DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Municipal Engineering Services Co., P.A.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Jonathan Pfohl Phone: (919) 772-5393

E-mail: jpfohl@mesco.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Wayne County Closed MSWLF and Active C&D Landfill	460-B South Landfill Road Dudley, NC 28333	96-01	.1600	February 11, 2008

Environmental Status: (Check all that apply)

☐ Initial/Background Monitoring ☐ Detection Monitoring ☒ Assessment Monitoring ☐ Corrective Action

Type of data submitted: (Check all that apply)

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☐ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify) _____
☐ Other(specify)

Notification attached?

☐ No. No groundwater or surface water standards were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Jonathan Pfohl	Environmental Specialist	(919) 772-5393
Facility Representative Name (Print)	Title	(Area Code) Telephone Number
Signature	4/14/08 Date	Affix NC Licensed/ Professional Geologist/Engineer Seal here:

Revised 01/2007

Groundwater Sampling Report and Statistical Analysis

Prepared for

Wayne County Closed MSWLF and Active C&D Landfill
Dudley, North Carolina

February, 2008

Permit Number: 96-01
MESCO Project Number: G08016.0

Completed on April 14, 2008

Municipal Services Garner, NC
Engineering Company, P.A. Boone, NC

Municipal Engineering Services Company, P.A.
Garner, Boone and Morehead City, North Carolina

OPERATION/CONSTRUCTION MANAGERS

Municipal Services

CIVIL/SANITARY ENGINEERS

Engineering Company, P.A.

April 14, 2008

Ms. Jaclynne Drummond
Solid Waste Section
Division of Waste Management
North Carolina Department of Environment and Natural Resources
401 Oberlin Road, Suite 150
Raleigh, NC 27605

Re: Groundwater Sampling and Statistical Analysis
Wayne County Closed MSW and active C&D Landfill, Dudley
Permit # : 96-01
MESCO Project No. G08016.0

Dear Ms. Drummond:

The Wayne County Closed Unlined MSWLF and active C&D Landfill, located in Dudley, NC was sampled and analyzed on February 11, 2008 by Environment I of Greenville NC as part of the routine semi-annual assessment monitoring program. Municipal Engineering Services Company, P.A. (MESCO) completed the sampling report and statistical analyses for the. Downgradient wells MW-2 and MW-8 were analyzed for the Appendix II list of VOCs, SVOCs, pesticides, herbicides, and metals since these wells previously contained statistically significant VOC detection(s). Monitoring wells MW-1, MW-2, MW-3, MW-5, and MW-7 located around the active C&D portion of the landfill were all analyzed for the C&D parameter list. The new parameter list includes the Appendix 1 list of VOCs and metals, mercury, specific conductance, pH, temperature, alkalinity, total dissolved solids, chloride, manganese, sulfate, and iron. All of the other wells contained in the approved sampling & analysis plan (SAP) were sampled for at least the complete Appendix I list of VOCs and metals. All three surface water sites SW-1, SW-2, and SW-3 were reported to be dry therefore not sampled during this event. The report for the active lined Subtitle D Landfill which comprise a separate portion of the facility is contained in a previously submitted report dated March 10, 2008. The laboratory results were reported to the Method Detection Limit (MDL) with reference to the Solid Waste Section Limits (SWSL) which were current as of the sampling event. The laboratory results are included herein.

All of the detected constituents were compared with the Groundwater Protection Standards (GWP) and the NCGW2L Standards for regulatory exceedance. The results are shown in the enclosed tables titled "Detection Scan". The following table illustrates all of the parameters that were found in concentrations above the NCGW2L Standard.

Table 1. Exceedance Summary

Monitoring Location	1,4-DCB	Benzene	Iron	Manganese	Lead
MW-1			x		
MW-2	x	x	x	x	
MW-3			x	x	x
MW-5			x	x	
MW-7			x	x	x
MW-8	x				

x=concentration greater than NCGW2L Standard

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PO Box 828, Morehead City, NC 28557 (252) 726-9481 PO Box 349, Boone, North Carolina 28607 (828) 262-1767

In general the water quality surrounding the Wayne County closed unlined MSWLF and the active C&D landfill was found to be very consistent when compared to historical monitoring events. Elevated metals consisting of primarily the C&D parameters iron and manganese were found within several monitoring wells including the background. The chlorinated hydrocarbon 1,4-dichlorobenzene continues to be detected within MW-8 for the thirteenth consecutive event. Concentrations of 1,4-dichlorobenzene and it's biodegredation product benzene were also detected above the NCGW2L within MW-2. The drastic reduction of the detection limits for 1,4-DCB and benzene are directly responsible for the recent exceedances.

MESCO also completed the statistical analysis for the closed MSWLF parameters as required by the Solid Waste Section. The purpose of these analyses is to determine, in comparison to background levels, statistical significance of Appendix I constituents detected during the February 2008 event.

Statistical Analysis Methodology

Metals

MESCO conducted an interwell statistical analysis on all of the detected metals. Monitoring well MW-1 was defined as the background well, and an upper tolerance limit (UTL) with 95% coverage was computed for each detected constituent from the background data at a 95% level of confidence. For each tested constituent, an appropriate statistical analysis method was selected based on the percentages of non-detects (%ND) in the historical background data. The following table (Table 2) summarizes the methods used for four different %ND ranges.

Table 2. Statistical Analysis Methods for Various %ND Ranges

%ND	Analysis Method	ND Substitution
%ND<15%	Parametric tolerance limit	1/2 ND
15%<%ND<50%	Parametric tolerance limit	Cohen or 1/2 ND
50%<%ND<90%	Non-parametric tolerance limit	1/2 ND
90%<%ND	Poisson tolerance limit	-

NOTE: For parametric tolerance interval, normality of the background data was checked by the Shapiro-Wilks normality test, as the method requires that the data be normally distributed.

A preliminary data screening was conducted upon the metals detected in all monitoring locations. Detected parameters with concentrations found below that of the background well MW-1 and those parameters found below quantifiable levels (SWSL) were eliminated and a statistical analysis was not conducted for that particular constituent/well. A total of 9 metals were tested for statistical significance. For arsenic, barium, beryllium, cadmium, mercury, vanadium, and lead the Poisson tolerance limit was used on the original data or the log of the original data with no ND substitution since the constituents had never historically been detected within the background well. For chromium and zinc the non-parametric tolerance limit with ½ NDs was used on the original data as its %ND was not normally distributed.

VOCs

All historical VOC detections in the background well MW-1 were pooled in order to determine the total number of detections, from which the expected number of detections in a single down gradient monitoring point (y^*) was derived by utilizing the Poisson prediction interval. The parameter y^* is defined by the following equation:

$$y^* = cy + \frac{t^2 c}{2} + tc\sqrt{y\left(1+\frac{1}{c}\right)+\frac{t^2}{4}}$$

where

c = 1/ n (n =number of background samples)
t = one-sided value of students t -Statistic at 95% confidence [a]
y = number of events observed in n previous samples
y^* = expected number of events in a single future sample

[a] Gibbons, R.D., 1994, Statistical methods for groundwater monitoring: John Wiley & Sons, Inc., p.12.

For each monitoring location showing any VOC detections, the number of detected VOCs was counted with each detection being considered a “hit”. The number was then compared with the expected number of detections derived from the background VOC data. The value of Student’s t -Statistic was derived from tabulated values included in Gibbons (1994).

Intrawell Analyses

Intrawell Analyses were conducted only upon those constituents that were initially found to be statistically significant by interwell analysis. In general, intrawell analysis is conducted in order to attempt to differentiate true contamination from spatial variability. Baseline levels in this context are defined as the background level derived from the data in a given downgradient well. Intrawell analyses through Shewhart-CUSUM control charts require a minimum of eight independent historical sampling events and a detection rate greater than 25% (%ND≤75%). Due to the detection rate criteria Shewhart-CUSUM control charts could not be developed for arsenic and lead within MW-3.

Results

Historical data compiled for monitoring well MW-1 was used as the baseline. Data distributions were reviewed using time series and box and whiskers plots (enclosed charts). Table 3 summarizes those metals that exhibited an increase in concentration compared to the background through interwell comparison analysis.

Table 3. Interwell Analyses Summary

Well	Arsenic	Chromium	Lead
MW-3	x	x	x
MW-7	x	x	x
MW-8		x	

x=Detected in increasing levels compared to background levels

The numbers of metal detections continue to be consistent with historical results and all concentrations were found within their respective historically identified range. Arsenic, chromium, and lead were found to have increased in concentration within MW-3 and MW-7 per interwell analysis. Chromium was also found to have increased within MW-8 compared to levels found within the background well MW-1. However, according to further intrawell analysis through formulation of Shewhart-CUSUM charts none of the metals were found to have increased compared to their own historical levels. Since Shewhart-CUSUM charts could not be formulated for lead and arsenic within MW-3 statistical trend analysis was completed instead. Neither arsenic nor lead were found to be currently exhibiting an increasing trend per Mann-Kendal trend analysis.

The Poisson Tolerance Interval at a 95% confidence level was completed for all of the detected VOCs. The wells that were found to be impacted statistically by VOCs are summarized in the following table 4.

Table 4. Poisson Tolerance Interval Analyses Summary

Well	1,4-DCB	Chlorobenzene	Benzene	Cumulative (ug/l)
MW-2	↓	↓	↓	19.7
MW-8	↓			5.4

↑ or ↓ = concentration in exceedance of the SWSL/NCGW2L Standard and current concentration above or below intrawell EWMA

Low but quantitative concentrations of VOCs continue to be detected within only downgradient well MW-2 and across gradient MW-8. Both wells were found to contain the chlorinated aliphatic hydrocarbon 1,4-dichlorobenzene and MW-2 also contained it's biodegredation products. The cumulative VOC concentrations remain relatively low with neither well exhibiting an increasing trend through Mann-Kendall Trend Analysis, Sen's Slope Analysis, and interpretation of the Exponentially Weighted Moving Average Control Chart (EWMA). However, due to the historical absence of VOCs detected within the background well both MW-2 and MW-8 are considered to be impacted according to the Poisson Prediction Interval Analysis at a 95% confidence level. Although it should be noted that the Poisson Tolerance Interval Analysis simply is based upon simply the number of detections without regard for biodegradation derivatives of the same compound. Regardless of this limitation of the Poisson Prediction Interval both MW-2 and MW-8 appear to be impacted by 1,4-DCB originating from the closed landfill. After further intra-well analyses through Mann-Kendall Trend Analysis, Sen's Slope Analysis, and the Exponentially Weighted Moving Average Control Chart (EWMA) none of the detected VOCs were found to be exhibiting an upward trend. The prescense of 1,4-DCB derivatives, elevated chloride, and elevated alkalinity within the impacted regions indicate that natural attenuation has very likely occurred. The release mechanism is believed to be either leachate and or landfill gas (LFG) migration.

Conclusion

The statistical analysis results conducted on metals indicate that none have increased within any of the monitoring wells. The detected metals are likely naturally inherent in the groundwater as indicated by elevated concentrations found within the background wells for both the closed and adjacent Subtitle D Landfills. Metal concentrations have historically exhibited large fluctuations and none of the constituents are exhibiting an upward trend. Monitoring wells MW-2 and MW-8 continue to be the only wells containing VOCs. Both of the impacted wells are installed in close proximity to the waste boundary and through natural attenuation the contaminant concentrations are expected to degrade and dilute with distance.

MESCO submitted the required Assessment of Corrective Measures (ACM) report on August 30, 2007 and conducted the subsequent public meeting on March 8, 2008. The comprehensive report concludes that the VOCs detected within MW-2 and MW-8 are the only concerns. The impacted wells are isolated within the relevant point of compliance and there are no offsite groundwater receptors within 2,000 ft. of the facility. The report concedes that the most cost effective and efficient system for remediation at this facility is Monitored Natural Attenuation (MNA). In order to better evaluate the current natural attenuation process further chemical monitoring is planned to be conducted by MESCO during the next routine sampling event scheduled for August 2008.

MESCO completed the groundwater report including a potentiometric map with groundwater flow rates and direction for the sampling event. The flow directions and gradients are very consistent with historical observations, showing no changes that would result in a different interpretation of the groundwater system. An updated groundwater and surface water sampling and analysis plan (SAP) will be submitted prior to July 2008. The updated SAP plan is expected to include continuation of assessment monitoring including water analysis of the C&D parameters, a reduction/elimination of unnecessary Appendix II parameters, and collection of additional MNA indicator parameters. If you have any questions or comments regarding this report, please contact me by phone at (919) 772-5393 or by email at jpfohl@mesco.com.

Sincerely,
MUNICIPAL ENGINEERING SERVICES CO., P.A.

Jonathan Pfohl
Environmental Specialist

Enclosures

cc: Mr. Tim Rogers
Wayne County

Detection Scan All Detections above SWSL, GWP or NCGW2L
Wayne County Closed Landfill (Dudley)

Well ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [4]	SWSL [2]	NCGW2L [3]	GWP[5]	Exceedance	Preliminary Cause
MW-1	Chloride	02/11/2008	47000	ug/l	5000	5000		250000		
MW-1	**Iron**	**02/11/2008**	**4406**	**ug/l**	**14.0**	**300**	**300**		**4106**	**Natural**
MW-1	TDS	02/11/2008	101000	ug/l	1000	1000	500000			
MW-1	**Vanadium**	**02/11/2008**	**8.7**	**ug/l**	**1.21**	**25**		**3.5**	**5.2**	
MW-2	**1,4-Dichlorobenzene**	**02/11/2008**	**3.4**	**ug/l**	**0.21**	**1**	**1.4**		**2**	**Leachate &/or LFG**
MW-2	Arsenic	02/11/2008	11	ug/l	0.07	10	50			
MW-2	Barium	02/11/2008	143	ug/l	0.34	100	2000			
MW-2	**Benzene**	**02/11/2008**	**2.6**	**ug/l**	**0.16**	**1**	**1**		**1.6**	**Leachate &/or LFG**
MW-2	Chloride	02/11/2008	79000	ug/l	5000	5000		250000		
MW-2	Chlorobenzene	02/11/2008	13.7	ug/l	0.13	3	50			
MW-2	**Iron**	**02/11/2008**	**47275**	**ug/l**	**14.0**	**300**	**300**		**46975**	**Natural**
MW-2	**Manganese**	**02/11/2008**	**192**	**ug/l**	**0.50**	**50**	**50**		**142**	**Natural**
MW-2	**TDS**	**02/11/2008**	**607000**	**ug/l**	**1000**	**1000**	**500000**		**107000**	**Natural**
MW-2	Total Alkalinity	02/11/2008	611	ug/l	1000	ne		ne		
MW-2	**Vanadium**	**02/11/2008**	**7.9**	**ug/l**	**1.21**	**25**		**3.5**	**4.4**	
MW-3	Arsenic	02/11/2008	18	ug/l	0.07	10	50			
MW-3	Barium	02/11/2008	131	ug/l	0.34	100	2000			
MW-3	Beryllium	02/11/2008	1	ug/l	0.17	1		2		
MW-3	Chloride	02/11/2008	11000	ug/l	5000	5000		250000		
MW-3	Chromium	02/11/2008	30	ug/l	1.38	10	50			
MW-3	**Iron**	**02/11/2008**	**30475**	**ug/l**	**14.0**	**300**	**300**		**30175**	**Natural**
MW-3	**Lead**	**02/11/2008**	**17**	**ug/l**	**0.04**	**10**	**15**		**2**	**Natural**
MW-3	**Manganese**	**02/11/2008**	**67**	**ug/l**	**0.50**	**50**	**50**		**17**	**Natural**
MW-3	TDS	02/11/2008	44000	ug/l	1000	1000	500000			
MW-3	**Thallium**	**02/11/2008**	**0.4**	**ug/l**	**0.04**	**5**		**0.28**	**0.12**	
MW-3	**Vanadium**	**02/11/2008**	**94**	**ug/l**	**1.21**	**25**		**3.5**	**90.5**	
MW-3	Zinc	02/11/2008	23	ug/l	1.86	10	1050			
MW-4	**Vanadium**	**02/11/2008**	**10.7**	**ug/l**	**1.21**	**25**		**3.5**	**7.2**	
MW-5	Chloride	02/11/2008	23000	ug/l	5000	5000		250000		
MW-5	**Iron**	**02/11/2008**	**11075**	**ug/l**	**14.0**	**300**	**300**		**10775**	**Natural**
MW-5	**Manganese**	**02/11/2008**	**61**	**ug/l**	**0.50**	**50**	**50**		**11**	**Natural**
MW-5	TDS	02/11/2008	48000	ug/l	1000	1000	500000			
MW-5	**Vanadium**	**02/11/2008**	**14.6**	**ug/l**	**1.21**	**25**		**3.5**	**11.1**	
MW-5	Zinc	02/11/2008	20	ug/l	1.86	10	1050			
MW-6	Barium	02/11/2008	425	ug/l	0.11	100	2000			
MW-6	Beryllium	02/11/2008	1	ug/l	0.06	1		2		
MW-6	Cadmium	02/11/2008	1	ug/l	0.04	1	1.75			
MW-6	Zinc	02/11/2008	11	ug/l	1.86	10	1050			
MW-7	Arsenic	02/11/2008	19	ug/l	0.07	10	50			
MW-7	Barium	02/11/2008	186	ug/l	0.11	100	2000			
MW-7	Chloride	02/11/2008	134000	ug/l	5000	5000		250000		
MW-7	Chromium	02/11/2008	20	ug/l	0.11	10	50			
MW-7	**Iron**	**02/11/2008**	**40125**	**ug/l**	**14.0**	**300**	**300**		**39825**	**Natural**
MW-7	**Lead**	**02/11/2008**	**21**	**ug/l**	**0.04**	**10**	**15**		**6**	**Natural**
MW-7	**Manganese**	**02/11/2008**	**227**	**ug/l**	**0.50**	**50**	**50**		**177**	**Natural**
MW-7	**TDS**	**02/11/2008**	**656000**	**ug/l**	**1000**	**1000**	**500000**		**156000**	**Natural**
MW-7	**Vanadium**	**02/11/2008**	**82**	**ug/l**	**1.21**	**25**		**3.5**	**78.5**	
MW-7	Zinc	02/11/2008	17	ug/l	1.86	10	1050			
MW-8	**1,4-Dichlorobenzene**	**02/11/2008**	**5.4**	**ug/l**	**0.21**	**1**	**1.4**		**4**	**Leachate &/or LFG**
MW-8	Arsenic	02/11/2008	11	ug/l	0.07	10	50			

Well ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [4]	SWSL [2]	NCGW2L [3]	GWP[5]	Exceedance	Preliminary Cause
MW-8	Barium	02/11/2008	147	ug/l	0.11	100	2000			
MW-8	Chromium	02/11/2008	16	ug/l	0.11	10	50			
MW-8	Lead	02/11/2008	14	ug/l	0.04	10	15			
MW-8	Mercury	02/11/2008	0.82	ug/l	0.13	0.2	1.1			
MW-8	**Vanadium**	**02/11/2008**	**19.4**	**ug/l**	**1.21**	**25**		**3.5**	**15.9**	
MW-8	Zinc	02/11/2008	12	ug/l	1.86	10	1050			
TB	**Acetonitrile**	**02/11/2008**	**42.4**	**ug/l**	**5.96**	**55**		**42**	**0.4**	

[1] Table contains all detections reported by laboratory

[2] SWSL = Solid Waste Section Reporting Limit (Current as of Sampling Event)

[3] NCGW2L = North Carolina Ground Water 2L Standard

[4] MDL = Method Detection Limit

[4] GWP = Groundwater Protection Standard (Current as of Sampling Event)

LFG = Landfill Gas

Detection Scan All Detections above MDL as Reported by Laboratory
Wayne County Closed Landfill (Dudley)

Well ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [4]	SWSL [2]	NCGW2L [3]	GWP[5]	Exceedance	Preliminary Cause
MW-1	Acetone	02/11/2008	2.7	ug/l	1.21	100	700			
MW-1	Antimony	02/11/2008	0.2	ug/l	0.08	6		1.4		
MW-1	Arsenic	02/11/2008	1.2	ug/l	0.07	10	50			
MW-1	Barium	02/11/2008	27.4	ug/l	0.34	100	2000			
MW-1	Beryllium	02/11/2008	0.1	ug/l	0.17	1		2		
MW-1	Cadmium	02/11/2008	0.1	ug/l	0.04	1	1.75			
MW-1	Chloride	02/11/2008	47000	ug/l	5000	5000		250000		
MW-1	Chloroform	02/11/2008	1.5	ug/l	0.13	5	70			
MW-1	Chromium	02/11/2008	4.5	ug/l	1.38	10	50			
MW-1	Cobalt	02/11/2008	0.2	ug/l	2.53	10		70		
MW-1	Copper	02/11/2008	1.2	ug/l	2.24	10	1000			
MW-1	**Iron**	**02/11/2008**	**4406**	**ug/l**	**14.0**	**300**	**300**		**4106**	**Natural**
MW-1	Lead	02/11/2008	2.7	ug/l	0.04	10	15			
MW-1	Manganese	02/11/2008	15	ug/l	0.50	50	50			
MW-1	Mercury	02/11/2008	0.04	ug/l	0.13	0.2	1.1			
MW-1	Nickel	02/11/2008	0.5	ug/l	1.35	50	100			
MW-1	Silver	02/11/2008	0.1	ug/l	2.32	10	18			
MW-1	TDS	02/11/2008	101000	ug/l	1000	1000	500000			
MW-1	Thallium	02/11/2008	0.2	ug/l	0.04	5		0.28		
MW-1	**Vanadium**	**02/11/2008**	**8.7**	**ug/l**	**1.21**	**25**		**3.5**	**5.2**	
MW-1	Zinc	02/11/2008	4.4	ug/l	1.86	10	1050			
MW-2	1,1-Dichloroethane	02/11/2008	0.5	ug/l	0.16	5	70			
MW-2	1,2-Dichlorobenzene	02/11/2008	0.4	ug/l	0.13	5	620			
MW-2	1,3-Dichlorobenzene	02/11/2008	0.3	ug/l	0.13	5	170			
MW-2	**1,4-Dichlorobenzene**	**02/11/2008**	**3.4**	**ug/l**	**0.21**	**1**	**1.4**		**2**	**Leachate &/or LFG**
MW-2	Acetone	02/11/2008	2.9	ug/l	1.21	100	700			
MW-2	Antimony	02/11/2008	0.1	ug/l	0.08	6		1.4		
MW-2	Arsenic	02/11/2008	11	ug/l	0.07	10	50			
MW-2	Barium	02/11/2008	143	ug/l	0.34	100	2000			
MW-2	**Benzene**	**02/11/2008**	**2.6**	**ug/l**	**0.16**	**1**	**1**		**1.6**	**Leachate &/or LFG**
MW-2	Cadmium	02/11/2008	0.1	ug/l	0.04	1	1.75			
MW-2	Chloride	02/11/2008	79000	ug/l	5000	5000		250000		
MW-2	Chlorobenzene	02/11/2008	13.7	ug/l	0.13	3	50			
MW-2	Chromium	02/11/2008	2.1	ug/l	1.38	10	50			
MW-2	Cis-1,2-Dichloroethene	02/11/2008	0.2	ug/l	0.14	5	70			
MW-2	Cobalt	02/11/2008	0.5	ug/l	2.53	10		70		
MW-2	Copper	02/11/2008	1.7	ug/l	2.24	10	1000			
MW-2	**Iron**	**02/11/2008**	**47275**	**ug/l**	**14.0**	**300**	**300**		**46975**	**Natural**
MW-2	Lead	02/11/2008	4.3	ug/l	0.04	10	15			
MW-2	**Manganese**	**02/11/2008**	**192**	**ug/l**	**0.50**	**50**	**50**		**142**	**Natural**
MW-2	Nickel	02/11/2008	2.9	ug/l	1.35	50	100			
MW-2	Selenium	02/11/2008	2.4	ug/l	0.14	10	50			
MW-2	**TDS**	**02/11/2008**	**607000**	**ug/l**	**1000**	**1000**	**500000**		**107000**	**Natural**
MW-2	Thallium	02/11/2008	0.1	ug/l	0.04	5		0.28		
MW-2	Tin	02/11/2008	0.9	ug/l	2.75	100		ne		
MW-2	Toluene	02/11/2008	0.2	ug/l	0.13	1	1000			
MW-2	Total Alkalinity	02/11/2008	611	ug/l	1000	ne		ne		
MW-2	**Vanadium**	**02/11/2008**	**7.9**	**ug/l**	**1.21**	**25**		**3.5**	**4.4**	
MW-2	Zinc	02/11/2008	2.5	ug/l	1.86	10	1050			
MW-3	Antimony	02/11/2008	0.4	ug/l	0.08	6		1.4		
MW-3	Arsenic	02/11/2008	18	ug/l	0.07	10	50			
MW-3	Barium	02/11/2008	131	ug/l	0.34	100	2000			

Well ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [4]	SWSL [2]	NCGW2L [3]	GWP[5]	Exceedance	Preliminary Cause
MW-3	Beryllium	02/11/2008	1	ug/l	0.17	1		2		
MW-3	Cadmium	02/11/2008	0.4	ug/l	0.04	1	1.75			
MW-3	Chloride	02/11/2008	11000	ug/l	5000	5000		250000		
MW-3	Chromium	02/11/2008	30	ug/l	1.38	10	50			
MW-3	Cobalt	02/11/2008	3.7	ug/l	2.53	10		70		
MW-3	Copper	02/11/2008	8.5	ug/l	2.24	10	1000			
MW-3	**Iron**	**02/11/2008**	**30475**	**ug/l**	**14.0**	**300**	**300**		**30175**	**Natural**
MW-3	**Lead**	**02/11/2008**	**17**	**ug/l**	**0.04**	**10**	**15**		**2**	**Natural**
MW-3	**Manganese**	**02/11/2008**	**67**	**ug/l**	**0.50**	**50**	**50**		**17**	**Natural**
MW-3	Mercury	02/11/2008	0.05	ug/l	0.13	0.2	1.1			
MW-3	Nickel	02/11/2008	6.8	ug/l	1.35	50	100			
MW-3	Selenium	02/11/2008	1.6	ug/l	0.14	10	50			
MW-3	Silver	02/11/2008	0.1	ug/l	2.32	10	18			
MW-3	Sulfate	02/11/2008	16	ug/l	5.0	250	250000			
MW-3	TDS	02/11/2008	44000	ug/l	1000	1000	500000			
MW-3	**Thallium**	**02/11/2008**	**0.4**	**ug/l**	**0.04**	**5**		**0.28**	**0.12**	
MW-3	**Vanadium**	**02/11/2008**	**94**	**ug/l**	**1.21**	**25**		**3.5**	**90.5**	
MW-3	Zinc	02/11/2008	23	ug/l	1.86	10	1050			
MW-4	Acetone	02/11/2008	2.2	ug/l	1.21	100	700			
MW-4	Antimony	02/11/2008	0.1	ug/l	0.08	6		1.4		
MW-4	Barium	02/11/2008	65.5	ug/l	0.34	100	2000			
MW-4	Beryllium	02/11/2008	0.2	ug/l	0.17	1		2		
MW-4	Cadmium	02/11/2008	0.1	ug/l	0.04	1	1.75			
MW-4	Chloroform	02/11/2008	0.3	ug/l	0.13	5	70			
MW-4	Chromium	02/11/2008	8.2	ug/l	1.38	10	50			
MW-4	Cobalt	02/11/2008	0.3	ug/l	2.53	10		70		
MW-4	Copper	02/11/2008	1.6	ug/l	2.24	10	1000			
MW-4	Lead	02/11/2008	5.9	ug/l	0.04	10	15			
MW-4	Nickel	02/11/2008	0.6	ug/l	1.35	50	100			
MW-4	Selenium	02/11/2008	0.3	ug/l	0.14	10	50			
MW-4	Thallium	02/11/2008	0.1	ug/l	0.04	5		0.28		
MW-4	**Vanadium**	**02/11/2008**	**10.7**	**ug/l**	**1.21**	**25**		**3.5**	**7.2**	
MW-4	Zinc	02/11/2008	6.2	ug/l	1.86	10	1050			
MW-5	Acetone	02/11/2008	5.3	ug/l	1.21	100	700			
MW-5	Antimony	02/11/2008	0.1	ug/l	0.08	6		1.4		
MW-5	Arsenic	02/11/2008	3.1	ug/l	0.07	10	50			
MW-5	Barium	02/11/2008	52.7	ug/l	0.34	100	2000			
MW-5	Beryllium	02/11/2008	0.7	ug/l	0.17	1		2		
MW-5	Cadmium	02/11/2008	0.8	ug/l	0.04	1	1.75			
MW-5	Chloride	02/11/2008	23000	ug/l	5000	5000		250000		
MW-5	Chromium	02/11/2008	3.6	ug/l	1.38	10	50			
MW-5	Cobalt	02/11/2008	2.2	ug/l	2.53	10		70		
MW-5	Copper	02/11/2008	1.1	ug/l	2.24	10	1000			
MW-5	**Iron**	**02/11/2008**	**11075**	**ug/l**	**14.0**	**300**	**300**		**10775**	**Natural**
MW-5	Lead	02/11/2008	2.5	ug/l	0.04	10	15			
MW-5	**Manganese**	**02/11/2008**	**61**	**ug/l**	**0.50**	**50**	**50**		**11**	**Natural**
MW-5	Nickel	02/11/2008	3.7	ug/l	1.35	50	100			
MW-5	Sulfate	02/11/2008	9.4	ug/l	5.0	250	250000			
MW-5	TDS	02/11/2008	48000	ug/l	1000	1000	500000			
MW-5	Thallium	02/11/2008	0.1	ug/l	0.04	5		0.28		
MW-5	**Vanadium**	**02/11/2008**	**14.6**	**ug/l**	**1.21**	**25**		**3.5**	**11.1**	
MW-5	Zinc	02/11/2008	20	ug/l	1.86	10	1050			
MW-6	Acetone	02/11/2008	3.5	ug/l	1.21	100	700			
MW-6	Arsenic	02/11/2008	0.3	ug/l	0.07	10	50			

Well ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [4]	SWSL [2]	NCGW2L [3]	GWP[5]	Exceedance	Preliminary Cause
MW-6	Barium	02/11/2008	425	ug/l	0.11	100	2000			
MW-6	Beryllium	02/11/2008	1	ug/l	0.06	1		2		
MW-6	Cadmium	02/11/2008	1	ug/l	0.04	1	1.75			
MW-6	Chromium	02/11/2008	1.9	ug/l	0.11	10	50			
MW-6	Cobalt	02/11/2008	1.3	ug/l	0.03	10		70		
MW-6	Copper	02/11/2008	0.6	ug/l	0.05	10	1000			
MW-6	Lead	02/11/2008	2.4	ug/l	0.04	10	15			
MW-6	Nickel	02/11/2008	6.8	ug/l	1.35	50	100			
MW-6	Thallium	02/11/2008	0.2	ug/l	0.04	5		0.28		
MW-6	Vanadium	02/11/2008	1.9	ug/l	1.21	25		3.5		
MW-6	Zinc	02/11/2008	11	ug/l	1.86	10	1050			
MW-7	Acetone	02/11/2008	6.5	ug/l	1.21	100	700			
MW-7	Antimony	02/11/2008	0.2	ug/l	0.08	6		1.4		
MW-7	Arsenic	02/11/2008	19	ug/l	0.07	10	50			
MW-7	Barium	02/11/2008	186	ug/l	0.11	100	2000			
MW-7	Beryllium	02/11/2008	0.7	ug/l	0.06	1		2		
MW-7	Cadmium	02/11/2008	0.6	ug/l	0.04	1	1.75			
MW-7	Chloride	02/11/2008	134000	ug/l	5000	5000		250000		
MW-7	Chromium	02/11/2008	20	ug/l	0.11	10	50			
MW-7	Cobalt	02/11/2008	1.1	ug/l	0.03	10		70		
MW-7	Copper	02/11/2008	3.1	ug/l	0.05	10	1000			
MW-7	**Iron**	**02/11/2008**	**40125**	**ug/l**	**14.0**	**300**	**300**		**39825**	**Natural**
MW-7	**Lead**	**02/11/2008**	**21**	**ug/l**	**0.04**	**10**	**15**		**6**	**Natural**
MW-7	**Manganese**	**02/11/2008**	**227**	**ug/l**	**0.50**	**50**	**50**		**177**	**Natural**
MW-7	Nickel	02/11/2008	1.7	ug/l	1.35	50	100			
MW-7	Selenium	02/11/2008	4.5	ug/l	0.14	10	50			
MW-7	Sulfate	02/11/2008	124.2	ug/l	5.0	250	250000			
MW-7	**TDS**	**02/11/2008**	**656000**	**ug/l**	**1000**	**1000**	**500000**		**156000**	**Natural**
MW-7	Thallium	02/11/2008	0.2	ug/l	0.04	5		0.28		
MW-7	**Vanadium**	**02/11/2008**	**82**	**ug/l**	**1.21**	**25**		**3.5**	**78.5**	
MW-7	Zinc	02/11/2008	17	ug/l	1.86	10	1050			
MW-8	1,1-Dichloroethane	02/11/2008	0.4	ug/l	0.16	5	70			
MW-8	**1,4-Dichlorobenzene**	**02/11/2008**	**5.4**	**ug/l**	**0.21**	**1**	**1.4**		**4**	**Leachate &/or LFG**
MW-8	Acetone	02/11/2008	4.6	ug/l	1.21	100	700			
MW-8	Antimony	02/11/2008	0.1	ug/l	0.08	6		1.4		
MW-8	Arsenic	02/11/2008	11	ug/l	0.07	10	50			
MW-8	Barium	02/11/2008	147	ug/l	0.11	100	2000			
MW-8	Benzene	02/11/2008	0.2	ug/l	0.16	1	1			
MW-8	Beryllium	02/11/2008	0.3	ug/l	0.06	1		2		
MW-8	Cadmium	02/11/2008	0.2	ug/l	0.04	1	1.75			
MW-8	Chlorobenzene	02/11/2008	1.5	ug/l	0.13	3	50			
MW-8	Chromium	02/11/2008	16	ug/l	0.11	10	50			
MW-8	Cobalt	02/11/2008	0.7	ug/l	0.03	10		70		
MW-8	Copper	02/11/2008	3.4	ug/l	0.05	10	1000			
MW-8	Lead	02/11/2008	14	ug/l	0.04	10	15			
MW-8	Mercury	02/11/2008	0.82	ug/l	0.13	0.2	1.1			
MW-8	Nickel	02/11/2008	0.7	ug/l	1.35	50	100			
MW-8	Selenium	02/11/2008	1.4	ug/l	0.14	10	50			
MW-8	Silver	02/11/2008	0.1	ug/l	0.04	10	18			
MW-8	Thallium	02/11/2008	0.1	ug/l	0.04	5		0.28		
MW-8	Tin	02/11/2008	1	ug/l	2.75	100		ne		
MW-8	**Vanadium**	**02/11/2008**	**19.4**	**ug/l**	**1.21**	**25**		**3.5**	**15.9**	
MW-8	Zinc	02/11/2008	12	ug/l	1.86	10	1050			
TB	**Acetonitrile**	**02/11/2008**	**42.4**	**ug/l**	**5.96**	**55**		**42**	**0.4**	

Well ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [4]	SWSL [2]	NCGW2L [3]	GWP[5]	Exceedance	Preliminary Cause
TB	Toluene	02/11/2008	0.3	ug/l	0.13	1	1000			
EB	Acetonitrile	02/11/2008	11.2	ug/l	5.96	55		42		
EB	Barium	02/11/2008	0.3	ug/l	0.11	100	2000			
EB	Cadmium	02/11/2008	0.1	ug/l	0.04	1	1.75			
EB	Chromium	02/11/2008	0.3	ug/l	0.11	10	50			
EB	Copper	02/11/2008	0.4	ug/l	0.05	10	1000			
EB	Lead	02/11/2008	0.1	ug/l	0.04	10	15			
EB	Nickel	02/11/2008	0.2	ug/l	1.35	50	100			
EB	Tin	02/11/2008	0.8	ug/l	2.75	100		ne		
EB	Toluene	02/11/2008	0.2	ug/l	0.13	1	1000			
EB	Zinc	02/11/2008	5.4	ug/l	1.86	10	1050			

[1] Table contains all detections reported by laboratory

[2] SWSL = Solid Waste Section Reporting Limit (Current as of Sampling Event)

[3] NCGW2L = North Carolina Ground Water 2L Standard

[4] MDL = Method Detection Limit

[4] GWP = Groundwater Protection Standard (Current as of Sampling Event)

LFG = Landfill Gas

Hydrologic Properties at Monitoring Well Locations
Wayne County Closed Landfill (Dudley)

Monitoring Well	Hydraulic Conductivity (cm/sec)	Effective Porosity (%)	Hydraulic Gradient	Flow Rate (ft/yr)	Flow Direction	Water Table Depth (ft)	Water Table Elev. (ft)
MW-1	5.40E-04	20.0	0.00551	15.39	N72W	16.88	146.38
MW-2	3.00E-04	20.0	0.01860	28.86	N46W	4.98	129.54
MW-3	6.40E-03	20.0	0.00634	209.91	N80W	1.03	133.78
MW-4	9.90E-04	20.0	0.00394	20.17	N76W	7.20	143.00
MW-5	3.10E-05	20.0	0.01796	2.88	N45W	3.00	121.78
MW-6	1.60E-04	20.0	0.00664	5.49	N81W	5.41	140.12
MW-7	7.30E-05	20.0	0.00715	2.70	N63W	8.64	134.95
MW-8	3.40E-04	20.0	0.00518	9.10	N60W	20.63	141.25

NOTE: Data for conductivities and effective porosity obtained from GAI Consultants' Water Sampling Report (January, 1995).
Hydrologic Gradient taken from the February 11, 2008 sampling event from water levels reported by Environment I.
Flow rate (Q) is defined by the equation:

where

$$Q = -\frac{K}{n_e} \cdot \frac{dh}{dl}$$

K = hydraulic conductivity
ne = effective porosity
dh = head difference
dl = horizontal distance

Statistical Analysis Results Summary

Inter-Well Analyses Summary
Wayne County Closed MSWLF and C&D Landfill (Dudley)

Background Well: MW-1

Arsenic, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
100	-	Poisson tolerance interval	ND	16.0	ug/l

Well	Result	Significance
MW--2	11	No
MW--3	18	yes
MW--7	19	yes
MW--8	11	No

Barium, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
100	log-normal	Poisson tolerance interval	ND	11.0	log[ug/l]

Well	Result	Significance
MW--2	4.9628	No
MW--3	4.8752	No
MW--6	6.0521	No
MW--7	5.2258	No
MW--8	4.9904	No

Beryllium, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
100	-	Poisson tolerance interval	ND	5.0	ug/l

Well	Result	Significance
MW--3	1	No
MW--6	1	No

Cadmium, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
100	-	Poisson tolerance interval	ND	3.0	ug/l

Well	Result	Significance
MW-6	1	No

Chromium, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
86.21	-	Non-Parametric tolerance interval	1/2 ND	13	ug/l

Well	Result	Significance
MW-3	30	yes
MW-7	20	yes
MW-8	16	yes

Lead, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
100	-	Poisson tolerance interval	ND	16.0	ug/l

Well	Result	Significance
MW-3	**17**	yes
MW-7	**21**	yes
MW-8	14	No

Mercury, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
100	-	Poisson tolerance interval	ND	2.5	log[ug/l]

Well	Result	Significance
MW-8	0.82	No

Vanadium, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
100	-	Poisson tolerance interval	ND	7.5	uq/l

Well	Result	Significance
MW-3	4.543	No
MW-7	4.407	No

Zinc, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
89.66	-	Non-Parametric tolerance interval	1/2 ND	7.5	ug/l

Well	Result	Significance
MW--3	3.14	No
MW--5	3	No
MW--6	2.4	No
MW--7	2.83	No
MW--8	2.48	No

NOTE: Bold-faced monitoring points indicate detected levels exceed North Carolina Groundwater Standard.

Summary of Pooled VOCs in Background Well (MW-1)
Wayne County Closed MSWLF and C&D Landfill (Dudley)

Constituent	Samples	NDs	% NDs
1,1,1,2-Tetrachloroethane	30	30	100.00
1,1,1-Trichloroethane	30	30	100.00
1,1,2,2-Tetrachloroethane	30	30	100.00
1,1,2-Trichloroethane	30	30	100.00
1,1-Dichloroethane	30	30	100.00
1,1-Dichloroethene	30	30	100.00
1,2,3-Trichloropropane	30	30	100.00
1,2-Dibromo-3-chloropropane	30	30	100.00
1,2-Dibromoethane	30	30	100.00
1,2-Dichlorobenzene	30	30	100.00
1,2-Dichloroethane	30	30	100.00
1,2-Dichloropropane	30	30	100.00
1,4-Dichlorobenzene	31	31	100.00
2-Butanone	30	30	100.00
2-Hexanone	30	30	100.00
4-Methyl-2-Pentanone	30	30	100.00
Acetone	30	30	100.00
Acrylonitrile	30	30	100.00
Benzene	30	30	100.00
Bromochloromethane	30	30	100.00
Bromodichloromethane	30	30	100.00
Bromoform	30	30	100.00
Bromomethane	30	30	100.00
Carbon disulfide	30	30	100.00
Carbon tetrachloride	30	30	100.00
Chlorobenzene	30	30	100.00
Chloroethane	30	30	100.00
Chloroform	30	30	100.00
Chloromethane	30	30	100.00
cis-1,2-Dichloroethene	30	30	100.00
cis-1,3-Dichloropropene	30	30	100.00
Chlorodibromomethane	30	30	100.00
Dibromomethane	30	30	100.00
Ethylbenzene	30	30	100.00
Iodomethane	30	30	100.00
Dichloromethane	30	30	100.00
Styrene	30	30	100.00
Tetrachloroethylene	30	30	100.00
Toluene	30	30	100.00
trans-1,2-Dichloroethene	30	30	100.00
trans-1,3-Dichloropropene	30	30	100.00
trans-1,4-Dichloro-2-butene	30	30	100.00
Trichloroethylene	30	30	100.00
Trichlorofluoromethane	30	30	100.00
Vinyl acetate	30	30	100.00
Vinyl chloride	30	30	100.00
Xylene	30	30	100.00
Total	**1411**	**1411**	**100.00**

Poisson Prediction Interval Based upon Pooled Background VOCs
Wayne County Closed MSWLF and C&D Landfill (Dudley)

All detected VOCs (Background Well: MW-1)

Constituent	MW-2	MW-8
1,4-Dichlorobenzene	**x**	**x**
Benzene	**x**	
Chlorobenzene	x	
Detection(s) per Scan	3.00	1.00

Total number of sampling events [n] =	30.02
Total number of detections in background wells [y] =	0
Number of comparisons (downgradient wells) [k] =	7
One-sided value of Student's t-statistic (95% confidence) [t] =	2.578
Expected number of detections in a single future sample [y*] =	**0.2214**

Statistically significant VOC detections at 95% confidence level within MW-2 & MW-8

Intra-Well Analysis Summary (Metals)
Wayne County Closed MSWLF and C&D Landfill (Dudley)

Well	Arsenic	Chromium	Lead
MW-3	n/a	no	n/a
MW-7	no	no	no
MW-8		no	

EXPLANATION

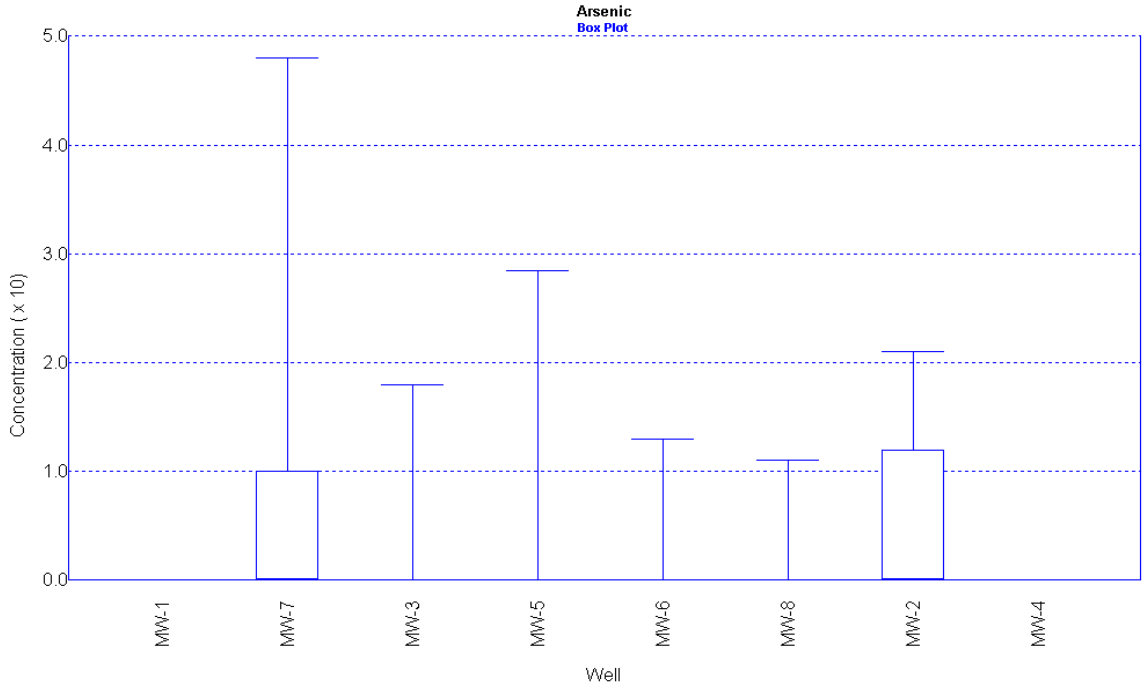
yes=detection statistically significant by intrawell analysis

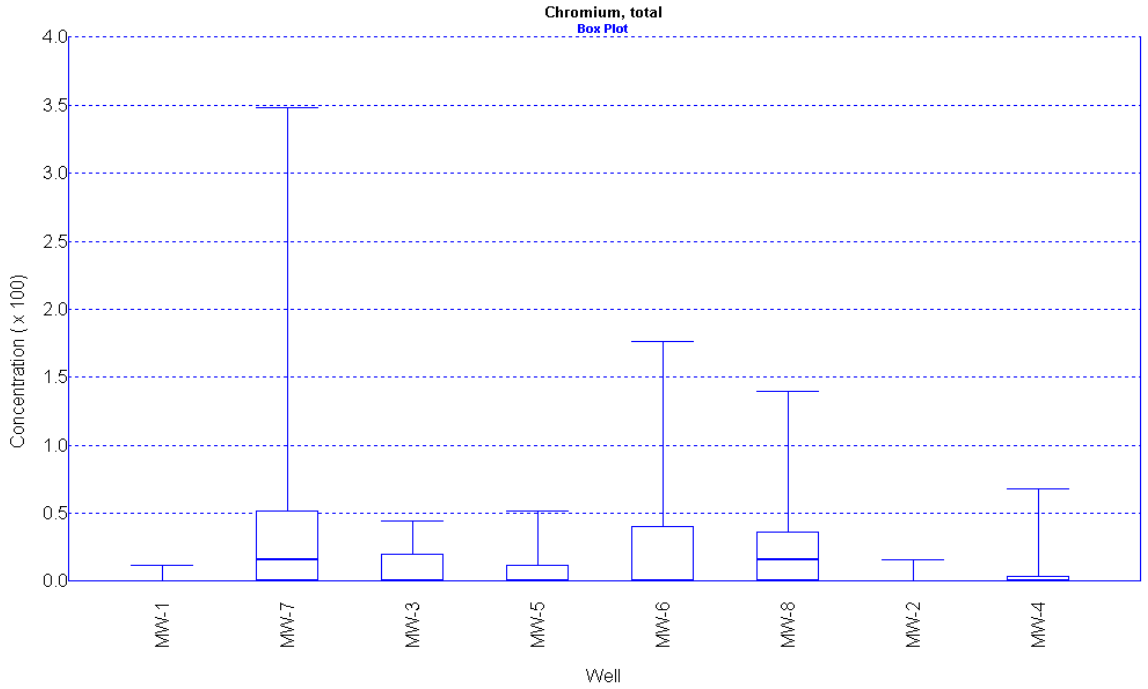
no=detection not statistically significant by intrawell analysis

n/a=not available, intrawell not possible via Shewhart CUSUM chart due to detection rate requirement

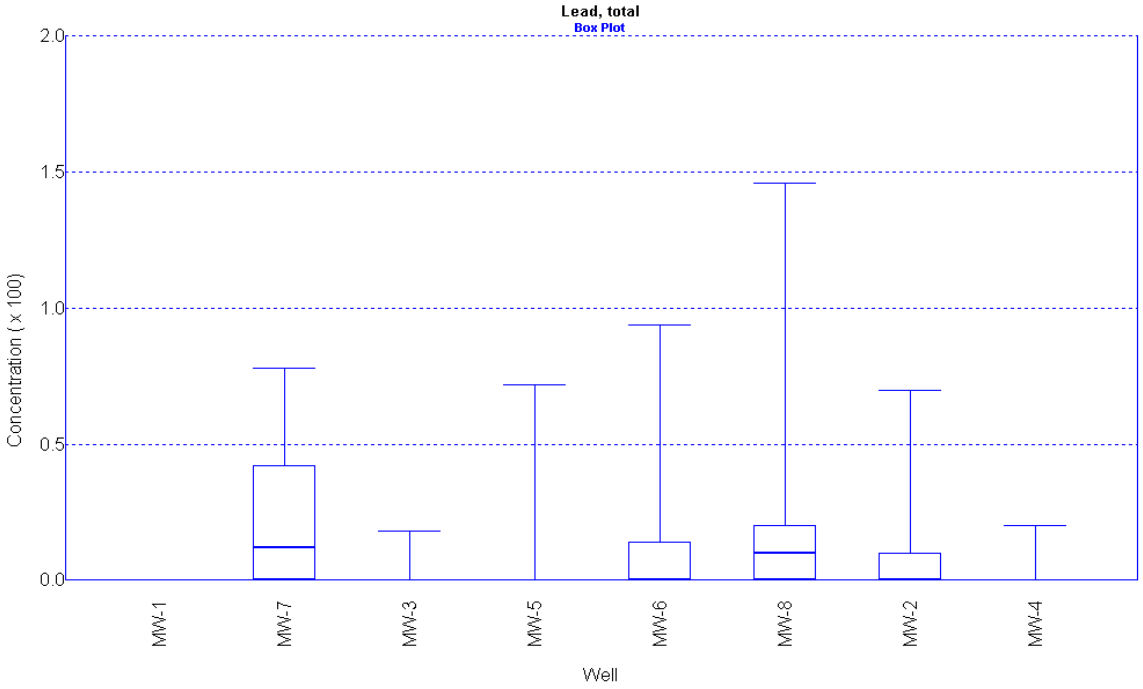
No Metals have increased according to Intrawell Analysis

Box Plots for Select Constituents (Metals)
Wayne County Closed MSWLF and C&D Landfill (Dudley)

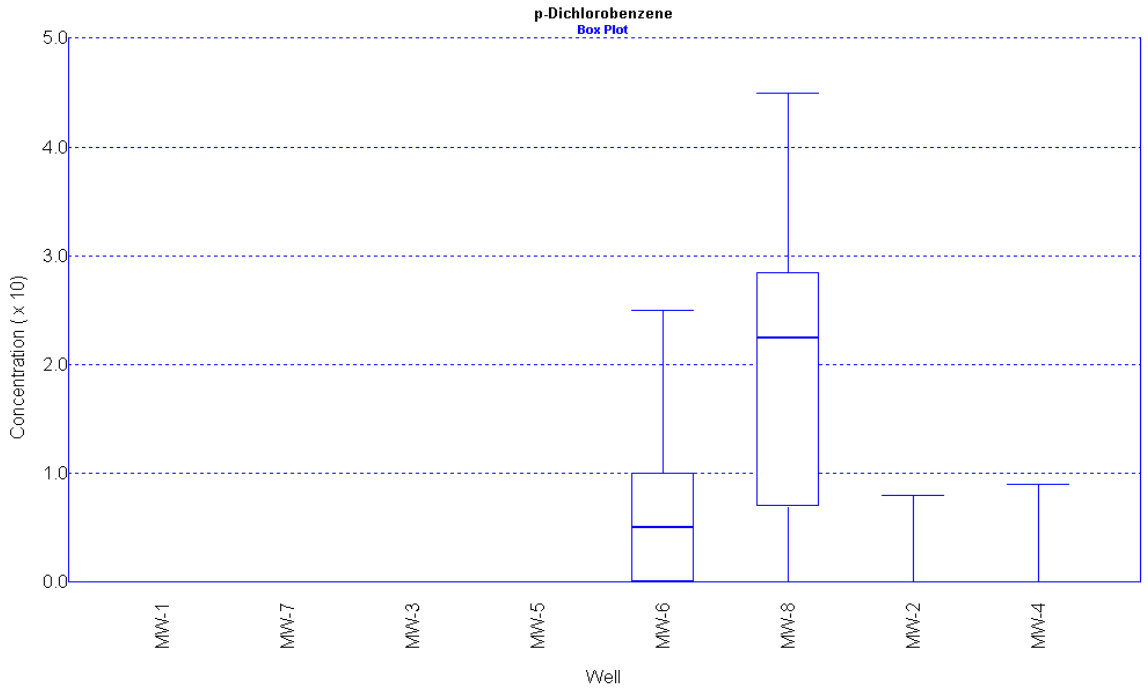


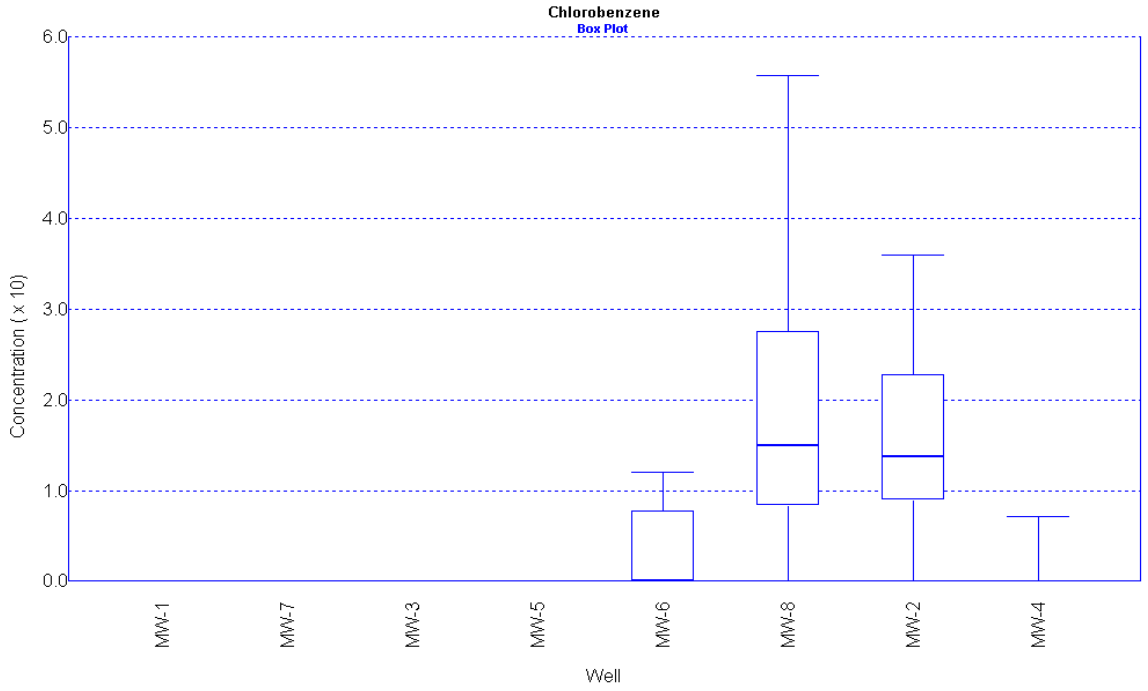


Box Plots for Select Constituents (Metals)
Wayne County Closed MSWLF and C&D Landfill (Dudley)

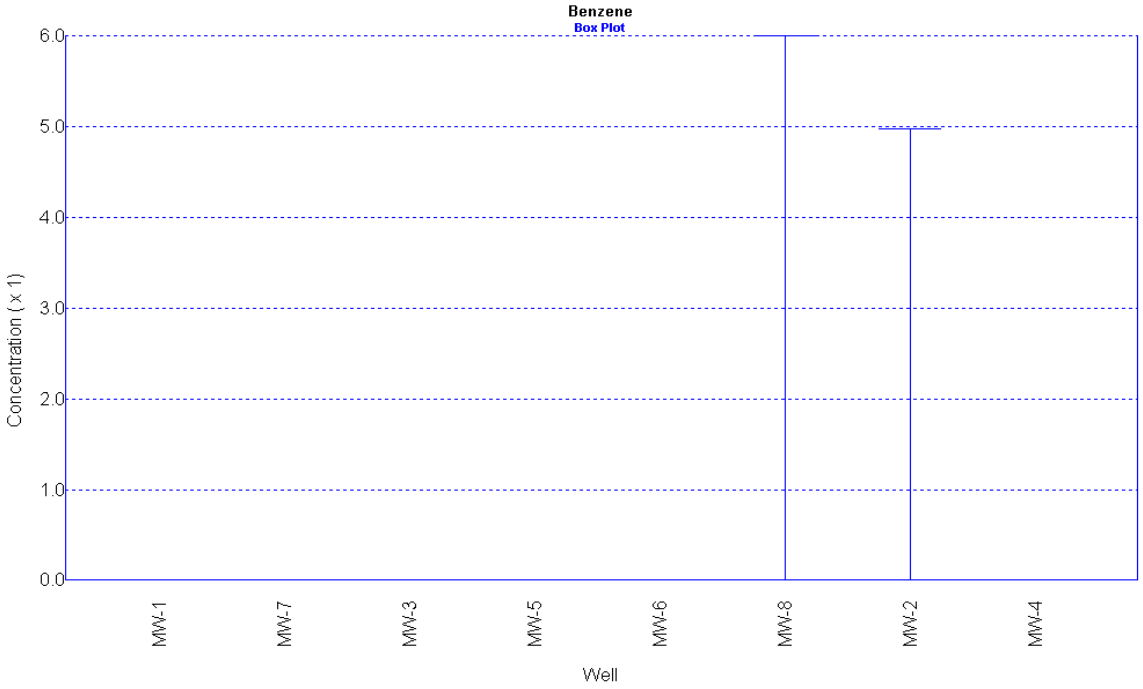


Box Plots for Select Constituents (VOCs)
Wayne County Closed MSWLF and C&D Landfill (Dudley)

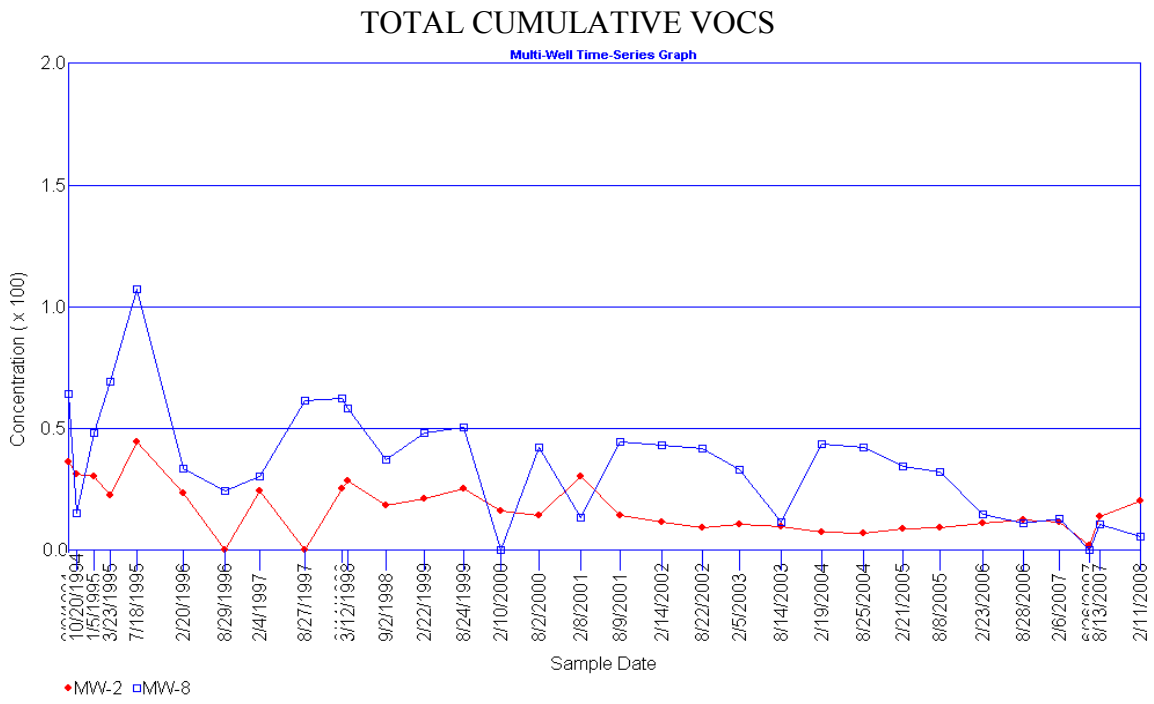




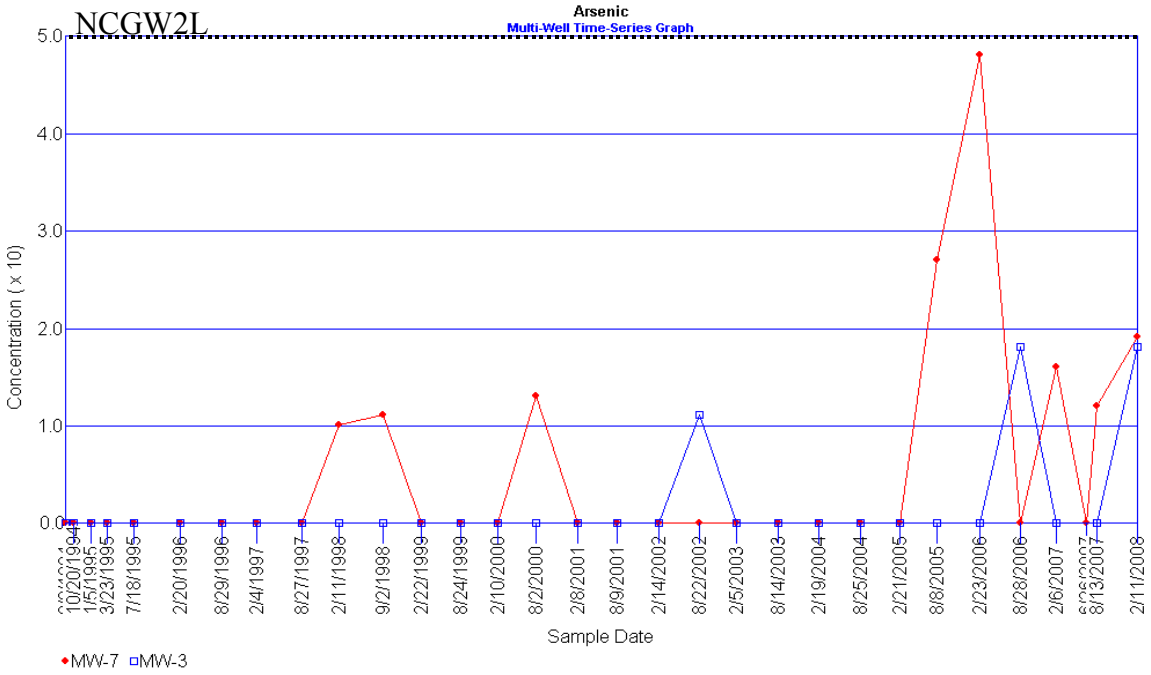
Box Plots for Select Constituents (VOCs)
Wayne County Closed MSWLF and C&D Landfill (Dudley)

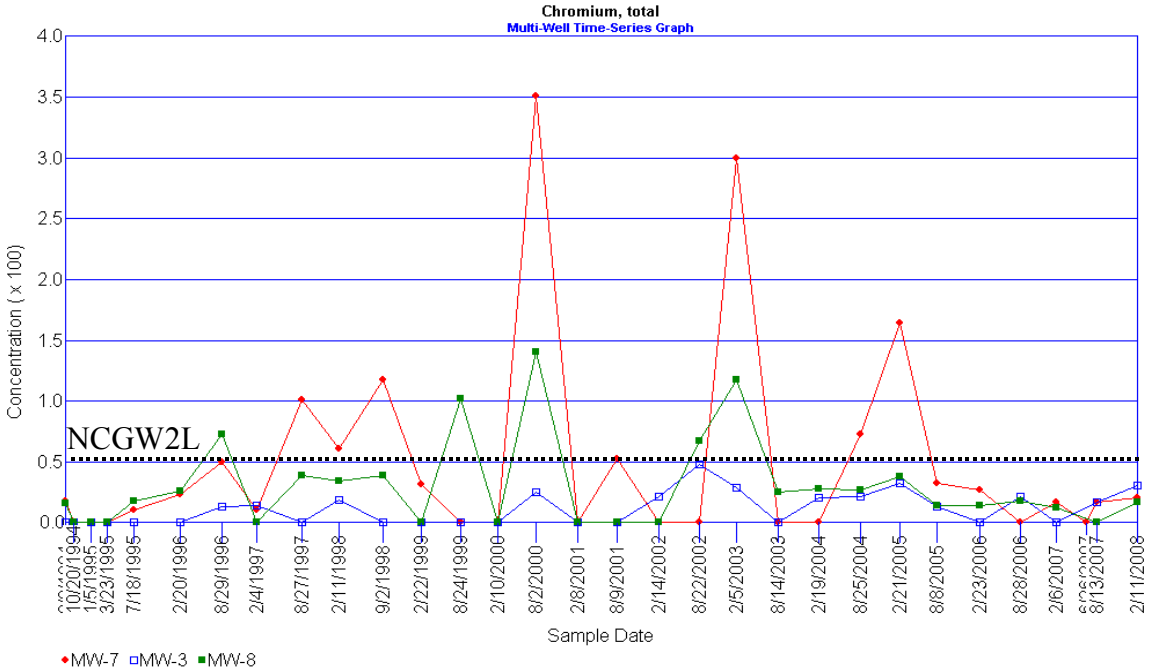


Time Series Plots for Total VOC Concentrations
Wayne County Closed MSWLF and C&D Landfill (Dudley)

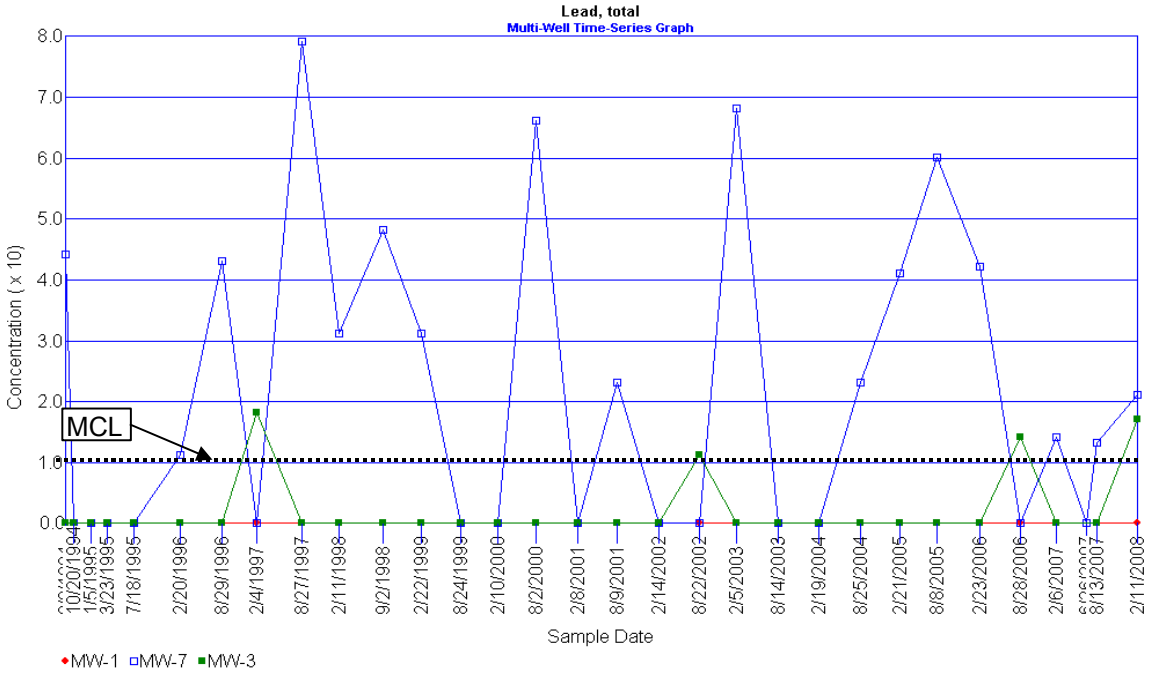


Time Series Plots for Select Constituents (Metals)
Wayne County Closed MSWLF and C&D Landfill (Dudley)

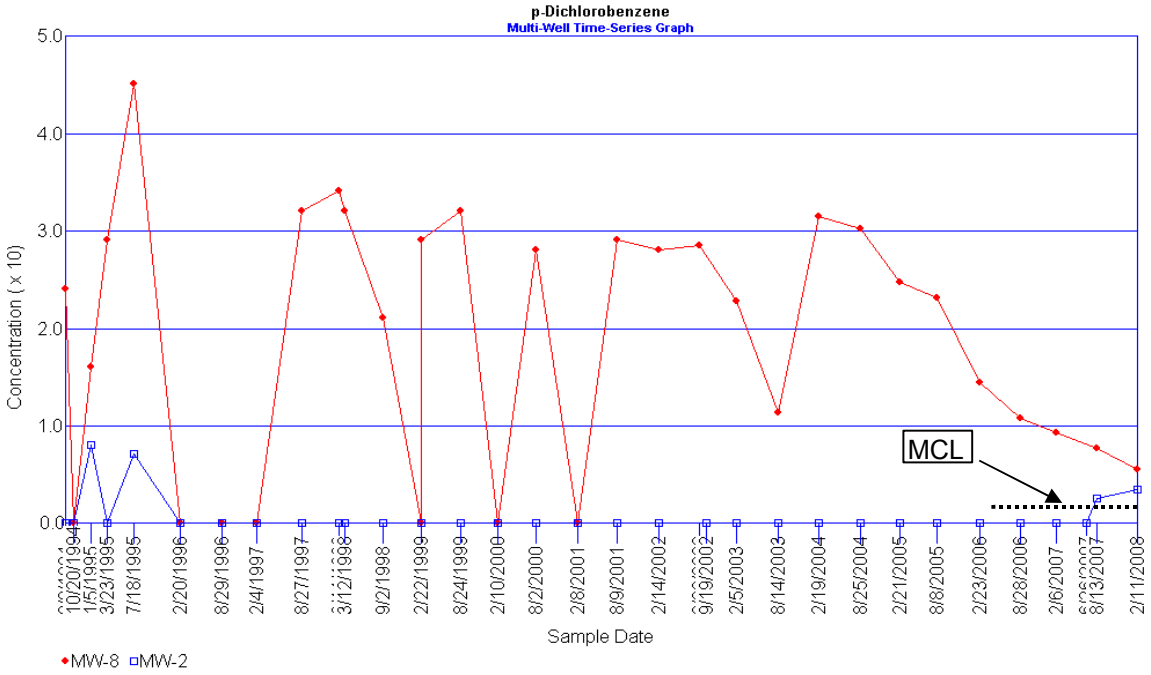


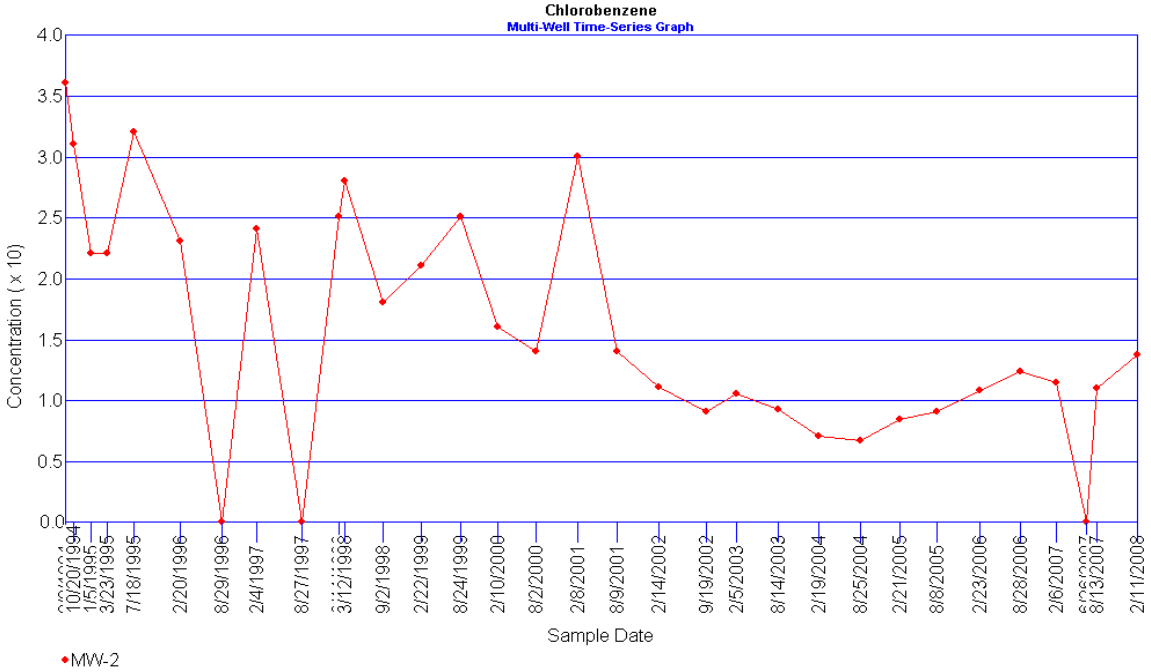


Time Series Plots for Select Constituents (Metals)
Wayne County Closed MSWLF and C&D Landfill (Dudley)

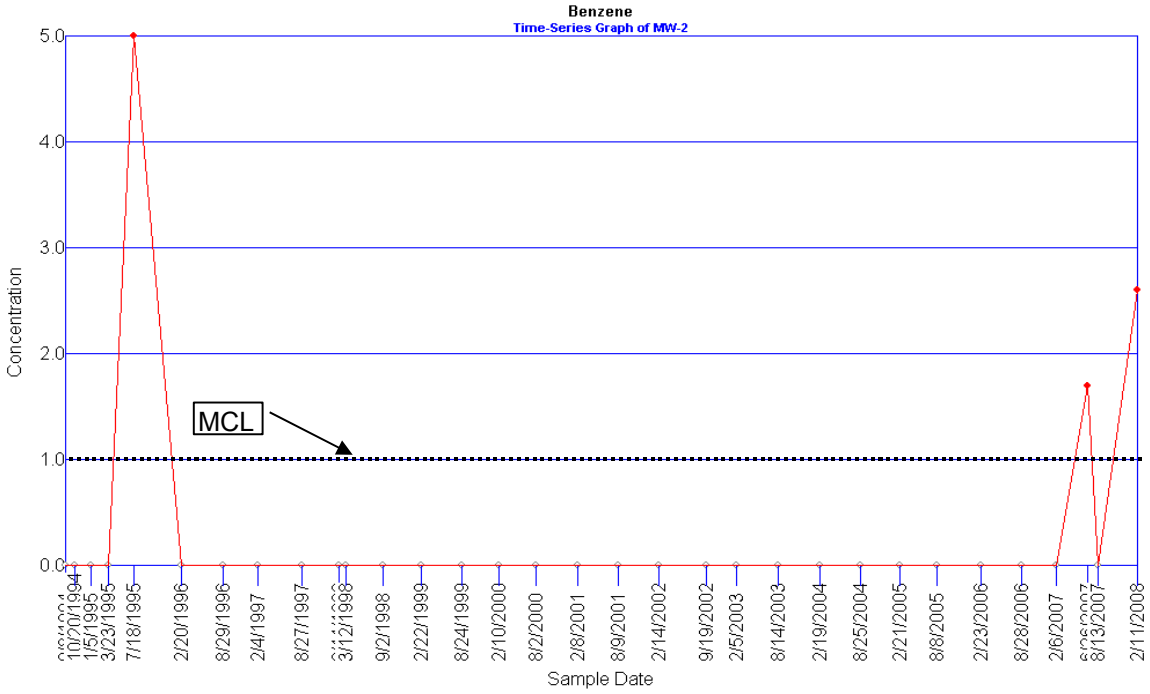


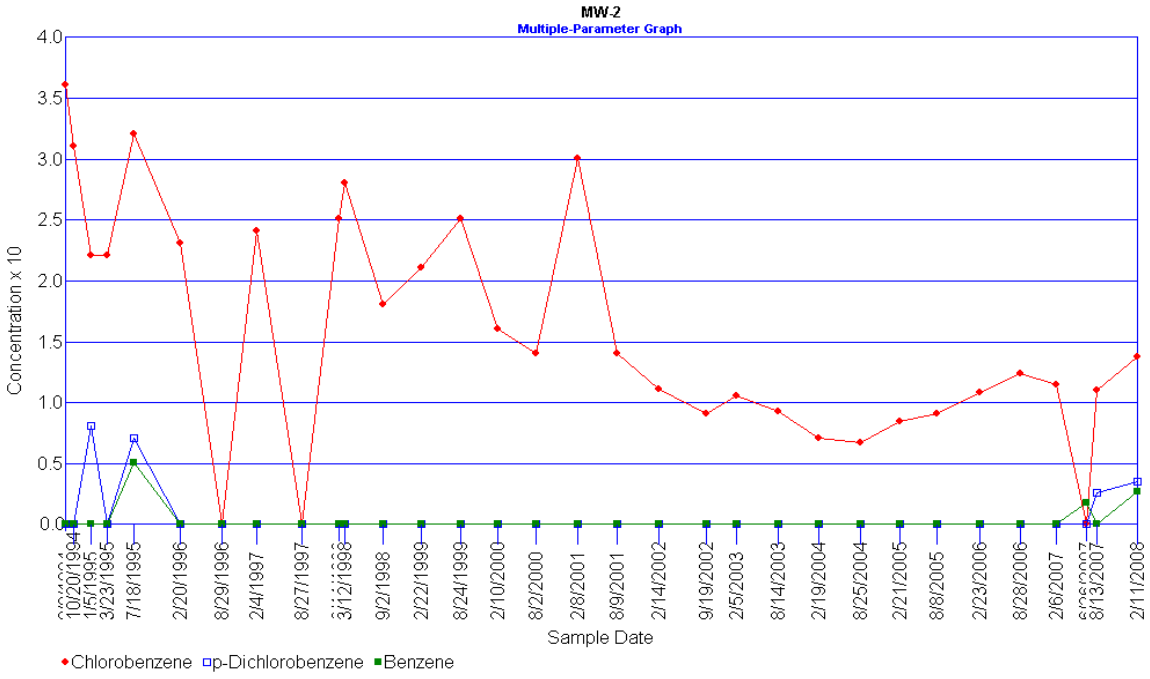
Time Series Plots for Select Constituents (VOCs)
Wayne County Closed MSWLF and C&D Landfill (Dudley)



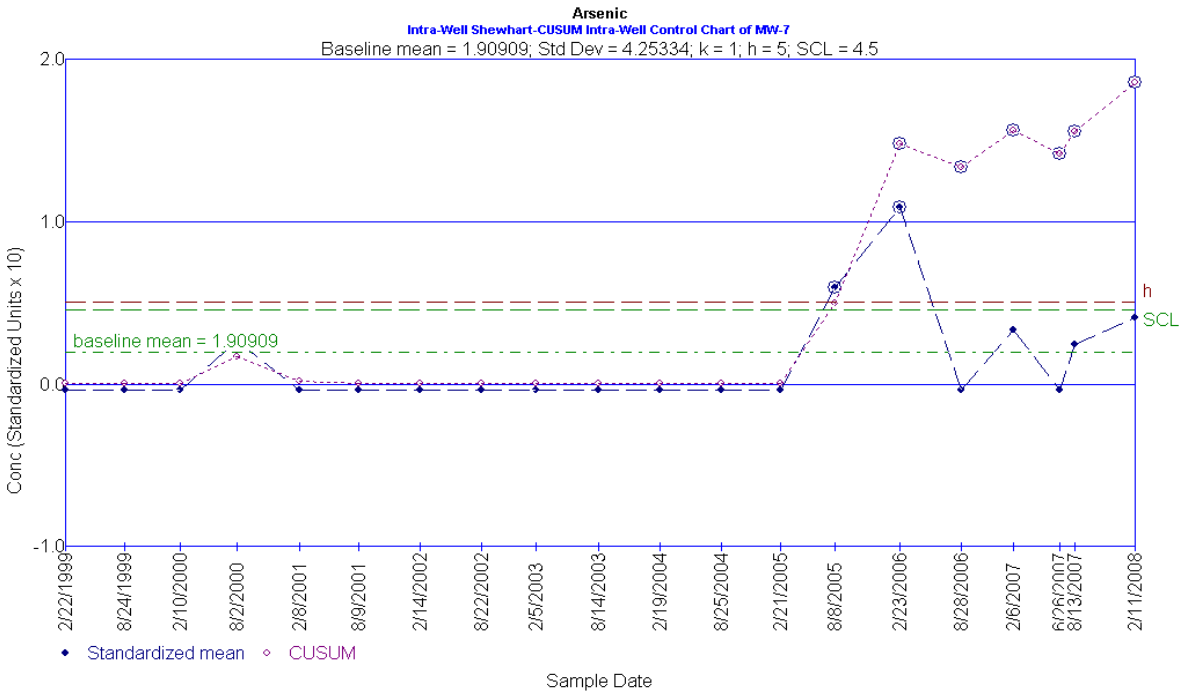


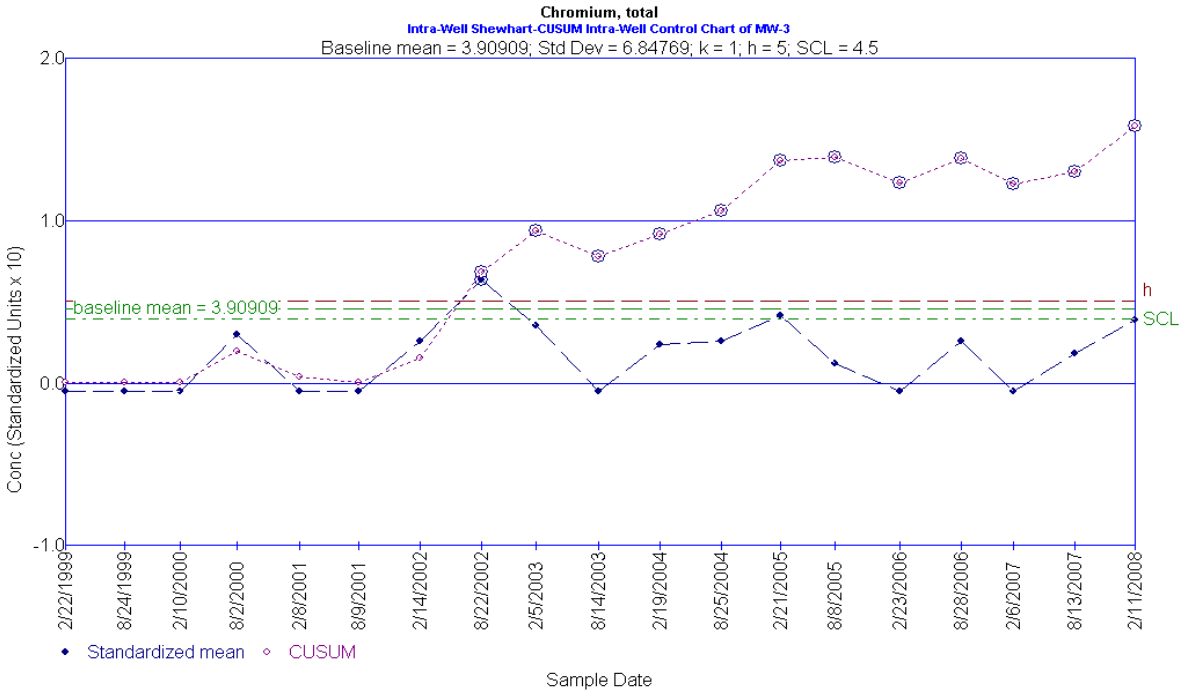
Time Series Plots for Select Constituents (VOCs)
Wayne County Closed MSWLF and C&D Landfill (Dudley)



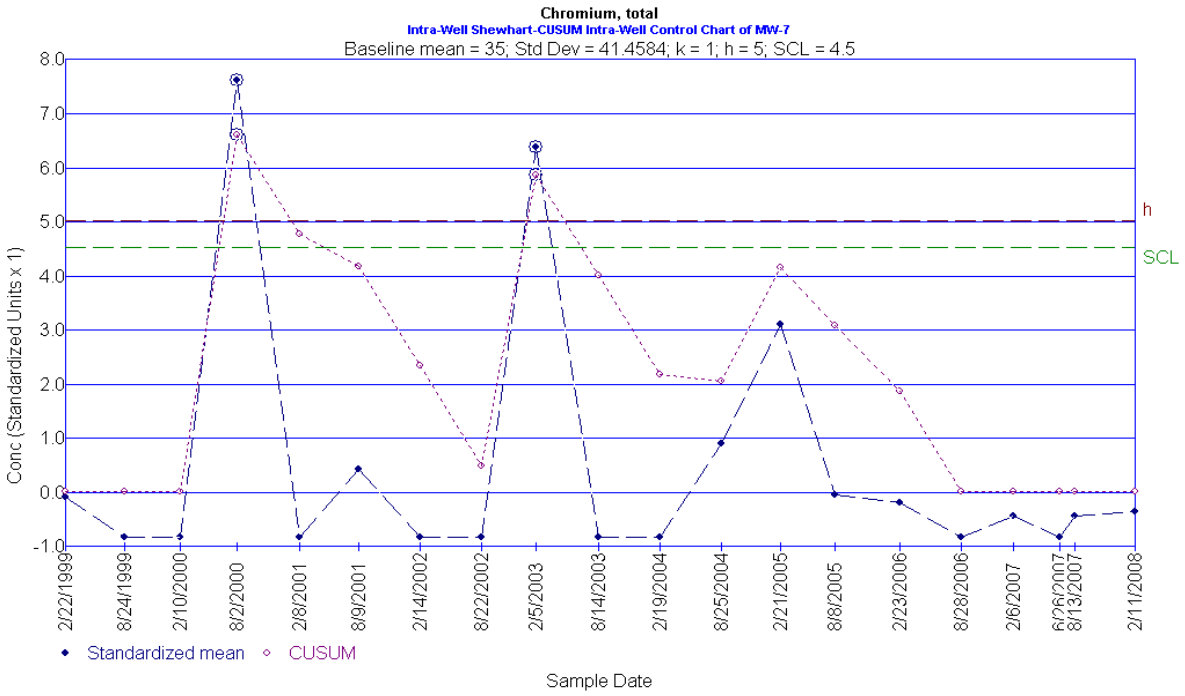


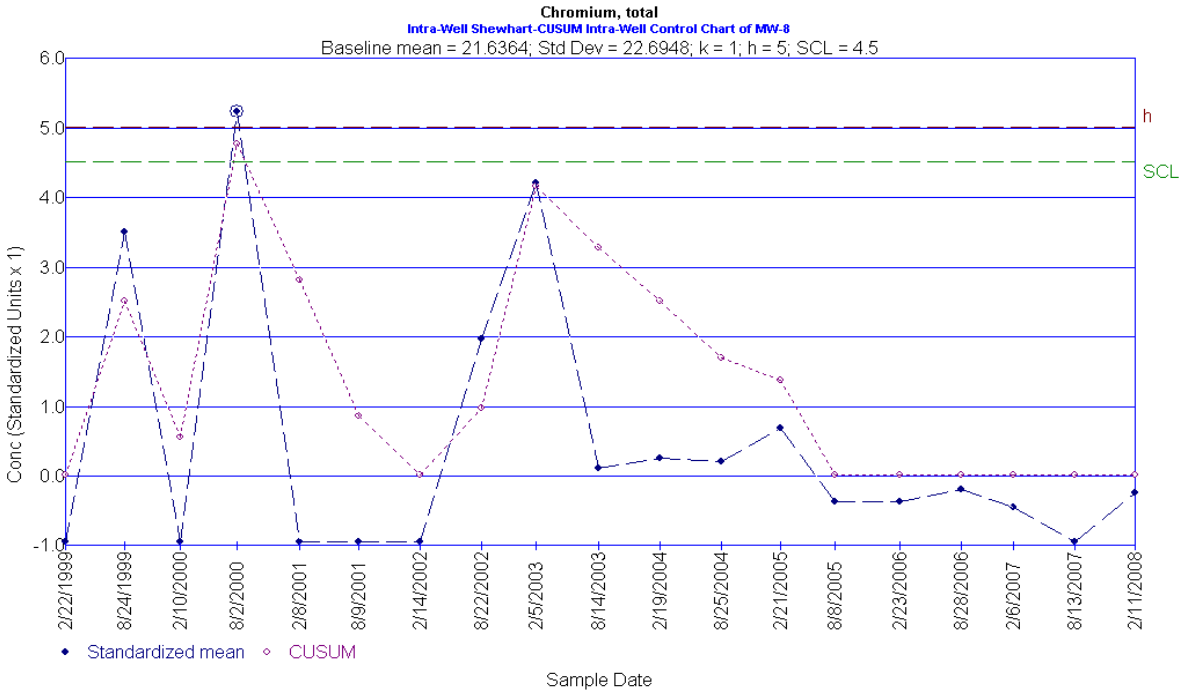
Shewhart-CUSUM charts for selected constituents
Wayne County Closed MSWLF and C&D Landfill (Dudley)



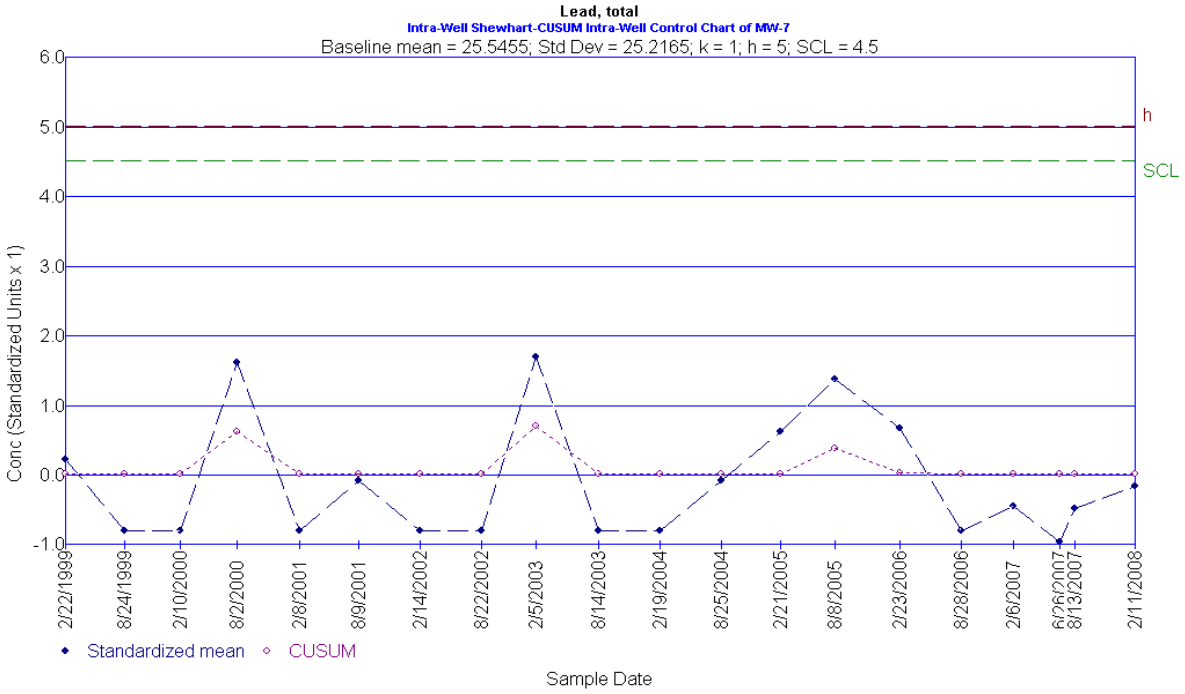


Shewhart-CUSUM charts for selected constituents
Wayne County Closed MSWLF and C&D Landfill (Dudley)





Shewhart-CUSUM charts for selected constituents
Wayne County Closed MSWLF and C&D Landfill (Dudley)



Basic Statistics

Basic Statistics

Parameter: Arsenic

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
241	
Total Non-Detects	211
Pooled Mean	6.26934
Pooled Std Dev	4.82579
Background Mean	4.74948
Background Std Dev	0.984436

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	29	29	100	137.735

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	4.74948	0.984436	0	3074	106

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-5	30	27	90	205.235
MW-8	30	27	90	162.235
MW-4	30	30	100	145.235
MW-6	30	29	96.6667	153.235
MW-2	31	19	61.2903	263
MW-7	31	23	74.1935	267
MW-3	30	27	90	177.235

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-5	6.84117	6.41928	2.09168	1.21384	3574	119.133
MW-8	5.40783	1.98889	0.658351	1.21384	3505	116.833
MW-4	4.84117	0.869966	0.0916839	1.21384	3180	106
MW-6	5.10783	1.72563	0.358351	1.21384	3298	109.933
MW-2	8.48387	5.19532	3.73439	1.20417	4713	152.032
MW-7	8.6129	9.00991	3.86342	1.20417	4265	137.581
MW-3	5.90783	3.58147	1.15835	1.21384	3552	118.4

Analysis of Variance Statistics

SS Wells	526.938
SS Total	5589.18

Kruskal-Wallis Statistics

Non-Detect Rank	106
Background Rank Sum	3074
Background Rank Mean	106
H Statistic	11.5537
H Adjusted for Ties	35.1293

Basic Statistics

Parameter: Barium

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
241	
Total Non-Detects	226
Pooled Mean	238.133
Pooled Std Dev	68.035
Background Mean	227.587
Background Std Dev	67.5917

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	29	29	100	6600.02

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	227.587	67.5917	0	3291.5	113.5

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-2	31	28	90.3226	7232.5
MW-7	31	29	93.5484	7079.52
MW-5	30	30	100	6850.02
MW-3	30	29	96.6667	6931.02
MW-4	30	29	96.6667	6991
MW-6	30	25	83.3333	8552
MW-8	30	27	90	7154

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-2	233.306	51.3268	5.71956	17.1994	3878	125.097
MW-7	228.372	64.7518	0.784716	17.1994	3758.5	121.242
MW-5	228.334	66.5421	0.747103	17.3374	3405	113.5
MW-3	231.034	60.418	3.4471	17.3374	3520.5	117.35
MW-4	233.033	53.5772	5.44644	17.3374	3521.5	117.383
MW-6	285.067	109.284	57.4798	17.3374	4032.5	134.417
MW-8	238.467	35.3033	10.8798	17.3374	3753.5	125.117

Analysis of Variance Statistics

SS Wells	78160.5
SS Total	1.1109e+006

Kruskal-Wallis Statistics

Non-Detect Rank	113.5
Background Rank Sum	3291.5
Background Rank Mean	113.5
H Statistic	2.16897
H Adjusted for Ties	12.3698

Basic Statistics

Parameter: Beryllium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
241	
Total Non-Detects	235
Pooled Mean	0.968921
Pooled Std Dev	0.462232
Background Mean	0.932414
Background Std Dev	0.21457

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	29	29	100	27.04

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	0.932414	0.21457	0	3422	118

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-4	30	30	100	28.04
MW-8	30	30	100	28.04
MW-7	31	31	100	28.135
MW-5	30	26	86.6667	37.04
MW-3	30	29	96.6667	28.54
MW-6	30	29	96.6667	28.54
MW-2	31	31	100	28.135

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-4	0.934667	0.211199	0.00225287	0.119177	3540	118
MW-8	0.934667	0.211199	0.00225287	0.119177	3540	118
MW-7	0.907581	0.256635	-0.0248331	0.118228	3658	118
MW-5	1.23467	1.15624	0.302253	0.119177	4026	134.2
MW-3	0.951333	0.194807	0.0189195	0.119177	3658	121.933
MW-6	0.951333	0.194807	0.0189195	0.119177	3659	121.967
MW-2	0.907581	0.256635	-0.0248331	0.118228	3658	118

Analysis of Variance Statistics

SS Wells	2.47952
SS Total	51.2781

Kruskal-Wallis Statistics

Non-Detect Rank	118
Background Rank Sum	3422
Background Rank Mean	118
H Statistic	1.36628
H Adjusted for Ties	18.7559

Basic Statistics

Parameter: Cadmium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
241	
Total Non-Detects	214
Pooled Mean	0.751494
Pooled Std Dev	1.28693
Background Mean	0.483793
Background Std Dev	0.0872768

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	29	29	100	14.03

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	0.483793	0.0872768	0	3117.5	107.5

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-4	30	29	96.6667	15.03
MW-2	31	31	100	14.78
MW-5	30	15	50	57.43
MW-7	31	30	96.7742	21.28
MW-8	30	30	100	14.53
MW-3	30	27	90	21.53
MW-6	30	23	76.6667	22.5

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-4	0.501	0.127424	0.0172069	0.318401	3332.5	111.083
MW-2	0.476774	0.0942828	-0.00701891	0.315867	3332.5	107.5
MW-5	1.91433	3.0655	1.43054	0.318401	5033.5	167.783
MW-7	0.686452	1.17552	0.202659	0.315867	3465	111.774
MW-8	0.484333	0.0858099	0.00054023	0.318401	3225	107.5
MW-3	0.717667	0.815783	0.233874	0.318401	3599.5	119.983
MW-6	0.75	0.6917	0.266207	0.318401	4055.5	135.183

Analysis of Variance Statistics

SS Wells	49.1729
SS Total	397.488

Kruskal-Wallis Statistics

Non-Detect Rank	107.5
Background Rank Sum	3117.5
Background Rank Mean	107.5
H Statistic	19.2828
H Adjusted for Ties	64.3072

Basic Statistics

Parameter: Chromium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
241	
Total Non-Detects	148
Pooled Mean	19.4589
Pooled Std Dev	38.8186
Background Mean	5.90069
Background Std Dev	2.93555

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	29	25	86.2069	171.12

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	5.90069	2.93555	0	2516.5	86.7759

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-8	30	10	33.3333	891.12
MW-5	30	21	70	327.12
MW-2	31	25	80.6452	192.12
MW-6	30	16	53.3333	919.12
MW-3	30	16	53.3333	395
MW-7	31	12	38.7097	1518
MW-4	30	23	76.6667	276

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-8	29.704	35.3579	23.8033	9.50551	4751	158.367
MW-5	10.904	12.256	5.00331	9.50551	3262.5	108.75
MW-2	6.19742	3.62108	0.29673	9.42985	2840.5	91.629
MW-6	30.6373	43.424	24.7366	9.50551	4152	138.4
MW-3	13.1667	10.9106	7.26598	9.50551	3847	128.233
MW-7	48.9677	82.9733	43.0671	9.42985	4820	155.484
MW-4	9.2	12.4828	3.29931	9.50551	2971.5	99.05

Analysis of Variance Statistics

SS Wells	51215
SS Total	361653

Kruskal-Wallis Statistics

Non-Detect Rank	74.5
Background Rank Sum	2516.5
Background Rank Mean	86.7759
H Statistic	34.7867
H Adjusted for Ties	45.2711

Basic Statistics

Parameter: Lead, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
241	
Total Non-Detects	178
Pooled Mean	11.0911
Pooled Std Dev	16.4993
Background Mean	4.74259
Background Std Dev	1.01734

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	29	29	100	137.535

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	4.74259	1.01734	0	2595.5	89.5

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-2	31	23	74.1935	290.235
MW-8	30	13	43.3333	504.035
MW-5	30	24	80	272.035
MW-6	30	21	70	394.035
MW-4	30	28	93.3333	166.035
MW-3	30	26	86.6667	185.035
MW-7	31	14	45.1613	724

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-2	9.36242	12.6548	4.61983	4.02402	3664.5	118.21
MW-8	16.8012	26.1439	12.0586	4.0563	4656.5	155.217
MW-5	9.06783	13.3044	4.32525	4.0563	3375	112.5
MW-6	13.1345	18.894	8.39191	4.0563	3818.5	127.283
MW-4	5.5345	3.20065	0.791914	4.0563	2900	96.6667
MW-3	6.16783	3.77714	1.42525	4.0563	3128	104.267
MW-7	23.3548	22.8612	18.6123	4.02402	5023	162.032

Analysis of Variance Statistics

SS Wells	8803.47
SS Total	65334.1

Kruskal-Wallis Statistics

Non-Detect Rank	89.5
Background Rank Sum	2595.5
Background Rank Mean	89.5
H Statistic	30.0089
H Adjusted for Ties	50.2582

Basic Statistics

Parameter: Mercury

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
120	
Total Non-Detects	107
Pooled Mean	0.416083
Pooled Std Dev	0.864748
Background Mean	0.2125
Background Std Dev	0.0694365

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	8	8	100	1.7

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	0.2125	0.0694365	0	432	54

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-8	25	14	56	26.88
MW-2	24	24	100	5.47
MW-5	9	9	100	1.95
MW-7	13	13	100	2.95
MW-3	9	9	100	1.95
MW-4	16	14	87.5	5.03
MW-6	16	16	100	4

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-8	1.0752	1.7608	0.8627	0.332749	2019	80.76
MW-2	0.227917	0.061218	0.0154167	0.334426	1296	54
MW-5	0.216667	0.0661438	0.00416667	0.398046	486	54
MW-7	0.226923	0.0563301	0.0144231	0.368102	702	54
MW-3	0.216667	0.0661438	0.00416667	0.398046	486	54
MW-4	0.314375	0.185938	0.101875	0.354712	975	60.9375
MW-6	0.25	0	0.0375	0.354712	864	54

Analysis of Variance Statistics

SS Wells	13.83
SS Total	88.9869

Kruskal-Wallis Statistics

Non-Detect Rank	54
Background Rank Sum	432
Background Rank Mean	54
H Statistic	11.2417
H Adjusted for Ties	38.6213

Basic Statistics

Parameter: Vanadium

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
241	
Total Non-Detects	185
Pooled Mean	49.5641
Pooled Std Dev	115.254
Background Mean	18.8003
Background Std Dev	4.06381

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	29	29	100	545.21

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	18.8003	4.06381	0	2697	93

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-4	30	29	96.6667	613.21
MW-6	30	22	73.3333	1536.21
MW-7	31	14	45.1613	4735.85
MW-5	30	19	63.3333	1364.21
MW-2	31	30	96.7742	599.06
MW-8	30	23	76.6667	1144.21
MW-3	30	19	63.3333	1407

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-4	20.4403	9.83016	1.63999	28.4039	2901	96.7
MW-6	51.207	83.6192	32.4067	28.4039	3781	126.033
MW-7	152.769	280.539	133.969	28.1778	5034	162.387
MW-5	45.4737	55.1637	26.6733	28.4039	4041	134.7
MW-2	19.3245	8.05341	0.524171	28.1778	2987	96.3548
MW-8	38.1403	42.5801	19.34	28.4039	3636	121.2
MW-3	46.9	46.247	28.0997	28.4039	4084	136.133

Analysis of Variance Statistics

SS Wells	416141
SS Total	3.18804e+006

Kruskal-Wallis Statistics

Non-Detect Rank	93
Background Rank Sum	2697
Background Rank Mean	93
H Statistic	25.8513
H Adjusted for Ties	47.2027

Basic Statistics

Parameter: Zinc, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
241	
Total Non-Detects	217
Pooled Mean	27.4174
Pooled Std Dev	32.8606
Background Mean	31.7621
Background Std Dev	42.7045

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	29	26	89.6552	921.1

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	31.7621	42.7045	0	3530	121.724

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-4	30	28	93.3333	1102.1
MW-7	31	26	83.871	778.6
MW-6	30	26	86.6667	765.1
MW-2	31	31	100	665.6
MW-8	30	28	93.3333	834.1
MW-3	30	27	90	702
MW-5	30	25	83.3333	839

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-4	36.7367	72.8893	4.9746	8.60046	3527	117.567
MW-7	25.1161	10.7994	-6.64594	8.53201	3979	128.355
MW-6	25.5033	13.1653	-6.25874	8.60046	3745	124.833
MW-2	21.471	8.23445	-10.2911	8.53201	3379	109
MW-8	27.8033	30.8485	-3.95874	8.60046	3513	117.1
MW-3	23.4	4.81807	-8.36207	8.60046	3614	120.467
MW-5	27.9667	18.7276	-3.7954	8.60046	3874	129.133

Analysis of Variance Statistics

SS Wells	5020.82
SS Total	259157

Kruskal-Wallis Statistics

Non-Detect Rank	109
Background Rank Sum	3530
Background Rank Mean	121.724
H Statistic	1.93408
H Adjusted for Ties	7.16341

Basic Statistics

Parameter: p-Dichlorobenzene

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
257	
Total Non-Detects	210
Pooled Mean	5.08514
Pooled Std Dev	7.28971
Background Mean	2.40661
Background Std Dev	0.746451

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	31	31	100	74.605

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	2.40661	0.746451	0	3270.5	105.5

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-6	32	15	46.875	206.805
MW-7	33	33	100	77.18
MW-5	32	32	100	77.105
MW-2	33	29	87.8788	92.475
MW-3	32	32	100	77.105
MW-4	32	31	96.875	83.605
MW-8	32	7	21.875	618

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-6	6.46266	5.24623	4.05604	1.21297	5426.5	169.578
MW-7	2.33879	0.829326	-0.067825	1.2039	3481.5	105.5
MW-5	2.40953	0.734498	0.00291835	1.21297	3376	105.5
MW-2	2.80227	1.38548	0.39566	1.2039	3922.5	118.864
MW-3	2.40953	0.734498	0.00291835	1.21297	3376	105.5
MW-4	2.61266	1.37758	0.206043	1.21297	3495.5	109.234
MW-8	19.3125	12.3432	16.9059	1.21297	6804.5	212.641

Analysis of Variance Statistics

SS Wells	7835.17
SS Total	13603.8

Kruskal-Wallis Statistics

Non-Detect Rank	105.5
Background Rank Sum	3270.5
Background Rank Mean	105.5
H Statistic	65.7199
H Adjusted for Ties	144.622

Basic Statistics

Parameter: Benzene

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
249	
Total Non-Detects	245
Pooled Mean	2.34538
Pooled Std Dev	0.641325
Background Mean	2.31933
Background Std Dev	0.583603

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	30	30	100	69.58

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	2.31933	0.583603	0	3690	123

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-8	31	30	96.7742	75.58
MW-6	31	31	100	72.08
MW-2	32	29	90.625	78.38
MW-3	31	31	100	72.08
MW-5	31	31	100	72.08
MW-4	31	31	100	72.08
MW-7	32	32	100	72.14

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-8	2.43806	0.875357	0.118731	0.165841	3939	127.065
MW-6	2.32516	0.574711	0.00582796	0.165841	3813	123
MW-2	2.44937	0.664161	0.130042	0.164561	4308	134.625
MW-3	2.32516	0.574711	0.00582796	0.165841	3813	123
MW-5	2.32516	0.574711	0.00582796	0.165841	3813	123
MW-4	2.32516	0.574711	0.00582796	0.165841	3813	123
MW-7	2.25438	0.692806	-0.0649583	0.164561	3936	123

Analysis of Variance Statistics

SS Wells	0.948446
SS Total	102.002

Kruskal-Wallis Statistics

Non-Detect Rank	123
Background Rank Sum	3690
Background Rank Mean	123
H Statistic	0.740362
H Adjusted for Ties	15.6118

Basic Statistics

Parameter: Chlorobenzene

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
249	
Total Non-Detects	181
Pooled Mean	6.34504
Pooled Std Dev	8.53639
Background Mean	2.35217
Background Std Dev	0.500813

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1	30	30	100	70.565

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1	2.35217	0.500813	0	2730	91

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-6	31	18	58.0645	153.565
MW-8	31	6	19.3548	542.765
MW-3	31	31	100	73.065
MW-7	32	32	100	73.145
MW-4	31	30	96.7742	77.865
MW-5	31	31	100	73.065
MW-2	32	3	9.375	515.88

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-6	4.95371	3.54061	2.60154	1.53371	4179	134.806
MW-8	17.5085	13.4899	15.1564	1.53371	6141	198.097
MW-3	2.35694	0.49311	0.00476882	1.53371	2821	91
MW-7	2.28578	0.630339	-0.0663854	1.52188	2912	91
MW-4	2.51177	1.01595	0.159608	1.53371	2920	94.1935
MW-5	2.35694	0.49311	0.00476882	1.53371	2821	91
MW-2	16.1213	9.40534	13.7691	1.52188	6601	206.281

Analysis of Variance Statistics

SS Wells	9428.92
SS Total	18071.8

Kruskal-Wallis Statistics

Non-Detect Rank	91
Background Rank Sum	2730
Background Rank Mean	91
H Statistic	106.563
H Adjusted for Ties	173.017

Interwell Analyses for Metals

Poisson Tolerance Limit

Parameter: Arsenic

Original Data (Not Transformed)
Non-Detects Replaced with Detection Limit

Poisson Count of 29 background Samples = 275.47
Degrees of Freedom = 552

95% Confidence Values

Chi-Squared Value (95% Confidence) = 607.766
Lambda (from Zack's formula) = 10.4787
Smallest Degrees of Freedom = 34
Upper Tolerance Limit (95%) = 16

99% Confidence Values

Chi-Squared Value (99% Confidence) = 632.224
Lambda (from Zack's formula) = 10.9004
Smallest Degrees of Freedom = 40
Upper Tolerance Limit (99%) = 19

	Date	Result	Impacted 95%	Impacted 99%
MW-8	9/8/1994	ND<10	FALSE	FALSE
	10/20/1994	ND<10	FALSE	FALSE
	1/5/1995	ND<10	FALSE	FALSE
	3/23/1995	ND<10	FALSE	FALSE
	7/18/1995	ND<10	FALSE	FALSE
	2/20/1996	ND<10	FALSE	FALSE
	8/29/1996	ND<10	FALSE	FALSE
	2/4/1997	ND<10	FALSE	FALSE
	8/27/1997	ND<10	FALSE	FALSE
	2/11/1998	ND<10	FALSE	FALSE
	9/2/1998	ND<10	FALSE	FALSE
	2/22/1999	ND<10	FALSE	FALSE
	8/24/1999	ND<10	FALSE	FALSE
	2/10/2000	ND<10	FALSE	FALSE
	8/2/2000	ND<10	FALSE	FALSE
	2/8/2001	ND<10	FALSE	FALSE
	8/9/2001	ND<10	FALSE	FALSE
	2/14/2002	ND<10	FALSE	FALSE
	8/22/2002	ND<10	FALSE	FALSE
	2/5/2003	ND<10	FALSE	FALSE
	8/14/2003	ND<10	FALSE	FALSE
	2/19/2004	ND<10	FALSE	FALSE
	8/25/2004	ND<10	FALSE	FALSE
	2/21/2005	ND<10	FALSE	FALSE
	8/8/2005	ND<10	FALSE	FALSE
	2/23/2006	10	FALSE	FALSE
	8/28/2006	11	FALSE	FALSE
	2/6/2007	ND<10	FALSE	FALSE
	8/13/2007	ND<0.47	FALSE	FALSE
	2/11/2008	11	FALSE	FALSE
MW-2	9/8/1994	ND<10	FALSE	FALSE
	10/20/1994	ND<10	FALSE	FALSE
	1/5/1995	ND<10	FALSE	FALSE
	3/23/1995	ND<10	FALSE	FALSE
	7/18/1995	ND<10	FALSE	FALSE
	2/20/1996	ND<10	FALSE	FALSE
	8/29/1996	ND<10	FALSE	FALSE
	2/4/1997	ND<10	FALSE	FALSE
	8/27/1997	ND<10	FALSE	FALSE
	2/11/1998	11	FALSE	FALSE
	9/2/1998	14	FALSE	FALSE
	2/22/1999	ND<10	FALSE	FALSE
	8/24/1999	ND<10	FALSE	FALSE
	2/10/2000	ND<10	FALSE	FALSE
	8/2/2000	10	FALSE	FALSE
	2/8/2001	ND<10	FALSE	FALSE
	8/9/2001	ND<10	FALSE	FALSE
	2/14/2002	ND<10	FALSE	FALSE
	8/22/2002	21	TRUE	TRUE
	2/5/2003	17	TRUE	FALSE
	8/14/2003	ND<10	FALSE	FALSE
	2/19/2004	ND<10	FALSE	FALSE
	8/25/2004	16	FALSE	FALSE

	2/21/2005	ND<10	FALSE	FALSE
	8/8/2005	16	FALSE	FALSE
	2/23/2006	12	FALSE	FALSE
	8/28/2006	16	FALSE	FALSE
	2/6/2007	11	FALSE	FALSE
	6/26/2007	ND<2	FALSE	FALSE
	8/13/2007	17	TRUE	FALSE
	2/11/2008	11	FALSE	FALSE
MW-7	9/8/1994	ND<10	FALSE	FALSE
	10/20/1994	ND<10	FALSE	FALSE
	1/5/1995	ND<10	FALSE	FALSE
	3/23/1995	ND<10	FALSE	FALSE
	7/18/1995	ND<10	FALSE	FALSE
	2/20/1996	ND<10	FALSE	FALSE
	8/29/1996	ND<10	FALSE	FALSE
	2/4/1997	ND<10	FALSE	FALSE
	8/27/1997	ND<10	FALSE	FALSE
	2/11/1998	10	FALSE	FALSE
	9/2/1998	11	FALSE	FALSE
	2/22/1999	ND<10	FALSE	FALSE
	8/24/1999	ND<10	FALSE	FALSE
	2/10/2000	ND<10	FALSE	FALSE
	8/2/2000	13	FALSE	FALSE
	2/8/2001	ND<10	FALSE	FALSE
	8/9/2001	ND<10	FALSE	FALSE
	2/14/2002	ND<10	FALSE	FALSE
	8/22/2002	ND<10	FALSE	FALSE
	2/5/2003	ND<10	FALSE	FALSE
	8/14/2003	ND<10	FALSE	FALSE
	2/19/2004	ND<10	FALSE	FALSE
	8/25/2004	ND<10	FALSE	FALSE
	2/21/2005	ND<10	FALSE	FALSE
	8/8/2005	27	TRUE	TRUE
	2/23/2006	48	TRUE	TRUE
	8/28/2006	ND<10	FALSE	FALSE
	2/6/2007	16	FALSE	FALSE
	6/26/2007	ND<2	FALSE	FALSE
	8/13/2007	12	FALSE	FALSE
	2/11/2008	19	TRUE	FALSE
MW-3	9/8/1994	ND<10	FALSE	FALSE
	10/20/1994	ND<10	FALSE	FALSE
	1/5/1995	ND<10	FALSE	FALSE
	3/23/1995	ND<10	FALSE	FALSE
	7/18/1995	ND<10	FALSE	FALSE
	2/20/1996	ND<10	FALSE	FALSE
	8/29/1996	ND<10	FALSE	FALSE
	2/4/1997	ND<10	FALSE	FALSE
	8/27/1997	ND<10	FALSE	FALSE
	2/11/1998	ND<10	FALSE	FALSE
	9/2/1998	ND<10	FALSE	FALSE
	2/22/1999	ND<10	FALSE	FALSE
	8/24/1999	ND<10	FALSE	FALSE
	2/10/2000	ND<10	FALSE	FALSE
	8/2/2000	ND<10	FALSE	FALSE
	2/8/2001	ND<10	FALSE	FALSE
	8/9/2001	ND<10	FALSE	FALSE
	2/14/2002	ND<10	FALSE	FALSE
	8/22/2002	11	FALSE	FALSE
	2/5/2003	ND<10	FALSE	FALSE
	8/14/2003	ND<10	FALSE	FALSE
	2/19/2004	ND<10	FALSE	FALSE
	8/25/2004	ND<10	FALSE	FALSE
	2/21/2005	ND<10	FALSE	FALSE
	8/8/2005	ND<10	FALSE	FALSE
	2/23/2006	ND<10	FALSE	FALSE
	8/28/2006	18	TRUE	FALSE
	2/6/2007	ND<10	FALSE	FALSE
	8/13/2007	ND<0.47	FALSE	FALSE
	2/11/2008	18	TRUE	FALSE

Poisson Tolerance Limit

Parameter: Barium

Natural Logarithm Transformation
Non-Detects Replaced with Detection Limit

Poisson Count of 29 background Samples = 167.571
Degrees of Freedom = 337

95% Confidence Values

Chi-Squared Value (95% Confidence) = 380.809
Lambda (from Zack's formula) = 6.56568
Smallest Degrees of Freedom = 24
Upper Tolerance Limit (95%) = 11

99% Confidence Values

Chi-Squared Value (99% Confidence) = 400.319
Lambda (from Zack's formula) = 6.90206
Smallest Degrees of Freedom = 29
Upper Tolerance Limit (99%) = 13.5

	Date	Result	Impacted 95%	Impacted 99%
MW-2	9/8/1994	ND<6.21461	FALSE	FALSE
	10/20/1994	ND<6.21461	FALSE	FALSE
	1/5/1995	ND<6.21461	FALSE	FALSE
	3/23/1995	ND<6.21461	FALSE	FALSE
	7/18/1995	ND<6.21461	FALSE	FALSE
	2/20/1996	ND<6.21461	FALSE	FALSE
	8/29/1996	ND<6.21461	FALSE	FALSE
	2/4/1997	ND<6.21461	FALSE	FALSE
	8/27/1997	ND<6.21461	FALSE	FALSE
	2/11/1998	ND<6.21461	FALSE	FALSE
	9/2/1998	ND<6.21461	FALSE	FALSE
	2/22/1999	ND<6.21461	FALSE	FALSE
	8/24/1999	ND<6.21461	FALSE	FALSE
	2/10/2000	ND<6.21461	FALSE	FALSE
	8/2/2000	ND<6.21461	FALSE	FALSE
	2/8/2001	ND<6.21461	FALSE	FALSE
	8/9/2001	ND<6.21461	FALSE	FALSE
	2/14/2002	ND<6.21461	FALSE	FALSE
	8/22/2002	ND<6.21461	FALSE	FALSE
	2/5/2003	ND<6.21461	FALSE	FALSE
	8/14/2003	ND<6.21461	FALSE	FALSE
	2/19/2004	ND<6.21461	FALSE	FALSE
	8/25/2004	ND<6.21461	FALSE	FALSE
	2/21/2005	ND<6.21461	FALSE	FALSE
	8/8/2005	ND<6.21461	FALSE	FALSE
	2/23/2006	ND<6.21461	FALSE	FALSE
	8/28/2006	ND<6.21461	FALSE	FALSE
	2/6/2007	4.99043	FALSE	FALSE
	6/26/2007	ND<0	FALSE	FALSE
	8/13/2007	5.2575	FALSE	FALSE
	2/11/2008	4.96284	FALSE	FALSE
MW-7	9/8/1994	ND<6.21461	FALSE	FALSE
	10/20/1994	ND<6.21461	FALSE	FALSE
	1/5/1995	ND<6.21461	FALSE	FALSE
	3/23/1995	ND<6.21461	FALSE	FALSE
	7/18/1995	ND<6.21461	FALSE	FALSE
	2/20/1996	ND<6.21461	FALSE	FALSE
	8/29/1996	ND<6.21461	FALSE	FALSE
	2/4/1997	ND<6.21461	FALSE	FALSE
	8/27/1997	ND<6.21461	FALSE	FALSE
	2/11/1998	ND<6.21461	FALSE	FALSE
	9/2/1998	ND<6.21461	FALSE	FALSE
	2/22/1999	ND<6.21461	FALSE	FALSE
	8/24/1999	ND<6.21461	FALSE	FALSE
	2/10/2000	ND<6.21461	FALSE	FALSE
	8/2/2000	ND<6.21461	FALSE	FALSE
	2/8/2001	ND<6.21461	FALSE	FALSE
	8/9/2001	ND<6.21461	FALSE	FALSE
	2/14/2002	ND<6.21461	FALSE	FALSE
	8/22/2002	ND<6.21461	FALSE	FALSE
	2/5/2003	ND<6.21461	FALSE	FALSE
	8/14/2003	ND<6.21461	FALSE	FALSE
	2/19/2004	ND<6.21461	FALSE	FALSE

	8/25/2004	ND<6.21461	FALSE	FALSE
	2/21/2005	ND<6.21461	FALSE	FALSE
	8/8/2005	ND<6.21461	FALSE	FALSE
	2/23/2006	ND<6.21461	FALSE	FALSE
	8/28/2006	ND<6.21461	FALSE	FALSE
	2/6/2007	4.96284	FALSE	FALSE
	6/26/2007	ND<0	FALSE	FALSE
	8/13/2007	ND<-3.21888	FALSE	FALSE
	2/11/2008	5.22575	FALSE	FALSE
MW-3	9/8/1994	ND<6.21461	FALSE	FALSE
	10/20/1994	ND<6.21461	FALSE	FALSE
	1/5/1995	ND<6.21461	FALSE	FALSE
	3/23/1995	ND<6.21461	FALSE	FALSE
	7/18/1995	ND<6.21461	FALSE	FALSE
	2/20/1996	ND<6.21461	FALSE	FALSE
	8/29/1996	ND<6.21461	FALSE	FALSE
	2/4/1997	ND<6.21461	FALSE	FALSE
	8/27/1997	ND<6.21461	FALSE	FALSE
	2/11/1998	ND<6.21461	FALSE	FALSE
	9/2/1998	ND<6.21461	FALSE	FALSE
	2/22/1999	ND<6.21461	FALSE	FALSE
	8/24/1999	ND<6.21461	FALSE	FALSE
	2/10/2000	ND<6.21461	FALSE	FALSE
	8/2/2000	ND<6.21461	FALSE	FALSE
	2/8/2001	ND<6.21461	FALSE	FALSE
	8/9/2001	ND<6.21461	FALSE	FALSE
	2/14/2002	ND<6.21461	FALSE	FALSE
	8/22/2002	ND<6.21461	FALSE	FALSE
	2/5/2003	ND<6.21461	FALSE	FALSE
	8/14/2003	ND<6.21461	FALSE	FALSE
	2/19/2004	ND<6.21461	FALSE	FALSE
	8/25/2004	ND<6.21461	FALSE	FALSE
	2/21/2005	ND<6.21461	FALSE	FALSE
	8/8/2005	ND<6.21461	FALSE	FALSE
	2/23/2006	ND<6.21461	FALSE	FALSE
	8/28/2006	ND<6.21461	FALSE	FALSE
	2/6/2007	ND<4.60517	FALSE	FALSE
	8/13/2007	ND<-3.21888	FALSE	FALSE
	2/11/2008	4.8752	FALSE	FALSE
MW-8	9/8/1994	ND<6.21461	FALSE	FALSE
	10/20/1994	ND<6.21461	FALSE	FALSE
	1/5/1995	ND<6.21461	FALSE	FALSE
	3/23/1995	ND<6.21461	FALSE	FALSE
	7/18/1995	ND<6.21461	FALSE	FALSE
	2/20/1996	ND<6.21461	FALSE	FALSE
	8/29/1996	ND<6.21461	FALSE	FALSE
	2/4/1997	ND<6.21461	FALSE	FALSE
	8/27/1997	ND<6.21461	FALSE	FALSE
	2/11/1998	ND<6.21461	FALSE	FALSE
	9/2/1998	ND<6.21461	FALSE	FALSE
	2/22/1999	ND<6.21461	FALSE	FALSE
	8/24/1999	ND<6.21461	FALSE	FALSE
	2/10/2000	ND<6.21461	FALSE	FALSE
	8/2/2000	ND<6.21461	FALSE	FALSE
	2/8/2001	ND<6.21461	FALSE	FALSE
	8/9/2001	ND<6.21461	FALSE	FALSE
	2/14/2002	ND<6.21461	FALSE	FALSE
	8/22/2002	ND<6.21461	FALSE	FALSE
	2/5/2003	ND<6.21461	FALSE	FALSE
	8/14/2003	ND<6.21461	FALSE	FALSE
	2/19/2004	ND<6.21461	FALSE	FALSE
	8/25/2004	ND<6.21461	FALSE	FALSE
	2/21/2005	ND<6.21461	FALSE	FALSE
	8/8/2005	ND<6.21461	FALSE	FALSE
	2/23/2006	ND<6.21461	FALSE	FALSE
	8/28/2006	ND<6.21461	FALSE	FALSE
	2/6/2007	4.85981	FALSE	FALSE
	8/13/2007	4.85203	FALSE	FALSE
	2/11/2008	4.99043	FALSE	FALSE
MW-6	9/8/1994	ND<6.21461	FALSE	FALSE
	10/20/1994	ND<6.21461	FALSE	FALSE
	1/5/1995	ND<6.21461	FALSE	FALSE
	3/23/1995	ND<6.21461	FALSE	FALSE
	7/18/1995	ND<6.21461	FALSE	FALSE

2/20/1996	ND<6.21461	FALSE	FALSE
8/29/1996	ND<6.21461	FALSE	FALSE
2/4/1997	ND<6.21461	FALSE	FALSE
8/27/1997	ND<6.21461	FALSE	FALSE
2/11/1998	ND<6.21461	FALSE	FALSE
9/2/1998	ND<6.21461	FALSE	FALSE
2/22/1999	ND<6.21461	FALSE	FALSE
8/24/1999	ND<6.21461	FALSE	FALSE
2/10/2000	ND<6.21461	FALSE	FALSE
8/2/2000	ND<6.21461	FALSE	FALSE
2/8/2001	ND<6.21461	FALSE	FALSE
8/9/2001	ND<6.21461	FALSE	FALSE
2/14/2002	ND<6.21461	FALSE	FALSE
8/22/2002	ND<6.21461	FALSE	FALSE
2/5/2003	ND<6.21461	FALSE	FALSE
8/14/2003	6.37502	FALSE	FALSE
2/19/2004	6.59441	FALSE	FALSE
8/25/2004	ND<6.21461	FALSE	FALSE
2/21/2005	ND<6.21461	FALSE	FALSE
8/8/2005	ND<6.21461	FALSE	FALSE
2/23/2006	ND<6.21461	FALSE	FALSE
8/28/2006	ND<6.21461	FALSE	FALSE
2/6/2007	5.81114	FALSE	FALSE
8/13/2007	5.4161	FALSE	FALSE
2/11/2008	6.05209	FALSE	FALSE

Poisson Tolerance Limit

Parameter: Beryllium, total

Original Data (Not Transformed)
Non-Detects Replaced with Detection Limit

Poisson Count of 29 background Samples = 54.08
Degrees of Freedom = 110

95% Confidence Values

Chi-Squared Value (95% Confidence) = 135.48
Lambda (from Zack's formula) = 2.33586
Smallest Degrees of Freedom = 12
Upper Tolerance Limit (95%) = 5

99% Confidence Values

Chi-Squared Value (99% Confidence) = 147.414
Lambda (from Zack's formula) = 2.54163
Smallest Degrees of Freedom = 15
Upper Tolerance Limit (99%) = 6.5

	Date	Result	Impacted 95%	Impacted 99%
MW-3	9/8/1994	ND<2	FALSE	FALSE
	10/20/1994	ND<2	FALSE	FALSE
	1/5/1995	ND<2	FALSE	FALSE
	3/23/1995	ND<2	FALSE	FALSE
	7/18/1995	ND<2	FALSE	FALSE
	2/20/1996	ND<2	FALSE	FALSE
	8/29/1996	ND<2	FALSE	FALSE
	2/4/1997	ND<2	FALSE	FALSE
	8/27/1997	ND<2	FALSE	FALSE
	2/11/1998	ND<2	FALSE	FALSE
	9/2/1998	ND<2	FALSE	FALSE
	2/22/1999	ND<2	FALSE	FALSE
	8/24/1999	ND<2	FALSE	FALSE
	2/10/2000	ND<2	FALSE	FALSE
	8/2/2000	ND<2	FALSE	FALSE
	2/8/2001	ND<2	FALSE	FALSE
	8/9/2001	ND<2	FALSE	FALSE
	2/14/2002	ND<2	FALSE	FALSE
	8/22/2002	ND<2	FALSE	FALSE
	2/5/2003	ND<2	FALSE	FALSE
	8/14/2003	ND<2	FALSE	FALSE
	2/19/2004	ND<2	FALSE	FALSE
	8/25/2004	ND<2	FALSE	FALSE
	2/21/2005	ND<2	FALSE	FALSE
	8/8/2005	ND<2	FALSE	FALSE
	2/23/2006	ND<2	FALSE	FALSE
	8/28/2006	ND<2	FALSE	FALSE
	2/6/2007	ND<1	FALSE	FALSE
	8/13/2007	ND<0.08	FALSE	FALSE
	2/11/2008	1	FALSE	FALSE
MW-6	9/8/1994	ND<2	FALSE	FALSE
	10/20/1994	ND<2	FALSE	FALSE
	1/5/1995	ND<2	FALSE	FALSE
	3/23/1995	ND<2	FALSE	FALSE
	7/18/1995	ND<2	FALSE	FALSE
	2/20/1996	ND<2	FALSE	FALSE
	8/29/1996	ND<2	FALSE	FALSE
	2/4/1997	ND<2	FALSE	FALSE
	8/27/1997	ND<2	FALSE	FALSE
	2/11/1998	ND<2	FALSE	FALSE
	9/2/1998	ND<2	FALSE	FALSE
	2/22/1999	ND<2	FALSE	FALSE
	8/24/1999	ND<2	FALSE	FALSE
	2/10/2000	ND<2	FALSE	FALSE
	8/2/2000	ND<2	FALSE	FALSE
	2/8/2001	ND<2	FALSE	FALSE
	8/9/2001	ND<2	FALSE	FALSE
	2/14/2002	ND<2	FALSE	FALSE
	8/22/2002	ND<2	FALSE	FALSE
	2/5/2003	ND<2	FALSE	FALSE
	8/14/2003	ND<2	FALSE	FALSE
	2/19/2004	ND<2	FALSE	FALSE
	8/25/2004	ND<2	FALSE	FALSE

2/21/2005	ND<2	FALSE	FALSE
8/8/2005	ND<2	FALSE	FALSE
2/23/2006	ND<2	FALSE	FALSE
8/28/2006	ND<2	FALSE	FALSE
2/6/2007	ND<1	FALSE	FALSE
8/13/2007	ND<0.08	FALSE	FALSE
2/11/2008	1	FALSE	FALSE

Poisson Tolerance Limit

Parameter: Cadmium, total

Original Data (Not Transformed)
Non-Detects Replaced with Detection Limit

Poisson Count of 29 background Samples = 28.06
Degrees of Freedom = 58

95% Confidence Values

Chi-Squared Value (95% Confidence) = 76.7778
Lambda (from Zack's formula) = 1.32375
Smallest Degrees of Freedom = 8
Upper Tolerance Limit (95%) = 3

99% Confidence Values

Chi-Squared Value (99% Confidence) = 85.9501
Lambda (from Zack's formula) = 1.4819
Smallest Degrees of Freedom = 11
Upper Tolerance Limit (99%) = 4.5

	Date	Result	Impacted 95%	Impacted 99%
MW-6	9/8/1994	ND<1	FALSE	FALSE
	10/20/1994	ND<1	FALSE	FALSE
	1/5/1995	ND<1	FALSE	FALSE
	3/23/1995	ND<1	FALSE	FALSE
	7/18/1995	ND<1	FALSE	FALSE
	2/20/1996	ND<1	FALSE	FALSE
	8/29/1996	1	FALSE	FALSE
	2/4/1997	ND<1	FALSE	FALSE
	8/27/1997	ND<1	FALSE	FALSE
	2/11/1998	ND<1	FALSE	FALSE
	9/2/1998	ND<1	FALSE	FALSE
	2/22/1999	ND<1	FALSE	FALSE
	8/24/1999	ND<1	FALSE	FALSE
	2/10/2000	ND<1	FALSE	FALSE
	8/2/2000	ND<1	FALSE	FALSE
	2/8/2001	ND<1	FALSE	FALSE
	8/9/2001	ND<1	FALSE	FALSE
	2/14/2002	ND<1	FALSE	FALSE
	8/22/2002	ND<1	FALSE	FALSE
	2/5/2003	ND<1	FALSE	FALSE
	8/14/2003	ND<1	FALSE	FALSE
	2/19/2004	ND<1	FALSE	FALSE
	8/25/2004	1	FALSE	FALSE
	2/21/2005	4	TRUE	FALSE
	8/8/2005	ND<1	FALSE	FALSE
	2/23/2006	2	FALSE	FALSE
	8/28/2006	ND<1	FALSE	FALSE
	2/6/2007	1	FALSE	FALSE
	8/13/2007	1	FALSE	FALSE
	2/11/2008	1	FALSE	FALSE

Non-Parametric Tolerance Interval

Parameter: Chromium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Total Percent Non-Detects = 52.5%
Background Samples (n) = 29
Maximum Background Concentration = 13
Minimum Coverage = 90.2%
Average Coverage = 96.6667%

Well	Sample	Result	Impacted
MW-8	9/8/1994	15	TRUE
MW-8	10/20/1994	ND<5	FALSE
MW-8	1/5/1995	ND<5	FALSE
MW-8	3/23/1995	ND<5	FALSE
MW-8	7/18/1995	17	TRUE
MW-8	2/20/1996	25	TRUE
MW-8	8/29/1996	72	TRUE
MW-8	2/4/1997	ND<5	FALSE
MW-8	8/27/1997	38	TRUE
MW-8	2/11/1998	33	TRUE
MW-8	9/2/1998	38	TRUE
MW-8	2/22/1999	ND<5	FALSE
MW-8	8/24/1999	101	TRUE
MW-8	2/10/2000	ND<5	FALSE
MW-8	8/2/2000	140	TRUE
MW-8	2/8/2001	ND<5	FALSE
MW-8	8/9/2001	ND<5	FALSE
MW-8	2/14/2002	ND<5	FALSE
MW-8	8/22/2002	66	TRUE
MW-8	2/5/2003	117	TRUE
MW-8	8/14/2003	24	TRUE
MW-8	2/19/2004	27	TRUE
MW-8	8/25/2004	26	TRUE
MW-8	2/21/2005	37	TRUE
MW-8	8/8/2005	13	FALSE
MW-8	2/23/2006	13	FALSE
MW-8	8/28/2006	17	TRUE
MW-8	2/6/2007	11	FALSE
MW-8	8/13/2007	ND<0.12	FALSE
MW-8	2/11/2008	16	TRUE
MW-7	9/8/1994	17	TRUE
MW-7	10/20/1994	ND<5	FALSE
MW-7	1/5/1995	ND<5	FALSE
MW-7	3/23/1995	ND<5	FALSE
MW-7	7/18/1995	10	FALSE
MW-7	2/20/1996	22	TRUE
MW-7	8/29/1996	49	TRUE
MW-7	2/4/1997	10	FALSE
MW-7	8/27/1997	100	TRUE
MW-7	2/11/1998	60	TRUE
MW-7	9/2/1998	117	TRUE
MW-7	2/22/1999	31	TRUE
MW-7	8/24/1999	ND<5	FALSE
MW-7	2/10/2000	ND<5	FALSE
MW-7	8/2/2000	350	TRUE
MW-7	2/8/2001	ND<5	FALSE
MW-7	8/9/2001	52	TRUE
MW-7	2/14/2002	ND<5	FALSE
MW-7	8/22/2002	ND<5	FALSE
MW-7	2/5/2003	299	TRUE
MW-7	8/14/2003	ND<5	FALSE
MW-7	2/19/2004	ND<5	FALSE
MW-7	8/25/2004	72	TRUE
MW-7	2/21/2005	163	TRUE
MW-7	8/8/2005	32	TRUE
MW-7	2/23/2006	26	TRUE
MW-7	8/28/2006	ND<5	FALSE
MW-7	2/6/2007	16	TRUE
MW-7	6/26/2007	ND<1	FALSE
MW-7	8/13/2007	16	TRUE
MW-7	2/11/2008	20	TRUE

MW-3	9/8/1994	ND<5	FALSE
MW-3	10/20/1994	ND<5	FALSE
MW-3	1/5/1995	ND<5	FALSE
MW-3	3/23/1995	ND<5	FALSE
MW-3	7/18/1995	ND<5	FALSE
MW-3	2/20/1996	ND<5	FALSE
MW-3	8/29/1996	12	FALSE
MW-3	2/4/1997	13	FALSE
MW-3	8/27/1997	ND<5	FALSE
MW-3	2/11/1998	18	TRUE
MW-3	9/2/1998	ND<5	FALSE
MW-3	2/22/1999	ND<5	FALSE
MW-3	8/24/1999	ND<5	FALSE
MW-3	2/10/2000	ND<5	FALSE
MW-3	8/2/2000	24	TRUE
MW-3	2/8/2001	ND<5	FALSE
MW-3	8/9/2001	ND<5	FALSE
MW-3	2/14/2002	21	TRUE
MW-3	8/22/2002	47	TRUE
MW-3	2/5/2003	28	TRUE
MW-3	8/14/2003	ND<5	FALSE
MW-3	2/19/2004	20	TRUE
MW-3	8/25/2004	21	TRUE
MW-3	2/21/2005	32	TRUE
MW-3	8/8/2005	12	FALSE
MW-3	2/23/2006	ND<5	FALSE
MW-3	8/28/2006	21	TRUE
MW-3	2/6/2007	ND<5	FALSE
MW-3	8/13/2007	16	TRUE
MW-3	2/11/2008	30	TRUE

Poisson Tolerance Limit

Parameter: Lead, total

Original Data (Not Transformed)
Non-Detects Replaced with Detection Limit

Poisson Count of 29 background Samples = 275.07
Degrees of Freedom = 552

95% Confidence Values

Chi-Squared Value (95% Confidence) = 607.766
Lambda (from Zack's formula) = 10.4787
Smallest Degrees of Freedom = 34
Upper Tolerance Limit (95%) = 16

99% Confidence Values

Chi-Squared Value (99% Confidence) = 632.224
Lambda (from Zack's formula) = 10.9004
Smallest Degrees of Freedom = 40
Upper Tolerance Limit (99%) = 19

	Date	Result	Impacted 95%	Impacted 99%
MW-8	9/8/1994	147	TRUE	TRUE
	10/20/1994	ND<10	FALSE	FALSE
	1/5/1995	ND<10	FALSE	FALSE
	3/23/1995	ND<10	FALSE	FALSE
	7/18/1995	12	FALSE	FALSE
	2/20/1996	12	FALSE	FALSE
	8/29/1996	29	TRUE	TRUE
	2/4/1997	ND<10	FALSE	FALSE
	8/27/1997	25	TRUE	TRUE
	2/11/1998	14	FALSE	FALSE
	9/2/1998	11	FALSE	FALSE
	2/22/1999	ND<10	FALSE	FALSE
	8/24/1999	19	TRUE	FALSE
	2/10/2000	ND<10	FALSE	FALSE
	8/2/2000	31	TRUE	TRUE
	2/8/2001	ND<10	FALSE	FALSE
	8/9/2001	21	TRUE	TRUE
	2/14/2002	ND<10	FALSE	FALSE
	8/22/2002	24	TRUE	TRUE
	2/5/2003	33	TRUE	TRUE
	8/14/2003	ND<10	FALSE	FALSE
	2/19/2004	ND<10	FALSE	FALSE
	8/25/2004	11	FALSE	FALSE
	2/21/2005	14	FALSE	FALSE
	8/8/2005	ND<10	FALSE	FALSE
	2/23/2006	12	FALSE	FALSE
	8/28/2006	15	FALSE	FALSE
	2/6/2007	ND<10	FALSE	FALSE
	8/13/2007	ND<0.07	FALSE	FALSE
	2/11/2008	14	FALSE	FALSE
MW-7	9/8/1994	44	TRUE	TRUE
	10/20/1994	ND<10	FALSE	FALSE
	1/5/1995	ND<10	FALSE	FALSE
	3/23/1995	ND<10	FALSE	FALSE
	7/18/1995	ND<10	FALSE	FALSE
	2/20/1996	11	FALSE	FALSE
	8/29/1996	43	TRUE	TRUE
	2/4/1997	ND<10	FALSE	FALSE
	8/27/1997	79	TRUE	TRUE
	2/11/1998	31	TRUE	TRUE
	9/2/1998	48	TRUE	TRUE
	2/22/1999	31	TRUE	TRUE
	8/24/1999	ND<10	FALSE	FALSE
	2/10/2000	ND<10	FALSE	FALSE
	8/2/2000	66	TRUE	TRUE
	2/8/2001	ND<10	FALSE	FALSE
	8/9/2001	23	TRUE	TRUE
	2/14/2002	ND<10	FALSE	FALSE
	8/22/2002	ND<10	FALSE	FALSE
	2/5/2003	68	TRUE	TRUE
	8/14/2003	ND<10	FALSE	FALSE
	2/19/2004	ND<10	FALSE	FALSE
	8/25/2004	23	TRUE	TRUE

	2/21/2005	41	TRUE	TRUE
	8/8/2005	60	TRUE	TRUE
	2/23/2006	42	TRUE	TRUE
	8/28/2006	ND<10	FALSE	FALSE
	2/6/2007	14	FALSE	FALSE
	6/26/2007	ND<2	FALSE	FALSE
	8/13/2007	13	FALSE	FALSE
	2/11/2008	21	TRUE	TRUE
MW-3	9/8/1994	ND<10	FALSE	FALSE
	10/20/1994	ND<10	FALSE	FALSE
	1/5/1995	ND<10	FALSE	FALSE
	3/23/1995	ND<10	FALSE	FALSE
	7/18/1995	ND<10	FALSE	FALSE
	2/20/1996	ND<10	FALSE	FALSE
	8/29/1996	ND<10	FALSE	FALSE
	2/4/1997	18	TRUE	FALSE
	8/27/1997	ND<10	FALSE	FALSE
	2/11/1998	ND<10	FALSE	FALSE
	9/2/1998	ND<10	FALSE	FALSE
	2/22/1999	ND<10	FALSE	FALSE
	8/24/1999	ND<10	FALSE	FALSE
	2/10/2000	ND<10	FALSE	FALSE
	8/2/2000	ND<10	FALSE	FALSE
	2/8/2001	ND<10	FALSE	FALSE
	8/9/2001	ND<10	FALSE	FALSE
	2/14/2002	ND<10	FALSE	FALSE
	8/22/2002	11	FALSE	FALSE
	2/5/2003	ND<10	FALSE	FALSE
	8/14/2003	ND<10	FALSE	FALSE
	2/19/2004	ND<10	FALSE	FALSE
	8/25/2004	ND<10	FALSE	FALSE
	2/21/2005	ND<10	FALSE	FALSE
	8/8/2005	ND<10	FALSE	FALSE
	2/23/2006	ND<10	FALSE	FALSE
	8/28/2006	14	FALSE	FALSE
	2/6/2007	ND<10	FALSE	FALSE
	8/13/2007	ND<0.07	FALSE	FALSE
	2/11/2008	17	TRUE	FALSE

Poisson Tolerance Limit

Parameter: Mercury

Original Data (Not Transformed)
Non-Detects Replaced with Detection Limit

Poisson Count of 8 background Samples = 3.4
Degrees of Freedom = 8

95% Confidence Values

Chi-Squared Value (95% Confidence) = 15.5073
Lambda (from Zack's formula) = 0.969207
Smallest Degrees of Freedom = 7
Upper Tolerance Limit (95%) = 2.5

99% Confidence Values

Chi-Squared Value (99% Confidence) = 20.0902
Lambda (from Zack's formula) = 1.25563
Smallest Degrees of Freedom = 10
Upper Tolerance Limit (99%) = 4

	Date	Result	Impacted 95%	Impacted 99%
MW-8	7/18/1995	3.7	TRUE	FALSE
	2/20/1996	8.5	TRUE	TRUE
	3/12/1998	ND<0.5	FALSE	FALSE
	9/2/1998	ND<0.5	FALSE	FALSE
	10/29/1998	ND<0.5	FALSE	FALSE
	12/2/1998	1	FALSE	FALSE
	2/22/1999	ND<0.5	FALSE	FALSE
	8/24/1999	1.3	FALSE	FALSE
	2/10/2000	ND<0.5	FALSE	FALSE
	8/2/2000	1.5	FALSE	FALSE
	2/8/2001	1.2	FALSE	FALSE
	8/9/2001	1.2	FALSE	FALSE
	2/14/2002	0.62	FALSE	FALSE
	8/22/2002	1.8	FALSE	FALSE
	2/5/2003	2.12	FALSE	FALSE
	8/14/2003	ND<0.5	FALSE	FALSE
	2/19/2004	ND<0.5	FALSE	FALSE
	8/25/2004	ND<0.5	FALSE	FALSE
	2/21/2005	ND<0.5	FALSE	FALSE
	8/8/2005	ND<0.5	FALSE	FALSE
	2/23/2006	ND<0.5	FALSE	FALSE
	8/28/2006	ND<0.5	FALSE	FALSE
	2/6/2007	ND<0.2	FALSE	FALSE
	8/13/2007	ND<0.04	FALSE	FALSE
	2/11/2008	0.82	FALSE	FALSE

Poisson Tolerance Limit

Parameter: Vanadium

Natural Logarithm Transformation
Non-Detects Replaced with Detection Limit

Poisson Count of 29 background Samples = 101.481
Degrees of Freedom = 204

95% Confidence Values

Chi-Squared Value (95% Confidence) = 238.322
Lambda (from Zack's formula) = 4.109
Smallest Degrees of Freedom = 17
Upper Tolerance Limit (95%) = 7.5

99% Confidence Values

Chi-Squared Value (99% Confidence) = 253.908
Lambda (from Zack's formula) = 4.37773
Smallest Degrees of Freedom = 21
Upper Tolerance Limit (99%) = 9.5

	Date	Result	Impacted 95%	Impacted 99%
MW-7	9/8/1994	4.04305	FALSE	FALSE
	10/20/1994	ND<3.68888	FALSE	FALSE
	1/5/1995	ND<3.68888	FALSE	FALSE
	3/23/1995	ND<3.68888	FALSE	FALSE
	7/18/1995	ND<3.68888	FALSE	FALSE
	2/20/1996	3.68888	FALSE	FALSE
	8/29/1996	5.05625	FALSE	FALSE
	2/4/1997	ND<3.68888	FALSE	FALSE
	8/27/1997	5.03695	FALSE	FALSE
	2/11/1998	5.0876	FALSE	FALSE
	9/2/1998	5.50533	FALSE	FALSE
	2/22/1999	3.73767	FALSE	FALSE
	8/24/1999	ND<3.68888	FALSE	FALSE
	2/10/2000	ND<3.68888	FALSE	FALSE
	8/2/2000	6.95368	FALSE	FALSE
	2/8/2001	ND<3.68888	FALSE	FALSE
	8/9/2001	4.64439	FALSE	FALSE
	2/14/2002	ND<3.68888	FALSE	FALSE
	8/22/2002	ND<3.68888	FALSE	FALSE
	2/5/2003	7.05962	FALSE	FALSE
	8/14/2003	ND<3.68888	FALSE	FALSE
	2/19/2004	ND<3.68888	FALSE	FALSE
	8/25/2004	5.55683	FALSE	FALSE
	2/21/2005	6.40688	FALSE	FALSE
	8/8/2005	4.72739	FALSE	FALSE
	2/23/2006	4.78749	FALSE	FALSE
	8/28/2006	ND<3.68888	FALSE	FALSE
	2/6/2007	4.02535	FALSE	FALSE
	6/26/2007	ND<0.530628	FALSE	FALSE
	8/13/2007	4.18965	FALSE	FALSE
	2/11/2008	4.40672	FALSE	FALSE
MW-3	9/8/1994	ND<3.68888	FALSE	FALSE
	10/20/1994	ND<3.68888	FALSE	FALSE
	1/5/1995	ND<3.68888	FALSE	FALSE
	3/23/1995	ND<3.68888	FALSE	FALSE
	7/18/1995	ND<3.68888	FALSE	FALSE
	2/20/1996	ND<3.68888	FALSE	FALSE
	8/29/1996	ND<3.68888	FALSE	FALSE
	2/4/1997	ND<3.68888	FALSE	FALSE
	8/27/1997	ND<3.68888	FALSE	FALSE
	2/11/1998	ND<3.68888	FALSE	FALSE
	9/2/1998	ND<3.68888	FALSE	FALSE
	2/22/1999	ND<3.68888	FALSE	FALSE
	8/24/1999	ND<3.68888	FALSE	FALSE
	2/10/2000	ND<3.68888	FALSE	FALSE
	8/2/2000	4.17439	FALSE	FALSE
	2/8/2001	ND<3.68888	FALSE	FALSE
	8/9/2001	ND<3.68888	FALSE	FALSE
	2/14/2002	4.68213	FALSE	FALSE
	8/22/2002	5.34711	FALSE	FALSE
	2/5/2003	4.00733	FALSE	FALSE
	8/14/2003	ND<3.68888	FALSE	FALSE
	2/19/2004	4.47734	FALSE	FALSE

8/25/2004	4.85203	FALSE	FALSE
2/21/2005	4.74493	FALSE	FALSE
8/8/2005	ND<3.68888	FALSE	FALSE
2/23/2006	ND<3.68888	FALSE	FALSE
8/28/2006	4.5326	FALSE	FALSE
2/6/2007	3.43399	FALSE	FALSE
8/13/2007	3.68888	FALSE	FALSE
2/11/2008	4.54329	FALSE	FALSE

Poisson Tolerance Limit

Parameter: Zinc, total

Natural Logarithm Transformation
Non-Detects Replaced with Detection Limit

Poisson Count of 29 background Samples = 105.27
Degrees of Freedom = 212

95% Confidence Values

Chi-Squared Value (95% Confidence) = 246.968
Lambda (from Zack's formula) = 4.25807
Smallest Degrees of Freedom = 17
Upper Tolerance Limit (95%) = 7.5

99% Confidence Values

Chi-Squared Value (99% Confidence) = 262.821
Lambda (from Zack's formula) = 4.5314
Smallest Degrees of Freedom = 22
Upper Tolerance Limit (99%) = 10

	Date	Result	Impacted 95%	Impacted 99%
MW-7	9/8/1994	3.95124	FALSE	FALSE
	10/20/1994	ND<3.91202	FALSE	FALSE
	1/5/1995	ND<3.91202	FALSE	FALSE
	3/23/1995	ND<3.91202	FALSE	FALSE
	7/18/1995	ND<3.91202	FALSE	FALSE
	2/20/1996	ND<3.91202	FALSE	FALSE
	8/29/1996	ND<3.91202	FALSE	FALSE
	2/4/1997	ND<3.91202	FALSE	FALSE
	8/27/1997	ND<3.91202	FALSE	FALSE
	2/11/1998	ND<3.91202	FALSE	FALSE
	9/2/1998	ND<3.91202	FALSE	FALSE
	2/22/1999	3.43399	FALSE	FALSE
	8/24/1999	ND<3.91202	FALSE	FALSE
	2/10/2000	ND<3.91202	FALSE	FALSE
	8/2/2000	4.12713	FALSE	FALSE
	2/8/2001	ND<3.91202	FALSE	FALSE
	8/9/2001	ND<3.91202	FALSE	FALSE
	2/14/2002	ND<3.91202	FALSE	FALSE
	8/22/2002	ND<3.91202	FALSE	FALSE
	2/5/2003	ND<3.91202	FALSE	FALSE
	8/14/2003	ND<3.91202	FALSE	FALSE
	2/19/2004	ND<3.91202	FALSE	FALSE
	8/25/2004	ND<3.91202	FALSE	FALSE
	2/21/2005	ND<3.91202	FALSE	FALSE
	8/8/2005	ND<3.91202	FALSE	FALSE
	2/23/2006	ND<3.91202	FALSE	FALSE
	8/28/2006	ND<3.91202	FALSE	FALSE
	2/6/2007	2.77259	FALSE	FALSE
	6/26/2007	ND<0	FALSE	FALSE
	8/13/2007	ND<-1.60944	FALSE	FALSE
	2/11/2008	2.83321	FALSE	FALSE
MW-3	9/8/1994	ND<3.91202	FALSE	FALSE
	10/20/1994	ND<3.91202	FALSE	FALSE
	1/5/1995	ND<3.91202	FALSE	FALSE
	3/23/1995	ND<3.91202	FALSE	FALSE
	7/18/1995	ND<3.91202	FALSE	FALSE
	2/20/1996	ND<3.91202	FALSE	FALSE
	8/29/1996	ND<3.91202	FALSE	FALSE
	2/4/1997	ND<3.91202	FALSE	FALSE
	8/27/1997	ND<3.91202	FALSE	FALSE
	2/11/1998	ND<3.91202	FALSE	FALSE
	9/2/1998	ND<3.91202	FALSE	FALSE
	2/22/1999	ND<2.30259	FALSE	FALSE
	8/24/1999	ND<3.91202	FALSE	FALSE
	2/10/2000	ND<3.91202	FALSE	FALSE
	8/2/2000	ND<3.91202	FALSE	FALSE
	2/8/2001	ND<3.91202	FALSE	FALSE
	8/9/2001	ND<3.91202	FALSE	FALSE
	2/14/2002	ND<3.91202	FALSE	FALSE
	8/22/2002	ND<3.91202	FALSE	FALSE
	2/5/2003	ND<3.91202	FALSE	FALSE
	8/14/2003	ND<3.91202	FALSE	FALSE
	2/19/2004	ND<3.91202	FALSE	FALSE

	8/25/2004	ND<3.91202	FALSE	FALSE
	2/21/2005	ND<3.91202	FALSE	FALSE
	8/8/2005	ND<3.91202	FALSE	FALSE
	2/23/2006	ND<3.91202	FALSE	FALSE
	8/28/2006	ND<3.91202	FALSE	FALSE
	2/6/2007	2.63906	FALSE	FALSE
	8/13/2007	2.30259	FALSE	FALSE
	2/11/2008	3.13549	FALSE	FALSE
MW-5	9/8/1994	4.27667	FALSE	FALSE
	10/20/1994	ND<3.91202	FALSE	FALSE
	1/5/1995	ND<3.91202	FALSE	FALSE
	3/23/1995	ND<3.91202	FALSE	FALSE
	7/18/1995	4.7185	FALSE	FALSE
	2/20/1996	ND<3.91202	FALSE	FALSE
	8/29/1996	ND<3.91202	FALSE	FALSE
	2/4/1997	ND<3.91202	FALSE	FALSE
	8/27/1997	ND<3.91202	FALSE	FALSE
	2/11/1998	ND<3.91202	FALSE	FALSE
	9/2/1998	ND<3.91202	FALSE	FALSE
	2/22/1999	ND<2.30259	FALSE	FALSE
	8/24/1999	ND<3.91202	FALSE	FALSE
	2/10/2000	ND<3.91202	FALSE	FALSE
	8/2/2000	ND<3.91202	FALSE	FALSE
	2/8/2001	ND<3.91202	FALSE	FALSE
	8/9/2001	ND<3.91202	FALSE	FALSE
	2/14/2002	ND<3.91202	FALSE	FALSE
	8/22/2002	ND<3.91202	FALSE	FALSE
	2/5/2003	ND<3.91202	FALSE	FALSE
	8/14/2003	ND<3.91202	FALSE	FALSE
	2/19/2004	ND<3.91202	FALSE	FALSE
	8/25/2004	ND<3.91202	FALSE	FALSE
	2/21/2005	ND<3.91202	FALSE	FALSE
	8/8/2005	ND<3.91202	FALSE	FALSE
	2/23/2006	ND<3.91202	FALSE	FALSE
	8/28/2006	ND<3.91202	FALSE	FALSE
	2/6/2007	2.94444	FALSE	FALSE
	8/13/2007	2.3979	FALSE	FALSE
	2/11/2008	2.99573	FALSE	FALSE
MW-6	9/8/1994	ND<3.91202	FALSE	FALSE
	10/20/1994	ND<3.91202	FALSE	FALSE
	1/5/1995	ND<3.91202	FALSE	FALSE
	3/23/1995	ND<3.91202	FALSE	FALSE
	7/18/1995	ND<3.91202	FALSE	FALSE
	2/20/1996	ND<3.91202	FALSE	FALSE
	8/29/1996	ND<3.91202	FALSE	FALSE
	2/4/1997	4.30407	FALSE	FALSE
	8/27/1997	4.11087	FALSE	FALSE
	2/11/1998	ND<3.91202	FALSE	FALSE
	9/2/1998	ND<3.91202	FALSE	FALSE
	2/22/1999	ND<2.30259	FALSE	FALSE
	8/24/1999	ND<3.91202	FALSE	FALSE
	2/10/2000	ND<3.91202	FALSE	FALSE
	8/2/2000	ND<3.91202	FALSE	FALSE
	2/8/2001	ND<3.91202	FALSE	FALSE
	8/9/2001	ND<3.91202	FALSE	FALSE
	2/14/2002	ND<3.91202	FALSE	FALSE
	8/22/2002	ND<3.91202	FALSE	FALSE
	2/5/2003	ND<3.91202	FALSE	FALSE
	8/14/2003	ND<3.91202	FALSE	FALSE
	2/19/2004	ND<3.91202	FALSE	FALSE
	8/25/2004	ND<3.91202	FALSE	FALSE
	2/21/2005	ND<3.91202	FALSE	FALSE
	8/8/2005	ND<3.91202	FALSE	FALSE
	2/23/2006	ND<3.91202	FALSE	FALSE
	8/28/2006	ND<3.91202	FALSE	FALSE
	2/6/2007	2.63906	FALSE	FALSE
	8/13/2007	ND<-1.60944	FALSE	FALSE
	2/11/2008	2.3979	FALSE	FALSE
MW-8	9/8/1994	5.23111	FALSE	FALSE
	10/20/1994	ND<3.91202	FALSE	FALSE
	1/5/1995	ND<3.91202	FALSE	FALSE
	3/23/1995	ND<3.91202	FALSE	FALSE
	7/18/1995	ND<3.91202	FALSE	FALSE
	2/20/1996	ND<3.91202	FALSE	FALSE

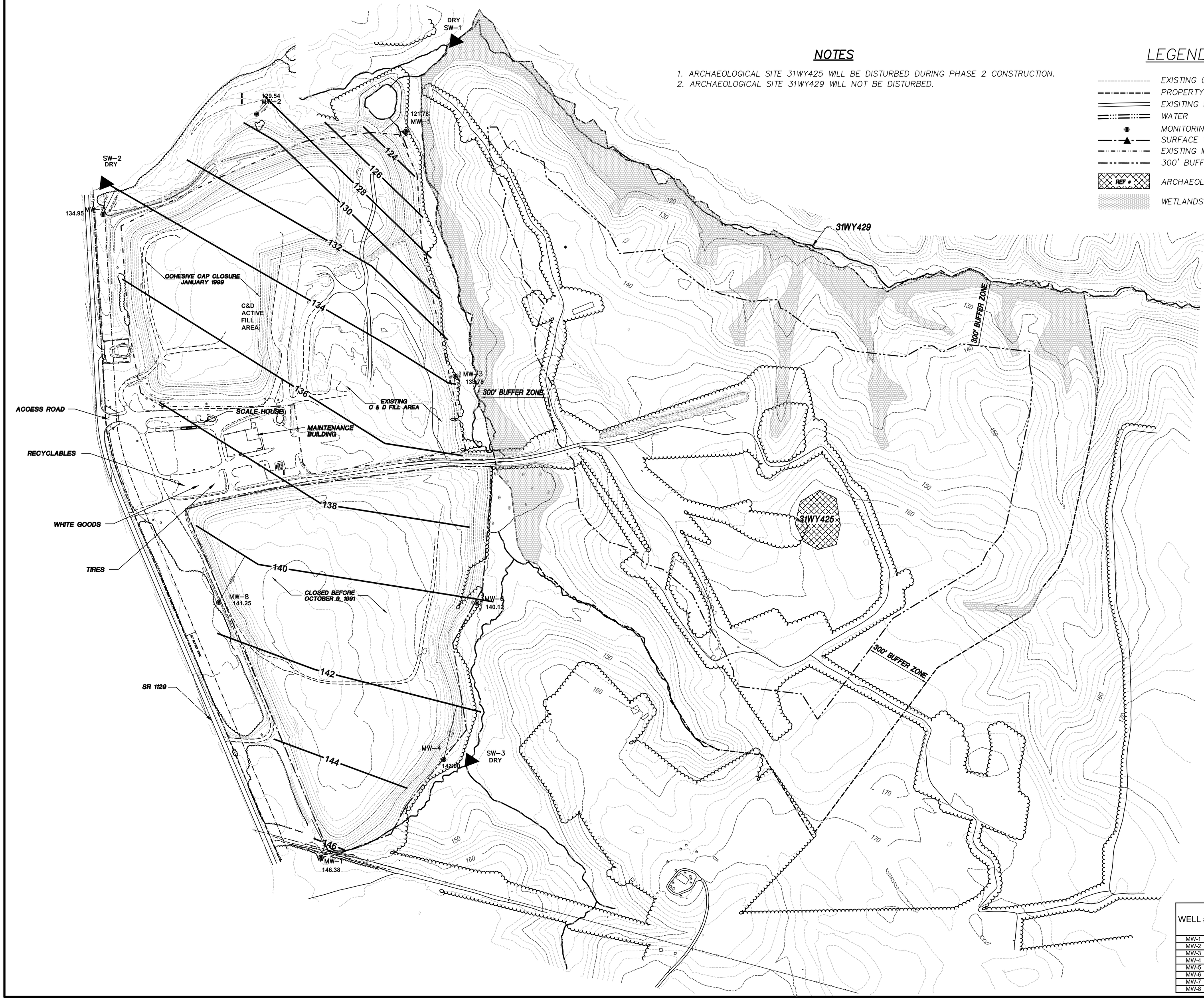
8/29/1996	ND<3.91202	FALSE	FALSE
2/4/1997	ND<3.91202	FALSE	FALSE
8/27/1997	ND<3.91202	FALSE	FALSE
2/11/1998	ND<3.91202	FALSE	FALSE
9/2/1998	ND<3.91202	FALSE	FALSE
2/22/1999	ND<2.30259	FALSE	FALSE
8/24/1999	ND<3.91202	FALSE	FALSE
2/10/2000	ND<3.91202	FALSE	FALSE
8/2/2000	ND<3.91202	FALSE	FALSE
2/8/2001	ND<3.91202	FALSE	FALSE
8/9/2001	ND<3.91202	FALSE	FALSE
2/14/2002	ND<3.91202	FALSE	FALSE
8/22/2002	ND<3.91202	FALSE	FALSE
2/5/2003	ND<3.91202	FALSE	FALSE
8/14/2003	ND<3.91202	FALSE	FALSE
2/19/2004	ND<3.91202	FALSE	FALSE
8/25/2004	ND<3.91202	FALSE	FALSE
2/21/2005	ND<3.91202	FALSE	FALSE
8/8/2005	ND<3.91202	FALSE	FALSE
2/23/2006	ND<3.91202	FALSE	FALSE
8/28/2006	ND<3.91202	FALSE	FALSE
2/6/2007	ND<2.30259	FALSE	FALSE
8/13/2007	ND<-1.60944	FALSE	FALSE
2/11/2008	2.48491	FALSE	FALSE

NOTES

1. ARCHAEOLOGICAL SITE 31WY425 WILL BE DISTURBED DURING PHASE 2 CONSTRUCTION.
2. ARCHAEOLOGICAL SITE 31WY429 WILL NOT BE DISTURBED.

LEGEND

- EXISTING CONTOURS
- PROPERTY LINE
- EXISITING ROAD
- WATER
- MONITORING WELL LOCATION
- SURFACE WATER MONITORING LOCATION
- EXISTING MSWLF SANITARY UNIT
- 300' BUFFER ZONE
- REF # — ARCHAEOLOGICAL SITES
- WETLANDS



Wayne Co. Closed Landfill
February 11, 2008

WELL #	TOP OF PIPE ELEVATION (FT)	DEPTH TO WATER (FT)	WATER ELEVATION (FT)
MW-1	163.26	16.88	146.38
MW-2	134.52	4.98	129.54
MW-3	134.81	1.03	133.78
MW-4	150.2	7.2	143
MW-5	124.78	3	121.78
MW-6	145.53	5.41	140.12
MW-7	143.59	8.64	134.95
MW-8	161.88	20.63	141.25

Municipal Services Engineering Company, P.A.
P.O. BOX 97 GARNER, N.C. 27529 (919) 772-5393
P.O. BOX 349 BOONE, N.C. 28607 (704) 262-1767

MUNICIPAL SOLID WASTE LANDFILL FACILITY
WAYNE COUNTY NORTH CAROLINA

DATE	BY	REV.	DESCRIPTION
8-15-96	CHS	1	CHANGE BUFFER TERMINOLOGY
2-16-97	CHS	2	MODIFY PER PHASE 1 CHANGES

POTENTIOMETRIC MAP WITH FLOW DIRECTIONS

SCALE: 1"=200'
DATE: 9/7/2001
DRWN. BY: C. SEYMOUR
CHKD. BY: K. Yoshida
PROJECT NUMBER
G01016.0
DRAWING NO.
SHEET NO.

Laboratory Results

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6043

WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY ,NC 28333

DATE COLLECTED: 02/11/08
DATE REPORTED : 03/11/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	Well #1	Well #2	Well #3	Well #4	Well #5	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.1	6.4	5.2	5.0	5.6	02/11/08	RJH	SM4500HB
Total Alkalinity, mg/l	1.0	1.0	--- U	611	--- U		--- U	02/12/08	TRB	SM2320B
Chloride, mg/l	5.0	5.0	47	79	11		23	02/13/08	MDM	SM4500-CLB
Cyanide, ug/l	5.0	10.0		--- U				02/15/08	SEJ	SM4500 CN-
Total Dissolved Residue, mg/l	1.0	1.0	101	607	44		48	02/13/08	TRB	SM2540C
Sulfate, mg/l	5.0	250.0	--- U	--- U	16.0 J		9.4 J	02/25/08	TRB	SM4500-SO4
Antimony, ug/l	0.08	6.0	0.2 J	0.1 J	0.4 J	0.1 J	0.1 J	02/15/08	CMF	EPA200.8
Arsenic, ug/l	0.07	10.0	1.2 J	11	18	2..3J	3.1 J	02/15/08	CMF	EPA200.8
Barium, ug/l	0.34	100.0	27.4 J	143	131	65.5 J	52.7 J	02/15/08	CMF	EPA200.8
Beryllium, ug/l	0.17	1.0	0.1 J	--- U	1	0.2 J	0.7 J	02/15/08	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.1 J	0.1 J	0.4 J	0.1 J	0.8 J	02/15/08	CMF	EPA200.8
Cobalt, ug/l	2.53	10.0	0.2 J	0.5 J	3.7 J	0.3 J	2.2 J	02/15/08	CMF	EPA200.8
Copper, ug/l	2.24	10.0	1.2 J	1.7 J	8.5 J	1.6 J	1.1 J	02/15/08	CMF	EPA200.8
Total Chromium, ug/l	1.38	10.0	4.5 J	2.1 J	30	8.2 J	3.6 J	02/15/08	CMF	EPA200.8
Iron, ug/l	14.0	300.0	4406	47275	30475		11075	02/18/08	ADD	SM3111B
Manganese, ug/l	0.50	50.0	15 J	192	67		61	02/13/08	LFJ	EPA200.7
Lead, ug/l	0.04	10.0	2.7 J	4.3 J	17	5.9 J	2.5 J	02/15/08	CMF	EPA200.8
Mercury, ug/l	0.13	0.20	0.04 J	--- U	0.05 J		--- U	02/15/08	CMF	EPA200.8
Nickel, ug/l	1.35	50.0	0.5 J	2.9 J	6.8 J	0.6 J	3.7 J	02/15/08	CMF	EPA200.8
Selenium, ug/l	0.14	10.0	--- U	2.4 J	1.6 J	0.3 J	--- U	02/15/08	CMF	EPA200.8
Silver, ug/l	2.32	10.0	0.1 J	--- U	0.1 J	--- U	--- U	02/15/08	CMF	EPA200.8
Thallium, ug/l	0.04	5.0	0.2 J	0.1 J	0.4 J	0.1 J	0.1 J	02/15/08	CMF	EPA200.8
Tin, ug/l	2.75	100.0		0.9 J				02/15/08	CMF	EPA200.8
Vanadium, ug/l	1.21	25.0	8.7 J	7.9 J	94	10.7 J	14.6 J	02/15/08	CMF	EPA200.8
Zinc, ug/l	1.86	10.0	4.4 J	2.5 J	23	6.2 J	20	02/15/08	CMF	EPA200.8
Sulfide, ug/l	100	1000		--- U				02/11/08	LFJ	SM4500-S2D
Conductivity (at 25c), uMhos	1.0	1.0	19	1178	41	31	88	02/11/08	RJH	SM2510B
Temperature, °C			16	12	17	14	17	02/11/08	RJH	SM2550B
Static Water Level, feet			16.88	4.98	1.03	7.20	3.00	02/11/08	RJH	
Well Depth, feet			26.61	16.68	19.46	19.85	18.84	02/11/08	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6043

WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY ,NC 28333

DATE COLLECTED: 02/11/08
DATE REPORTED : 03/11/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	Well #6	Well #7	Well #8	Trip Blank	Equipment Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.4	4.3	4.7			02/11/08	RJH	SM4500HB
Total Alkalinity, mg/l	1.0	1.0		--- U				02/12/08	TRB	SM2320B
Chloride, mg/l	5.0	5.0		134				02/13/08	MDM	SM4500-CLB
Cyanide, ug/l	5.0	10.0			--- U		--- U	02/15/08	SEJ	SM4500 CN-
Total Dissolved Residue, mg/l	1.0	1.0		656				02/13/08	TRB	SM2540C
Sulfate, mg/l	5.0	250.0		124.2 J				02/25/08	TRB	SM4500-SO4
Antimony, ug/l	0.08	6.0	--- U	0.2 J	0.1 J		--- U	02/15/08	CMF	EPA200.8
Arsenic, ug/l	0.07	10.0	0.3 J	19	11		--- U	02/15/08	CMF	EPA200.8
Barium, ug/l	0.11	100.0	425	186	147		0.3 J	02/15/08	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	1	0.7 J	0.3 J		--- U	02/15/08	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	1	0.6 J	0.2 J		0.1 J	02/15/08	CMF	EPA200.8
Cobalt, ug/l	0.03	10.0	1.3 J	1.1 J	0.7 J		--- U	02/15/08	CMF	EPA200.8
Copper, ug/l	0.05	10.0	0.6 J	3.1 J	3.4 J		0.4 J	02/15/08	CMF	EPA200.8
Total Chromium, ug/l	0.11	10.0	1.9 J	20	16		0.3 J	02/15/08	CMF	EPA200.8
Iron, ug/l	14.0	300.0		40125			--- U	02/18/08	ADD	SM3111B
Manganese, ug/l	0.50	50.0		227			--- U	02/13/08	LFJ	EPA200.7
Lead, ug/l	0.04	10.0	2.4 J	21	14		0.1 J	02/15/08	CMF	EPA200.8
Mercury, ug/l	0.13	0.20		--- U			--- U	02/15/08	CMF	EPA200.8
Mercury, ug/l	0.13	0.20			0.82			02/20/08	ADD	EPA245.1
Nickel, ug/l	1.35	50.0	6.8 J	1.7 J	0.7 J		0.2 J	02/15/08	CMF	EPA200.8
Selenium, ug/l	0.14	10.0	--- U	4.5 J	1.4 J		--- U	02/15/08	CMF	EPA200.8
Silver, ug/l	0.04	10.0	--- U	--- U	0.1 J		--- U	02/15/08	CMF	EPA200.8
Thallium, ug/l	0.04	5.0	0.2 J	0.2 J	0.1 J		--- U	02/15/08	CMF	EPA200.8
Tin, ug/l	2.75	100.0			1.0 J		0.8 J	02/15/08	CMF	EPA200.8
Vanadium, ug/l	1.21	25.0	1.9 J	82	19.4 J		--- U	02/15/08	CMF	EPA200.8
Zinc, ug/l	1.86	10.0	11	17	12		5.4 J	02/15/08	CMF	EPA200.8
Sulfide, ug/l	100	1000			--- U		--- U	02/11/08	LFJ	SM4500-S2D
Conductivity (at 25c), uMhos	1.0	1.0	262	1230	74			02/11/08	RJH	SM2510B
Temperature, °C			12	15	15			02/11/08	RJH	SM2550B
Static Water Level, feet			5.41	8.64	20.63			02/11/08	RJH	
Well Depth, feet			17.21	19.89	30.01			02/11/08	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY, NC 28333

CLIENT ID: 6043

ANALYST: CHS
DATE COLLECTED: 02/11/08
DATE EXTRACTED: 02/14/08
DATE ANALYZED: 02/25/08
DATE REPORTED: 03/11/08

REVIEWED BY:

PESTICIDES AND PCB'S
EPA METHOD 8081A

PARAMETERS, ug/l	MDL	SWSL	Well #2	Well #8	Equipment Blank
1. Aldrin	0.029	0.05	--- U	--- U	--- U
2. Alpha-BHC	0.032	0.05	--- U	--- U	--- U
3. Beta-BHC	0.031	0.05	--- U	--- U	--- U
4. Delta-BHC	0.030	0.05	--- U	--- U	--- U
5. Gamma-BHC (Lindane)	0.032	0.05	--- U	--- U	--- U
6. Chlordane	0.320	0.50	--- U	--- U	--- U
7. 4,4-DDD	0.051	0.10	--- U	--- U	--- U
8. 4,4-DDE	0.049	0.10	--- U	--- U	--- U
9. 4,4-DDT	0.052	0.10	--- U	--- U	--- U
10. Dieldrin	0.042	0.07	--- U	--- U	--- U
11. Endosulfan I	0.056	0.10	--- U	--- U	--- U
12. Endosulfan II	0.046	0.10	--- U	--- U	--- U
13. Endosulfan Sulfate	0.072	0.10	--- U	--- U	--- U
14. Endrin	0.053	0.10	--- U	--- U	--- U
15. Endrin Aldehyde	0.068	0.10	--- U	--- U	--- U
16. Heptachlor	0.039	0.05	--- U	--- U	--- U
17. Hepthchlor Epoxide	0.042	0.07	--- U	--- U	--- U
18. Methoxychlor	0.530	1.00	--- U	--- U	--- U
19. Pcb's (Aroclors)	0.500	2.00	--- U	--- U	--- U
20. Toxaphene	0.690	1.00	--- U	--- U	--- U

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MR. TIM ROGERS
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DUDLEY, NC 28333

REVIEWED BY:

CLIENT ID: 6043

ANALYST: CHS
DATE COLLECTED: 02/11/08
DATE EXTRACTED: 02/20/08
DATE ANALYZED: 02/21/08
DATE REPORTED: 03/11/08

LANDFILL APPENDIX II
EPA METHOD 8151A

PARAMETERS, ug/l	MDL	SWSL	Well #2	Well #8	Equipment Blank
1. 2,4-D	0.36	2.0	--- U	--- U	--- U
2. Dinoseb	0.54	1.0	--- U	--- U	--- U
3. 2,4,5-TP	0.42	2.0	--- U	--- U	--- U
4. 2,4,5-T	0.47	2.0	--- U	--- U	--- U

NOTE: Spike recovery for Dinoseb outside control limits due to sample matrix interference

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

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Wastewater ID: 10

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GREENVILLE, N.C. 27835-7085

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CLIENT: WAYNE CO. LANDFILL (DUDLEY)
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460B LANDFILL ROAD
DUDLEY, NC 28333

CLIENT ID: 6043

ANALYST: MAO
DATE COLLECTED: 02/11/08
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Page: 1

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	02/13/08 Well #1	02/13/08 Well #3	02/13/08 Well #4	02/20/08 Well #5	02/20/08 Well #6
	Date Analyzed:						
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	2.70 J	--- U	2.20 J	5.30 J	3.50 J
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	5.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	1.50 J	--- U	0.30 J	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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CLIENT ID: 6043

ANALYST: MAO
DATE COLLECTED: 02/11/08
DATE REPORTED: 03/11/08

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed: MDL	SWSL	02/20/08 Well #7
1. Chloromethane	0.18	1.0	--- U
2. Vinyl Chloride	0.34	1.0	--- U
3. Bromomethane	0.26	10.0	--- U
4. Chloroethane	0.29	10.0	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U
7. Acetone	1.21	100.0	6.50 J
8. Iodomethane	0.12	10.0	--- U
9. Carbon Disulfide	0.14	100.0	--- U
10. Methylene Chloride	0.14	1.0	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U
13. Vinyl Acetate	0.20	5.0	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U
15. 2-Butanone	0.85	100.0	--- U
16. Bromochloromethane	0.11	3.0	--- U
17. Chloroform	0.13	5.0	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U
20. Benzene	0.16	1.0	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U
22. Trichloroethene	0.13	1.0	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U
24. Bromodichloromethane	0.13	1.0	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U
27. Toluene	0.13	1.0	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U
30. Tetrachloroethene	0.16	1.0	--- U
31. 2-Hexanone	1.00	50.0	--- U
32. Dibromochloromethane	0.14	3.0	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U
34. Chlorobenzene	0.13	3.0	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U
36. Ethylbenzene	0.16	1.0	--- U
37. Xylenes	0.48	5.0	--- U
38. Dibromomethane	0.17	10.0	--- U
39. Styrene	0.16	1.0	--- U
40. Bromoform	0.11	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U
46. Acrylonitrile	1.49	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: I0

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY, NC 28333

CLIENT ID: 6043 A

ANALYST: MAO
DATE COLLECTED: 02/11/08
DATE ANALYZED: 02/20/08
DATE REPORTED: 02/27/08

REVIEWED BY:

LANDFILL APPENDIX II
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Well #8
1. Chloromethane	0.18	1.0	--- U
2. Vinyl Chloride	0.34	1.0	--- U
3. Bromomethane	0.26	10.0	--- U
4. Chloroethane	0.29	10.0	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U
7. Acetone	1.21	100.0	4.60 J
8. Iodomethane	0.12	10.0	--- U
9. Carbon Disulfide	0.14	100.0	--- U
10. Methylene Chloride	0.14	1.0	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U
12. 1,1-Dichloroethane	0.16	5.0	0.40 J
13. Vinyl Acetate	0.20	5.0	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U
15. 2-Butanone	0.85	100.0	--- U
16. Bromochloromethane	0.11	3.0	--- U
17. Chloroform	0.13	5.0	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U
20. Benzene	0.16	1.0	0.20 J
21. 1,2-Dichloroethane	0.12	1.0	--- U
22. Trichloroethene	0.13	1.0	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U
24. Bromodichloromethane	0.13	1.0	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U
27. Toluene	0.13	1.0	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U
30. Tetrachloroethene	0.16	1.0	--- U
31. 2-Hexanone	1.00	50.0	--- U
32. Dibromochloromethane	0.14	3.0	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U
34. Chlorobenzene	0.13	3.0	1.50 J
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U
36. Ethylbenzene	0.16	1.0	--- U
37. Xylenes	0.48	5.0	--- U
38. Dibromomethane	0.17	10.0	--- U
39. Styrene	0.16	1.0	--- U
40. Bromoform	0.11	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	5.40
44. 1,2-Dichlorobenzene	0.13	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U
46. Acrylonitrile	1.49	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- U
48. Acrolein	5.46	50.0	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Waatewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY, NC 28333

CLIENT ID: 6043 A

ANALYST: MAO
DATE COLLECTED: 02/11/08
DATE ANALYZED: 02/20/08
DATE REPORTED: 02/27/08

REVIEWED BY:

LANDFILL APPENDIX II
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Well #8
49. Allyl Chloride	0.17	10.0	--- U
50. Chloroprene	0.16	20.0	--- U
51. 1,3-Dichlorobenzene	0.13	5.0	--- U
52. Dichlorodifluoromethane	0.16	5.0	--- U
53. 1,3-Dichloropropane	0.12	1.0	--- U
54. 2,2-Dichloropropane	0.18	15.0	--- U
55. 1,1-Dichloropropene	0.13	5.0	--- U
56. Ethyl Methacrylate	0.14	10.0	--- U
57. Hexachlorobutadiene	0.22	10.0	--- U
58. Isobutyl Alcohol	5.23	100.0	--- U
59. Methacrylonitrile	1.64	100.0	--- U
60. Methyl Methacrylate	0.10	30.0	--- U
61. Naphthalene	0.13	10.0	--- U
62. Propionitrile	1.60	150.0	--- U
63. 1,2,4-Trichlorobenzene	0.11	10.0	--- U
64. Acetonitrile	5.96	50.0	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY, NC 28333

CLIENT ID: 6043

ANALYST: MAO
DATE COLLECTED: 02/11/08
DATE ANALYZED: 02/13/08
DATE REPORTED: 03/11/08

REVIEWED BY:

LANDFILL APPENDIX II
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Well #2	Trip Blank	Equipment Blank
1. Chloromethane	0.18	1.0	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U
7. Acetone	1.21	100.0	2.90 J	--- U	--- U
8. Iodomethane	0.12	10.0	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	0.50 J	--- U	--- U
13. Vinyl Acetate	0.20	5.0	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	0.20 J	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U
20. Benzene	0.16	1.0	2.60	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U
27. Toluene	0.13	1.0	0.20 J	0.30 J	0.20 J
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	13.70	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	3.40	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	0.40 J	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- U	--- U	--- U
48. Acrolein	5.46	50.0	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY, NC 28333

CLIENT ID: 6043

ANALYST: MAO
DATE COLLECTED: 02/11/08
DATE ANALYZED: 02/13/08
DATE REPORTED: 03/11/08

REVIEWED BY:

LANDFILL APPENDIX II
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Well #2	Trip Blank	Equipment Blank
49. Allyl Chloride	0.17	10.0	--- U	--- U	--- U
50. Chloroprene	0.16	20.0	--- U	--- U	--- U
51. 1,3-Dichlorobenzene	0.13	5.0	0.30 J	--- U	--- U
52. Dichlorodifluoromethane	0.16	5.0	--- U	--- U	--- U
53. 1,3-Dichloropropane	0.12	1.0	--- U	--- U	--- U
54. 2,2-Dichloropropane	0.18	15.0	--- U	--- U	--- U
55. 1,1-Dichloropropene	0.13	5.0	--- U	--- U	--- U
56. Ethyl Methacrylate	0.14	10.0	--- U	--- U	--- U
57. Hexachlorobutadiene	0.22	10.0	--- U	--- U	--- U
58. Isobutyl Alcohol	5.23	100.0	--- U	--- U	--- U
59. Methacrylonitrile	1.64	100.0	--- U	--- U	--- U
60. Methyl Methacrylate	0.10	30.0	--- U	--- U	--- U
61. Naphthalene	0.13	10.0	--- U	--- U	--- U
62. Propionitrile	1.60	150.0	--- U	--- U	--- U
63. 1,2,4-Trichlorobenzene	0.11	10.0	--- U	--- U	--- U
64. Acetonitrile	5.96	50.0	--- U	42.40 J	11.20 J

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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CLIENT: WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY, NC 28333

CLIENT ID: 6043

ANALYST: CHS
DATE COLLECTED: 02/11/08
DATE EXTRACTED: 02/18/08
DATE ANALYZED: 03/05/08
DATE REPORTED: 03/11/08

REVIEWED BY:

SEMI-VOLATILE ORGANICS
EPA METHOD 8270C

PARAMETERS, ug/l	MDL	SWSL	Well #2	Well #8	Equipment Blank
1. Acenaphthene	2.66	10.0	--- U	--- U	--- U
2. Acenaphthylene	2.60	10.0	--- U	--- U	--- U
3. Anthracene	2.97	10.0	--- U	--- U	--- U
4. Benzo[a]antrhacene	4.16	10.0	--- U	--- U	--- U
5. Benzo[b]fluoranthene	3.32	10.0	--- U	--- U	--- U
6. Benzo[k]fluoranthene	4.23	10.0	--- U	--- U	--- U
7. Benzo[g,h,i]perylene	2.61	10.0	--- U	--- U	--- U
8. Benzo[a]pyrene	3.27	10.0	--- U	--- U	--- U
9. 4-Bromophenyl Phenyl Ether	2.63	10.0	--- U	--- U	--- U
10. Butyl Benzyl Phthalate	5.78	10.0	--- U	--- U	--- U
11. Bis-(2-Chloroethoxy) Methane	3.14	10.0	--- U	--- U	--- U
12. Bis-(2-Chloroethyl) Ether	2.58	10.0	--- U	--- U	--- U
13. Bis-(2-Chloroisopropyl) Ether	2.58	10.0	--- U	--- U	--- U
14. 2-Chloronaphthalene	2.17	10.0	--- U	--- U	--- U
15. 4-Chlorophenyl Phenyl Ether	2.42	10.0	--- U	--- U	--- U
16. Chrysene	4.04	10.0	--- U	--- U	--- U
17. Dibenzo[a,h]anthracene	2.78	10.0	--- U	--- U	--- U
18. Di-N-Butyl Phthalate	3.09	10.0	--- U	--- U	--- U
19. Dimethyl Phthalate	3.78	10.0	--- U	--- U	--- U
20. Diethyl Phthalate	3.92	10.0	--- U	--- U	--- U
21. 2,4-Dinitrotoluene	3.95	10.0	--- U	--- U	--- U
22. 2,6-Dinitrotoluene	3.88	10.0	--- U	--- U	--- U
23. Di-N-Octyl Phthalate	2.81	10.0	--- U	--- U	--- U
24. Bis-(2-Ethylhexyl) Phthalate	9.97	15.0	--- U	--- U	--- U
25. Fluoranthene	3.92	10.0	--- U	--- U	--- U
26. Fluorene	2.95	10.0	--- U	--- U	--- U
27. Hexachlorobenzene	2.61	10.0	--- U	--- U	--- U
28. Hexachlorocyclopentadiene	4.16	10.0	--- U	--- U	--- U
29. Indeno[1,2,3-Cd]pyrene	2.91	10.0	--- U	--- U	--- U
30. Isophorone	3.74	10.0	--- U	--- U	--- U
31. Nitrobenzene	2.85	10.0	--- U	--- U	--- U
32. N-Nitrosodimethylamine	4.25	10.0	--- U	--- U	--- U
33. N-Nitrosodiphenylamine	3.95	10.0	--- U	--- U	--- U
34. N-Nitrosodi-N-Propylamine	4.06	10.0	--- U	--- U	--- U
35. Phenanthrene	3.24	10.0	--- U	--- U	--- U
36. Pyrene	3.63	10.0	--- U	--- U	--- U
37. 4-Chloro-3-Methylphenol	3.79	20.0	--- U	--- U	--- U
38. 2-Chlorophenol	2.75	10.0	--- U	--- U	--- U
39. O-Cresol	3.68	10.0	--- U	--- U	--- U
40. P-Cresol	4.12	10.0	--- U	--- U	--- U
41. 2,4-Dichlorophenol	5.19	10.0	--- U	--- U	--- U
42. 2,6-Dichlorophenol	4.89	10.0	--- U	--- U	--- U
43. 2,4-Dimethylphenol	3.21	10.0	--- U	--- U	--- U
44. 4,6-Dinitro-2-Methylphenol	4.77	50.0	--- U	--- U	--- U
45. 2,4-Dinitrophenol	4.37	50.0	--- U	--- U	--- U
46. Ethyl Methanesulfonate	5.26	10.0	--- U	--- U	--- U
47. Methyl Methanesulfonate	4.92	10.0	--- U	--- U	--- U
48. 2-Nitrophenol	3.64	10.0	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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CLIENT: WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY, NC 28333

CLIENT ID: 6043

ANALYST: CHS
DATE COLLECTED: 02/11/08
DATE EXTRACTED: 02/18/08
DATE ANALYZED: 03/05/08
DATE REPORTED: 03/11/08

REVIEWED BY:

SEMI-VOLATILE ORGANICS
EPA METHOD 8270C

PARAMETERS, ug/l	MDL	SWSL	Well #2	Well #8	Equipment Blank
49. 4-Nitrophenol	3.17	50.0	--- U	--- U	--- U
50. Pentachlorophenol	5.33	25.0	--- U	--- U	--- U
51. Phenol	1.86	10.0	--- U	--- U	--- U
52. 2,3,4,6-Tetrachlorophenol	3.12	10.0	--- U	--- U	--- U
53. 2,4,5-Trichlorophenol	4.17	10.0	--- U	--- U	--- U
54. 2,4,6-Trichlorophenol	3.84	10.0	--- U	--- U	--- U
55. Acetophenone	2.89	10.0	--- U	--- U	--- U
56. 2-Acetylaminofluorene	3.98	20.0	--- U	--- U	--- U
57. 4-Aminobiphenyl	4.12	20.0	--- U	--- U	--- U
58. Benzyl Alcohol	4.47	20.0	--- U	--- U	--- U
59. 4-Chloroaniline	3.36	20.0	--- U	--- U	--- U
60. Chlorobenzilate	5.12	10.0	--- U	--- U	--- U
61. Diallate	2.98	10.0	--- U	--- U	--- U
62. Dibenzofuran	4.28	10.0	--- U	--- U	--- U
63. 3,3-Dichlorobenzidine	4.22	20.0	--- U	--- U	--- U
64. Dimethoate	3.98	20.0	--- U	--- U	--- U
65. P-Dimethylaminoazobenzene	2.89	10.0	--- U	--- U	--- U
66. 7,12-Dimethylbenz[a]anthracene	5.26	10.0	--- U	--- U	--- U
67. 3,3-Dimethylbenzadine	3.21	10.0	--- U	--- U	--- U
68. 1,3-Dinitrobenzene	2.89	20.0	--- U	--- U	--- U
69. Diphenylamine	5.10	10.0	--- U	--- U	--- U
70. Disulfoton	4.28	10.0	--- U	--- U	--- U
71. Famphur	3.98	20.0	--- U	--- U	--- U
72. Hexachloropropene	4.31	10.0	--- U	--- U	--- U
73. Isosafrole	2.88	10.0	--- U	--- U	--- U
74. Kepone	2.78	20.0	--- U	--- U	--- U
75. Methapyrilene	3.54	100.0	--- U	--- U	--- U
76. 3-Methylchloroanthrene	4.21	10.0	--- U	--- U	--- U
77. 2-Methylnaphthalene	3.79	10.0	--- U	--- U	--- U
78. Methyl Parathion	4.32	10.0	--- U	--- U	--- U
79. m-Cresol	3.81	10.0	--- U	--- U	--- U
80. 1,4-Naphthoquinone	4.00	10.0	--- U	--- U	--- U
81. 1-Naphthylamine	5.61	10.0	--- U	--- U	--- U
82. 2-Naphthylamine	4.62	10.0	--- U	--- U	--- U
83. 2-Nitroaniline	3.61	50.0	--- U	--- U	--- U
84. 3-Nitroaniline	4.81	50.0	--- U	--- U	--- U
85. 4-Nitroaniline	4.22	20.0	--- U	--- U	--- U
86. 5-Nitro-O-Toluidine	4.01	10.0	--- U	--- U	--- U
87. N-Nitrosodi-n-butylamine	3.63	10.0	--- U	--- U	--- U
88. N-Nitrosodiethylamine	3.83	20.0	--- U	--- U	--- U
89. N-Nitrosomethylethylamine	3.83	10.0	--- U	--- U	--- U
90. N-Nitrosopiperidine	5.19	20.0	--- U	--- U	--- U
91. N-Nitrosopyrrolidine	2.89	10.0	--- U	--- U	--- U
92. Parathion	3.12	10.0	--- U	--- U	--- U
93. Pentachlorobenzene	3.92	10.0	--- U	--- U	--- U
94. Pentachloronitrobenzene	3.71	20.0	--- U	--- U	--- U
95. Phenacetin	4.41	20.0	--- U	--- U	--- U
96. 1,4 Benzenediamine	2.99	10.0	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY, NC 28333

CLIENT ID: 6043

ANALYST: CHS
DATE COLLECTED: 02/11/08
DATE EXTRACTED: 02/18/08
DATE ANALYZED: 03/05/08
DATE REPORTED: 03/11/08

REVIEWED BY:

SEMI-VOLATILE ORGANICS
EPA METHOD 8270C

PARAMETERS, ug/l	MDL	SWSL	Well #2	Well #8	Equipment Blank
97. Phorate	3.86	10.0	--- U	--- U	--- U
98. Pronamide	3.69	10.0	--- U	--- U	--- U
99. Safrole	4.12	10.0	--- U	--- U	--- U
100. 1,2,4,5-Tetrachlorobenzene	5.01	10.0	--- U	--- U	--- U
101. Thionazin	4.62	20.0	--- U	--- U	--- U
102. O-Toluidine	4.11	10.0	--- U	--- U	--- U
103. 1,3,5-Trinitrobenzene	3.98	10.0	--- U	--- U	--- U
104. 0,0,0-Triethyl Phosphorothioate	3.61	10.0	--- U	--- U	--- U
105. Hexachloroethane	1.49	10.0	--- U	--- U	--- U
106. Isodrin	3.11	20.0	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environmental, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6043 **Week:** 7

WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY NC 28333

(919) 689-2994

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

CHLORINE NEUTRALIZED AT COLLECTION																						
pH CHECK (LAB)				12			12					12	12									
CONTAINER TYPE, P/G	P	P	P	P	P	P	P	P	P	P		G	G	G	G	G						
CHEMICAL PRESERVATION	A	A	A	D	A	A	A	F D	A	A		E	E	A	A	A						
PARAMETERS	Field pH	Alkalinity	Chloride	Cyanide	TDS	Sulfate	Metals	Sulfide	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	EPA 8270C	8270C Dup. 1	EPA 8081A	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	COLLECTION DATE	COLLECTION TIME	SAMPLE LOCATION
Well #1	G	G	G		G	G	G		G	G	G	G	G					16	8	02 11 08	1140	Well #1
Well #2	G	G	G	G	G	G	G	G	G	G	G			G	G	G		12	11	02 11 08	0920	Well #2
Well #3	G	G	G		G	G	G		G	G	G	G	G					17	8	02 11 08	1005	Well #3
Well #4	G						G		G	G	G	G	G					14	4	02 11 08	1035	Well #4
Well #5	G	G	G		G	G	G		G	G	G	G	G					17	8	02 11 08	0935	Well #5
Well #6	G						G		G	G	G	G	G					12	4	02 11 08	1020	Well #6
Well #7	G	G	G		G	G	G		G	G	G	G	G					15	8	02 11 08	0900	Well #7
Well #8	G			G			G	G	G	G	G			G	G	G		15	10	02 11 08	1050	Well #8
Trip Blank																			2	02 11 08		Trip Blank
Equipment Blank				G			G	G						G	G	G			9	02 11 08		Equipment Blank

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: Y N

SAMPLES COLLECTED BY: (Please Print) Hope Fox

SAMPLES RECEIVED IN LAB AT 5.6 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hogge	02 11 08	Martha [illegible]	2/11/08 2:14
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

Instructions for completing this form are on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 159533

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6043 **Week: 7**

WAYNE CO. LANDFILL (DUDLEY)
MR. TIM ROGERS
460B LANDFILL ROAD
DUDLEY NC 28333

(919) 689-2994

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

CHLORINE NEUTRALIZED AT COLLECTION																					
pH CHECK (LAB)																					
CONTAINER TYPE, P/G																					
CHEMICAL PRESERVATION																					
PARAMETERS																					
SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	8260B App. II	8260 App. II 1	8260 App. II 2	8151A Landfill												
Well #1					8																
Well #2	02/11/08	0920		12	11	G	G	G	G												
Well #3					8																
Well #4					4																
Well #5					8																
Well #6					4																
Well #7					8																
Well #8	02/11/08	1050		15	10	G	G		G												
Trip Blank	02/11/08				2																
Equipment Blank	02/11/08				9	G	G		G												

A - NONE, B - HNO_3, C - H_2SO_4, D - NAOH, E - HCL, F - ZINC ACETATE, G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY Y N

SAMPLES COLLECTED BY: (Please Print) Hope Fox

SAMPLES RECEIVED IN LAB AT 5.6°C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Rob Hope	02/11/08	Annette Lach	2/11/08 2:14
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

Instructions for completing this form are on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 159532