Qt 2011	76.10	82.63	85.30
4th Qt. 2011	67.80	73.62	76.00
2nd Qt 2012	35.21	54.24	45.77
4th Qt. 2012	24.00	26.05	26.22
2nd Qt 2013	16.25	17.64	17.75
4th Qt. 2013	14.59	15.85	15.93
2nd Qt 2014	19.00	20.17	20.30
4th Qt. 2014	28.20	33.30	33.60
2nd Qt 2015	36.10	40.10	33.60

From boring log descriptions and well development procedures, aquifer permeability is very low in the shale and moderate in the alluvium. Typical hydraulic conductivities for shale aquifers range from 10^{-3} to 10^{-7} gpd/ft^2 (Freeze and Cherry, 1979). Coarse-grained material at the alluvium-shale contact account for a majority of the subsurface flow.

The Huntington Power Plant (HPP) voluntarily began an investigation into potential ground

water discharges in 2003 with the submittal and approval of a Site-Wide Sampling and Analysis Plan (SAP) to the State of Utah. Twenty-eight monitoring wells were installed and sampled quarterly for a list of twenty-eight water quality parameters both up and downgradient of potential areas of concern:

- Combustion Waste Landfill (old and new)
- Coal Storage Area
- Wastewater Storage Ponds
- Plant Site

After collection of four quarters of sampling data from this monitoring network, key monitoring wells were transitioned into the semi-annual monitoring network along with the Research Farm wells and historic surface water body sample locations. Each of the above listed areas, along with the Research Farm will be analyzed using the aforementioned methods: hydraulic flow characteristics, analytical data trends, geochemical analysis and statistical analysis.

Because waste material from this facility is derived from coal combustion, the liquid and slurry wastes are composed of naturally occurring minerals (sodium, calcium, potassium, magnesium, carbonate, sulfate, chloride, boron, nitrate, and selenium). The water bearing formation beneath the facility (Mancos Shale) has background concentrations of these same minerals, thus discerning impacts from facility operations can be challenging. Due to contact with the Mancos Shale, ground water also shows natural degradation along flowpaths. For this study, potential contaminates from each source were delineated and the ground water evaluated using comparative, trend, geochemical and statistical analyses.

2.7 Corrective Actions
Utilizing the monitoring network developed for this site, several issues have been identified and corrective actions designed to address these concerns have been implemented. Detection, corrective actions and subsequent monitoring of the response are described below.

Lacy's Lake – now closed
Monitoring well HSW-1 (**Figure 1**) was installed to detect any issues with this storm water pond, locally known as Lacy's Lake. In 2011, nitrate and TDS Protection Levels were exceeded in this well (**Figure A-14**). Lacy's Lake was drained, cleaned and reclaimed in 2011 and is no longer in use. As seen in the hydrograph in **Figure A-5**, water levels have fallen steeply since the lake was closed and Protection Level exceedances have dissipated.

Wastewater Pond – now closed
HWW-4 is downgradient of a wastewater Holding Pond, north of the facility. This monitoring

well began to exceed nitrate and TDS Protection Levels in 2012 (**Figure A-14**). As shown in **Figure A-5,** water levels in this well sharply decreased as the pond was drained and the cause of the exceedances investigated. The pond was converted to a concrete decanting basin in 2015. Water levels in the adjacent monitoring well remain low indicating that seepage has been greatly reduced and **Figure A-14** indicates a coincident decrease in nitrate and TDS concentrations.

CW Landfill
In 2006, the waste handling procedure at HPP was updated to eliminate free liquid in the Combustion Waste Landfill.   New waste handling equipment was purchased to condition the FGD concentrate from the Unit 1 thickener and Unit 2 hydro cyclones with fly ash and lime in pug mills.   In 2010 new vacuum drum filters were installed to further dewater the FGD concentrate (gypsum). Excess fluids from the dewatering process are sent to the waste water decanting basins where it is either reused in the plant or sent to the Irrigation Storage Pond and the dewatered waste material is trucked for disposal in the Combustion Waste Landfill. This process eliminated free liquid going to the new Landfill and subsequently reduced water levels and constituent concentrations in the shallow Landfill monitoring wells as shown in **Figures A-16 and A-18**.

In addition to reducing water in the FGD waste handling process, infiltration of precipitation has been reduced at the old CW Landfill by designing and covering the Landfill with an evapotranspiration cap. The results of this work can be seen in **Figure A-24** which shows decreasing water levels in HLF-6O starting in 2011.

The drainage holding the two Landfills for the plant is fed primarily by upgradient ground water underflow, infiltration of precipitation and Landfill seepage. The infiltration has been reduced significantly by the construction of an evapotranspiration cap over the old CW Landfill and updated FGD handling procedures. The decreased ground water elevations for HDP-1 and HDP-2 on the hydrograph (**Figure A-4)** indicate the reduction in infiltration and consequential reduction in ground water quality parameter concentrations (**Figure A-18**), which are due to the increased efforts to minimize water content in waste material and infiltration of precipitation at the Landfill. In addition a capture drain system was installed in this drainage in 2008/2009 to prevent shallow ground water with high constituent concentrations from impacting site ground water/surface water resources. The captured water is re-routed for beneficial use within the Plant processes.

3.0   DATA ANALYSIS

3.1 Hydraulic Flow Characteristics
In general, ground water flows from the plateau into the incised creek valleys and then along the

valley bottoms (**Figures 8 and 9**). Thus, higher elevation areas along Deer Creek and the Duck Pond Drainage flow to the alluvium in these valley bottoms which then discharge into the Huntington Creek Valley alluvium. Huntington Creek drains the site from the northwest until it exits to the southeast.

Evidence of ground water under the influence of surface water is illustrated by the seasonal elevation and temperature fluctuations in **Figures A-1 through A-4**. Notice that monitoring wells near the creek (NH-1W, NH-3W, NH-6W and NH-8W) show much more seasonal variation, as compared to wells further from the creek (NH-2W, NH-4W and NH-5W) which show a damped response to seasonal fluctuations of ground water temperature and elevation.

Trilinear diagrams which exhibit the overall geochemical signature of site monitoring points are shown for the spring and fall 2015 monitoring events in **Figures 11 and 12**. Notice that monitoring wells NH-6W and NH-8W plot very near the three monitoring points from Huntington Creek (UPL-9, H-2 and H-1), indicating the similarity in water chemistry.

3.2 Analytical Data
Trend Analysis
Intra-well (comparison of data constituent trends within the same well) and inter-well (comparison to other wells) trend analyses were performed on the analytical data results for the wells which exceed Protection Levels (**Table III**). Significant trends are identified in the monitoring well sub-groups below.

CW Landfill
Monitoring wells HLF-6O and HLF-7Od monitor the old CW Landfill. Water levels in both of these monitoring wells exhibit a sharply decreasing trend from 2011 to present (**Figure A-24**). This is most likely due to the placement of an evapotranspiration cap on this Landfill, which greatly reduces the amount of infiltration from precipitation. Neither of these wells have had an exceedance of their respective Protection Levels since fall of 2012. Nitrate and TDS trends (**Figure A-17**) in HLF-6O are relatively stable, while those in HLF-7Od are decreasing from 2013 to present.

HLF-3Nd, HLF-3Ns and HLF-4N are monitoring wells for the new CW Landfill. Water levels (**Figure A-12 and Figure A-23**) in HLF-3Ns show a decreasing trend from 2004 to present and HLF-4N exhibits a decreasing trend from 2011 to present. The deeper HLF-3Nd well has an increasing water level trend. With the exception of an abnormally high nitrate value in HLF-3Ns in October 2015, these wells have not exceeded their respective Protection Levels (**Figure A-23**).   (Subsequent monthly monitoring in HLF-3Ns indicates a steeply decreasing nitrate concentration in this well since the high value in October). Nitrate trends in HLF-3Nd and HLF-

4N are steeply decreasing with concentrations in HLF-3Nd below detection since 2013. Nitrate concentrations in HLF-3Ns have been low and very stable with the exception of the last monitoring period. None of these wells has exceeded their Protection Level for TDS and the trends in HLF-3Ns and HLF-4N are decreasing, while HLF-3Nd TDS concentrations are relatively stable with no discernible trend.

Table III. Huntington Power Plant
Compliance Well Protection Levels

Monitoring Well	Ground Water Class	Nitrate as N (mg/L)	Total Dissolved Solids (mg/L)
CW Landfill Monitoring Wells			
HLF-6O	*	4.1	9,131
HLF-7Od	*	183	21,205
HLF-3Nd	III	0.4	4,951
HLF-3Ns	III	0.6	5,017
HLF-4N	III	0.14	4,500
HDP-1	*	18	12,536
HDP-2	*	41	16,863
Coal Pile			
HCP-6	II	1.9	2,390
Wastewater			
HSW-1	III	6.5	4,905
HWW-4	II	2.2	1,863
Plant Site			
HPS-1		8.4	6,544
Research Farm Wells			
NH-1W	III	10.7	5,847
NH-3W	II	9.7	2,527
NH-6W	II	2.6	1,311
NH-8W	II	3.4	589
RG-1	III	12.4	6,300

*Wells affected by previous discharges, ground water class will not be determined.

HDP-1 and HDP-2 monitor the Duck Pond Drainage downgradient of both CW Landfills.   Both of these wells have decreasing water level trends (**Figure A-4**) most likely due to the capping

and FGD liquid reduction practices that have been employed and the drain capture system that was installed in 2009. HDP-2 has not exceeded its Protection Levels (**Figure A-18**) and has a steeply decreasing trend for both nitrate and TDS. Monitoring well HDP-2 is downgradient of HDP-1 and the drain system. HDP-1 has exceeded its Protection Level for both nitrate and TDS, but also has a steeply decreasing trend for both beginning in 2009. Concentrations are lower in HDP-2 due to the drain capturing ground water with higher concentrations of constituents of concern. Surface water monitoring downgradient at the "Creek at DP3" sample point indicates this drainage has been dry from the fourth quarter of 2009 to present.

Coal Pile
The coal pile is monitored by HCP-6. **Figure A-5** shows that ground water elevations for this well have also decreased steeply since the second quarter of 2011. This well has had exceedances of the Protection Level (**Figure A-21**) for nitrate, which correlate with short term spikes in ground water elevation. Both ground water elevation and nitrate concentrations in this well have a decreasing trend from 2011 to present.

Wastewater
HWW-4 is downgradient of a closed wastewater Holding Pond, north of the facility. Exceedances of the Protections Levels in 2012 indicated that there may be issues with the Holding Pond. The pond was drained, cleaned and converted to a concrete settling basin in 2015. **Figure A-5** shows that water levels in this well have been sharply decreasing since 2012, when corrective actions began. Continued nitrate and TDS Protection Level exceedances after initial actions to repair the pond liner were taken, prompted HPP to convert this pond to a concrete decanting basin in 2015. **Figure A-22** indicates a steep decrease in nitrate and TDS since the conversion.

Storm water in Lacy's Lake was monitored by well HSW-1. Again, exceedances of the Protection Levels in 2010 in HSW-1 indicated issues with Lacy's Lake. The lake was drained, cleaned and reclaimed in 2011 and is no longer in use. While there were many exceedances of the nitrate and TDS Protection Levels prior to 2011, there are only four exceedances for nitrate after corrective measures were taken (**Figure A-14 and A-21**) and both constituents have steeply decreasing trends. As seen in the hydrograph in **Figure A-5**, water levels have fallen steeply since the lake was closed, although there was a slight increase in the fourth quarters of 2013 and 2014 and spring 2015 which coincide with the nitrate exceedances.

Plant site
HPS-1 monitors ground water near the facility. Ground water and temperature data is graphed for this well in **Figure A-4**. Both ground water elevations and temperatures are relatively consistent with little seasonal variation. Ground water temperatures are slightly higher here than

in other site wells. In May of 2013, there is a peak in ground water elevation that is approximately three feet higher than typical and coincides with the nitrate Protection Level Exceedance. Both TDS and nitrate have a slightly decreasing trend from 2008 to present (**Figure A-22**).

Research Farm Wells
Research Farm wells NH-6W and NH-8W have had exceedances of Protection Levels mainly for TDS during fall monitoring periods generally from 2008 to present (**Figures A-19 and A-20**). As shown in **Figures A-1 through A-3**, most farm wells exhibit a decreasing ground water elevation beginning in the fall of 2011 (NH-1W, NH-2W, NH-4W, NH-5W, NH-7W, NH-8W). Monitoring wells NH-3W, NH-6W and NH-8W are closer to the creek and although they show decreased water levels over the same period, they do not exhibit the prolonged decreased trend that the other farm wells do.

Research Farm well water chemistry for key constituents is plotted on **Figures A-8 through A-10.** These graphs indicate generally higher boron and TDS from 2008 to present. Although this correlates with the lower water levels, the farm is also irrigated and the irrigation water was also evaluated. Monitoring point UPL-13 evaluates the Irrigation Storage Pond water. Key water chemistry constituents from this pond are shown in **Figure A-7**. Monitoring data indicate increased calcium, boron, sodium and TDS beginning with data from the second quarter of 2007. This seems to correlate with spikes in nitrate, boron and TDS in NH-1W, NH-3W, NH-5W (**Figures A-8 and A-9)**, and TDS in NH-8W (**Figure A-10**).

3.3 Geochemical Analysis
Geochemical analyses consisted of using trilinear diagrams to evaluate water types and changes over the monitoring period. As ground water moves through an aquifer matrix, it acquires a diagnostic chemical composition, as a result of the interaction between the ground water and the lithologic aquifer framework. At the HPP, water quality analyses have delineated a range of water quality types in monitoring wells across the site. This suggests that aquifer water quality at the site is highly dependent upon the aquifer composition and water levels. It also suggests that the aquifer matrix is reactive with ground water, because of the low permeability of the aquifer material and the resulting long ground water residence times. Details on ground water geochemistry beneath the HPP are provided using Trilinear diagrams.

Figures 11 and 12 are trilinear diagrams which plot the geochemical water type of multiple wells and surface water sampling points at HPP for the spring and fall 2015 monitoring events. Surface water is plotted in blue, while the Research Farm wells and the Duck Pond Drainage points are plotted in green and the CW Landfill monitoring wells in red. Other monitoring points (mostly within or in the vicinity of the plant) are plotted in black. Generally the trilinear diagrams indicate

that the Huntington Creek sample points have much lower chloride and sulfate and higher calcium and bicarbonate than the other monitoring points. Most of the Landfill monitoring wells have very high sulfate content and a varying percentage of calcium. The farm wells, NH-4W and NH-2W, plot closer to Landfill wells when considering sulfate concentration, which may indicate seepage from the Mancos Shale at the toe of this slope. NH-6W and NH-8W plot very near the Huntington Creek points indicating interaction between surface water and ground water in these wells.

CW Landfill
Trilinear diagrams were created for both HDP-1 and HDP-2 (**Figures B-6, B-6A and B-7**) the trilinear for HDP-1 indicates little change in this well over time. There is an increase in sulfate, but the points plot together in a relatively tight bunch. HDP-2 shows a similar spread in the data points.

Coal Pile
The coal pile monitoring well HCP-6 shows some geochemical variation over time. The quarters in which exceedances of the Protection Levels occurred (in orange on **Figure B-11**) all plot almost on top of each other in an area indicating slightly higher sulfate during these events. The exceedances also correlate with short spikes in ground water elevation.

Wastewater
The trilinear diagram for HWW-4 (**Figure B-10**) indicates variation in this well over time, but does not indicate a trend in any one direction. Again post-corrective action data (2014 to 2015) cluster indicating the effectiveness of the closure of this holding pond.

Monitoring well HSW-1 shows more variation geochemically (**Figure B-9**) and the post-Lacy's Lake data definitely cluster together indicating that the Lake closure had a positive effect on water quality in this well.

Plant Site
HPS-1 is plotted on **Figures B-8 and B-8A**. This trilinear shows a slightly larger change in chemistry over time in this well, but again the variation is relatively small, indicating that the exceedance is short in duration and the water quality returns relatively quickly to more historic levels.

Research Farm Wells
Figure B-1 illustrates the Irrigation Storage Pond water chemistry over time. The numbers in the legend indicate the quarter and year in which the data was collected. NH-8W (**Figure B-2**) represents a Research Farm monitoring well in close proximity to Huntington Creek.

Figure B-3 indicates the water chemistry change over time in NH-6W. This well had Protection Level exceedances during the fall monitoring event of 2010, 2011 and 2013. The trilinear indicates a distinct change in chemistry in this well in the fall (green symbols on Figure B-3 are spring and black are fall). The spring data has lower sulfate and chloride concentrations and the fall data has higher concentrations. It is possible that the Protection Level exceedances are noted in the fall because irrigation water builds up these constituents in the soil until they are flushed into the ground water near the end of the irrigation season. The exceedances of the Protection Levels in this well were most likely exasperated by a leak that was discovered in the valve to the lateral line that fed the field area around NH-6W. It was repaired before the 2014 irrigation season and in 2015 the constituent levels are much lower with fall levels lower than spring.

As with both the field and analytical data trend analyses, this geochemical data further indicates a correlation between the irrigation water chemistry and the concentrations and timing of concentrations in Farm wells NH-6W and NH-8W (**Figures A-9 and A-10**). The predominant fall timing of the Protection Level exceedances correlates with the highest levels of these constituents in the shallow ground water due to irrigation of the Farm all summer.

3.4 Statistical Analysis
The monitoring data for the HPP were analyzed using Sanitas™ Version 9.4.40, a statistical analysis program which is designed to comply with EPA statistical requirements for Subtitle D and Subtitle C landfills. Sanitas™ follows EPA Regulations and Guidance 40 CFR parts 257, 258, and 264, EPA Interim Final Guidance and EPA Addendum to the Interim Final Guidance.

Two general statistical analysis methods are recommended for detection monitoring of ground water at waste disposal facilities.

Method 1- Installation of background wells hydraulically upgradient of the facility along with monitoring wells downgradient. In this method, generally ANOVA analysis is completed to compare downgradient wells with upgradient wells and look for variance between the means. This method is not applicable at HPP because there are no upgradient monitoring wells.

Method 2- Intrawell comparisons of the data history within a well. This method is particularly useful in situations where there is a high degree of natural variability in the aquifer matrix which causes difference in mean concentrations between wells that may be in close proximity. The assumption for this method is that the wells have not been impacted by Plant processes. If they have been impacted, this method will not detect further impacts unless there are significant increases.

An intermediate solution of Shewart-CUSUM control charts was chosen for HPP. Sanitas™

uses the EPA recommended procedure for construction of Shewart-CUSUM charts. This method detects further releases both by their magnitude and trend. Further confidence is built in the analysis by removing outliers and existing trends from the background data for each well prior to computing the historic mean and variance. No outliers or trends were removed in this analysis.

After running the analysis (**Appendix C**), a comparison was made between the permit mandated Protection Levels for nitrate and TDS and the control limit ("h" on data sheets in Appendix C) and the upper Shewart control limit ("SCL" on data sheets in Appendix C) to which the new data were compared. This comparison (**Table IV**) indicates the higher limits from the statistical analysis as compared to the permit limits. The statistical analysis uses the mean plus 5 times the standard deviation for "h" and the mean plus 4.5 times the standard deviation for "SCL". These are the EPA recommended values. (The EPA's more recent Unified Guidance suggests 5 times the standard deviation for "SCL", but Sanitas™ uses the more conservative 4.5 value.) The permit Protection Levels were calculated using the mean plus 2 standard deviations. Note that the Shewart-CUSUM method checks for parametric data within the well, if the data are not parametric and cannot be transformed, the method calculates a Prediction Limit based on the data set.

Data from 2015, which exceeded control limits are shown below in their respective monitoring well group.

CW Landfill
HLF-3Ns exceeded the Control Chart Limit for Nitrite + Nitrite as N and selenium in 2015.

Wastewater
HSW-1 exceeded the Control Chart Limit for hardness in 2015

Research Farm Wells
 NH-8W exceeded the Prediction Limit for sodium in 2015.

Table IV. Huntington Power Plant
Protection Level versus Control Chart Limit Comparison

Monitoring Well	Nitrate as N Protection Level (mg/L)	Nitrate as N Control Chart Limit (mg/L)	Total Dissolved Solids Protection Level (mg/L)	Total Dissolved Solids Control Chart Limit (mg/L)
HLF-6O	4.1	4.2*	9,131	10,371
HLF-7Od	183	246.3	21,205	23,000*
HLF-3Nd	0.4	4.40	4,951	5,351
HLF-3Ns	0.6	1.59	5,017	4,900*
HLF-4N	0.14	0.11*	4,500	4,314
HDP-1	18	65.47	12,536	18,775
HDP-2	41	60.24	16,863	20,056
HCP-6	1.9	2.75*	2,390	2,914
HSW-1	6.5	16.68	4,905	6,681
HWW-4	2.2	6.04	1,863	1,750*
HPS-1	8.4	14.24	6,544	6,800*
NH-1W	10.7	37.08	5,847	7,290*
NH-3W	9.7	10.9*	2,527	4,790
NH-6W	2.6	9.7*	1,311	1,082
NH-8W	3.4	3.71*	589	700*
RG-1	12.4	9.7*	6,300	11,090*

*Non-parametric Prediction Limit

4.0   CONCLUSIONS

When evaluating possible HPP impacts to surface water resources, Huntington Creek is the nearest receptor. A cursory examination indicates a slight increase in water quality parameter concentrations at the downgradient monitoring points (H-2 and UPL-9), as compared to H-1 (**Table I**). However further evaluation of historic to present surface water monitoring data reveals that recent water quality at each of these monitoring points is very similar to the quality as measured 37 years ago (**Figures 5, 6 and 7**). Further investigation indicates that ground water

moving through the Mancos Shale discharges from multiple springs along the stream channel and recharges Huntington Creek between the H-1 and UPL-9 monitoring points. This is indicated both visually by seeps coming from the banks along the creek and with flow measurements which indicate a gain in flow along this reach. Thus, when evaluating all lines of evidence, the increase in surface water quality parameter concentrations is most likely the result of naturally occurring dissolution of salts from the shale into ground water which then recharges surface water in seeps along this stretch of the creek.

Ground water beneath the Plant site is monitored by a ground water well network that was voluntarily developed over a decade ago. This network was designed to provide early detection of possible releases to ground water from potential source areas at the site   This evaluation indicates that the existing monitoring system is working as designed. Over its life, several releases have been detected and corrective measures have been developed and implemented with positive results generally within a very short timeframe.

Corrective measures and their effects are described in more detail in Section 2.7 but include:

1.   Closure of Lacy's Lake – former storm water pond,
2.   Closure of a wastewater Holding Pond,
3.   ET capping of the Old CW Landfill,
4.   Upgrade of waste handling equipment to eliminate free liquid thereby reducing infiltration at the new CWL,
5.   Installation of a capture drain system to prevent contamination of shallow ground water in the Duck Pond Drainage.

This evaluation indicates that surface water quality in Huntington Creek has not changed appreciably over the life of this facility. In addition, although there have been releases to ground water at this site, they have been detected and corrected. As a result, plant operations have had an inconsequential impact on site water resources.

5.0 REFERENCES

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Figures

Legend

- Monitoring Network Well
- Existing Monitoring Well
- Surface Water Sample Point

HUNTINGTON POWER PLANT

Water Sampling Network

| Job#: PERCM02 | |
| Date: 1/11/2016 | **FIGURE 1** |

Legend

- Coal Storage
- Landfill
- Plant Site
- Storm Water
- Surface Water
- Waste Water
- → Raw Water
- ⇢ Intermittant Raw Water
- → Process Water
- — Collection System

4800 gpm from Huntington Creek

Settling Basin

Evaporative Losses (4 gpm)

6522 gpm To Plant

From Mine (803 gpm)

Pond Closed 2015 Water decanting basins installed Oct. 2015

Holding Pond

Waste Water Treatment Plant

Overflow

Plant Waste Water

Plant Process & Storm Water

Waste Water Treatment Plant Effluent (12 gpm)

From Waste Disposal Basin (355 gpm max)

Pond Closed 2015

Retention Basin

Collection System Inlet

Reuse In Plant

To Pond

Pump House

Irrigation Storage Pond (Evaporation Pond)

Evaporative Losses (81 gpm max)

To Farm

Old Landfill Drainage

New Landfill Drainage

Feet

0   450   900   1,800

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WET Water & Environmental Technologies

HUNTINGTON POWER PLANT

Water Conservation Flow Diagram

Job#: PERCM02

Date: 1/7/2016

Path: M:\Huntington\2015\Figure2_Flow_Chart.mxd, Author: jlejowne

FIGURE 2

bing

Legend

- ⊕ Existing Monitoring Well
- ✦ Monitoring Network Well
- ⊛ Surface Water Sample Point

UNITNAME

- Alluvial fan deposits
- Alluvium
- Blackhawk Formation
- Blue Gate Member of the Mancos Shale
- Castlegate Sandstone
- Flagstaff Limestone
- Lower unit of the Emery Sandstone Member of the Mancos Shale
- Masuk Member of the Mancos Shale
- Middle unit of the Emery Sandstone Member of the Mancos Shale
- North Horn Formation
- Pediment Mantle
- Price River Formation
- Slope wash
- Star Point Sandstone
- Upper unit of the Emery Sandstone Member of the Mancos Shale
- water

1 inch = 4,000 feet

Feet

0   2,000   4,000   8,000

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WET Water & Environmental TECHNOLOGIES

Huntington Power Plant

Regional Geology

Job#: PERCM02

Date: 1/7/2016

FIGURE 3a

Path: M:Huntington/2015/Figure3a_Geology.mxd Author: jkprovne

Legend

- Existing Monitoring Well
- Monitoring Network Well
- Surface Water Sample Point

UNITNAME
- Alluvial fan deposits
- Alluvium
- Blackhawk Formation
- Masuk Member of the Mancos Shale
- Middle unit of the Emery Sandstone Member of the Mancos Shale
- Pediment Mantle
- Star Point Sandstone
- Upper unit of the Emery Sandstone Member of the Mancos Shale
- water

Kbh

Ksp

Kmm

QTpm

QTpm

QTpm

Qf

H-1 Huntington Creek

Deer Creek

HWW-2

HWW-3

HWW-4

HWW-1

H-2

HCP-2

HCP-3

HPS-1   H-8W   NH-8W

HPS-2

HCP-4

HCP-1

HCP-6

West End Canyon

@ Pumphouse   H-GFD

HWW-6   UPL-13

water

Mine Well

HCP-5

HSW-1

Qal

NH-7W   NH-6W   HWW-7

H-11   H-12

HDP-3   Duck Pond

SW@
HDP-3   NH-5W

HDP-2

RG-1

NH-4W

Drain-O

HDP-1   Drain-N

HLF-70

Duck Pond Drainage

NH-3W

HLF-60

QTpm

NH-2W

HLF-10   QTpm   HLF-20   HLF-40

UPL-9

NH-1W

Ksp

N

W   E

S

1 ___ ___ ___

Feet

0   500   1,000   2,000

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Huntington Power Plant

Site Geology

Job#: PERCM02

Date: 1/7/2016   **FIGURE 3b**

Path: M:\Huntington\2015\Figure3b_Geology.mxd, Author: jhproerie

Legend

- ◈ Existing Monitoring Well
- ◈ Monitoring Network Well
- ● Surface Water Sample Point

Soils U623

006	Badland-Rubble land-Rock outcrop complex, 45 to 200 percent slopes
021	Bunkin-Rock outcrop-Zigzag complex, 40 to 70 percent slopes
024	Castledale-Colorow-Pherson complex, 1 to 5 percent slopes
037	Dumps
045	Foy-Podo-Rangecreek association, 20 to 70 percent slopes
047	Gerst-Badland complex, 12 to 50 percent slopes
051	Gerst-Strych-Badland complex, 30 to 70 percent slopes
082	Kitipes gravelly fine sandy loam, 3 to 8 percent slopes
116	Patterfield loam, 0 to 3 percent slopes
130	Podo-Rock outcrop complex, 40 to 70 percent slopes
132	Porser very stony fine sandy loam, 3 to 20 percent slopes
154	Shupert-Dancehall complex, 1 to 8 percent slopes
158	Smithpond gravelly fine sandy loam, 1 to 5 percent slopes
165	Strych very stony fine sandy loam, 3 to 30 percent slopes
182	Wuby-Datino complex, 40 to 75 percent slopes
185	Zigzag-Badland-Rubble land complex, 45 to 80 percent slopes
186	Zigzag-Porser-Badland complex, 25 to 70 percent slopes

Soils U616

113	Strych very stony loam, 3 to 15 percent slopes
114	Strych very stony loam, dry, 3 to 30 percent slopes
3	Badland-Rubbleland-Rock outcrop complex
37	Gerst-Strych-Badland complex, 50 to 70 percent slopes
96	Rock outcrop-Rubbleland-Travessilla complex

1 inch = 1,000 feet

Feet

0   500   1,000   2,000

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Huntington Power Plant

USDA NRCS SOILS

Job#: PERCM02

Date: 1/7/2016

FIGURE 4

Figure 5
Surface Water Quality Trends - H-1

Figure 6
Surface Water Quality Trends - H-2

Figure 7
Surface Water Quality Trends - UPL-9

Legend
- Ground Water Elevation Contour
- Inferred Ground Water Elevation Contour
- Abandoned Well
- Existing Monitoring Well
- Monitoring Network Well
- Surface Water Sample Point (CFS)

H-1 Huntington Creek

HWW-2
HWW-3 6,345.26
HWW-1 6,364.75
HWW-4 6,345.09
H-2

HCP-2
HCP-3

Deer Creek
HCP-1

HCP-4 6,435.24
HCP-6 6,373.09
HCP-5

HPS-1 6,361.38
HPS-2
H-8W 6,274.18
NH-8W 6,258.56

Mine Well 6,299.10

HSW-1 6,360.53

West End Canyon
H-11
NH-7W 6,271.32
@ Pumphouse
HWW-6
UPL-13

Duck Pond
H-12
HDP-3
NH-6W 6,224.20
HWW-7 6,234.96

RG-1 6,290.63

HDP-2
NH-5W 6,212.04

Drain-N Drain-S
HDP-1
NH-4W 6,204.90

HLF-70 6,501.18
Duck Pond Drainage

HLF-40 6,524.00
HLF-60 6,516.89

HLF-10 6,585.19
HLF-20 6,614.62

NH-3W 6,184.71

NH-2W 6,185.29
UPL-9

NH-1W 6,176.59

HLF-30 6,553.84

N
W E
S

Feet
0 500 1,000 2,000

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HUNTINGTON POWER PLANT

Ground Water Elevation Map 2nd Quarter 2015

Job#: PERCM02
Date: 1/11/2016

FIGURE 8

bing

Legend
- Ground Water Elevation Contour
- Inferred Ground Water Elevation Contour
- Abandoned Well
- Existing Monitoring Well
- Monitoring Network Well
- Surface Water Sample Point (CFS)

HUNTINGTON POWER PLANT

Ground Water Elevation Map 4th Quarter 2015

Job#: PERCM02
Date: 1/11/2016

FIGURE 9

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Figure 10.
Huntington River Flow Measurements

LEGEND:

- ● HWW-4
- ◉ HWW-7
- ○ HLF-10
- ⊖ HLF-3O
- ⊕ HLF-3N D
- ⊘ HLF-4N
- ◢ HLF-60
- ◁ HLF-70 D
- + HLF-3N S
- ✳ HSW-1
- ◉ HPS-1
- ⊗ HCP-4
- ✳ HCP-6
- ✛ NF-OLF
- ◀ SF-NLF
- ▣ HDP-2
- ⊡ HDP-1
- ⊠ NH1W
- ∅ NH2W
- ◩ NH3W
- ★ NH4W
- ✲ NH5W
- ◁ NH6W
- ✳ NH7W
- ✖ NH8W
- ⊞ RG-1W
- ⬡ H-1
- ✧ H-2
- ⬡ UPL-9
- ✶ H-11 Spring
- ◆ H-12 Duckpond
- ◥ HG-FD
- ◣ UPL-13
- ✧ West End Canyon
- ✧ Landfill inflow @ pumphouse
- ▢ DP inflow @ pumphouse
- ✕ H8W

LEGEND:

- HWW–4
- HWW–7
- HLF–10
- HLF–30
- HLF–3N D
- HLF–4N
- HLF–60
- HLF–70 D
- HLF–3N S
- HSW–1
- HPS–1
- HCP–4
- HCP–6
- HCP–4
- HCP–6
- HDP–2
- HDP–1
- NH1W
- NH2W
- NH3W
- NH4W
- NH5W
- NH6W
- NH7W
- NH8W
- RG–1W
- H–1
- H–2
- UPL–9
- H–11 Spring
- H–12 Duckpond
- HG–FD
- UPL–13
- West End Canyon
- Landfill inflow @ pumphouse
- DP inflow @ pumphouse
- H8W
- DP inflow @ pumphouse
- H8W

Water & Environmental TECHNOLOGIES

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HUNTINGTON SPRING
MONITORING WELLS

FIGURE 12

PERCM43

DATE: 12/9/2015

Appendix A. Water Quality Graphs

NH - 1W (Farm Well)

NH - 2W (Farm Well)

NH - 3W (Farm Well)

Figure A-1

NH - 4W (Farm Well)

NH - 5W (Farm Well)

NH-6W

Figure A-2

NH - 7W (Farm Well)

NH-8W

Figure A-3

HDP - 1 (Landfill)

HDP - 2 (Landfill)

HPS - 1 (Plant Site)

Figure A-4

HSW - 1 (Storm Water)

HWW - 4 (Waste Water)

HCP - 6 (Coal Pile)

Figure A-5

H-1 Huntington Creek

H - 2 Huntington Creek

UPL - 9 Huntington Creek

Figure A-6

UPL-13 (Irrigation Pond)

UPL-13 (Irrigation Pond)

Figure A-7

NH - 1W (Farm Well)

NH - 2W (Farm Well)

NH - 3W (Farm Well)

Figure A-8

NH - 4W (Farm Well)

NH - 5W (Farm Well)

NH-6W (Farm Well)

Figure A-9

NH - 7W (Farm Well)

NH - 8W (Farm Well)

Figure A-10

HWW-7

HWW-7

Figure A-11

HLF - 3NS (Land Fill)

HLF - 7OD

Figure A-12

HDP - 1 (Landfill)

HDP - 2 (Landfill)

HPS - 1 (Plant Site)

Figure A-13

Figure A-14

H-1 Huntington Creek

H - 2 Huntington Creek

UPL - 9 Huntington Creek

Figure A-15

Figure A-16

Figure A-17

Figure A-18

NH - 1W (Farm Well)

NH - 3W (Farm Well)

NH - 6W (Farm Well)

Figure A-19

NH - 8W (Farm Well)

RG - 1 (Farm Well)

Figure A-20

Figure A-21

Figure A-22

Figure A-23

GW Elevation-HLF-6O

GW Elevation-HLF-7Od

Figure A-24

Appendix B. Trilinear Diagrams

LEGEND:

HUNTINGTON UPL-13
SURFACE WATER

FIGURE B-1

PacifiCorp — Water & Environmental Technologies — HUNTINGTON

PERCM43
DATE: 12/9/2015

Piper diagram (trilinear diagram) with CATIONS (Calcium (Ca), Magnesium (Mg), Sodium (Na) + Potassium (K)) and ANIONS (HCO3 + CO3, Carbonate (CO3) + Bicarbonate (HCO3), Chloride (Cl), Sulfate (SO4)), plotting %meq/l.

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HUNTINGTON NH8W
MONITORING WELL

PERCM43

DATE: 12/9/2015

FIGURE B-2

Piper diagram — HUNTINGTON NH8W H8W MONITORING WELL

LEGEND:

7 2 07
7 4 07
8 2 08
8 4 08
9 2 09
9 4 09
10 2 10
10 4 10
11 2 11
11 4 11
12 2 12
12 4 12
13 2 13
13 4 13
14 2 14
14 4 14
15 2 15
15 4 15

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HUNTINGTON NH6W
MONITORING WELL

PERCM43
DATE: 12/9/2015   FIGURE B-3

LEGEND:

Ca
Magnesium (Mg)
Calcium (Ca)
CATIONS
Na+K
%meq/l
Mg
Sodium (Na) + Potassium (K)

Sulfate (SO4) + Chloride (Cl)
Calcium (Ca) + Magnesium (Mg)

HCO 3 +CO 3
Carbonate (CO3) + Bicarbonate (HCO3)
Chloride (Cl)
ANIONS
Sulfate (SO4)
SO 4
Cl

2 07
4 07
2 08
4 08
2 09
4 09
2 10
4 10
2 11
4 11
2 12
4 12
2 13
4 13
2 14
4 14
2 15
4 15

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HUNTINGTON NH4W
MONITORING WELL

PERCM43

DATE: 12/9/2015   FIGURE B-4

FIGURE B-5

LEGEND:

PACIFICORP
HUNTINGTON NH2W
MONITORING WELL

Water & Environmental
TECHNOLOGIES
HUNTINGTON

PERCM43
DATE: 12/9/2015

Piper diagram plot for HUNTINGTON HDP-1 Monitoring Well.

LEGEND:

1 04	2 04	3 04	4 04
2 05	3 04	4 05	
2 06	4 05	4 06	
2 07	4 06		
4 07			
4 08	2 08		
4 09	2 09		
2 10	4 09		
4 10	2 11		
4 11	2 12		
4 12	2 13		
4 13	2 14		
4 14	2 15		
4 15			

Cations: Calcium (Ca), Magnesium (Mg), Sodium (Na) + Potassium (K), Na+K, Mg, Ca

Anions: HCO3 + CO3, Carbonate (CO3) + Bicarbonate (HCO3), Chloride (Cl), Sulfate (SO4), SO4, Cl

%meq/l

Sulfate (SO4) + Chloride (Cl), Calcium (Ca) + Magnesium (Mg)

Sulfate (SO4)

LEGEND:

LEGEND:

HUNTINGTON HDP-2
MONITORING WELL

PacifiCorp
Water & Environmental Technologies
HUNTINGTON

PERCM43
DATE: 12/9/2015

FIGURE B-7

Piper diagram

Magnesium (Mg)

Calcium (Ca)

C A T I O N S

Sodium (Na) + Potassium (K)

Na+K

%meq/l

Mg

Ca

Sulfate (SO4) + Chloride (Cl)

Calcium (Ca) + Magnesium (Mg)

Carbonate (CO3) + Bicarbonate (HCO3)

HCO 3 +CO 3

Chloride (Cl)

A N I O N S

Sulfate (SO4)

SO 4

Cl

LEGEND:

● 4 03
◑ 1 04
🔴 2 04
◇ 3 04
⊕ 2 05
⊘ 4 05
◐ 2 06
◆ 4 06
+ 2 07
+ 4 07
▷ 2 08
◢ 4 08
◐ 2 09
✦ 4 09
✕ 2 10
✛ 4 10
✕ 2 11
✚ 4 11
⊡ 2 12
◫ 4 12
⊘ 2 13
◼ 4 13
⬟ 2 14
⚙ 4 14
◈ 2 15
◆ 4 15

LEGEND:

HUNTINGTON HSW-1
MONITORING WELL

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HUNTINGTON

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PERCM43

DATE: 12/9/2015

FIGURE B-9

Figure B-10

LEGEND:

◆ 4 03	
● 4 15	
⊕ 4 04	
◇ 3 04	
⊘ 2 04	
⊙ 2 05	
⊘ 4 05	
⊗ 2 06	
▷ 4 06	
◁ 2 07	
▷ 4 07	
⊠ 2 08	
✕ 4 08	
⊕ 2 09	
⊕ 4 09	
⊗ 2 10	
✛ 4 10	
⊞ 2 11	
⊕ 4 11	
⊠ 2 12	
⊡ 4 12	
⊘ 2 13	
◻ 4 13	
◼ 2 14	
✶ 4 14	
◉ 2 15	
● 4 15	

PACIFICORP
HUNTINGTON

Water & Environmental TECHNOLOGIES

HUNTINGTON HWW-4
MONITORING WELL

PERCM43
DATE: 12/9/2015

FIGURE B-10

LEGEND:

HUNTINGTON HCP-6
MONITORING WELL

PacifiCorp HUNTINGTON

Water & Environmental
TECHNOLOGIES

PERCM43
DATE: 12/9/2015

FIGURE B-11

LEGEND:

Magnesium (Mg)

Calcium (Ca)
C A T I O N S

Sodium (Na) + Potassium (K)

Mg

Na+K

%meq/l

Sulfate (SO4) + Chloride (Cl)

Calcium (Ca) + Magnesium (Mg)

Carbonate (CO3) + Bicarbonate (HCO3)

HCO 3 +CO 3

Chloride (Cl)
A N I O N S

Sulfate (SO4)

SO 4

Cl

HCO3 + CO3

80

20

LEGEND:

HUNTINGTON H-2
SURFACE WATER

FIGURE B-13

PERCM43
DATE: 12/9/2015

LEGEND:

HUNTINGTON H-2
SURFACE WATER

Water & Environmental Technologies
HUNTINGTON

PACIFICORP

PERCM43
DATE: 12/9/2015

FIGURE B-13a

Piper diagram — cations and anions trilinear plots

CATIONS — Calcium (Ca), Magnesium (Mg), Sodium (Na) + Potassium (K)
ANIONS — Carbonate (CO3) + Bicarbonate (HCO3), Sulfate (SO4), Chloride (Cl)
%meq/l

LEGEND:

80

60

LEGEND:

◖	4 00
▷	2 01
⊬	4 01
+	2 02
⊕⊹	4 02
⊘	2 03
⊗	4 03
⊹⊗	2 04
⊤	4 04
✹	2 05
▤	4 05
⊡	2 06
⊞	4 06
⊠	2 07
◳	4 07
✦	2 08
⊗	4 08
✿	2 09
▷	4 09
▦	2 10
⊞	4 10
✸	2 11
◈	4 11
✿	2 12
⊕	4 12
◆	2 13
▷	4 13
⬤	2 14
▲	4 14
☼	2 15
⊖	4 15

Appendix C. Statistical Analyses

Control Chart

Within Control Limits

HWW-4

- ■ HWW-4 background
- ◆ HWW-4 compliance
- ● CUSUM

h = 464.6

SCL = 455.2

Background Data Summary: Mean=370.9, Std. Dev.=18.74, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9361, critical = 0.918. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Alk   Analysis Run 12/14/2015 3:42 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3ND

Background Data Summary: Mean=694.3, Std. Dev.=37.74, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9411, critical = 0.918. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Alk   Analysis Run 12/14/2015 3:42 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Legend:
- ■ HLF-4N background
- ◆ HLF-4N compliance

Limit = 404

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Alk   Analysis Run 12/14/2015 3:42 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

- ■ HLF-6O background
- ◆ HLF-6O compliance

Limit = 400

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Alk   Analysis Run 12/14/2015 3:42 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-7OD

Within Control Limits

■ HLF-7OD background

◆ HLF-7OD compliance

● CUSUM

h = 769

SCL = 751.3

Background Data Summary: Mean=592, Std. Dev.=35.4, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9638, critical = 0.918. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3NS background

◆ HLF-3NS compliance

Limit = 686

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HCP-6

■ HCP-6 background

◆ HCP-6 compliance

● CUSUM

h = 527.5

SCL = 514.2

y-axis: mg/l (0, 120, 240, 360, 480, 600)

x-axis: 11/1/03, 3/26/06, 8/19/08, 1/12/11, 6/7/13, 11/1/15

Background Data Summary: Mean=394.5, Std. Dev.=26.6, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9582, critical = 0.918. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

Legend:
- ■ HDP-1 background
- ◆ HDP-1 compliance
- ● CUSUM

h = 730.4

SCL = 691.7

Background Data Summary: Mean=343.6, Std. Dev.=77.37, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.967, critical = 0.914. Report alpha = 0.00011. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH1W

mg/l

440
352
264
176
88
0

5/1/07   1/11/09   9/24/10   6/6/12   2/17/14   11/1/15

- ■ NH1W background
- ◆ NH1W compliance
- ● CUSUM

h = 438.3

SCL = 432.1

Background Data Summary: Mean=376, Std. Dev.=12.47, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9226, critical = 0.892. Report alpha = 0.00023. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ NH3W background

◆ NH3W compliance

Limit = 312

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 17 background values. Report alpha = 0.05556. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH6W

mg/l

■ NH6W background

◆ NH6W compliance

● CUSUM

h = 435.7

SCL = 420.7

5/1/07   1/11/09   9/24/10   6/6/12   2/17/14   11/1/15

Background Data Summary: Mean=285.4, Std. Dev.=30.05, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9609, critical = 0.892. Report alpha = 0.00023. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH8W

Legend:
- ■ NH8W background
- ◆ NH8W compliance
- ● CUSUM

h = 291.5

SCL = 287.2

Background Data Summary: Mean=248.3, Std. Dev.=8.637, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9322, critical = 0.892. Report alpha = 0.00023. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

RG-1W

Within Control Limits

Legend:
- ■ RG-1W background
- ◆ RG-1W compliance
- ⬤ CUSUM

h = 379.4

SCL = 370.2

Y-axis: mg/l — values: 400, 320, 240, 160, 80, 0

X-axis: 5/1/07, 1/11/09, 9/24/10, 6/6/12, 2/17/14, 11/1/15

Background Data Summary: Mean=287.5, Std. Dev.=18.38, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9357, critical = 0.892. Report alpha = 0.00023. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Alk   Analysis Run 12/14/2015 3:43 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 21 background values. Report alpha = 0.04545. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-3ND

Within Control Limits
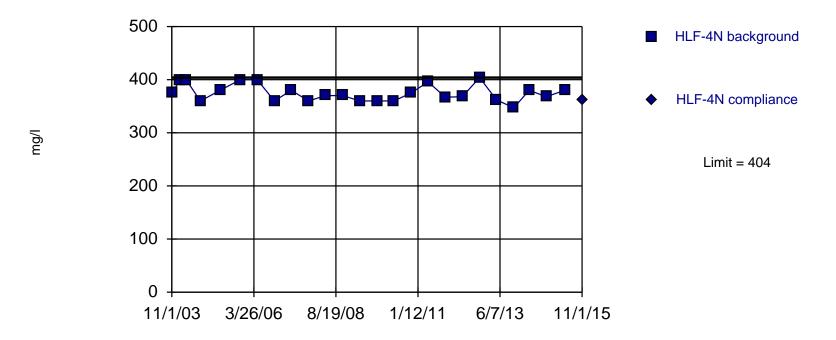

Background Data Summary: Mean=0.786, Std. Dev.=0.05701, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9391, critical = 0.918. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
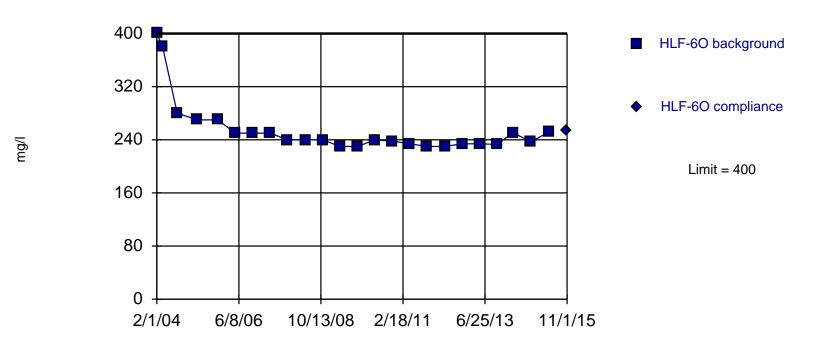
Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HLF-4N

Within Control Limits

- ■ HLF-4N background
- ◆ HLF-4N compliance
- ● CUSUM

h = 0.904

SCL = 0.8783

Background Data Summary: Mean=0.6472, Std. Dev.=0.05136, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9434, critical = 0.918. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-7OD

Within Control Limits

Background Data Summary: Mean=4.929, Std. Dev.=0.9054, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9542, critical = 0.918. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
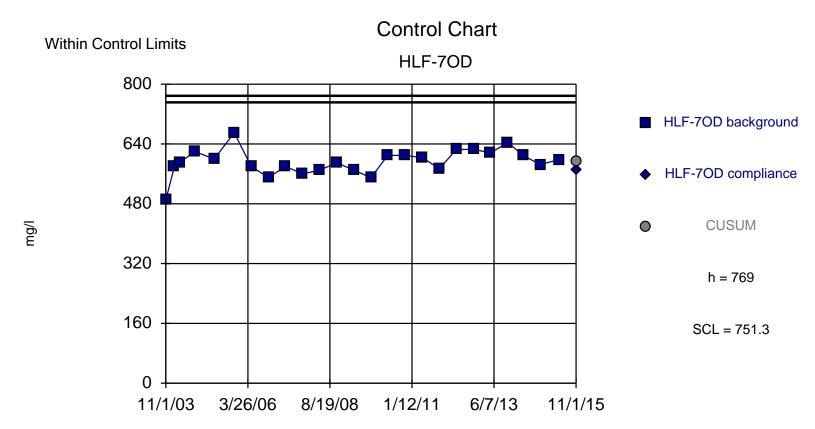
Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-3NS

■ HLF-3NS background

h = 1.095

SCL = 1.04

mg/l

Background Data Summary: Mean=0.545, Std. Dev.=0.11, n=4. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8794, critical = 0.748. Report alpha = 0. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

mg/l

11/1/03   3/26/06   8/19/08   1/12/11   6/7/13   11/1/15

■ HSW-1 background

◆ HSW-1 compliance

○ CUSUM

h = 24.7

SCL = 22.93

Background Data Summary: Mean=6.995, Std. Dev.=3.541, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9733, critical = 0.918. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
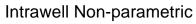
Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

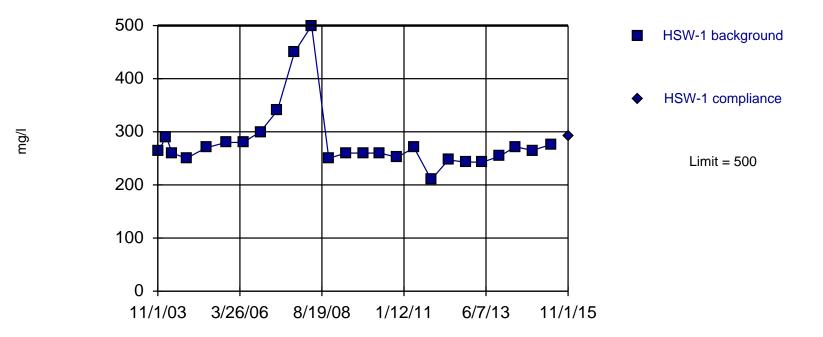# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
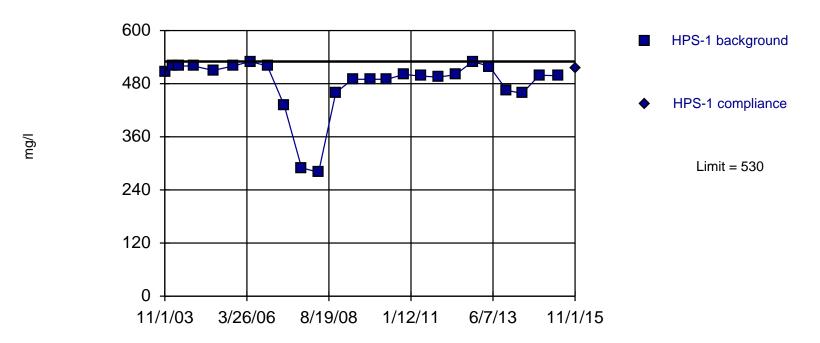
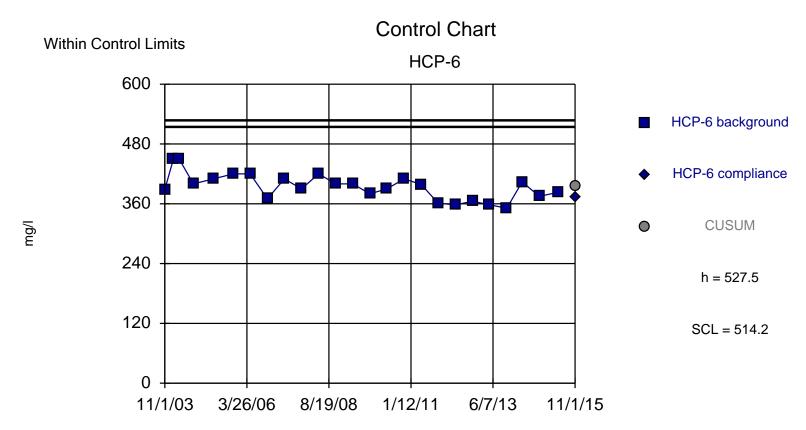Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

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Control Chart

Within Control Limits

HCP-6

■ HCP-6 background

◆ HCP-6 compliance

● CUSUM

h = 1.537

SCL = 1.467

Background Data Summary: Mean=0.8312, Std. Dev.=0.1413, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9436, critical = 0.918. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-2

Within Control Limits

mg/l

- ■ HDP-2 background
- ◆ HDP-2 compliance
- ○ CUSUM

h = 58.75

SCL = 55.22

Background Data Summary: Mean=23.45, Std. Dev.=7.06, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9604, critical = 0.916. Report alpha = 0.000092. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

- ■ HDP-1 background
- ◆ HDP-1 compliance
- ● CUSUM

h = 87.41

SCL = 84.51

Background Data Summary (based on square transformation): Mean=2656, Std. Dev.=996.9, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9615, critical = 0.914. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: B   Analysis Run 12/14/2015 3:44 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH1W

■ NH1W background
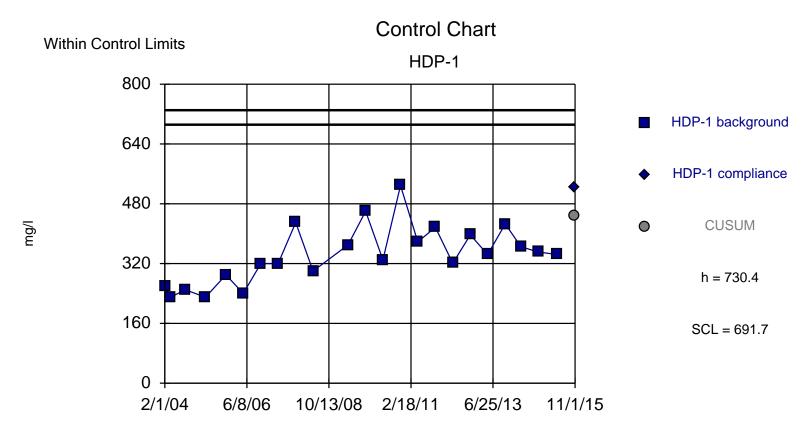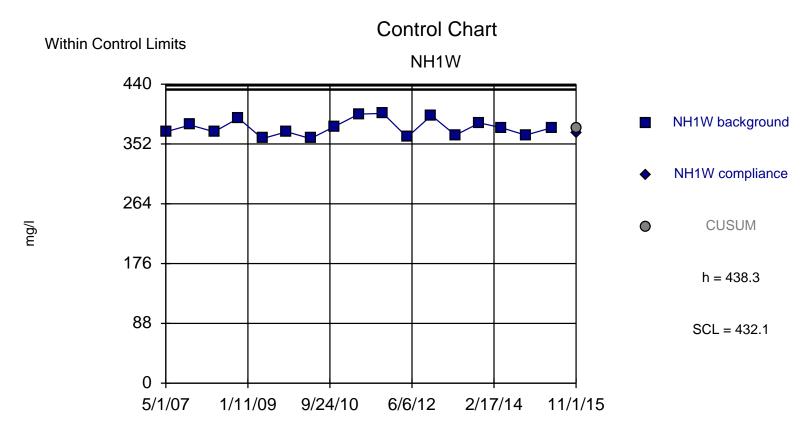
◆ NH1W compliance
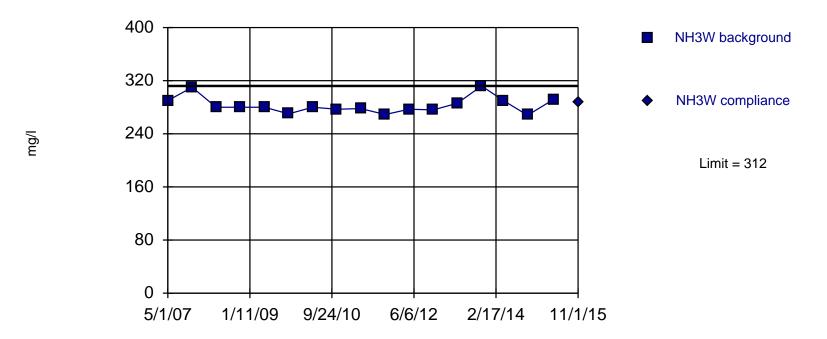
● CUSUM

h = 12.4

SCL = 11.7

Background Data Summary: Mean=5.426, Std. Dev.=1.395, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9519, critical = 0.936. Report alpha = 0.000048. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: B   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH3W

■ NH3W background

◆ NH3W compliance

● CUSUM

h = 4.759

SCL = 4.211

Background Data Summary (based on natural log transformation): Mean=0.3383, Std. Dev.=0.2443, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9504, critical = 0.936. Report alpha = 0.000048. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
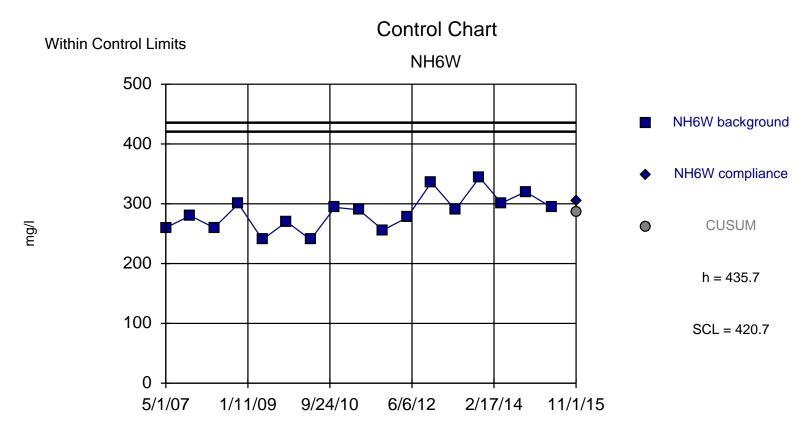
Constituent: B   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH6W

NH6W background

h = 12.78

SCL = 10.56

Background Data Summary (based on cube root transformation): Mean=0.8979, Std. Dev.=0.288, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9199, critical = 0.918. Report alpha = 0. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
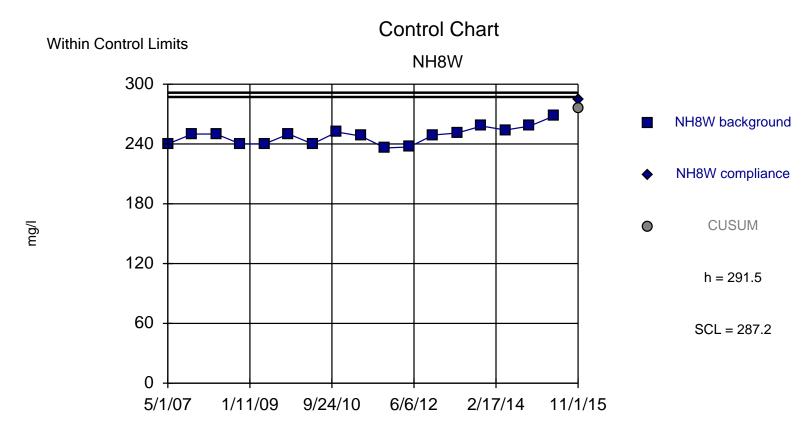
Constituent: B   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Prediction Limit

Intrawell Non-parametric, NH8W
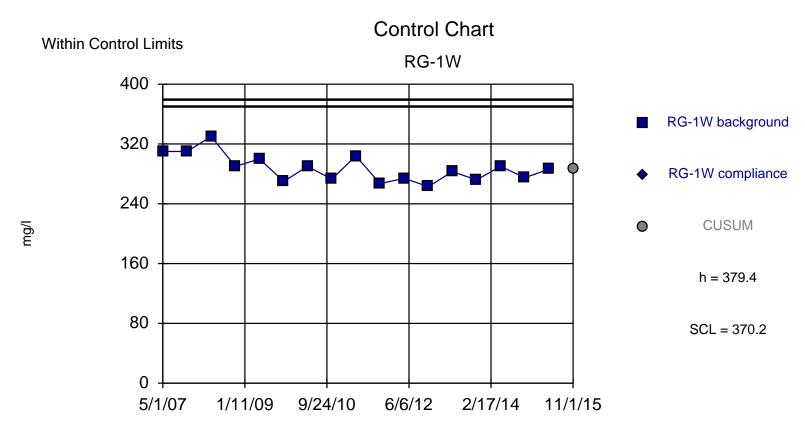

■ NH8W background

Limit = 0.45

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 12 background values. Report alpha = 0.07692. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: B   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

RG-1W

Within Control Limits

Background Data Summary (based on square transformation): Mean=17.84, Std. Dev.=6.215, n=33. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9628, critical = 0.931. Report alpha = 0.000056. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
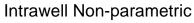
Constituent: B   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HWW-4

Background Data Summary: Mean=175.4, Std. Dev.=20.74, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9339, critical = 0.918. Report alpha = 0.000092. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
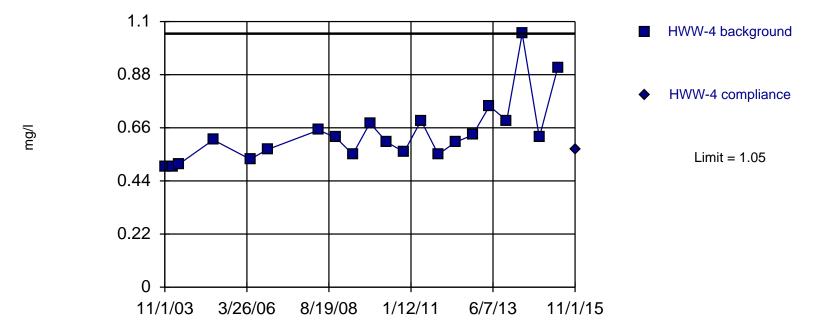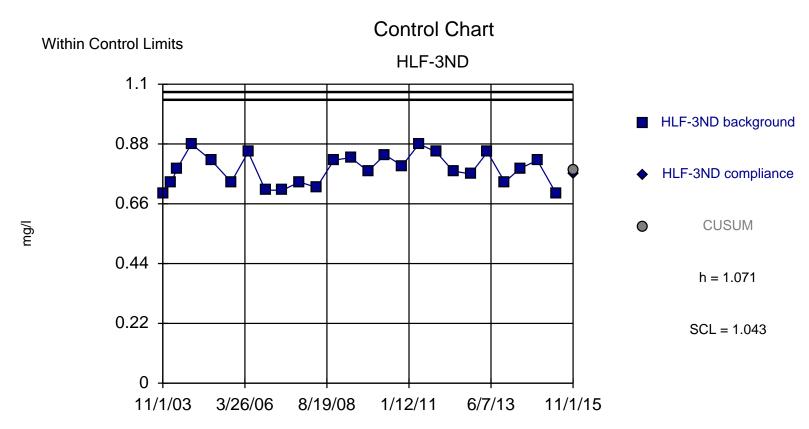
Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3ND background

◆ HLF-3ND compliance

Limit = 23

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

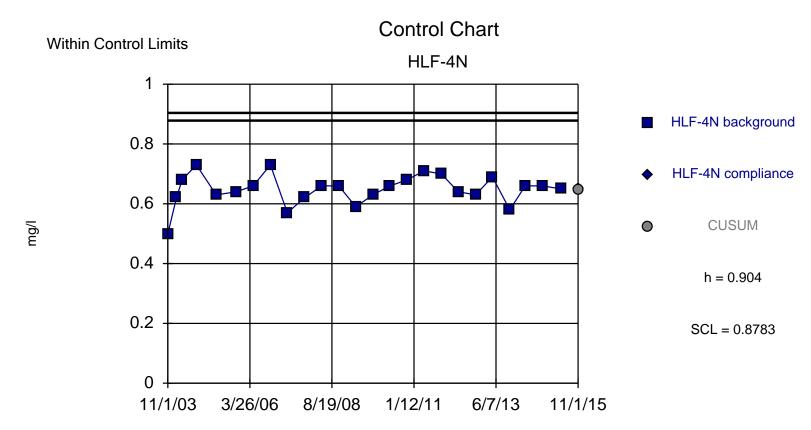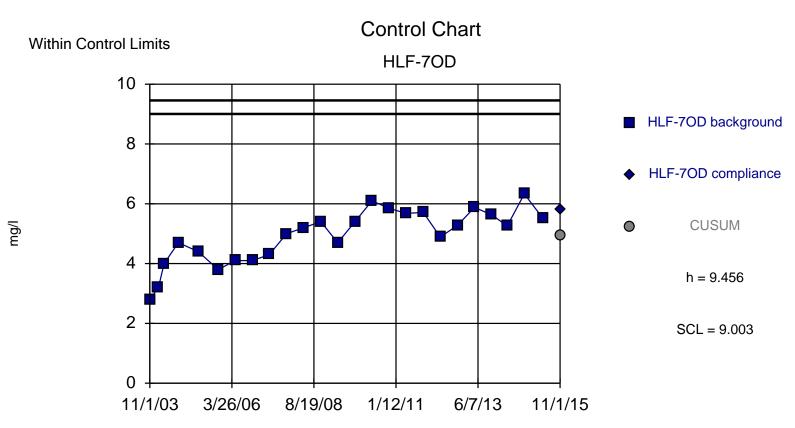# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
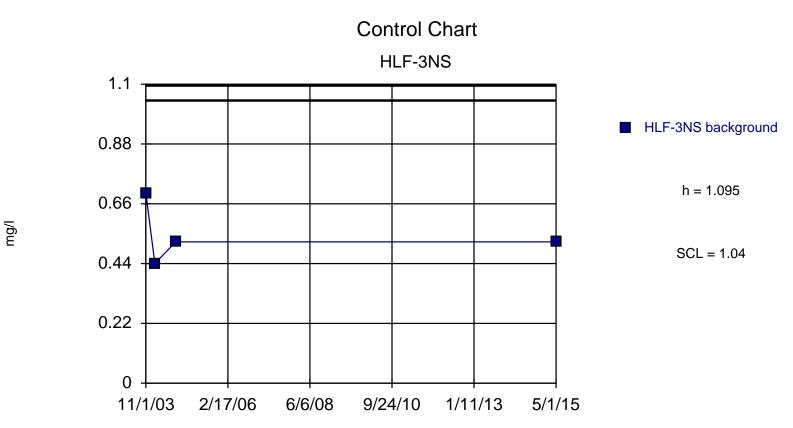
Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-7OD background

◆ HLF-7OD compliance

Limit = 650

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3NS

- ■ HLF-3NS background
- ◆ HLF-3NS compliance
- ● CUSUM

h = 501.1

SCL = 492.6

Background Data Summary (based on x^4 transformation): Mean=2.1e10, Std. Dev.=8.4e9, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9351, critical = 0.918. Report alpha = 0.000092. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
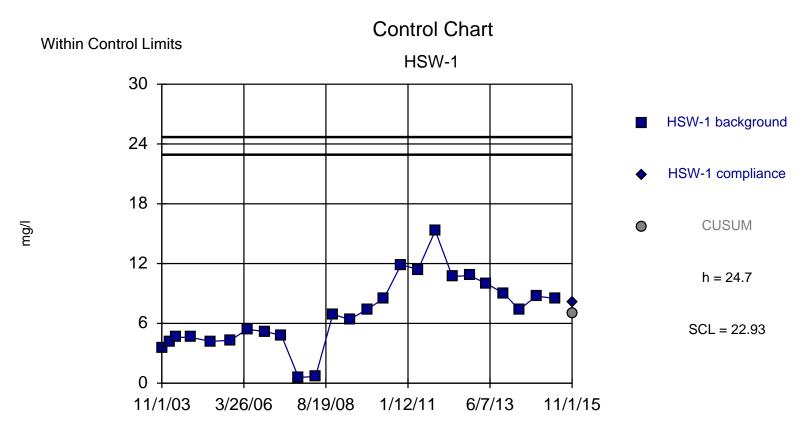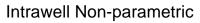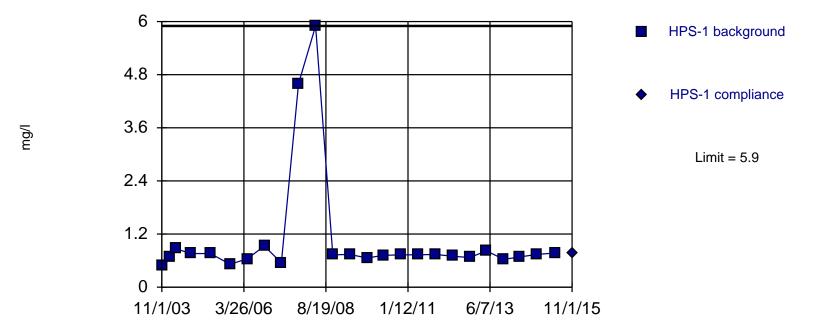
Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

■ HSW-1 background

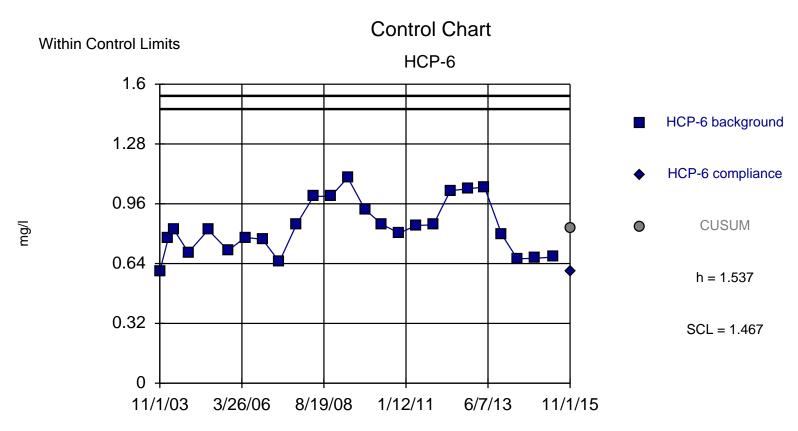◆ HSW-1 compliance

● CUSUM

h = 969.3

SCL = 920.9

Background Data Summary: Mean=485.5, Std. Dev.=96.76, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9596, critical = 0.918. Report alpha = 0.000092. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

■ HPS-1 background

◆ HPS-1 compliance

⬤ CUSUM

h = 936.7

SCL = 898.8

Background Data Summary: Mean=558, Std. Dev.=75.74, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9632, critical = 0.918. Report alpha = 0.000092. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
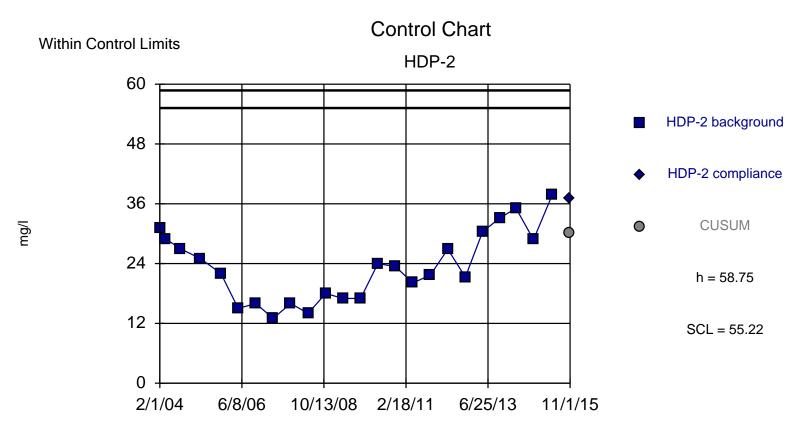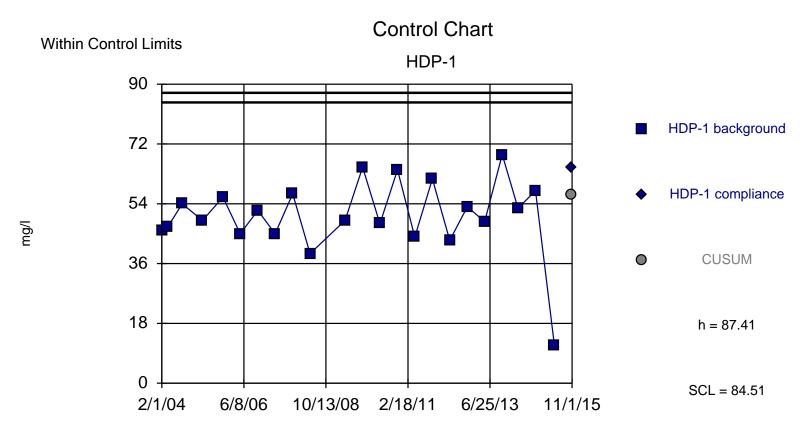
Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HCP-6

Within Control Limits

■ HCP-6 background

♦ HCP-6 compliance

○ CUSUM

h = 259.6

SCL = 250.7

Background Data Summary: Mean=170.6, Std. Dev.=17.8, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9229, critical = 0.918. Report alpha = 0.000092. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

- ■ HDP-2 background
- ◆ HDP-2 compliance

Limit = 840

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
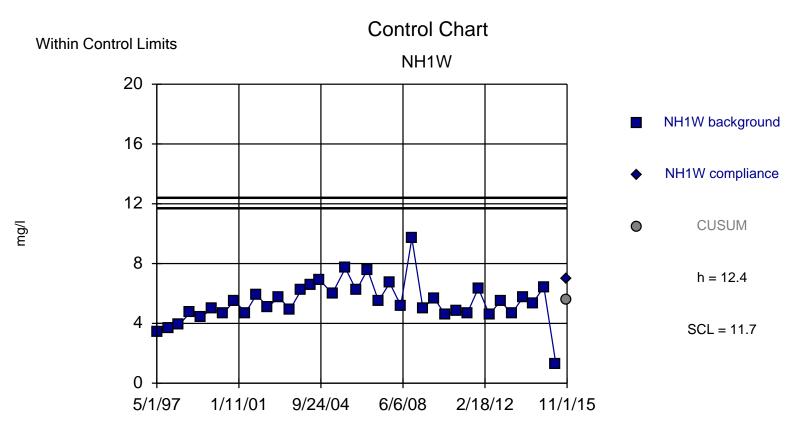
Constituent: Ca   Analysis Run 12/14/2015 3:45 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
Huntington2015

Control Chart

Within Control Limits

HDP-1

Background Data Summary (based on natural log transformation): Mean=6.387, Std. Dev.=0.07799, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9221, critical = 0.914. Report alpha = 0.000112. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
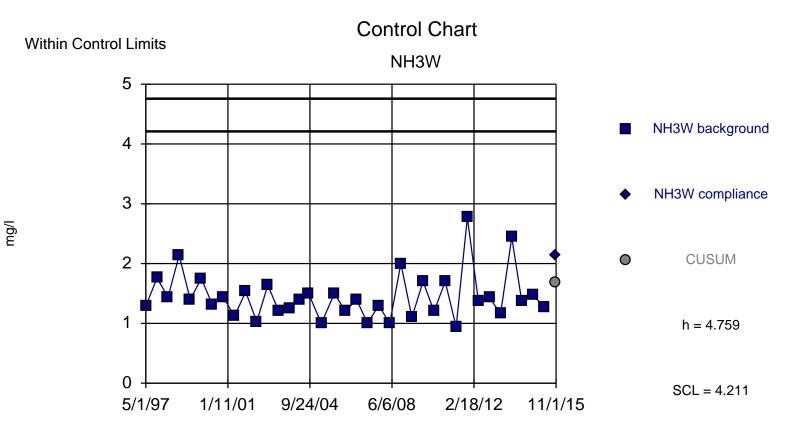
Constituent: Ca   Analysis Run 12/14/2015 3:46 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH1W

Within Control Limits

Legend:
- ■ NH1W background
- ◆ NH1W compliance
- ● CUSUM

h = 523.2

SCL = 505.9

Background Data Summary: Mean=349.8, Std. Dev.=34.69, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9585, critical = 0.936. Report alpha = 0.000034. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
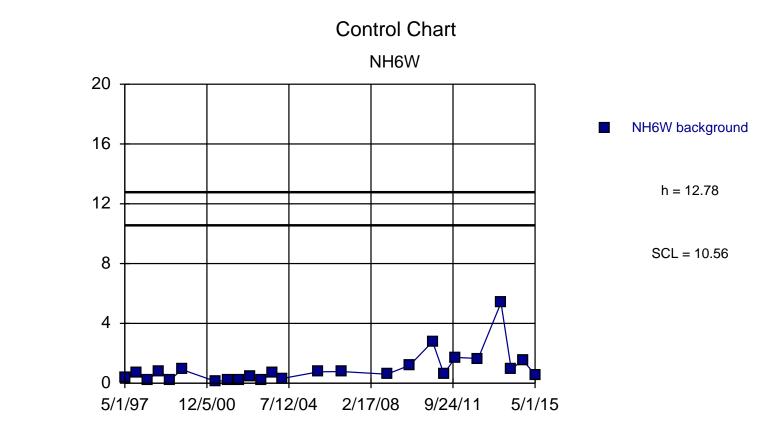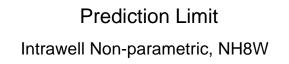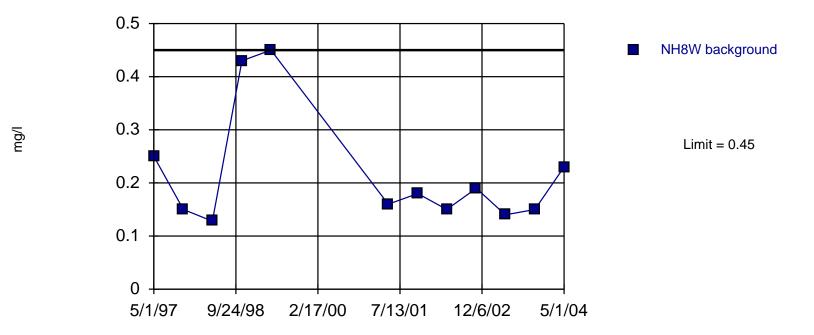
Constituent: Ca   Analysis Run 12/14/2015 3:46 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Ca   Analysis Run 12/14/2015 3:46 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Ca   Analysis Run 12/14/2015 3:46 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH8W

- ■ NH8W background
- ◆ NH8W compliance
- ● CUSUM

h = 120

SCL = 116.1

Background Data Summary: Mean=81.02, Std. Dev.=7.805, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9776, critical = 0.936. Report alpha = 0.000034. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
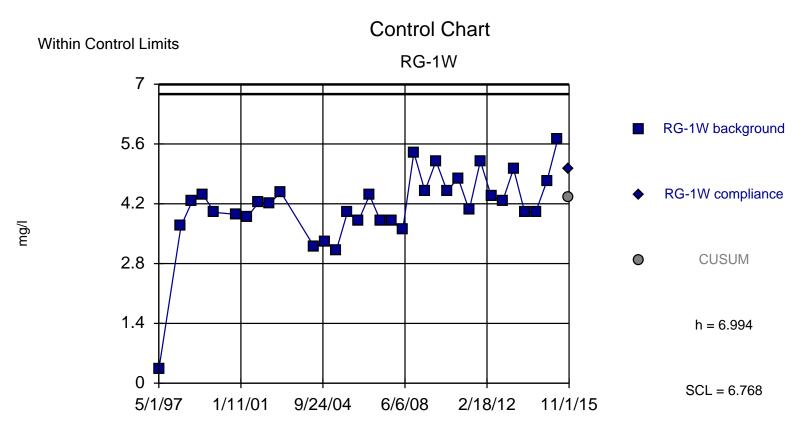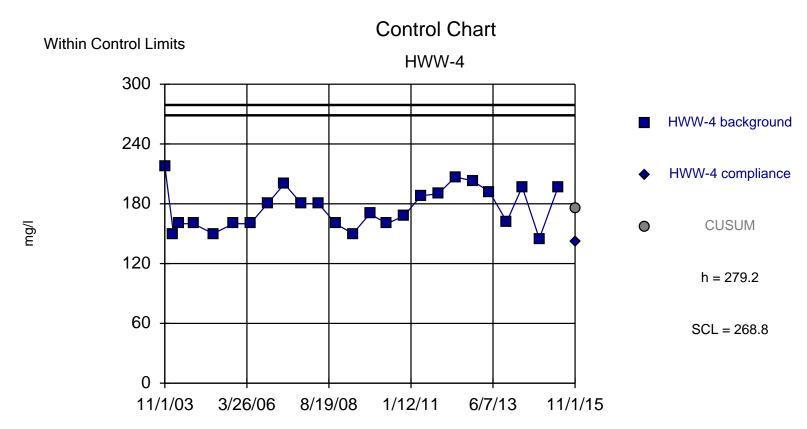
Constituent: Ca   Analysis Run 12/14/2015 3:46 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

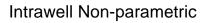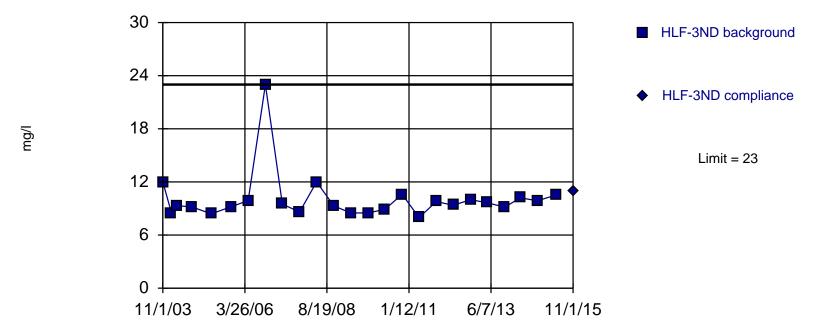### RG-1W

Within Control Limits

Background Data Summary (based on natural log transformation): Mean=5.735, Std. Dev.=0.1519, n=33. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9358, critical = 0.931. Report alpha = 0.000036. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Ca   Analysis Run 12/14/2015 3:46 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HWW-4

Background Data Summary: Mean=343.9, Std. Dev.=60.85, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9473, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-3ND

Within Control Limits

mg/l

- ■ HLF-3ND background
- ◆ HLF-3ND compliance
- ○ CUSUM

h = 2290

SCL = 2202

Background Data Summary: Mean=1408, Std. Dev.=176.4, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9537, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

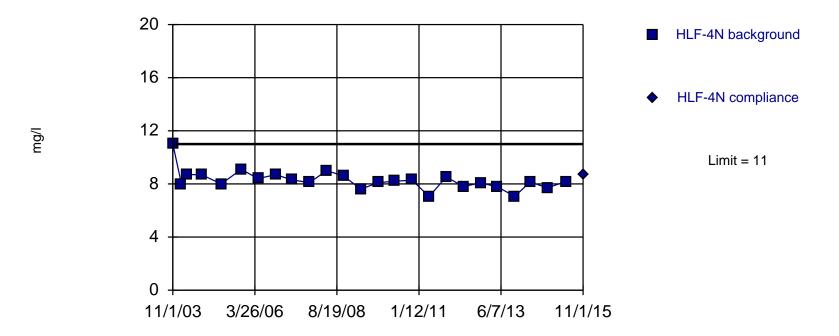Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-4N

- ■ HLF-4N background
- ◆ HLF-4N compliance
- ● CUSUM

h = 728.5

SCL = 697.4

Background Data Summary: Mean=418, Std. Dev.=62.09, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9757, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

- HLF-6O background
- HLF-6O compliance

Limit = 3300

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
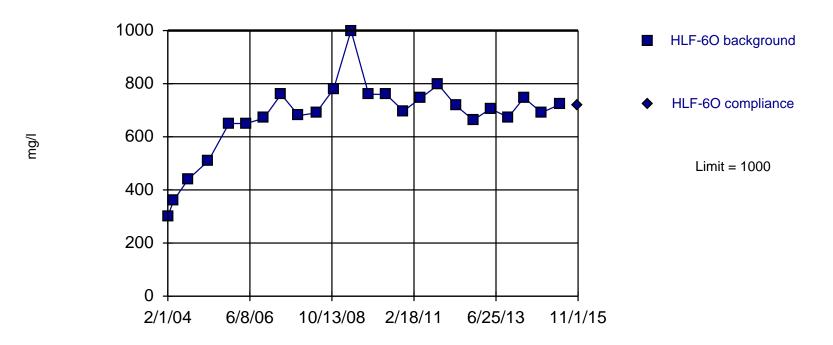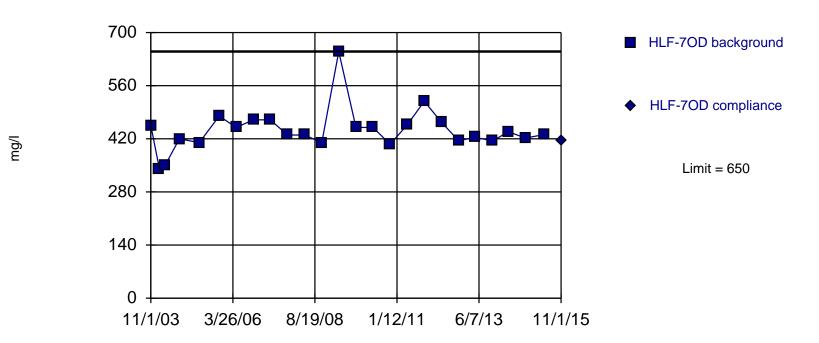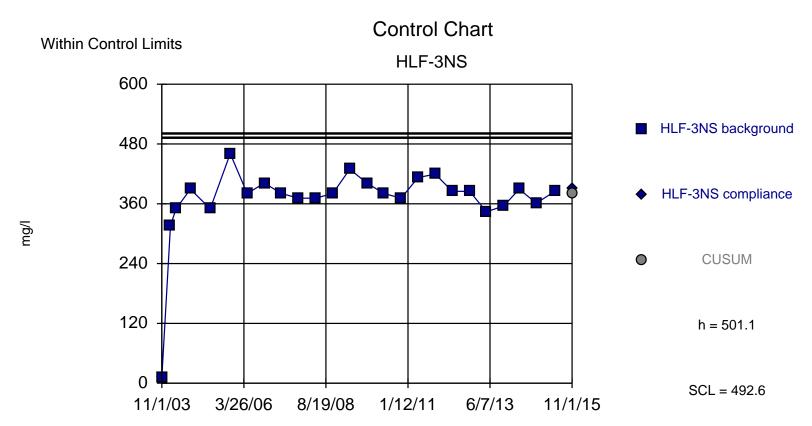
Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-7OD

Within Control Limits

mg/l

■ HLF-7OD background

◆ HLF-7OD compliance

● CUSUM

h = 2544

SCL = 2446

Background Data Summary: Mean=1561, Std. Dev.=196.5, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9711, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3NS background

◆ HLF-3NS compliance

Limit = 990

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
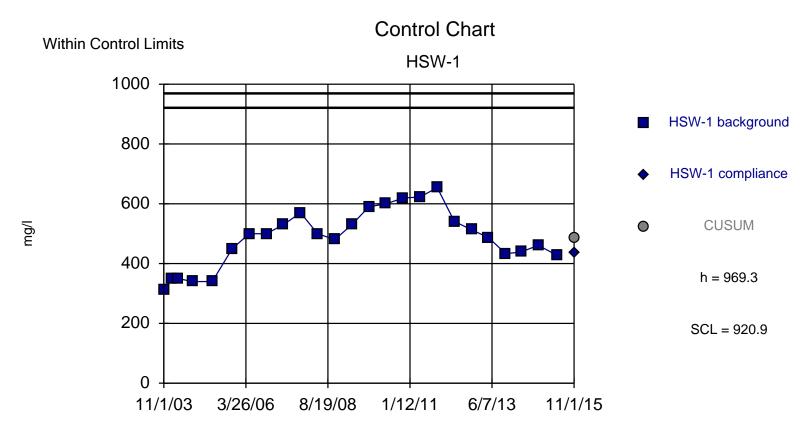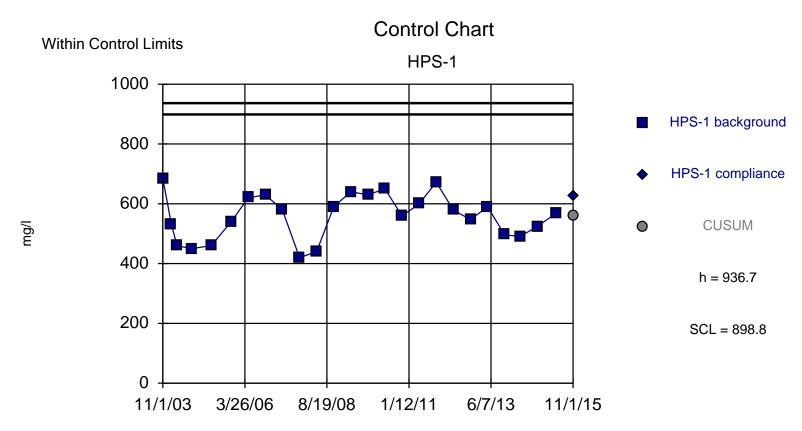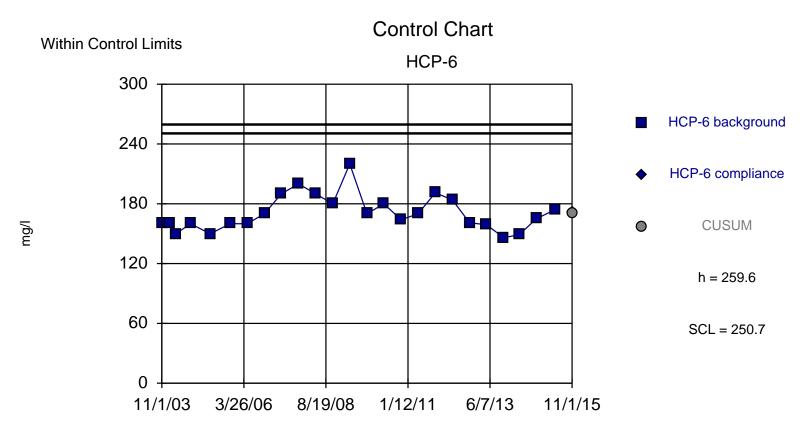
Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
Huntington2015

Control Chart

HSW-1

Within Control Limits

Legend:
- ■ HSW-1 background
- ◆ HSW-1 compliance
- ● CUSUM

h = 2531

SCL = 2355

Background Data Summary: Mean=768.7, Std. Dev.=352.5, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9402, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

Legend:
- ■ HPS-1 background
- ◆ HPS-1 compliance
- ● CUSUM

h = 1146

SCL = 1084

Background Data Summary: Mean=524.2, Std. Dev.=124.4, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9501, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
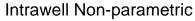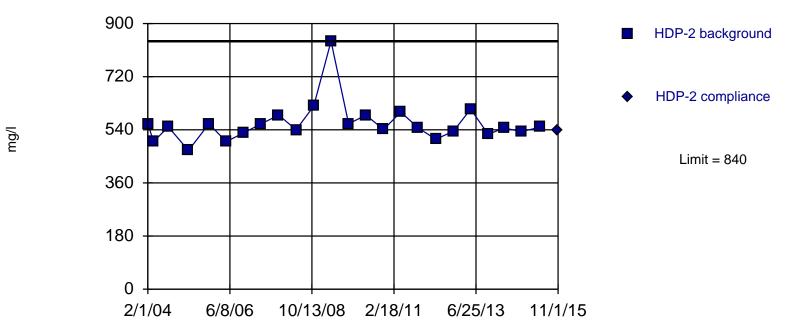
Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HCP-6

- ■ HCP-6 background
- ◆ HCP-6 compliance
- ● CUSUM

h = 1150

SCL = 1062

Background Data Summary (based on natural log transformation): Mean=6.25, Std. Dev.=0.1595, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9225, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
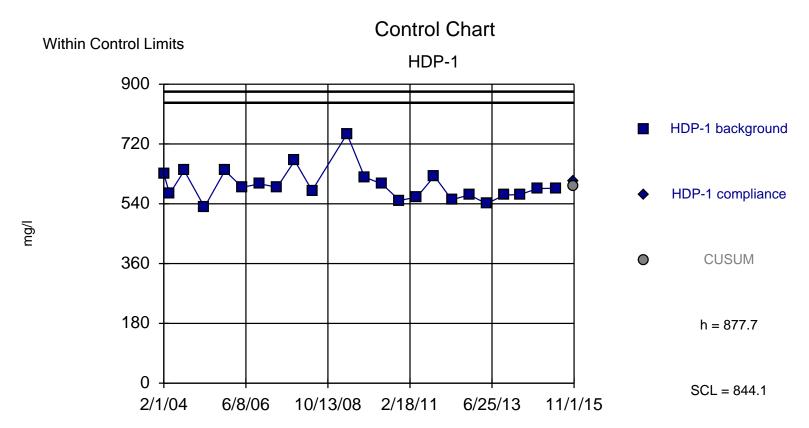
Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-2

mg/l

■ HDP-2 background

◆ HDP-2 compliance

● CUSUM

h = 5382

SCL = 5140

Background Data Summary: Mean=2959, Std. Dev.=484.6, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9358, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
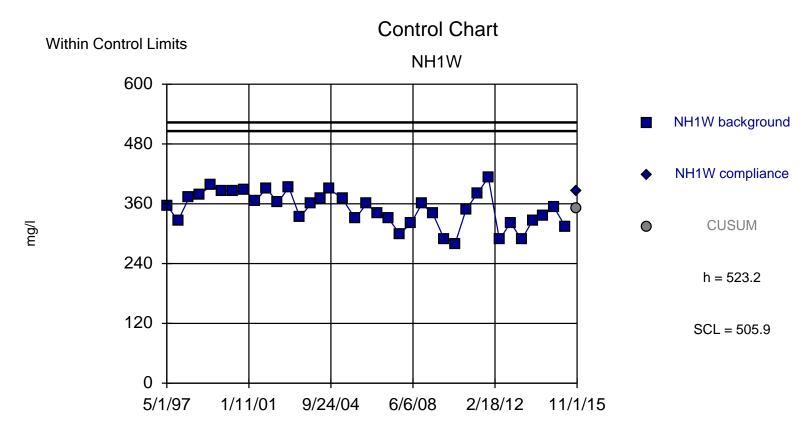
Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-1

mg/l

■ HDP-1 background
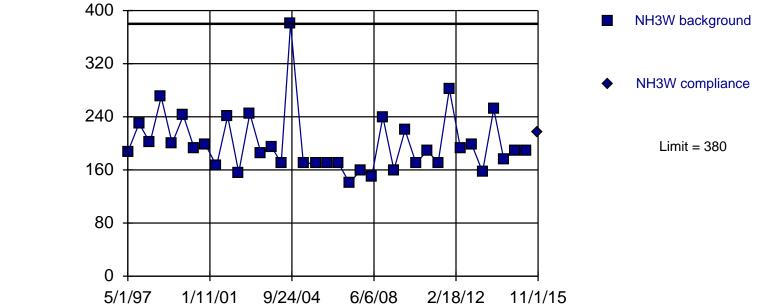
◆ HDP-1 compliance

● CUSUM

h = 5208

SCL = 4905

Background Data Summary (based on square root transformation): Mean=50.84, Std. Dev.=4.265, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9263, critical = 0.914. Report alpha = 0.000086. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH1W

Within Control Limits

Background Data Summary (based on square root transformation): Mean=25.51, Std. Dev.=2.188, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9515, critical = 0.936. Report alpha = 0.000026. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit
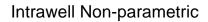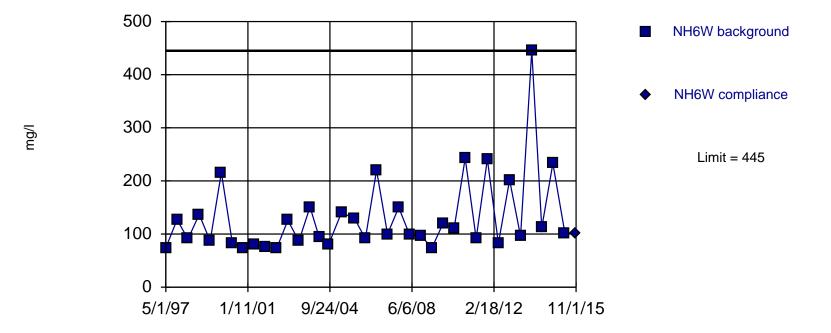
Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
NH6W

Within Control Limits

■ NH6W background

◆ NH6W compliance

● CUSUM

h = 2056

SCL = 1457

Background Data Summary (based on natural log transformation): Mean=4.187, Std. Dev.=0.6882, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9605, critical = 0.936. Report alpha = 0.000026. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015
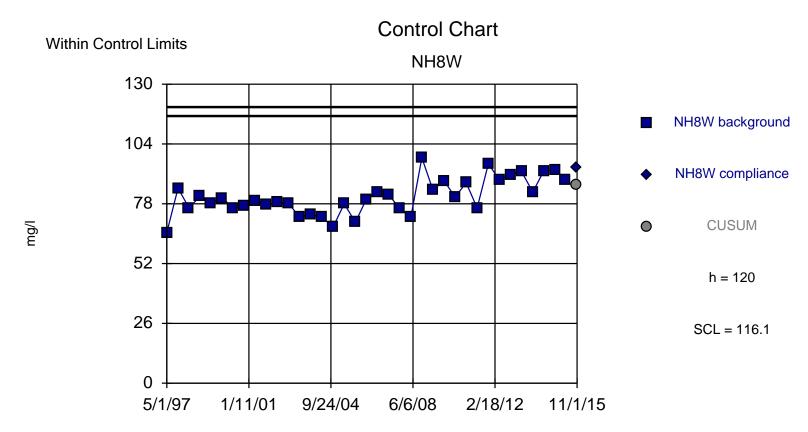
Within Limit

Prediction Limit

Intrawell Non-parametric

■ NH8W background
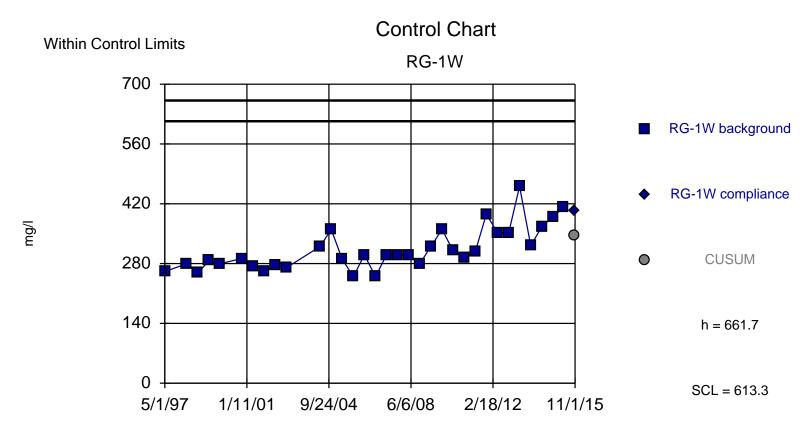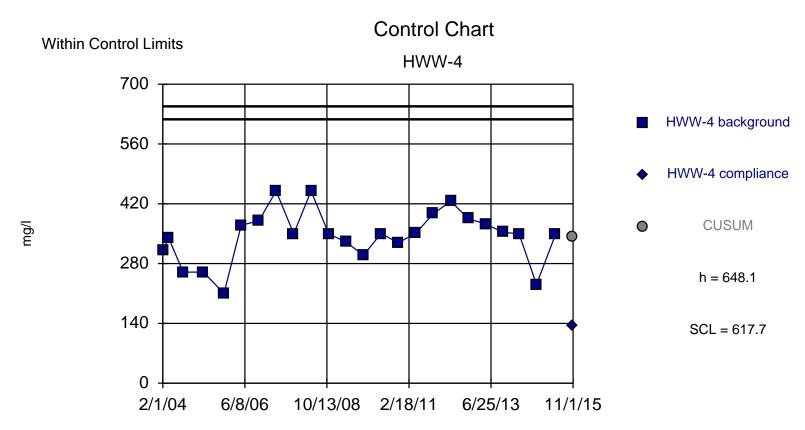
◆ NH8W compliance

Limit = 69.4

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
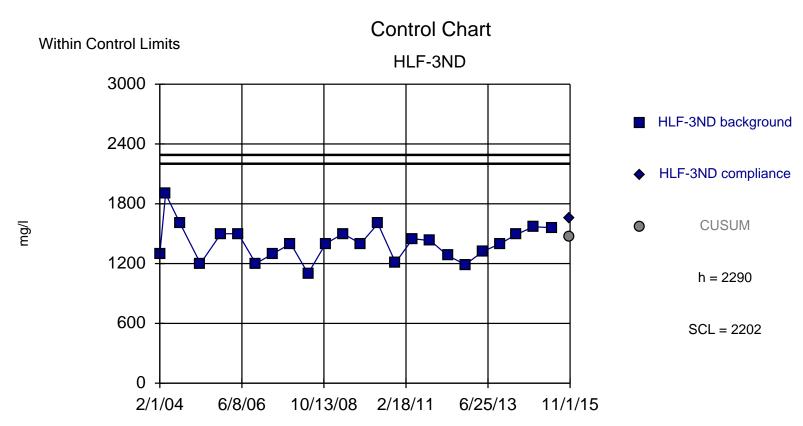
Constituent: Cl   Analysis Run 12/14/2015 3:47 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 33 background values. Report alpha = 0.02941. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cl   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HWW-4

- ■ HWW-4 background
- ◆ HWW-4 compliance
- ● CUSUM

h = 3600

SCL = 3476

Background Data Summary: Mean=2358, Std. Dev.=248.4, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9608, critical = 0.918. Report alpha = 0.000094. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
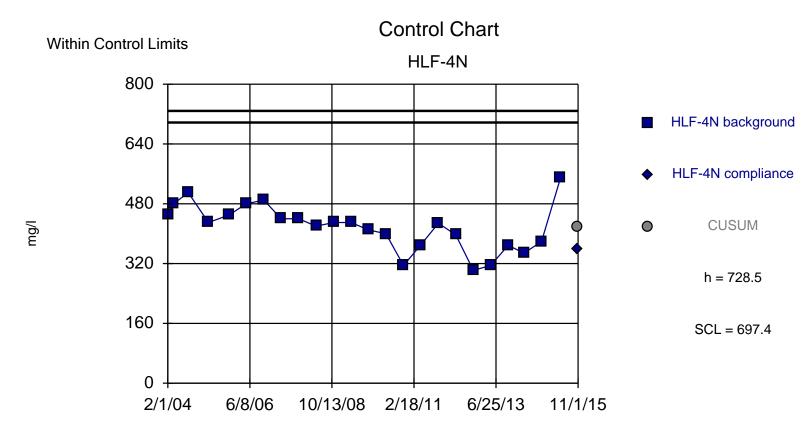
Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-3ND

Within Control Limits

■ HLF-3ND background

◆ HLF-3ND compliance

⬤ CUSUM

h = 9079

SCL = 8901

Background Data Summary (based on cube transformation): Mean=3.2e11, Std. Dev.=8.6e10, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9295, critical = 0.918. Report alpha = 0.000094. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
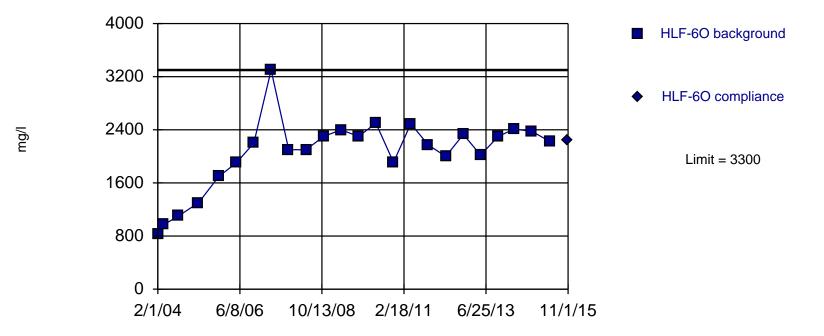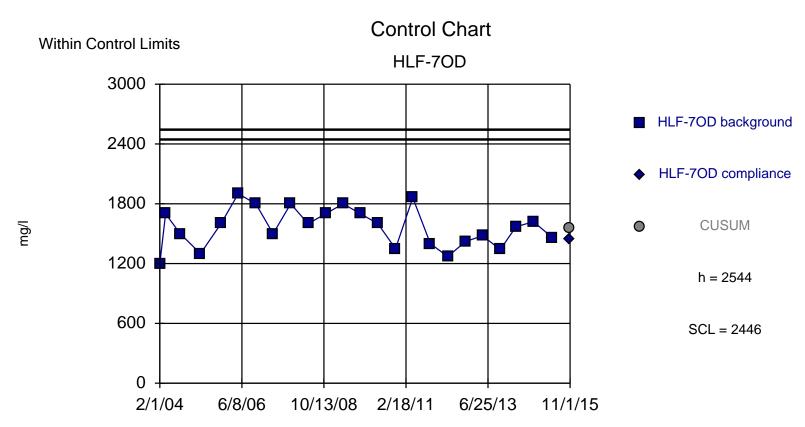
Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

- ■ HLF-6O background
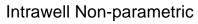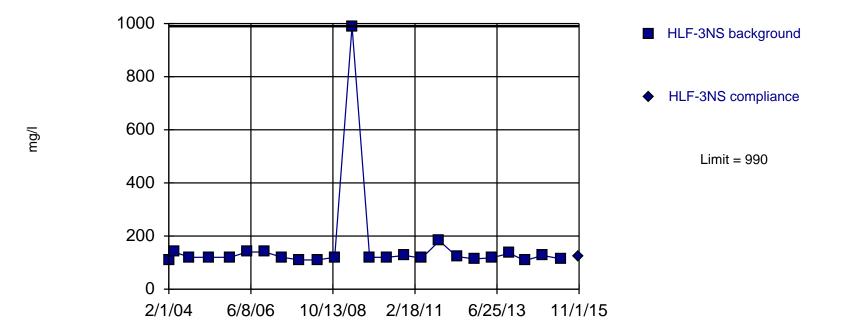- ◆ HLF-6O compliance

Limit = 15900

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
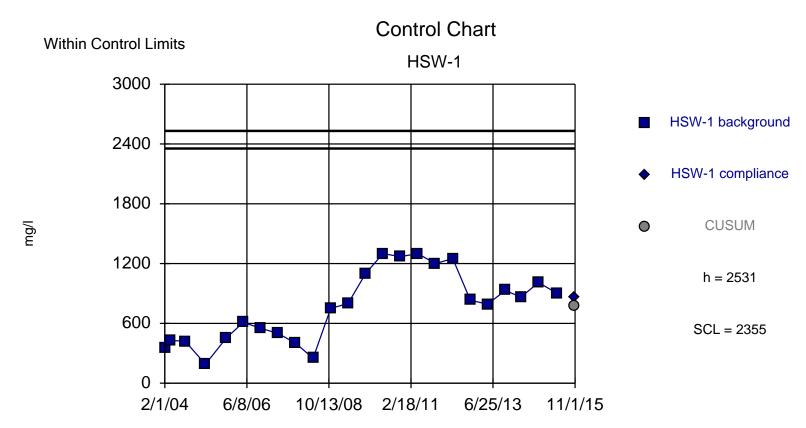
Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-7OD

Within Control Limits

umhos/cm (y-axis)

y-axis values: 22000, 17600, 13200, 8800, 4400, 0

x-axis values: 11/1/03, 3/26/06, 8/19/08, 1/12/11, 6/7/13, 11/1/15

Legend:
- ■ HLF-7OD background
- ◆ HLF-7OD compliance
- ● CUSUM

h = 21694

SCL = 21472

Background Data Summary (based on x^6 transformation): Mean=4.2e25, Std. Dev.=1.2e25, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9197, critical = 0.918. Report alpha = 0.000094. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

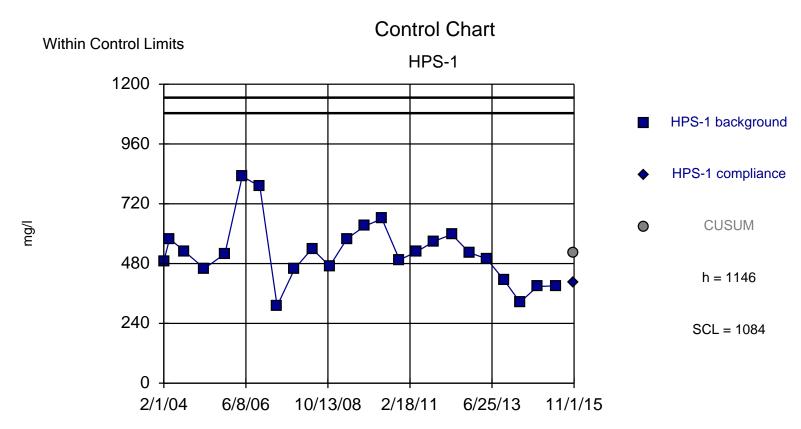■ HLF-3NS background
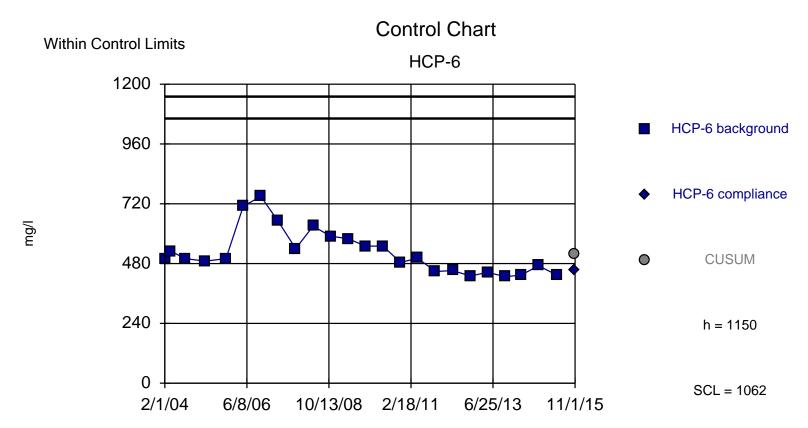
◆ HLF-3NS compliance

Limit = 6090

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
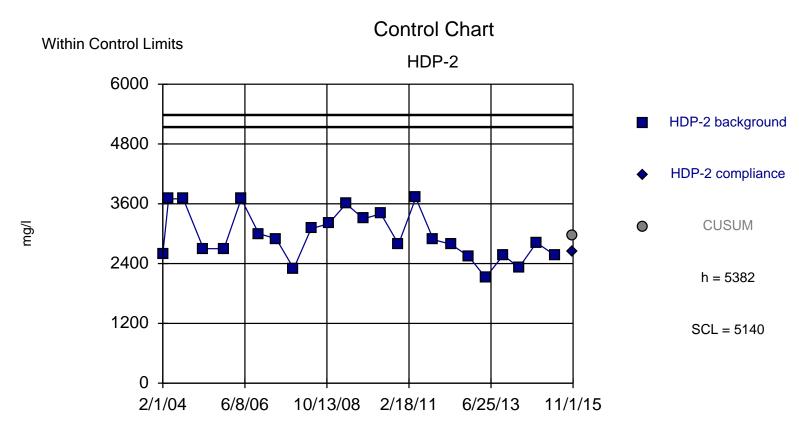
Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HSW-1

Within Control Limits

Legend:
- ■ HSW-1 background
- ◆ HSW-1 compliance
- ● CUSUM

h = 9982

SCL = 9503

y-axis: umhos/cm
x-axis dates: 11/1/03, 3/26/06, 8/19/08, 1/12/11, 6/7/13, 11/1/15
y-axis values: 0, 2000, 4000, 6000, 8000, 10000

Background Data Summary: Mean=5194, Std. Dev.=957.6, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9503, critical = 0.918. Report alpha = 0.000094. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
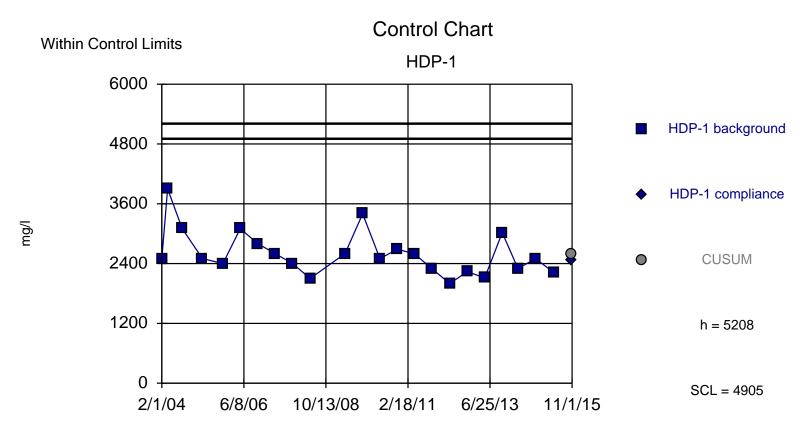
Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

■ HPS-1 background

◆ HPS-1 compliance

● CUSUM

h = 7661

SCL = 7401

Background Data Summary: Mean=5066, Std. Dev.=519, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9459, critical = 0.918. Report alpha = 0.000094. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
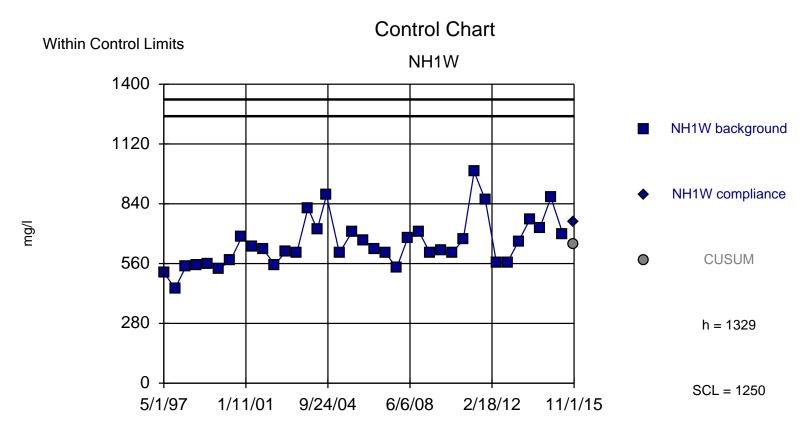
Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HCP-6

Background Data Summary (based on square transformation): Mean=9544340, Std. Dev.=1419901, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9413, critical = 0.918. Report alpha = 0.000094. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
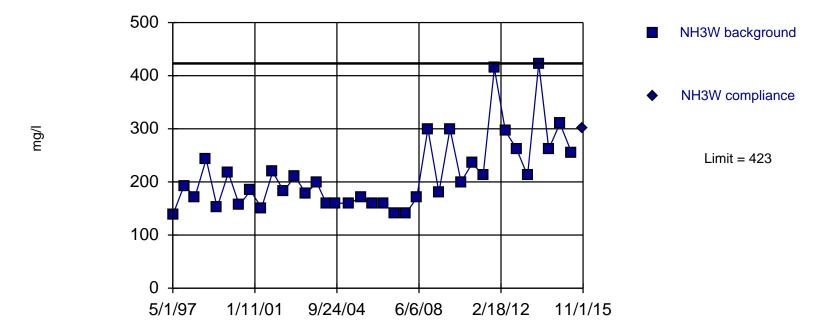
Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HDP-2 background

◆ HDP-2 compliance

Limit = 18000

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

■ HDP-1 background

◆ HDP-1 compliance

⬤ CUSUM

h = 21442

SCL = 20442

Background Data Summary (based on square root transformation): Mean=111.9, Std. Dev.=6.912, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9206, critical = 0.914. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
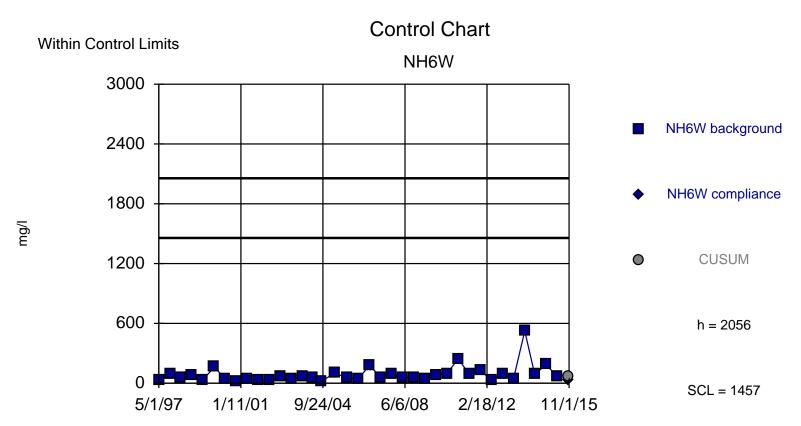
Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH1W

Legend:
- ■ NH1W background
- ◆ NH1W compliance
- ● CUSUM

h = 7200

SCL = 6962

y-axis: umhos/cm

x-axis values: 5/1/97, 1/11/01, 9/24/04, 6/6/08, 2/18/12, 11/1/15

Background Data Summary: Mean=4820, Std. Dev.=475.9, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9731, critical = 0.936. Report alpha = 0.00004. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
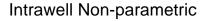
Constituent: COND   Analysis Run 12/14/2015 3:48 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015

Control Chart
NH3W

Within Control Limits

umhos/cm

- ■ NH3W background
- ◆ NH3W compliance
- ● CUSUM

h = 4501

SCL = 4224

5000 — 4000 — 3000 — 2000 — 1000 — 0
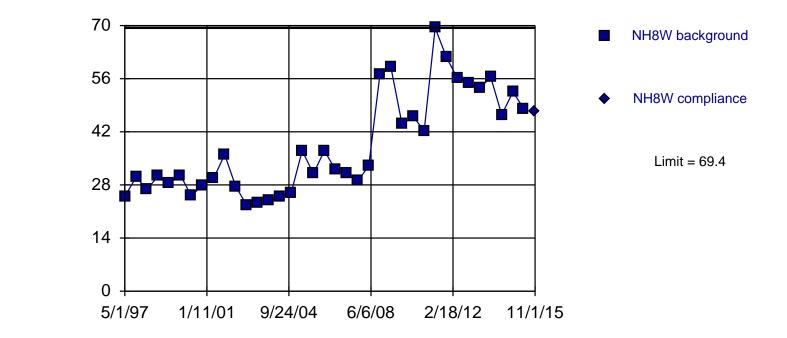
5/1/97   1/11/01   9/24/04   6/6/08   2/18/12   11/1/15

Background Data Summary (based on square root transformation): Mean=46.12, Std. Dev.=4.194, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9372, critical = 0.936. Report alpha = 0.00004. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
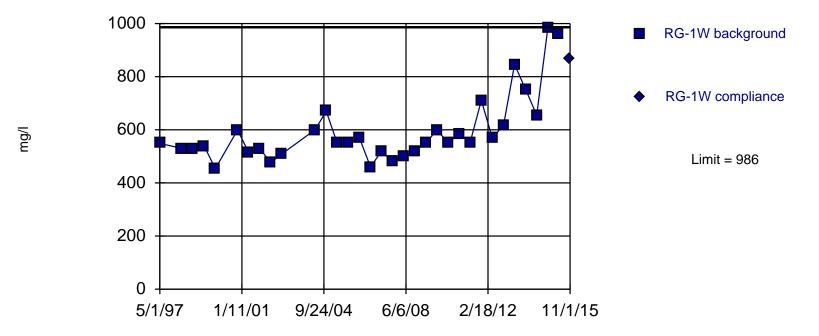
Constituent: COND   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

- NH6W background
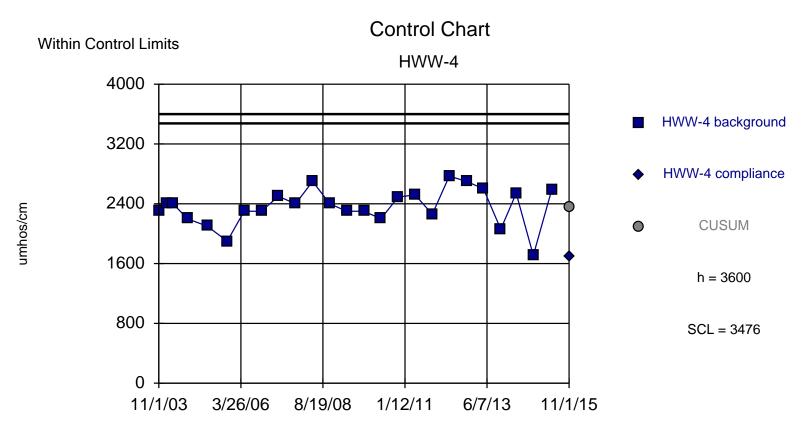- NH6W compliance

Limit = 3860

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: COND   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
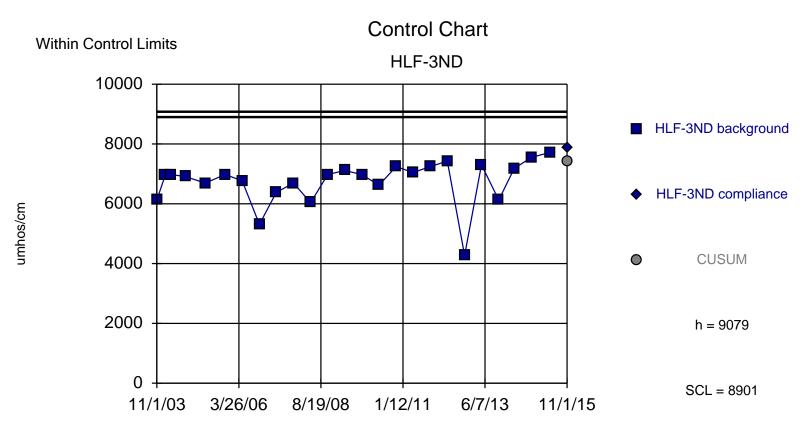
Constituent: COND   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Legend:
■ RG-1W background
◆ RG-1W compliance

Limit = 7320

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 33 background values. Report alpha = 0.02941. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
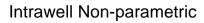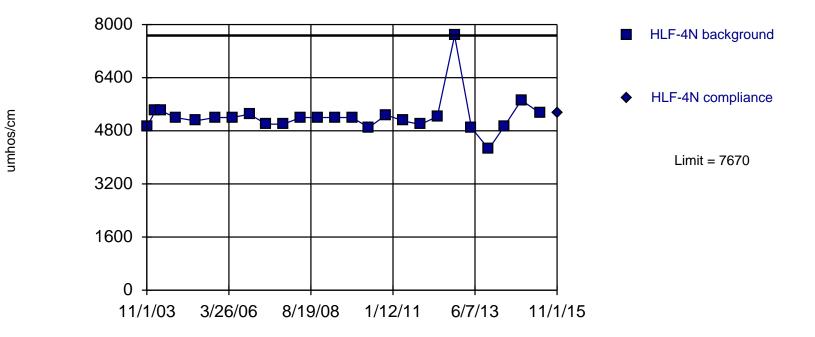
Constituent: COND   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HWW-4

Background Data Summary: Mean=0.2333, Std. Dev.=0.0439, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9566, critical = 0.916. Report alpha = 0.00012. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
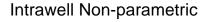
Constituent: F   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3ND

■ HLF-3ND background

◆ HLF-3ND compliance

⬤ CUSUM

h = 4.989

SCL = 4.819

Background Data Summary: Mean=3.291, Std. Dev.=0.3397, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9534, critical = 0.918. Report alpha = 0.00011. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: F   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit
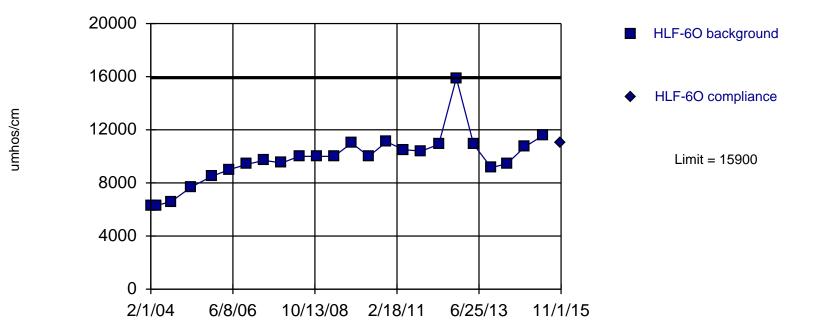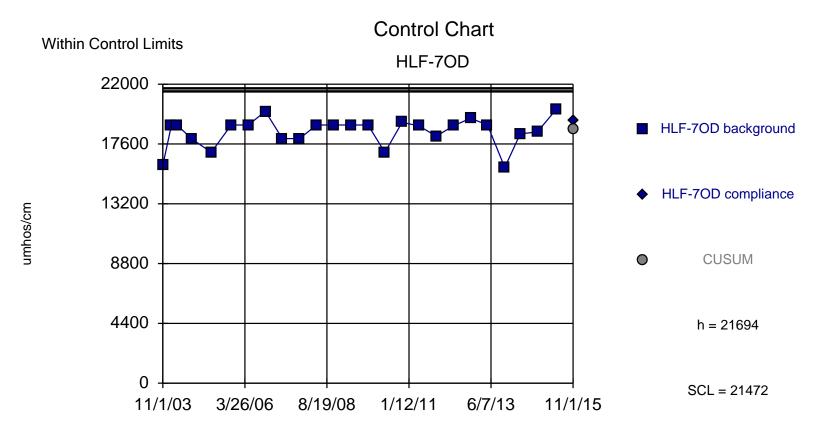
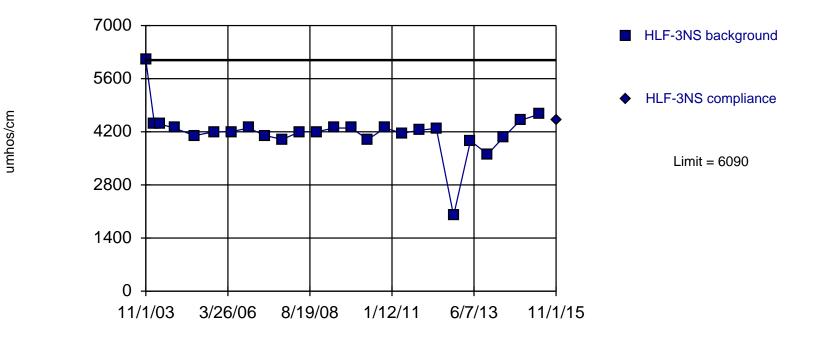# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: F   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 21 background values. Report alpha = 0.04545. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
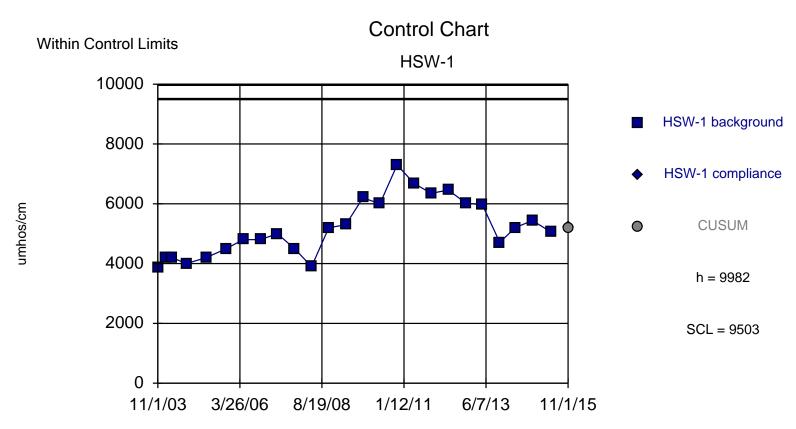
Constituent: F   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Prediction Limit
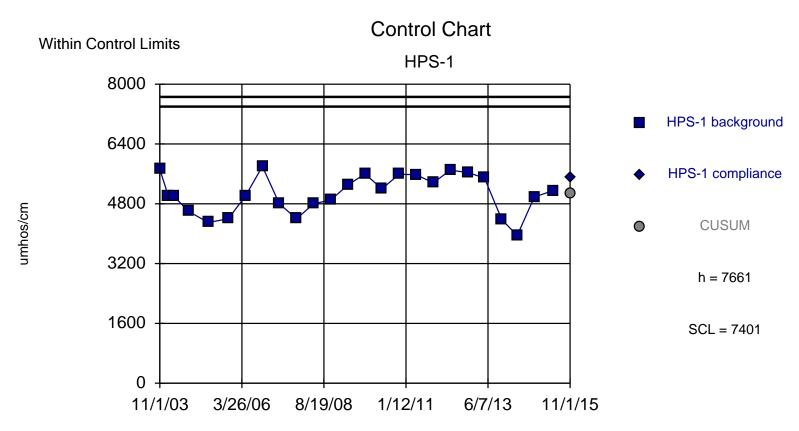
Intrawell Non-parametric, HLF-7OD

■ HLF-7OD background

Limit = 1.98

mg/l

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 23 background values. Report alpha = 0.04167. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: F   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3NS background

◆ HLF-3NS compliance

Limit = 4.18

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 23 background values. Report alpha = 0.04167. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: F   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

Legend:
- ■ HSW-1 background
- ◆ HSW-1 compliance
- ● CUSUM

h = 0.6069

SCL = 0.5734

Background Data Summary: Mean=0.2722, Std. Dev.=0.06694, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.927, critical = 0.914. Report alpha = 0.00016. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
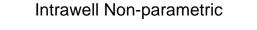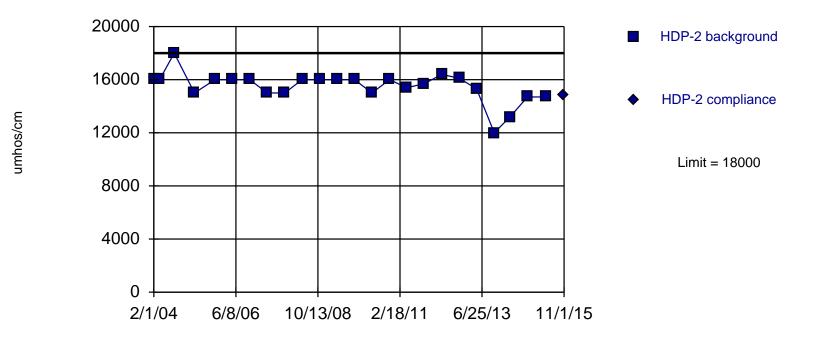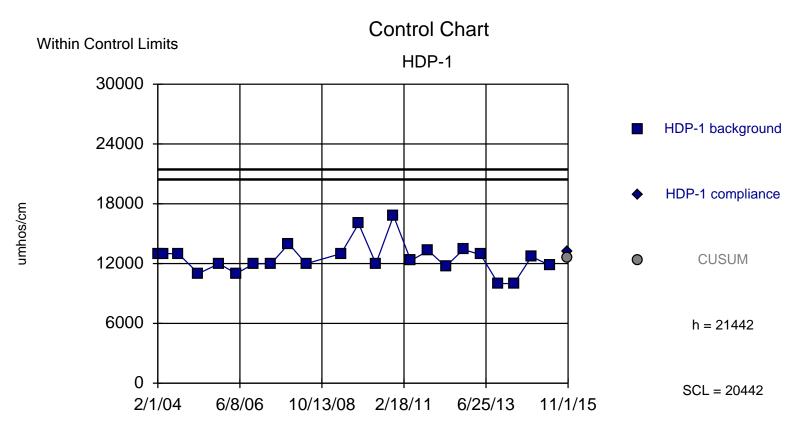
Constituent: F   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HPS-1

■ HPS-1 background

h = 0.6206

SCL = 0.5663

Background Data Summary (based on square root transformation): Mean=0.4351, Std. Dev.=0.07053, n=22.
Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05,
calculated = 0.9117, critical = 0.911. Report alpha = 0. Dates ending 10/15/2014 used for control stats.
Unstandardized h=5, SCL=4.5.

Constituent: F   Analysis Run 12/14/2015 3:49 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HCP-6 background
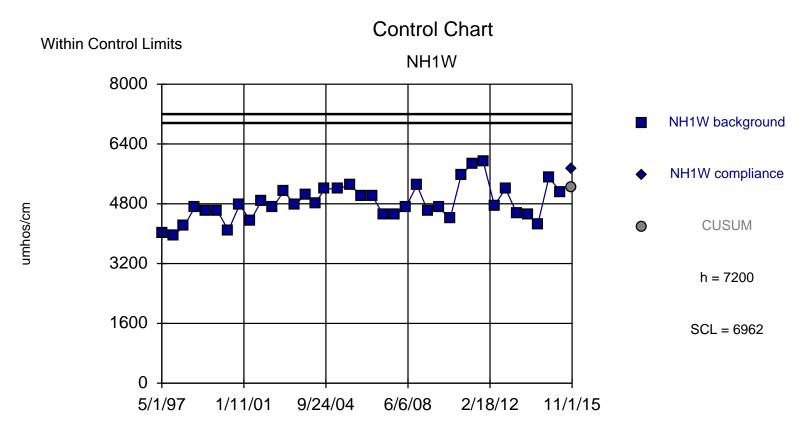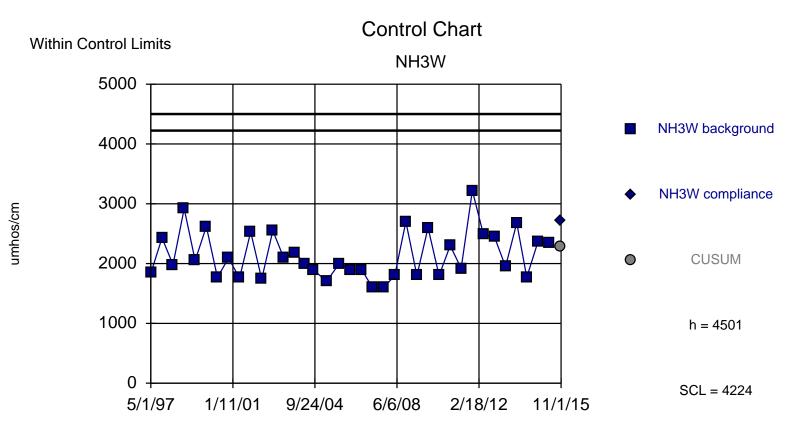
◆ HCP-6 compliance

Limit = 0.34

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: F   Analysis Run 12/14/2015 3:50 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 22 background values. Report alpha = 0.04348. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: F   Analysis Run 12/14/2015 3:50 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HDP-1 background

◆ HDP-1 compliance

Limit = 1.37

Non-parametric test used in lieu of control chart 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. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: F   Analysis Run 12/14/2015 3:50 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH1W

Background Data Summary: Mean=0.2369, Std. Dev.=0.03467, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.95, critical = 0.887. Report alpha = 0. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
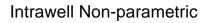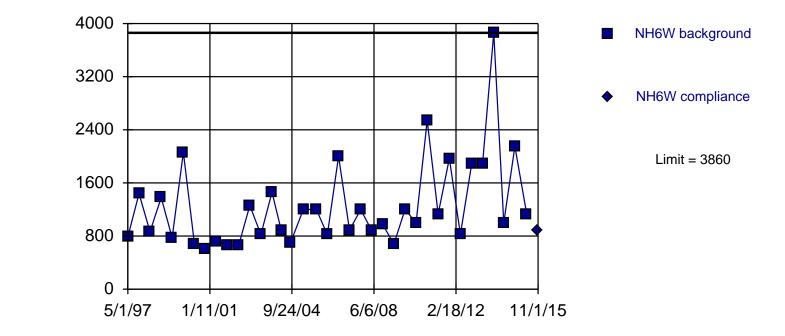
Constituent: F   Analysis Run 12/14/2015 3:50 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH3W

Within Control Limits

- ■ NH3W background
- ◆ NH3W compliance
- ● CUSUM

h = 0.5175

SCL = 0.476

Background Data Summary (based on cube root transformation): Mean=0.5823, Std. Dev.=0.04411, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.897, critical = 0.892. Report alpha = 0.000216. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
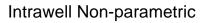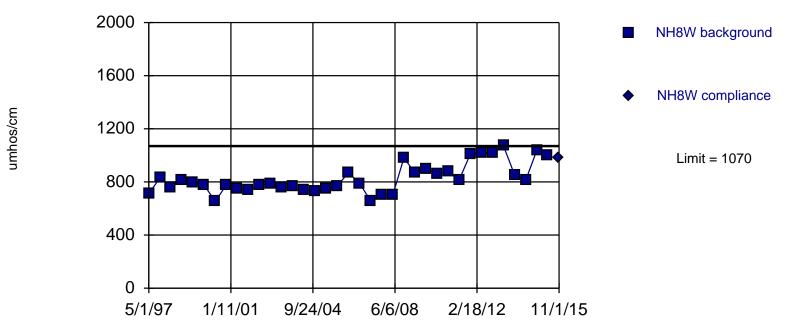
Constituent: F   Analysis Run 12/14/2015 3:50 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH6W

Within Control Limits

Legend:
- ■ NH6W background
- ◆ NH6W compliance
- ● CUSUM

h = 0.7977

SCL = 0.7673

mg/l

x-axis: 5/1/07   1/11/09   9/24/10   6/6/12   2/17/14   11/1/15

Background Data Summary (based on square transformation): Mean=0.1598, Std. Dev.=0.0953, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.914, critical = 0.887. Report alpha = 0.000284. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: F   Analysis Run 12/14/2015 3:50 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
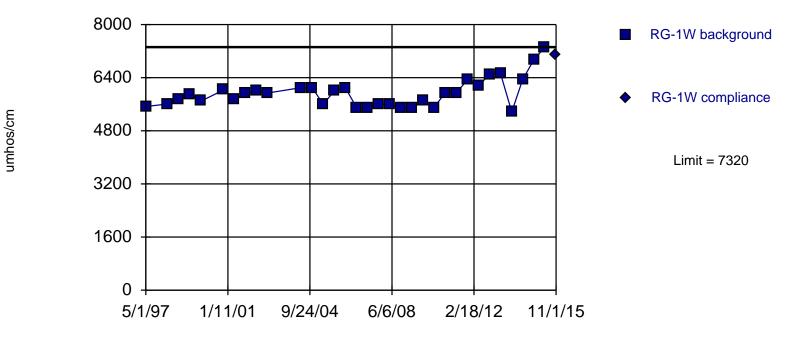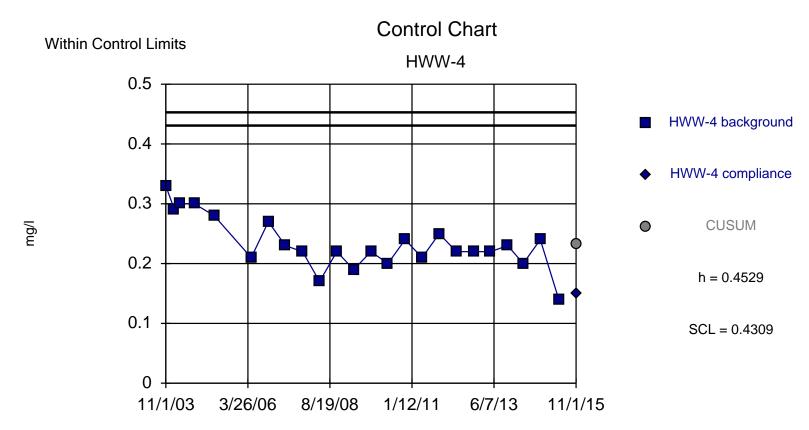
Huntington2015

Control Chart

NH8W

Within Control Limits

Legend:
- ■ NH8W background
- ◆ NH8W compliance
- ● CUSUM

h = 0.4053

SCL = 0.3793

Background Data Summary (based on square root transformation): Mean=0.4295, Std. Dev.=0.04141, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.895, critical = 0.892. Report alpha = 0.000252. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: F   Analysis Run 12/14/2015 3:50 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

RG-1W

Legend: ■ RG-1W background
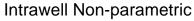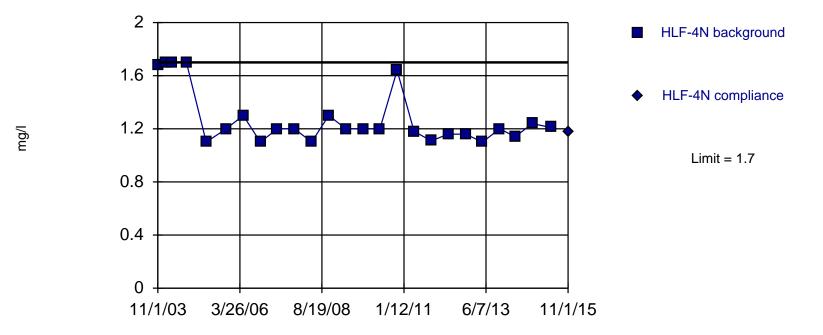
h = 0.5038

SCL = 0.485

Background Data Summary: Mean=0.3167, Std. Dev.=0.03741, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9533, critical = 0.887. Report alpha = 0. Dates ending 11/1/2014 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: F   Analysis Run 12/14/2015 3:50 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limits

Prediction Limit

Intrawell Non-parametric

■ HWW-4 background

◆ HWW-4 compliance

Limit = 8.14

Limit = 6.62

n/a

9

7.2

5.4

3.6

1.8

0

2/1/04   6/8/06   10/13/08   2/18/11   6/25/13   11/1/15

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 24 background values. Report alpha = 0.08. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: FieldpH   Analysis Run 12/14/2015 3:50 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
Huntington2015

Control Chart

Within Control Limits

HLF-3ND

- ■ HLF-3ND background
- ◆ HLF-3ND compliance
- ○ CUSUM
- ○ Low CUSUM

h = 9.637

SCL = 9.475

h = 6.404

SCL = 6.566

Background Data Summary: Mean=8.02, Std. Dev.=0.3233, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9382, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
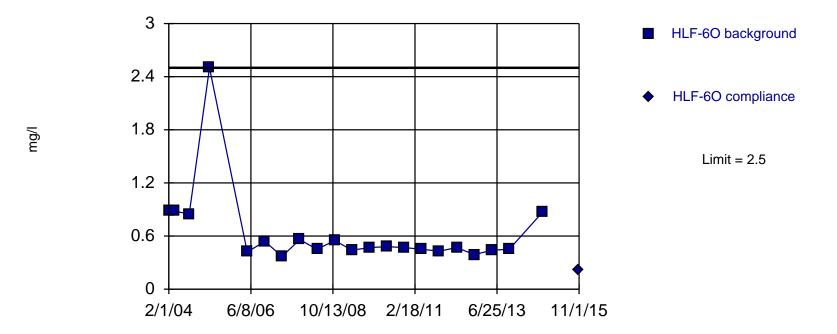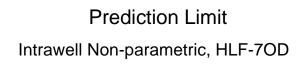
Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-4N

Legend:
- ■ HLF-4N background
- ◆ HLF-4N compliance
- ○ CUSUM
- ○ Low CUSUM

h = 10.06

SCL = 9.885

h = 6.557

SCL = 6.732

Background Data Summary: Mean=8.308, Std. Dev.=0.3503, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9264, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-6O

Legend:
- ■ HLF-6O background
- ◆ HLF-6O compliance
- ⚫ CUSUM
- ⚫ Low CUSUM

h = 7.975

SCL = 7.869

h = 5.852

SCL = 5.959

Background Data Summary: Mean=6.914, Std. Dev.=0.2123, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9314, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-7OD

Legend:
- ■ HLF-7OD background
- ◆ HLF-7OD compliance
- ○ CUSUM
- ○ Low CUSUM

h = 8.169

SCL = 8.051

h = 5.813

SCL = 5.931

Background Data Summary: Mean=6.991, Std. Dev.=0.2356, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9531, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3NS

n/a

- ■ HLF-3NS background
- ◆ HLF-3NS compliance
- ○ CUSUM
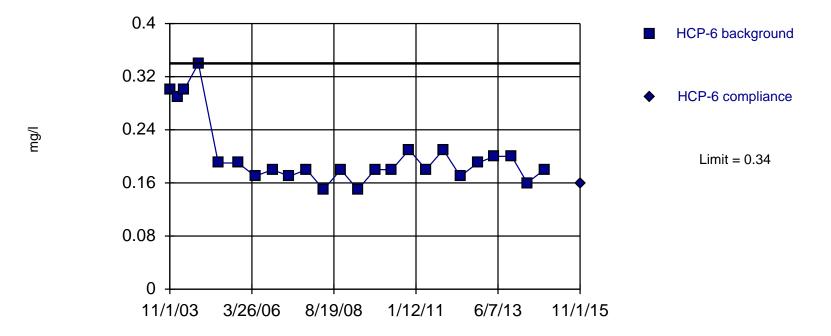- ○ Low CUSUM

h = 8.476

SCL = 8.325

h = 5.452

SCL = 5.603

Background Data Summary: Mean=6.964, Std. Dev.=0.3024, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9509, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

■ HSW-1 background

◆ HSW-1 compliance

⬤ CUSUM

⬤ Low CUSUM

h = 8.146

SCL = 8.041

h = 5.072

SCL = 5.325

Background Data Summary (based on cube transformation): Mean=335.5, Std. Dev.=41, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9172, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
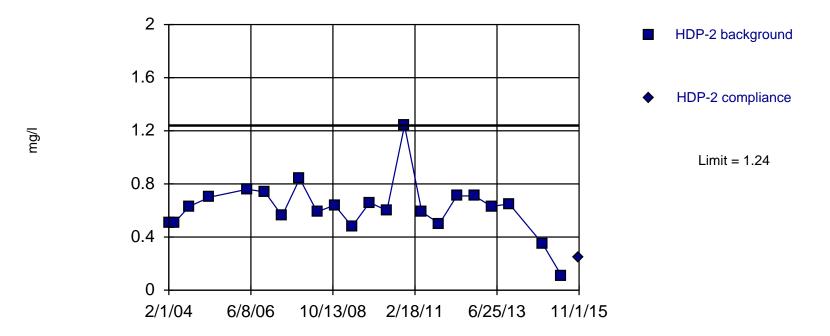
Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

Legend:
- ■ HPS-1 background
- ◆ HPS-1 compliance
- ● CUSUM
- ● Low CUSUM

h = 7.986

SCL = 7.855

h = 5.359

SCL = 5.49

Background Data Summary: Mean=6.673, Std. Dev.=0.2627, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9503, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HCP-6

■ HCP-6 background

◆ HCP-6 compliance

○ CUSUM

○ Low CUSUM

h = 8.309

SCL = 8.181

h = 5.755

SCL = 5.882

Background Data Summary: Mean=7.032, Std. Dev.=0.2554, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9232, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-2

Legend:
- ■ HDP-2 background
- ◆ HDP-2 compliance
- ○ CUSUM
- ○ Low CUSUM

h = 8.451

SCL = 8.318

h = 5.791

SCL = 5.924

Background Data Summary: Mean=7.121, Std. Dev.=0.266, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9346, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limits

Prediction Limit

Intrawell Non-parametric

■ HDP-1 background

◆ HDP-1 compliance

Limit = 7.78

Limit = 6.71

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 23 background values. Report alpha = 0.08333. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
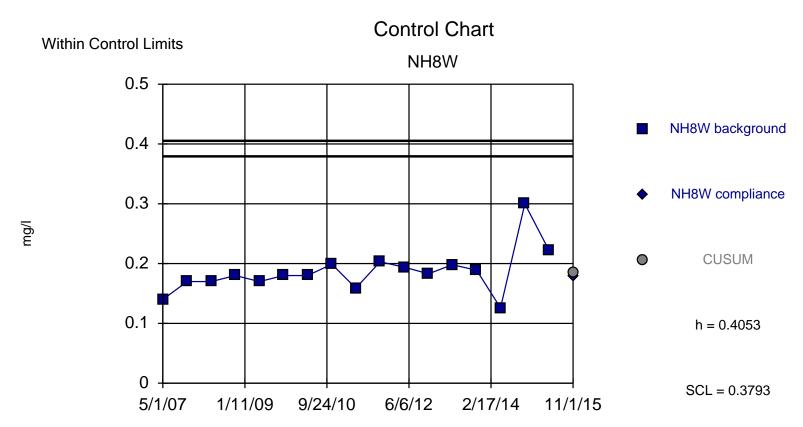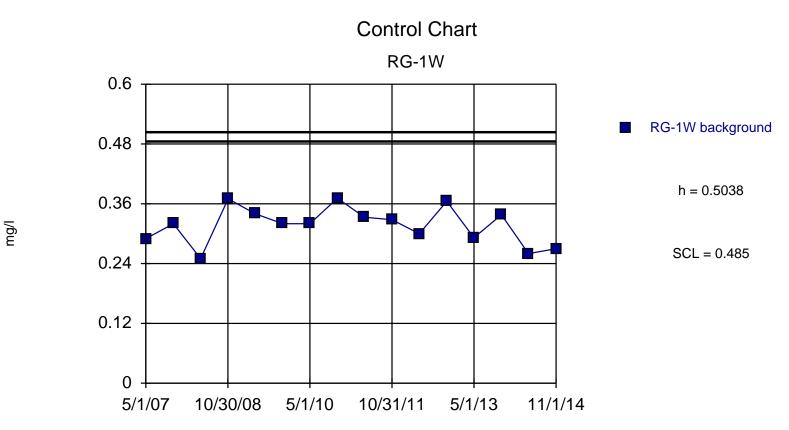
Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH1W

Legend:
- ■ NH1W background
- ◆ NH1W compliance
- ● CUSUM
- ● Low CUSUM

h = 7.949

SCL = 7.84

h = 5.771

SCL = 5.88

Background Data Summary: Mean=6.86, Std. Dev.=0.2179, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9329, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH3W

Background Data Summary: Mean=6.996, Std. Dev.=0.2115, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9781, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
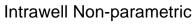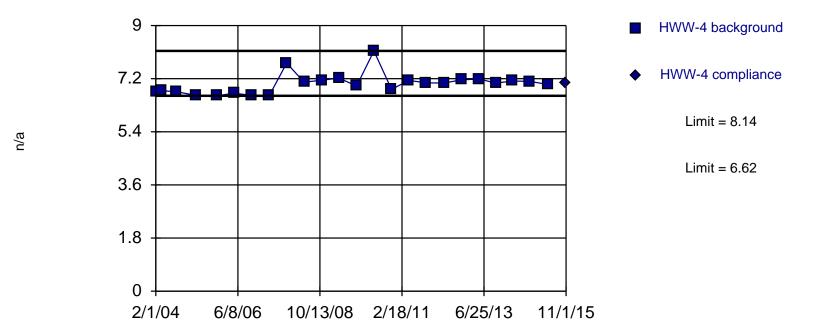
Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH6W

NH6W background

NH6W compliance

CUSUM

Low CUSUM

h = 8.371

SCL = 8.229

h = 5.534

SCL = 5.676

Background Data Summary: Mean=6.953, Std. Dev.=0.2838, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9594, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
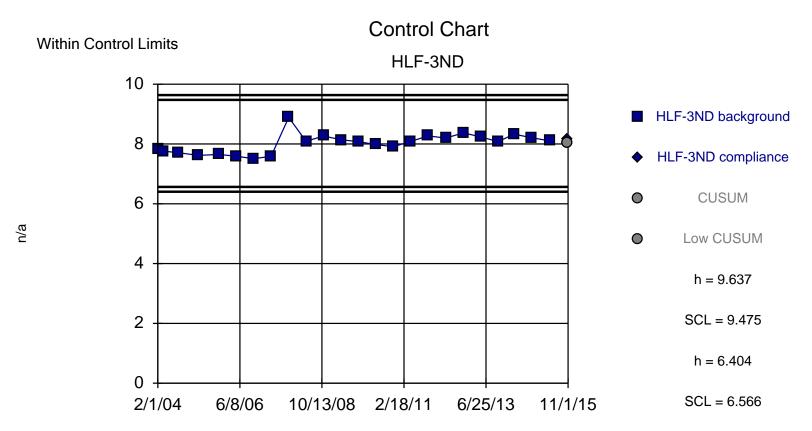
Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limits

Prediction Limit

Intrawell Non-parametric

■ NH8W background
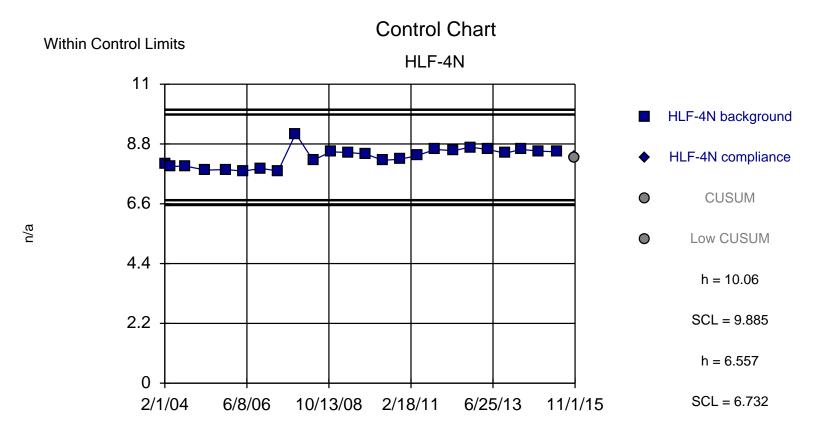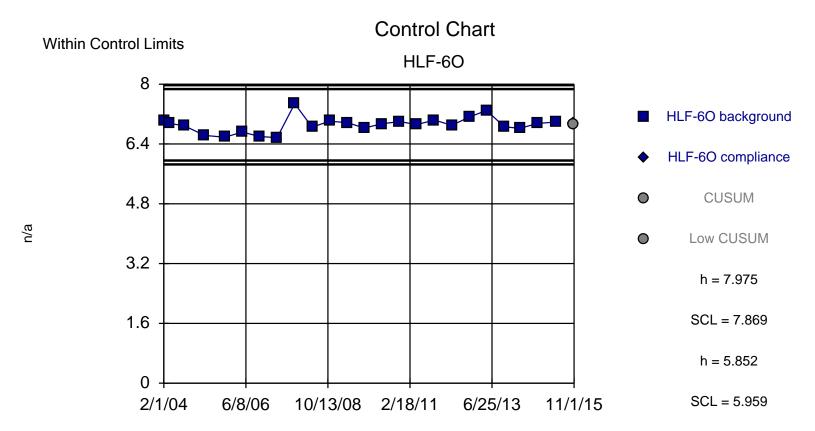
◆ NH8W compliance

Limit = 7.56

Limit = 6.69

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 24 background values. Report alpha = 0.08. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
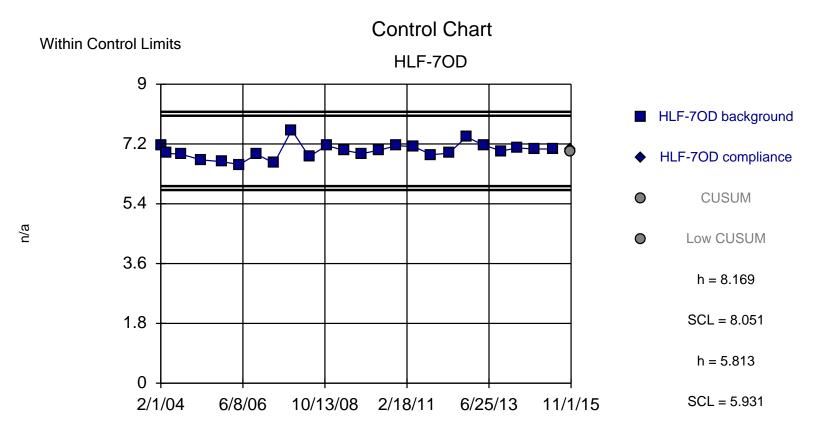
Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

RG-1W

Legend:
- ■ RG-1W background
- ◆ RG-1W compliance
- ○ CUSUM
- ○ Low CUSUM

h = 8.253

SCL = 8.137

h = 5.932

SCL = 6.048

Background Data Summary: Mean=7.093, Std. Dev.=0.2321, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9297, critical = 0.914. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: FieldpH   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HWW-4

- ■ HWW-4 background
- ◆ HWW-4 compliance
- ● CUSUM

h = 1254

SCL = 1213

Background Data Summary: Mean=848, Std. Dev.=81.15, n=22. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9475, critical = 0.911. Report alpha = 0.00014. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
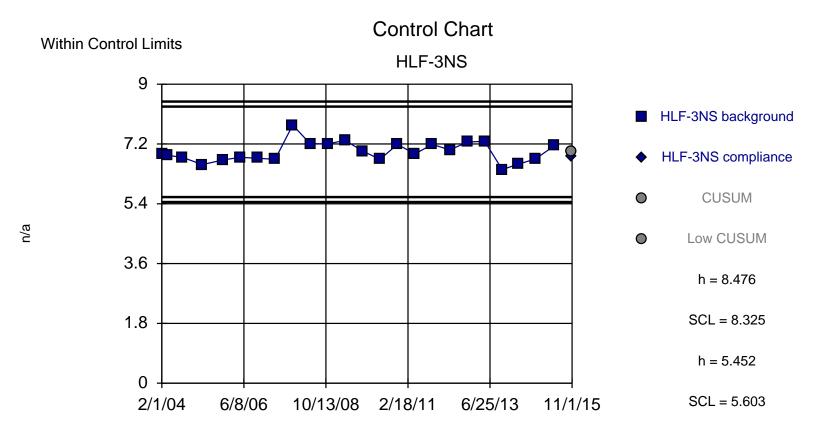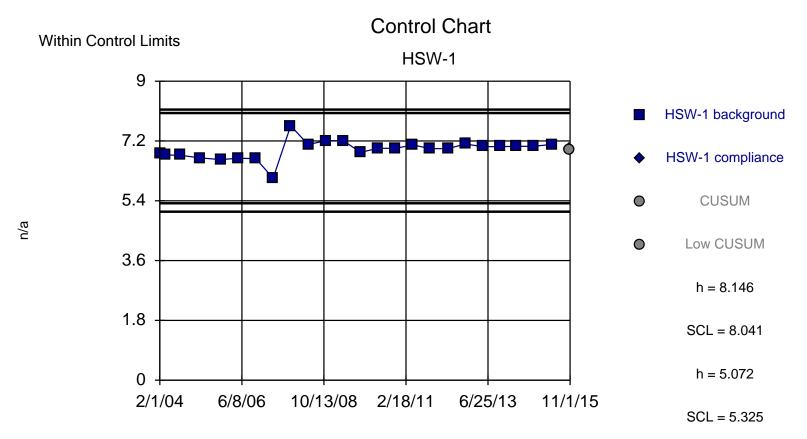
Constituent: Hardness   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3ND background

◆ HLF-3ND compliance

Limit = 60

n/a

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 22 background values. Report alpha = 0.04348. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Hardness   Analysis Run 12/14/2015 3:51 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HLF-4N

Within Control Limits

Legend:
- ■ HLF-4N background
- ◆ HLF-4N compliance
- ● CUSUM

h = 57.97

SCL = 56.19

Background Data Summary: Mean=40.26, Std. Dev.=3.542, n=21. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9341, critical = 0.908. Report alpha = 0.000148. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
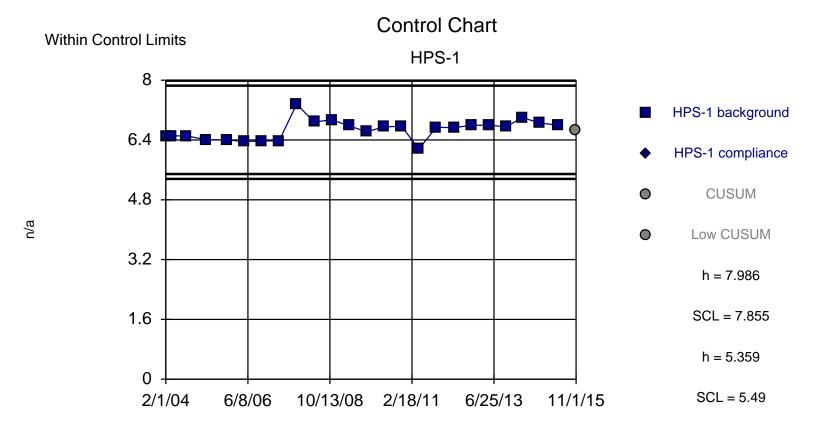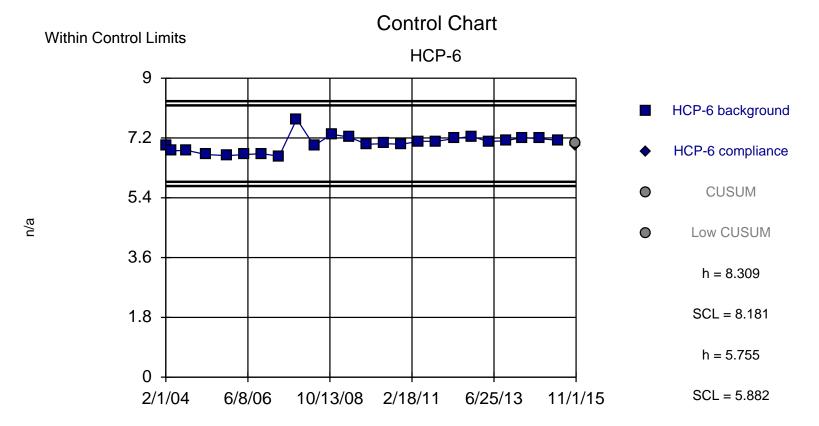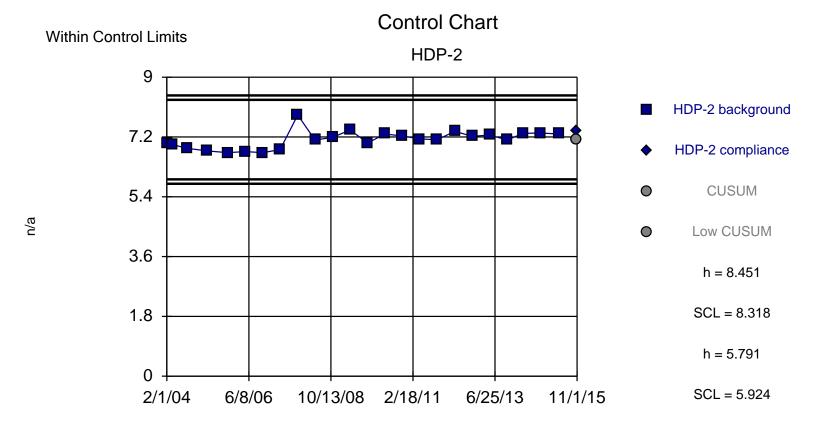
Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-6O background

◆ HLF-6O compliance

Limit = 6300

n/a

7000

5600

4200

2800

1400

0

2/1/04   6/8/06   10/13/08   2/18/11   6/25/13   11/1/15

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 22 background values. Report alpha = 0.04348. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-7OD background

◆ HLF-7OD compliance

Limit = 8600

n/a

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 22 background values. Report alpha = 0.04348. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3NS background

◆ HLF-3NS compliance

Limit = 3000

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 22 background values. Report alpha = 0.04348. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Exceeds Control Limits

HSW-1

- ■ HSW-1 background
- ◆ HSW-1 compliance
- ● CUSUM

h = 5363

SCL = 5099

Background Data Summary: Mean=2725, Std. Dev.=527.7, n=22. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9557, critical = 0.911. Report alpha = 0.000122. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
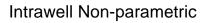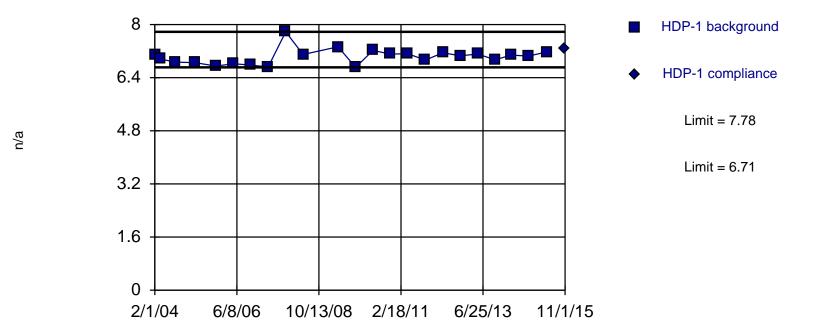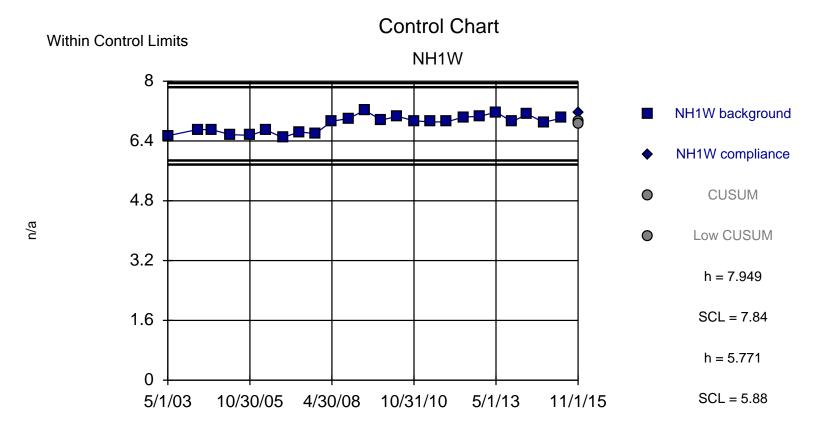
Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

■ HPS-1 background

◆ HPS-1 compliance

● CUSUM

h = 3896

SCL = 3809

Background Data Summary (based on cube transformation): Mean=2.0e10, Std. Dev.=7.8e9, n=22. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9514, critical = 0.911. Report alpha = 0.000122. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
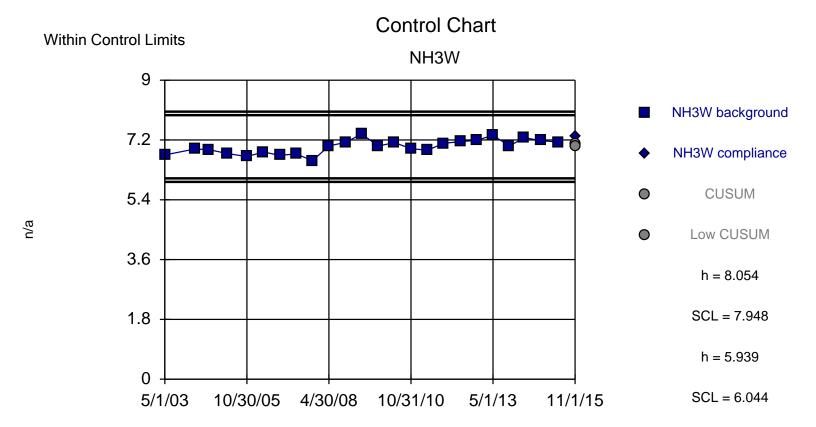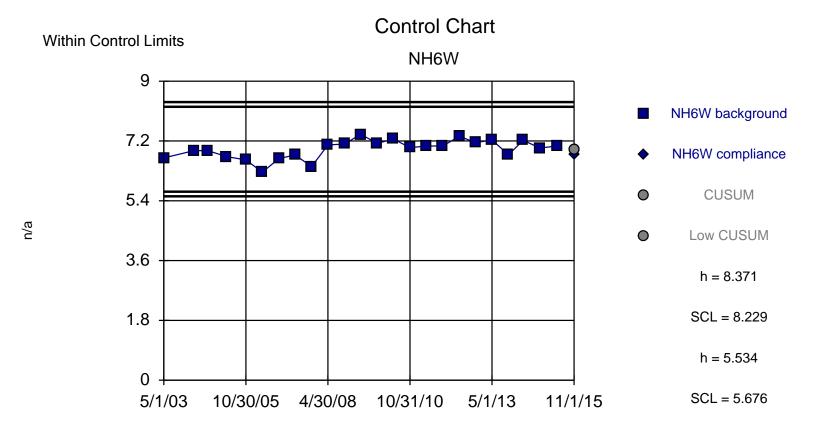
Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HCP-6

Within Control Limits

- ■ HCP-6 background
- ◆ HCP-6 compliance
- ● CUSUM

h = 1568

SCL = 1514

Background Data Summary: Mean=1030, Std. Dev.=107.6, n=22. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9173, critical = 0.911. Report alpha = 0.000122. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
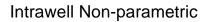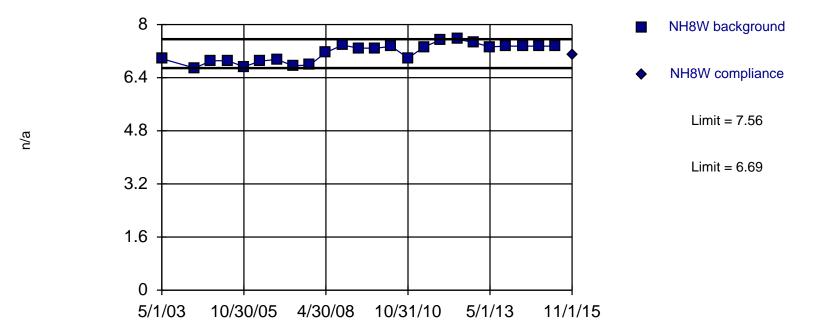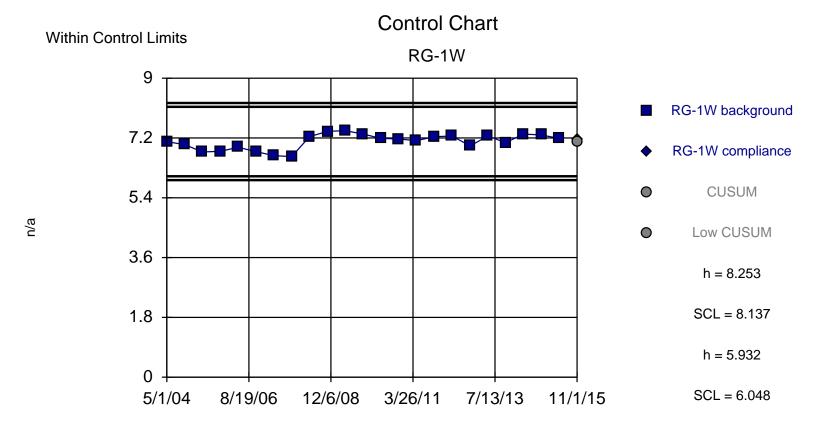
Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HDP-2 background

◆ HDP-2 compliance

Limit = 10700

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 21 background values. Report alpha = 0.04545. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

n/a

- ■ HDP-1 background
- ◆ HDP-1 compliance
- ● CUSUM

h = 9354

SCL = 8836

Background Data Summary (based on cube root transformation): Mean=17.11, Std. Dev.=0.7915, n=20. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9091, critical = 0.905. Report alpha = 0.00016. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

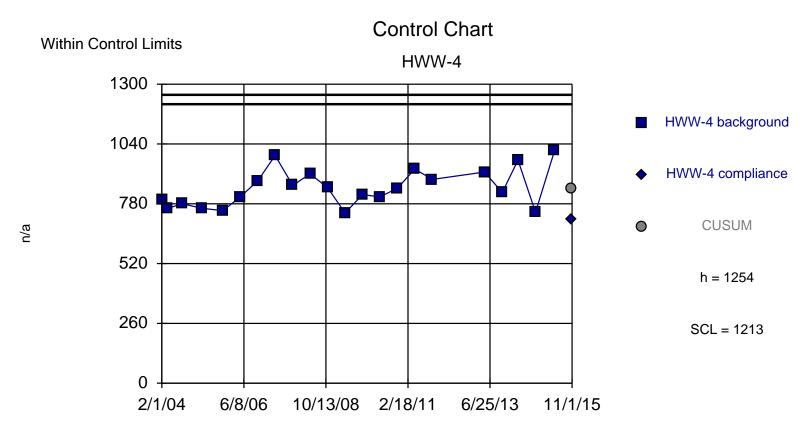Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH1W

- ■ NH1W background
- ◆ NH1W compliance
- ⬤ CUSUM

h = 3454

SCL = 3318

n/a

Background Data Summary: Mean=2099, Std. Dev.=271, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8942, critical = 0.881. Report alpha = 0.000354. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH3W

Within Control Limits

n/a

- ■ NH3W background
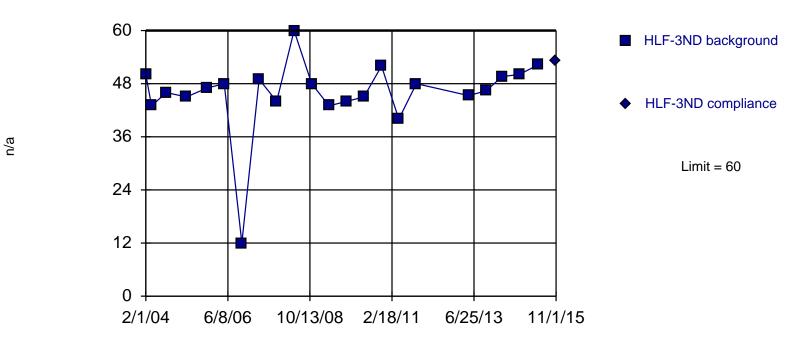- ◆ NH3W compliance
- ● CUSUM

h = 2089

SCL = 1975

Background Data Summary: Mean=951.9, Std. Dev.=227.4, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.898, critical = 0.881. Report alpha = 0.000354. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
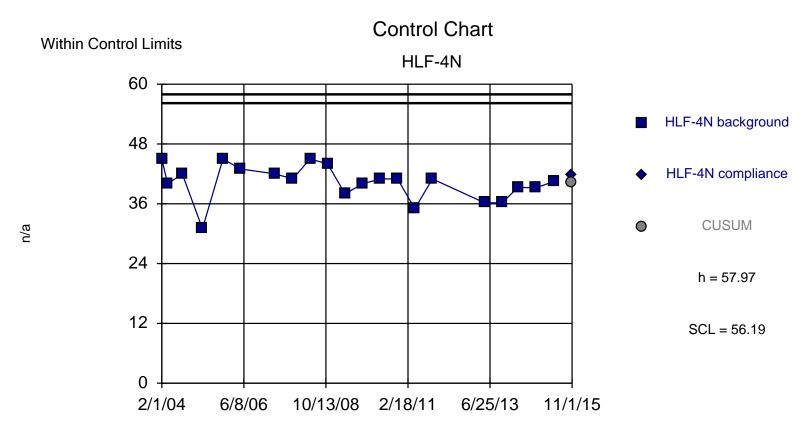
Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

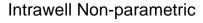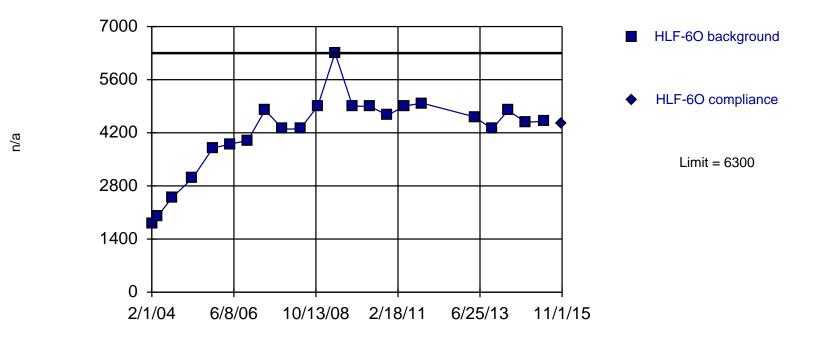# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 15 background values. Report alpha = 0.0625. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH8W

Legend:
- ■ NH8W background
- ◆ NH8W compliance
- ● CUSUM

h = 574.1

SCL = 555.9

Background Data Summary: Mean=391.3, Std. Dev.=36.56, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9443, critical = 0.881. Report alpha = 0.000354. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

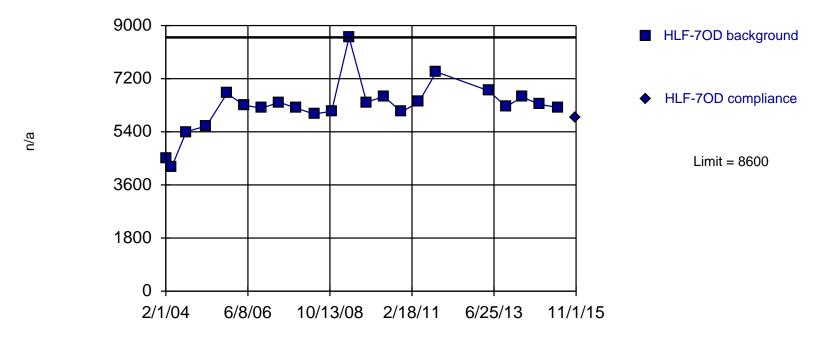# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 15 background values. Report alpha = 0.0625. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Hardness   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HWW-4 background

◆ HWW-4 compliance

Limit = 420

mg/l

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
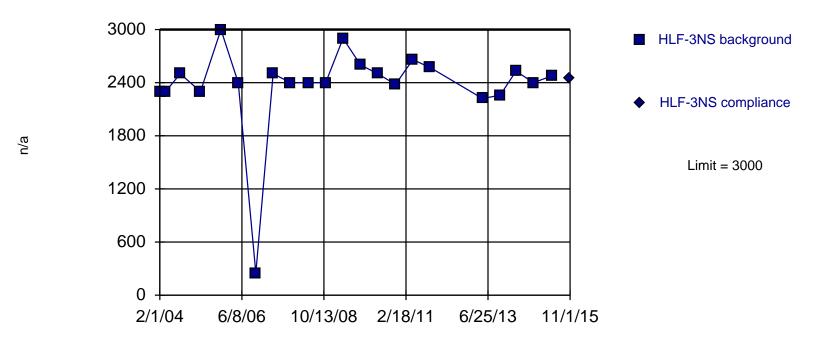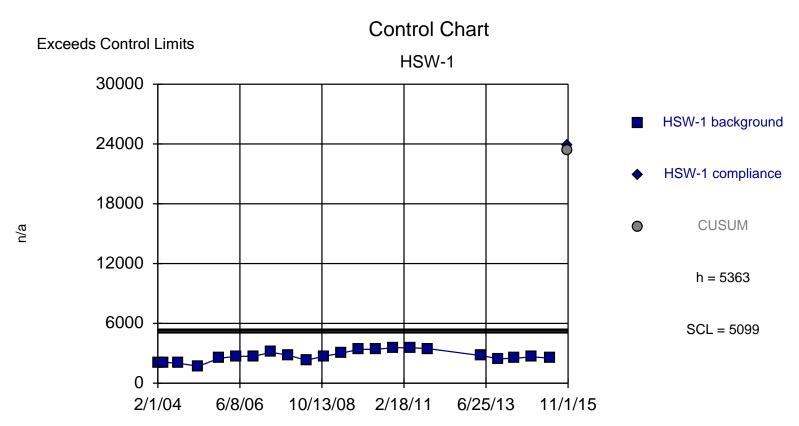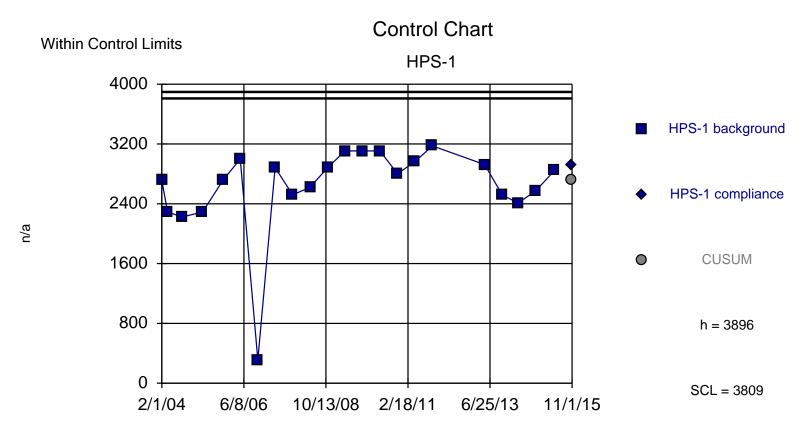
Constituent: HCO3   Analysis Run 12/14/2015 3:52 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3ND

■ HLF-3ND background

◆ HLF-3ND compliance

⬤ CUSUM

h = 887.2

SCL = 868

Background Data Summary: Mean=694.7, Std. Dev.=38.51, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9372, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-4N

Within Control Limits

mg/l

■ HLF-4N background

◆ HLF-4N compliance

● CUSUM

h = 451.7

SCL = 441.9

Background Data Summary: Mean=353.2, Std. Dev.=19.7, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9438, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-6O background
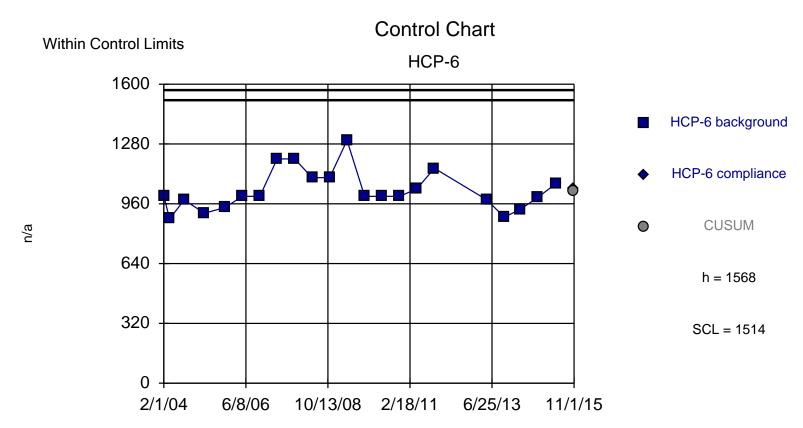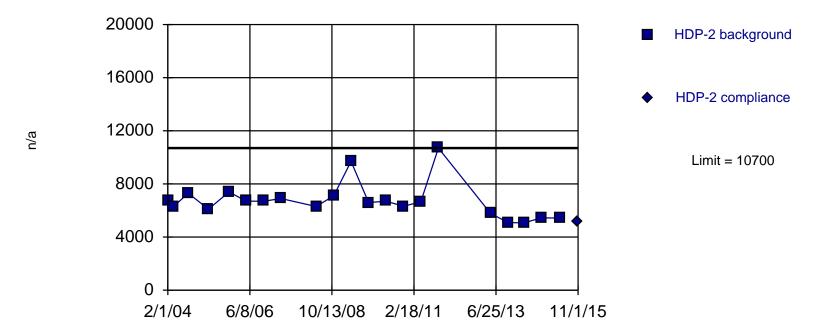
◆ HLF-6O compliance

Limit = 400

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-7OD

Within Control Limits

Legend:
- ■ HLF-7OD background
- ◆ HLF-7OD compliance
- ● CUSUM

h = 741.6

SCL = 727.1

y-axis: mg/l, values 0, 160, 320, 480, 640, 800

x-axis: 2/1/04, 6/8/06, 10/13/08, 2/18/11, 6/25/13, 11/1/15

Background Data Summary: Mean=596.3, Std. Dev.=29.07, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9705, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
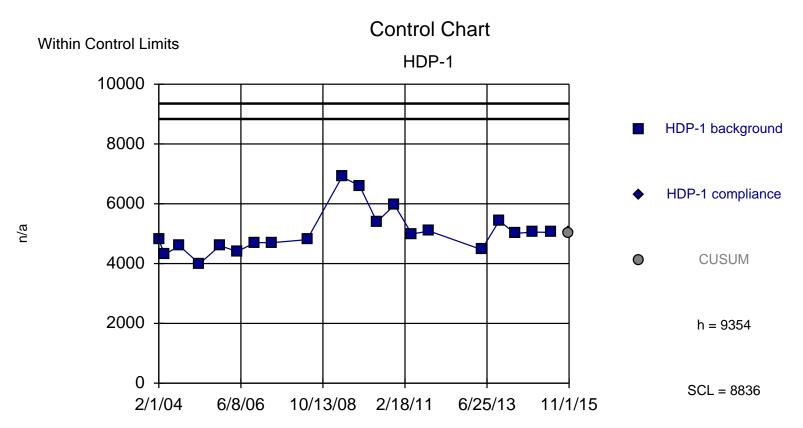
Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3NS

■ HLF-3NS background

◆ HLF-3NS compliance

● CUSUM

h = 304.8

SCL = 297.7

Background Data Summary: Mean=233.8, Std. Dev.=14.2, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9419, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

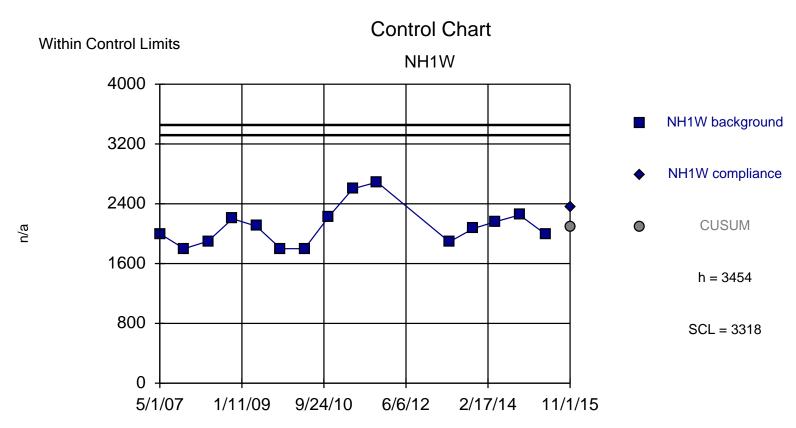## Prediction Limit

Within Limit

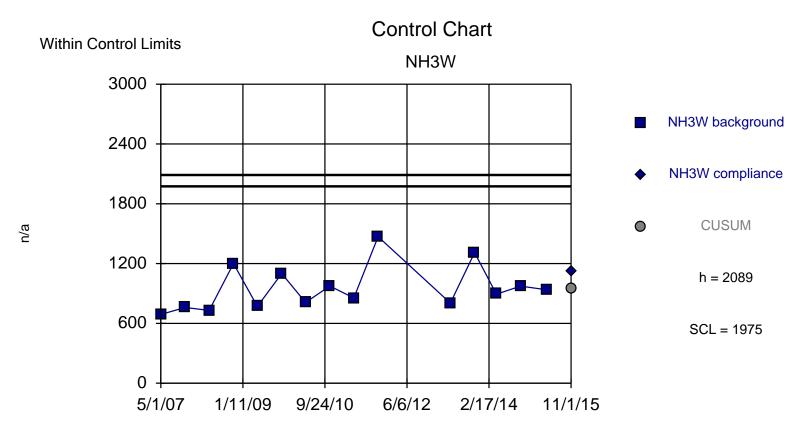### Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HPS-1 background

◆ HPS-1 compliance

Limit = 530

y-axis: mg/l (0, 120, 240, 360, 480, 600)

x-axis: 2/1/04, 6/8/06, 10/13/08, 2/18/11, 6/25/13, 11/1/15

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HCP-6

■ HCP-6 background

♦ HCP-6 compliance

● CUSUM

h = 530.5

SCL = 516.9

Background Data Summary: Mean=394.8, Std. Dev.=27.14, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9561, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
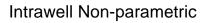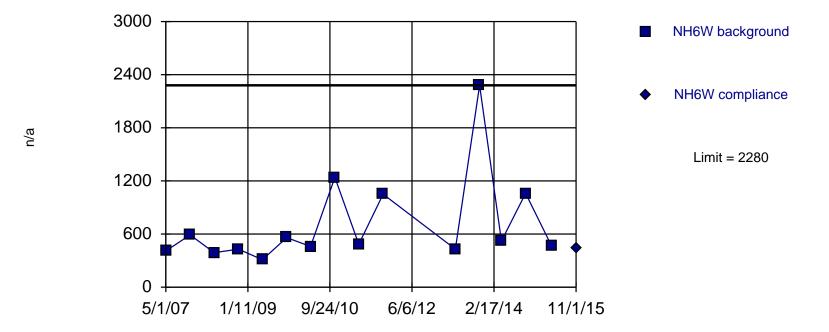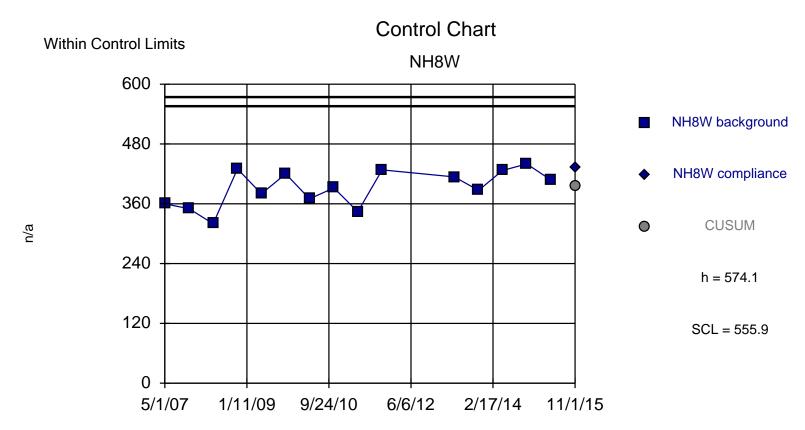
Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HDP-2 background

◆ HDP-2 compliance

Limit = 620

mg/l

700

560

420

280

140

0

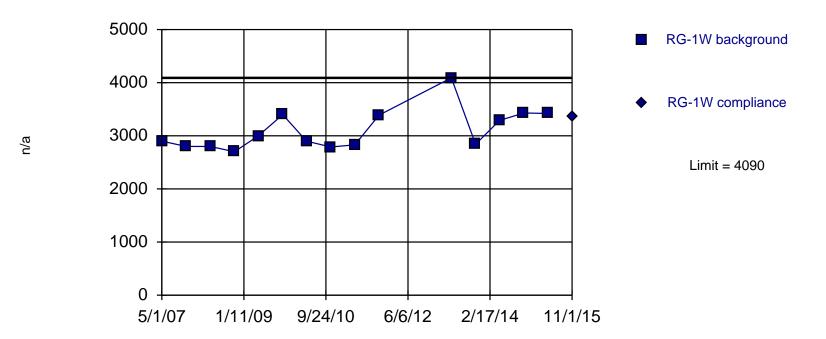2/1/04   6/8/06   10/13/08   2/18/11   6/25/13   11/1/15

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
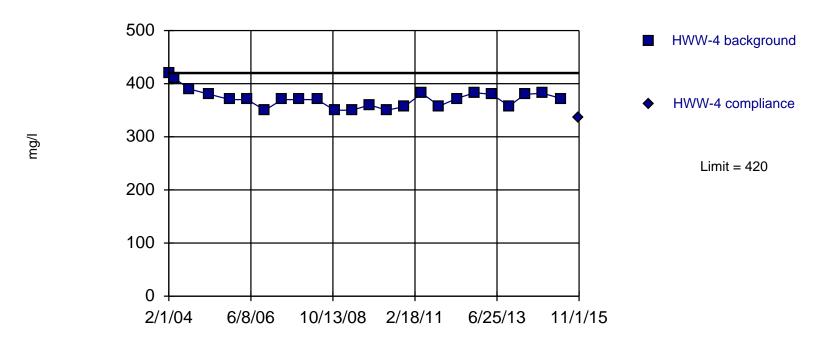
Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

Background Data Summary: Mean=343.6, Std. Dev.=77.37, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.967, critical = 0.914. Report alpha = 0.000102. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH1W

Within Control Limits

Legend:
- ■ NH1W background
- ◆ NH1W compliance
- ● CUSUM

h = 438.3

SCL = 432.1

Background Data Summary: Mean=376, Std. Dev.=12.47, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9226, critical = 0.892. Report alpha = 0.000242. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ NH3W background

♦ NH3W compliance

Limit = 312

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 17 background values. Report alpha = 0.05556. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
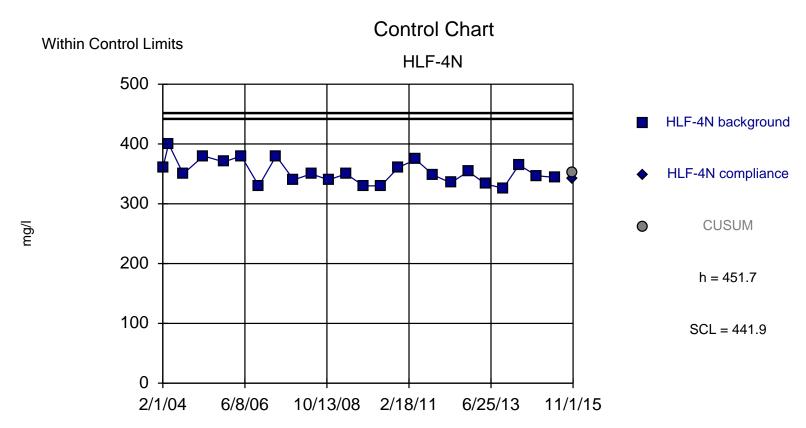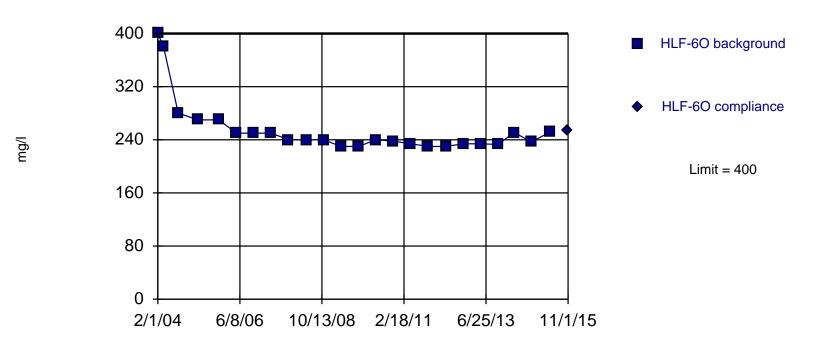
Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH6W

Legend:
- ■ NH6W background
- ◆ NH6W compliance
- ● CUSUM

h = 435.7

SCL = 420.7

Background Data Summary: Mean=285.4, Std. Dev.=30.05, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9609, critical = 0.892. Report alpha = 0.000242. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
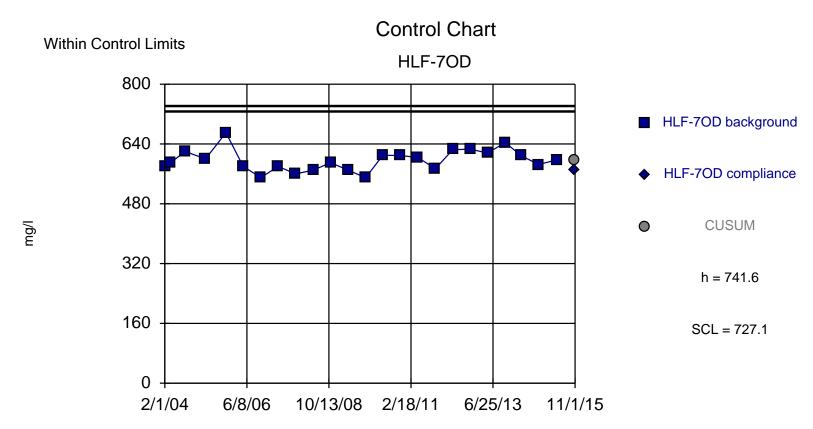
Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH8W

Within Control Limits

mg/l

- ■ NH8W background
- ◆ NH8W compliance
- ● CUSUM

h = 291.5

SCL = 287.2

X-axis: 5/1/07   1/11/09   9/24/10   6/6/12   2/17/14   11/1/15

Background Data Summary: Mean=248.3, Std. Dev.=8.637, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9322, critical = 0.892. Report alpha = 0.000242. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
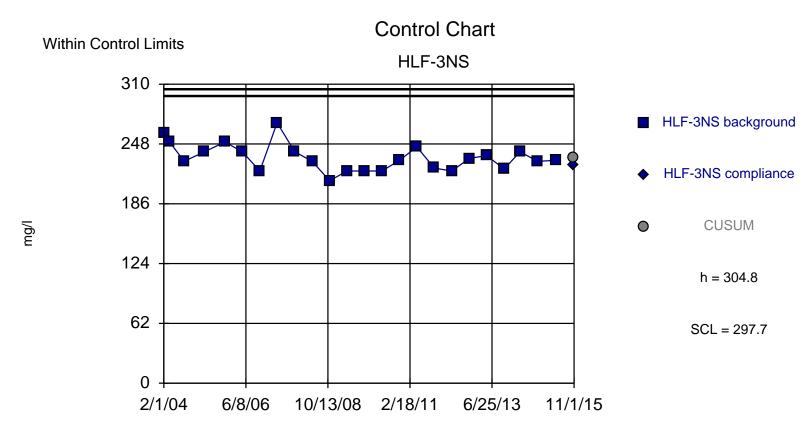
Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

RG-1W

Within Control Limits

mg/l

- ■ RG-1W background
- ◆ RG-1W compliance
- ● CUSUM

h = 379.4

SCL = 370.2

Background Data Summary: Mean=287.5, Std. Dev.=18.38, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9357, critical = 0.892. Report alpha = 0.000242. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: HCO3   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
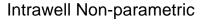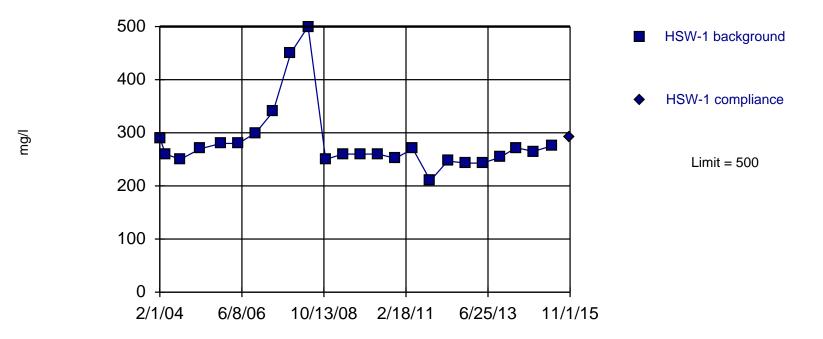
Constituent: K   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

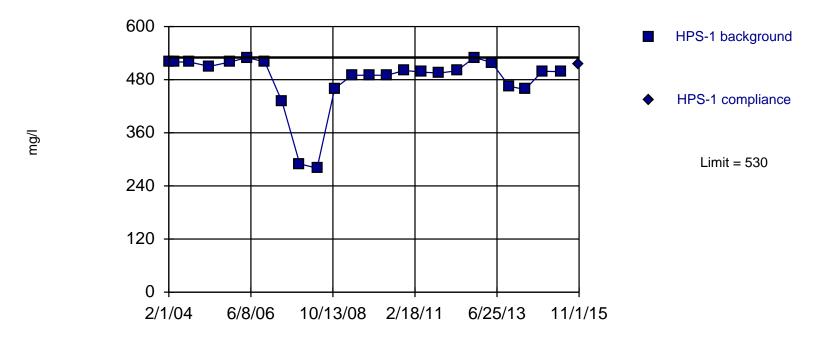## Intrawell Non-parametric

■ HLF-3ND background
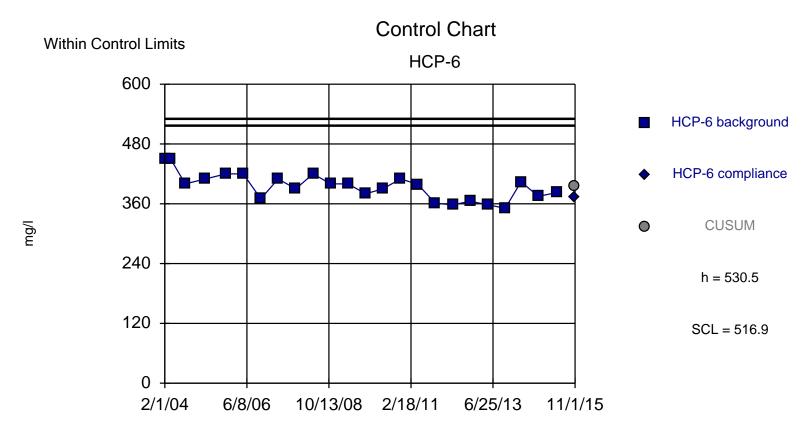
◆ HLF-3ND compliance

Limit = 12

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: K   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

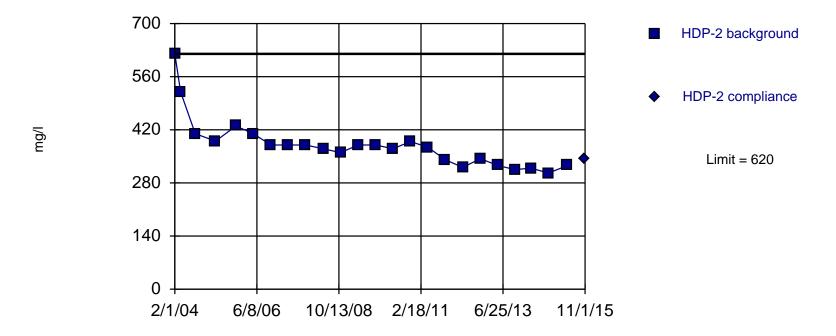# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
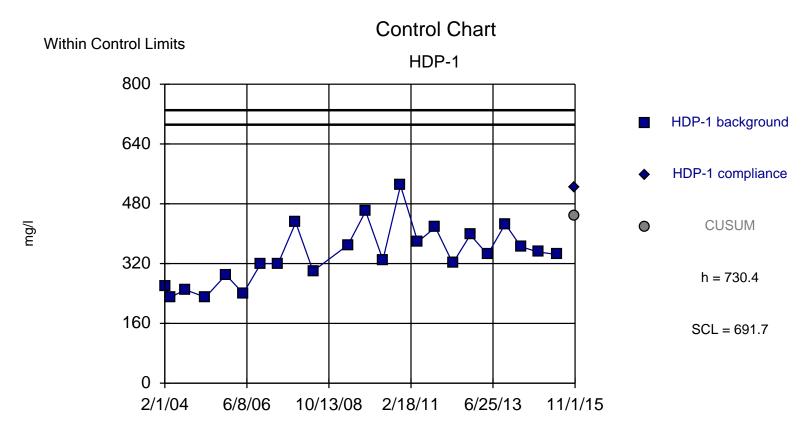
Constituent: K   Analysis Run 12/14/2015 3:53 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-6O

- ■ HLF-6O background
- ◆ HLF-6O compliance
- ○ CUSUM

h = 25.74

SCL = 24.53

Background Data Summary: Mean=13.67, Std. Dev.=2.413, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9651, critical = 0.916. Report alpha = 0.000094. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

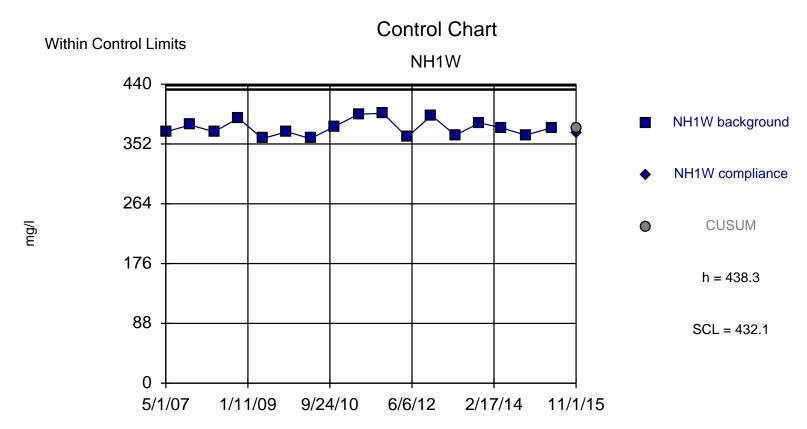Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
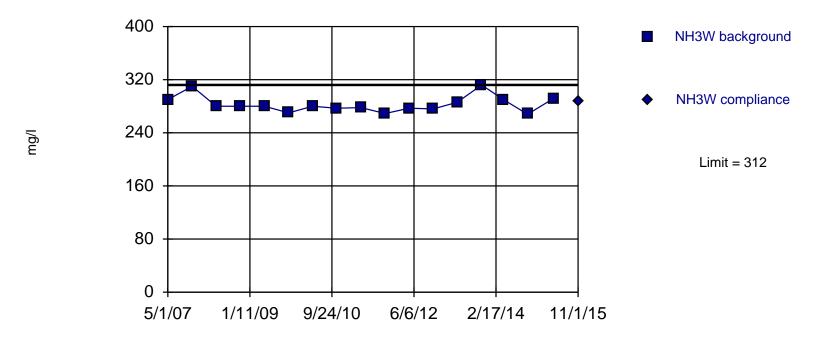
Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-3NS

Within Control Limits

mg/l

■ HLF-3NS background

◆ HLF-3NS compliance

⬤ CUSUM

h = 17.25

SCL = 16.55

11/1/03   3/26/06   8/19/08   1/12/11   6/7/13   11/1/15

Background Data Summary: Mean=10.24, Std. Dev.=1.402, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9333, critical = 0.918. Report alpha = 0.000082. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

Background Data Summary: Mean=17.74, Std. Dev.=3.515, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9358, critical = 0.918. Report alpha = 0.000082. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
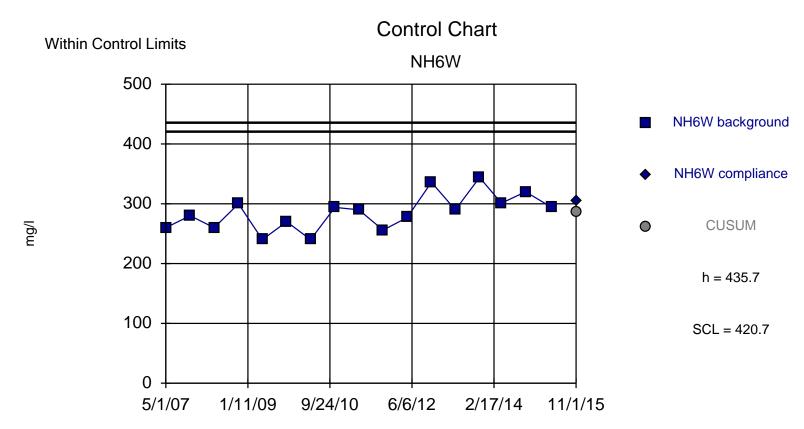
Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

Legend:
- ■ HPS-1 background
- ◆ HPS-1 compliance
- ● CUSUM

h = 24.43

SCL = 23.19

Background Data Summary: Mean=12.11, Std. Dev.=2.464, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9396, critical = 0.918. Report alpha = 0.000082. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
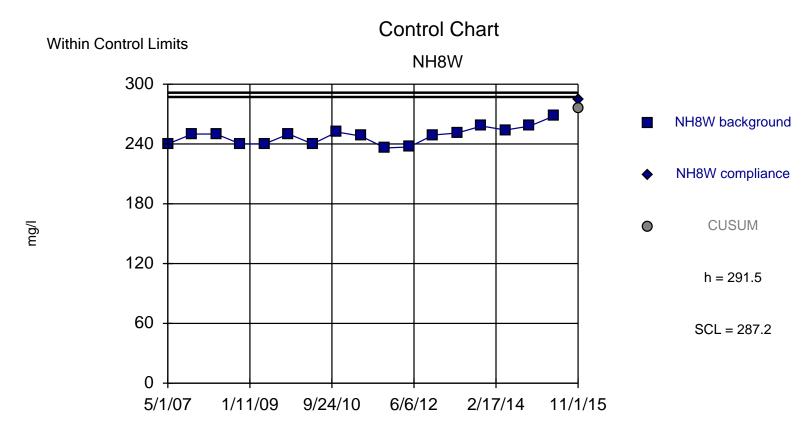
Huntington2015

Within Limit

Prediction Limit
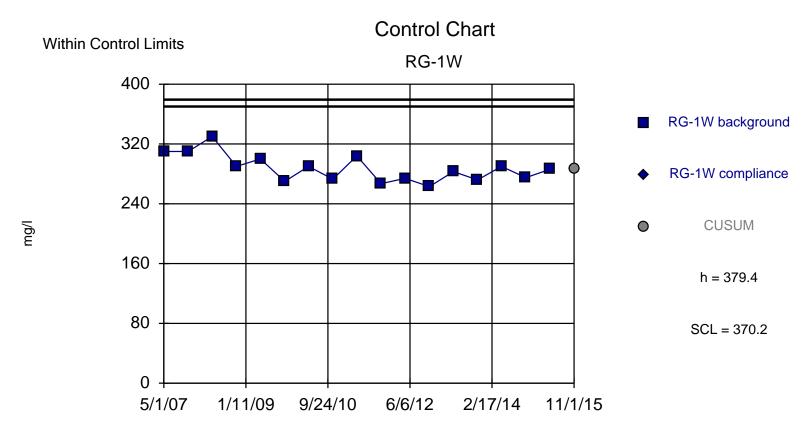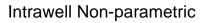
Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

- ■ HDP-2 background
- ◆ HDP-2 compliance

Limit = 58

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

Legend:
- ■ HDP-1 background
- ◆ HDP-1 compliance
- ● CUSUM

h = 59.1

SCL = 56.72

y-axis: mg/l (0, 12, 24, 36, 48, 60)

x-axis: 2/1/04, 6/8/06, 10/13/08, 2/18/11, 6/25/13, 11/1/15

Background Data Summary: Mean=35.28, Std. Dev.=4.764, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9526, critical = 0.914. Report alpha = 0.000122. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
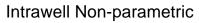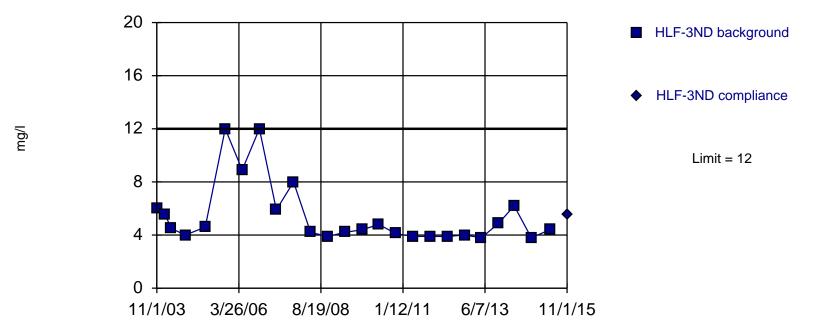
Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH1W

■ NH1W background

◆ NH1W compliance

○ CUSUM

h = 25.82

SCL = 24.66

mg/l

(x-axis labels: 5/1/07, 1/11/09, 9/24/10, 6/6/12, 2/17/14, 11/1/15)

(y-axis labels: 0, 6, 12, 18, 24, 30)

Background Data Summary: Mean=14.26, Std. Dev.=2.311, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9385, critical = 0.892. Report alpha = 0.00025. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit
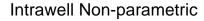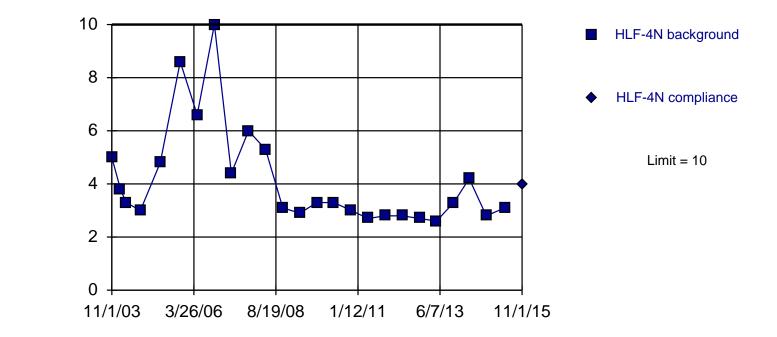
Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 17 background values. Report alpha = 0.05556. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
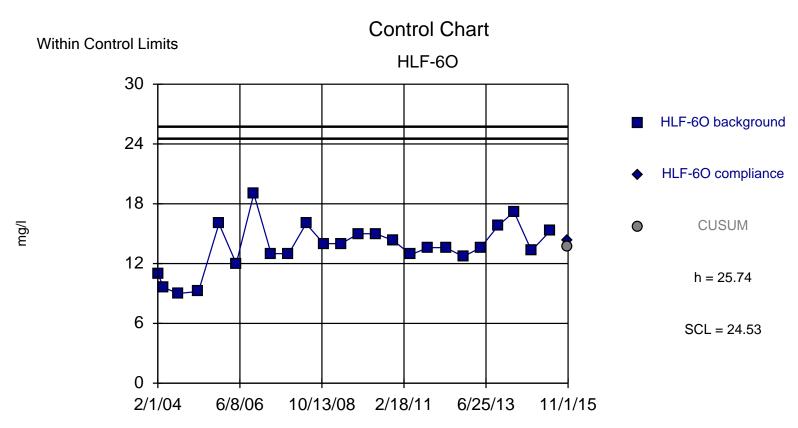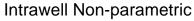
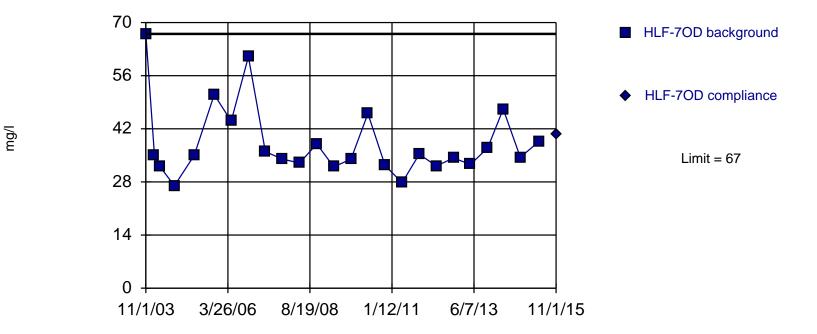Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH6W

Within Control Limits

Background Data Summary (based on square root transformation): Mean=2.047, Std. Dev.=0.7063, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8974, critical = 0.892. Report alpha = 0.00025. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH8W

mg/l

- ■ NH8W background
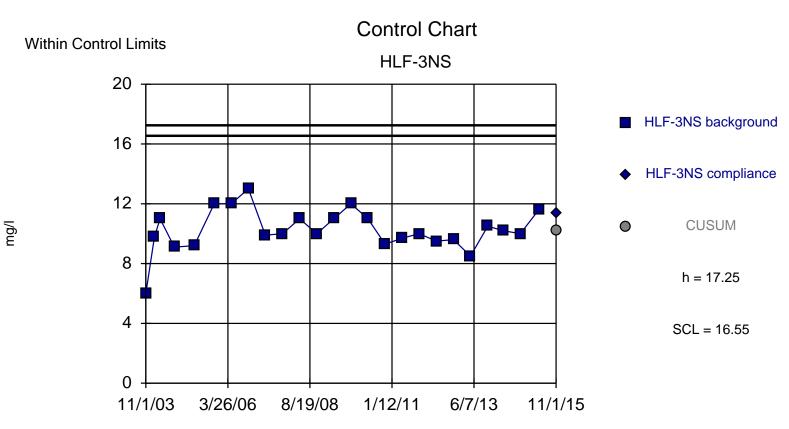- ◆ NH8W compliance
- ⬤ CUSUM

h = 3.381

SCL = 3.248

Background Data Summary: Mean=2.052, Std. Dev.=0.2658, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9478, critical = 0.892. Report alpha = 0.00025. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

RG-1W

- ■ RG-1W background
- ◆ RG-1W compliance
- ● CUSUM

h = 20.46

SCL = 19.06

Background Data Summary (based on natural log transformation): Mean=2.309, Std. Dev.=0.1419, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8975, critical = 0.892. Report alpha = 0.00025. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
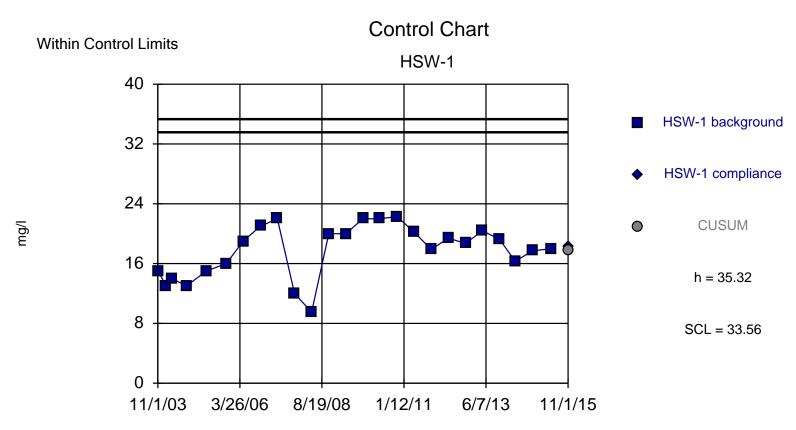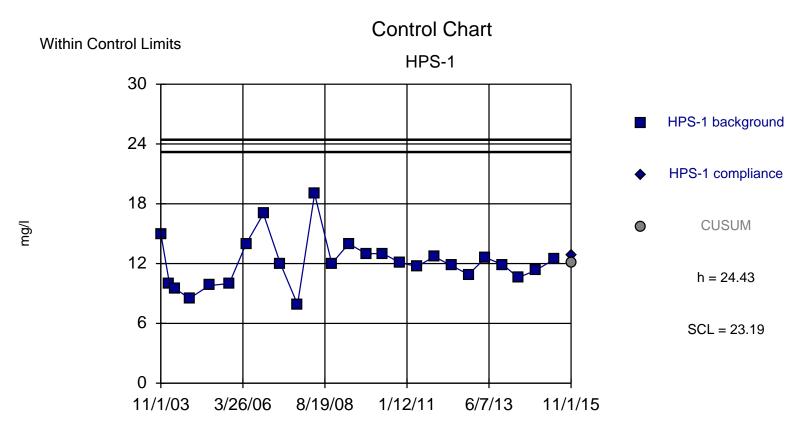
Constituent: K   Analysis Run 12/14/2015 3:54 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

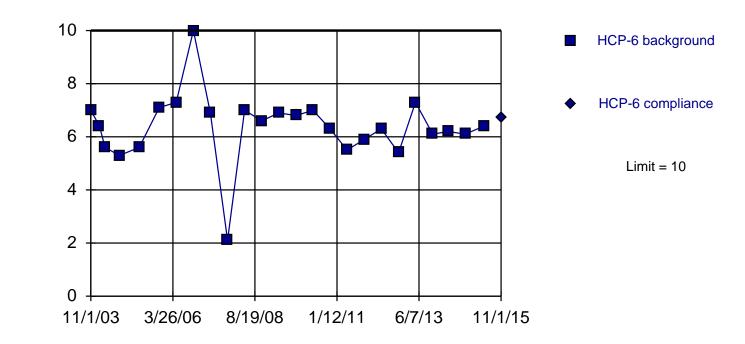Within Control Limits

HWW-4

Background Data Summary: Mean=103.7, Std. Dev.=9.995, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9675, critical = 0.918. Report alpha = 0.0001. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Sanitas™ v.9.4.40 For the statistical analyses of groundwater by Water Environmental Technologies only. EPA

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3ND background

♦ HLF-3ND compliance

Limit = 13

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-4N

Background Data Summary (based on cube transformation): Mean=120.8, Std. Dev.=40.69, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9499, critical = 0.918. Report alpha = 0.0001. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
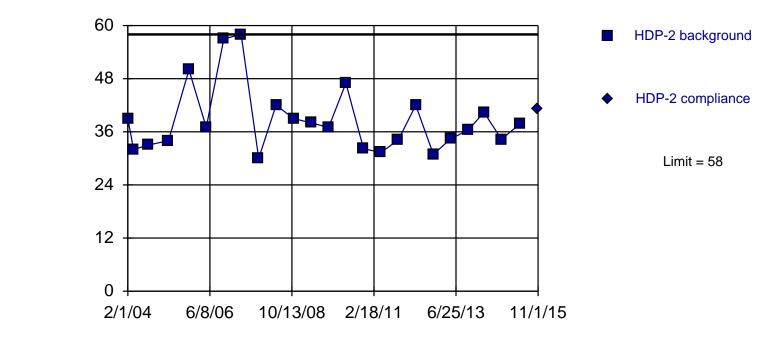
Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HLF-6O

Within Control Limits

- ■ HLF-6O background
- ◆ HLF-6O compliance
- ● CUSUM

h = 1134

SCL = 1094

Background Data Summary (based on square transformation): Mean=401573, Std. Dev.=176912, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.917, critical = 0.916. Report alpha = 0.00012. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
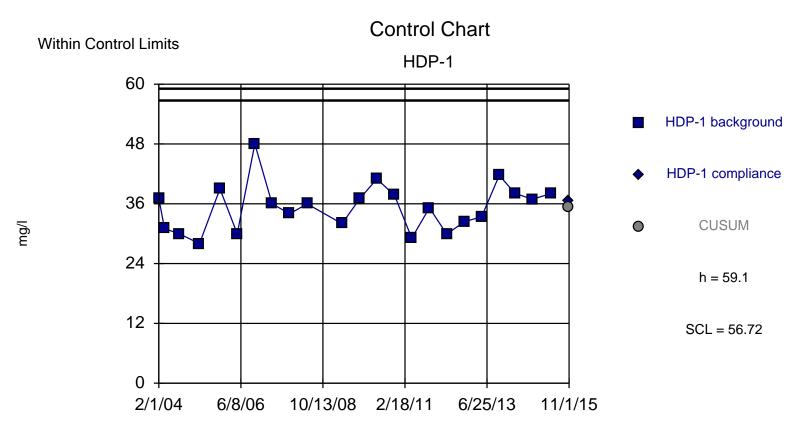
Huntington2015

Within Limit
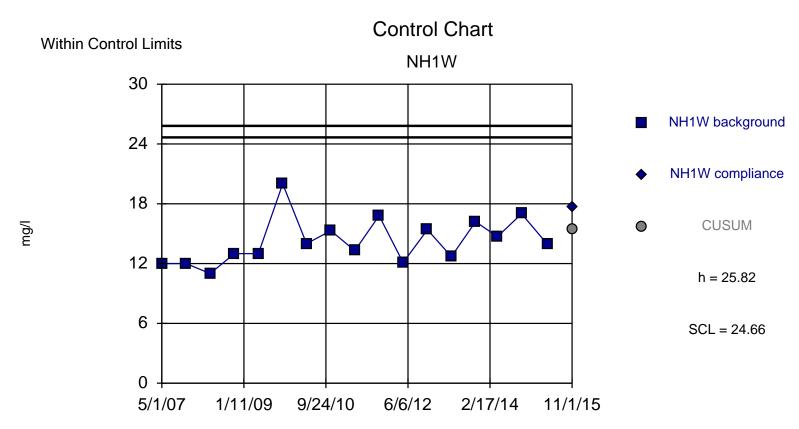
Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015
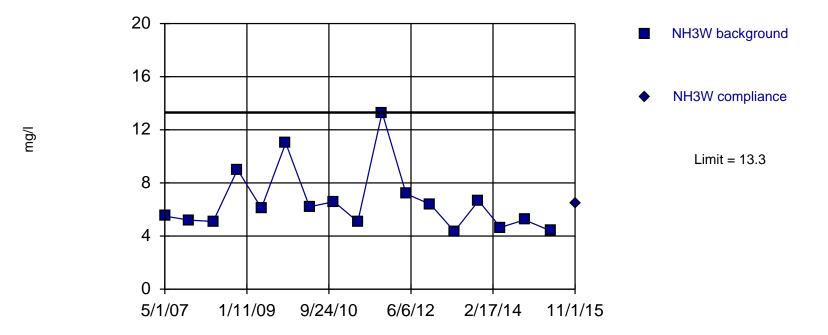
Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3NS background

◆ HLF-3NS compliance

Limit = 450

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

Background Data Summary: Mean=364.7, Std. Dev.=70.42, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9468, critical = 0.918. Report alpha = 0.00009. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
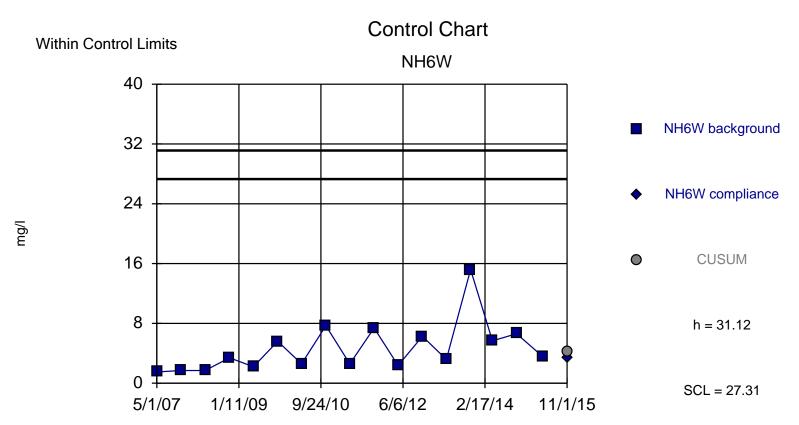
Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

Background Data Summary: Mean=336.6, Std. Dev.=30.56, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9192, critical = 0.918. Report alpha = 0.00009. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
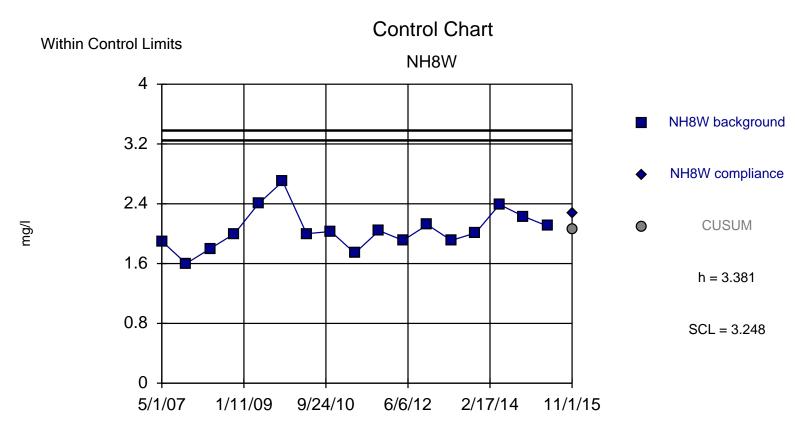
Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HCP-6

Within Control Limits

■ HCP-6 background

◆ HCP-6 compliance

● CUSUM

h = 214

SCL = 207.2

Background Data Summary: Mean=145.8, Std. Dev.=13.64, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9701, critical = 0.918. Report alpha = 0.00009. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-2

mg/l

- ■ HDP-2 background
- ◆ HDP-2 compliance
- ● CUSUM

h = 2230

SCL = 2130

X-axis: 2/1/04   6/8/06   10/13/08   2/18/11   6/25/13   11/1/15

Y-axis: 0, 600, 1200, 1800, 2400, 3000

Background Data Summary: Mean=1231, Std. Dev.=199.9, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9436, critical = 0.916. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
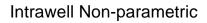
Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

mg/l

■ HDP-1 background

◆ HDP-1 compliance

● CUSUM

h = 1753

SCL = 1649

x-axis: 2/1/04   6/8/06   10/13/08   2/18/11   6/25/13   11/1/15

y-axis: 0, 400, 800, 1200, 1600, 2000

Background Data Summary (based on square root transformation): Mean=29.23, Std. Dev.=2.528, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.921, critical = 0.914. Report alpha = 0.000126. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
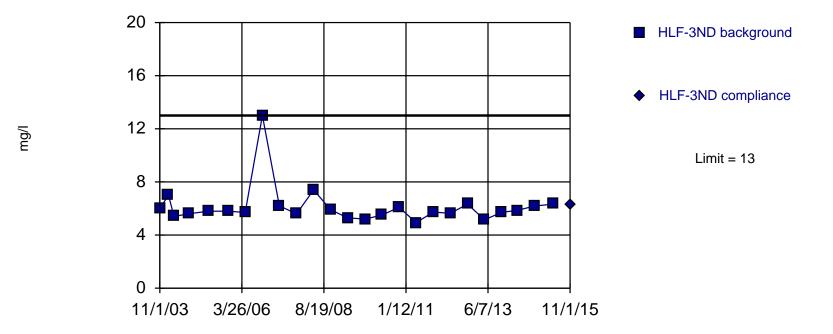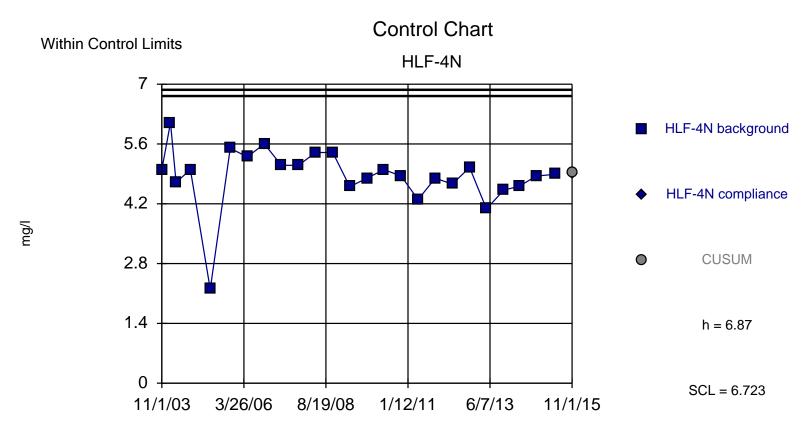
Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ NH3W background
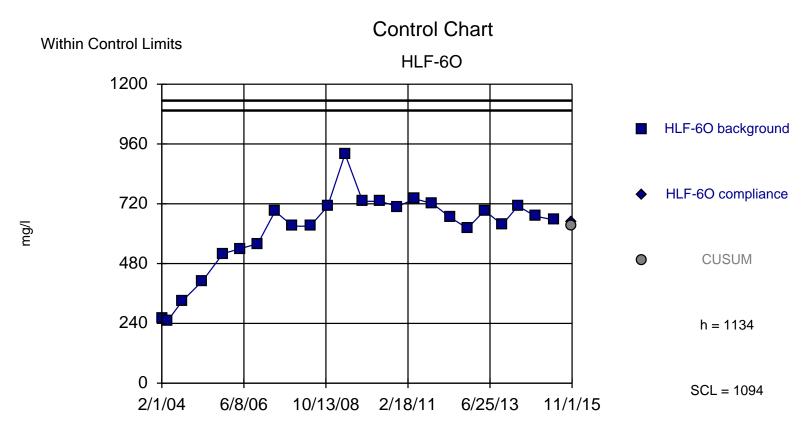
◆ NH3W compliance

Limit = 330

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
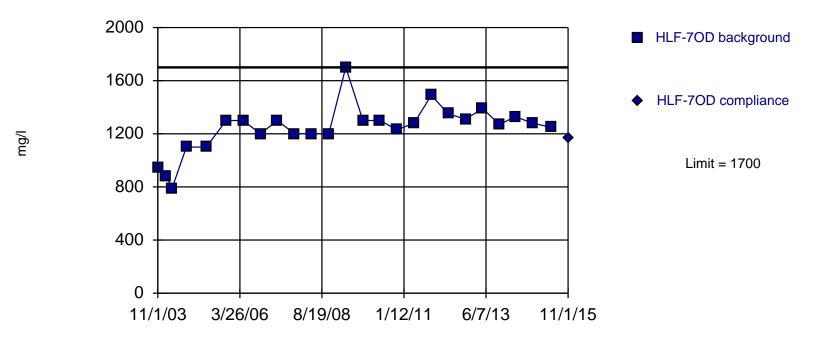
Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mg   Analysis Run 12/14/2015 3:55 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH8W

- ■ NH8W background
- ◆ NH8W compliance
- ● CUSUM

h = 63.63

SCL = 61.27

Background Data Summary: Mean=40.03, Std. Dev.=4.72, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9521, critical = 0.936. Report alpha = 0.000032. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
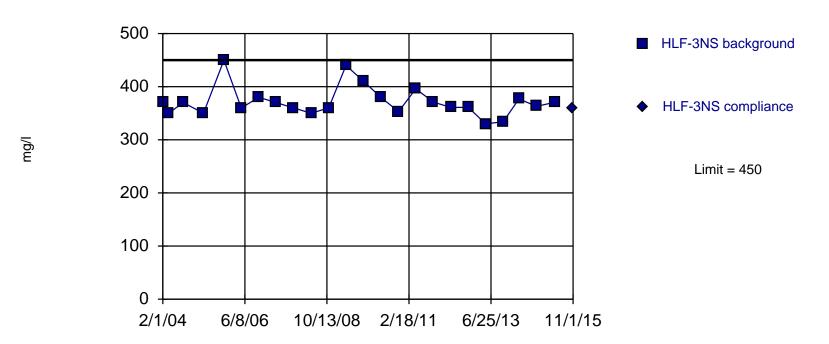
Constituent: Mg   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

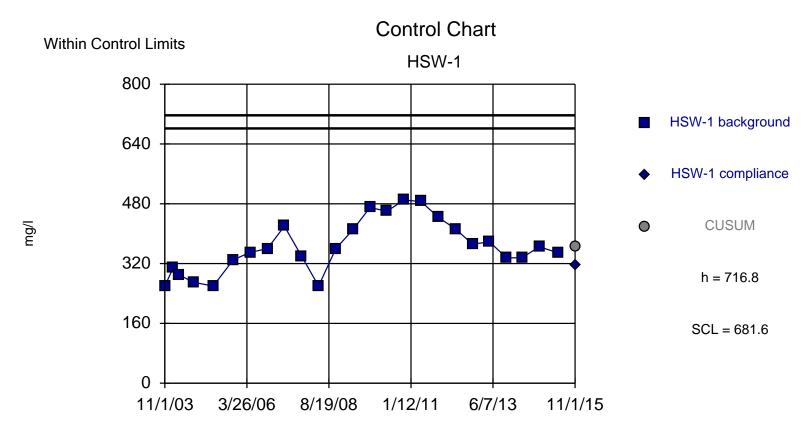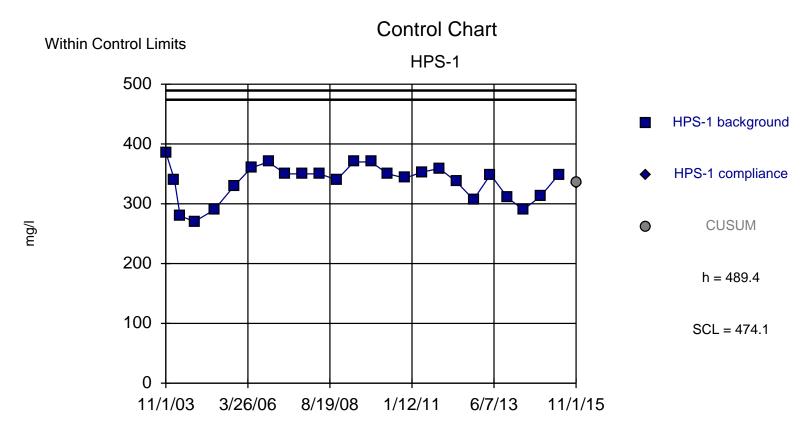# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 33 background values. Report alpha = 0.02941. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
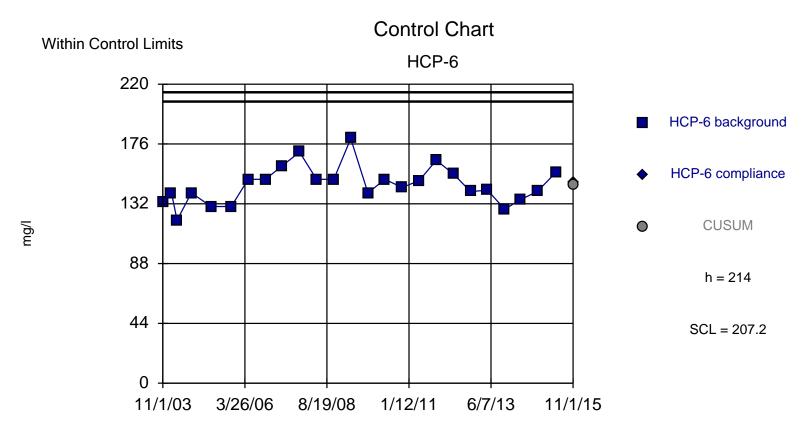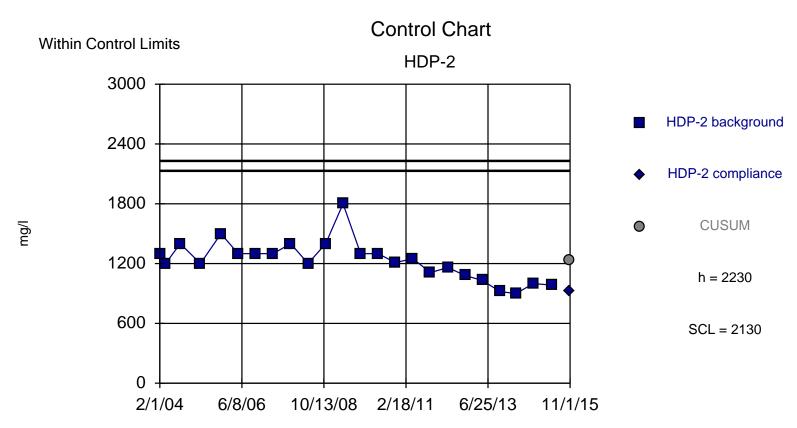
Constituent: Mg   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HWW-4

■ HWW-4 background

h = 13.71

SCL = 7.061

mg/l

20

16

12

8

4

0

11/1/03   5/1/05   10/31/06   4/30/08   10/30/09   5/1/11

Background Data Summary (based on natural log transformation): Mean=-4.02, Std. Dev.=1.328, n=10. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9367, critical = 0.842. Report alpha = 0. Dates ending 5/1/2011 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Mn   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3ND

■ HLF-3ND background

◆ HLF-3ND compliance

● CUSUM

h = 0.8851

SCL = 0.6047

Background Data Summary (based on natural log transformation): Mean=-3.933, Std. Dev.=0.7622, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.924, critical = 0.916. Report alpha = 0.000096. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
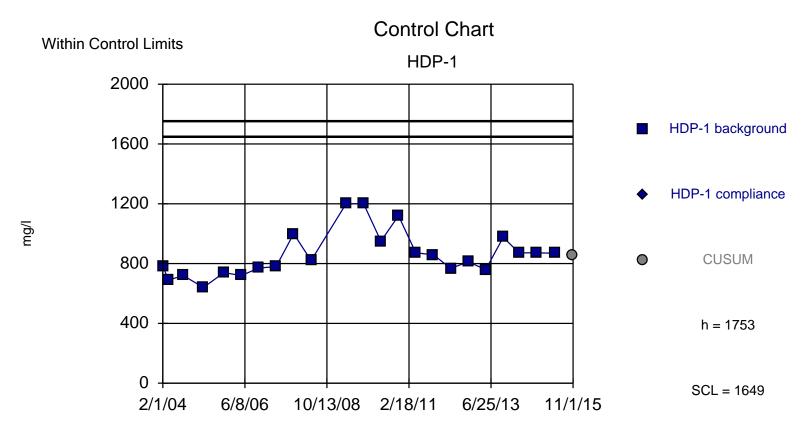
Constituent: Mn   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Prediction Limit

Exceeds Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mn   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-6O

- ■ HLF-6O background
- ◆ HLF-6O compliance
- ● CUSUM

h = 1.075

SCL = 0.7322

Background Data Summary (based on natural log transformation): Mean=-3.764, Std. Dev.=0.7671, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9742, critical = 0.916. Report alpha = 0.000096. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
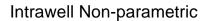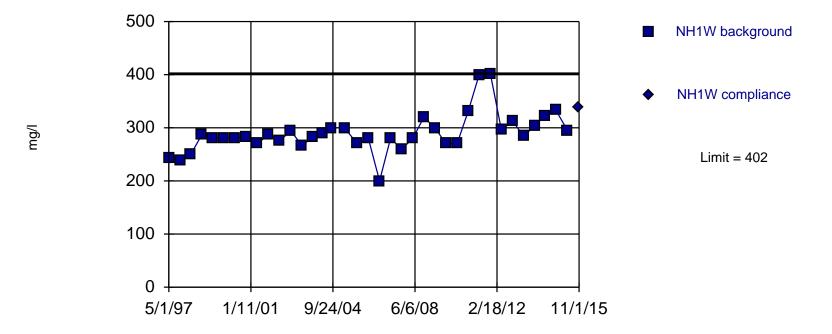
Constituent: Mn   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HLF-7OD

Within Control Limits

Background Data Summary (based on square root transformation): Mean=0.3417, Std. Dev.=0.1883, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.932, critical = 0.918. Report alpha = 0.000086. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Mn   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3NS background
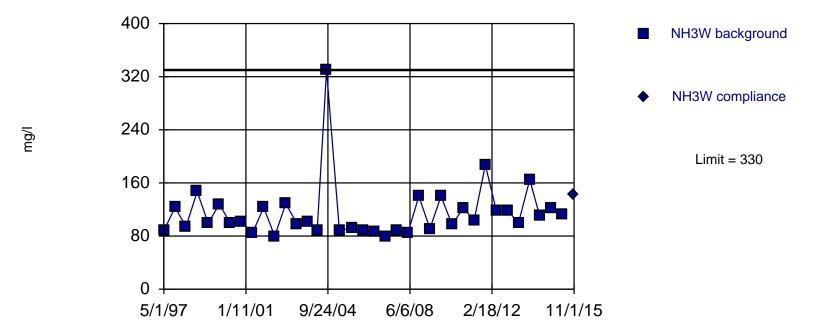
◆ HLF-3NS compliance

Limit = 0.56

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
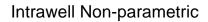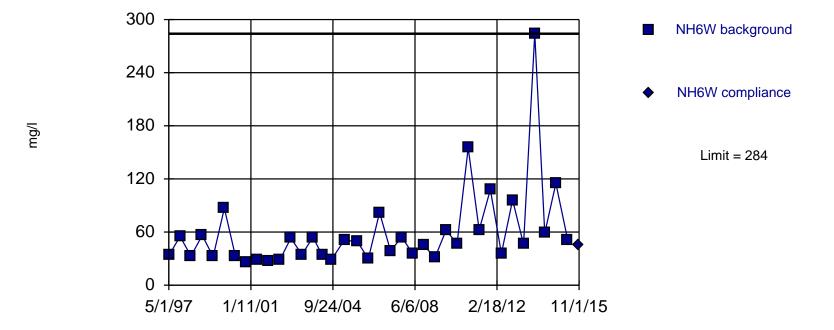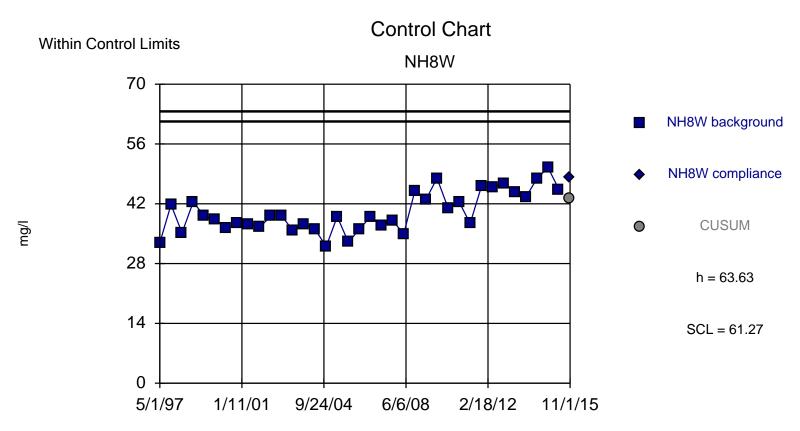
Constituent: Mn   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

Legend:
- ■ HSW-1 background
- ◆ HSW-1 compliance
- ● CUSUM

h = 20.93

SCL = 12.18

Background Data Summary (based on natural log transformation): Mean=-2.372, Std. Dev.=1.083, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9689, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Mn   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HPS-1

Within Control Limits

- ■ HPS-1 background
- ◆ HPS-1 compliance
- ● CUSUM

h = 0.7873

SCL = 0.7343

Background Data Summary: Mean=0.2579, Std. Dev.=0.1059, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9681, critical = 0.918. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Mn   Analysis Run 12/14/2015 3:56 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HCP-6

Within Control Limits

mg/l

- ■ HCP-6 background
- ◆ HCP-6 compliance
- ⬤ CUSUM

h = 17.49

SCL = 8.297

Background Data Summary (based on natural log transformation): Mean=-4.598, Std. Dev.=1.492, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9053, critical = 0.859. Report alpha = 0.000638. Dates ending 10/15/2014 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Mn   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
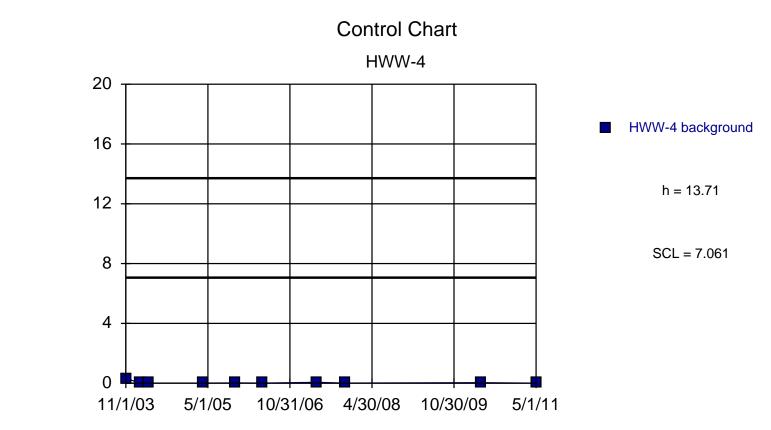
Huntington2015

Within Limit

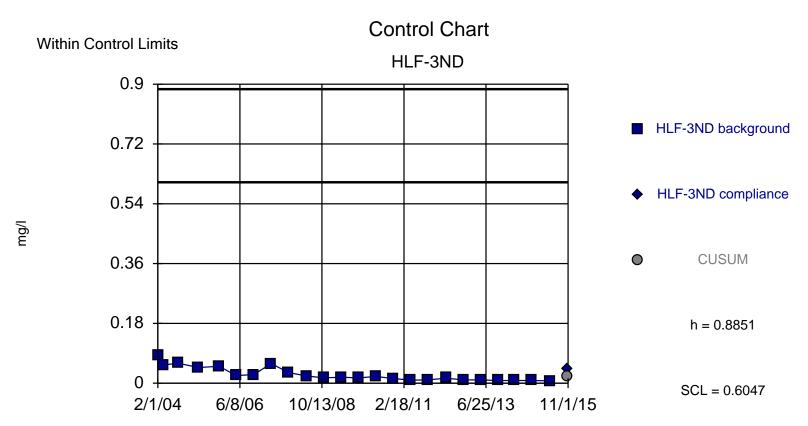# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 22 background values. Report alpha = 0.04348. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mn   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HDP-1 background

◆ HDP-1 compliance

Limit = 1.27

mg/l

(y-axis: 2, 1.6, 1.2, 0.8, 0.4, 0)

(x-axis: 2/1/04, 6/8/06, 10/13/08, 2/18/11, 6/25/13, 11/1/15)

Non-parametric test used in lieu of control chart 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. Insufficient data to test for seasonality: data were not deseasonalized.
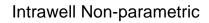
Constituent: Mn   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015

Control Chart

NH1W

Within Control Limits

Legend:
- ■ NH1W background
- ◆ NH1W compliance
- ● CUSUM

h = 0.9653

SCL = 0.9017

Background Data Summary: Mean=0.3294, Std. Dev.=0.1272, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9627, critical = 0.892. Report alpha = 0.000264. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
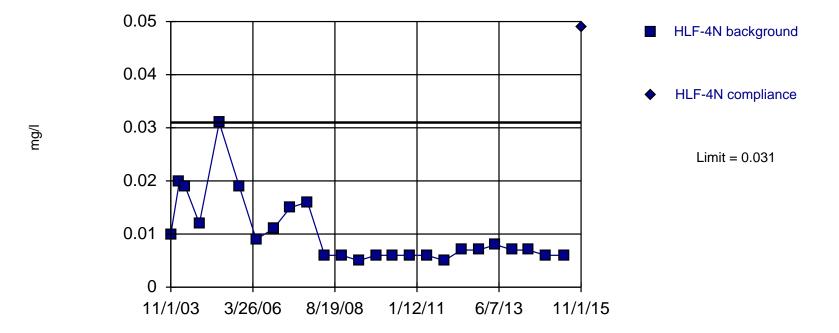
Constituent: Mn   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH6W

NH6W background

h = 0.006149

SCL = 0.005779

Background Data Summary: Mean=0.00245, Std. Dev.=0.0007398, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8459, critical = 0.818. Report alpha = 0. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
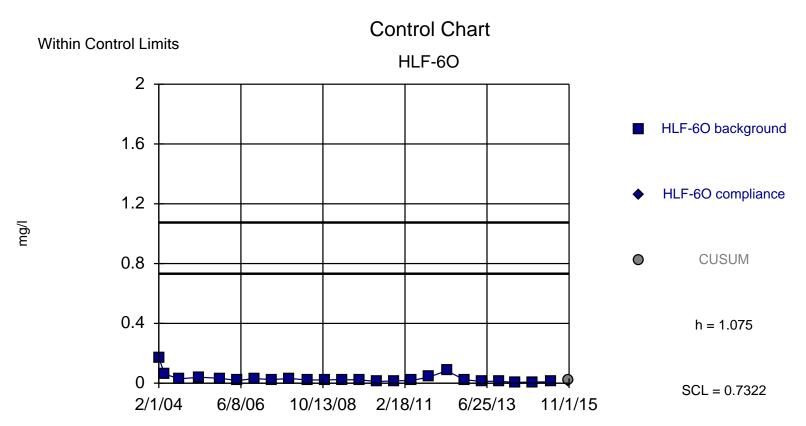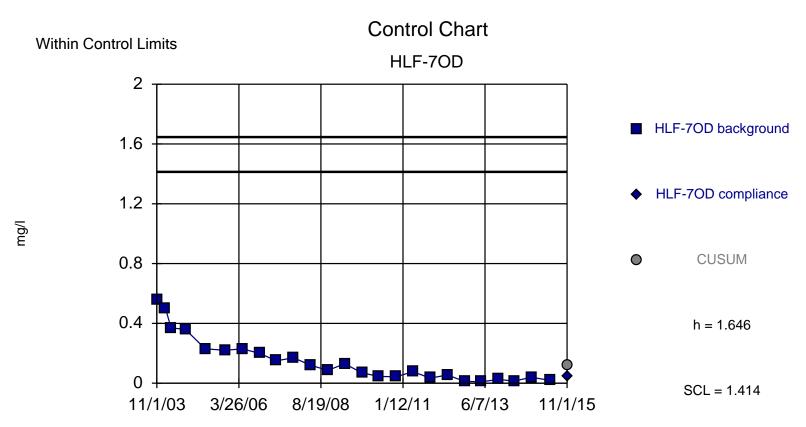
Constituent: Mn   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HWW-4

Within Control Limits

Background Data Summary: Mean=205.1, Std. Dev.=30.47, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9396, critical = 0.918. Report alpha = 0.000112. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Na   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3ND

Legend:
- ■ HLF-3ND background
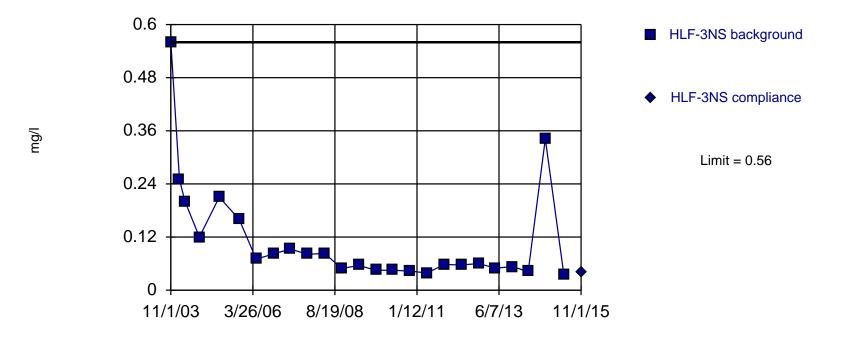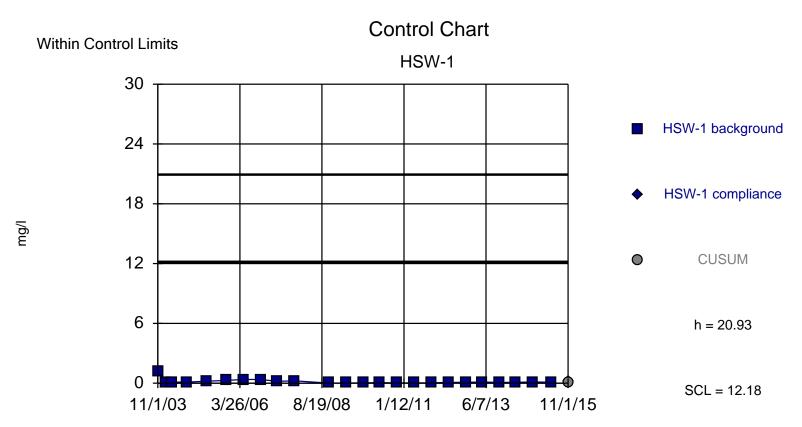- ◆ HLF-3ND compliance
- ● CUSUM

h = 2813

SCL = 2676

Background Data Summary (based on square root transformation): Mean=40.03, Std. Dev.=2.601, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9398, critical = 0.918. Report alpha = 0.000112. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Na   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-4N

Within Control Limits

■ HLF-4N background

◆ HLF-4N compliance

○ CUSUM

h = 1779

SCL = 1724

Background Data Summary: Mean=1230, Std. Dev.=109.9, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.977, critical = 0.918. Report alpha = 0.000112. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
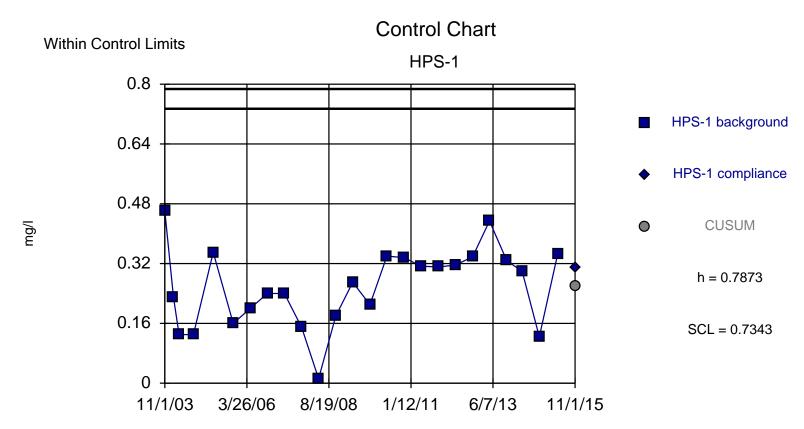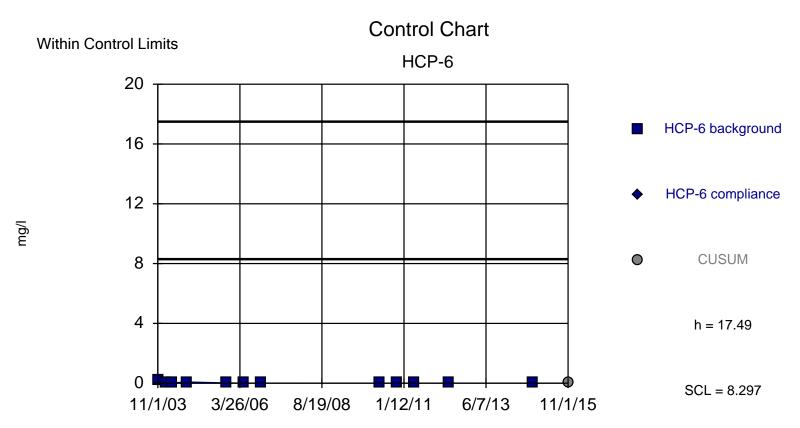
Constituent: Na   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-6O

Within Control Limits

■ HLF-6O background

◆ HLF-6O compliance

⬤ CUSUM

h = 1726

SCL = 1650

Background Data Summary: Mean=971, Std. Dev.=151, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.939, critical = 0.916. Report alpha = 0.000096. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Na   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-7OD

Background Data Summary: Mean=3616, Std. Dev.=351.6, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9522, critical = 0.918. Report alpha = 0.000078. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
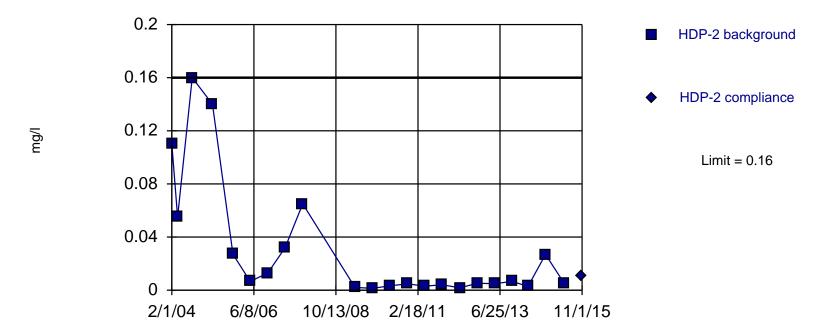
Constituent: Na   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3NS background

◆ HLF-3NS compliance

Limit = 1320
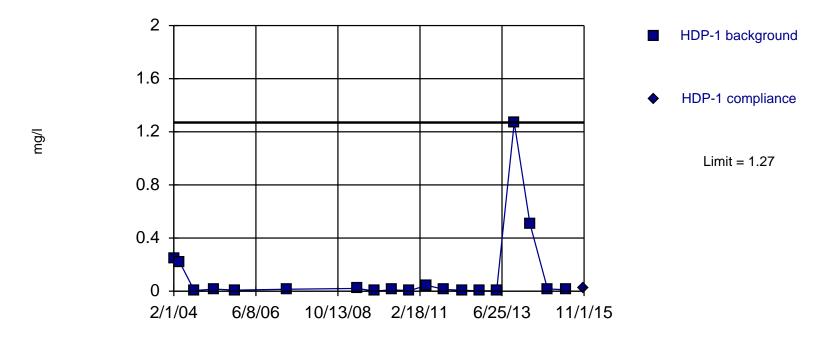
Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Na   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HSW-1

Within Control Limits

Background Data Summary: Mean=307.4, Std. Dev.=45.26, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9343, critical = 0.918. Report alpha = 0.000078. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Na   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

■ HPS-1 background

◆ HPS-1 compliance

⬤ CUSUM

h = 583.2

SCL = 559.6

mg/l

600
480
360
240
120
0

11/1/03   3/26/06   8/19/08   1/12/11   6/7/13   11/1/15

Background Data Summary: Mean=347.9, Std. Dev.=47.06, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.965, critical = 0.918. Report alpha = 0.000078. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Na   Analysis Run 12/14/2015 3:57 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HCP-6

■ HCP-6 background

◆ HCP-6 compliance

⬤ CUSUM

h = 438.9

SCL = 426.3

mg/l

Background Data Summary: Mean=312.3, Std. Dev.=25.33, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9615, critical = 0.918. Report alpha = 0.000078. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Na   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

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Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
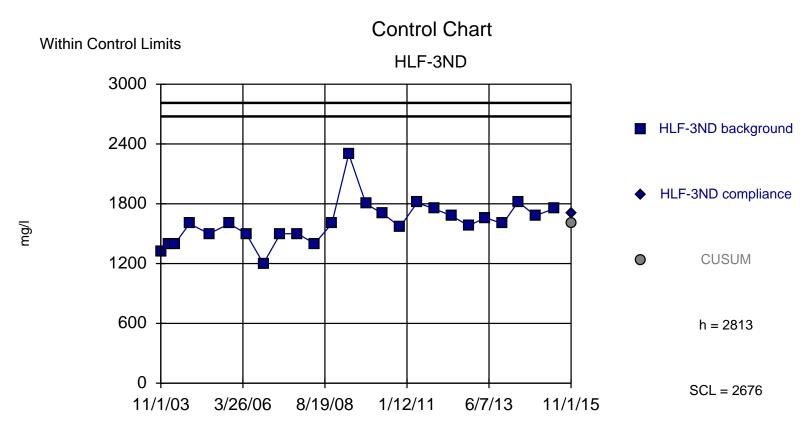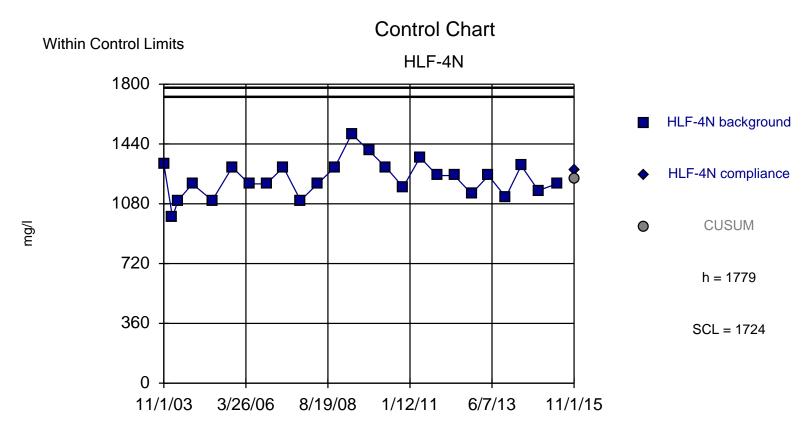
Constituent: Na   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

mg/l

■ HDP-1 background

◆ HDP-1 compliance

⬤ CUSUM

h = 3797

SCL = 3505

Background Data Summary (based on natural log transformation): Mean=7.441, Std. Dev.=0.1601, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9176, critical = 0.914. Report alpha = 0.000116. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Na   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH1W

Within Control Limits

- ■ NH1W background
- ◆ NH1W compliance
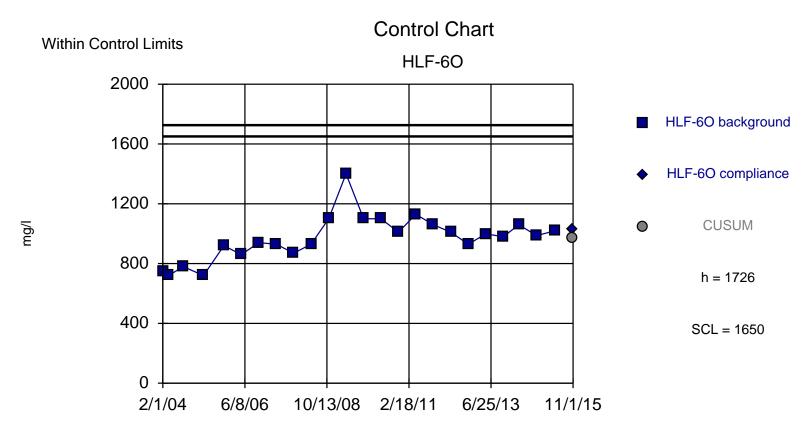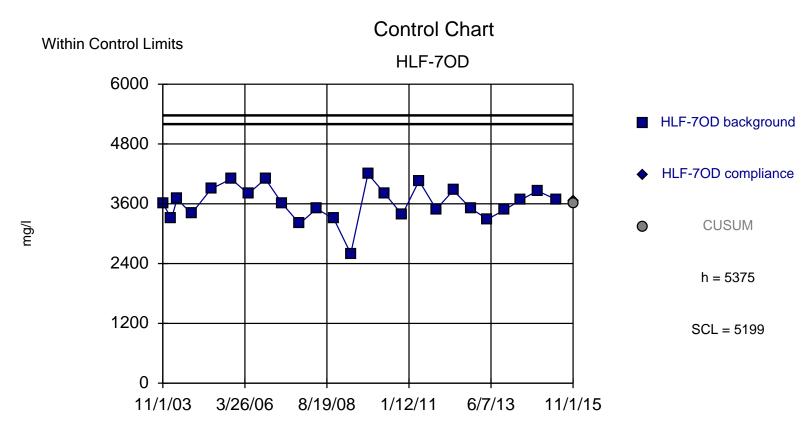- ● CUSUM

h = 823.4

SCL = 784.2

Background Data Summary: Mean=431.7, Std. Dev.=78.33, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9764, critical = 0.936. Report alpha = 0.000044. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
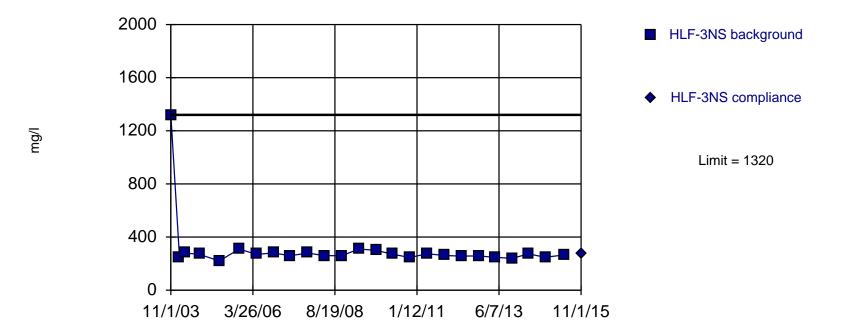
Constituent: Na   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Na   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
NH6W

Within Control Limits

Legend:
- NH6W background
- NH6W compliance
- CUSUM

h = 679.3

SCL = 527.5

Background Data Summary (based on natural log transformation): Mean=3.991, Std. Dev.=0.506, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9639, critical = 0.936. Report alpha = 0.000044. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
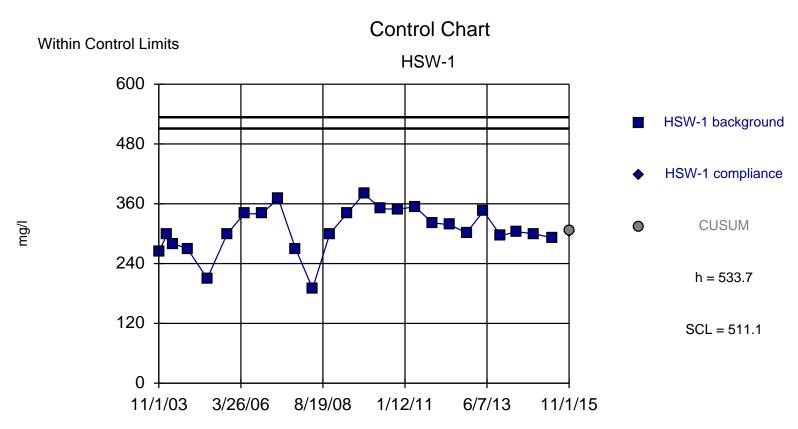
Constituent: Na   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Exceeds Limit

Prediction Limit

Intrawell Non-parametric

- ■ NH8W background
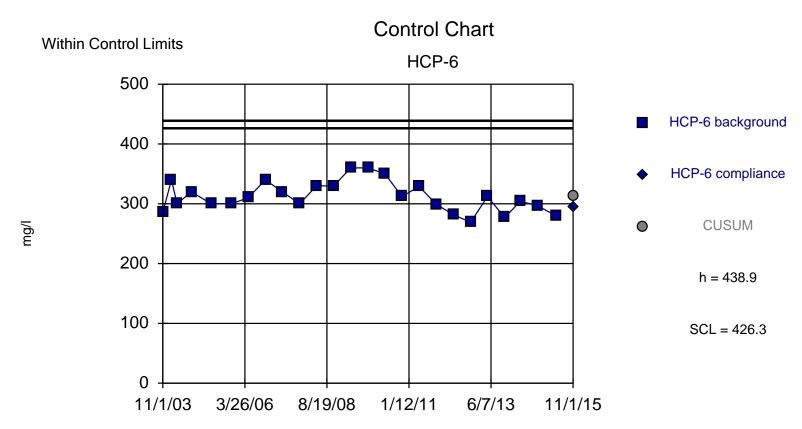- ◆ NH8W compliance

Limit = 53.9

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Na   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

RG-1W

Within Control Limits

mg/l

Legend:
- ■ RG-1W background
- ◆ RG-1W compliance
- ● CUSUM

h = 759.1

SCL = 731.6

X-axis labels: 5/1/97, 1/11/01, 9/24/04, 6/6/08, 2/18/12, 11/1/15

Y-axis labels: 0, 160, 320, 480, 640, 800

Background Data Summary (based on square root transformation): Mean=22.51, Std. Dev.=1.009, n=33. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9427, critical = 0.931. Report alpha = 0.000048. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
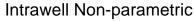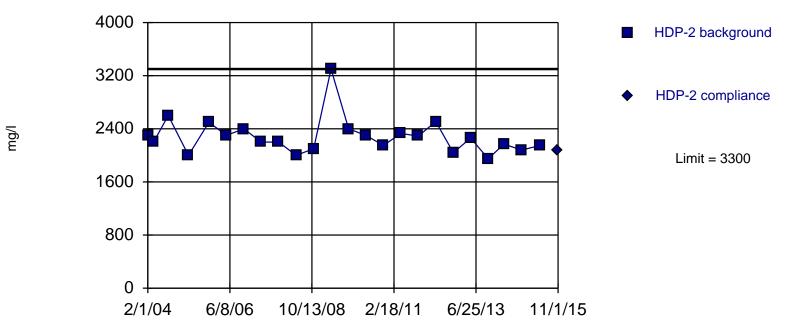
Constituent: Na   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HWW-4

Within Control Limits

Legend:
- ■ HWW-4 background
- ◆ HWW-4 compliance
- ⬤ CUSUM

h = 0.07472

SCL = 0.07012

Background Data Summary: Mean=0.02879, Std. Dev.=0.009185, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.925, critical = 0.916. Report alpha = 0.000118. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
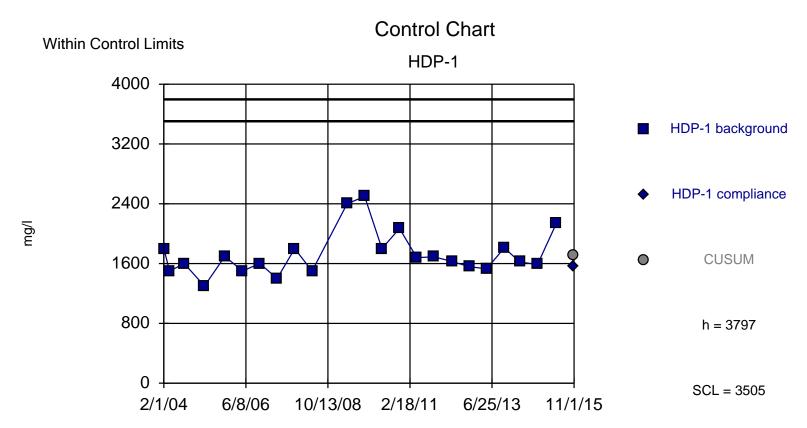
Constituent: Ni   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Prediction Limit

Intrawell Non-parametric, HLF-3ND
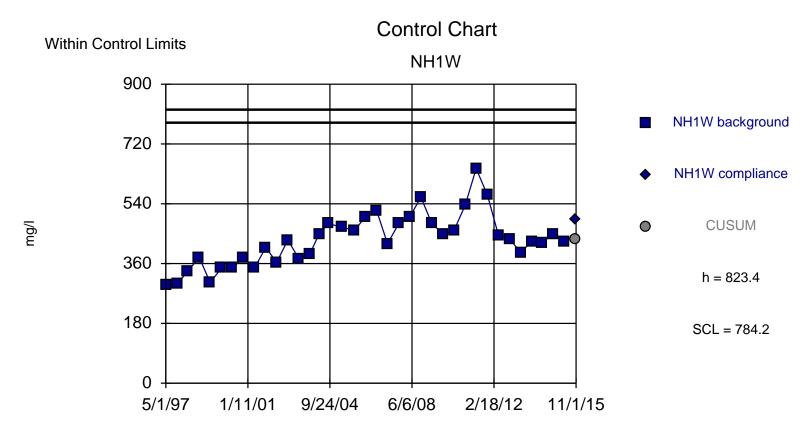

■ HLF-3ND background

Limit = 0.02

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 15 background values. Report alpha = 0.0625. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Ni   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Prediction Limit

Intrawell Non-parametric, HLF-4N

■ HLF-4N background

Limit = 0.025

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 12 background values. Report alpha = 0.07692. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Ni   Analysis Run 12/14/2015 3:58 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HLF-6O

Within Control Limits

mg/l

■ HLF-6O background

◆ HLF-6O compliance

○ CUSUM

h = 0.2058

SCL = 0.1892

0.3
0.24
0.18
0.12
0.06
0

9/1/04   11/25/06   2/18/09   5/14/11   8/7/13   11/1/15

Background Data Summary: Mean=0.03989, Std. Dev.=0.03318, n=22. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9192, critical = 0.911. Report alpha = 0.00016. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
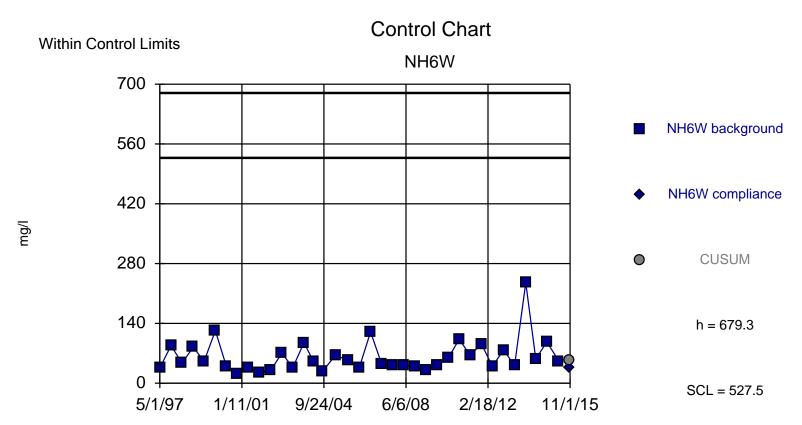
Constituent: Ni   Analysis Run 12/14/2015 3:59 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-7OD

Legend:
- ■ HLF-7OD background
- ◆ HLF-7OD compliance
- ○ CUSUM

h = 0.3168

SCL = 0.3045

Background Data Summary: Mean=0.194, Std. Dev.=0.02457, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9186, critical = 0.918. Report alpha = 0.00009. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Ni   Analysis Run 12/14/2015 3:59 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

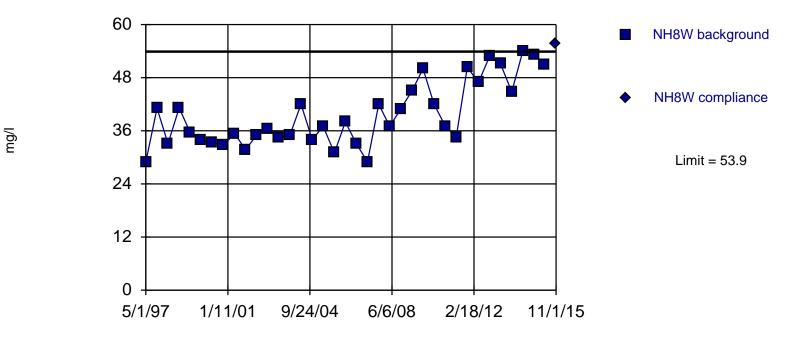Within Control Limits

HLF-3NS

Background Data Summary (based on cube root transformation): Mean=0.2678, Std. Dev.=0.1067, n=22. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9168, critical = 0.911. Report alpha = 0.000148. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Ni   Analysis Run 12/14/2015 3:59 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HSW-1

Within Control Limits

mg/l

- ■ HSW-1 background
- ◆ HSW-1 compliance
- ○ CUSUM

h = 0.4747

SCL = 0.4493

0.5

0.4

0.3

0.2

0.1

0

11/1/03   3/26/06   8/19/08   1/12/11   6/7/13   11/1/15

Background Data Summary: Mean=0.2198, Std. Dev.=0.05098, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9627, critical = 0.918. Report alpha = 0.000096. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
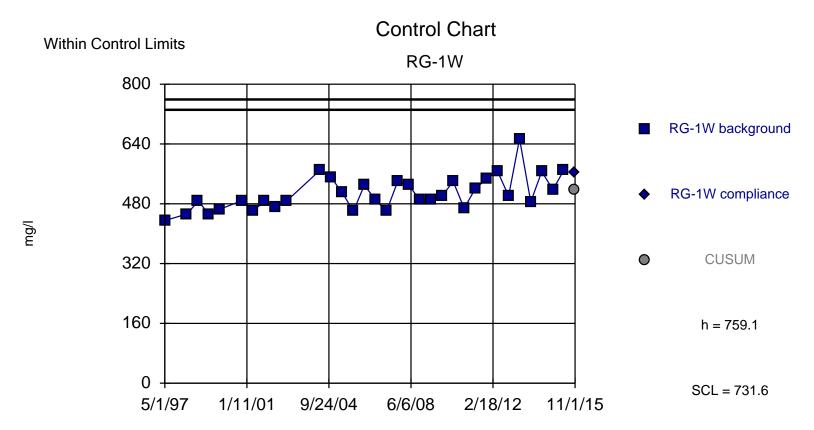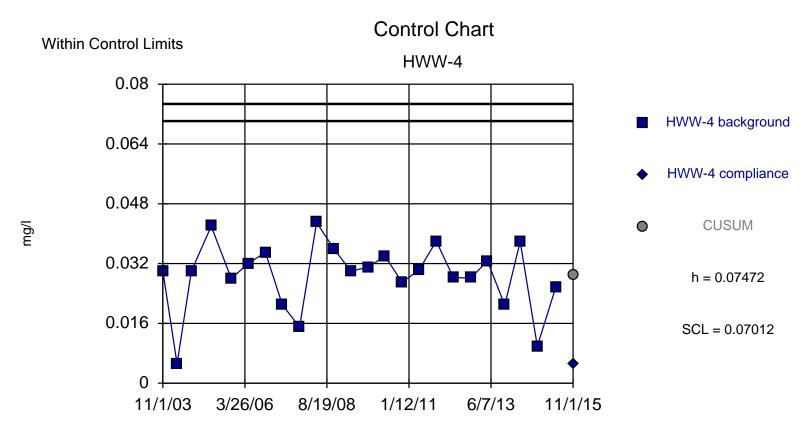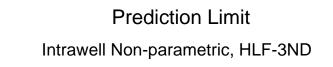
Constituent: Ni   Analysis Run 12/14/2015 3:59 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

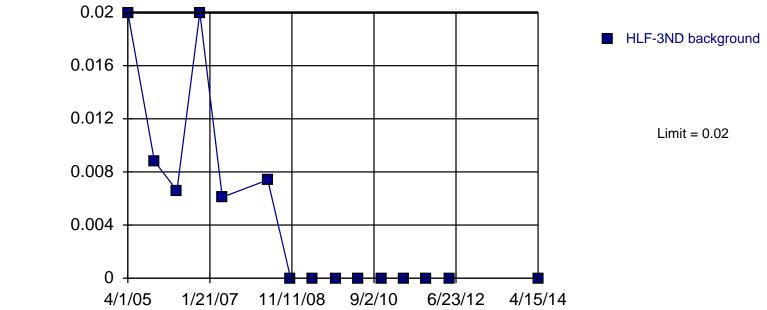### HPS-1

Within Control Limits

Background Data Summary (based on square root transformation): Mean=0.3388, Std. Dev.=0.1154, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9489, critical = 0.916. Report alpha = 0.000092. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Ni   Analysis Run 12/14/2015 3:59 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HCP-6

- ■ HCP-6 background
- ◆ HCP-6 compliance
- ○ CUSUM

h = 0.07092

SCL = 0.06616

mg/l

0.08
0.064
0.048
0.032
0.016
0

11/1/03   3/26/06   8/19/08   1/12/11   6/7/13   11/1/15

Background Data Summary: Mean=0.02336, Std. Dev.=0.009512, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9222, critical = 0.914. Report alpha = 0.0001. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
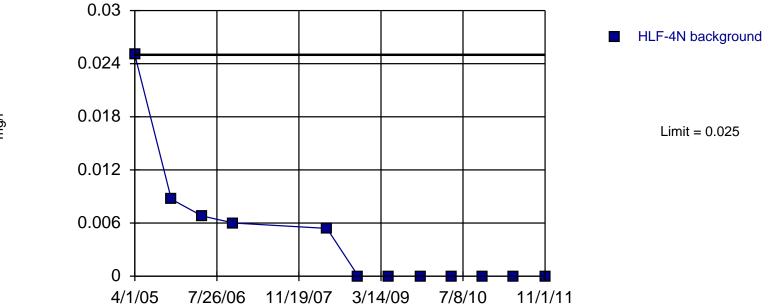
Constituent: Ni   Analysis Run 12/14/2015 3:59 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-2

Within Control Limits

- ■ HDP-2 background
- ◆ HDP-2 compliance
- ⬤ CUSUM

h = 0.2598

SCL = 0.2436

Background Data Summary (based on square root transformation): Mean=0.3486, Std. Dev.=0.03222, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9196, critical = 0.916. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Ni   Analysis Run 12/14/2015 3:59 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015
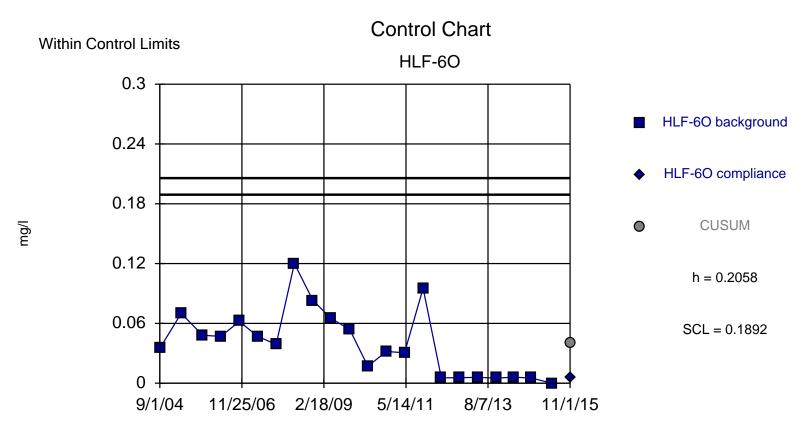
Control Chart

Within Control Limits

HDP-1

mg/l

■ HDP-1 background

◆ HDP-1 compliance

⬤ CUSUM

h = 0.3677

SCL = 0.3555

Background Data Summary (based on square transformation): Mean=0.04677, Std. Dev.=0.01769, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9632, critical = 0.914. Report alpha = 0.000178. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Ni   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
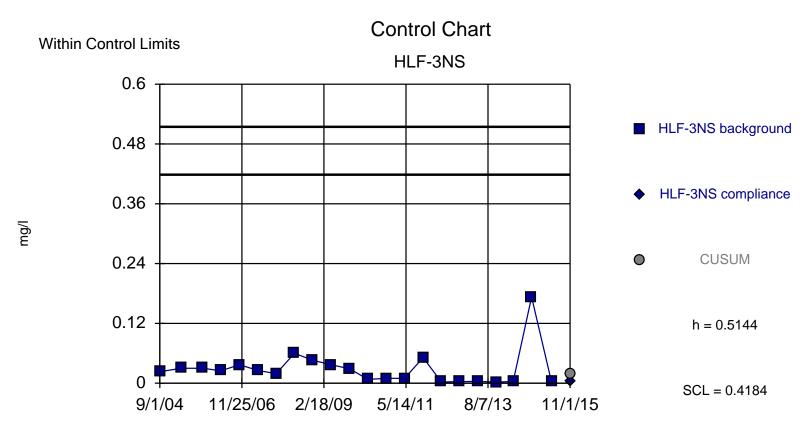
Huntington2015

Sanitas™ v.9.4.40 For the statistical analyses of groundwater by Water Environmental Technologies only. EPA

Control Chart
NH1W

Within Control Limits

mg/l

- ■ NH1W background
- ◆ NH1W compliance
- ● CUSUM

h = 0.2299

SCL = 0.2157

0.3
0.24
0.18
0.12
0.06
0

5/1/07   1/11/09   9/24/10   6/6/12   2/17/14   11/1/15

Background Data Summary (based on square root transformation): Mean=0.3291, Std. Dev.=0.03007, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8921, critical = 0.892. Report alpha = 0.000226. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Ni   Analysis Run 12/14/2015 4:00 PM

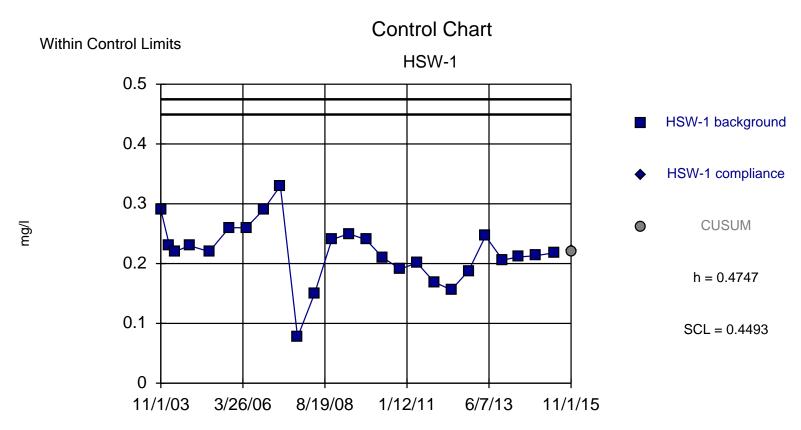Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
NH3W

Within Control Limits

Legend:
- ■ NH3W background
- ◆ NH3W compliance
- ⬤ CUSUM

h = 0.1749

SCL = 0.1582

y-axis: mg/l (0, 0.04, 0.08, 0.12, 0.16, 0.2)

x-axis: 5/1/07, 1/11/09, 9/24/10, 6/6/12, 2/17/14, 11/1/15

Background Data Summary (based on cube root transformation): Mean=0.375, Std. Dev.=0.03686, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9013, critical = 0.892. Report alpha = 0.000226. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
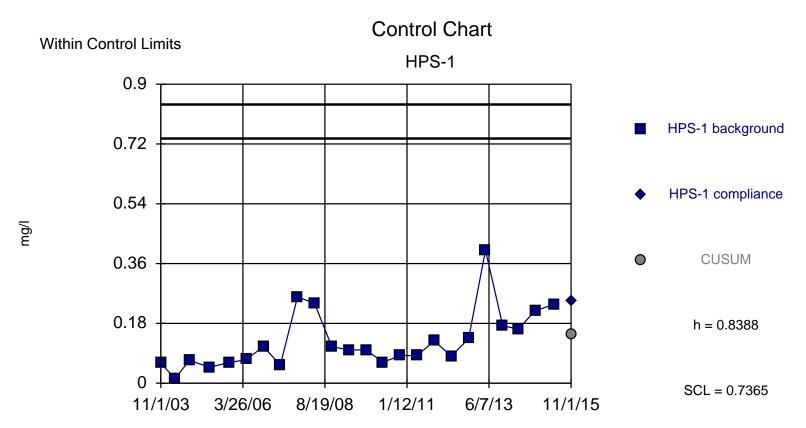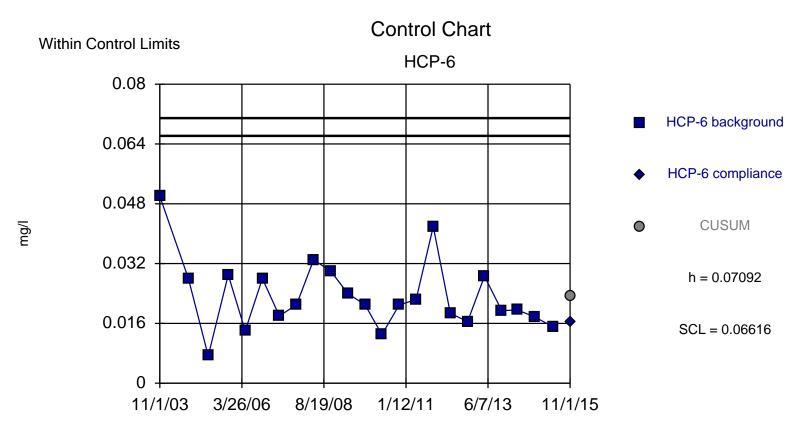
Constituent: Ni   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
NH6W

Within Control Limits

Legend:
- ■ NH6W background
- ◆ NH6W compliance
- ● CUSUM

h = 0.1731

SCL = 0.1517

Background Data Summary (based on square root transformation): Mean=0.151, Std. Dev.=0.05301, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.918, critical = 0.892. Report alpha = 0.000226. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
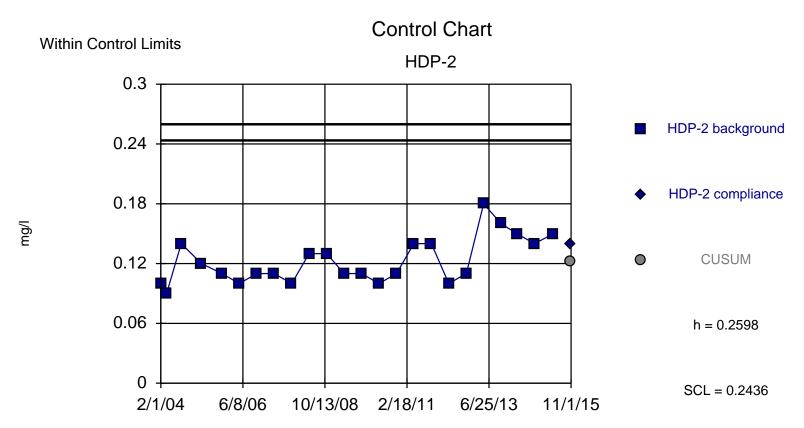
Constituent: Ni   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015

Control Chart

Within Control Limits

NH8W

Background Data Summary (based on square root transformation): Mean=0.09939, Std. Dev.=0.02227, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9122, critical = 0.892. Report alpha = 0.000226. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
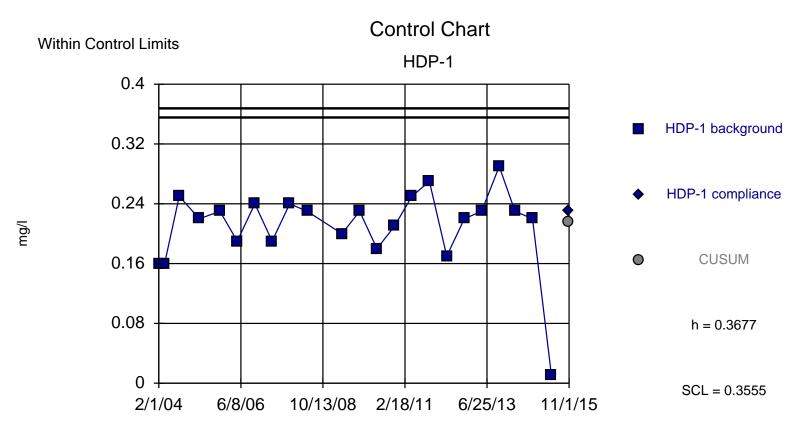
Constituent: Ni   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

RG-1W

■ RG-1W background

◆ RG-1W compliance

⬤ CUSUM

h = 0.2944

SCL = 0.283

Background Data Summary: Mean=0.1808, Std. Dev.=0.02272, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9153, critical = 0.892. Report alpha = 0.000226. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
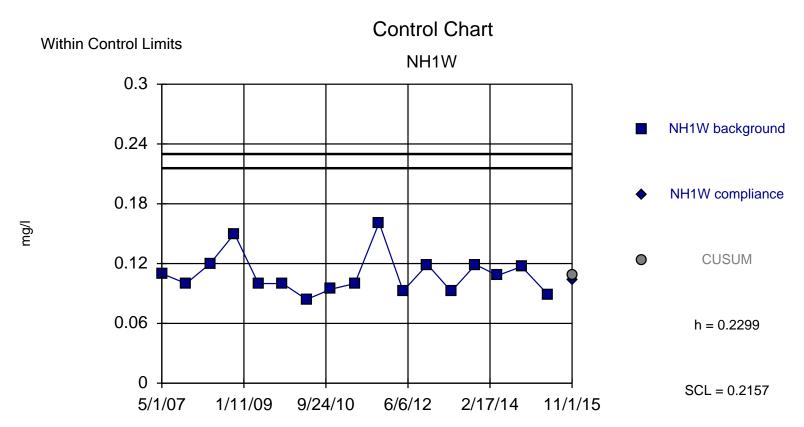
Constituent: Ni   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HWW-4

Background Data Summary (based on square root transformation): Mean=1.354, Std. Dev.=0.2453, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9211, critical = 0.916. Report alpha = 0.000088. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
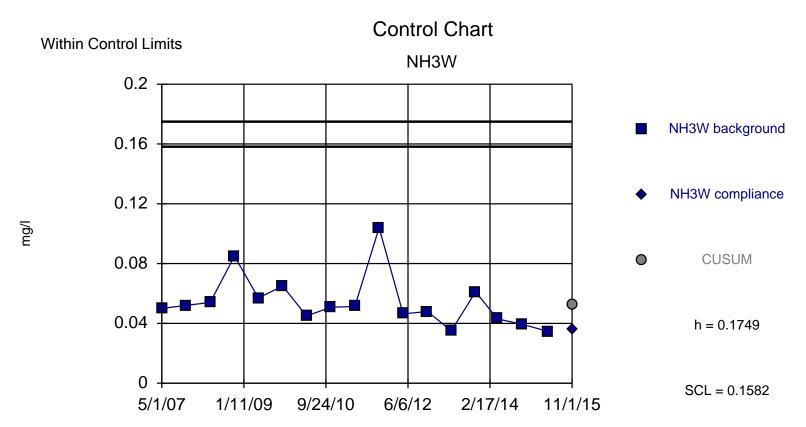
Constituent: NO3   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-3ND

Background Data Summary (based on natural log transformation): Mean=-3.031, Std. Dev.=1.003, n=18. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9356, critical = 0.897. Report alpha = 0. Dates ending 5/1/2013 used for control stats. Unstandardized h=5, SCL=4.5.
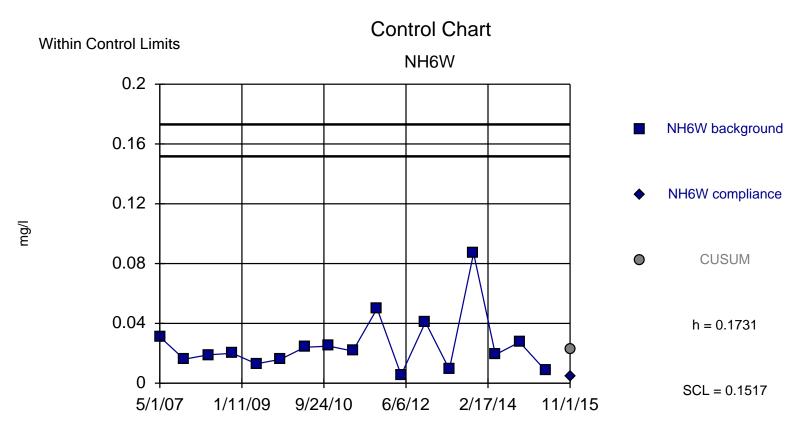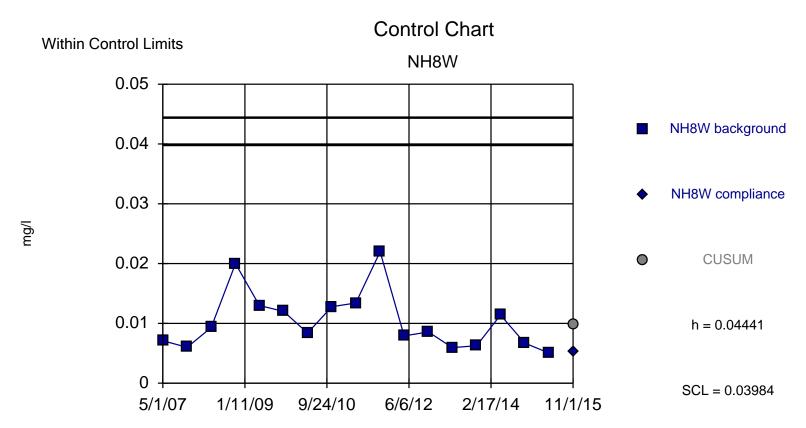
Constituent: NO3   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Prediction Limit

Intrawell Non-parametric, HLF-4N

Non-parametric test used in lieu of control chart 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. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: NO3   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-6O background

◆ HLF-6O compliance

Limit = 4.2

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: NO3   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HLF-7OD

Within Control Limits

Legend:
- ■ HLF-7OD background
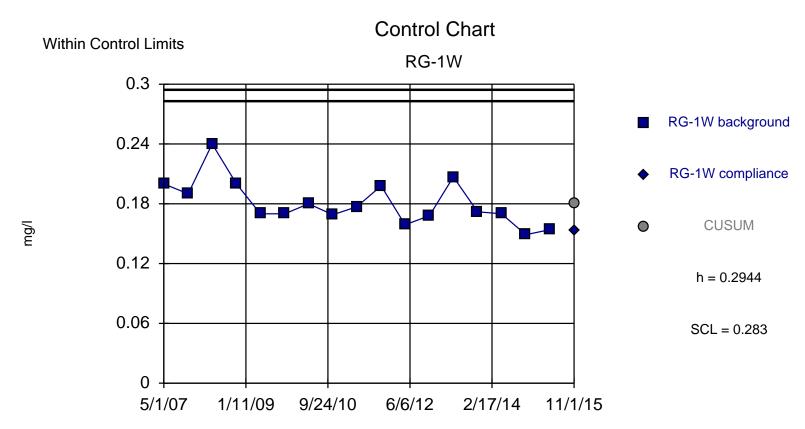- ◆ HLF-7OD compliance
- ⬤ CUSUM

h = 263.6

SCL = 246.3

Background Data Summary (based on square root transformation): Mean=10.8, Std. Dev.=1.088, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.928, critical = 0.916. Report alpha = 0.000088. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
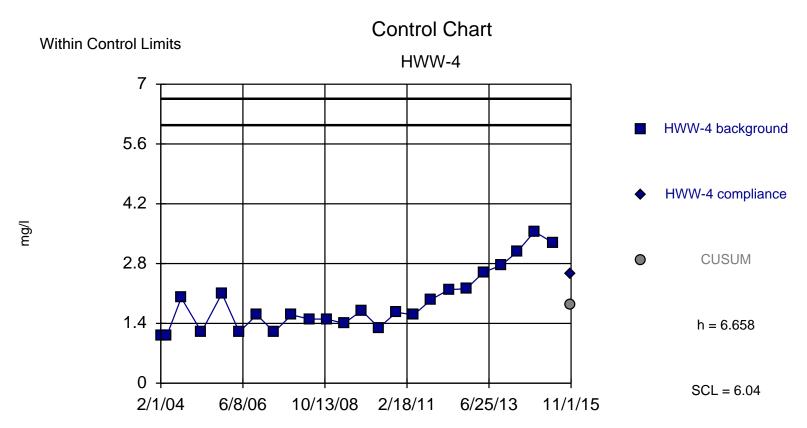
Constituent: NO3   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-3NS

Exceeds Control Limits

mg/l

■ HLF-3NS background
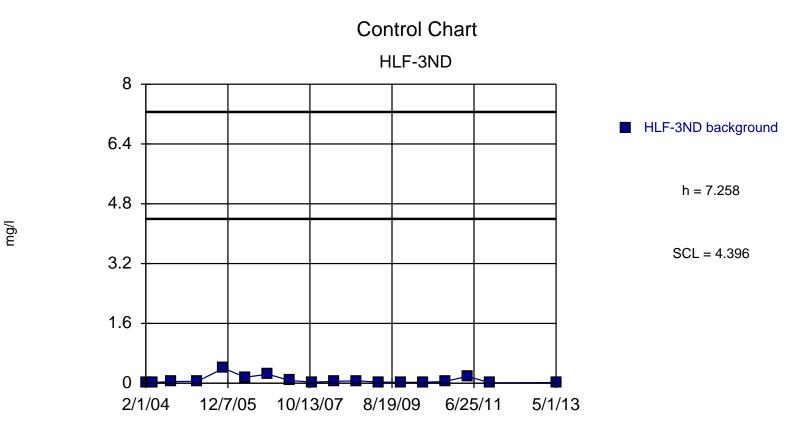
◆ HLF-3NS compliance

● CUSUM

h = 1.838

SCL = 1.594

Background Data Summary (based on square root transformation): Mean=0.4239, Std. Dev.=0.1864, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9682, critical = 0.914. Report alpha = 0.000146. Dates ending 10/15/2014 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: NO3   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

mg/l

■ HSW-1 background

◆ HSW-1 compliance

○ CUSUM

h = 17.91

SCL = 16.68

Background Data Summary: Mean=5.64, Std. Dev.=2.454, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.961, critical = 0.916. Report alpha = 0.00013. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: NO3   Analysis Run 12/14/2015 4:00 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015

Control Chart

Within Control Limits

HPS-1

Legend:
- ■ HPS-1 background
- ◆ HPS-1 compliance
- ● CUSUM

h = 15.13

SCL = 14.24

Background Data Summary: Mean=6.225, Std. Dev.=1.78, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9485, critical = 0.916. Report alpha = 0.00013. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
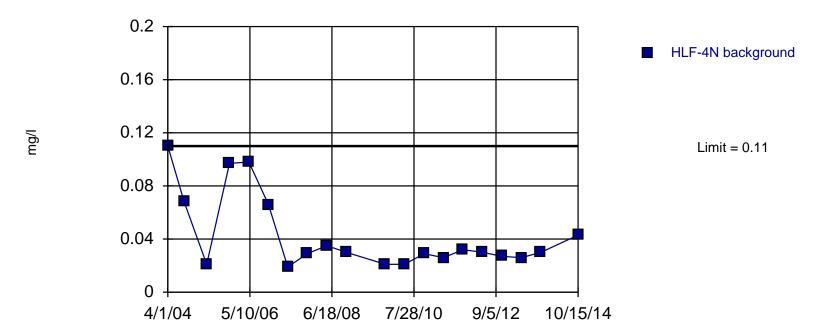
Constituent: NO3   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

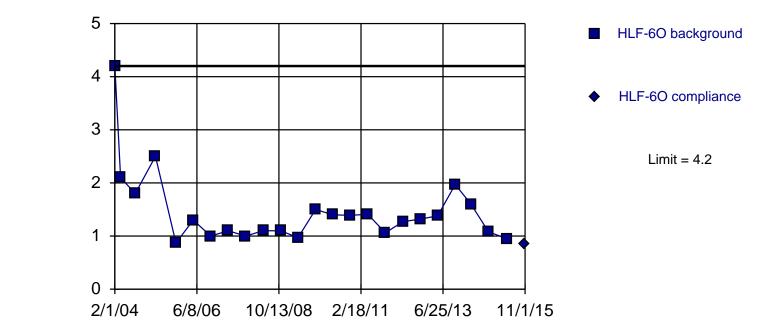# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: NO3   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-2

Within Control Limits

Legend:
- ■ HDP-2 background
- ◆ HDP-2 compliance
- ● CUSUM

h = 64.11

SCL = 60.24

Background Data Summary: Mean=25.35, Std. Dev.=7.751, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.939, critical = 0.916. Report alpha = 0.00013. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: NO3   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015

Control Chart
HDP-1

■ HDP-1 background

h = 75.96

SCL = 65.47

mg/l

Background Data Summary (based on square root transformation): Mean=2.476, Std. Dev.=1.248, n=22. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9764, critical = 0.911. Report alpha = 0. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: NO3   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
NH1W

Within Control Limits

mg/l

- ■ NH1W background
- ◆ NH1W compliance
- ⬤ CUSUM

h = 47.73

SCL = 37.08

x-axis: 5/1/97, 1/11/01, 9/24/04, 6/6/08, 2/18/12, 11/1/15

y-axis: 0, 10, 20, 30, 40, 50

Background Data Summary (based on natural log transformation): Mean=1.34, Std. Dev.=0.505, n=36. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9378, critical = 0.935. Report alpha = 0.000052. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: NO3   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ NH3W background

◆ NH3W compliance

Limit = 10.9

mg/l

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
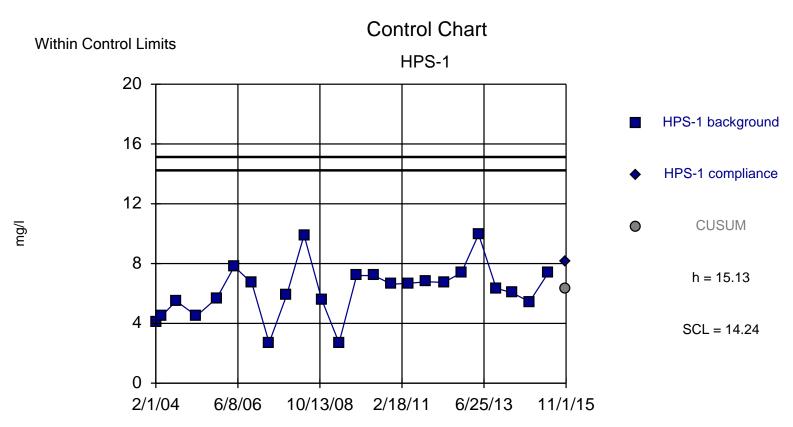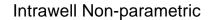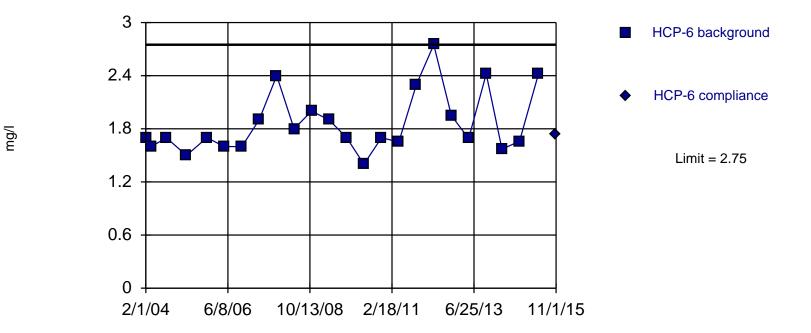
Constituent: NO3   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

mg/l

- ■ NH6W background
- ◆ NH6W compliance

Limit = 9.7

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 31 background values. Report alpha = 0.03125. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: NO3   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 31 background values. Report alpha = 0.03125. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: NO3   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit
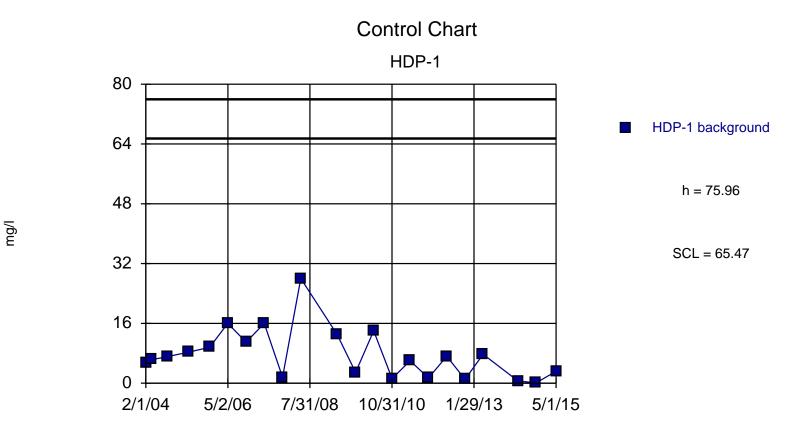
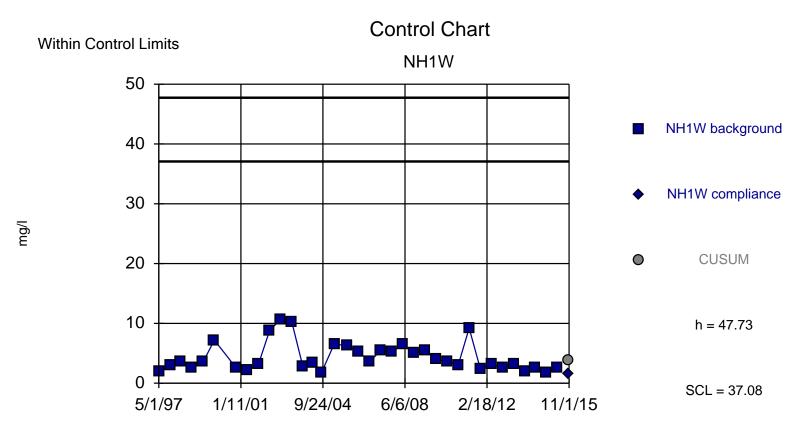# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 33 background values. Report alpha = 0.02941. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: NO3   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HWW-4

Within Control Limits

Legend:
- ■ HWW-4 background
- ◆ HWW-4 compliance
- ○ CUSUM
- ○ Low CUSUM

h = 7.896

SCL = 7.826

h = 6.496

SCL = 6.566

Background Data Summary: Mean=7.196, Std. Dev.=0.1399, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9242, critical = 0.918. Report alpha = 0.000066. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
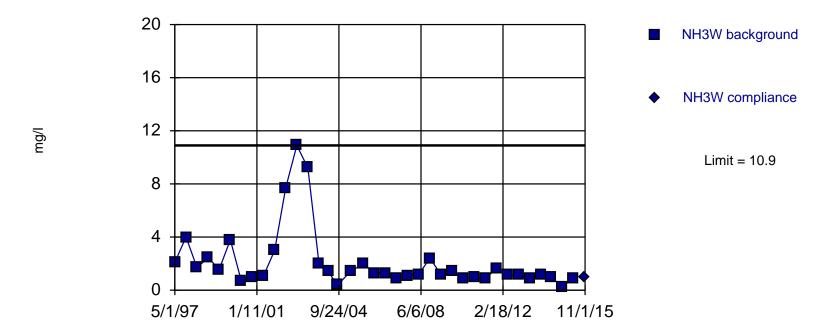
Constituent: pH   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limits

Prediction Limit

Intrawell Non-parametric

■ HLF-3ND background

◆ HLF-3ND compliance

Limit = 8.5

Limit = 7.21

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 25 background values. Report alpha = 0.07692. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: pH   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limits

Prediction Limit

Intrawell Non-parametric

n/a

■ HLF-4N background

◆ HLF-4N compliance

Limit = 8.83

Limit = 8.18

9

7.2

5.4

3.6

1.8

0

11/1/03   3/26/06   8/19/08   1/12/11   6/7/13   11/1/15
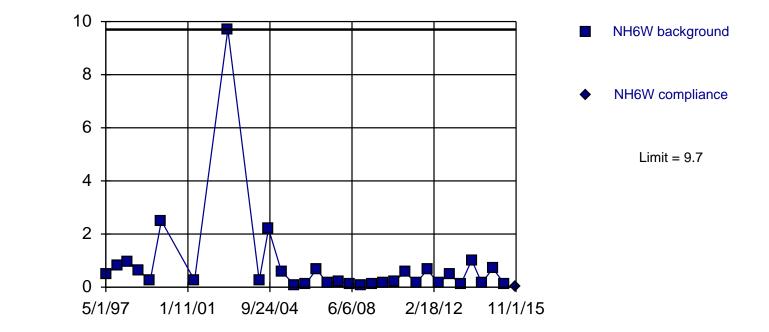
Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 25 background values. Report alpha = 0.07692. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: pH   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limits

Prediction Limit

Intrawell Non-parametric

■ HLF-6O background
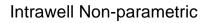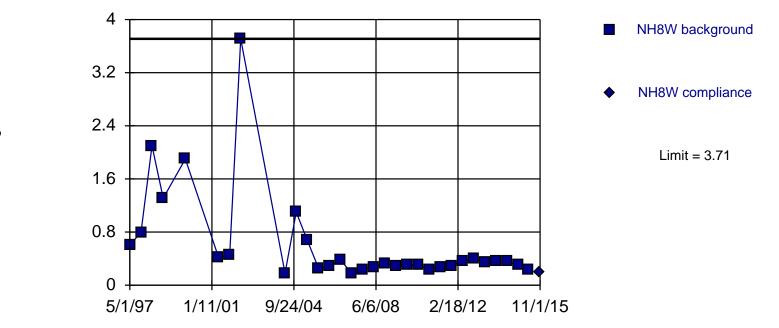
◆ HLF-6O compliance

Limit = 7.63

Limit = 6.87

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 24 background values. Report alpha = 0.08. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: pH   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-7OD

Within Control Limits

- ■ HLF-7OD background
- ◆ HLF-7OD compliance
- ○ CUSUM
- ○ Low CUSUM

h = 8.336

SCL = 8.231

h = 6.232

SCL = 6.337

Background Data Summary: Mean=7.284, Std. Dev.=0.2103, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9259, critical = 0.918. Report alpha = 0.000066. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: pH   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limits

Prediction Limit

Intrawell Non-parametric

HLF-3NS background

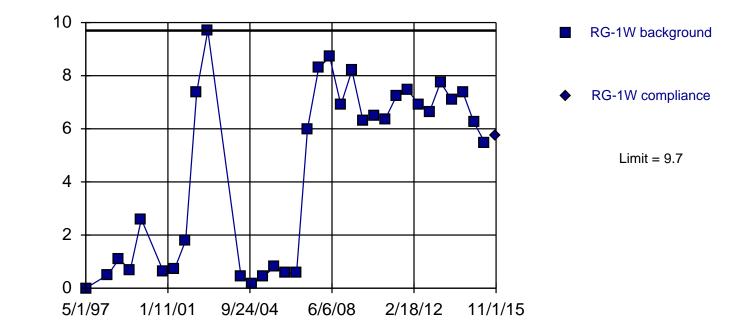HLF-3NS compliance

Limit = 8.4

Limit = 6.96

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 25 background values. Report alpha = 0.07692. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
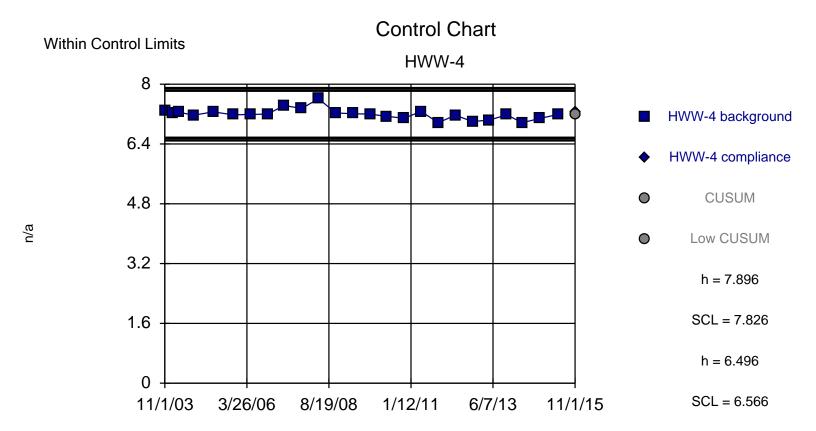
Constituent: pH   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
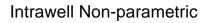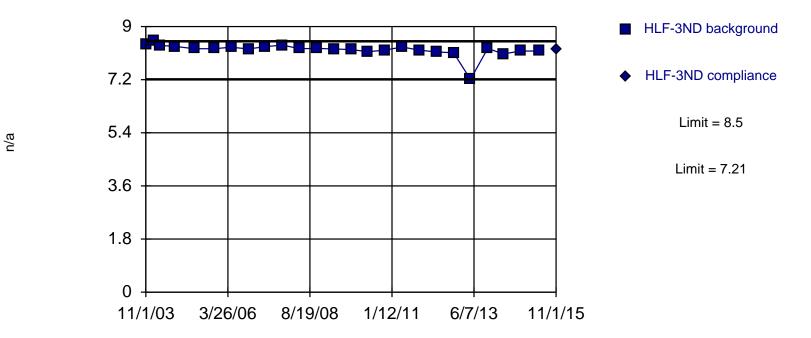
Huntington2015

Control Chart

HSW-1

Within Control Limits

Legend:
- ■ HSW-1 background
- ◆ HSW-1 compliance
- ○ CUSUM
- ○ Low CUSUM

h = 8.015

SCL = 7.929

h = 6.285

SCL = 6.371

Background Data Summary: Mean=7.15, Std. Dev.=0.1731, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9332, critical = 0.918. Report alpha = 0.000066. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: pH   Analysis Run 12/14/2015 4:01 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

HPS-1 background

HPS-1 compliance

CUSUM

Low CUSUM

h = 7.858

SCL = 7.764

h = 5.973

SCL = 6.067

Background Data Summary: Mean=6.916, Std. Dev.=0.1885, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9341, critical = 0.918. Report alpha = 0.000066. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
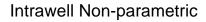
Constituent: pH   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limits

Prediction Limit

Intrawell Non-parametric

■ HCP-6 background
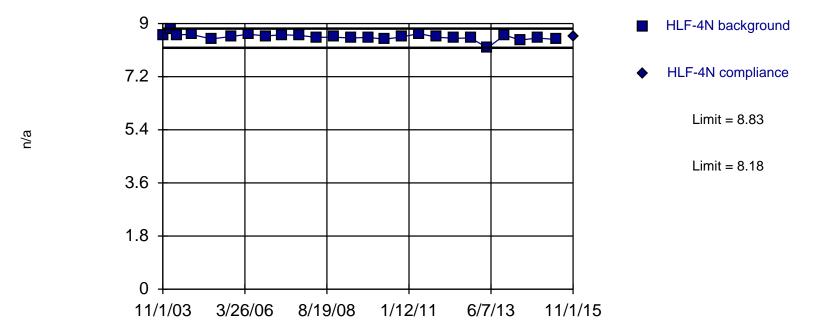
◆ HCP-6 compliance

Limit = 8.06

Limit = 7.11

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 25 background values. Report alpha = 0.07692. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
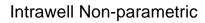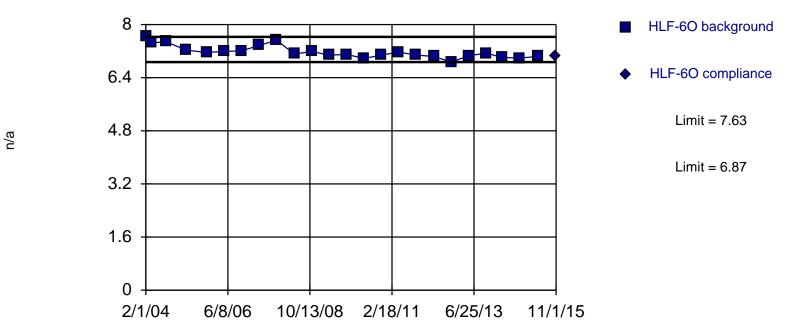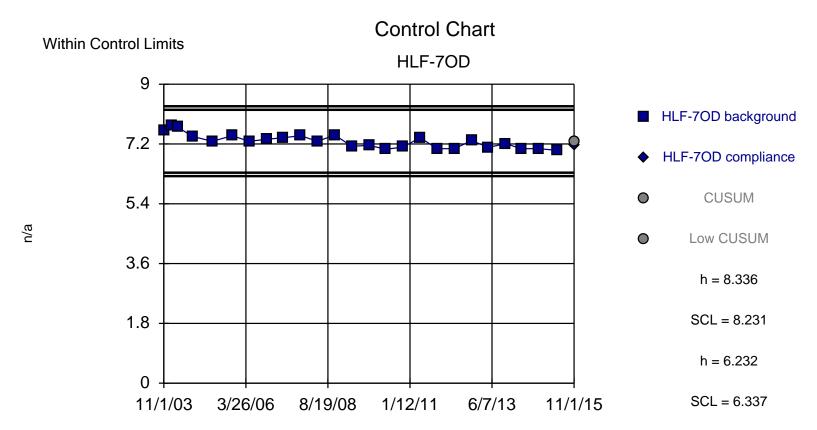
Constituent: pH   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-2

- ■ HDP-2 background
- ◆ HDP-2 compliance
- ⊙ CUSUM
- ⊙ Low CUSUM

h = 7.848

SCL = 7.79

h = 6.681

SCL = 6.74

Background Data Summary: Mean=7.265, Std. Dev.=0.1167, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9476, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: pH   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

- HDP-1 background
- HDP-1 compliance
- CUSUM
- Low CUSUM

h = 8.17

SCL = 8.077

h = 6.302

SCL = 6.396

Background Data Summary: Mean=7.236, Std. Dev.=0.1868, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9373, critical = 0.914. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: pH   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH1W

Legend:
- ■ NH1W background
- ◆ NH1W compliance
- ○ CUSUM
- ○ Low CUSUM

h = 7.447

SCL = 7.408

h = 6.654

SCL = 6.694

Background Data Summary: Mean=7.051, Std. Dev.=0.07932, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.95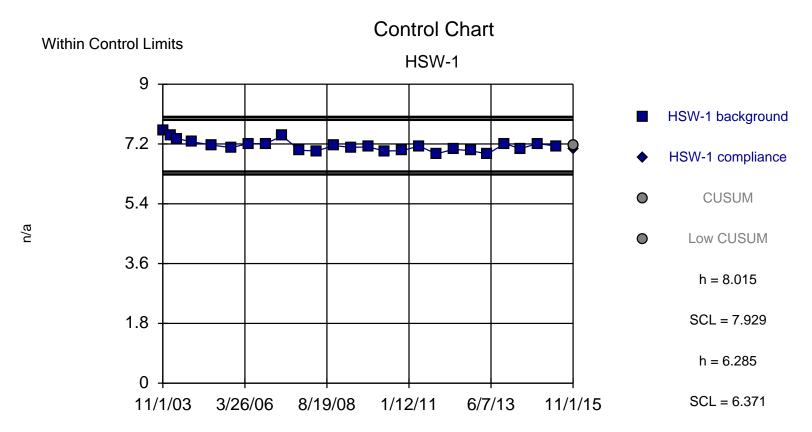87, critical = 0.881. Report alpha = 0.000336. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: pH   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH3W

Legend:
- ■ NH3W background
- ◆ NH3W compliance
- ● CUSUM
- ● Low CUSUM

h = 7.637

SCL = 7.597

h = 6.834

SCL = 6.874

Background Data Summary: Mean=7.235, Std. Dev.=0.08034, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9002, critical = 0.881. Report alpha = 0.000336. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
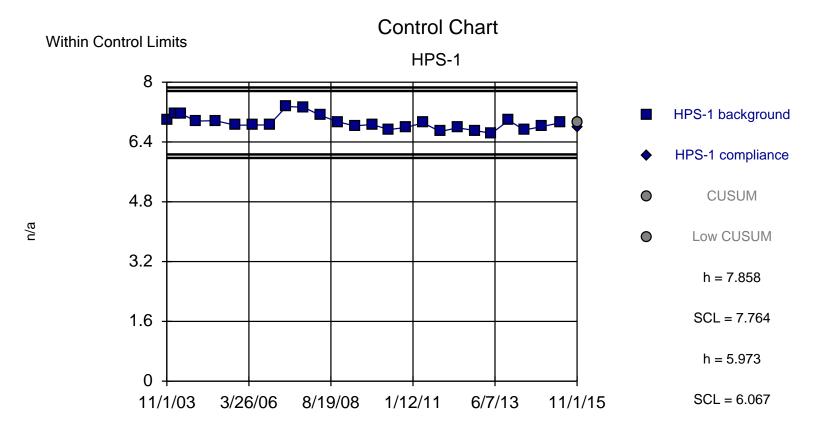
Constituent: pH   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH6W

Within Control Limits

- ■ NH6W background
- ◆ NH6W compliance
- ○ CUSUM
- ○ Low CUSUM
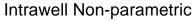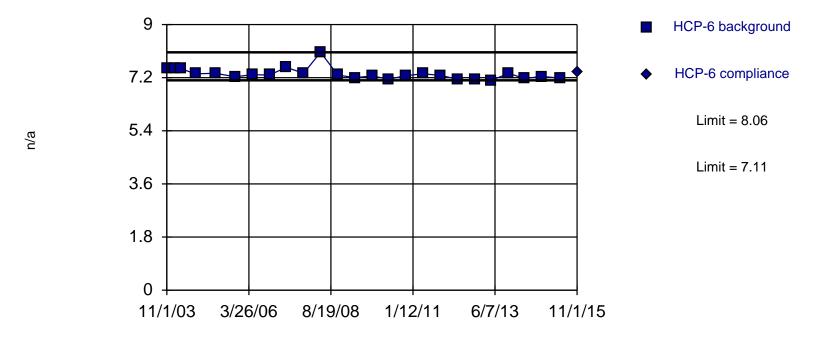
h = 8.063

SCL = 7.981

h = 6.423

SCL = 6.505

Background Data Summary: Mean=7.243, Std. Dev.=0.164, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9728, critical = 0.881. Report alpha = 0.000336. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: pH   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH8W

NH8W background

NH8W compliance

CUSUM

Low CUSUM

h = 7.849

SCL = 7.814

h = 7.148

SCL = 7.183

Background Data Summary: Mean=7.499, Std. Dev.=0.07009, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9404, critical = 0.881. Report alpha = 0.000336. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
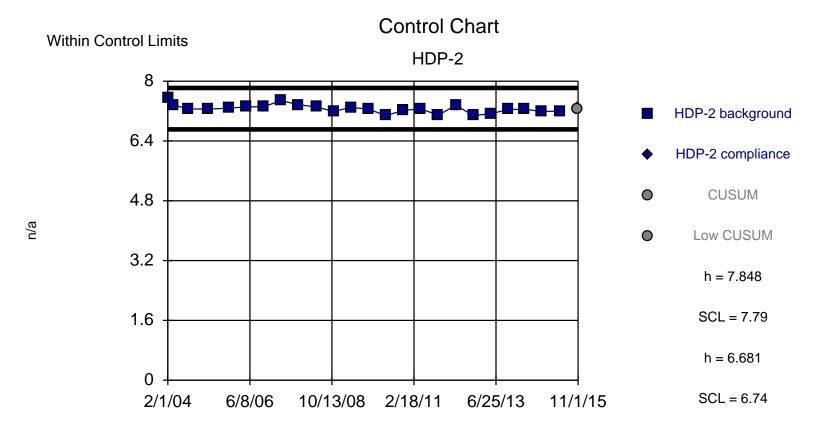
Constituent: pH   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
RG-1W

Within Control Limits

Legend:
- RG-1W background
- RG-1W compliance
- CUSUM
- Low CUSUM

h = 7.856

SCL = 7.801

h = 6.76

SCL = 6.815

Background Data Summary: Mean=7.308, Std. Dev.=0.1096, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.92, critical = 0.881. Report alpha = 0.000336. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

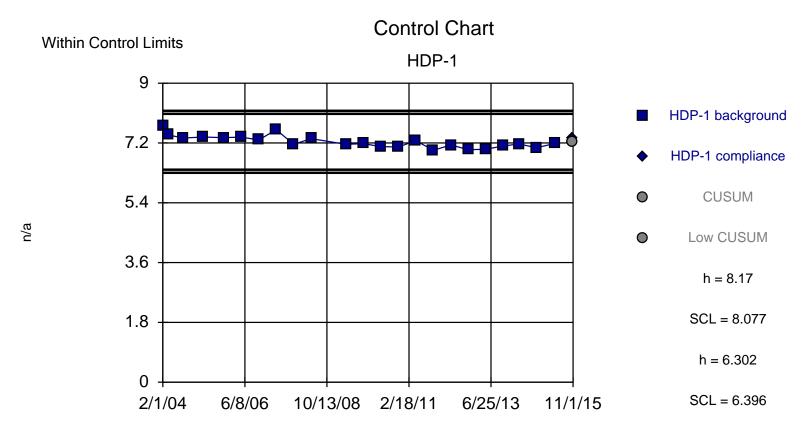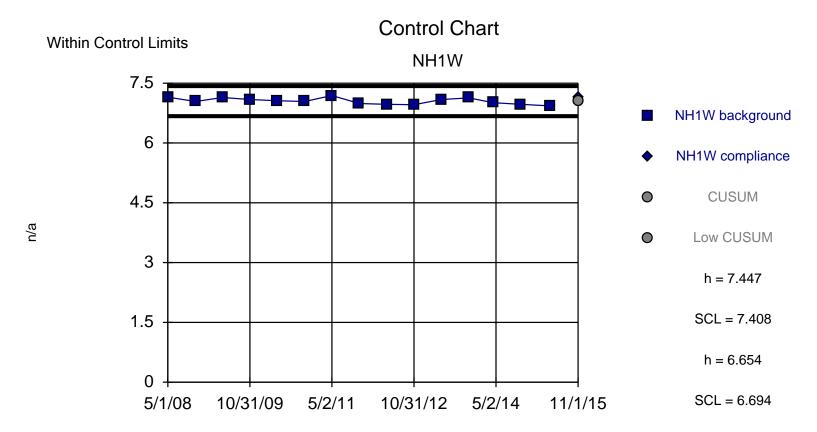Constituent: pH   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HWW-4

■ HWW-4 background

◆ HWW-4 compliance

⬤ CUSUM

h = 3.877

SCL = 3.735

Background Data Summary: Mean=2.462, Std. Dev.=0.283, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.946, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: SC   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3ND

Background Data Summary (based on natural log transformation): Mean=1.963, Std. Dev.=0.133, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9179, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
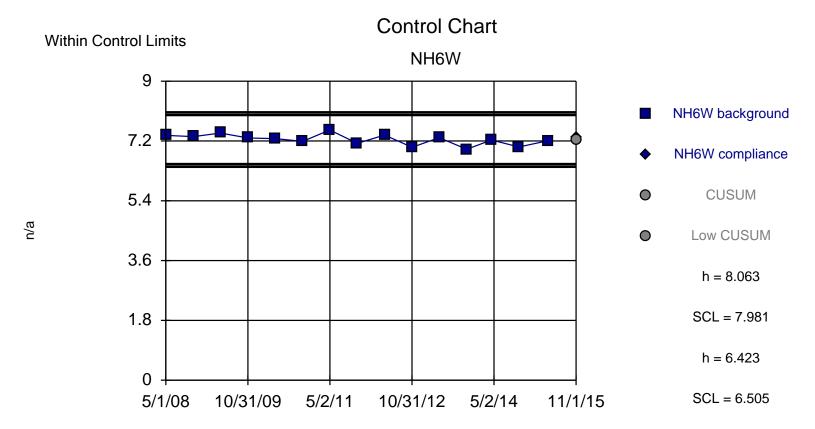
Constituent: SC   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HLF-4N

Within Control Limits

n/a

- ■ HLF-4N background
- ◆ HLF-4N compliance
- ⬤ CUSUM

h = 6.324

SCL = 6.212

Background Data Summary: Mean=5.2, Std. Dev.=0.2247, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9176, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
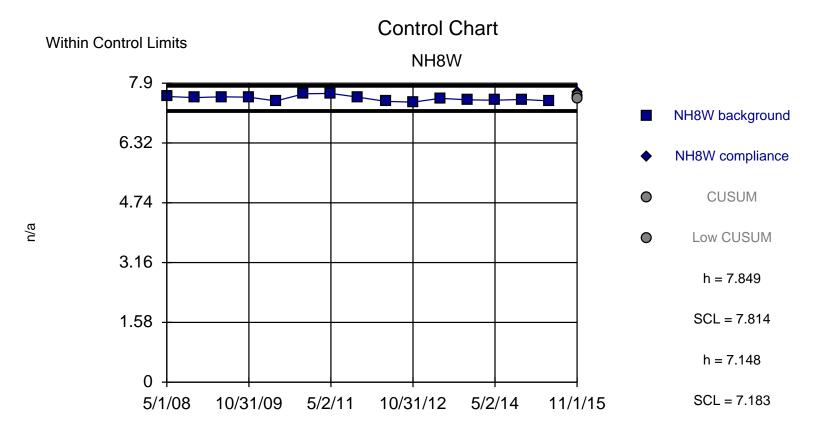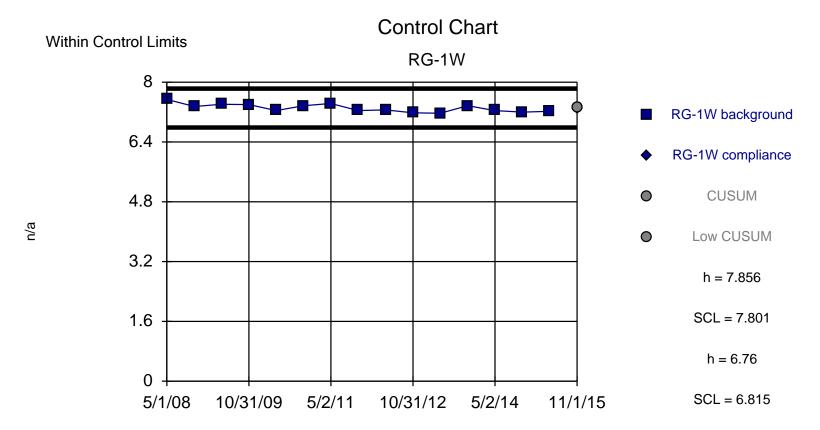
Constituent: SC   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-6O

■ HLF-6O background

◆ HLF-6O compliance

○ CUSUM

h = 22.18

SCL = 21.01

Background Data Summary: Mean=10.53, Std. Dev.=2.33, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.928, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
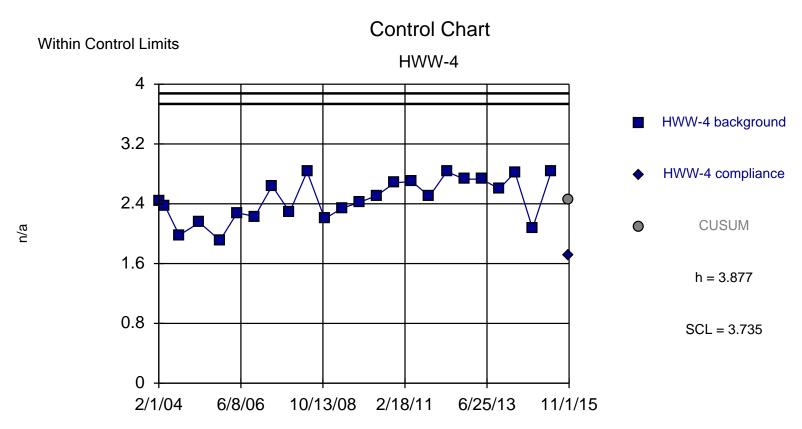
Constituent: SC   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-7OD

- ■ HLF-7OD background
- ◆ HLF-7OD compliance
- ● CUSUM

h = 31.61

SCL = 30.36

Background Data Summary (based on square root transformation): Mean=4.499, Std. Dev.=0.2246, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.926, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
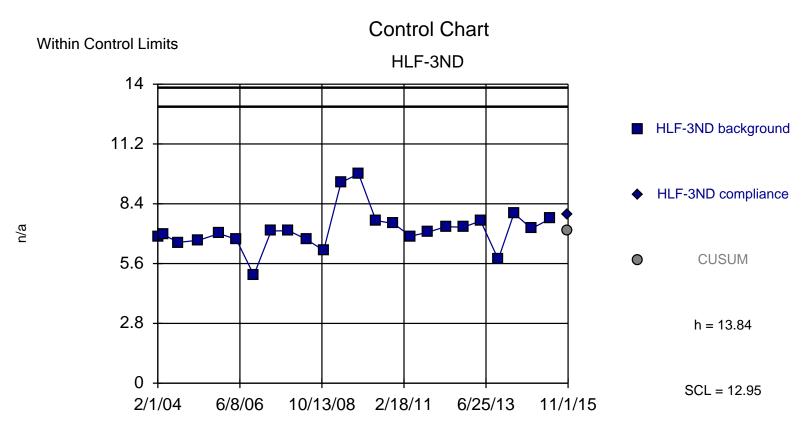
Constituent: SC   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-3NS

Within Control Limits

n/a

- ■ HLF-3NS background
- ◆ HLF-3NS compliance
- ● CUSUM

h = 5.376

SCL = 5.269

Background Data Summary: Mean=4.305, Std. Dev.=0.2142, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9747, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
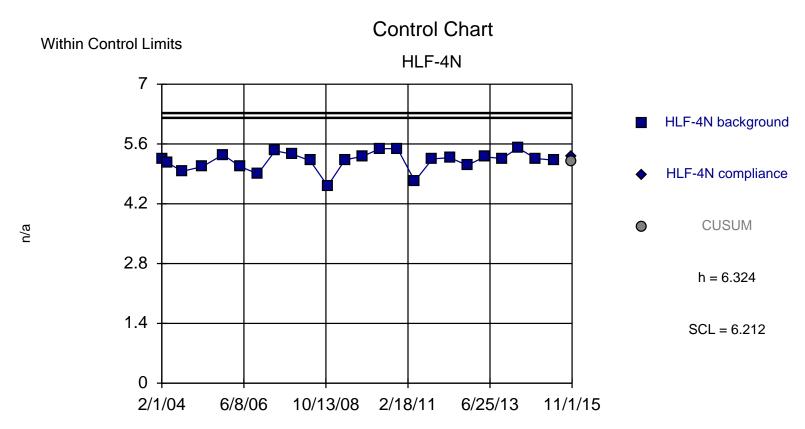
Constituent: SC   Analysis Run 12/14/2015 4:02 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HSW-1

Within Control Limits

n/a

X-axis: 2/1/04, 6/8/06, 10/13/08, 2/18/11, 6/25/13, 11/1/15
Y-axis: 0, 2.2, 4.4, 6.6, 8.8, 11

Legend:
■ HSW-1 background
♦ HSW-1 compliance
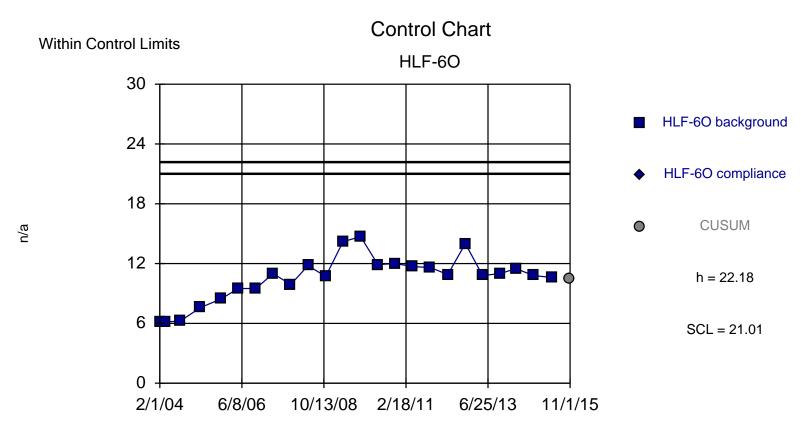● CUSUM

h = 10.8

SCL = 10.27

Background Data Summary: Mean=5.477, Std. Dev.=1.065, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9504, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

Legend:
- ■ HPS-1 background
- ◆ HPS-1 compliance
- ● CUSUM

h = 7.937

SCL = 7.667

Background Data Summary: Mean=5.239, Std. Dev.=0.5396, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9622, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
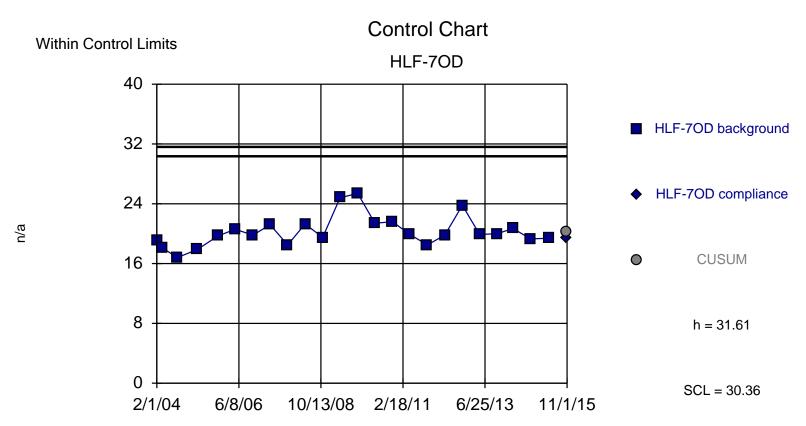
Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HCP-6

Background Data Summary: Mean=3.178, Std. Dev.=0.23, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9174, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
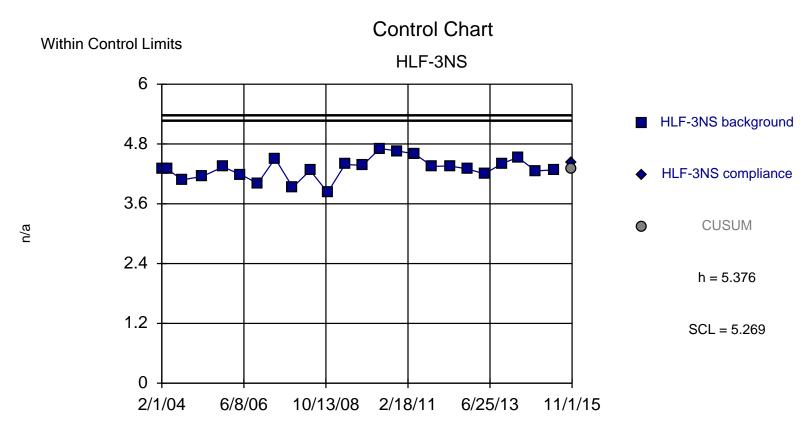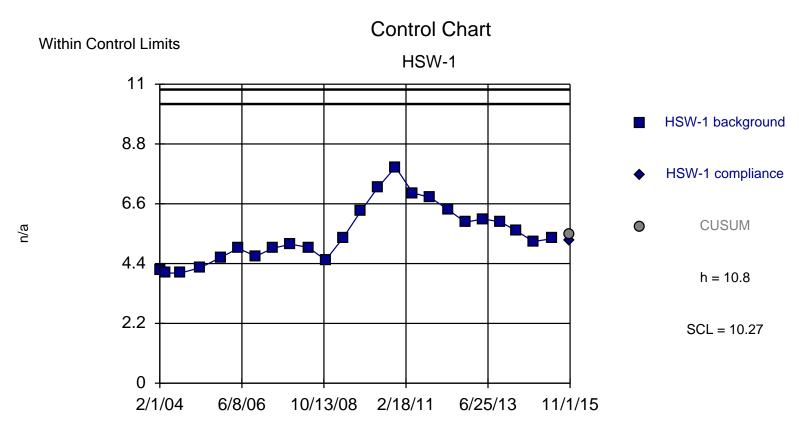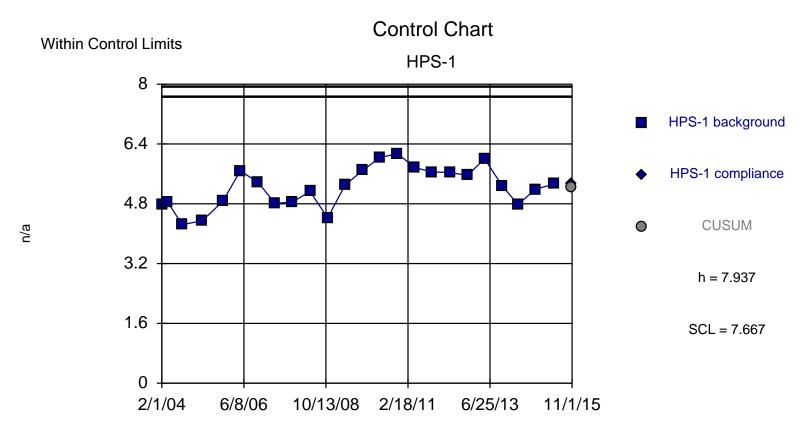
Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

n/a

■ HDP-1 background

◆ HDP-1 compliance

Limit = 22.3

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 23 background values. Report alpha = 0.04167. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH3W

n/a

■ NH3W background

◆ NH3W compliance

● CUSUM

h = 5.559

SCL = 5.064

Background Data Summary (based on natural log transformation): Mean=0.783, Std. Dev.=0.1865, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9214, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
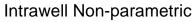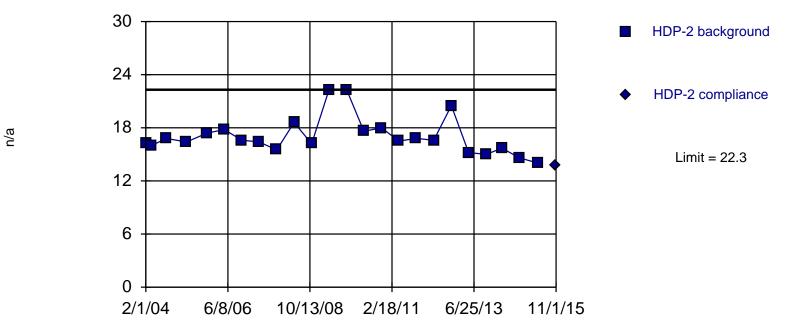
Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
NH6W

Within Control Limits

n/a

NH6W background

NH6W compliance

CUSUM

h = 13.69

SCL = 10.79

Background Data Summary (based on natural log transformation): Mean=0.2355, Std. Dev.=0.4763, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9232, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
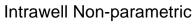
Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

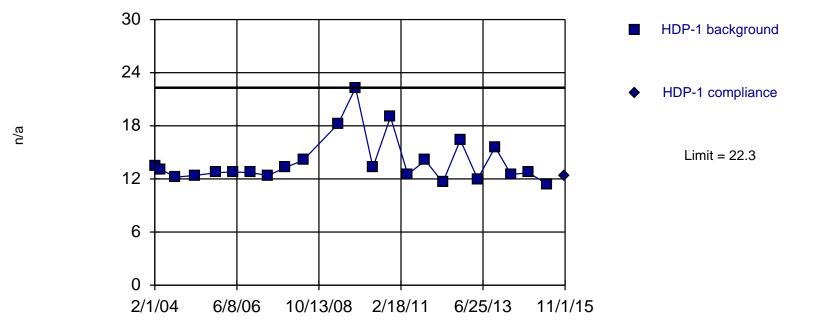# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
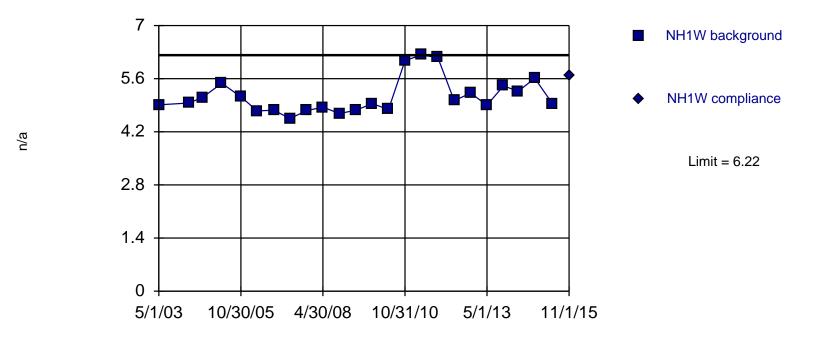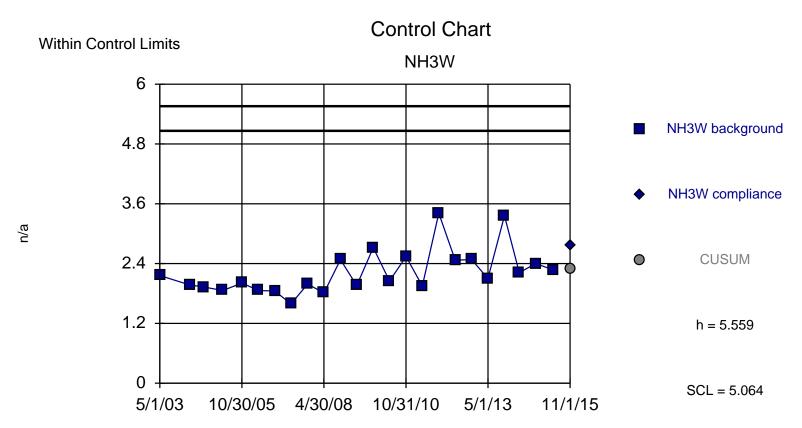
Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

RG-1W

■ RG-1W background

◆ RG-1W compliance

● CUSUM

h = 9.1

SCL = 8.798

Background Data Summary: Mean=6.086, Std. Dev.=0.6028, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9632, critical = 0.914. Report alpha = 0.00009. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: SC   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HWW-4

Within Control Limits

- ■ HWW-4 background
- ◆ HWW-4 compliance
- ● CUSUM

h = 0.01368

SCL = 0.01247

Background Data Summary (based on cube root transformation): Mean=0.1667, Std. Dev.=0.01448, n=19. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9061, critical = 0.901. Report alpha = 0.000188. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Se   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

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Control Chart
HLF-6O

Within Control Limits

Background Data Summary: Mean=0.0215, Std. Dev.=0.004191, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9729, critical = 0.916. Report alpha = 0.000098. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Se   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-7OD

■ HLF-7OD background

◆ HLF-7OD compliance

○ CUSUM

h = 1.171

SCL = 1.096

Background Data Summary: Mean=0.4173, Std. Dev.=0.1508, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9806, critical = 0.918. Report alpha = 0.000086. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
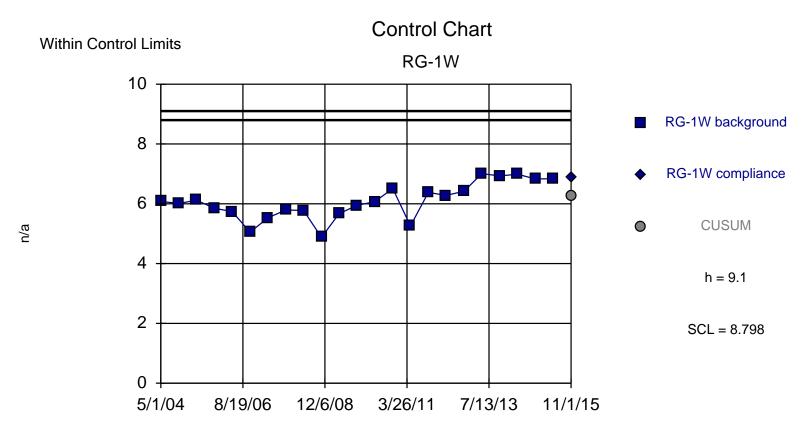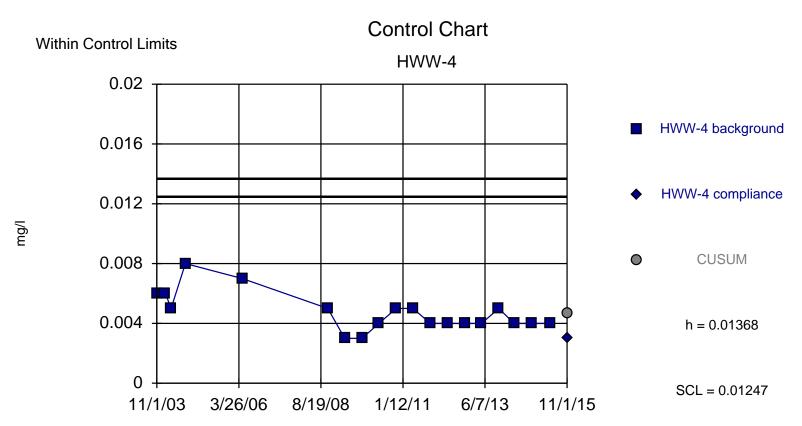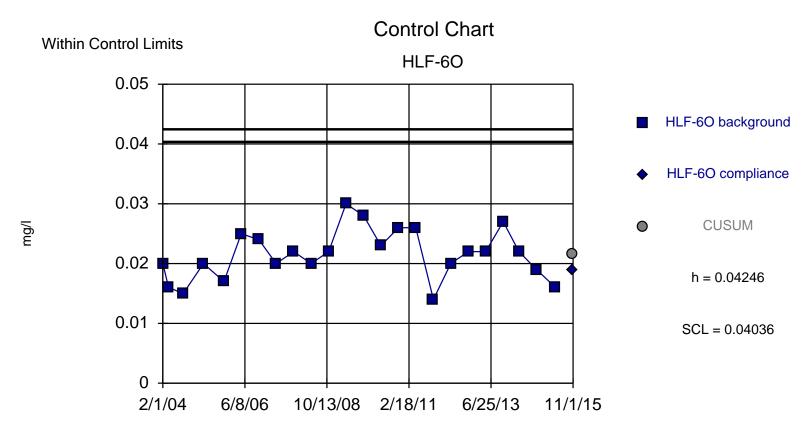
Constituent: Se   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015

Control Chart
HLF-3NS

Exceeds Control Limits

mg/l

■ HLF-3NS background

◆ HLF-3NS compliance

● CUSUM

h = 0.02707

SCL = 0.02369

x-axis: 5/1/10, 6/7/11, 7/13/12, 8/19/13, 9/25/14, 11/1/15

y-axis: 0, 0.02, 0.04, 0.06, 0.08, 0.1

Background Data Summary (based on square root transformation): Mean=0.05841, Std. Dev.=0.02122, n=4. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.7779, critical = 0.748. Report alpha = 0.01369. Dates ending 10/15/2014 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Se   Analysis Run 12/14/2015 4:03 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

mg/l

- ■ HSW-1 background
- ◆ HSW-1 compliance
- ● CUSUM

h = 0.101

SCL = 0.08155

Background Data Summary (based on natural log transformation): Mean=-4.433, Std. Dev.=0.428, n=22. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.913, critical = 0.911. Report alpha = 0.000142. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HPS-1

Within Control Limits

■ HPS-1 background

◆ HPS-1 compliance

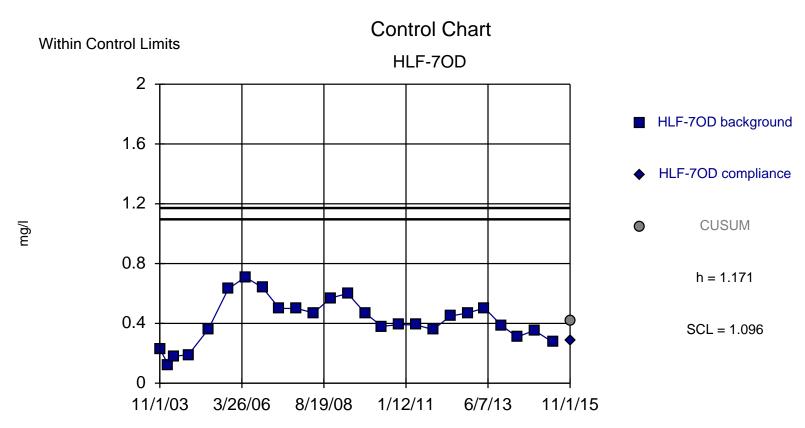○ CUSUM

h = 0.03534

SCL = 0.03276

Background Data Summary: Mean=0.009476, Std. Dev.=0.005173, n=21. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.926, critical = 0.908. Report alpha = 0.000132. Dates ending 10/15/2014 used for control stats. Unstandardized h=5, SCL=4.5.
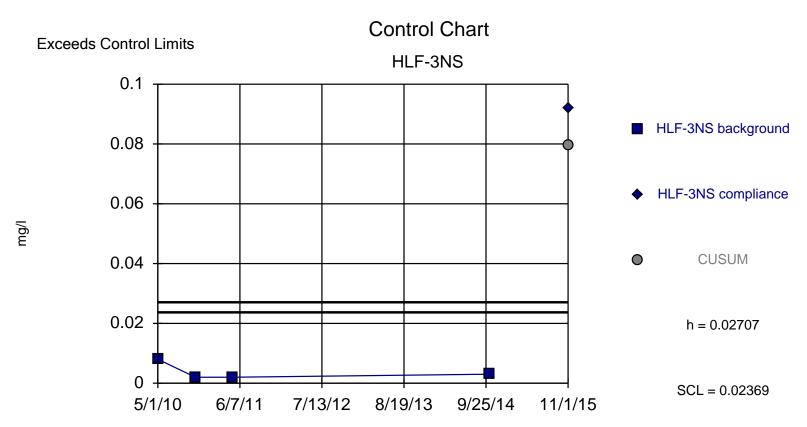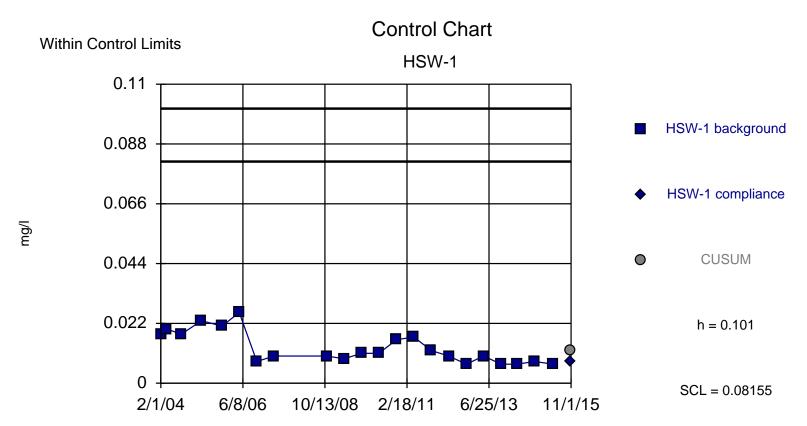
Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HCP-6 background

◆ HCP-6 compliance

Limit = 0.006

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 14 background values. Report alpha = 0.06667. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-2

Legend:
- ■ HDP-2 background
- ◆ HDP-2 compliance
- ● CUSUM

h = 0.6658

SCL = 0.6037

Background Data Summary (based on square root transformation): Mean=0.4263, Std. Dev.=0.07795, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.931, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
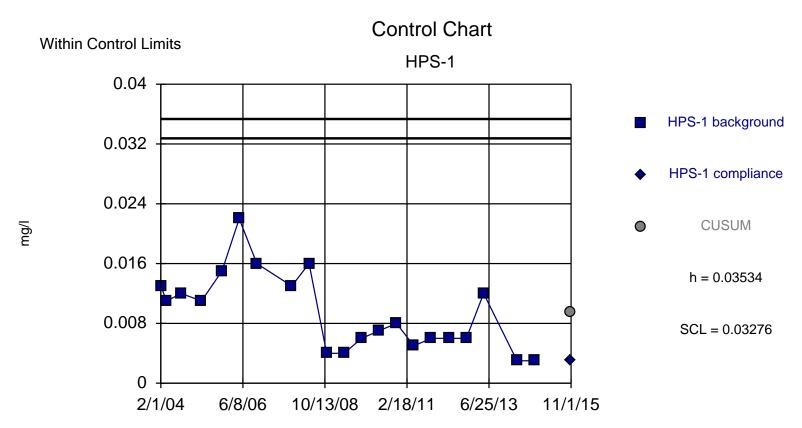
Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

- ■ HDP-1 background
- ◆ HDP-1 compliance
- ● CUSUM

h = 0.6621

SCL = 0.571

mg/l

Background Data Summary (based on square root transformation): Mean=0.2331, Std. Dev.=0.1161, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9345, critical = 0.914. Report alpha = 0.000112. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
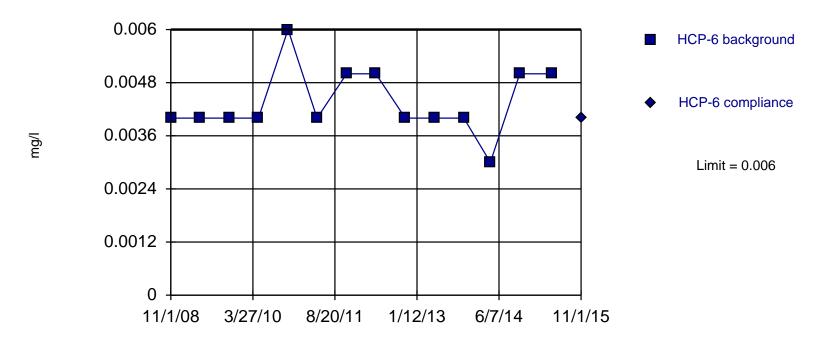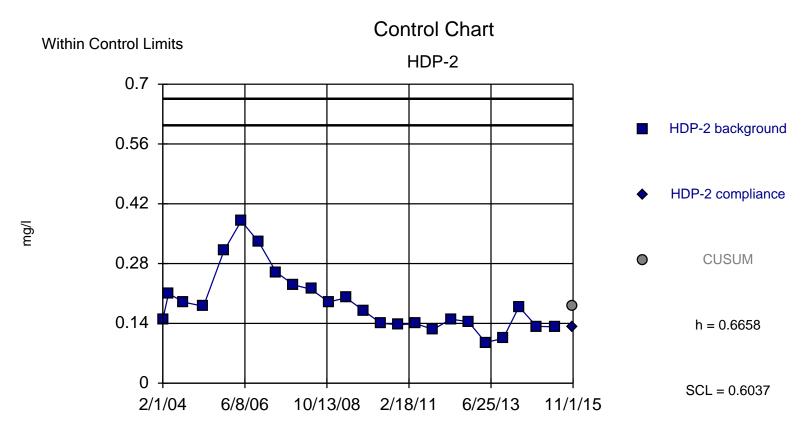
Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ NH1W background

◆ NH1W compliance

Limit = 0.033

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 17 background values. Report alpha = 0.05556. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:
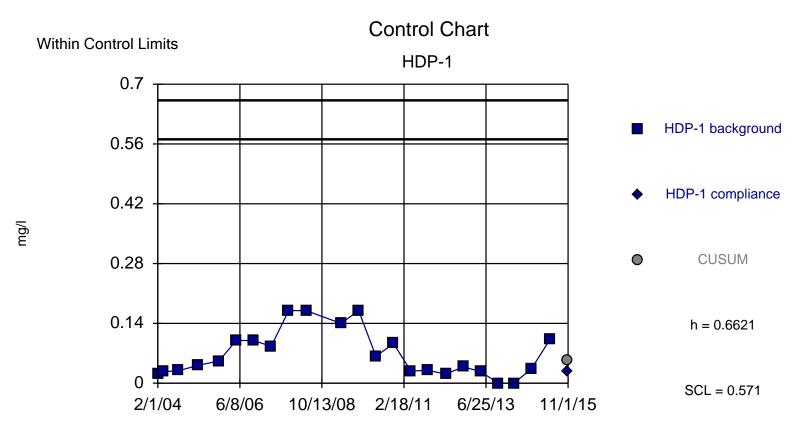
Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 14 background values. Report alpha = 0.06667. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
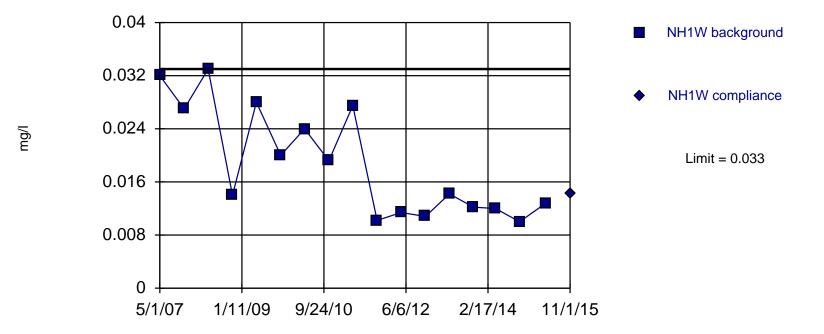
Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Prediction Limit

Intrawell Non-parametric, NH6W

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 7 background values. Report alpha = 0.125. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Prediction Limit

Intrawell Non-parametric, NH8W

■ NH8W background

Limit = 0.003

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 11 background values. Report alpha = 0.08333. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

RG-1W

Within Control Limits

Background Data Summary (based on square transformation): Mean=0.0001995, Std. Dev.=0.00005066, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9065, critical = 0.892. Report alpha = 0.000236. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
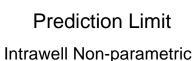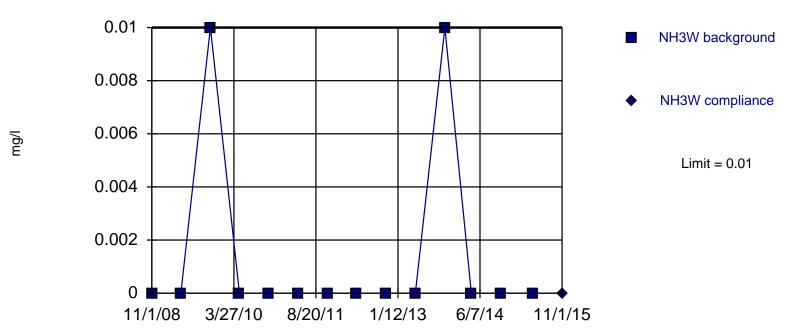
Constituent: Se   Analysis Run 12/14/2015 4:04 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HWW-4

Legend:
- ■ HWW-4 background
- ◆ HWW-4 compliance
- ● CUSUM

h = 918

SCL = 871.3

y-axis: mg/l

x-axis values: 2/1/04, 6/8/06, 10/13/08, 2/18/11, 6/25/13, 11/1/15

Background Data Summary: Mean=451.4, Std. Dev.=93.32, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9486, critical = 0.916. Report alpha = 0.000126. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
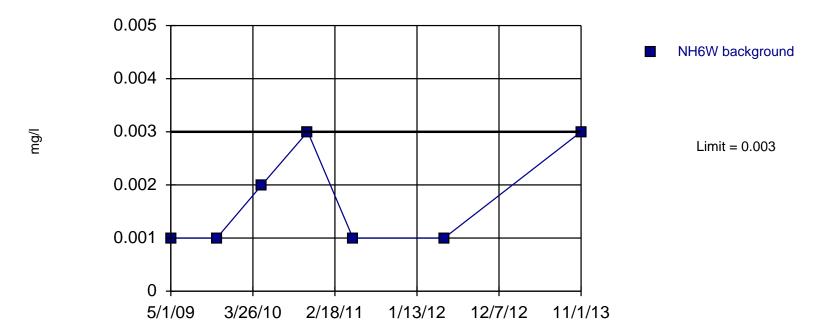
Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-3ND

Within Control Limits

Background Data Summary: Mean=819, Std. Dev.=154.4, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9527, critical = 0.918. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-4N

■ HLF-4N background

◆ HLF-4N compliance

○ CUSUM

h = 2339

SCL = 2258

mg/l

(x-axis labels: 11/1/03, 3/26/06, 8/19/08, 1/12/11, 6/7/13, 11/1/15)

(y-axis labels: 0, 600, 1200, 1800, 2400, 3000)

Background Data Summary: Mean=1534, Std. Dev.=160.8, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.934, critical = 0.918. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-6O

Within Control Limits

mg/l

■ HLF-6O background

◆ HLF-6O compliance

● CUSUM

h = 5577

SCL = 5299

Background Data Summary: Mean=2797, Std. Dev.=556.1, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9468, critical = 0.916. Report alpha = 0.000092. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HLF-7OD

Within Control Limits

Background Data Summary: Mean=10388, Std. Dev.=1215, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9504, critical = 0.918. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3NS

■ HLF-3NS background

◆ HLF-3NS compliance

● CUSUM

h = 3492

SCL = 3387

Background Data Summary (based on square transformation): Mean=4982324, Std. Dev.=1442829, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9285, critical = 0.918. Report alpha = 0.000104. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HSW-1

Within Control Limits

Legend:
- ■ HSW-1 background
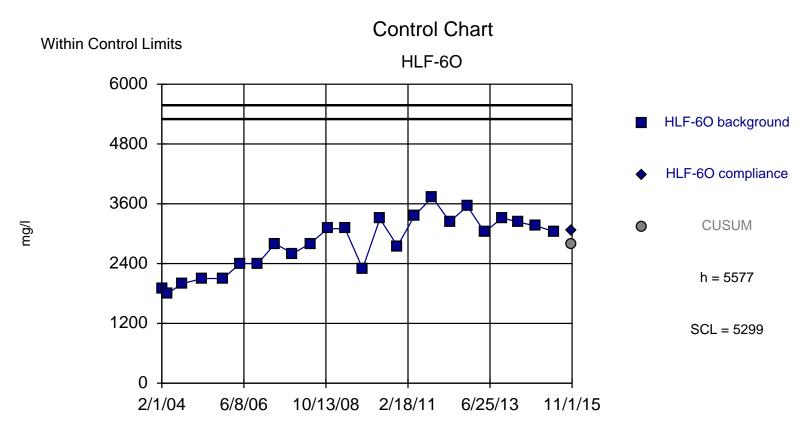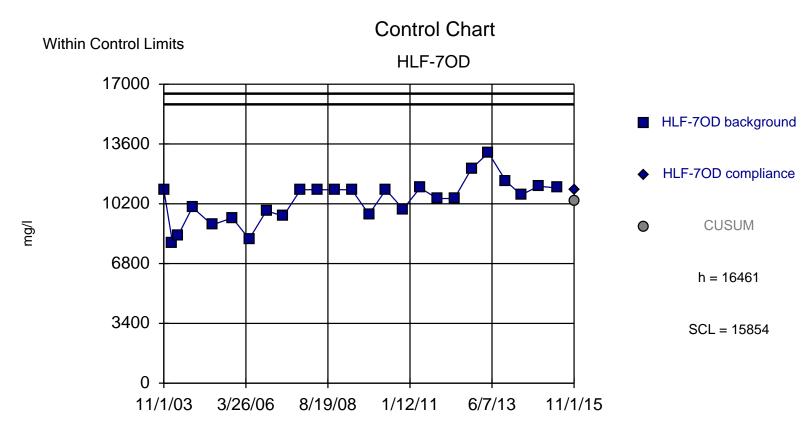- ◆ HSW-1 compliance
- ● CUSUM

h = 3385

SCL = 3223

Background Data Summary: Mean=1762, Std. Dev.=324.7, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9715, critical = 0.916. Report alpha = 0.000124. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
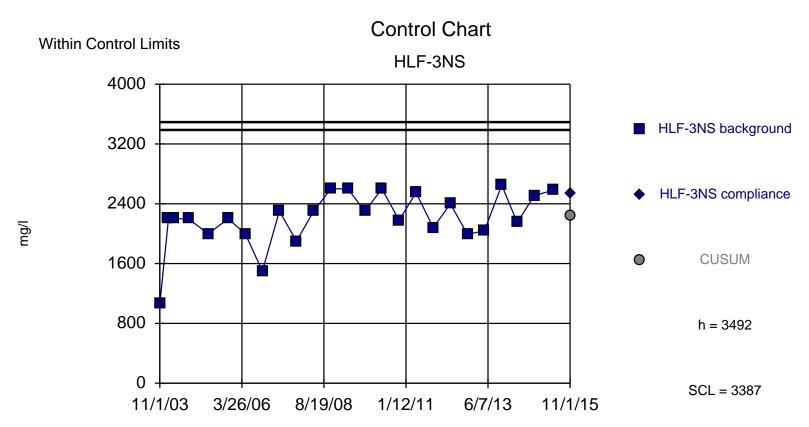
Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HPS-1

Within Control Limits

■ HPS-1 background

◆ HPS-1 compliance

● CUSUM

h = 4189

SCL = 3974

Background Data Summary: Mean=2032, Std. Dev.=431.5, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9591, critical = 0.916. Report alpha = 0.000124. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
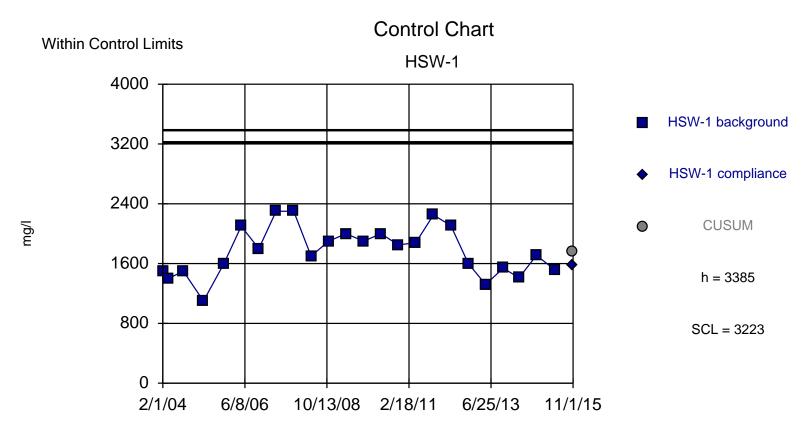
Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015

Control Chart
HCP-6

Within Control Limits

mg/l

■ HCP-6 background

◆ HCP-6 compliance

● CUSUM

h = 1042

SCL = 992.4

Background Data Summary: Mean=543.3, Std. Dev.=99.81, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9887, critical = 0.916. Report alpha = 0.000124. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
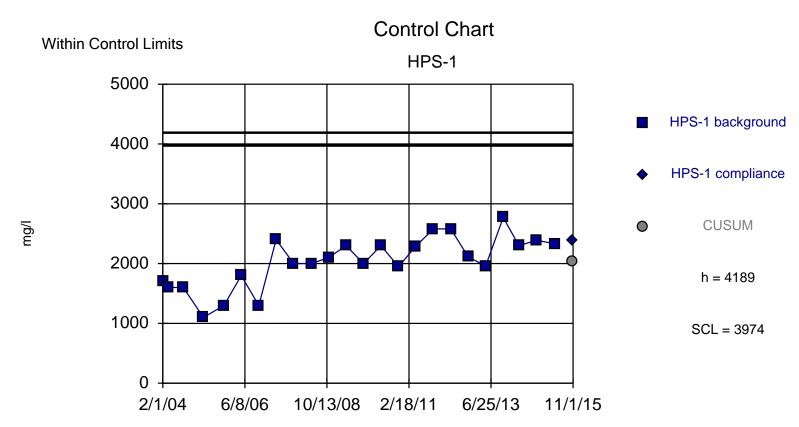
Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-2

Legend:
- ■ HDP-2 background
- ◆ HDP-2 compliance
- ● CUSUM

h = 8301

SCL = 8049

Background Data Summary: Mean=5780, Std. Dev.=504.2, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9579, critical = 0.916. Report alpha = 0.000124. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
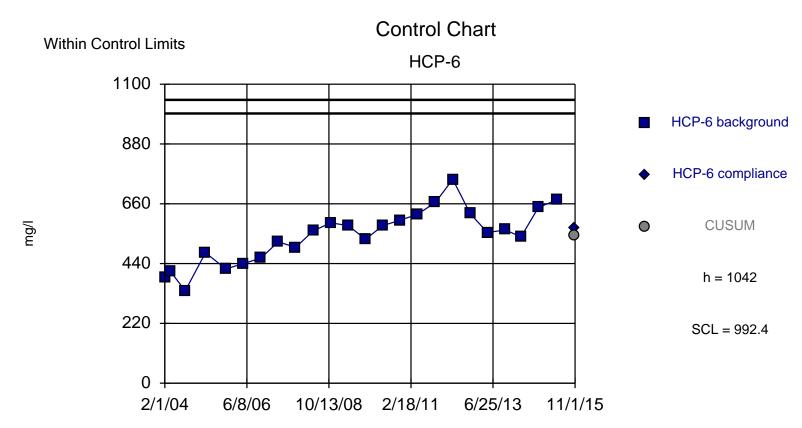
Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-1

mg/l

- ■ HDP-1 background
- ◆ HDP-1 compliance
- ○ CUSUM

h = 8257

SCL = 7832

X-axis: 2/1/04   6/8/06   10/13/08   2/18/11   6/25/13   11/1/15

Y-axis: 0, 1800, 3600, 5400, 7200, 9000

Background Data Summary: Mean=4013, Std. Dev.=848.8, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9452, critical = 0.914. Report alpha = 0.0001. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
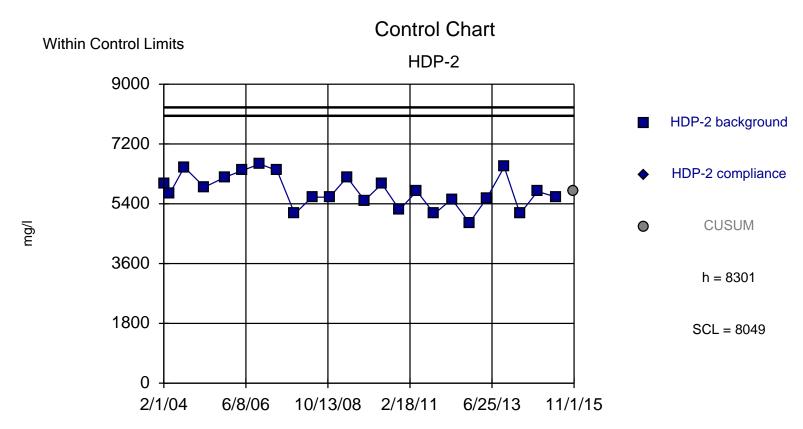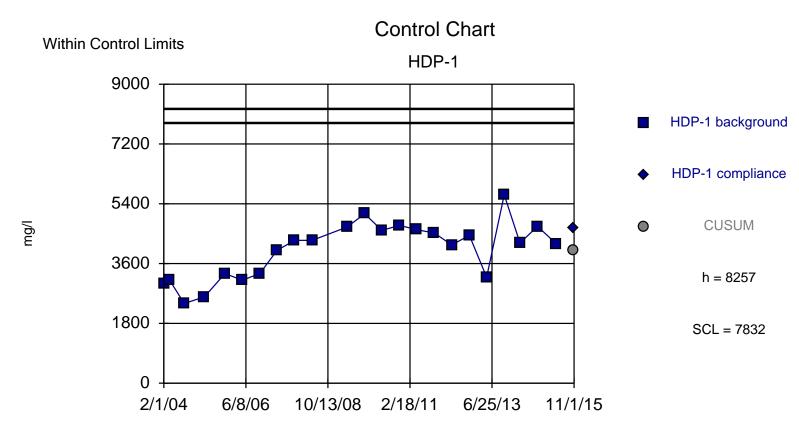
Constituent: SO4   Analysis Run 12/14/2015 4:05 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH1W

Within Control Limits

Legend:
- ■ NH1W background
- ◆ NH1W compliance
- ● CUSUM

h = 2389

SCL = 2305

y-axis: mg/l, 0, 600, 1200, 1800, 2400, 3000

x-axis: 5/1/97, 1/11/01, 9/24/04, 6/6/08, 2/18/12, 11/1/15

Background Data Summary: Mean=1549, Std. Dev.=168, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9598, critical = 0.936. Report alpha = 0.000046. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
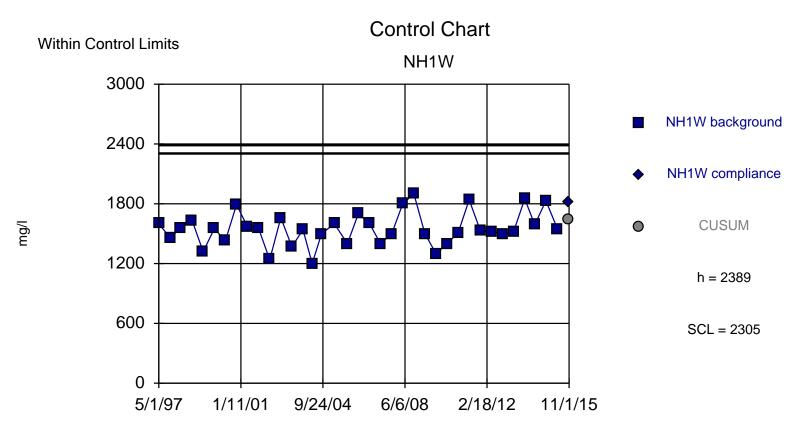
Constituent: SO4   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH3W

Background Data Summary (based on cube root transformation): Mean=8.552, Std. Dev.=0.7749, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9398, critical = 0.936. Report alpha = 0.000046. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
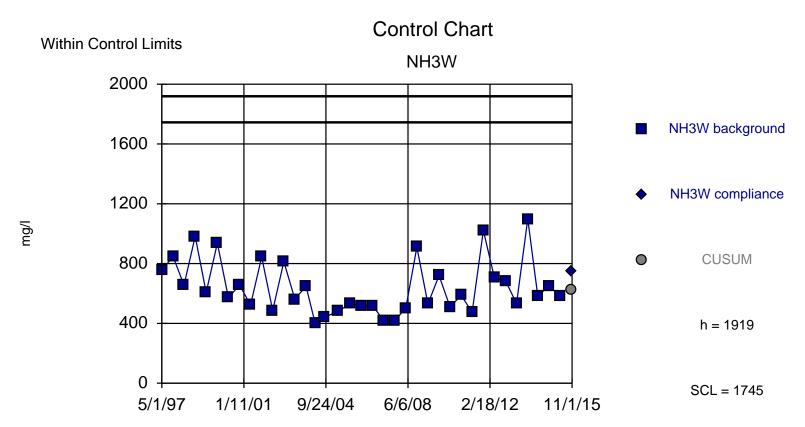
Constituent: SO4   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH6W

Within Control Limits

Legend:
- ■ NH6W background
- ◆ NH6W compliance
- ● CUSUM

h = 11036

SCL = 7439

Background Data Summary (based on natural log transformation): Mean=5.364, Std. Dev.=0.7889, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9665, critical = 0.936. Report alpha = 0.000046. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
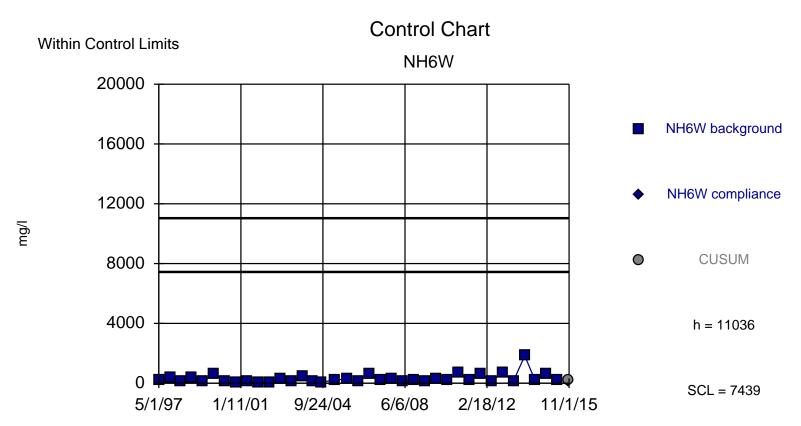
Constituent: SO4   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH8W

Background Data Summary (based on square root transformation): Mean=12.45, Std. Dev.=1.646, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.937, critical = 0.936. Report alpha = 0.000046. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
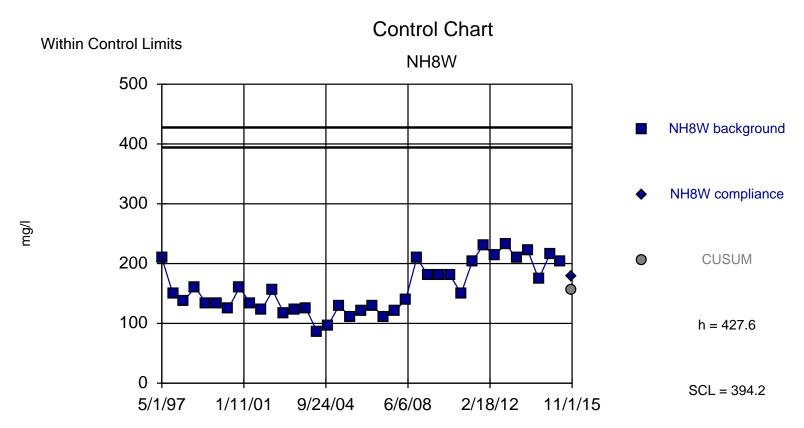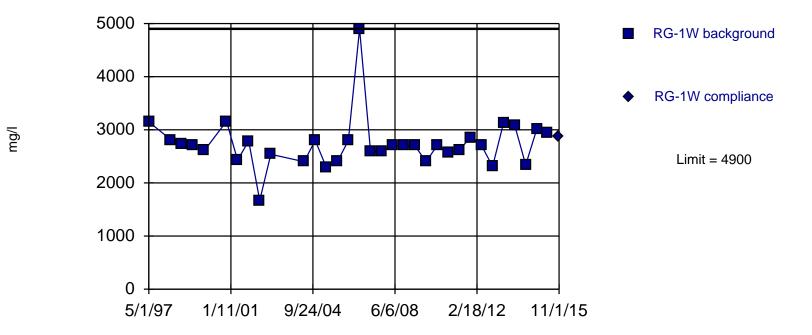
Constituent: SO4   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ RG-1W background

◆ RG-1W compliance

Limit = 4900

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 33 background values. Report alpha = 0.02941. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: SO4   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: TDS   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3ND

ppm

6000

4800

3600

2400

1200

0

11/1/03   3/26/06   8/19/08   1/12/11   6/7/13   11/1/15

■ HLF-3ND background
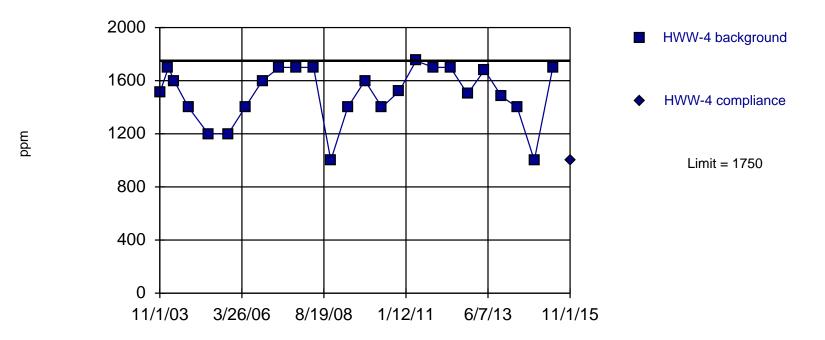
◆ HLF-3ND compliance

● CUSUM

h = 5469

SCL = 5351

Background Data Summary (based on square transformation): Mean=1.7e7, Std. Dev.=2552783, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9319, critical = 0.918. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: TDS   Analysis Run 12/14/2015 4:06 PM
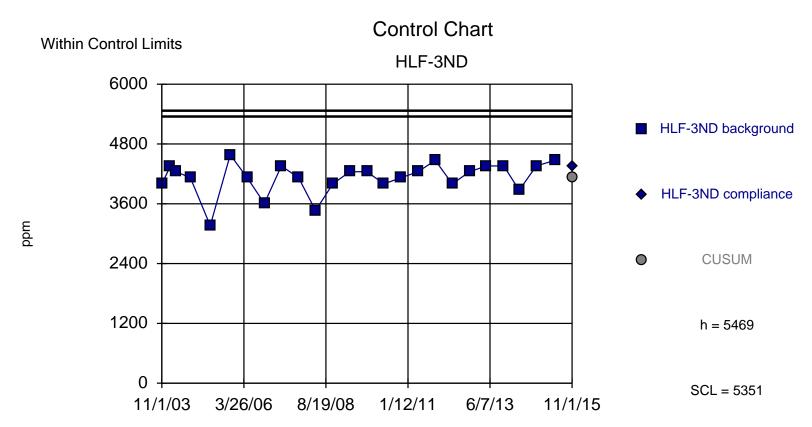
Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-4N

ppm

5000

4000

3000

2000

1000

0

11/1/03   3/26/06   8/19/08   1/12/11   6/7/13   11/1/15

■ HLF-4N background

◆ HLF-4N compliance

● CUSUM

h = 4396

SCL = 4314

Background Data Summary (based on cube transformation): Mean=3.9e10, Std. Dev.=9.3e9, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9219, critical = 0.918. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: TDS   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart
HLF-6O

Within Control Limits

- ■ HLF-6O background
- ◆ HLF-6O compliance
- ⬤ CUSUM

h = 10606

SCL = 10371

Background Data Summary (based on cube transformation): Mean=4.2e11, Std. Dev.=1.6e11, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9378, critical = 0.916. Report alpha = 0.000106. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
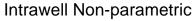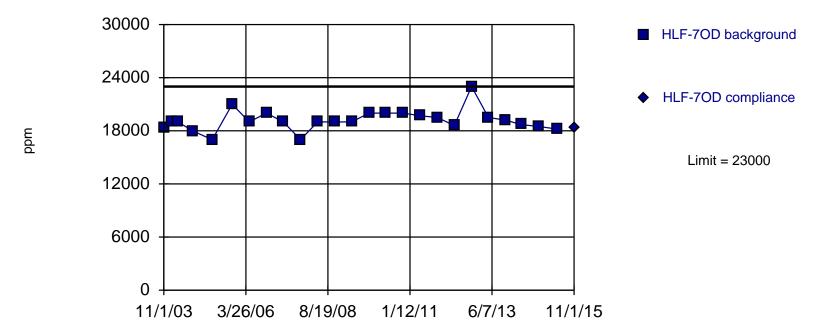
Constituent: TDS   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-7OD background

◆ HLF-7OD compliance

Limit = 23000

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: TDS   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ HLF-3NS background

◆ HLF-3NS compliance

Limit = 4900

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: TDS   Analysis Run 12/14/2015 4:06 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

■ HSW-1 background

◆ HSW-1 compliance

● CUSUM

h = 6966

SCL = 6681

Background Data Summary: Mean=4110, Std. Dev.=571.3, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9814, critical = 0.918. Report alpha = 0.000128. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
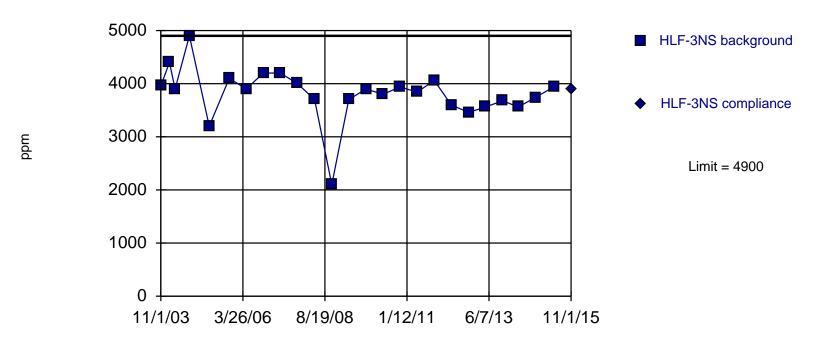
Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

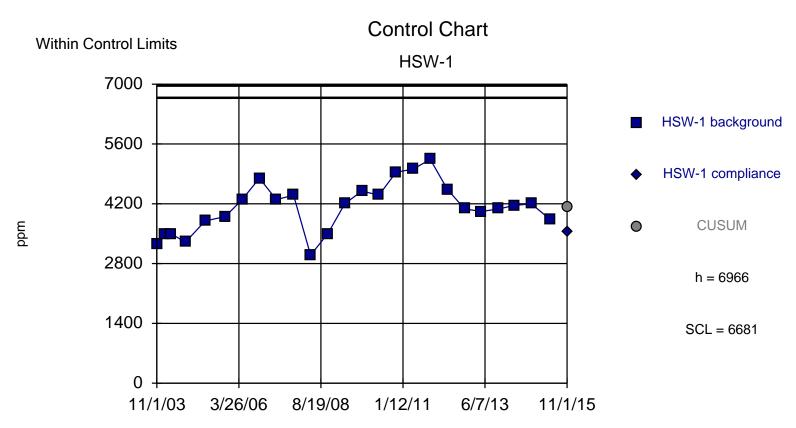■ HPS-1 background
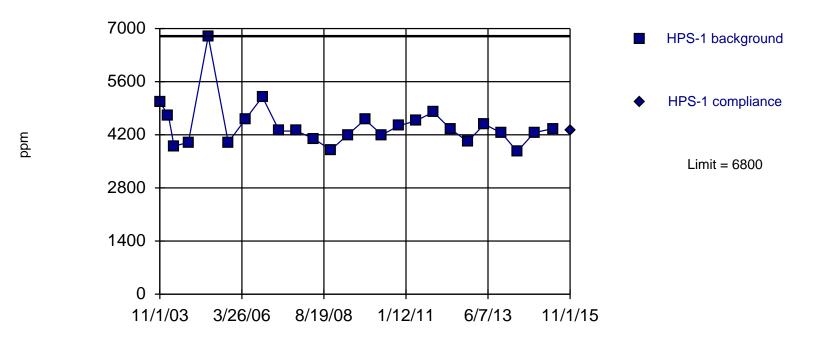
◆ HPS-1 compliance

Limit = 6800

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 25 background values. Report alpha = 0.03846. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
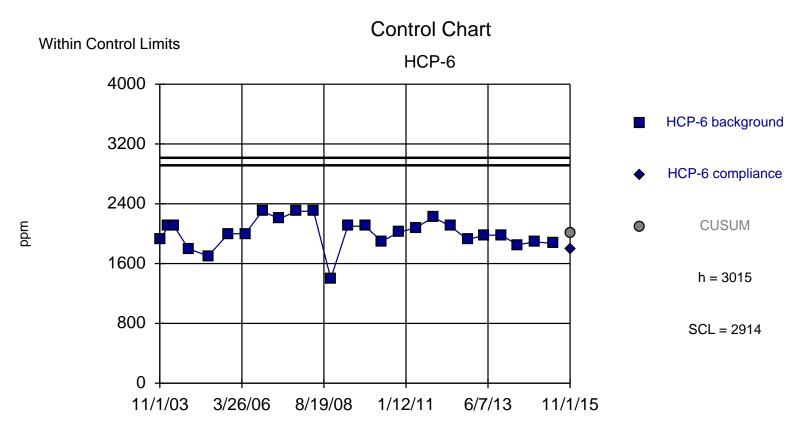
Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HCP-6

Legend:
- ■ HCP-6 background
- ◆ HCP-6 compliance
- ⬤ CUSUM

h = 3015

SCL = 2914

Background Data Summary: Mean=2005, Std. Dev.=202, n=25. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9305, critical = 0.918. Report alpha = 0.000128. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-2

Within Control Limits

ppm

- ■ HDP-2 background
- ♦ HDP-2 compliance
- ● CUSUM

h = 20713

SCL = 20056

Background Data Summary: Mean=14146, Std. Dev.=1313, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.921, critical = 0.916. Report alpha = 0.000084. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
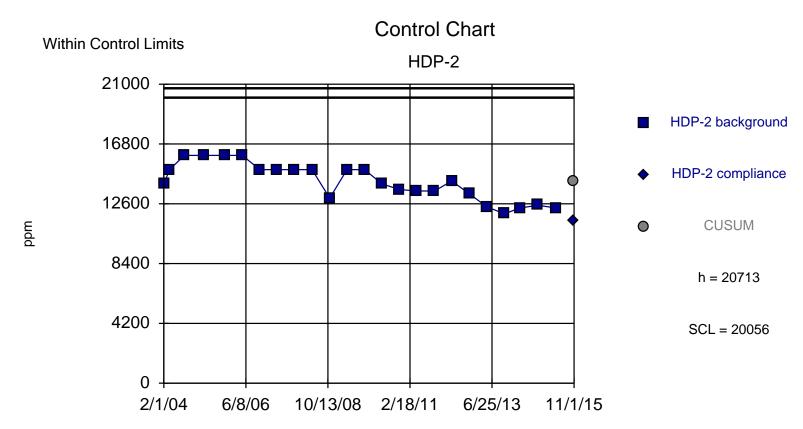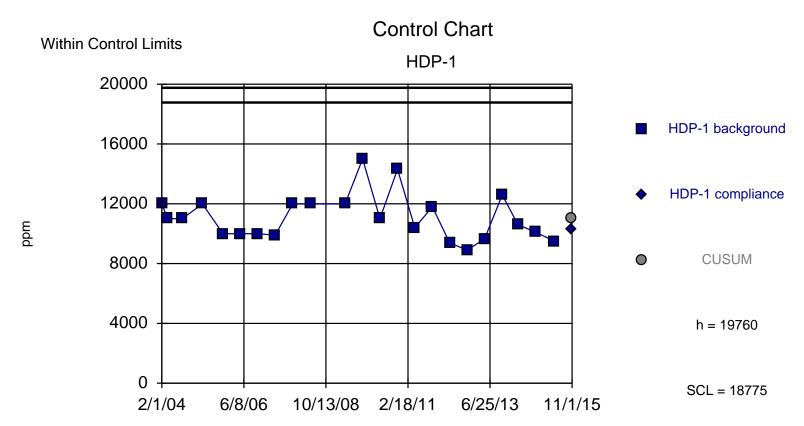
Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-1

Background Data Summary (based on square root transformation): Mean=105.1, Std. Dev.=7.095, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.929, critical = 0.914. Report alpha = 0.000114. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
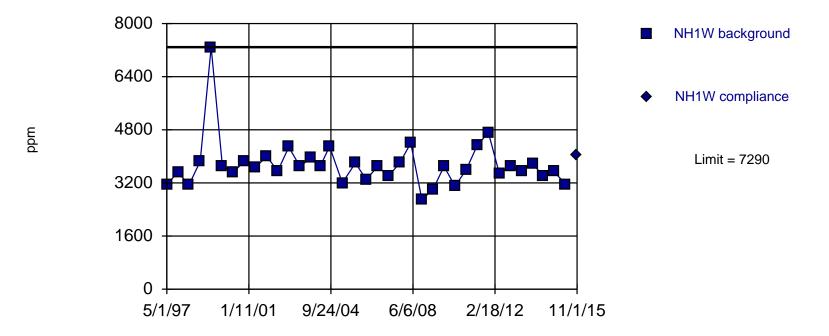
Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

NH3W

Background Data Summary (based on natural log transformation): Mean=7.306, Std. Dev.=0.2596, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9477, critical = 0.936. Report alpha = 0.000036. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
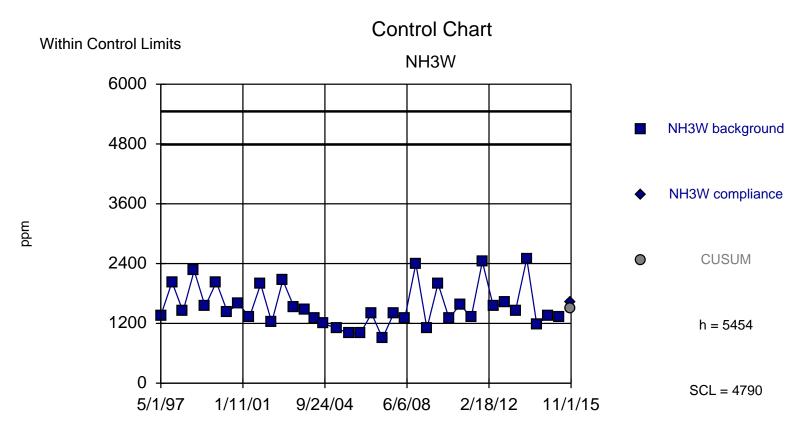
Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH6W

Within Control Limits

Background Data Summary (based on natural log transformation): Mean=6.456, Std. Dev.=0.6298, n=37. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9802, critical = 0.936. Report alpha = 0.000036. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
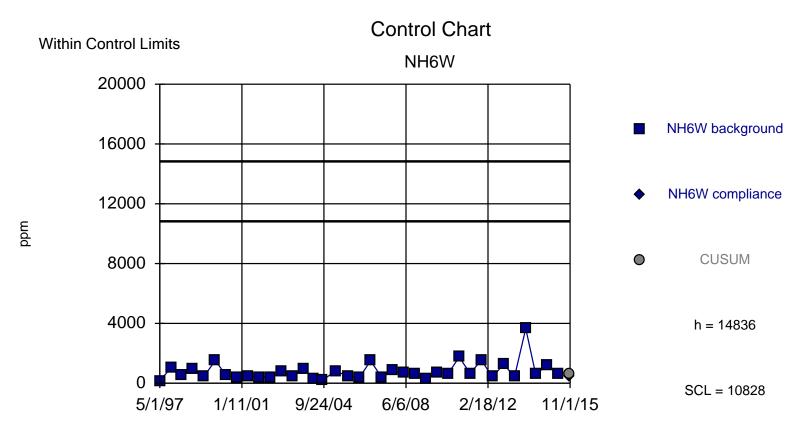
Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

■ NH8W background

◆ NH8W compliance

Limit = 700

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 37 background values. Report alpha = 0.02632. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
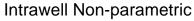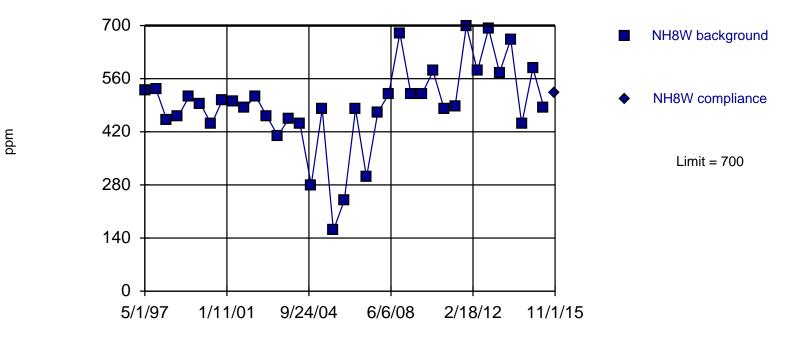
Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

Legend:
- ■ RG-1W background
- ◆ RG-1W compliance

Limit = 11090

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 33 background values. Report alpha = 0.02941. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: TDS   Analysis Run 12/14/2015 4:07 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HWW-4

■ HWW-4 background

◆ HWW-4 compliance

⬤ CUSUM

h = 17.96

SCL = 17.49

Background Data Summary: Mean=13.27, Std. Dev.=0.9383, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9576, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
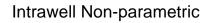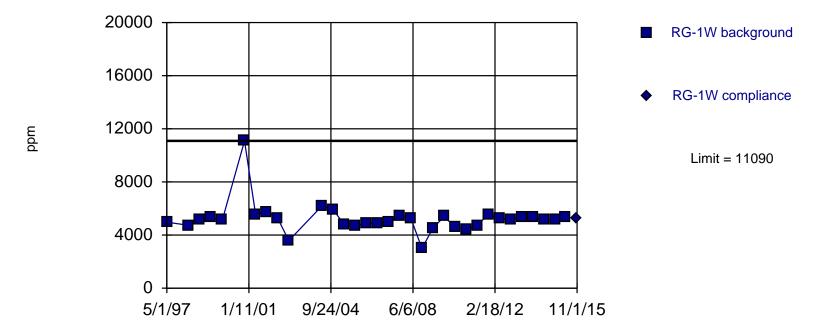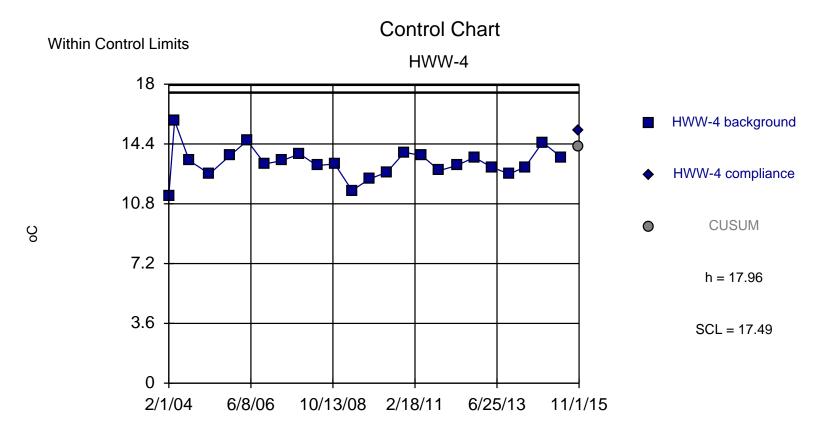
Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3ND

■ HLF-3ND background

◆ HLF-3ND compliance

⚫ CUSUM

h = 19.45

SCL = 18.74

Background Data Summary: Mean=12.4, Std. Dev.=1.409, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9771, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-4N

Within Control Limits

■ HLF-4N background
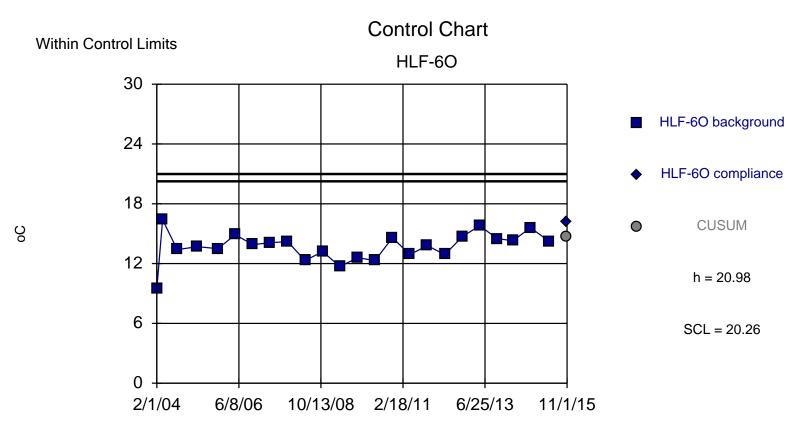
◆ HLF-4N compliance

● CUSUM

h = 16.95

SCL = 16.45

Background Data Summary: Mean=11.92, Std. Dev.=1.008, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9839, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HLF-6O

Within Control Limits

Legend:
- ■ HLF-6O background
- ◆ HLF-6O compliance
- ● CUSUM

h = 20.98

SCL = 20.26

Y-axis: oC

X-axis dates: 2/1/04, 6/8/06, 10/13/08, 2/18/11, 6/25/13, 11/1/15

Background Data Summary: Mean=13.71, Std. Dev.=1.455, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9576, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
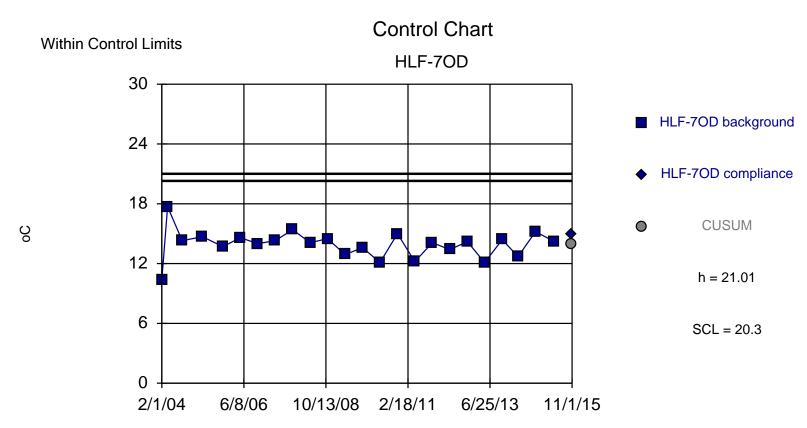
Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-7OD

oC

■ HLF-7OD background

◆ HLF-7OD compliance

○ CUSUM

h = 21.01

SCL = 20.3

2/1/04   6/8/06   10/13/08   2/18/11   6/25/13   11/1/15

Background Data Summary: Mean=13.91, Std. Dev.=1.42, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9385, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
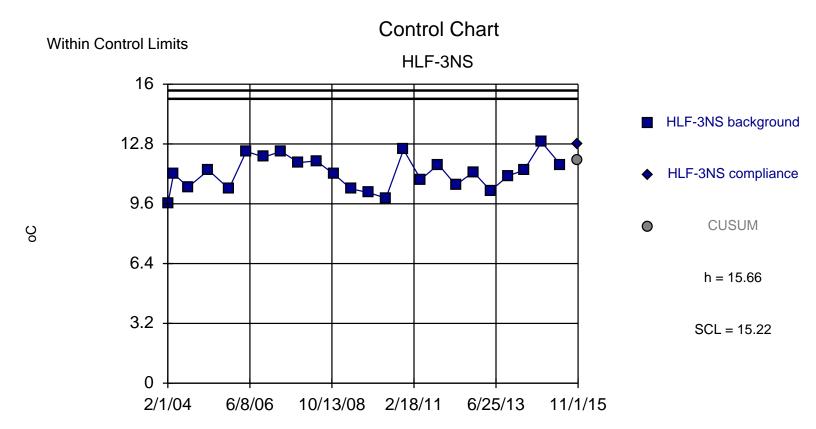
Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HLF-3NS

■ HLF-3NS background

◆ HLF-3NS compliance

⬤ CUSUM

h = 15.66

SCL = 15.22

Background Data Summary: Mean=11.24, Std. Dev.=0.8836, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.978, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
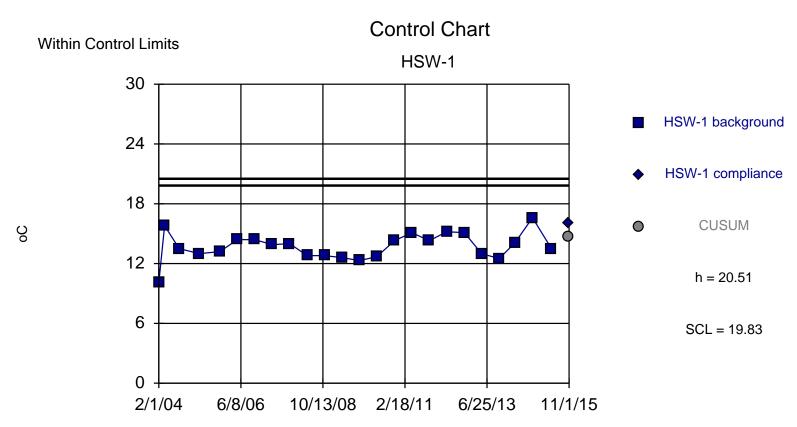
Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HSW-1

Background Data Summary: Mean=13.72, Std. Dev.=1.359, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9653, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
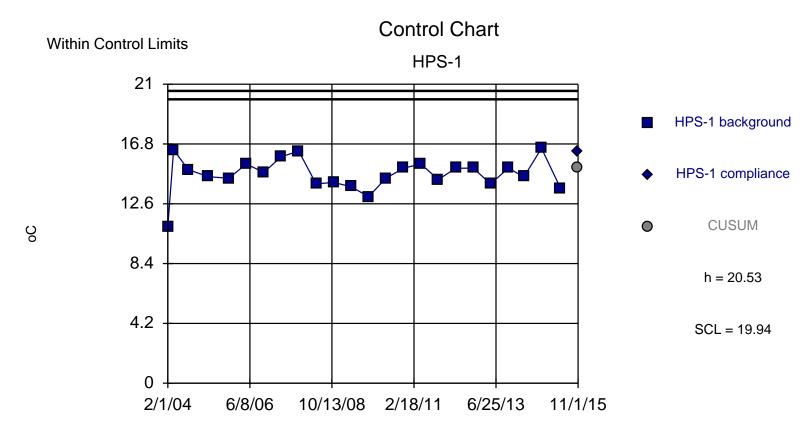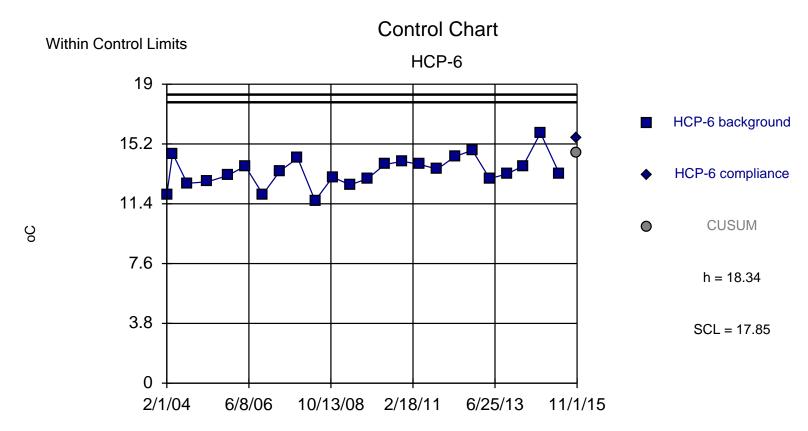
Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HPS-1

Legend:
- ■ HPS-1 background
- ◆ HPS-1 compliance
- ● CUSUM

h = 20.53

SCL = 19.94

Background Data Summary: Mean=14.66, Std. Dev.=1.173, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9174, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
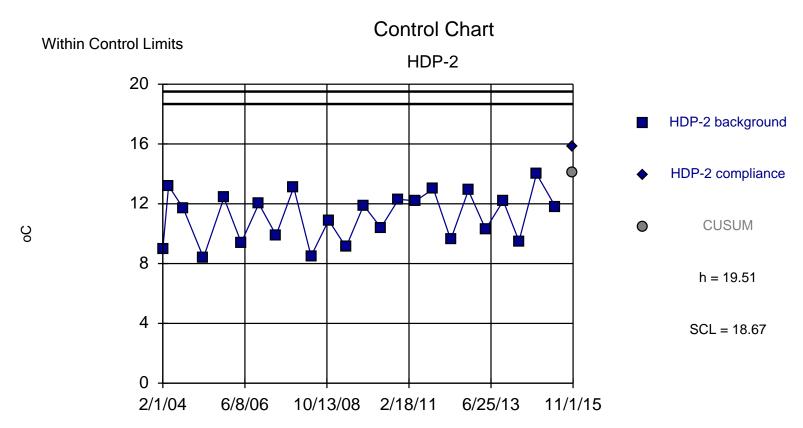
Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Sanitas™ v.9.4.40 For the statistical analyses of groundwater by Water Environmental Technologies only. EPA

Control Chart

Within Control Limits

HCP-6

- ■ HCP-6 background
- ◆ HCP-6 compliance
- ● CUSUM

h = 18.34

SCL = 17.85

Background Data Summary: Mean=13.47, Std. Dev.=0.9743, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9838, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.
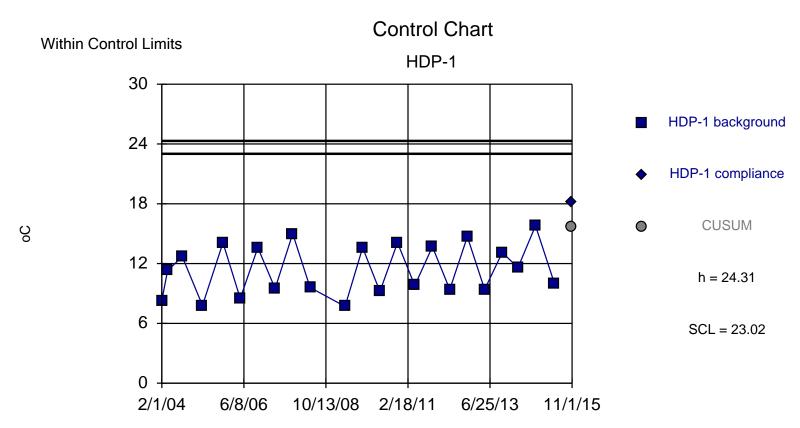
Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

HDP-2

oC

- ■ HDP-2 background
- ◆ HDP-2 compliance
- ● CUSUM

h = 19.51

SCL = 18.67

Background Data Summary: Mean=11.15, Std. Dev.=1.671, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9369, critical = 0.916. Report alpha = 0.000108. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.
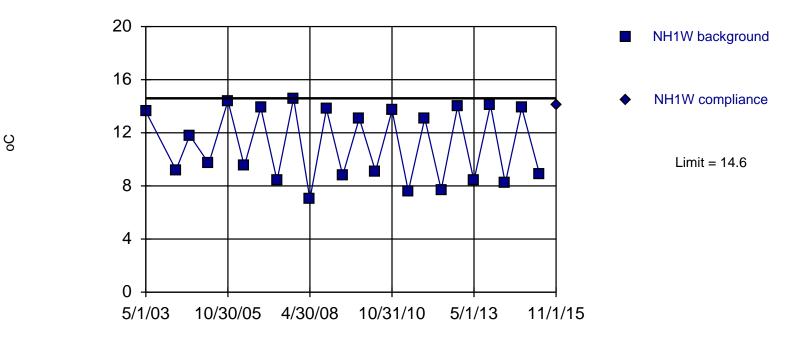
Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

HDP-1

Within Control Limits

oC

■ HDP-1 background

◆ HDP-1 compliance

● CUSUM

h = 24.31

SCL = 23.02

x-axis: 2/1/04 6/8/06 10/13/08 2/18/11 6/25/13 11/1/15

y-axis: 0, 6, 12, 18, 24, 30

Background Data Summary: Mean=11.41, Std. Dev.=2.578, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9173, critical = 0.914. Report alpha = 0.00009. Dates ending 5/1/2015 used for control stats. Unstandardized h=5, SCL=4.5.

Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

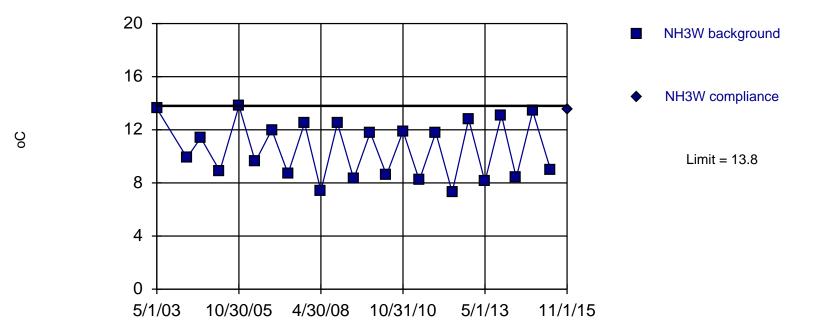# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Within Limit

Prediction Limit

Intrawell Non-parametric

oC

■ NH3W background

◆ NH3W compliance

Limit = 13.8

5/1/03   10/30/05   4/30/08   10/31/10   5/1/13   11/1/15

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

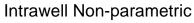Huntington2015

Within Limit

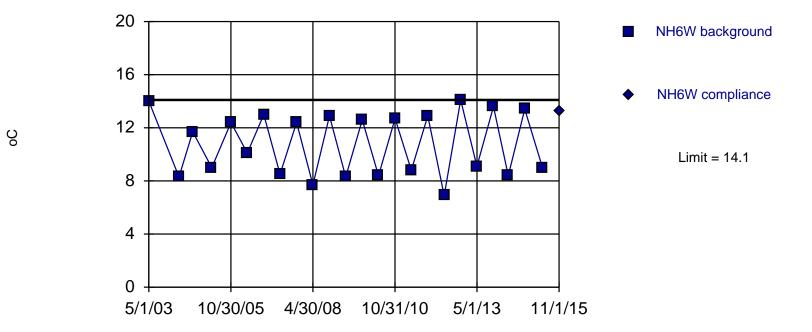# Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.04. Most recent point compared to limit. Insufficient data to test for seasonality: data were not deseasonalized.
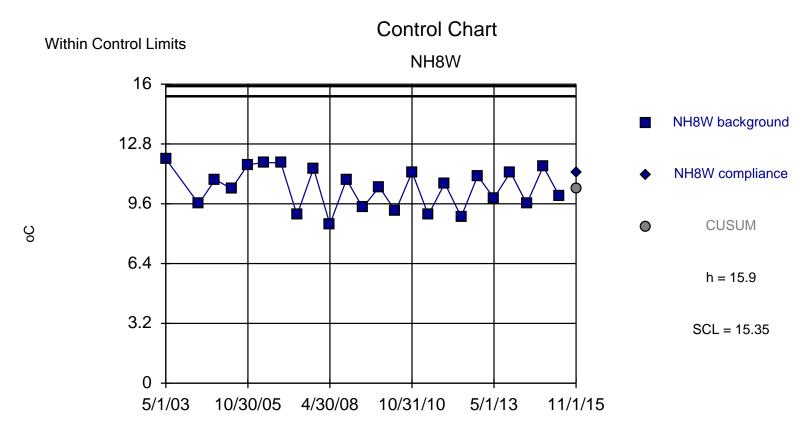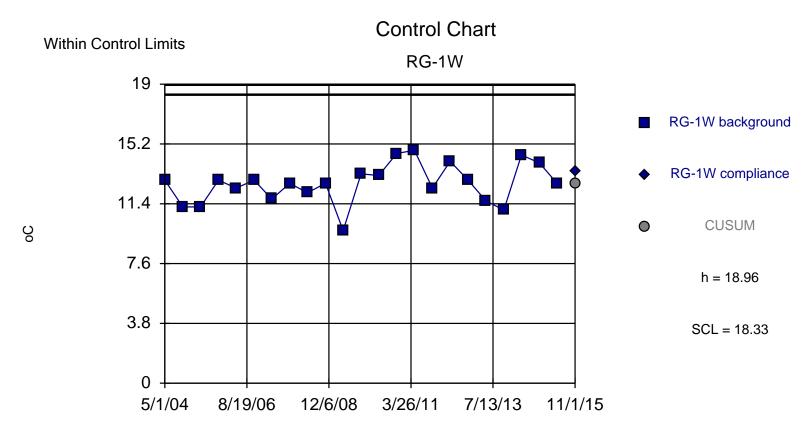
Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

NH8W

Within Control Limits

Legend:
- ■ NH8W background
- ◆ NH8W compliance
- ● CUSUM

h = 15.9

SCL = 15.35

Background Data Summary: Mean=10.44, Std. Dev.=1.091, n=24. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.933, critical = 0.916. Report alpha = 0.000082. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Temp   Analysis Run 12/14/2015 4:08 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File:

Huntington2015

Control Chart

Within Control Limits

RG-1W

■ RG-1W background

◆ RG-1W compliance

⬤ CUSUM

h = 18.96

SCL = 18.33

Background Data Summary: Mean=12.67, Std. Dev.=1.258, n=23. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.967, critical = 0.914. Report alpha = 0.000118. Dates ending 5/1/2015 used for control stats.   Unstandardized h=5, SCL=4.5.

Constituent: Temp   Analysis Run 12/14/2015 4:09 PM

Facility: Huntington Power Plant   Client: Water Environmental Tech.   Data File: Huntington2015