Clayton Engineering
Civil & Environmental

October 25, 2010

Ms. Jaclynne Drummond
Solid Waste Section
Division of Waste Management
North Carolina Department of Environment and Natural Resources
Mail Service Center 1646
Raleigh, NC 27699-1646

RE: STATISTICAL ANALYSIS/EVALUATION: APRIL 2010
DUNN-ERWIN MUNICIPAL SOLID WASTE LANDFILL, PERMIT 43-02
HARNETT COUNTY, NORTH CAROLINA

Dear Ms. Drummond:

On behalf of Harnett County, C.T. Clayton, Sr., PE, Inc. (CTC) is pleased to herewith submit the results of the statistical analysis for the semi-annual groundwater monitoring event of April 2010 performed at the Dunn-Erwin Municipal Solid Waste Landfill in accordance with North Carolina Solid Waste Management Rules *15A N.C.A.C. 13 B, .1633* and *.1634.* The findings and conclusions of this report will be considered by Harnett County for the assessment of the Harnett County's Corrective Action Plan (CAP) for the groundwater contamination plume, downgradient of the existing landfill in accordance with North Carolina Solid Waste Management Rules *15A N.C.A.C. 13B, .1635, .1636, and .1637,* and *15A N.C.A.C. 13B .0547.*

The report is organized in sections entitled Executive Summary, Introduction, Methodology, and Results, and it has four appendices inclusive of the statistical model output.

Should you have any questions or comments, please contact me at our address shown above or by e-mail at ***tyrus@ctclayton.com***.

Sincerely,

C. T. CLAYTON, SR., P.E., INC.

C. Tyrus Clayton, Jr., P.E.

cc. Jerry Blanchard - Harnett County
C. T. Clayton, Sr., P.E.
C. J. Poran, PE - ENSOL, Inc.

/attachments

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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).
- 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):

C.T. Clayton, Sr., P.E., Inc. (Consultant)

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

Name: C. Tyrus Clayton, Jr. PE Phone: 910-897-7070

E-mail: tyrus@ctclayton.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Dunn/Erwin Landfill	SR1725 Dunn, NC	43-02	.1600	April 20-21, 2010

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.

C. Tyrus Clayton, Jr., PE — Facility Representative Name (Print)

Consultant — Title

910-897-7070 — (Area Code) Telephone Number

C. Tyrus Clayton — Signature

10/18/2010 — Date

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA PROFESSIONAL SEAL 028909 ENGINEER C. TYRUS CLAYTON, JR.

PO Box 578, 46 West Washington ST. Coats, NC 27521

Facility Representative Address

C-2570

NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009

STATISTICAL ANALYSIS/EVALUATION
APRIL 2010
DUNN-ERWIN MUNICIPAL SOLID WASTE LANDFILL
PERMIT #43-02
HARNETT COUNTY, NORTH CAROLINA

Submitted to:
Solid Waste Section
Division of Waste Management
NCDENR
1646 Mail Service Center
Raleigh, NC 27699-1646

Submitted by:
C.T. Clayton, Sr., P.E., Inc.
P. O. Box 578
Coats, NC 27521

Submitted on behalf of:
Harnett County General Services
P.O. Box 940
Lillington, NC 27546

October 7, 2010

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EXECUTIVE SUMMARY

The April 2010 groundwater sampling event performed at the Dunn-Erwin Municipal Solid Waste Landfill (MSWLF) fulfilled the County's semi-annual groundwater sampling and analyses requirements in accordance with North Carolina Solid Waste Management Rules *15A N.C.A.C. 13 B, .1633* and *.1634.* Figures 1, 2A and 2B show the facility layout and various groundwater monitoring wells and piezometers locations, respectively.

Previously, an extensive study was completed in order to better understand the groundwater contamination plume at the site, as described in the report dated August 25, 2003, including the field investigation performed in October 2002 in conjunction with the scheduled October 2002 semi-annual sampling event. Also, 12 new observation wells were installed in the general area of the groundwater contamination plume during this field investigation. The field investigation was followed by additional laboratory testing, and an extensive analysis and computer modeling. Results from that study have been incorporated in this report also including the October 2002 delineation of the groundwater contaminant plume in the uppermost aquifer, downgradient of the MSWLF.

Several new wells (MW11, MW 12, MW 13, MW 14, and MW15) and piezometers (PZ-50, PZ-51, PZ-52, and PZ-53) have been installed and are associated with the proposed new construction and demolition debris (C&D) landfill in the southwest of the groundwater contaminant plume area. In addition, a new surface water sampling point, SWPT4, has been added as of the April 2010 monitoring event, also associated with the C&D landfill.

Data from the April 2010 semi-annual sampling were evaluated in sets. Set 1 consists of wells monitoring the previously closed (December 1998) solid waste landfill portion of the site where active construction and demolition debris (C&D) placement is ongoing, including monitoring wells (MWs) MW1, MW2, MW3R, MW4, MW5, MW6, MW7B, MW8, and MW31. Monitoring well MW3, which was previously damaged during site operations prior to April 2005 sampling event has been replaced by MW3R as of June 2005. Monitoring wells MW9 and MW10 were installed in March 2001 and have been added to Data Set 1 as of April 2001. These wells have been incorporated into the statistical analysis as their background sampling was completed in October 2002.

In 2006, five (5) new MWs (MW11 - MW15) were installed in conjunction with the proposed C&D landfill. Theoretically, these new wells belong to Set 1 since they are downgradient of the active C&D and closed MSWLF. Four of these wells (MW11 - MW14) were incorporated into the statistical analysis of Set 1 as Subset 1N after their background sampling was completed in October 2008. Because MW15 had not been sampled in October 2007 with MW11 - MW14, April 2009 was its fourth sampling event, so MW15 has been incorporated as of April 2009.

Within Subset 1N, subject to the final proposed C&D landfill design and groundwater monitoring plan, one of these monitoring wells may be designated as an upgradient well to the new landfill. Additionally, one or more of the related four new piezometers (PZ-50 through PZ-53) could also be converted into monitoring wells for the new landfill, as needed.

As part of the groundwater monitoring plan associated with the SWS-approved CAP (as of November 18, 2009) Harnett County has installed (5) new monitoring wells, MW-53 and MW-56

through MW-59, downgradnient of the apparent western boundary of the contamination plume as shown in Figure 2A. Monitoring well MW-6 has also been replaced with MW-6B installed adjacent. Once installed and developed, these wells will undergo four (4) background sampling events starting April 2011, and then they will be added to Set 1 monitoring wells.

Set 2 consists of wells monitoring the older closed portion of the landfill site, including MW16, MW23B, MW32, MW33, and the newer MW34 and MW35 installed in June 1996. Monitoring well MW23B is statistically compared with Set 1 as it appears to be located downgradient of these wells.

Set 3 consists of surface water monitoring points (SWPTs) along the wetlands between the active and the closed areas, including SWPT1, SWPT2, and SWPT3. SWPT4 has been added as of the April 2010 sampling event and will be included in the statistical analysis of Set 3 once four background sampling events have been completed.

Groundwater levels at all monitoring wells are also recorded, as shown in Table 1. As an overall average, groundwater levels during this latest sampling event were approximately 2.44 feet below the average groundwater level based on all sampling events, for each respective well. This value also includes groundwater levels for the wells MW11 - MW15.

As of October 2008, the groundwater elevation map (Figure 1) was updated with average contours based on data collected from January 2007 to May 2008, including data from MW11 - MW15. In addition, Table 2, Groundwater Velocity Data, was updated to incorporate values for MW11 - MW15.

The 15A NCAC 02L.0202 North Carolina Groundwater Standards (NCGS) have been amended as of January 1, 2010. This report incorporates the revised NCGS. Historical data have been comprehensively re-evaluated taking into consideration the revised NCGS.

This report complies with the revised requirements of the Solid Waste Section (SWS), per the SWS Memoranda dated October 27, 2006, February 23, 2007, and October 16, 2007. Specifically, the Solid Waste Section Limits (SWSL) and lower Method Detection Limits (MDLs) were incorporated as of the October 2007 sampling event. The 15A NCAC 13B groundwater protection standards (GPS) are considered for those constituents that lack a 2L NCGS. The 13B GPS have been incorporated only as of October 2007 and are not compared to historic data.

The new MDLs are significantly less than previous detection limits. The SWSLs are more similar to the previous detection limits but are lower for several constituents. Table 6 of this report provides a comprehensive comparison of 2L NCGS, 13B groundwater protection standards, SWSL, and current and historical (2006) MDLs for constituents commonly included in the statistical analysis at the Dunn-Erwin landfill.

As required, concentrations greater than the MDL but less than the SWSL are reported by the laboratory as *estimated values*. Because historic data, including background sampling, was reported using much higher detection limits, estimated values are not incorporated into the current statistical analysis, except for the prediction interval intra-well comparison as discussed in Section III, Methodology. Only results exceeding SWSLs are included in the statistical

analysis and presented in the summary tables found in Appendices A-C, as the SWSLs allow for a more consistent comparison of current and historical data. For a complete listing of estimated concentrations, refer to the laboratory reports.

As required by the new rules, the Environmental Monitoring Reporting Form accompanies this submittal. Table 4B serves as the notification table required with this form and includes results which exceed a 2L NCGS or a 13B GPS. Because some of the SWSLs are greater than the NCGS or GPS, estimated values which exceed NCGS or GPS are included. GPS have been included with NCGS in the statistical analysis tables in the Appendices for detections above the SWSL. However, these tables do not include the estimated detections below the SWSL and are not intended to be an exhaustive comparison to NCGS and GPS.

When compared to historical detection limits, the use of the generally lower SWSLs has resulted in an increase in the number of reported detections. In addition, the lower SWSLs, which are now used in place of the detection limits in qualitative analyses (refer to Section III, Methodology), have resulted in more constituents being statistically significant over background levels (SSIOBL).

The statistical analysis results indicate that compliance wells MW6, MW7B, MW8, MW9, MW10, and MW15 in Set 1 have statistically significant levels of one or more organics over background levels when compared with the background wells. The April 2010 results show that there were a similar number organics detected in concentrations greater than NCGS or GPS when compared to the number of organics detected above NCGS or GPS in October 2009. The April 2010 NCGS or GPS exceedances for organics include: benzene, tetrachloroethylene, trichloroethylene, and vinyl chloride in MW6; benzene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride in MW7B; benzene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride in MW8; benzene, methylene chloride, tetrachloroethylene, and vinyl chloride in MW9; and benzene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, and vinyl chloride in MW10.

As part of this event's statistical analysis, the prediction interval intra-well comparison was incorporated to verify certain Test of Proportions (TOP) results. In select cases the compliance-to-background well analyses are not accurate because natural, statistically significant variations existed prior to the facility operation commencement. If the TOP indicates a result of Statistically Significant Increase Over Background Level (SSIOBL) for such a constituent, the prediction interval intra-well comparison is used to verify the result. If the average post-operational concentrations of the constituent are within the prediction interval analysis (PIA) calculated based on background concentrations, the result is not considered SSIOBL.

Using this PIA methodology, the following were not SSIOBL: beryllium for MW2, MW3, MW4, and MW12; barium for MW5, MW7B, and MW23B; cobalt for MW7B; and lead for MW7B. The PIA indicated the following were SSIOBL: barium for MW6.

Cobalt and mercury in MW6 and mercury in MW7B also show statistically significant levels through the TOP. However, cobalt was not detected during MW6's background sampling, and mercury was not included in either well's background sampling. Consequently, these constituents do not qualify for an intra-well comparison.

The following inorganics exceeded NCGS or GPS during this sampling event in Set 1, representing a similar number of inorganics exceeding NCGS or GPS compared to the October 2009 results: vanadium in MW31, MW6, and MW9; lead in MW6 and MW7B; chromium in MW9, and thallium in MW7B. With the exception of vanadium in MW9, the thallium and vanadium exceedances were estimated concentration values. The thallium and vanadium detections appear to be background, as these inorganics were not SSIOBL for any well.

In Set 2, no organics or inorganics are statistically significant. No organics were detected in April 2010, consistent with the results from recent sampling events. For inorganics, only barium and lead were detected in Set 2. Lead exceeded the NCGS at MW34.

In Set 3, only zinc and toluene were detected, with estimated values of vanadium, representing an increase in the number of detections compared to October 2009. Toluene at SWPT3 continues to be statistically significant for Set 3. The following inorganics exceeded NCGS or GPS during this sampling event, similar to the levels from October 2009: vanadium in SWPT2 and SWPT3 (estimated results).

Details of the statistical procedures employed are discussed in Section III of this report, entitled Methodology. The results of the April 2010 analysis are summarized and discussed for each constituent detected over the SWSL at each monitoring well or surface water monitoring point in Section III, entitled Results. Appendices A, B, C, and D contain tabulated data for the individual wells with computer-generated results of the statistical analyses performed and laboratory results with chain of custody forms, respectively. Based on these statistical analysis results and the August 2003 detailed plume investigation report, the following conclusions regarding groundwater contamination and future monitoring at the Dunn-Erwin MSWLF are presented:

- The previously active portion of the Dunn-Erwin solid waste landfill is now closed with a final cap. C&D waste is being placed on the cap area, as per SWS approval. All parameters that have been detected in concentrations that are statistically significant over background levels (SSIOBL) are being compared with North Carolina Groundwater Standards (NCGS), as appropriate.

- Harnett County has begun the implementation of corrective action program according to North Carolina Solid Waste Management Rules *15A N.C.A.C. 13 B, .1637,* as per SWS review and approval. A Corrective Action Plan, dated December 2008, with revisions in February 2009 and October 2009, has been approved by the Solid Waste Section (SWS). A leachate management system was approved per the SWS review letter dated November 17, 2009. Groundwater extraction and phytoremediation were approved per the SWS review letter dated November 18, 2009.

- Harnett County continues groundwater Assessment Monitoring in accordance with North Carolina Solid Waste Management Rule *15A N.C.A.C. 13 B, .1634.* The findings and conclusions of this report will be considered by Harnett County for the assessment of CAP for the groundwater contamination plume, downgradient of the existing landfill implemented by Harnett County in accordance with North Carolina Solid Waste Management Rules *15A N.C.A.C. 13B, .1635, .1636, and .1637,* and *15A N.C.A.C. 13B .0547.*

- Based on updated groundwater analytical data accumulated since October 1994 from the scheduled semi-annual sampling events, the top four organic contaminants most frequently detected in downgradient monitoring wells at concentrations that consistently have exceeded NCGS include 1,1-dichloroethane, methylene chloride, tetrachloroethylene, and trichloroethylene. Prior to this event and since October 2003, benzene had been detected in the downgradient plume only in MW9 (both results occurring during the 2006 events). However, benzene detections have increased over recent sampling events, and it now qualifies for the TOP. The prevalence of benzene detections will be observed in future sampling events. Tetrachloroethylene also qualifies for the TOP.

- Three of the organics mentioned in the previous paragraph, 1,1-dichloroethane, methylene chloride and trichloroethylene, have been consistently considered as statistically significant in the semi-annual assessments. Historically, only methylene chloride had been consistently detected in average concentrations that are about one order of magnitude greater than NCGS. Therefore, methylene chloride was considered the key organic constituent in the groundwater contamination plume, downgradient of the MSWLF. With the 2010 revision to the NCGS, the average concentrations compared to NCGS for 1,1-dichloroethane are now very similar to the ratio for methylene chloride, so going forward **both 1,1-dichloroethane and methylene chloride** are now considered as a key constituents in the CAP assessment.

- With 10 detections as of the October 2007 sampling event (including past events), vinyl chloride has qualified for inclusion into the contamination plume review starting October 2007. There were five additional vinyl chloride detections in April 2009. However, vinyl chloride results **are not** as prevalent as the other top organic contaminants, and because it has a **low 2L standard** the results show apparent large average concentration-to-NCGS ratios. It has been included in Figure 3 to observe in future events.

- As of October 1999 only wells MW6, MW7B, and MW8 require annual sampling for Appendix II constituents while in assessment monitoring. All other monitoring wells of Set 1 were excluded from Appendix II sampling requirements based on approval of the North Carolina Solid Waste Section (SWS) from October 1999. However, the SWS requested in March 2007 that MW9 and MW10 also be added to the Appendix II testing since they are within the contaminant plume. Therefore, these five wells are sampled for Appendix II constituents in October annually, as required by the SWS.

- All active monitoring well locations in Set 1 should continue to be sampled and analyzed for Appendix I constituents semi-annually as per North Carolina Solid Waste Management Rules 15A N.C.A.C. 13 B, .1633, with the next Appendix I sampling event scheduled for October 2010.

- All active monitoring wells in Set 2 should continue to be sampled and analyzed for Appendix I organics and the eight RCRA metals semi-annually while in detection monitoring. The next sampling event should occur in October 2010.

- All active surface water point locations in Set 3 should continue to be sampled and

analyzed for Appendix I constituents semi-annually as per North Carolina Solid Waste Management Rules 15A N.C.A.C. 13 B, .1633, with the next Appendix I sampling event scheduled for October 2010. SWPT4 will continue to be sampled, and it will be included in the statistical analysis for Set 3 once four (4) background events are completed.

- Background sampling of new wells MW11 - MW14 has been be completed as of October 2008. These wells have been incorporated into the statistical analysis of Set 1 as a Subset 1N. Background sampling at MW15 has also been completed and this well has been incorporated into the statistical analysis (as part of Subset 1N with MW11-MW14) as of October 2009.

- As planned six (6) new monitoring wells MW-6B, MW-53 and MW-56 through P-MW-59, were installed and developed, and will undergo four (4) background sampling events starting April 2011, and then they will be added to Set 1 monitoring wells.

- As per current SWS reporting requirements this submittal includes:
    - (i) Environmental Monitoring Reporting Form (hardcopy)
    - (ii) Summary Table 4B with the parameters that exceed 2L NCGS or 13B GPS in April 2010
    - (iii) A hard copy of the EXCEL sheets from the E1I lab
    - (iv) A hard copy of the complete assessment report

I. Introduction

This statistical analysis was performed to evaluate whether groundwater and surface water monitoring results from the April 2010 sampling event at the Dunn-Erwin MSWLF in Harnett County demonstrate compliance with North Carolina Groundwater Standards (NCGS) with respect to Appendix I and Appendix II constituents of the North Carolina Solid Waste Management Rules *15A N.C.A.C. 13 B, .1633(a) and .1634(a).* The United States Environmental Protection Agency (EPA) Guidance Document, Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, April 1989, was used as the main reference for the statistical procedures followed in this study. Details of the procedures and results obtained from the analysis are described in the following sections.

Conclusions and recommendations regarding subsequent sampling at the Dunn-Erwin MSWLF are presented in the Executive Summary. Figure 1 shows the downgradient area of the MSWLF with approximate contamination plume boundaries as updated in the CAP of October 2009. A layout of approximate monitoring wells and surface water sampling locations and the MSWLF facility is shown in Figure 2.

II. Groundwater Levels

Table 1 shows historic groundwater levels within monitoring wells at the Dunn-Erwin landfill. Generally, groundwater levels during the April 2010 sampling event were approximately 2.44 feet below the average groundwater level based on all sampling events, for each respective well. This value includes groundwater levels for recently installed wells MW11 - MW15.

Table 2 shows estimated groundwater velocity data, previously calculated based on groundwater levels recorded in the October 1995 sampling event and updated to include average data from January 2007 to May 2008 for wells MW11 - MW15. This table also incorporates an estimated range of site hydraulic conductivity and effective porosity values.

III. Methodology

An Excel™ adaptation of the EPA software GRITS/STAT (A Ground Water Information Tracking System with Statistical Analysis Capability, Version 4.2) was utilized to perform statistical calculations. Downgradient monitoring wells (MWs) MW2, MW3R, MW4, MW5, MW6, MW7B, MW8, MW9, MW10, MW11, MW12, MW13, MW14, MW15, and MW23B were each compared with the upgradient wells MW1 and MW31 (Data Set 1), and downgradient wells MW32, MW33, MW34, and MW35 were each compared to upgradient well MW16 (Data Set 2) to evaluate the existence of statistically significant increases over background levels (SSIOBL) for each detected constituent. Surface Water Monitoring Points (SWPTs) SWPT2 and SWPT3 are compared with upgradient SWPT1 (Data Set 3) to evaluate the existence of SSIOBL for each Appendix I constituent.

For the reasons discussed in the Executive Summary regarding differences between historic and current method detection limits (MDLs) and the Solid Waste Section Limits

(SWSLs), only detections exceeding the SWSLs are included in the statistical analysis. Estimated values (concentrations reported as greater than the MDL but less than the SWSL) are not included in the statistical analysis. When referring to the statistical analysis, a non-detect is a result less than the SWSL and a detection is a result greater than the SWSL. Where necessary, estimated values are compared to NCGS or 13B Groundwater Protection Standards (GPS). A comparison of NCGS and GPS standards, SWSLs, April 2010 MDLs and detection limits from 2006 for selected commonly detected constituents are presented in Table 6.

The one-way analysis of variance test (ANOVA) compares median concentrations of the respective upgradient and downgradient wells between data sets with at least four sampling events each. The Excel™ program was employed to perform the ANOVA for each parameter in a monitoring well group with less than 50% total non-detects in all wells over all sampling events.

All data sets with less than 15% non-detects were also tested for both normal and log-normal data distributions using EPA accepted normality tests. A parametric ANOVA was performed for those data sets meeting the normality and less than 15% non-detect requirements. The parametric ANOVA also tested for residual normality and homogeneity of variances (using Levene's Test) between data sets, both of which are necessary to determine those parameters that are SSIOBL using the parametric ANOVA. For both the parametric ANOVA and Levene's Test, non-detected concentrations were computed as on one-half (1/2) of the method detection limit. If any of the above tests produced a negative result, the parametric ANOVA was disregarded. (No data sets met the criteria for a parametric ANOVA test during the latest event).

All data sets with less than 50% non-detects and not fulfilling the requirements of the parametric ANOVA test received the non-parametric ANOVA test, which utilized the Kruskal-Wallace Test for making comparisons between data sets.

The Test of Proportions, as outlined in Section 8.1.2 of the EPA Guidance document, was utilized for all data sets for constituents with less than or equal to 50% and above 10% detects in all monitoring wells combined. This test was further defined to include only those compliance wells (individually coupled with the background wells) that produced a large enough data set such that the total number of detects for the particular constituent was greater than or equal to five (5).

In select cases the compliance-to-background well analyses are not accurate because natural, statistically significant variations existed prior to the facility operation commencement. If the Test of Proportions indicates a result of SSIOBL for such a constituent, the prediction interval intra-well comparison was used to verify the statistical significance of the concentrations. If the average post-operational concentrations of the constituent are within the prediction interval analysis calculated based on background concentrations, the result is not considered SSIOBL. Estimated values are used in the prediction interval analysis. Previously, a non-detect value was treated as half the detection limit to calculate the interval. However, use of the estimated values allows for a more accurate prediction than using half the SWSL.

For all other instances that did not qualify for the ANOVA tests or the Test of Proportions, the detections were analyzed qualitatively. The qualitative analysis was conducted for individual constituents at a particular compliance well. Initially, the number of detections for the constituent in the particular compliance well was considered as follows:

- A compliance well with only one detection was not considered SSIOBL.

- For a compliance well with two or more detections and without detections in the background well, the order of magnitude (OOM) above the SWSL was evaluated. The OOM was computed as the logarithm of the actual detected concentration over the SWSL. If the average concentrations had an OOM greater than or equal to 0.67 (five times greater than the SWSL), the constituent was considered SSIOBL for the particular well. Prior to October 2007, the detection limit was used because the SWSLs had not been incorporated. As noted in the Executed Summary, the SWSL is more consistent with historic detection limits, compared to the much lower MDLs (refer to Table 6). As such, use of the SWSL allows for a more uniform comparison to the historic data and is also consistent with the use of SWSL in the other statistical analyses.

- For a compliance well with two or more detections and with detections of the particular constituent also in the background well, the compliance well was evaluated depending on the number and magnitude of detections at the compliance well, the background well, and their respective average concentration differences.

Additionally, Table 5 includes the analysis of cumulative results from all sampling events of the ongoing scheduled semi-annual analyses since October 1994, showing the summary of all organic detections in Data Set 1 that includes downgradient (compliance) monitoring wells (MWs) MW2, MW3R, MW4, MW5, MW6, MW7B, MW8, MW9, MW10, MW11, MW12, MW13, MW14, MW15, and MW23B.

Page 11 of 12 in Table 5 shows overall average concentration of organics detections with respect to the number of detections, and the average-concentration-to-NCGS ratio (ANR). The criteria selected to identify main organic constituents include these that had 10 or more detections with an ANR that approaches or exceeds 1.0. Vinyl chloride was added to the list of main constituents after it reached 10 detections.

IV. Results

This section reports results from the statistical tests performed on detected constituents (greater than SWSL as of October 2007). A summary of upgradient wells (background wells) precedes the downgradient wells for each data set. The upgradient well summaries include a complete detection history for all sampling events per upgradient well. Downgradient well summaries include a brief detection history followed by the results of the statistical tests per detected constituent.

Detections noted prior to October 2007 include all results which exceeded the historic detection limits for the respective constituents. Unless otherwise noted, a detection is now defined as a result that exceeds the SWSL as of October 2007. Estimated values (greater than the current MDL but less than the SWSL) are not listed except for some instances to compare to NCGS or GPS.

A summary of the results of the statistical tests for inorganics is shown in Table 3. In addition to the types of statistical tests and inorganic results, Table 3 also shows which inorganics were detected, both above the MDL and also above the SWSL. Table 4A indicates those parameters that have been detected in concentrations that are statistically significant over background levels (SSIOBL). Table 4B lists parameters exceeding NCGS or GPS during the April 2010 sampling event. ***Table 4B is intended to also serve as the notification table that is required with the Environmental Monitoring Reporting Form.*** To allow for a concise and legible summary, only monitoring wells with results that exceeded NCGS or GPS are listed. Results for monitoring wells or parameters not listed did not exceed NCGS or GPS. It should also be noted that Table 4B includes estimated values.

Detailed summary tables of constituent detections over the SWSL per monitoring well, recommended statistical tests per constituent, and results of the respective statistical tests are enclosed in Appendices A, B, and C for Data Sets 1, 2, and 3, respectively. Laboratory analytical data and chain of custody forms are included in Appendix D.

In Table 5, Page 11 of 12, five organic compounds shown in bold face were identified as the top organic constituents in the groundwater contamination plume, including benzene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride. 1,1-dichloroethane had been added to this list due to its NCGS revision from 700 to 70 ug/l in 2006. Vinyl chloride had been added after it had 10 detections (as of October 2007). Of these only 1,1-dichloroethane, methylene chloride, and trichloroethylene have consistently been identified as SSIOBL by the statistical analyses of the scheduled semi-annual sampling results.

An analysis to verify that these main organic constituents are consistent within the assumed area of the groundwater contamination plume was performed. The analysis included average concentration of organics detections, number of detections, and ANR values detected only in compliance wells MW6, MW7B, MW8, MW9, and MW10, and averaged only over these five (5) wells for all sampling events since October 1994. The results shown in Table 5, Page 12 of 12 verify that the main organic constituents that

had 10 or more detections with an ANR that exceeds 1.0, shown in bold face, are benzene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride.

To obtain time-line perspective of these organics detections, Figure 3 shows the average ANR values per each scheduled semi-annual sampling event in the five downgradient wells located within the estimated groundwater contamination plume area for these five organic constituents. The Figure shows that methylene chloride, 1,1-dichloroethane, trichloroethylene, and tetrachloroethylene have been detected with ANR values exceeding 1.0 since the beginning of data collection in October 1994, while benzene has only been detected with ANR values exceeding 1.0 since March 1999. Vinyl chloride shows high ANR values due to a relatively lower NCGS; however, it shows ANR values greater than 1.0 much less frequently than the other constituents. It is likely the vinyl chloride detections are a result of the degradation of the larger chlorinated compounds.

Historically, methylene chloride had been detected most consistently with the highest ANR values, with a maximum of 31. Previously, methylene chloride was also the only SSIOBL organic constituent that had consistently been detected in the plume area in concentrations that exceed NCGS by about one order of magnitude. However, the NCGS for 1,1-dichloroethane was revised from 70 ug/l to 6 ug/l in 2010. As a result, the ANR values for 1,1-dichloroethane are now very similar to the ANR values for methylene chloride. With the NCGS revisions, it appears that 1,1-dichloroethane and methylene chloride can be considered the key organic constituents in this groundwater contamination plume.

SET 1

Upgradient Wells (Background Wells):

MW1: MW1 is an upgradient well for MW2, MW3, MW4, MW5, MW6, MW7B, MW8, and MW23B (which is a Set 2 monitoring well). Historically, this well has shown inorganic concentrations above the detection limit for barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, tin, vanadium, and zinc. Of these constituents, barium exceeded NCGS in one sampling event with a concentration of 1.68 mg/l in January 1995. Cadmium exceeded NCGS in one sampling event with a concentration of 0.004 mg/l in January 1995. Chromium exceeded NCGS in four sampling events with concentrations of 0.018, 0.011, 0.013, and 0.02 in January and March 1995, April 1997, and April 1998. Lead exceeded NCGS in five sampling events with concentrations of 0.104, 0.104, 0.02, 0.028, and 0.018 mg/l in January, March and September 1995, and April and October 1997, respectively. Historically, carbon disulfide and diethylphthalate have been the only organic constituents detected in MW1. No constituents were detected during this latest sampling event.

The following summarizes the history of detected concentrations for each metal constituent:

barium: Barium was detected in six sampling events for MW1 with concentrations of 0.252, 0.024, 1.68, 0.586, 0.083, and 0.1 mg/l in October and

November 1994, January and March 1995, October 1997, and October 1998, respectively.

beryllium: Beryllium was detected in ten sampling events for MW1 with concentrations of 0.024, 0.006, 0.002, 0.002, 0.003, 0.006, 0.001, 0.004, 0.003, 0.002, 0.002, and 0.001 mg/l in January, March, and September 1995, April and October 1996, April and October 1997, April and October 1998, October 1999, and April 2002, and October 2009, respectively.

cadmium: Cadmium was detected in four sampling events for MW1 with concentrations of 0.0008, 0.001, 0.004, and 0.011 mg/l, in October and November 1994 and January and March 1995, respectively.

chromium: Chromium was detected in five sampling events with concentrations of 0.005, 0.018, 0.011, 0.013, 0.02 mg/l in October 1994, January and March 1995, April 1997, and April and October 1998, respectively.

cobalt: Cobalt was detected in only one sampling event for MW1 with a concentration of 0.016 mg/l in January 1995.

copper: Copper was detected in four sampling events for MW1 with concentrations of 0.017, 0.078, 0.018, and 0.007 mg/l in October 1994, January and March 1995, and October 1997, respectively.

lead: Lead was detected in six sampling events for MW1 with concentrations of 0.005, 0.104, 0.104, 0.02, 0.028, and 0.018 mg/l in October 1994 and January, March, and September 1995, and April and October 1997, respectively.

nickel: Nickel was detected for one sampling event in MW1 with a concentration of 0.03 mg/l in January 1995.

vanadium: Vanadium was detected in two sampling events for MW1 with concentrations of 0.02 and 0.083 mg/l in October 1994, and January 1995, respectively.

zinc: Zinc was detected in eight sampling events in MW1 with concentrations of 0.098, 0.012, 0.237, 0.038, 0.08, 0.065, 0.08, and 0.011 mg/l in October and November 1994 and January , March, and September 1995, April 1997, April 2004, and May 2007, respectively.

The following organics have been detected in MW1:

carbon disulfide: Carbon disulfide was detected in two sampling event in MW1 with concentrations of 20.9 and 7.4 mg/l in November 1994 and October 1999, respectively.

diethylphthalate: Diethylphthalate was detected in three sampling events for MW1 with concentrations of 5.3, 5.3 and 9.8 ug/l in September 1995, April 1996 and April 1997, respectively.

MW31: MW31 is a background well for MW2, MW3, MW4, MW5, MW6, MW7B, MW8 and MW23B. The detected metals in MW31 have been barium, beryllium, cadmium, chromium, cobalt, copper, lead, vanadium, and zinc. Of these, arsenic exceeded NCGS in three sampling event with concentrations of 0.055, 0.011, and 0.032 mg/l in September 1995, April 1996, and April 1997. Cadmium exceeded NCGS in three events with concentrations of 0.005, 0.003, and 0.003 in January 1995, March 1995, and September 1995, respectively. Chromium exceeded NCGS in ten events with concentrations of 0.021, 0.015, 0.021, 0.21, 0.044, 0.124, 0.06, 0.04, 0.08, and 0.1 mg/l in October and November 1994, September 1995, April 1996, April and October 1997, October 1998, and March and October 1999, respectively. Lead exceeded NCGS in nine events with concentrations of 0.0052, 0.033, 0.17, 0.031, 0.088, 0.045, 0.03, 0.05, and 0.06 mg/l in January, March and September 1995, April 1996, April and October 1997, October 1998, and March and October 1999, respectively. Vanadium exceeded the 13B GPS with *estimated* results of 6.6, 20.7, 19.9, 6.2, 6.5, and 4.3 ug/l in October 2007, April 2008, October 2008, April and October 2009, and April 2010. There have been no detected organics in MW31. No constituents were detected during this latest sampling event.

The following summarizes the history of detected concentrations for each metal constituent in MW31:

arsenic: Arsenic was detected in five sampling events for MW31 with concentrations of 0.005, 0.055, 0.011, 0.032, and 0.005 mg/l in March and September 1995 April 1996, and April and October 1997, respectively.

barium: Barium was detected in four sampling events for MW31 with concentrations of 0.04, 0.157, 0.097, and 0.098 mg/l in October 1994, January and March 1995, and October 1997 respectively.

beryllium: Beryllium was detected in four sampling events for MW31 with concentrations of 0.028, 0.006, 0.003, 0.001 and 0.005 mg/l in November 1994, September 1995, April and October 1997, and October 1999, respectively.

cadmium: Cadmium was detected in four sampling events for MW31 with concentrations of 0.005, 0.003, 0.003, and 0.001 mg/l in January, March, and September 1995, and April 1997, respectively.

chromium: Chromium was detected in nine sampling events for MW31 with concentrations of 0.021, 0.015, 0.021, 0.21, 0.044, 0.124, 0.06, 0.04, 0.01, and 0.01 mg/l in October and November 1994, January and September 1995, April 1996, April and October 1997, October 1998, October 1999, and April 2000, respectively.

cobalt: Cobalt was detected in two sampling events for MW31 with concentrations of 0.007 and 0.02 mg/l in January and September 1995, respectively.

copper: Copper was detected in eight sampling events for MW31 with concentrations of 0.011, 0.006, 0.052, 0.033, 0.017, 0.033, 0.043, and 0.06 mg/l, in October and November 1994, January, March, and September 1995, April 1996, April 1997, and October 1998, respectively.

lead: Lead was detected in ten sampling events for MW31 with concentrations of 0.011, 0.006, 0.052, 0.033, 0.017, 0.031, 0.088, 0.045, 0.03, 0.06, 0.014, and 0.013 mg/l, in October and November 1994, January, March, and September 1995, April 1996, April and October 1997, October 1998, October 1999, April 2008, and October 2008, respectively.

vanadium: Vanadium was detected for nine sampling events for MW31 with concentrations of 0.045, 0.026, 0.032, 0.08, 041, 0.087, 0.235, 0.11, and 0.04 mg/l, in October and November 1994, January, March, and September 1995, April 1996, April and October 1997, and October 1998, respectively.

zinc: Zinc was detected for nine sampling events in MW31 with concentrations of 0.017, 0.01, 0.027, 0.037, 0.07, 0.05, 0.04, 0.01, 0.017, and 0.01 mg/l, in October and November 1994, January, March, and September 1995, April 1996, October 1997, October 1998, October 1999, May 2007, and April 2008, respectively.

Downgradient Wells (Compliance Wells):

MW2: Compliance well MW2 has shown inorganic detections for arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. Of these, arsenic exceeded NCGS in one event, with a concentration of 0.033 in September 1995. Barium exceeded NCGS in one event, with a concentration of 0.82 in September 1995. Cadmium exceeded NCGS in two events, with concentrations of 0.003 and 0.004 mg/l in March and September 1995, respectively. Chromium exceeded NCGS in four events, with concentrations of 0.033, 0.02, 0.02, and 0.017 mg/l in November 1994, March and September 1995, and April 1997, respectively. Lead exceeded NCGS in four events, with concentrations of 0.025, 0.025, 0.041, and 0.025 mg/l in November 1994 and January, March and September 1995, respectively. Vanadium exceeded the 13B GPS with an *estimated* results of 3.6 ug/l in October 2008. Diethylphthalate, an Appendix II constituent not included in Appendix I, was detected in September 1995 in MW2. This was the only organic constituent detected for all sampling events in MW2. Beryllium was the only constituent detected during this latest sampling event.

The following results were obtained for the detected metal in MW2 in April 2010:

beryllium: Beryllium resulted as not SSIOBL for MW2 using the Prediction Interval Analysis.

MW3R: Compliance well MW3R has replaced compliance well MW3. Groundwater data from sampling events prior to October 2005 from MW3 have been utilized to compare with the data for MW3R sampled beginning in October 2005.

Compliance well MW3 and/or MW3R previously had metal detections for barium, beryllium, cadmium, chromium, cobalt, copper, lead, vanadium, and zinc. Cadmium, exceeded NCGS in two sampling events with concentrations of 0.002 and 0.011 mg/l in November 1994 and March 1995, respectively. Chromium exceeded NCGS in one event, with a concentration of 0.014 in April 2002. Vanadium exceeded the 13B GPS with an *estimated* results of 4.3 ug/l in October 2008. Carbon disulfide has been the only organic constituent detected in MW3/3R. Beryllium and zinc were the only constituents detected during this latest sampling event.

The following results were obtained for the detected metals in MW3 in April 2010:

beryllium: Beryllium resulted as not SSIOBL for MW3 using the Prediction Interval Analysis.

zinc: Zinc resulted as not SSIOBL for MW3 using the Test of Proportions.

MW4: MW4 has had a history of detections of the inorganics barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. Beryllium exceeded the 13B GPS with a result of 6.0 ug/l in October 2008. Chromium exceeded NCGS in three events, with concentrations of 0.024, 0.011, and 0.03 in November 1994, October 1996 and October 1999, respectively. Cadmium has exceeded NCGS in one event with a concentration of 0.004 mg/l in March 1995. Lead has exceeded NCGS in two events: 0.018 mg/l in both November 1994 and October 1996. Carbon disulfide and diethylphthalate have been the only detected organics for MW4, however no organics were detected in this latest sampling. Beryllium and zinc were the only constituents detected during this latest sampling event.

The following results were obtained for the detected metals in MW4 in April 2010:

beryllium: Beryllium resulted as not SSIOBL for MW4 using the Prediction Interval Analysis.

zinc: Zinc resulted as not SSIOBL for MW4 using the Test of Proportions.

MW5: Compliance well MW5 had shown above the detection limit inorganic concentrations for barium, cadmium, chromium, copper, lead, nickel, vanadium, and zinc. Of these, arsenic exceeded NCGS in one sampling event with a concentration of 0.02 mg/l in April 2000. Vanadium exceeded the 13B GPS with an *estimated* results of 4.0 ug/l in October 2008. Carbon disulfide has been the only organic constituent detected with a concentration of 30.5 and 6.4 ug/l in November 1994 and October 1999. Only barium was detected during this latest sampling event.

The following results were obtained for the detected metal in MW5 in April 2010:

barium: Barium resulted as not SSIOBL for MW5 using the Prediction Interval Analysis.

MW6: Compliance well MW6 has a history of inorganic detections for arsenic, barium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, vanadium, and zinc. Of these, cadmium has exceeded NCGS in three sampling event with concentrations of 0.005, 0.009, and 0.004 mg/l in October and November 1994 and January 1995, respectively. Chromium has exceeded NCGS in four sampling events with concentrations of 0.033, 0.02, 0.012, and 0.017 mg/l in November 1994, April 1996, April 1997, and April 2002, respectively. Lead has exceeded NCGS in five sampling events with concentrations of 0.019, 0.033, 0.037, 0.019, and 0.019 mg/l in November 1994, January and September 1995, April 1996, and April 2010, respectively. Mercury exceeded NCGS in two sampling events with a concentration of 0.002 mg/l in October 1999. Zinc exceeded NCGS in one sampling event with a concentration of 91.5 mg/l in October 2004. Vanadium exceeded 13B GPS with *estimated* results of 7.3, 5.5, 5.6, and 24.3 ug/l in October 2007, October 2008, April 2009, and April 2010, respectively. Barium, cadmium, cobalt, lead and zinc were the detected inorganic constituents during this latest sampling event at MW6.

Detected organics for MW6 include acetone, benzene, bis(2-ethylhexyl)phthalate, carbon disulfide, carbon tetrachloride chlorobenzene, 1,4-dichlorobenzene, chloroethane, 1,1-dichloroethane, 1,1-dichloroethene, dichlorodifluoromethane, methylene chloride, 1,1,1-trichlroethane, trichloroethylene, vinyl chloride, and xylenes.

Benzene has exceeded NCGS in eight sampling events with concentrations of 2.7, 3.4, 9.5, 6.1, 4.2, 4.9, 2.4, and 3.3 ug/l in March and October 1999, April 2001, October 2007, April and October 2008, April 2009, and April 2010, respectively.

Carbon tetrachloride exceeded NCGS in October 2009 with a concentration of 2.9 ug/L.

Chlorobenzene exceeded NCGS in October 1998 with a concentration of 70 ug/l.

Chloromethane exceeded NCGS in one sampling event with a concentration of 46 ug/l in April 2000.

1,4-dichlorobenzene has exceeded NCGS in four sampling events with concentrations of 7.2, 6.9, 7.7, 7.4 ug/l in April 2001, October 2005, October 2007, April 2008, respectively.

1,1-dichloroethane has exceeded NCGS in 23 sampling events with concentrations of 78.9, 51.7, 105, 87.1, 67, 66, 61, 80, 134, 160, 30.1, 88, 64, 41, 37, 27, 28, 27.7, 6.6, 18.4, 13.1, 7.4, 8.9, 33.2, 18.6, 18.4, 13.9, 22.7, 9.2, and 8.4 ug/l in October and November 1994, January, March, and September 1995, February, April and October 1996, April and October 1997, April 1998, March and October 1999, April and October 2000, October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, and April and October 2008, respectively.

1,1-dichloroethene has exceeded NCGS in one sampling event with a concentration of 83.2 ug/l in January 1995.

1,2-dichloroethane has exceeded 13B GPS in two sampling events with estimated concentrations of 0.6 and 0.4 ug/l in October 2007 and April 2008, respectively.

Methylene chloride has exceeded NCGS in 14 sampling events with concentrations of 66, 109, 47, 37, 34.8, 28.2, 12.8, 64.5, 20.1, 12.9, 8.8, 33, 9.0, and 6.3 ug/l in October 2000, April and October 2001, April and October 2002, October 2003, April 2004, October 2005, April and October 2006, May and October 2007, October 2008, and October 2009, respectively.

Tetrachloroethylene has exceeded NCGS in 15 sampling events with concentrations of 5.3, 3.8, 5.6, 1.9, 8.2, 7.1, 6.2, 8.0, 6.9, 9.3, 4.5, 3.8, 1.8, 5.3, and 4.9 ug/l in October 1994, January and March 1995, October 1999, April 2001, October 2005, April and October 2006, May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Trichloroethylene has exceeded NCGS in 22 sampling events with concentrations of 8.4, 6.7, 10.6, 8.8, 7.2, 6.8, 11, 9.9, 8.7, 7.0, 17, 5.4, 5.2, 8.8, 7.1, 8.1, 7.7, 9.24, 5.9, 4.9, 4.7, and 4.8 ug/l in October and November 1994, January and March 1995, February and October 1996, April and October 1997, October 1999, April 2000, April and October 2001, April 2002, October 2005, April and October 2006, May and October 2007, April and October 2008, October 2009, and April 2010, respectively.

Vinyl chloride has exceeded NCGS in nine sampling events with concentrations of 22, 11.2, 8, 7.2, 6.3, 10.8, 2.6, 5.0, and 6.2 ug/l in April 2001, April 2006, May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Bis(2-ethylhexyl)phthalate has exceeded NCGS in one sampling event with a concentration of 6.8 ug/l in July 1996.

Benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride were the detected organics at MW6 during this latest sampling event.

The following results were obtained for the detected metals in MW6 in April 2010:

barium: Barium resulted as SSIOBL for MW6 using the Prediction Interval Analysis.

cadmium: Cadmium resulted as not SSIOBL for MW6 using the Qualitative Test.

cobalt: Cobalt resulted as SSIOBL for MW6 using the Test of Proportions.

lead: Lead resulted as not SSIOBL for MW6 using the Test of Proportions.

zinc: Zinc resulted as not SSIOBL for MW6 using the Test of Proportions.

The following results were obtained for the detected organics in MW6 in April 2010:

benzene:	Benzene resulted as SSIOBL for MW6 using the Test of Proportions.
1,4-dichlorobenzene:	1,4-dichlorobenzene resulted as SSIOBL for MW6 using the Qualitative Test.
cis-1,2-dichloroethene:	cis-1,2-Dichloroethene resulted as SSIOBL for MW6 using the Test of Proportions.
methylene chloride:	Methylene chloride resulted as SSIOBL for MW6 using the Test of Proportions.
tetrachloroethylene:	Tetrachloroethylene resulted as SSIOBL for MW6 using the Test of Proportions.
trichloroethylene:	Trichloroethylene resulted as SSIOBL for MW6 using the Test of Proportions.
vinyl chloride:	Vinyl chloride resulted as SSIOBL for MW6 using the Qualitative Test.

MW7B: Compliance well MW7B has replaced compliance well MW7. Groundwater data from previous sampling events (October and November 1994, and January and March 1995) from MW7 have been utilized to compare with the data for MW7B sampled since September 1995.

Detected metals in MW7 and/or MW7B include arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium, zinc, and mercury. Of these, arsenic exceeded NCGS in three sampling events with concentrations of 0.033, 0.032, and 0.279 mg/l in September 1995, April 1997, and October 1997, respectively. Barium exceeded NCGS in two sampling events with concentrations of 0.892 and 0.9 mg/l in October 1994 and March 1999, respectively. Cadmium exceeded NCGS in two sampling events with concentrations of 0.004 in both September 1995 and April 1997. Chromium exceeded NCGS in ten sampling events with concentrations of 0.03, 0.04, 0.09, 0.02, 0.021, 0.071, 0.011, 0.09, 0.014, and 0.013 mg/l in October 1994, March and September 1995, April and October 1996, April and October 1997, March 1999, October 2000, and April 2002, respectively. Lead exceeded NCGS in 22 sampling events with concentrations of 0.519, 0.044, 0.36, 0.196, 0.087, 0.264, 0.062, 0.070, 0.71, 0.05, 0.10, 0.036, 0.017, 0.020, 0.035, 0.018, 0.027, 0.019, 0.031, 0.019, 0.061, and 23 mg/l in October 1994, March and September 1995, April and October 1996, April and October 1997, April 1998, March and October 1999, April and October 2000, October 2001, April 2002, October 2003, October 2004, and April and October 2005, October 2007, October 2008, October 2009, and April 2010, respectively. Mercury exceeded NCGS in six sampling events with concentrations of 0.0027, 0.00142, 0.0011, 0.0015, 0.0046, and 0.0026 mg/l in October 2002, October 2003, October 2004, October 2005, October 2006, and October 2007, respectively. Thallium exceeded 13B GPS with *estimated* results of 0.5, 0.4, 2.8, 1.1, and 0.8 ug/l in October 2007, April 2008, October 2008, October 2009, and April 2010, respectively. Vanadium

exceeded 13B GPS with *estimated* results of 14.2 and 10.7 ug/l in October 2007 and October 2009, respectively.

Barium, cobalt, and lead were the detected metals at MW7 during this latest sampling event.

Detected organics have included benzene, chlorobenzene, chloroethane, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethene, 1,1-dichloroethane, 1,2-dichloroethane, methylene chloride, toluene, 1,1,1-trichloroethane, tetrachloroethylene, trichloroethylene, trichlorofluoromethane, xylenes, dichlorodifluoromethane, diethylphthalate, and bis(2-ethylhexyl)phthalate.

Benzene has exceeded NCGS in eight sampling events with concentrations of 1.1, 4.7, 4.1, 4.2, 5.8, 4.6, 9.4, and 9.5 ug/l in March 1999, May 2007, October 2007, April and October 2008, April and October 2009, and April 2010 respectively.

Chloromethane has exceeded NCGS in one sampling event with a concentration of 64 ug/l in April 2000.

1,1-dichloroethane has exceeded NCGS in 31 sampling events with concentrations of 262, 69.7, 52.4, 100, 92, 77, 100, 56, 30, 99.5, 110, 210, 170, 90, 176, 230, 87.1, 220, 141, 137, 113, 147, 22.5, 176, 174, 153, 129, 15.1, 114, 110, and 136 ug/l in October and November 1994, March and September 1995, February, April and October 1996, April and October 1997, April 1998, March and October 1999, April and October 2000, October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008 and April and October 2009, and April 2010, respectively.

1,2-dichloroethane has exceeded NCGS in two sampling events with a concentration of 8.7 ug/l in April 2003 and an *estimated* concentration of 0.4 ug/L in October 2008.

1,1-dichloroethene has exceeded NCGS in one sampling event with a concentration of 8.1 ug/l in April 2003.

Methylene chloride has exceeded NCGS in 19 sampling events with concentrations of 60, 75, 138, 154, 26.4, 174, 70.3, 93.3, 101, 75.1, 59.6, 79.9, 74.1, 74.5, 45.5, 69, 80.9, 45.3, and 79.9 ug/l in October 2000, April and October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008, April and October 2009, and April 2010, respectively.

Tetrachloroethylene exceeded NCGS in seven sampling events with concentrations of 9.0, 3.7, 3.2, 3.7, 3.3, 7.3, and 4.9 ug/l in October 2005, October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Trichloroethylene exceeded NCGS in 21 sampling events, with concentrations of 9.9, 10.7, 3.6, 7.8, 6.0, 5.3, 7.3, 8.8, 6.8, 7.6, 7.7, 7.5, 10.5, 9.9, 8.8, 9.2, 9.1, 8.8, 7.8, 10.9, and 10.2 ug/l in October and November 1994, March and October 1999, April 2000, April and October 2001, April 2002, October 2003, April and October 2004, April 2005, April

and October 2006, May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Vinyl chloride has exceeded NCGS in seven sampling events with concentrations of 5, 5, 3.9, 8.2, 4.3, 6.4, and 6.4 ug/l in May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Bis(2-ethylhexyl)phthalate exceeded NCGS in one sampling event with a concentration of 24 ug/l in September 1995.

1,1,2,2-tetrachloroethane exceeded 13B GPS with an *estimated* result of 1.0 ug/l in October 2008.

During this latest sampling event, benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, trichlorofluoromethane, and vinyl chloride were detected at MW7B.

The following results were obtained for the detected inorganics in MW7/7B in April 2010:

barium: Barium resulted as not SSIOBL for MW7/7B using the Prediction Interval Analysis.

cobalt: Cobalt resulted as not SSIOBL for MW7/7B using the Prediction Interval Analysis.

lead: Lead resulted as not SSIOBL for MW7/7B using the Prediction Interval Analysis.

The following results were obtained for the detected organics in MW7/7B April 2010:

benzene: Benzene resulted as SSIOBL for MW7/7B using the Test of Proportions.

1,4-dichlorobenzene: 1,4-dichlorobenzene resulted as not SSIOBL for MW7/7B using the Qualitative Test.

cis-1,2-dichloroethene: cis-1,2-Dichloroethene as SSIOBL for MW7/7B using the Test of Proportions.

1,1-dichloroethane: 1,1-dichloroethane resulted as SSIOBL for MW7/7B using the Test of Proportions.

methylene chloride: Methylene chloride resulted as SSIOBL for MW7/7B using the Test of Proportions.

tetrachloroethylene: Tetrachloroethylene resulted as SSIOBL for MW7/7B using the Test of Proportions.

trichloroethylene: Trichloroethylene resulted as SSIOBL for MW7/7B using the Test of Proportions.

trichlorofluoromethane: Trichlorofluoromethane resulted as SSIOBL for MW7/7B using the Qualitative Test.

vinyl chloride: Vinyl chloride resulted as SSIOBL for MW7/7B using the Qualitative Test.

MW8: Compliance well MW8 has shown above detection limit inorganic concentrations for barium, beryllium, cadmium, chromium, copper, lead, vanadium, zinc, cyanide, and mercury. Arsenic exceeded NCGS in one sampling event with a concentration of 0.015 mg/l in April 1997. Cadmium exceeded NCGS in two sampling event with a concentration of 0.002 mg/l in both November 1994 and April 1997. Chromium exceeded NCGS in three sampling events with concentrations of 0.013, 0.111, and 0.022 mg/l in November 1994, April 1997, and October 2001. Lead exceeded NCGS in one sampling event with a concentration of 0.073 mg/l in April 1997. Cyanide exceeded NCGS in one sampling event with a concentration of 0.127 mg/l in October 1996. Mercury exceeded NCGS in one sampling event with a concentration of 0.002 mg/l in October 1998. Barium was the only detected metal at MW8 during this latest sampling event.

Detected organics at MW8 have included benzene, cis-1,2-dichloroethene, carbon disulfide, chloroethane, chloromethane, 1,4-dichlorobenzene, 1,1-dichloroethane, methylene chloride, dichlorodifluoromethane, vinyl chloride, and xylenes.

Benzene exceeded NCGS in eight sampling events, with concentrations of 2.1, 1.6, 2.6, 2.5, 2.9, 2.6, 25.2, and 5.6 ug/l in October 1997, March 1999, October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Chloromethane exceeded NCGS in three sampling events, with concentrations of 6.1, 88, and 25 ug/l in October 1999, April 2000, and October 2001, respectively.

1,1-dichloroethane exceeded NCGS in 28 sampling events with concentrations of 6.4, 11, 7.8, 45, 47, 10.2, 39, 37, 59, 92, 44, 135, 80, 76.8, 71.5, 59.2, 42.7, 31, 38.9, 59, 58.6, 63, 49.1, 54.3, 61.8, 32, 38, and 38 in September 1995, February and April 1996, April and October 1997, April and October 1998, March and October 1999, April and October 2000, April 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008, April and October 2009, and April 2010, respectively.

1,2-dichloroethane exceeded NCGS in one sampling event, with an *estimated* concentration of 0.8 ug/l in October 2009.

1,1-dichloroethene exceeded NCGS in one sampling event, with a concentration of 81 ug/l in October 2001.

Methylene chloride exceeded NCGS in 25 sampling events, with concentrations of 49, 31, 5.2, 25, 30, 74, 140, 92, 90, 80.5, 71.2, 69, 44.5, 39.9, 40.6, 63.3, 64, 67.2, 48.4, 35.9, 31, 48, 32.5, 32.3, and 31.4 ug/l in April and October 1997, April and October 1998, March

1999, October 2000, April and October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Tetrachloroethylene exceeded NCGS in eight sampling events, with concentrations of 5.2, 5, 6.5, 5.5, 4.7, 5.7, 5.2, and 5 ug/l in October 2006, May and October 2007, April and October 2008, April and October 2009, April 2010, respectively.

Trichloroethylene exceeded NCGS in nine sampling events, with concentrations of 6.8, 5.3, 4, 4.4, 4.8, 4.8, 41.1, 4.1, and 4.3 ug/l in April and October 2001, May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Vinyl chloride exceeded NCGS with *estimated* results of 0.9 and 0.8 ug/l in October 2007 and October 2009, and results of 1.0, 1.5, 1.3, and 1.6 ug/L in April and October 2008, April 2009, and April 2010, respectively.

During this latest sampling event, benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride were detected at MW8.

The following result was obtained for the detected inorganic in MW8 in April 2010:

barium: Barium resulted as not SSIOBL for MW8 using the Test of Proportions.

The following results were obtained for the detected organics in MW8 in April 2010:

benzene: Benzene resulted as SSIOBL for MW8 using the Test of Proportions.

1,4-dichlorobenzene: 1,4-Dichlorobenzene resulted as not SSIOBL for MW8 using the Qualitative Test.

cis-1,2-dichloroethene: cis-1,2-Dichloroethene resulted as SSIOBL for MW8 using the Test of Proportions.

1,1-dichloroethane: 1,1-Dichloroethane resulted as SSIOBL for MW8 using the Test of Proportions.

methylene chloride: Methylene chloride resulted as SSIOBL for MW8 using the Test of Proportions.

tetrachloroethylene: Tetrachloroethylene resulted as SSIOBL for MW8 using the Test of Proportions.

trichloroethylene: Trichloroethylene resulted as SSIOBL for MW8 using the Test of Proportions.

vinyl chloride: Vinyl chloride resulted as not SSIOBL for MW8 using the Qualitative Test.

MW9: Compliance well MW9 was installed in March 2001 and was sampled for the first time in April 2001. The data are now included in the statistical analysis.

Detected metals in MW9 include barium, chromium, copper, lead, mercury, and vanadium. Chromium exceeded NCGS in four sampling events with concentrations of 0.038, 0.015, 0.082, and 0.017 mg/l in October 2001, April and October 2002, and April 2010, respectively. Mercury exceeded NCGS in two sampling events with concentrations of 0.005 and 0.0015 mg/l in October 2007 and October 2008. Vanadium exceeded 13B GPS with *estimated results* of 6.1 and 3.7 ug/l in April and October 2009 and an actual result of 39 ug/l in April 2010. Barium, chromium, lead, and vanadium were the detected inorganics during this latest sampling event.

Detected organics at MW9 have included benzene, chlorobenzene, chloroethane, chloromethane, 1,2-dibromoethane, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethane, 1,2-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, vinyl chloride, and xylenes.

Benzene exceeded NCGS in 15 sampling events, with concentrations of 8.6, 11, 7.8, 8.2, 8.1, 6.4, 5.6, 5.2, 5, 5.4, 11.5, 8, 8.1, 7.2, and 8.7 ug/l in April and October 2001, April and October 2002, April and October 2003, April and October 2006, May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Chloromethane exceeded NCGS in one sampling event, with a concentration of 189 ug/l in April 2001. 1,2-dibromoethane exceeded NCGS in one sampling event, with a concentration of 14 ug/l in October 2001.

1,4-dichlorobenzene exceeded NCGS in one sampling event, with a concentration of 6.6 ug/l in April 2008.

1,1-dichloroethane exceeded NCGS in 16 sampling events, with concentrations of 126, 219, 170, 202, 135, 122, 75.2, 81.9, 110, 103, 87, 74.7, 58.1, 68.1, 43.3, and 34.3 ug/l in October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008, and April and October 2009, respectively.

1,2-dichloroethane exceeded NCGS in two sampling event, with concentrations of 11.8 and 0.8 (estimated) ug/l in April 2003 and April 2008, respectively.

Methylene chloride exceeded NCGS in 17 sampling events, with concentrations of 195, 231, 272, 197, 166, 127, 67.9, 56.7, 75.7, 122, 96.4, 64.2, 49.6, 64.6, 53.2, 42.2, and 37.7 ug/l in October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008, April and October 2009, and April 2010, respectively.

Tetrachloroethylene exceeded NCGS in nine sampling events, with concentrations of 5.3, 5.3, 5.1, 2.9, 4.4, 2.4, 1.4, 1.0, and 1.2 ug/l in October 2001, October 2002, April 2003, October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Trichloroethylene exceeded NCGS in 14 sampling events, with concentrations of 11, 15, 9.8, 10, 9.5, 8.2, 5.8, 7.0, 6.5, 6.2, 5.0, 4.7, 3.9, 5.9, and 4.2 ug/l in April and October 2001, April and October 2002, October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, and April and October 2008, respectively.

Vinyl chloride exceeded NCGS in seven sampling events, with concentrations of 9.1, 5.9, 6.5, 8.7, 6.4, 6.3, and 7.9 ug/l in May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Benzene, chlorobenzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride were detected at MW9 during this latest sampling event.

The following result was obtained for the detected inorganic in MW9 in April 2010:

barium: Barium resulted as not SSIOBL for MW9 using the Test of Proportions.

chromium: Chromium resulted as not SSIOBL for MW9 using the Test of Proportions.

lead: Lead resulted as not SSIOBL for MW9 using the Test of Proportions.

vanadium: Vanadium resulted as not SSIOBL for MW9 using the Test of Proportions.

The following results were obtained for the detected organics in MW9 in April 2010:

benzene: Benzene resulted as SSIOBL for MW9 using the Test of Proportions.

chlorobenzene: Chlorobenzene resulted as not SSIOBL for MW9 using the Qualitative Test.

1,4-dichlorobenzene: 1,4-dichlorobenzene resulted as not SSIOBL for MW9 using the Qualitative Test.

cis-1,2-dichloroethene: cis-1,2-Dichloroethene resulted as SSIOBL for MW9 using the Test of Proportions.

methylene chloride: Methylene chloride resulted as SSIOBL for MW9 using the Test of Proportions.

tetrachloroethylene: Tetrachloroethylene resulted as SSIOBL for MW9 using the Test of Proportions.

trichloroethylene: Trichloroethylene resulted as SSIOBL for MW9 using the Test of Proportions.

vinyl chloride: Vinyl chloride resulted as SSIOBL for MW9 using the Qualitative Test.

MW10: Compliance well MW10 was installed in March 2001 and was sampled for the first time in April 2001. The data are now included in the statistical analysis.

Detected metals in MW10 include chromium, copper, lead, vanadium and zinc. Arsenic exceeded NCGS in one sampling event with a concentration of 0.016 in April 2009.Chromium exceeded NCGS in four sampling events with concentrations of 0.014, 0.013, 0.118, and 0.012 mg/l in April 2001, April and October 2002, and October 2005. Vanadium exceeded 13B GPS with *estimated* results of 12.2, 3.7, 5.2, and 5.2 ug/l in October 2007, April 2008, and April and October 2009. No inorganics were detected during this latest sampling event.

Detected organics at MW10 have included acetone, benzene, chlorobenzene, chloroethane, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,2-dibromoethane, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, toluene, trichloroethylene, vinyl chloride, and xylenes.

Acetone exceeded NCGS in one sampling event, with a concentration of 2,340 ug/l in April 2009 (apparent anomaly).

Benzene exceeded NCGS in nine sampling events, with concentrations of 6.9, 7.3, 6.2, 4.6, 2.0, 4.5, 3.9, 7.0, 5.0, and 6.7 ug/l in April and October 2001, April 2002, May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

1,1-dichloroethane exceeded NCGS in 16 sampling events, with concentrations of 266, 109, 59.3, 42.6, 69.1, 606, 53.3, 34.9, 25.2, 19.1, 9.4, 10.9, 9.2, 7.5, 7.7, and 6.2 ug/l, in October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, April and October 2008, and April 2010, respectively.

Methylene chloride exceeded NCGS in 14 sampling events, with concentrations of 120, 310, 132, 59.3, 19.7, 48.7, 48, 67.7, 51.6, 27.1, 14.4, 10, 7.7, and 15.4 ug/l in April and October 2001, April and October 2002, April and October 2003, April and October 2004, April 2005, April 2006, April and October 2009, and April 2010, respectively.

Tetrachloroethylene exceeded NCGS in seven sampling events, with concentrations of 12, 11, 13, 6.8, 7.1, 7.3, and1.1 ug/l in April and October 2001, April and October 2002, April and October 2003, and April 2010, respectively.

Trichloroethylene exceeded NCGS in four sampling events, with a concentrations of 11, 11, 9.1, and 5.7 ug/l in April and October 2001, April 2002, and October 2003, respectively.

Vinyl chloride exceeded NCGS in seven sampling events, with concentrations of 10, 1.4, 2, 3.3, 3.9, 2.0, and 3.9 ug/l in April 2001, October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Benzene, chlorobenzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride were the detected organics at MW10 during this latest sampling event.

The following results were obtained for the detected organics in MW10 in April 2010:

benzene:	Benzene resulted as SSIOBL for MW10 using the Test of Proportions.
chlorobenzene:	Chlorobenzene resulted as not SSIOBL for MW10 using the Qualitative Test.
1,4-dichlorobenzene:	1,4-Dichlorobenzene resulted as not SSIOBL for MW10 using the Qualitative Test.
cis-1,2-dichloroethene:	cis-1,2-dichloroethene resulted as SSIOBL for MW10 using the Test of Proportions.
1,1-dichloroethane:	1,1-Dichloroethane resulted as SSIOBL for MW10 using the Test of Proportions.
methylene chloride:	Methylene chloride resulted as SSIOBL for MW10 using the Test of Proportions.
tetrachloroethylene:	Tetrachloroethylene resulted as SSIOBL for MW10 using the Test of Proportions.
trichloroethylene:	Trichloroethylene resulted as SSIOBL for MW10 using the Test of Proportions.
vinyl chloride:	Vinyl chloride resulted as not SSIOBL for MW10 using the Qualitative Test.

MW11: Compliance well MW11 was installed in 2006 and was sampled for the first time in May 2007. The data are now included in the statistical analysis. Detected metals in MW11 include zinc. Vanadium exceeded 13B GPS with *estimated* concentrations of 6.2, 6.1, and 4.5 ug/l in October 2008, and April and October 2009, respectively. No organics have been detected in MW11. No inorganics were detected during this latest sampling event.

MW12: Compliance well MW12 was installed in 2006 and was sampled for the first time in May 2007. The data are now included in the statistical analysis. Detected metals in MW12

include beryllium and zinc. Vanadium exceeded 13B GPS with *estimated* concentrations of 6.4, 8.0, and 4.4 ug/l in October 2007, and April and October 2009, respectively. No other inorganics have exceeded NCGS or 13B GPS. No organics have been detected in MW12. Beryllium was detected during this latest sampling event.

The following results was obtained for the detected inorganic in MW12 in April 2010:

beryllium: Benzene resulted as not SSIOBL for MW12 using the Prediction Interval Analysis.

MW13: Compliance well MW13 was installed in 2006 and was sampled for the first time in May 2007. The data are now included in the statistical analysis. Detected metals in MW13 include zinc. No inorganics have exceeded NCGS or 13B GPS. No organics have been detected in MW13. No inorganics were detected during this latest sampling event.

MW14: Compliance well MW14 was installed in 2006 and was sampled for the first time in May 2007. The data are now included in the statistical analysis. Detected metals in MW14 include zinc. Vanadium exceeded 13B GPS with an *estimated* concentration of 5.9 ug/l in April 2009. No other inorganics have exceeded NCGS or 13B GPS. Chloromethane is the only organic to have been detected in MW14. Only zinc was detected during this sampling event.

The following result was obtained for the detected inorganic in MW14 in April 2010:

zinc: Zinc resulted as not SSIOBL for MW14 using the Test of Proportions.

MW15: Compliance well MW15 was installed in 2006 and was sampled for the first time in May 2007. The data are now included in the statistical analysis. No metals have been detected in MW15. Toluene is the only organic detected in MW15. No inorganics were detected during this latest sampling event. No constituents were detected during this latest sampling event.

MW23B: MW23B is a Set 2 well. It does not follow the Set 1 analysis schedule since it is too remote to be a monitoring point for the active portion of the landfill. It is analyzed for Appendix I organics plus the eight RCRA metals as a part of Set 2. However, it is statistically compared with Set 1 because it appears to be located downgradient of the active landfill.

Compliance well MW23B has shown above the detection limit inorganic concentrations for barium, beryllium, cadmium, chromium, copper, lead, selenium, silver, zinc, and mercury. Of these, arsenic exceeded NCGS in two sampling events with concentrations of 0.064 and 0.015 in October 1997 and October 1999, respectively. Chromium exceeded NCGS in five sampling events with concentrations of 0.025, 0.012, 0.0105, 0.025, and 0.104 in November 1994, March 1995, February 1996, March 1999, and October 1999, respectively. Lead exceeded NCGS in March and September 1995, February 1996, March and October 1999 with concentrations of 0.018, 0.027, 0.0157, 0.049, and 0.089 mg/l, respectively. Silver exceeded NCGS in one sampling event with a concentration of 0.105 in January 1995. Mercury also exceeded NCGS in one sampling event with a concentration

of 0.0017 mg/l in March 1999. No organics have been detected in MW23B. No inorganics were detected during this latest sampling event.

DATA SET 2

In April 2010, Set 2 monitoring wells were sampled, analyzed, and statistically evaluated for Appendix I organics and eight RCRA metals only as they monitor the older, closed-out portion of the landfill. Prior to September 1995, there are data for all Appendix I constituents. These data are reported, however analyses are performed for only the eight RCRA metals.

Upgradient Well (Background Well):

MW16: MW16 is a background well for MW32, MW33, MW34, and MW35 in this analysis. The detected inorganics in MW16 include barium, cadmium, chromium, cobalt, copper, lead, mercury, vanadium, and zinc. Of these, cadmium exceeded NCGS in six sampling events with concentrations of 0.0018, 0.006, 0.007, 0.002, 0.0075, and 0.0049 mg/l in October 1994, January, March, and September 1995, October 1996, and April 1997, respectively. Lead exceeded NCGS in two sampling events with a concentration of 0.02 and 0.039 ug/l in April 1997 and March 1999, respectively. Chromium exceeded NCGS in three sampling events with concentrations of 0.019, 0.062, and 0.019 ug/l in April 1997, March 1999, and October 1999, respectively. The only detected organic in MW16 was methylene chloride in January 1995, which exceeded NCGS with a concentration of 29.4 ug/l. No constituents were detected during the latest sampling event.

The following summarizes the history of detected concentrations for each metal constituent in MW16:

barium: Barium was detected in ten sampling events for MW16 with concentrations of 0.112, 0.194, 0.114, 0.147, 0.014, 0.099, 0.1, 0.281, 0.162, and 0.06 mg/l in October and November 1994, January and March 1995, October 1997, April and October 1998, March and October 1999, and April 2000, respectively.

cadmium: Cadmium was detected in eight sampling events for MW16 with concentrations of 0.0018, 0.001, 0.006, 0.007, 0.002, 0.0075, 0.0049, and 0.001 mg/l in October and November 1994, January, March, and September 1995, October 1996, April 1997, and March 1999, respectively.

chromium: Chromium was detected in eight sampling events for MW16 with concentrations of 0.004, 0.007, 0.005, 0.01, 0.019, 0.006, 0.008, 0.062 and 0.019 mg/l in October and November 1994, March, and September 1995, April 1997, April and October 1998, and March and October 1999, respectively.

copper: Copper was detected in four sampling events for MW16 with concentrations of 0.008, 0.009, 0.018, and 0.014 mg/l in October and November 1994 and January and March 1995, respectively.

lead: Lead was detected in ten sampling events for MW16 with concentrations of 0.002, 0.003, 0.004, 0.013, 0.012, 0.020, 0.002, 0.005, 0.039, 0.011, and 0.002 mg/l in October and November 1994, March and September 1995, October 1996, April and October 1997, October 1998, March and October 1999, and April 2000, respectively.

mercury: Mercury was detected in only one sampling event for MW16 with a concentration of 0.0002 mg/l in October 1998.

vanadium: Vanadium was detected in two sampling events for MW16 with concentrations of 0.005 and 0.012 mg/l in October and November 1994.

zinc: Zinc was detected in five sampling events for MW16 with concentrations of 0.012, 0.014, 0.015, 0.027, and 0.07 mg/l in October and November 1994, January and March 1995, and October 1996, respectively.

Downgradient Wells (Compliance Wells):

MW32: Compliance well MW32 has had detections for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, vanadium, and zinc. Of these, arsenic exceeded NCGS in one sampling event with a concentration of 0.015 mg/l in November 1994. Cadmium exceeded NCGS in two sampling events with concentrations of 0.004 and 0.025 mg/l in November 1994 and October 1998. Chromium exceeded NCGS in seven sampling events with concentrations of 0.133, 0.015, 0.022, 0.038, 0.041, 0.094, and 0.012 mg/l in November 1994, January and March 1995, March and October 1999, April 2003, and October 2003, respectively. Lead exceeded NCGS in nine sampling events with concentrations of 0.09, 0.02, 0.064, 0.033, 0.063, 0.029, 0.021, 0.024, 0.023 mg/l in November 1994, March 1995, March and October 1999, April 2003, April 2005, April 2006, April 2008, and October 2009, respectively. The only detected organic constituent for MW32 was MEK (2-butanone) with a concentration of 471 ug/l in January 1995. No constituents were detected during the latest sampling event.

MW33: Compliance well MW33 has had detections for barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, vanadium, zinc. Of these, cadmium exceeded NCGS in three sampling events with concentrations of 0.0021, 0.003, and 0.005 mg/l in October and November 1994 and January 1995, respectively. Lead exceeded NCGS in two sampling events with concentrations of 0.014 and 0.016 mg/l in January 1995 and October 1998, respectively. Chromium exceeded NCGS in three events with concentrations of 0.012, 0.014, and 0.012 mg/l in November 1994, January 1995, and October 1998, respectively. The only detected organic was cis-1,2-dichloroethene, detected in October 1998 with a concentration of 1.8 ug/l. No constituents were detected in MW33 during the latest sampling event.

MW34: This compliance well, installed in June 1996, was sampled for Appendix I organics and the eight RCRA metals in April 1998. Inorganics barium, chromium, lead, and mercury have been detected in MW34. No organics have been detected at this monitoring well. Chromium exceeded NCGS in three events with concentrations of 0.017, 0.031, and 0.012 in October 1998 and March and October 1999, respectively. Lead exceeded NCGS in four events with concentrations of 0.02, 0.025, 0.02, and 0.06 mg/l in October 1998, March and

October 1999, and April 2010, respectively. Only lead was detected during the latest sampling event.

The following result was obtained for the detected inorganic in MW34 in April 2010:

lead: Lead resulted as not SSIOBL for MW34 using the Test of Proportions.

MW35: This compliance well, installed in June 1996, was analyzed for Appendix I organics and the eight RCRA metals in April 1998. Inorganics arsenic, barium, cadmium, chromium, lead, mercury and selenium have been detected at MW35. Of these arsenic exceeded NCGS in three sampling events with concentrations of 0.0681, 0.021, and 0.016 mg/l in April 1997, October 1997, and October 1998, respectively. Barium has exceeded NCGS in three sampling events with concentrations of 2.06, 0.877, and 0.848 mg/l in April 1997, October 1997, and March 1999, respectively. Cadmium has exceeded NCGS in two sampling events with concentrations of 0.0119 and 0.208 mg/l in April and October 1997. Chromium has exceeded NCGS in four sampling events with concentrations of 0.0119, 0.208, 0.148, and 0.035 mg/l in April and October 1997, March 1999, and October 1999, respectively. Lead has exceeded NCGS in five sampling events with concentrations of 0.355, 0.105, 0.055, 0.110 and 0.043 mg/l in April and October 1997, October 1998, and March and October 1999, respectively. Mercury exceeded NCGS in one sampling event with a concentration of 2.06 mg/l in 0.002 mg/l in April 1997. No organics have been detected in MW35. Barium was the only constituent detected during the latest sampling event.

The following result was obtained for the detected inorganic in MW35 in April 2010:

barium: Barium resulted as not SSIOBL for MW35 using the Test of Proportions.

SET 3: SURFACE WATER MONITORING POINTS

Set 3 surface water monitoring points were sampled, analyzed, and statistically evaluated for Appendix I parameters only.

Upgradient Surface Water Monitoring Point (Background):

SWPT1: SWPT1 is an upgradient surface water monitoring point for SWPT2 and SWPT3. SWPT1 has had detected metal concentrations for arsenic, barium, cadmium, chromium, copper, and zinc. Arsenic exceeded NCGS in four sampling events with concentrations of 0.013, 0.047, 0.021, and 0.011 mg/l in September 1995, October 2008, and April and October 2009, respectively. Chromium exceeded NCGS in one sampling event with a concentration of 0.011 in April 1999. Lead exceeded NCGS with a concentration of 0.029 mg/l in April 2009. Vanadium exceeded 13B GPS with concentrations of 40 and 39 ug/l in October 2008 and April 2009, respectively, and with an *estimated* concentration of 18.8 ug/l in Ocotber 2009. The only organics detected at SWPT1 were toluene in October 1999 and chloromethane in October 2008. No constituents were detected at SWPT1 during this sampling event.

The following summarizes the detection history at SWPT1:

arsenic: Arsenic was detected in five sampling events for SWPT1 with concentrations of 0.007, 0.013, 0.047, 0.021, and 0.011 mg/l in October 1994, September 1995, October 2008, and April and October 2009, respectively.

barium: Barium was detected in six sampling events for SWPT1 with concentrations of 0.045, 0.033, 0.03, 0.029, 0.183, and 0.222 mg/l in October and November 1994, January and March 1995, October 2008, and April 2009, respectively.

cadmium: Cadmium was detected in two sampling events for SWPT1 with concentrations of 0.001 mg/l in September 1995 and October 2003.

chromium: Chromium was detected in two sampling event for SWPT1 with concentrations of 0.002 and 0.011 mg/l in October 1994 and April 2009.

cobalt: Cobalt was detected in three sampling events for SWPT1 with a concentration of 0.010, 0.031, and 0.037 mg/l in October 1999, October 2008, ands April 2009, respectively.

copper: Copper was detected in three sampling events for SWPT1 with concentrations of 0.006, 0.006, and 0.015 mg/l in October 1994, March 1995, and April 2009, respectively.

lead: Lead was detected in two sampling events for SWPT1 with concentrations of 0.01, and 0.029 mg/l in October 2008 and April 2009.

vanadium: Vanadium was detected in two sampling events for SWPT1 with concentrations of 0.04 and 0.039 mg/l in October 2008 and April 2009, respectively.

zinc: Zinc was detected in 10 sampling events for SWPT1 with concentrations of 0.011, 0.016, 0.021, 0.013, 0.22, 0.04, 0.011, 0.022, 0.033, and 0.073 mg/l in October and November 1994, January and March 1995, October 1997, October 1998, May 2007, April and October 2008, and April 2009, respectively.

chloromethane: Chloromethane was detected in one sampling event for SWPT1 with a concentration of 1.3 ug/l in October 2008.

toluene: Toluene was detected in one sampling event for SWPT1 with a concentration of 1.3 ug/l in October 1999.

Downgradient Surface Water Monitoring Points (Compliance):

SWPT2: SWPT2 is a compliance surface water monitoring point with previously detected metal concentrations for arsenic, barium, cadmium, chromium, copper, lead and zinc. Arsenic exceeded NCGS in one sampling event with a concentration of 0.012 in October 2008. Vanadium exceeded 13B GPS with *estimated* concentrations of 23.1, 7.1, and 7.4 ug/l in

October 2008, October 2009, and April 2010, respectively. Detected organics include toluene. Zinc and toluene were detected during the latest sampling event.

The following result was obtained for the detected inorganic in SWPT2 in April 2010:

zinc: Zinc resulted as not SSIOBL for SWPT2 using the Test of Proportions.

The following result was obtained for the detected organic in SWPT2 in April 2010:

toluene: Toluene resulted as not SSIOBL for SWPT2 using the Qualitative Test.

SWPT3: SWPT3 is a compliance surface water monitoring point with previously detected metal concentrations for arsenic, barium, cadmium, chromium, cobalt, copper, lead and zinc. Of these, arsenic exceeded NCGS in two sampling events with concentrations of 0.023 and 0.011 mg/l in September 1995 and October 1998, respectively. Cadmium exceeded NCGS in two sampling events with concentrations of 0.0045 and 0.006 mg/l in October 1994 and September 1995. Chromium exceeded NCGS in one sampling event with a concentration of 0.02 mg/l in April 1998. Lead exceeded NCGS in one sampling event with a concentration of 0.02 mg/l in October 1998. Vanadium exceeded 13B GPS with *estimated* values of 3.9, 13.7, and 4.7 ug/l in April 2008, October 2008, and April 2010, respectively. The previously detected organics for SWPT3 include benzene, cis-1,2-dichloroethene, ethylbenzene, toluene, vinyl chloride, and xylenes. Of these, benzene and vinyl chloride exceeded groundwater standards for the September 1995 sampling event with concentrations of 9.1 and 15 ug/l, respectively. No constituents were detected in SWPT3 during the latest sampling event.

SWPT4: SWPT4 is a compliance surface water monitoring point associated with the proposed new C&D landfill. It has been included in sampling events as of April 2010. It will be included in the Set 3 analysis once four background sampling events have been completed. No constituents were detected during this sampling event.

TABLES

Table 1
Static Water Elevations for Dunn/Erwin Landfill

Monitor Well	TOC Elevation	Ground Elevation	Screen Elevations		Static Water Elevations							
			Upper	Lower	9/-/86	########	########	10-Jan-95	17-Mar-95	28-Mar-95	27-Apr-95	03-Jun-95
MW1	235.67	234.27	no schematic		-	210.37	211.17	211.97	212.07	210.77	210.67	210.67
MW2	198.01	196.01	181.01	166.01	-	182.01	182.21	182.09	183.67	182.85	181.89	182.01
MW3	182.16	180.16	171.16	161.16	-	175.66	176.36	176.76	176.66	175.91	175.49	176.56
MW3R	181.52	179.44	168.52	158.52	-	-	-	-	-	-	-	-
MW4	178.72	176.12	167.12	157.12	-	173.72	174.12	173.02	175.22	173.82	173.89	175.02
MW5	188.75	186.75	167.75	152.75	-	173.45	173.15	172.75	172.75	172.08	172.25	173.75
MW6	208.60	205.60	no schematic		-	192.20	192.10	192.25	194.65	193.70	193.60	192.60
MW7	218.52	216.12	202.12	192.12	-	193.52	193.22	193.06	195.24	193.27	193.02	-
MW7B	219.33	216.10	204.10	189.10	-	-	-	-	-	-	-	-
MW8	218.71	216.01	207.01	192.01	-	201.01	200.71	200.51	202.56	201.21	201.70	-
MW9	219.43	217.17	202.17	187.17	-	-	-	-	-	-	-	-
MW10	214.54	211.57	203.57	188.57	-	-	-	-	-	-	-	-
MW11	203.41	200.88	188.41	178.41	-	-	-	-	-	-	-	-
MW12	172.48	169.95	162.48	152.48	-	-	-	-	-	-	-	-
MW13	187.39	184.80	154.39	139.39	-	-	-	-	-	-	-	-
MW14	170.91	168.59	162.91	142.91	-	-	-	-	-	-	-	-
MW15	190.18	187.80	183.18	178.18	-	-	-	-	-	-	-	-
MW16	195.61	194.20	188.54	170.54	188.20	192.81	191.91	190.47	189.81	190.61	190.61	191.11
MW23B	169.98	168.37	154.97	144.97	163.00	163.98	164.38	164.77	164.83	164.73	164.73	-
MW31	233.30	231.90	203.20	193.20	212.00	210.80	211.60	211.30	212.80	212.22	210.97	-
MW32	183.84	182.20	148.81	138.81	175.60	174.34	175.64	175.24	176.71	174.34	174.67	-
MW33	173.88	170.90	156.90	146.90	164.20	163.88	163.98	164.65	167.53	-	-	-
MW34**	194.06	191.12	no schematic		-	-	-	-	-	-	-	-
MW35**	181.77	179.31	no schematic		-	-	-	-	-	-	-	-
Averages						185.21	185.43	185.30	186.50	187.13	186.96	185.96

NOTES:

** MW34 and MW35 Ground Elevation and TOC elevation are estimated from the contour map (Fig. 1).

denotes day of highest groundwater level (of total days sampled) for the particular MW

denotes day of lowest groundwater level (of total days sampled) for the particular MW

Well 7B Installed Sept. 1995

MW3R replaced MW3 as of Oct. 2005.

Table 1
Static Water Elevations for Dunn/Erwin Landfill

Monitor Well	Static Water Elevations											
	07-Jul-95	21-Aug-95	9/13/95**	20-Sep-95	#######	09-Feb-96	03-Apr-96	########	15-Apr-97	29-Sep-97	########	23-Mar-99
MW1	215.67	209.92	211.07	209.87	211.37	213.25	212.10	211.10	210.12	210.42	210.56	212.21
MW2	184.01	181.81	181.82	181.91	181.51	183.89	183.07	182.52	182.01	183.71	182.36	183.91
MW3	178.16	175.96	176.05	176.16	175.96	177.25	177.22	177.80	176.03	176.77	176.62	176.91
MW3R	-	-	-	-	-	-	-	-	-	-	-	-
MW4	174.72	173.72	173.70	173.82	173.92	174.81	174.61	174.97	172.91	175.04	174.09	175.47
MW5	173.75	173.15	173.47	173.45	173.55	172.76	172.62	173.85	172.50	173.76	173.55	173.88
MW6	194.60	194.00	193.48	193.30	193.50	193.11	193.21	193.77	193.09	192.45	192.08	192.64
MW7	-	195.42	-	194.62	194.22	-	-	-	-	-	-	-
MW7B	-	-	197.08	194.93	194.53	194.71	195.25	195.64	195.11	193.55	193.78	192.86
MW8	201.31	201.91	201.46	201.36	201.11	201.39	201.68	201.36	201.31	200.97	201.67	202.79
MW9	-	-	-	-	-	-	-	-	-	-	-	-
MW10	-	-	-	-	-	-	-	-	-	-	-	-
MW11	-	-	-	-	-	-	-	-	-	-	-	-
MW12	-	-	-	-	-	-	-	-	-	-	-	-
MW13	-	-	-	-	-	-	-	-	-	-	-	-
MW14	-	-	-	-	-	-	-	-	-	-	-	-
MW15	-	-	-	-	-	-	-	-	-	-	-	-
MW16	191.31	193.01	193.26	183.51	191.61	-	189.96	193.29	190.70	192.79	192.96	190.01
MW23B	165.28	164.48	164.85	164.88	164.60	-	165.40	166.80	164.99	164.92	164.33	164.61
MW31	212.30	210.90	210.59	210.90	211.00	212.51	210.40	213.94	212.84	209.93	210.48	211.00
MW32	176.34	-	175.79	-	176.14	-	176.09	176.46	175.48	176.15	176.09	175.25
MW33	-	-	163.96	163.88	163.68	-	165.63	166.04	164.74	165.62	163.95	165.71
MW34**	-	-	-	-	-	-	-	190.88	188.76	190.93	190.90	189.20
MW35**	-	-	-	-	-	-	-	176.56	176.04	176.58	175.99	172.72
Averages	187.95	188.57	185.89	186.35	186.19	191.52	185.94	186.33	185.11	185.57	185.29	185.28

NOTES:

** MW34 and MW35 Ground Elevation and TOC elevation are estimated from the contour map (Fig. 1).

denotes day of highest groundwater level (of total days sampled) for the particular MW

denotes day of lowest groundwater level (of total days sampled) for the particular MW

Well 7B Installed Sept. 1995

MW3R replaced MW3 as of Oct. 2005.

Table 1
Static Water Elevations for Dunn/Erwin Landfill

Monitor Well	Static Water Elevations											
	########	20-Apr-00	########	19-Apr-01	15-16-Oct-01	03-Apr-02	########	30-Apr-03	########	21-Apr-04	########	26-Apr-05
MW1	210.50	211.70	210.43	210.41	210.92	211.41	210.83	211.57	211.22	210.99	211.53	211.42
MW2	184.02	183.67	183.69	183.49	183.34	183.62	183.46	183.01	183.25	182.82	183.14	183.52
MW3	177.37	176.85	176.70	176.70	176.95	177.21	177.28	177.84	177.77	177.66	177.88	-
MW3R	-	-	-	-	-	-	-	-	-	-	-	-
MW4	175.78	174.67	174.66	174.54	174.73	175.19	175.57	175.68	175.78	176.98	176.58	174.35
MW5	174.40	172.67	173.90	172.66	174.10	173.14	174.40	173.55	175.15	175.61	176.26	173.18
MW6	193.21	193.05	192.74	192.62	192.70	192.68	192.15	194.11	192.75	192.81	192.95	193.12
MW7	-	-	-	-	-	-	-	-	-	-	-	-
MW7B	193.02	191.46	193.38	192.96	193.87	193.46	192.67	195.73	194.22	194.32	194.44	194.32
MW8	202.77	203.01	209.31	203.09	209.72	203.06	202.65	203.98	203.00	202.96	202.53	202.95
MW9	-	-	-	192.81	193.60	193.21	192.23	195.59	193.78	194.01	194.12	194.09
MW10	-	-	-	193.16	193.28	192.98	192.04	195.54	192.90	193.53	193.65	194.06
MW11	-	-	-	-	-	-	-	-	-	-	-	-
MW12	-	-	-	-	-	-	-	-	-	-	-	-
MW13	-	-	-	-	-	-	-	-	-	-	-	-
MW14	-	-	-	-	-	-	-	-	-	-	-	-
MW15	-	-	-	-	-	-	-	-	-	-	-	-
MW16	192.91	190.49	188.19	186.60	188.28	186.74	188.05	187.78	188.61	187.06	189.07	187.37
MW23B	164.84	164.14	164.67	164.06	164.39	164.46	164.58	164.35	164.18	164.23	163.67	163.94
MW31	211.60	209.98	210.96	210.27	211.21	210.12	210.40	211.03	210.55	209.86	211.30	211.02
MW32	176.75	175.63	181.16	178.28	181.16	178.21	181.12	178.80	181.02	178.31	181.06	180.40
MW33	167.33	165.59	165.59	165.63	164.43	165.20	164.68	166.21	164.08	164.53	164.45	165.65
MW34**	191.34	189.21	191.09	189.03	191.01	189.38	191.41	189.38	190.85	188.92	190.89	189.14
MW35**	176.67	175.84	176.47	175.35	176.35	175.46	176.81	175.67	176.36	176.16	176.42	175.49
Averages	186.17	185.20	186.20	185.98	187.06	186.21	186.49	187.05	186.79	186.52	187.06	187.13

NOTES:

** MW34 and MW35 Ground Elevation and TOC elevation are estimated from the contour map (Fig. 1).

denotes day of highest groundwater level (of total days sampled) for the particular MW

denotes day of lowest groundwater level (of total days sampled) for the particular MW

Well 7B Installed Sept. 1995

MW3R replaced MW3 as of Oct. 2005.

Table 1
Static Water Elevations for Dunn/Erwin Landfill

Monitor Well	Static Water Elevations									
	########	19-Apr-06	10/23-24/06	02-May-07	########	23-Apr-08	########	22-Apr-09	########	########
MW1	208.53	209.70	209.41	209.64	208.61	209.79	209.76	210.34	209.74	210.58
MW2	181.59	182.07	181.99	182.33	179.47	183.19	182.31	182.59	181.62	183.08
MW3	-	-	-	-	-	-	-	-	-	-
MW3R	177.12	175.64	176.43	175.72	171.57	176.30	176.78	176.92	177.24	176.59
MW4	174.45	174.33	174.88	174.39	171.22	174.97	176.16	177.07	177.11	174.80
MW5	174.19	172.64	173.98	172.81	171.05	173.29	176.16	175.86	176.93	173.39
MW6	191.99	192.50	192.17	191.75	191.84	193.61	192.48	193.59	192.22	193.00
MW7	-	-	-	-	-	-	-	-	-	-
MW7B	193.02	193.29	193.23	194.32	192.73	193.19	193.45	194.89	193.58	194.78
MW8	201.41	202.18	201.95	202.15	201.13	203.23	202.68	202.92	201.80	202.86
MW9	192.51	192.89	192.73	194.02	192.21	193.01	193.09	194.71	193.16	207.84
MW10	191.95	192.66	191.46	193.70	191.86	194.30	193.08	194.81	192.75	203.75
MW11	-	185.43	184.74	184.36	183.89	185.99	184.89	185.33	184.58	185.12
MW12	-	166.16	165.65	166.23	163.37	166.25	166.59	167.80	167.22	167.38
MW13	-	162.71	163.71	162.48	162.48	162.60	164.06	162.78	164.16	162.64
MW14	-	161.61	164.44	163.61	160.85	163.61	164.77	163.42	164.24	163.02
MW15	-	182.45	178.36	180.58	-	182.70	180.04	181.07	178.75	181.02
MW16	186.87	186.75	188.36	187.21	187.62	188.23	188.67	187.28	188.71	187.31
MW23B	163.67	163.96	163.87	163.70	160.58	163.99	164.29	164.33	164.20	164.25
MW31	209.58	209.72	210.45	210.74	208.96	210.35	210.99	210.81	210.61	211.11
MW32	180.81	178.01	180.64	178.74	180.63	178.68	180.94	178.53	180.86	178.38
MW33	163.66	164.44	163.92	164.98	162.86	167.04	164.55	165.58	163.95	165.69
MW34**	190.85	189.13	190.96	189.29	190.97	189.81	191.55	189.54	191.25	189.35
MW35**	176.05	175.47	176.40	175.76	175.22	175.96	176.57	175.78	176.52	175.89
Averages	185.78	182.44	182.72	182.66	181.39	183.19	183.36	183.45	183.24	184.17

Table 1
Static Water Elevations for Dunn/Erwin Landfill

Monitor Well	Min	Max	Ave	Range	Std Dev
MW1	208.53	215.67	210.84	7.14	1.2
MW2	179.47	184.02	182.70	4.55	0.9
MW3	175.49	178.16	176.82	2.67	0.7
MW3R	171.57	177.24	176.03	5.67	1.7
MW4	171.22	177.11	174.74	5.89	1.1
MW5	171.05	176.93	173.65	5.88	1.2
MW6	191.75	194.65	192.94	2.90	0.7
MW7	193.02	195.42	193.95	2.40	0.9
MW7B	191.46	197.08	193.99	5.62	1.1
MW8	200.51	209.72	202.43	9.21	1.8
MW9	192.21	207.84	194.19	15.63	3.4
MW10	191.46	203.75	193.76	12.29	2.6
MW11	183.89	185.99	184.93		
MW12	163.37	167.80	166.29		
MW13	162.48	164.16	163.07		
MW14	160.85	164.77	163.29		
MW15	178.36	182.70	180.62		
MW16	183.51	193.29	189.42	9.78	2.3
MW23B	160.58	166.80	164.35	6.22	0.9
MW31	208.96	213.94	210.98	4.98	1.0
MW32	174.34	181.16	177.85	6.82	2.3
MW33	162.86	167.53	164.93	4.67	1.1
MW34**	188.76	191.55	190.19	2.79	1.0
MW35**	172.72	176.81	175.95	4.09	0.8
Averages	180.77	186.42	183.25	6.27	1.41

Range and Std Dev for wells MW11 - MW15 will be added after more data is available.

Table 1B
Piezometer Static Water Elevations for Dunn/Erwin Landfill

Piez. No.	TOC El.	Grnd. El.	Screen Elev. Upper	Screen Elev. Lower	Average Water Level	Date Sampled 3/19/1991	3/26/1991	4/12/1991	6/27/1991	3/28/1995	4/27/1995	7/7/1995	8/21/1995
40S	176.17	174.20	163.70	158.80	*168.12*	171.68	171.44	171.38	170.61	ND	ND	ND	168.77
41S	208.58	205.90	192.40	187.40	*192.72*	192.83	192.85	192.89	192.21	194.33	193.48	194.58	192.68
42S	168.05	166.00	152.40	142.50	*162.02*	163.03	162.81	162.32	162.63	163.15	163.30	163.55	164.25
44S	184.20	182.41	172.40	167.10	*179.60*	180.86	180.79	179.20	180.46	179.83	179.70	ND	180.90
45S	202.71	200.10	183.90	178.90	*180.74*	181.26	181.16	181.82	180.54	ND	181.51	ND	180.91
46S	220.77	218.20	197.70	187.70	*194.19*	193.17	194.14	193.23	193.76	195.87	195.27	196.77	195.17
47S	189.89	188.21	178.60	168.60	*181.84*	184.25	183.81	183.46	181.83	184.82	184.39	185.39	180.89
48S	208.27	207.20	195.10	185.10	*194.95*	197.22	197.01	196.85	196.41	197.52	196.52	198.57	196.37
GP-24-W	198.27	193.94	189.94	184.94	*190.33*	ND	ND	ND	ND	ND	ND	ND	ND
GP-25-W	200.69	196.45	191.45	186.45	*191.64*	ND	ND	ND	ND	ND	ND	ND	ND
GP-27-W	207.41	203.01	195.01	185.01	*190.95*	ND	ND	ND	ND	ND	ND	ND	ND
GP-28-W	204.26	199.79	194.79	184.79	*191.99*	ND	ND	ND	ND	ND	ND	ND	ND
GP-30-W	208.76	204.44	198.44	188.44	*192.84*	ND	ND	ND	ND	ND	ND	ND	ND
GP-31-W	199.44	195.24	190.24	185.24	*190.79*	ND	ND	ND	ND	ND	ND	ND	ND
GP-33-W	212.15	207.94	195.94	185.94	*192.04*	ND	ND	ND	ND	ND	ND	ND	ND
GP-34-W	210.15	205.77	197.77	187.77	*192.60*	ND	ND	ND	ND	ND	ND	ND	ND
GP-35-W	193.87	189.65	187.65	182.65	*189.56*	ND	ND	ND	ND	ND	ND	ND	ND
GP-36-W	211.71	207.34	195.34	185.34	*192.33*	ND	ND	ND	ND	ND	ND	ND	ND
GP-37-W	197.28	193.08	188.08	183.08	*188.21*	ND	ND	ND	ND	ND	ND	ND	ND
GP-38-W	215.79	211.09	206.09	196.09	*199.69*	ND	ND	ND	ND	ND	ND	ND	ND
PZ-50	205.53	204.00	195.53	185.53	*190.15*	ND	ND	ND	ND	ND	ND	ND	ND
PZ-51	179.75	177.24	168.75	153.75	*169.13*	ND	ND	ND	ND	ND	ND	ND	ND
PZ-52	198.49	197.00	185.49	175.49	*178.77*	ND	ND	ND	ND	ND	ND	ND	ND
PZ-53	201.27	198.96	186.27	181.27	*183.79*	ND	ND	ND	ND	ND	ND	ND	ND
Average Surficial	*NA*	*NA*	*NA*	*NA*	*185.77*	*183.04*	*183.00*	*182.64*	*182.31*	*185.92*	*184.88*	*187.77*	*182.49*
42D	167.96	165.80	126.60	116.70	*152.77*	148.23	148.08	148.07	147.68	ND	147.96	ND	147.06
44D	184.28	182.61	143.40	133.50	*173.13*	173.13	171.86	171.17	170.30	170.16	170.18	ND	170.48
46D	221.38	218.20	179.20	169.20	*193.10*	ND	ND	ND	ND	193.71	192.88	195.88	194.78
47D	190.10	189.16	145.20	135.20	*162.78*	163.39	161.38	161.13	161.03	ND	165.30	165.50	160.8
Average Deep	*NA*	*NA*	*NA*	*NA*	*173.28*	*161.58*	*160.44*	*160.12*	*159.67*	*181.93*	*169.08*	*180.69*	*168.28*
PB9	211.24		203.60	183.60	*190.31*	190.82	190.40	190.07	189.93	---	---	---	---

NOTE: Indicates LOW Water
Indicates HIGH Water
ND= No Data
Range is the difference in high and low water levels for piezometer

Table 1B
Piezometer Static Water Elevations for Dunn/Erwin Landfill

Piez. No.	Date Sampled 9/20/1995	10/19/1995	10/5/1998	3/23/1999	10/14/1999	4/20/2000	10/11/2000	4/17/2001	9/13/2001	10/15/2001	4/3/2002
40S	167.57	167.77	156.72	Dry	Dry	Dry	167.11	ND	ND	ND	ND
41S	192.18	194.28	191.13	192.22	193.93	192.76	192.58	ND	ND	ND	ND
42S	164.65	163.85	ND	ND	ND	ND	168.05	154.20	160.44	154.91	157.11
44S	180.3	180.4	172.88	180.95	181.85	181.18	180.01	180.91	181.31	180.67	181.06
45S	179.81	180.01	179.11	180.76	182.63	181.22	179.91	181.03	181.22	180.41	180.82
46S	194.47	193.97	192.15	192.37	196.41	ND	196.09	ND	ND	193.39	192.98
47S	179.49	179.89	180.42	184.53	ND	184.93	182.67	178.85	183.14	182.07	183.84
48S	196.27	196.07	ND	ND	ND	ND	ND	192.63	195.87	195.77	193.55
GP-24-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.09
GP-25-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.95
GP-27-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.10
GP-28-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.79
GP-30-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	191.61
GP-31-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.34
GP-33-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.74
GP-34-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	191.52
GP-35-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	189.35
GP-36-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.84
GP-37-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	187.98
GP-38-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	196.89
PZ-50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Surficial	*181.84*	*182.03*	*178.74*	*186.17*	*188.71*	*185.02*	*180.92*	*177.52*	*180.40*	*181.20*	*187.81*
42D	147.36	147.26	ND	ND	ND	ND	167.96	157.87	160.39	158.37	159.98
44D	171.18	171.28	179.57	173.11	174.02	172.59	174.03	172.17	173.61	174.32	173.55
46D	194.28	194.08	193.4	191.98	192.65	193.33	192.53	191.65	192.83	195.13	192.38
47D	161.10	160.60	162.22	161.64	ND	161.91	162.52	162.19	162.9	163.21	163.13
Average Deep	*168.48*	*168.31*	*178.40*	*175.58*	*183.34*	*175.94*	*174.26*	*170.97*	*172.43*	*172.76*	*172.26*
PB9	---	---	---	---	---	---	---	---	---	---	---

NOTE: Indicates LOW Water
Indicates HIGH Water
ND= No Data
Range is the difference in high and low water levels for piezometer

Table 1B
Piezometer Static Water Elevations for Dunn/Erwin Landfill

Piez. No.	Date Sampled 10/15/2002	4/30/2003	10/28/2003	4/21/2004	10/27/2004	4/25/2005	10/17/2005	4/18/2006	10/23/2006	5/1/2007	10/23/2007	4/22/2008
40S	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
41S	ND	194.23	191.58	192.27	192.35	193.22	190.71	191.80	191.58	192.58	190.37	194.38
42S	164.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
44S	179.82	ND	179.8	171.66	181.07	181.44	171.66	180.16	179.88	180.91	175.03	181.33
45S	179.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46S	192.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
47S	180.63	ND	182.31	178.88	182.44	179.08	176.58	182.58	179.18	183.18	174.92	184.86
48S	195.52	193.46	195.75	185.53	196.17	193.49	194.46	193.06	195.33	193.24	193.72	193.59
GP-24-W	ND	ND	191.11	189.76	191.59	190.04	189.72	190.78	190.57	191.51	189.47	189.73
GP-25-W	ND	192.89	191.81	192.04	192.07	192.33	190.55	191.31	190.95	191.94	189.63	192.84
GP-27-W	ND	ND	190.17	190.89	191.02	192.04	189.33	190.57	190.38	191.38	189.15	193.59
GP-28-W	ND	ND	192.29	192.65	192.58	192.97	190.85	191.76	191.23	192.63	190.17	193.00
GP-30-W	ND	195.21	192.19	192.84	192.95	193.76	190.98	192.16	191.92	193.24	190.84	194.76
GP-31-W	ND	ND	191.33	191.06	191.66	190.32	190.24	191.00	190.60	191.73	189.09	190.21
GP-33-W	ND	194.45	191.75	192.16	192.39	192.81	190.45	191.54	191.18	192.54	190.15	193.15
GP-34-W	ND	ND	192.38	193.04	193.19	193.75	191.11	192.22	191.96	192.33	190.82	194.21
GP-35-W	ND	ND	189.91	189.84	189.90	189.87	189.28	189.65	189.48	189.83	188.17	189.66
GP-36-W	ND	ND	192.25	192.80	192.91	193.35	191.00	191.95	191.70	193.04	190.58	193.52
GP-37-W	ND	188.73	188.17	188.79	188.23	188.66	187.62	188.50	188.01	188.52	185.58	189.09
GP-38-W	ND	200.37	200.19	199.75	199.98	199.79	199.90	199.67	199.91	199.78	199.84	199.73
PZ-50	ND	ND	ND	ND	ND	ND	ND	190.22	189.24	ND	ND	190.77
PZ-51	ND	ND	ND	ND	ND	ND	ND	168.96	169.52	168.33	168.43	169.22
PZ-52	ND	ND	ND	ND	ND	ND	ND	179.22	177.92	178.77	177.47	180.08
PZ-53	ND	ND	ND	ND	ND	ND	ND	183.71	183.28	183.61	182.36	185.02
Average Surficial	*181.86*	*194.19*	*190.81*	*189.62*	*191.28*	*191.06*	*189.03*	*188.54*	*188.19*	*188.90*	*186.62*	*189.64*
42D	152.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
44D	174.63	ND	174.82	172.87	175.47	173.57	173.75	173.05	174.63	173.21	172.90	173.19
46D	192.16	ND	193.54	192.82	193.72	192.95	192.19	192.03	192.45	193.07	192.05	192.16
47D	163.45	ND	163.65	163.06	164.16	163.49	163.15	163.22	163.80	163.25	162.13	162.99
Average Deep	*170.68*	*ND*	*177.34*	*176.25*	*177.78*	*176.67*	*176.36*	*176.10*	*176.96*	*176.51*	*175.69*	*176.11*
PB9	---	---	---	---	---	---	---	---	---	---	---	---

NOTE: Indicates LOW Water
Indicates HIGH Water
ND= No Data
Range is the difference in high and low water levels for piezometer

Table 1B
Piezometer Static Water Elevations for Dunn/Erwin Landfill

Piez. No.	10/15/2008	4/22/2009	10/21/2009	4/20/2010	RANGE	MIN	MAX
40S	ND	ND	ND	ND	14.96	156.72	171.68
41S	192.46	193.81	191.59	193.24	4.21	190.37	194.58
42S	ND	ND	ND	ND	13.85	154.20	168.05
44S	180.26	181.39	179.55	181.39	10.19	171.66	181.85
45S	ND	ND	ND	ND	3.52	179.11	182.63
46S	ND	ND	ND	ND	4.77	192.00	196.77
47S	179.75	183.91	177.38	184.20	10.47	174.92	185.39
48S	195.35	193.32	195.27	193.12	13.04	185.53	198.57
GP-24-W	189.91	189.97	190.68	192.17	2.70	189.47	192.17
GP-25-W	191.24	192.47	191.25	192.45	3.26	189.63	192.89
GP-27-W	191.11	192.60	190.22	191.82	4.44	189.15	193.59
GP-28-W	191.63	193.26	191.66	193.30	3.13	190.17	193.30
GP-30-W	192.79	194.50	192.10	193.96	4.37	190.84	195.21
GP-31-W	190.62	192.10	190.76	192.26	3.17	189.09	192.26
GP-33-W	191.69	193.50	191.39	193.49	4.30	190.15	194.45
GP-34-W	192.72	194.54	192.20	193.68	3.72	190.82	194.54
GP-35-W	189.43	189.86	189.52	189.96	1.79	188.17	189.96
GP-36-W	192.24	194.09	191.92	193.77	3.51	190.58	194.09
GP-37-W	188.29	188.71	188.08	188.79	3.51	185.58	189.09
GP-38-W	199.96	199.95	199.93	200.05	3.48	196.89	200.37
PZ-50	ND	190.38	ND	189.88	1.53	189.24	190.77
PZ-51	170.40	169.08	170.14	168.89	2.07	168.33	170.40
PZ-52	178.12	179.79	177.97	179.83	2.61	177.47	180.08
PZ-53	183.94	184.59	183.21	184.42	2.66	182.36	185.02
Average Surficial	*188.52*	*189.59*	*188.15*	*189.53*			
42D	ND	ND	ND	ND	20.90	147.06	167.96
44D	174.67	173.49	174.86	173.40	9.41	170.16	179.57
46D	192.77	193.51	192.91	194.66	4.23	191.65	195.88
47D	163.64	163.55	163.87	163.55	4.90	160.60	165.50
Average Deep	*177.03*	*176.85*	*177.21*	*177.20*			
PB9	---	---			0.89	189.93	190.82

NOTE: Indicates LOW Water
Indicates HIGH Water
ND= No Data
Range is the difference in high and low water levels for piezometer

Table 1C
Turbidity and Specific Conductivity Measurements
Dunn-Erwin MSW Landfill
Harnett County, North Carolina

	Apr-10			
	Turbidity	Temp.	pH	Conductivity
	NTU	*°C*	*pH*	*uMhos*
MW1	9.1	17	5.4	57
MW2	14	16	4.6	89
MW3R	11	15	5.1	129
MW4	6.1	15	4.5	66
MW5	18	16	6.2	157
MW6	260	15	5.4	302
MW7	85	17	4.8	157
MW8	24	16	4.3	122
MW9	950	17	5.2	226
MW10	85	17	5.6	238
MW11	45	15	4.9	48
MW12	34	15	4.7	68
MW13	9	16	6.3	133
MW14	50	15	5.5	127
MW15	27	14	5.2	31
MW16	15	15	6.3	256
MW23B	34	14	5.2	40
MW31	130	18	5.0	25
MW32	280	14	5.4	44
MW33	18	15	4.8	72
MW34	75	15	5.5	79
MW35	140	15	5.6	274
SWPT1	25	24	6.3	92
SWPT2	90	19	6.0	83
SWPT3	35	17	6.4	128
SWPT4	29	17	5.9	88

Table 2
Harnett County Dunn-Erwin Landfill
Groundwater Velocity Data

	Shallow Wells								Estimated Velocities* (cm/s)			
	K (cm/sec)*			n values*				i*, Oct. 95	=(1)*i/(3)	=(1)*i/(4)	=(2)*i/(5)	=(2)*i/(6)
MW	Note Ref.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(a)	(b)	(c)	(d)
MW1		7.9E-07	1.0E-03	0.1	0.2	0.3	0.4	3.3E-02	2.6E-07	1.3E-07	1.1E-04	8.3E-05
MW2		3.5E-05	1.0E-03	0.1	0.2	0.3	0.4	4.0E-02	1.4E-05	7.0E-06	1.3E-04	1.0E-04
MW3		1.2E-05	1.0E-03	0.1	0.2	0.3	0.4	8.0E-02	9.2E-06	4.6E-06	2.7E-04	2.0E-04
MW4		1.2E-05	1.0E-03	0.1	0.2	0.3	0.4	8.0E-02	9.9E-06	5.0E-06	2.7E-04	2.0E-04
MW5		4.0E-05	1.0E-03	0.1	0.2	0.3	0.4	1.0E-01	4.0E-05	2.0E-05	3.3E-04	2.5E-04
MW6		3.5E-05	1.0E-03	0.1	0.2	0.3	0.4	8.0E-02	2.8E-05	1.4E-05	2.7E-04	2.0E-04
MW7B		NA	1.0E-03	0.1	0.2	0.3	0.4	1.0E-02	NA	NA	3.3E-05	2.5E-05
MW8		2.0E-06	1.0E-03	0.1	0.2	0.3	0.4	1.3E-02	2.5E-07	1.3E-07	4.2E-05	3.1E-05
MW9		8.6E-04		0.25				1.5E-02	5.2E-05			
MW10		3.0E-06		0.25				1.7E-02	2.0E-07			
MW11		2.5E-05		0.25				4.8E-02	4.8E-06			
MW12		2.3E-05		0.25				4.4E-02	4.0E-06			
MW13		5.5E-06		0.25				6.1E-02	1.3E-06			
MW14		7.4E-07		0.25				6.5E-02	1.9E-07			
MW15		2.2E-05		0.25				2.6E-02	2.3E-06			
MW16		7.3E-08	1.0E-03	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA
MW23B		2.8E-04	1.0E-03	0.1	0.2	0.3	0.4	2.0E-02	5.6E-05	2.8E-05	6.7E-05	5.0E-05
MW31		3.2E-06	1.0E-03	0.1	0.2	0.3	0.4	2.5E-02	8.0E-07	4.0E-07	8.3E-05	6.3E-05
MW32		2.9E-06	1.0E-03	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA
MW33		4.1E-06	1.0E-03	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA
MW34		NA	NA	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA
MW35		NA	NA	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA

*** Equation** **V=Ki/n (cm/sec)**

Where V = Mean groundwater velocity as calculated by the above equation
i= Hydraulic gradient (unitless), see note (7)
n = Effective porosity (unitless), see notes (3) through (6)
k = hydraulic conductivity, see notes (1) and (2)

Notes:

NA refers to wells where data is unavailable
(1) In situ hydraulic conductivity as estimated by Withers and Ravenel, "Evaluation of Groundwater Flow and Direction", November 1994
(2) In situ site hydraulic conductivity as estimated for "Field Investigation of Contaminant Plume", October 1996, except
MW9 and MW10 installed in March 2001, for which values are obtained from the Titan report.
MW11 - MW15 calculated by ENSOL, Inc., August 2006 (based on slug tests).
(3) Estimated as the lower limit for effective porosity, n, by Withers and Ravenel, Evaluation of Groundwater Flow and Direction, November 1994
(4) Estimated as the upper limit for effective porosity, n, by Withers and Ravenel, Evaluation of Groundwater Flow and Direction, November 1994
(5) Lower limit of effective porosity estimation in "Field Investigation of Contaminant Plume", October 1996.
(6) Upper limit of effective porosity estimation in "Field Investigation of Contaminant Plume", October 1996.
n=0.25 used for MW11 - MW15, which is average of other values.
(7) Hydraulic gradient as estimated from groundwater contours based on groundwater data sampled in October 1995, except for wells MW11 - MW15, which were estimated from contours based on groundwater data from Jan 2007 - May 2008.

(a) Velocity as estimated using Withers and Ravenel estimated hydraulic conductivity (1), the lower limit for effective porosity (3), and the corresponding hydraulic gradient estimated from Figure 1.

(b) Velocity as estimated using Withers and Ravenel estimated hydraulic conductivity (1), the upper limit for effective porosity (4), and the corresponding hydraulic gradient estimated from Figure 1.

(c) Velocity as estimated using estimated hydraulic conductivity (2), the effective porosity (5), and the corresponding hydraulic gradient estimated from Figure 1.

(d) Velocity as estimated using estimated hydraulic conductivity (2), the effective porosity (6), and the corresponding hydraulic gradient estimated from Figure 1.

(e) For MW9 and MW10 installed in March 2001, velocity was computed for values obtained from the Titan report.

Table 3
Summary of Results of Various Statistical Analyses Detected Inorganics
April 2010

Constituent	Test Set 1[1]	Test Set 2[1]	Test Set 3	Monitoring Wells Indicating SSIOBL	Detected > MDL	Detected > SWSL
Arsenic	Qualitative	Qualitative	Qualitative	None	Yes	No
Barium	TOP[2], PIA[5]	TOP[2]	TOP[2]	MW6	Yes	Yes
Beryllium	TOP[2], PIA[5]	NA[3]	Qualitative	None	Yes	Yes
Cadmium	Qualitative	TOP[2]	Qualitative	None	Yes	Yes
Chromium	TOP[2]	TOP[2]	Qualitative	None	Yes	Yes
Cobalt	TOP[2], PIA[5]	NA[3]	Qualitative	MW6	Yes	Yes
Copper	TOP[2]	NA[3]	TOP[2]	None	Yes	No
Lead	TOP[2], PIA[5]	TOP[2]	Qualitative	None	Yes	Yes
Mercury	NA[4]	Qualitative	NA[4]	MW6, MW7	No	No
Nickel	Qualitative	NA[3]	Qualitative	None	Yes	No
Selenium	Qualitative	Qualitative	Qualitative	None	Yes	No
Silver	Qualitative	Qualitative	Qualitative	None	Yes	No
Thallium	NA[7]	NA[7]	NA[7]	NA[7]	Yes	No
Tin	Qualitative	NA[6]	NA[6]	None	NA[6]	NA[6]
Vanadium	TOP[2]	NA[3]	Qualitative	None	Yes	Yes
Zinc	TOP[2]	NA[3]	TOP[2]	None	Yes	Yes

Notes to Table 1:

1 MW23B, a Set 2 well, is statistically compared with Set 1 since it is located downgradient of the Set 1 wells.
2 Those constituents which were tested using the test of proportions were also reviewed qualitatively.
3 These constituents are not included in the 8 RCRA metals sampled for in data Set 2.
4 Mercury is included only in Data Set 2 and only annually in monitoring wells MW6, MW7,7B, and MW8 in Data Set 1.
5 The Prediction Interval Analysis is used when the TOP results are not accurate due to natural, statistically significant variations in concentrations which existed prior to the facility operation commencement.
6 Tin was not included in this sampling event.
7 Thallium was only detected at estimated values below SWSL; estimated values not included in statistical analysis.

Abbreviations

NP ANOVA = Non-Parametric ANOVA
TOP = Test of Proportions
PIA = Prediction Interval Analysis
NA = Not applicable
MDL = Method Detection Limit
SWSL = Solid Waste Section Limit

Table 4A
Summary of Appendices I & II Statistical Analysis Results
April 2010

Monitoring Well	Parameters Indicating SSIOBL	
	Inorganics	Organics
Set 1		
MW1 [1]	NA [1]	NA [1]
MW31 [1]	NA [1]	NA [1]
MW2	none	none
MW3	none	none
MW4	none	none
MW5	none	none
MW6	barium, cobalt, mercury	benzene, chlorobenzene, chloroethane, cis-1,2-dichloroethylene, 1,4-dichlorobenzene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, 1,1,1-trichloroethane, trichloroethylene, vinyl chloride, xylenes, dichlorodifluoromethane
MW7B	mercury	benzene, chloroethane, cis-1,2-dichloroethylene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, toluene, 1,1,1-trichloroethane, trichloroethylene, trichlorofluoromethane, vinyl chloride, xylenes, dichlorodifluoromethane
MW8	none	benzene, chloroethane, chloromethane, cis-1,2-dichloroethylene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene
MW9	none	benzene, chloroethane, cis-1,2-dichloroethylene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, vinyl chloride, xylenes
MW10	none	benzene, chloroethane, cis-1,2-dichloroethylene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, toluene, trichloroethylene, xylenes
MW11	none	none
MW12	none	none
MW13	none	none
MW14	none	none
MW15	none	toluene
MW23B [2]	none	none

1. NA indicates Not Applicable. These are upgradient wells or surface water points.
2. MW23B, a set 2 well, is statistically compared with Set 1 as it is located downgradient of the active landfill.
3. Set 2 was sampled, analyzed, and evaluated for Appendix I organics plus the eight (8) RCRA metals only. Set 3 was sampled, analyzed, and evaluated for Appendix I parameters only.

Table 4A cont.
Summary of Appendices I & II Statistical Analysis Results
April 2010

Monitoring Well	Parameters Indicating SSIOBL	
	Inorganics	Organics
Set 2 [3]		
MW16 [1]	NA [1]	NA [1]
MW32	none	none
MW33	none	none
MW34	none	none
MW35	none	none
Set 3 [3]		
SWPT1 [1]	NA [1]	NA [1]
SWPT2	none	none
SWPT3	none	toluene

1. NA indicates Not Applicable. These are upgradient wells or surface water points.
2. MW23B, a set 2 well, is statistically compared with Set 1 as it is located downgradient of the active landfill.
3. Set 2 was sampled, analyzed, and evaluated for Appendix I organics plus the eight (8) RCRA metals only. Set 3 was sampled, analyzed, and evaluated for Appendix I parameters only.

Table 4B
Notification Table
NC Groundwater Exceedances
Dunn-Erwin Landfill
Harnett County, North Carolina
April 2010

Constituent	2L STD	13B STD	SWSL	MW31	MW6	MW7B	MW8	MW9	MW10	MW34	SWPT2	SWPT3	Notes
Inorganics													
Chromium	10	--	10					17					Not SSIOBL, background
Lead	15	--	10		19	23				60			Not SSIOBL, background
Thallium	NE	0.28	5.5			*0.8*							Probable trace background
Vanadium	NE	3.5	25	*4.3*	*24.3*			39			*7.4*	*4.7*	Not SSIOBL, background
Organics													
Benzene	1	--	1		3.3	9.5	5.6	8.7	6.7				MW6 - MW10 are located within previously identified contaminant plume. This area is included in corrective action.
1,1-Dichloroethane	6	--	5			136	38		6.2				
Methylene chloride	5	--	1			79.9	31.4	37.7	15.4				
Tetrachloroethylene	0.7	--	1		4.9	4.9	5	1.2	1.1				
Trichloroethylene	3	--	1		4.8	10.2	4.3						
Vinyl chloride	0.03	--	1		6.2	6.4	1.6	7.9	3.9				

NE = Not Established
All units are in (ug/L) unless noted.
Values in italics are estimated.
Only wells with exceedances shown.
Only values > 2L or 13B STD shown.

Table 5
Groundwater Monitoring Well Data
Monitoring Well 2 (MW2)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW2 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	34	700	0	0
Benzene	0	34	1	0	0
Carbon Disulfide	0	34	700	0	0
Carbon Tetrachloride	0	34	0.3	0	0
Chlorobenzene	0	34	50	0	0
Chloroethane	0	34	3000	0	0
Chloromethane	0	34	3	0	0
1,2-Dibromoethane	0	34	0.02	0	0
1,4-Dichlorobenzene	0	34	6	0	0
cis-1,2-Dichloroethene	0	34	70	0	0
1,1-Dichloroethane	0	34	6	0	0
1,2-Dichloroethane	0	34	0.4	0	0
1,1-Dichloroethene	0	34	7	0	0
Methylene Chloride	0	34	5	0	0
Tetrachloroethylene	0	34	0.7	0	0
Toluene	0	34	600	0	0
1,1,1-Trichloroethane	0	34	200	0	0
Trichloroethylene	0	34	3	0	0
Trichloroflouromethane	0	34	2000	0	0
Vinyl Chloride	0	34	0.03	0	0
Xylenes	0	34	500	0	0
Dichlorodifluoromethane*	0	10	1000	0	0
Diethyphthalate*	13	10	6000	1	1.3
bis(2-ethylhexyl)phthalate*	0	10	3	0	0
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 3 (MW3)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW3 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	33	700	0	0
Benzene	0	33	1	0	0
Carbon Disulfide	64.4	33	700	1	1.95
Carbon Tetrachloride	0	34	0.3	0	0
Chlorobenzene	0	33	50	0	0
Chloroethane	0	33	3000	0	0
Chloromethane	0	33	3	0	0
1,2-Dibromoethane	0	33	0.02	0	0
1,4-Dichlorobenzene	0	33	6	0	0
cis-1,2-Dichloroethene	0	33	70	0	0
1,1-Dichloroethane	0	33	6	0	0
1,2-Dichloroethane	0	33	0.4	0	0
1,1-Dichloroethene	0	33	7	0	0
Methylene Chloride	0	33	5	0	0
Tetrachloroethylene	0	33	0.7	0	0
Toluene	0	33	600	0	0
1,1,1-Trichloroethane	0	33	200	0	0
Trichloroethylene	0	33	3	0	0
Trichloroflouromethane	0	33	2000	0	0
Vinyl Chloride	0	33	0.03	0	0
Xylenes	0	33	500	0	0
Dichlorodifluoromethane*	0	10	1000	0	0
Diethyphthalate*	0	10	6000	0	0
bis(2-ethylhexyl)phthalate*	0	10	3	0	0
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 4 (MW4)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW4 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	34	700	0	0
Benzene	0	34	1	0	0
Carbon Disulfide	48.8	34	700	3	1.44
Carbon Tetrachloride	0	34	0.3	0	0
Chlorobenzene	0	34	50	0	0
Chloroethane	0	34	3000	0	0
Chloromethane	0	34	3	0	0
1,2-Dibromoethane	0	34	0.02	0	0
1,4-Dichlorobenzene	0	34	6	0	0
cis-1,2-Dichloroethene	0	34	70	0	0
1,1-Dichloroethane	0	34	6	0	0
1,2-Dichloroethane	0	34	0.4	0	0
1,1-Dichloroethene	0	34	7	0	0
Methylene Chloride	0	34	5	0	0
Tetrachloroethylene	0	34	0.7	0	0
Toluene	0	34	600	0	0
1,1,1-Trichloroethane	0	34	200	0	0
Trichloroethylene	0	34	3	0	0
Trichloroflouromethane	0	34	2000	0	0
Vinyl Chloride	0	34	0.03	0	0
Xylenes	0	34	500	0	0
Dichlorodifluoromethane*	0	10	1000	0	0
Diethyphthalate*	26	10	6000	2	2.60
bis(2-ethylhexyl)phthalate*	0	10	3	0	0
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 5 (MW5)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW5 Detects		NCGS
SAMPLING DATES	SUM	Events	(ug/l)
ORGANICS (ug/l)			
Acetone	0	34	700
Benzene	0	34	1
Carbon Disulfide	37.3	34	700
Carbon Tetrachloride	0	34	0.3
Chlorobenzene	0	34	50
Chloroethane	0	34	3000
Chloromethane	0	34	3
1,2-Dibromoethane	0	34	0.02
1,4-Dichlorobenzene	0	34	6
cis-1,2-Dichloroethene	0	34	70
1,1-Dichloroethane	0	34	6
1,2-Dichloroethane	0	34	0.4
1,1-Dichloroethene	0	34	7
Methylene Chloride	0	34	5
Tetrachloroethylene	0	34	0.7
Toluene	0	34	600
1,1,1-Trichloroethane	0	34	200
Trichloroethylene	0	34	3
Trichloroflouromethane	0	34	2000
Vinyl Chloride	0	34	0.03
Xylenes	0	34	500
Dichlorodifluoromethane*	0	10	1000
Diethyphthalate*	0	10	6000
bis(2-ethylhexyl)phthalate*	0	10	3
NOTES			

Table 5
Groundwater Monitoring Well Data
Monitoring Well 6 (MW6)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW6 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	170	35	700	1	4.86
Benzene	36.5	35	1	8	1.04
Carbon Disulfide	7.9	35	700	1	0.23
Carbon Tetrachloride	2.9	35	0.3	1	0.08
Chlorobenzene	135.6	35	50	7	3.87
Chloroethane	850.8	35	3000	17	24.31
Chloromethane	46	35	3	1	1.31
1,2-Dibromoethane	0	35	0.02	0	0.00
1,4-Dichlorobenzene	51.7	35	6	9	1.48
cis-1,2-Dichloroethene	217	35	70	14	6.20
1,1-Dichloroethane	1412.3	35	6	30	40.35
1,2-Dichloroethane	0	35	0.4	0	0.00
1,1-Dichloroethene	84.6	35	7	2	2.42
Methylene Chloride	1361.2	35	5	29	38.89
Tetrachloroethylene	85	35	0.7	16	2.43
Toluene	0	35	600	0	0.00
1,1,1-Trichloroethane	94.5	35	200	9	2.70
Trichloroethylene	184.14	35	3	24	5.26
Trichloroflouromethane	0	35	2000	0	0.00
Vinyl Chloride	79.3	35	0.03	9	2.27
Xylenes (total)	437	35	500	13	12.49
Dichlorodifluoromethane*	42.1	21	1000	7	2.00
Diethyphthalate*	0	21	6000	0	0.00
bis(2-ethylhexyl)phthalate*	6.8	21	3	1	0.32
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 7,7B (MW7,7B)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW7,7B Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	33	700	0	0
Benzene	43.4	33	1	8	1.315152
Carbon Disulfide	0	33	700	0	0
Carbon Tetrachloride	0	33	0.3	0	0
Chlorobenzene	22.2	33	50	5	0.672727
Chloroethane	783.2	33	3000	26	23.73333
Chloromethane	64	33	3	1	1.939394
1,2-Dibromoethane	0	33	0.02	0	0
1,4-Dichlorobenzene	6	33	6	4	0.181818
cis-1,2-Dichloroethene	43.6	33	70	5	1.321212
1,1-Dichloroethane	3799.3	33	6	31	115.1303
1,2-Dichloroethane	8.7	33	0.4	1	0.263636
1,1-Dichloroethene	188.6	33	7	20	5.715152
Methylene Chloride	1697.8	33	5	25	51.44848
Tetrachloroethylene	35.1	33	0.7	7	1.063636
Toluene	76.8	33	600	7	2.327273
1,1,1-Trichloroethane	600.7	33	200	17	18.20303
Trichloroethylene	175.2	33	3	22	5.309091
Trichloroflouromethane	138.4	33	2000	17	4.193939
Vinyl Chloride	39.2	33	0.03	7	1.187879
Xylenes	63.9	33	500	9	1.936364
Dichlorodifluoromethane*	772.4	21	1000	18	36.78095
Diethyphthalate*	13	21	6000	1	0.619048
bis(2-ethylhexyl)phthalate*	24	21	3	1	1.142857
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 8 (MW8)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW8 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	35	700	0	0.00
Benzene	45.1	35	1	8	1.29
Carbon Disulfide	0	35	700	0	0.00
Carbon Tetrachloride	0	35	0.3	0	0.00
Chlorobenzene	0	35	50	0	0.00
Chloroethane	268.6	35	3000	14	7.67
Chloromethane	119.1	35	3	3	3.40
1,2-Dibromoethane	0	35	0.02	0	0.00
1,4-Dichlorobenzene	9.4	35	6	6	0.27
cis-1,2-Dichloroethene	87.2	35	70	7	2.49
1,1-Dichloroethane	1387.3	35	6	28	39.64
1,2-Dichloroethane	0	35	0.4	0	0.00
1,1-Dichloroethene	81	35	7	1	2.31
Methylene Chloride	1335.9	35	5	25	38.17
Tetrachloroethylene	42.8	35	0.7	8	1.22
Toluene	0	35	600	0	0.00
1,1,1-Trichloroethane	0	35	200	0	0.00
Trichloroethylene	86.4	35	3	12	2.47
Trichloroflouromethane	0	35	2000	0	0.00
Vinyl Chloride	5.4	35	0.03	4	0.15
Xylenes	5	35	500	1	0.14
Dichlorodifluoromethane*	20.4	21	1000	4	0.971429
Diethyphthalate*	0	21	6000	0	0
bis(2-ethylhexyl)phthalate*	0	21	3	0	0
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 9 (MW9)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW9 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	19	700	0	0
Benzene	114.8	19	1	15	6.042105
Carbon Disulfide	0	19	700	0	0
Carbon Tetrachloride	0	19	0.3	0	0
Chlorobenzene	231.6	19	50	17	12.18947
Chloroethane	423.2	19	3000	16	22.27368
Chloromethane	189	19	3	1	9.947368
1,2-Dibromoethane	14	19	0.02	1	0.736842
1,4-Dichlorobenzene	16.2	19	6	6	0.852632
cis-1,2-Dichloroethene	108.8	19	70	10	5.726316
1,1-Dichloroethane	1709.6	19	6	16	89.97895
1,2-Dichloroethane	11.8	19	0.4	1	0.621053
1,1-Dichloroethene	0	19	7	0	0
Methylene Chloride	1918.2	19	5	17	100.9579
Tetrachloroethylene	29	19	0.7	9	1.526316
Toluene	0	19	600	0	0
1,1,1-Trichloroethane	0	19	200	0	0
Trichloroethylene	120.4	19	3	18	6.336842
Trichloroflouromethane	0	19	2000	0	0
Vinyl Chloride	50.8	19	0.03	7	2.673684
Xylenes	174.8	19	500	10	9.2
Dichlorodifluoromethane*	0	3	1000	0	NA
Diethyphthalate*	0	3	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	3	3	0	NA
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 10 (MW10)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW10 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	3279	19	700	5	172.5789
Benzene	54.1	19	1	10	2.847368
Carbon Disulfide	0	19	700	0	0
Carbon Tetrachloride	0	19	0.3	0	0
Chlorobenzene	133.1	19	50	12	7.005263
Chloroethane	285.4	19	3000	9	15.02105
Chloromethane	0	19	3	0	0
1,2-Dibromoethane	0	19	0.02	0	0
1,4-Dichlorobenzene	16.2	19	6	6	0.852632
cis-1,2-Dichloroethene	259.4	19	70	18	13.65263
1,1-Dichloroethane	1347.2	19	6	18	70.90526
1,2-Dichloroethane	0	19	0.4	0	0
1,1-Dichloroethene	0	19	7	0	0
Methylene Chloride	936.5	19	5	15	49.28947
Tetrachloroethylene	58.3	19	0.7	7	3.068421
Toluene	25.3	19	600	3	1.331579
1,1,1-Trichloroethane	0	19	200	0	0
Trichloroethylene	40.8	19	3	7	2.147368
Trichloroflouromethane	0	19	2000	0	0
Vinyl Chloride	26.5	19	0.03	7	1.394737
Xylenes	145.9	19	500	9	7.678947
Dichlorodifluoromethane*	0	3	1000	0	NA
Diethyphthalate*	0	3	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	3	3	0	NA
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 11 (MW11)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW11 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	7	700	0	0
Benzene	0	7	1	0	0
Carbon Disulfide	0	7	700	0	0
Carbon Tetrachloride	0	7	0.3	0	0
Chlorobenzene	0	7	50	0	0
Chloroethane	0	7	3000	0	0
Chloromethane	0	7	3	0	0
1,2-Dibromoethane	0	7	0.02	0	0
1,4-Dichlorobenzene	0	7	6	0	0
cis-1,2-Dichloroethene	0	7	70	0	0
1,1-Dichloroethane	0	7	6	0	0
1,2-Dichloroethane	0	7	0.4	0	0
1,1-Dichloroethene	0	7	7	0	0
Methylene Chloride	0	7	5	0	0
Tetrachloroethylene	0	7	0.7	0	0
Toluene	0	7	600	0	0
1,1,1-Trichloroethane	0	7	200	0	0
Trichloroethylene	0	7	3	0	0
Trichloroflouromethane	0	7	2000	0	0
Vinyl Chloride	0	7	0.03	0	0
Xylenes	0	7	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethyphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 12 (MW12)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW12 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	7	700	0	0
Benzene	0	7	1	0	0
Carbon Disulfide	0	7	700	0	0
Carbon Tetrachloride	0	7	0.3	0	0
Chlorobenzene	0	7	50	0	0
Chloroethane	0	7	3000	0	0
Chloromethane	0	7	3	0	0
1,2-Dibromoethane	0	7	0.02	0	0
1,4-Dichlorobenzene	0	7	6	0	0
cis-1,2-Dichloroethene	0	7	70	0	0
1,1-Dichloroethane	0	7	6	0	0
1,2-Dichloroethane	0	7	0.4	0	0
1,1-Dichloroethene	0	7	7	0	0
Methylene Chloride	0	7	5	0	0
Tetrachloroethylene	0	7	0.7	0	0
Toluene	0	7	600	0	0
1,1,1-Trichloroethane	0	7	200	0	0
Trichloroethylene	0	7	3	0	0
Trichloroflouromethane	0	7	2000	0	0
Vinyl Chloride	0	7	0.03	0	0
Xylenes	0	7	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethyphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 13 (MW13)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW13 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	7	700	0	0
Benzene	0	7	1	0	0
Carbon Disulfide	0	7	700	0	0
Carbon Tetrachloride	0	7	0.3	0	0
Chlorobenzene	0	7	50	0	0
Chloroethane	0	7	3000	0	0
Chloromethane	0	7	3	0	0
1,2-Dibromoethane	0	7	0.02	0	0
1,4-Dichlorobenzene	0	7	6	0	0
cis-1,2-Dichloroethene	0	7	70	0	0
1,1-Dichloroethane	0	7	6	0	0
1,2-Dichloroethane	0	7	0.4	0	0
1,1-Dichloroethene	0	7	7	0	0
Methylene Chloride	0	7	5	0	0
Tetrachloroethylene	0	7	0.7	0	0
Toluene	0	7	600	0	0
1,1,1-Trichloroethane	0	7	200	0	0
Trichloroethylene	0	7	3	0	0
Trichloroflouromethane	0	7	2000	0	0
Vinyl Chloride	0	7	0.03	0	0
Xylenes	0	7	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethyphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 14 (MW14)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW14 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	7	700	0	0
Benzene	0	7	1	0	0
Carbon Disulfide	0	7	700	0	0
Carbon Tetrachloride	0	7	0.3	0	0
Chlorobenzene	0	7	50	0	0
Chloroethane	0	7	3000	0	0
Chloromethane	1	7	3	1	0.142857
1,2-Dibromoethane	0	7	0.02	0	0
1,4-Dichlorobenzene	0	7	6	0	0
cis-1,2-Dichloroethene	0	7	70	0	0
1,1-Dichloroethane	0	7	6	0	0
1,2-Dichloroethane	0	7	0.4	0	0
1,1-Dichloroethene	0	7	7	0	0
Methylene Chloride	0	7	5	0	0
Tetrachloroethylene	0	7	0.7	0	0
Toluene	0	7	600	0	0
1,1,1-Trichloroethane	0	7	200	0	0
Trichloroethylene	0	7	3	0	0
Trichloroflouromethane	0	7	2000	0	0
Vinyl Chloride	0	7	0.03	0	0
Xylenes	0	7	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethyphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 15 (MW15)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW15 Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	6	700	0	0
Benzene	0	6	1	0	0
Carbon Disulfide	0	6	700	0	0
Carbon Tetrachloride	0	7	0.3	0	0
Chlorobenzene	0	6	50	0	0
Chloroethane	0	6	3000	0	0
Chloromethane	0	6	3	0	0
1,2-Dibromoethane	0	6	0.02	0	0
1,4-Dichlorobenzene	0	6	6	0	0
cis-1,2-Dichloroethene	0	6	70	0	0
1,1-Dichloroethane	0	6	6	0	0
1,2-Dichloroethane	0	6	0.4	0	0
1,1-Dichloroethene	0	6	7	0	0
Methylene Chloride	0	6	5	0	0
Tetrachloroethylene	0	6	0.7	0	0
Toluene	167.7	6	600	4	27.95
1,1,1-Trichloroethane	0	6	200	0	0
Trichloroethylene	0	6	3	0	0
Trichloroflouromethane	0	6	2000	0	0
Vinyl Chloride	0	6	0.03	0	0
Xylenes	0	6	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethyphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 5
Groundwater Monitoring Well Data
Monitoring Well 23B (MW23B)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW23B Detects		NCGS	# Detects	Averages
SAMPLING DATES	SUM	Events	(ug/l)		
ORGANICS (ug/l)					
Acetone	0	33	700	0	0
Benzene	0	33	1	0	0
Carbon Disulfide	0	33	700	0	0
Carbon Tetrachloride	0	33	0.3	0	0
Chlorobenzene	0	33	50	0	0
Chloroethane	0	33	3000	0	0
Chloromethane	0	33	3	0	0
1,2-Dibromoethane	0	33	0.02	0	0
1,4-Dichlorobenzene	0	33	6	0	0
cis-1,2-Dichloroethene	0	33	70	0	0
1,1-Dichloroethane	0	33	6	0	0
1,2-Dichloroethane	0	33	0.4	0	0
1,1-Dichloroethene	0	33	7	0	0
Methylene Chloride	0	33	5	0	0
Tetrachloroethylene	0	33	0.7	0	0
Toluene	0	33	600	0	0
1,1,1-Trichloroethane	0	33	200	0	0
Trichloroethylene	0	33	3	0	0
Trichloroflouromethane	0	33	2000	0	0
Vinyl Chloride	0	33	0.03	0	0
Xylenes	0	33	500	0	0
Dichlorodifluoromethane*	0	2	1000	0	0
Diethyphthalate*	0	2	6000	0	0
bis(2-ethylhexyl)phthalate*	0	2	3	0	0
NOTES					

Table 5
Total Downgradient Detects and Averages
Set 1 Data
Dunn-Erwin MSW Landfill
Harnett County, NC

CONSTITUENT	# Detects	Average Conc	NCGS	Avg/NCGS
			(ug/l)	
ORGANICS (ug/l)				
Acetone	6	11.83	700	1.69E-02
Benzene	49	0.84	1	**0.84**
Carbon Disulfide	7	0.31	700	4.49E-04
Carbon Tetrachloride	1	0.00	0.3	0.00E+00
Chlorobenzene	41	1.58	50	0.03
Chloroethane	82	6.20	3000	2.07E-03
Chloromethane	7	1.12	3	0.37
1,2-Dibromoethane	1	0.05	0.02	2
1,4-Dichlorobenzene	31	0.24	6	4.04E-02
cis-1,2-Dichloroethene	54	1.96	70	0.03
1,1-Dichloroethane	123	23.73	6	**3.96**
1,2-Dichloroethane	2	0.06	0.4	0.15
1,1-Dichloroethene	23	0.70	7	0.10
Methylene Chloride	111	18.58	5	**3.72**
Tetrachloroethylene	47	0.62	0.7	**0.89**
Toluene	14	2.11	600	3.51E-03
1,1,1-Trichloroethane	26	1.39	200	0.01
Trichloroethylene	83	1.43	3	**0.48**
Trichlorofluoromethane	17	0.28	2000	1.40E-04
Vinyl Chloride	34	0.51	0.03	**17.1**
Xylenes	42	2.10	500	4.19E-03
Dichlorodifluoromethane**	29	4.97	1000	4.97E-03
Diethyphthalate**	4	0.56	6000	9.41E-05
bis(2-ethylhexyl)phthalate**	2	0.18	3	0.06

Table 5
Average Concentrations in Plume Wells
MW-6, MW-7B, MW-8, MW-9, and MW-10
Dunn-Erwin MSW Landfill
Harnett County, NC

CONSTITUENT	# Detects	Average Conc	NCGS	Avg/NCGS
ORGANICS (ug/l)				
Acetone	6	35.49	700	5.07E-02
Benzene	49	2.51	1	**2.51**
Carbon Disulfide	1	0.05	700	6.45E-05
Carbon Tetrachloride	1	0.00	0.3	0.00E+00
Chlorobenzene	41	4.75	50	0.09
Chloroethane	82	18.60	3000	0.01
Chloromethane	6	3.32	3	1.11
1,2-Dibromoethane	1	0.15	0.02	7.37
1,4-Dichlorobenzene	31	0.73	6	1.21E-01
cis-1,2-Dichloroethene	54	5.88	70	0.08
1,1-Dichloroethane	123	71.20	6	**11.87**
1,2-Dichloroethane	2	0.18	0.4	0.44
1,1-Dichloroethene	23	2.09	7	0.30
Methylene Chloride	111	55.75	5	**11.15**
Tetrachloroethylene	47	1.86	0.7	**2.66**
Toluene	10	0.73	600	1.22E-03
1,1,1-Trichloroethane	26	4.18	200	0.02
Trichloroethylene	83	4.30	3	**1.43**
Trichlorofluoromethane	17	0.84	2000	4.19E-04
Vinyl Chloride	34	1.54	0.03	**51.18**
Xylenes	42	6.29	500	0.01
Dichlorodifluoromethane**	29	13.25	1000	0.01
Diethyphthalate**	1	0.21	6000	3.44E-05
bis(2-ethylhexyl)phthalate**	2	0.49	3	0.16

Table 6
Comparison of Standards, SWSL, Current and Historic Detection Limits
For selected Constituents
Dunn-Erwin Landfill
Harnett County, North Carolina
Apr-10

Constituent	2L STD	13B STD	SWSL	2010 MDL	2006 DL
Inorganics					
Antimony	NE	1.4	6	0.22	30
Arsenic	10	--	10	0.04	10
Barium	700	--	100	0.03	500
Beryllium	NE	4	1	0.02	2
Cadmium	2	--	1	0.02	1
Chromium	10	--	10	0.03	10
Cobalt	NE	70	10	0.1	10
Copper	1000	--	10	0.03	200
Lead	15	--	10	0.01	10
Nickel	100	--	50	0.05	50
Selenium	20	--	10	0.32	20
Silver	20	--	10	0.03	10
Thallium	NE	0.28	5.5	0.05	10
Vanadium	NE	3.5	25	0.03	40
Zinc	1000	--	10	0.08	50
Cyanide	70	--	10	5	50
Mercury	1	--	0.2	0.08	1
Tin	NE	2100	100	0.08	100
Organics					
Acetone	700	--	100	9.06	100
Benzene	1	--	1	0.24	5
Carbon disulfide	700	--	100	0.23	100
Carbon Tetrachloride	0.3	--	1	0.22	10
Chlorobenzene	50	--	3	0.3	5
Chloroethane	3000	--	10	0.48	10
Methyl chloride	3	--	1	0.77	10
1,2-Dibromoethane	0.02	--	1	0.26	5
1,4-Dichlorobenzene	6	--	1	0.39	5
cis-1,2-Dichloroethene	70	--	5	0.25	5
1,1-Dichloroethane	6	--	5	0.2	5
1,2-Dichloroethane	0.4	--	1	0.27	5
1,1-Dichloroethene	7	--	5	0.17	5
Methylene chloride	5	--	1	0.64	10
Tetrachloroethylene	0.7	--	1	0.17	5
Toluene	600	--	1	0.23	5
1,1,1-Trichloroethane	200	--	1	0.19	5
Trichloroethylene	3	--	1	0.23	5
Trichlorofluoromethane	2000	--	1	0.24	5
Vinyl chloride	0.03	--	1	0.63	10
Xylenes (total)	500	--	5	0.68	5

NE = Not Established
All units are in (ug/L) unless noted.

FIGURES

CLAYTON
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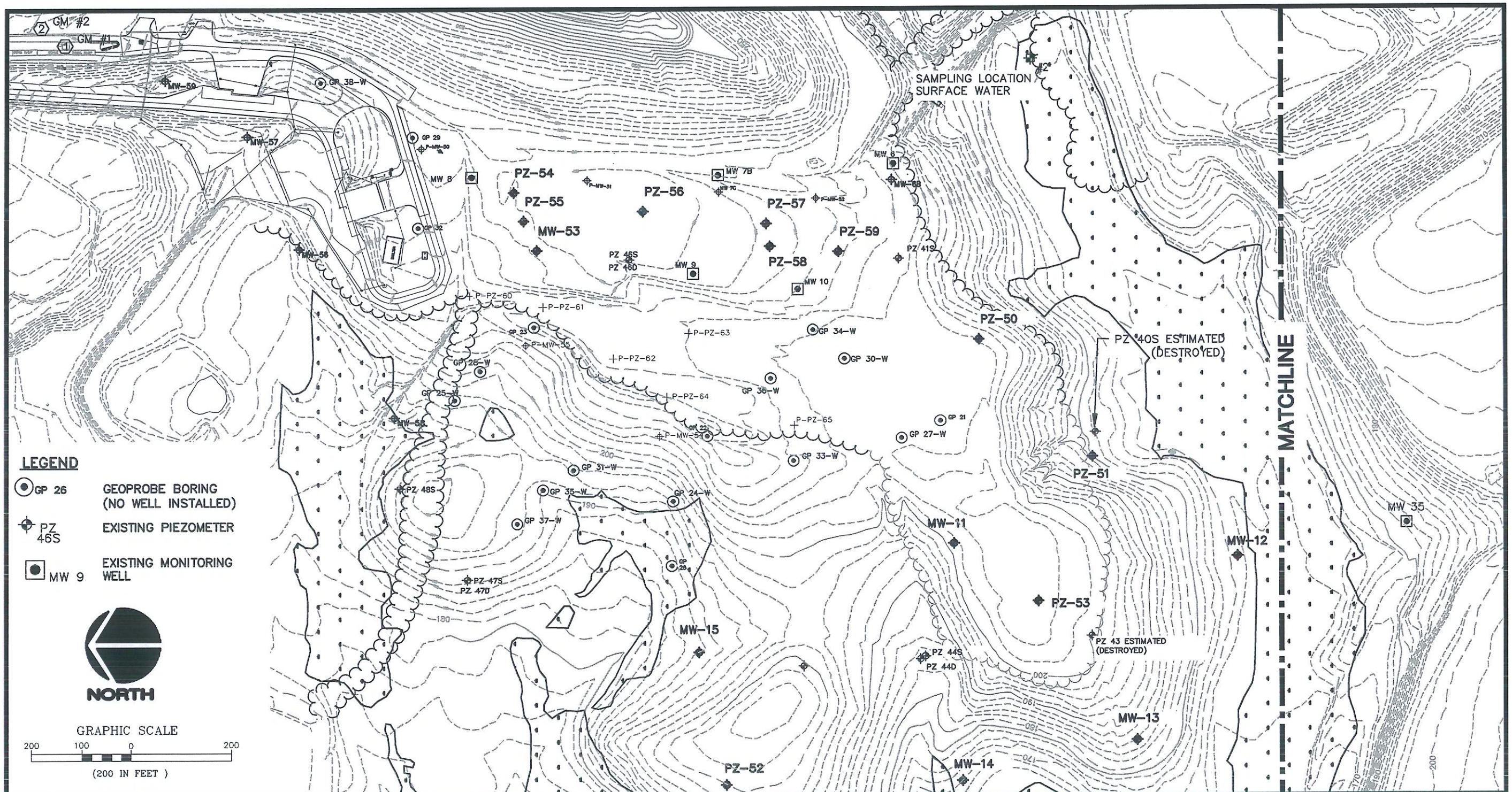
DUNN-ERWIN
LANDFILL

LANDFILL LAYOUT

HARNETT COUNTY NORTH CAROLINA

PROJECT #	: 3002
PROJ. ENG.	: RS
DRAWN BY	: SBK
FIELD BK.	: –
CAD FILE	: 3035Mas Exhibit.DWG
SCALE	: 1" = 300'
DATE	: 21 OCTOBER 2010
SHEET #	: 1 of 1



CLAYTON Engineering
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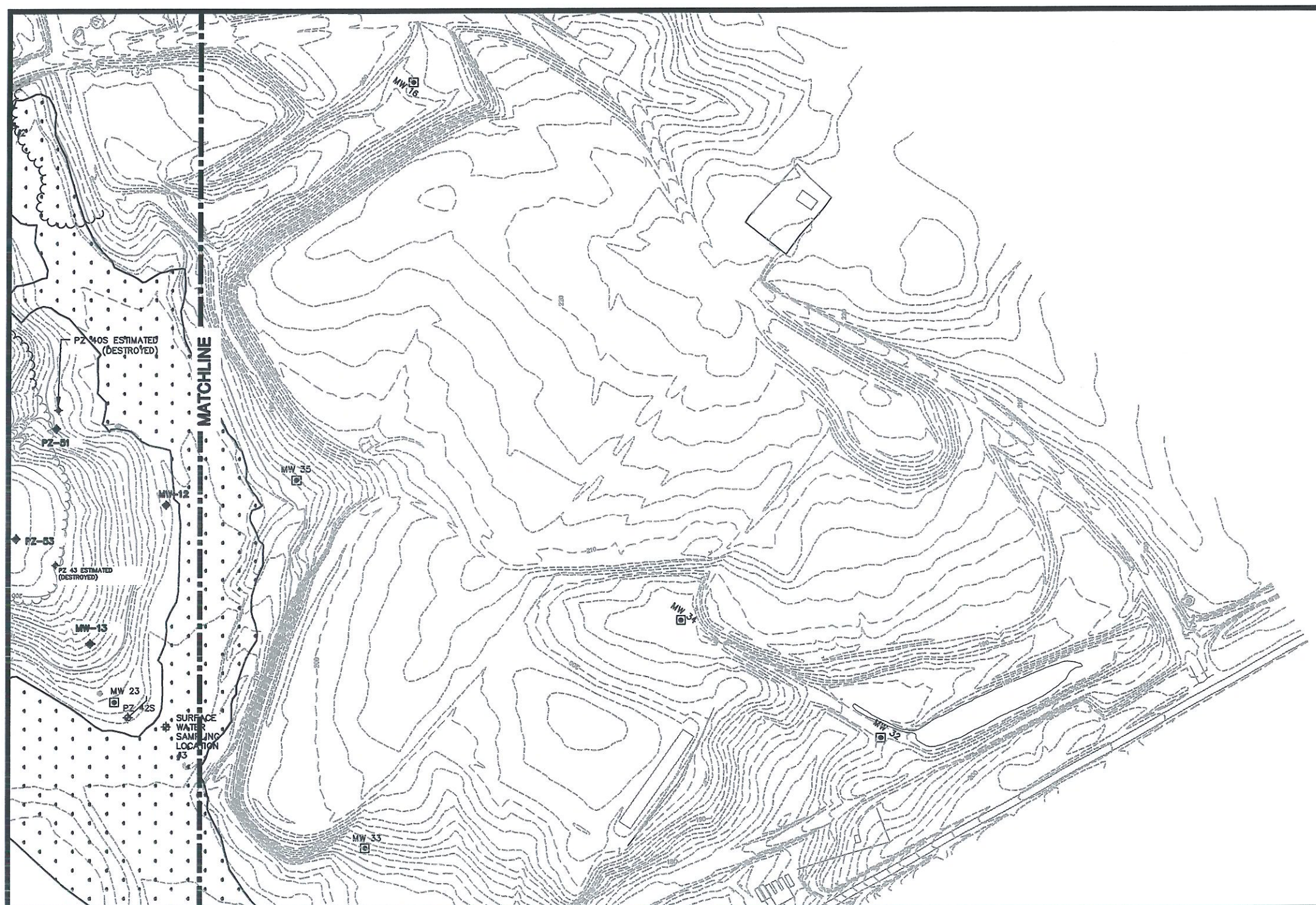
DUNN-ERWIN
LANDFILL

LANDFILL LAYOUT

HARNETT COUNTY NORTH CAROLINA

PROJECT #	: 3002
PROJ. ENG.	: RS
DRAWN BY	: SBK
FIELD BK.	: –
CAD FILE	: 3035Mas Exhibit.DWG
SCALE	: 1" = 200'
DATE	: 21 OCTOBER 2010
SHEET #	: 2A



LEGEND

GP 26	GEOPROBE BORING (NO WELL INSTALLED)
PZ 46S	EXISTING PIEZOMETER
MW 9	EXISTING MONITORING WELL

NORTH

GRAPHIC SCALE

300 150 0 300

(300 IN FEET)

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DUNN-ERWIN
LANDFILL

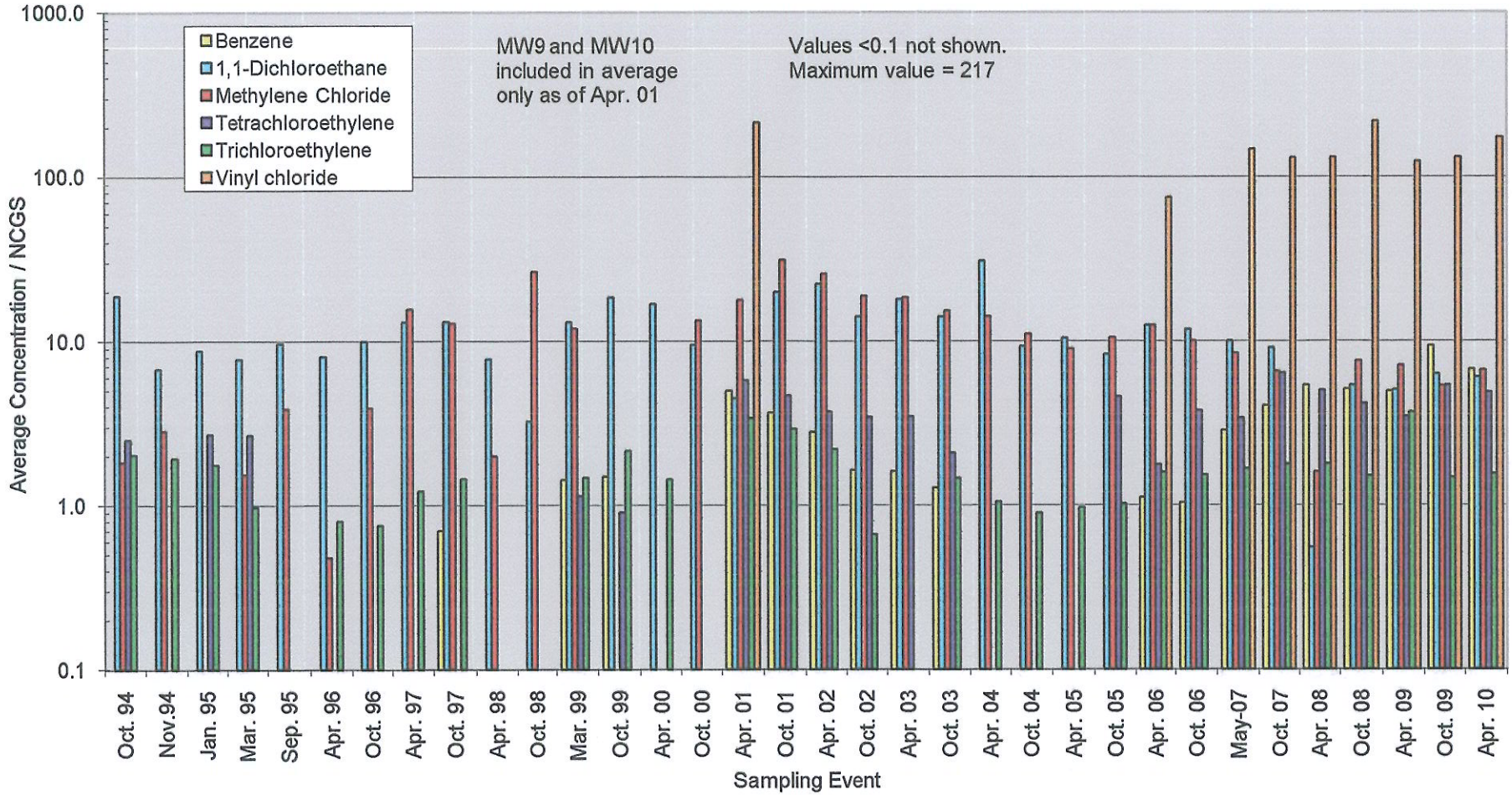
LANDFILL LAYOUT

HARNETT COUNTY NORTH CAROLINA

PROJECT #	: 3002
PROJ. ENG.	: RS
DRAWN BY	: SBK
FIELD BK.	: –
CAD FILE	: 3035Mas Exhibit.DWG
SCALE	: 1" = 300'
DATE	: 21 OCTOBER 2010
SHEET #	: 2B

Figure 3

Top Six, NCGS-Normalized Average Organics Concentrations per Sampling Event
Averages for Select Downgradient Wells (Contaminant Plume Area)
MW6, MW7B, MW8, MW9, MW10
Dunn-Erwin Landfill, Harnett County



APPENDIX A

DATA SET 1

Groundwater Monitoring Well Data
Monitoring Well 1 (MW1)
Upgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW1																				
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02
INORGANICS (mg/l)																					
Antimony						NA	NA		NA												
Arsenic						NA	NA		NA												
Barium	0.252	0.024	1.68	0.586		NA	NA		NA			0.083		0.1							
Beryllium			0.024	0.006	0.002	NA	NA	0.002	NA	0.003	0.006	0.001	0.004	0.003		0.002					0.002
Cadmium	0.0008	0.001	0.004	0.001		NA	NA		NA												
Chromium	0.005		0.018	0.011		NA	NA		NA		0.013		0.02								
Cobalt			0.016			NA	NA		NA												
Copper	0.017		0.078	0.018		NA	NA		NA			0.007									
Lead	0.005		0.104	0.104	0.02	NA	NA		NA		0.028	0.018									
Nickel			0.03			NA	NA		NA												
Selenium						NA	NA		NA												
Silver						NA	NA		NA												
Vanadium	0.02		0.083			NA	NA		NA												
Zinc	0.098	0.012	0.237	0.038	0.08	NA	NA		NA		0.0647										
t-Cyanide*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA
Tin*	NA	NA	NA	NA		NA	NA		NA		NA	0.1	NA		NA		NA	NA	NA	NA	NA
ORGANICS (ug/l)																					
Acetone						NA	NA		NA												
Benzene						NA	NA		NA												
Carbon Disulfide		20.9				NA	NA		NA							7.4					
Carbon Tetrachloride						NA	NA		NA												
Chlorobenzene						NA	NA		NA												
Chloroethane						NA	NA		NA												
Chloromethane						NA	NA		NA												
1,2-Dibromoethane						NA	NA		NA												
1,4-Dichlorobenzene						NA	NA		NA												
cis-1,2-Dichloroethene						NA	NA		NA												
1,1-Dichloroethane						NA	NA		NA												
1,2-Dichloroethane						NA	NA		NA												
1,1-Dichloroethene						NA	NA		NA												
Methylene Chloride						NA	NA		NA												
Tetrachloroethylene						NA	NA		NA												
Toluene						NA	NA		NA												
1,1,1-Trichloroethane						NA	NA		NA												
Trichloroethylene						NA	NA		NA												
Trichloroflouromethane						NA	NA		NA												
Vinyl Chloride						NA	NA		NA												
Xylenes						NA	NA		NA												
Dichlorodifluoromethane*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA
Diethyphthalate*	NA	NA	NA	NA	5.3			5.3			9.8		NA		NA		NA	NA	NA	NA	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA

		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 1 (MW1)
Upgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																	MW1 detects		NCGS
SAMPLING DATES	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)																			(mg/l)
Antimony																	0	0%	0.0014**
Arsenic																	0	0%	0.01
Barium																	6	18%	0.7
Beryllium															0.001		12	35%	0.004**
Cadmium																	4	12%	0.002
Chromium																	5	15%	0.01
Cobalt																	1	3%	0.07**
Copper																	4	12%	1
Lead																	6	18%	0.015
Nickel																	1	3%	0.1
Selenium																	0	0%	0.02
Silver																	0	0%	0.02
Vanadium																	2	6%	0.0035**
Zinc				0.08						0.011							8	24%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	17%	2.1**
ORGANICS (ug/l)																			(ug/l)
Acetone																	0	0%	700
Benzene																	0	0%	1
Carbon Disulfide																	2	6%	700
Carbon Tetrachloride																	0	0%	0.3
Chlorobenzene																	0	0%	50
Chloroethane																	0	0%	3000
Chloromethane																	0	0%	3
1,2-Dibromoethane																	0	0%	0.02
1,4-Dichlorobenzene																	0	0%	6
cis-1,2-Dichloroethene																	0	0%	70
1,1-Dichloroethane																	0	0%	6
1,2-Dichloroethane																	0	0%	0.4
1,1-Dichloroethene																	0	0%	7
Methylene Chloride																	0	0%	5
Tetrachloroethylene																	0	0%	0.7
Toluene																	0	0%	600
1,1,1-Trichloroethane																	0	0%	200
Trichloroethylene																	0	0%	3
Trichloroflouromethane																	0	0%	2000
Vinyl Chloride																	0	0%	0.03
Xylenes																	0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3	30%	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	3

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 31 (MW31)
Upgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW31																				
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02
INORGANICS (mg/l)																					
Antimony						NA	NA		NA												
Arsenic				0.005	0.055	NA	NA	0.011	NA		0.032	0.005									
Barium	0.04		0.157	0.097		NA	NA		NA			0.098			0.1						
Beryllium		0.028			0.006	NA	NA		NA		0.003	0.001			0.002	0.005					
Cadmium			0.005	0.003	0.003	NA	NA		NA		0.0013										
Chromium	0.021	0.015	0.021		0.21	NA	NA	0.044	NA		0.124	0.060		0.04	0.08	0.1	0.01				
Cobalt			0.007		0.02	NA	NA		NA												
Copper	0.017	0.012	0.095	0.04	0.22	NA	NA	0.033	NA			0.043		0.06	0.07						
Lead	0.011	0.006	0.052	0.033	0.17	NA	NA	0.031	NA		0.088	0.045		0.03	0.05	0.06					
Nickel						NA	NA		NA												
Selenium						NA	NA		NA												
Silver						NA	NA		NA												
Vanadium	0.045	0.026	0.032	0.08	0.41	NA	NA	0.087	NA		0.235	0.11		0.04	0.13						
Zinc	0.017	0.01	0.027	0.037	0.07	NA	NA		NA			0.05		0.04	0.04	0.1					
t-Cyanide*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA
Tin*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA
ORGANICS (ug/l)																					
Acetone						NA	NA		NA												
Benzene						NA	NA		NA												
Carbon Disulfide						NA	NA		NA												
Carbon Tetrachloride						NA	NA		NA												
Chlorobenzene						NA	NA		NA												
Chloroethane						NA	NA		NA												
Chloromethane						NA	NA		NA												
1,2-Dibromoethane						NA	NA		NA												
1,4-Dichlorobenzene						NA	NA		NA												
cis-1,2-Dichloroethene						NA	NA		NA												
1,1-Dichloroethane						NA	NA		NA												
1,2-Dichloroethane						NA	NA		NA												
1,1-Dichloroethene						NA	NA		NA												
Methylene Chloride						NA	NA		NA												
Tetrachloroethylene						NA	NA		NA												
Toluene						NA	NA		NA												
1,1,1-Trichloroethane						NA	NA		NA												
Trichloroethylene						NA	NA		NA												
Trichloroflouromethane						NA	NA		NA												
Vinyl Chloride						NA	NA		NA												
Xylenes						NA	NA		NA												
Dichlorodifluoromethane*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA
Diethyphthalate*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA

		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 31 (MW31)
Upgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																MW31 Detects		NCGS
SAMPLING DATES	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	detect#	detect%	
INORGANICS (mg/l)																		(mg/l)
Antimony																0	0%	0.0014**
Arsenic																5	15%	0.01
Barium																5	15%	0.7
Beryllium																6	18%	0.004**
Cadmium																4	12%	0.002
Chromium																11	33%	0.01
Cobalt																2	6%	0.07**
Copper																9	27%	1
Lead												0.014	0.013			13	39%	0.015
Nickel																0	0%	0.1
Selenium																0	0%	0.02
Silver																0	0%	0.02
Vanadium																10	30%	0.0035**
Zinc										0.017		0.01				11	33%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	2.1**
ORGANICS (ug/l)																		(ug/l)
Acetone																0	0%	700
Benzene																0	0%	1
Carbon Disulfide																0	0%	700
Carbon Tetrachloride																0	0%	0.3
Chlorobenzene																0	0%	50
Chloroethane																0	0%	3000
Chloromethane																0	0%	3
1,2-Dibromoethane																0	0%	0.02
1,4-Dichlorobenzene																0	0%	6
cis-1,2-Dichloroethene																0	0%	70
1,1-Dichloroethane																0	0%	6
1,2-Dichloroethane																0	0%	0.4
1,1-Dichloroethene																0	0%	7
Methylene Chloride																0	0%	5
Tetrachloroethylene																0	0%	0.7
Toluene																0	0%	600
1,1,1-Trichloroethane																0	0%	200
Trichloroethylene																0	0%	3
Trichloroflouromethane																0	0%	2000
Vinyl Chloride																0	0%	0.03
Xylenes																0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	3

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 2 (MW2)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW2																					
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02
INORGANICS (mg/l)																						
Antimony						NA	NA		NA													
Arsenic				0.005	0.033	NA	NA		NA													
Barium	0.143	0.404	0.489	0.469	0.82	NA	NA		NA			0.05		0.1								
Beryllium			0.012	0.035		NA	NA	0.004	NA	0.005	0.005	0.002	0.004	0.003		0.008	0.002		0.002	0.002	0.002	
Cadmium		0.001	0.001	0.003	0.004	NA	NA		NA													
Chromium	0.006	0.033		0.02	0.02	NA	NA		NA		0.0117					0.01						
Cobalt		0.009		0.01	0.07	NA	NA		NA													
Copper	0.027	0.046	0.037	0.041		NA	NA		NA			0.008										
Lead	0.006	0.025	0.025	0.041	0.025	NA	NA		NA		0.0148	0.004				0.01						
Nickel		0.02		0.01		NA	NA		NA													
Selenium						NA	NA		NA													
Silver						NA	NA		NA													
Vanadium	0.24		0.022	0.07	0.05	NA	NA		NA													
Zinc	0.037	0.026	0.096	0.104	0.05	NA	NA		NA	0.102		0.023				0.06						
t-Cyanide*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA		NA	NA		NA		NA	0.0008	NA		NA		NA	NA	NA	NA	NA	NA
Tin*	NA	NA	NA	NA		NA	NA		NA		NA	0.1	NA		NA		NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																						
Acetone						NA	NA		NA													
Benzene						NA	NA		NA													
Carbon Disulfide						NA	NA		NA													
Carbon Tetrachloride						NA	NA		NA													
Chlorobenzene						NA	NA		NA													
Chloroethane						NA	NA		NA													
Chloromethane						NA	NA		NA													
1,2-Dibromoethane						NA	NA		NA													
1,4-Dichlorobenzene						NA	NA		NA													
cis-1,2-Dichloroethene						NA	NA		NA													
1,1-Dichloroethane						NA	NA		NA													
1,2-Dichloroethane						NA	NA		NA													
1,1-Dichloroethene						NA	NA		NA													
Methylene Chloride						NA	NA		NA													
Tetrachloroethylene						NA	NA		NA													
Toluene						NA	NA		NA													
1,1,1-Trichloroethane						NA	NA		NA													
Trichloroethylene						NA	NA		NA													
Trichloroflouromethane						NA	NA		NA													
Vinyl Chloride						NA	NA		NA													
Xylenes						NA	NA		NA													
Dichlorodifluoromethane*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA
Diethyphthalate*	NA	NA	NA	NA	13								NA		NA		NA	NA	NA	NA	NA	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA
		- indicates concentrations exceeding NCGS																				
	"NE"	- not established																				
	"NA"	- not applicable																				
	*	-denotes an Appendix II constituent not included in Appendix I																				

Groundwater Monitoring Well Data
Monitoring Well 2 (MW2)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																MW2 Detects		NCGS
SAMPLING DATES	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)																		(mg/l)
Antimony																0	0%	0.0014**
Arsenic																2	6%	0.01
Barium																7	21%	0.7
Beryllium	0.004		0.002	0.003					0.002	0.0015	0.002	0.002	0.0019	0.0018	0.0017	23	68%	0.004**
Cadmium																4	12%	0.002
Chromium																6	18%	0.01
Cobalt																3	9%	0.07**
Copper																5	15%	1
Lead																8	24%	0.015
Nickel																2	6%	0.1
Selenium																0	0%	0.02
Silver																0	0%	0.02
Vanadium																4	12%	0.0035**
Zinc									0.013		0.012					10	29%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	17%	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	17%	2.1**
ORGANICS (ug/l)																		(ug/l)
Acetone																0	0%	700
Benzene																0	0%	1
Carbon Disulfide																0	0%	700
Carbon Tetrachloride																0	0%	0.3
Chlorobenzene																0	0%	50
Chloroethane																0	0%	3000
Chloromethane																0	0%	3
1,2-Dibromoethane																0	0%	0.02
1,4-Dichlorobenzene																0	0%	6
cis-1,2-Dichloroethene																0	0%	70
1,1-Dichloroethane																0	0%	6
1,2-Dichloroethane																0	0%	0.4
1,1-Dichloroethene																0	0%	7
Methylene Chloride																0	0%	5
Tetrachloroethylene																0	0%	0.7
Toluene																0	0%	600
1,1,1-Trichloroethane																0	0%	200
Trichloroethylene																0	0%	3
Trichloroflouromethane																0	0%	2000
Vinyl Chloride																0	0%	0.03
Xylenes																0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	10%	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	3

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 3 (MW3)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW3																					
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02
INORGANICS (mg/l)																						
Antimony						NA	NA		NA													
Arsenic						NA	NA		NA													
Barium	0.095	0.174	0.083	0.061		NA	NA		NA			0.062			0.1							
Beryllium		0.004	0.08	0.007	0.007	NA	NA	0.007	NA	0.011	0.009	0.004	0.005	0.005	0.011	0.008	0.004	0.005	0.006	0.005	0.005	0.005
Cadmium		0.002	0.001	0.011		NA	NA		NA													
Chromium	0.005			0.003		NA	NA		NA							0.01					0.014	
Cobalt		0.005	0.012			NA	NA		NA													
Copper				0.006		NA	NA		NA			0.006										
Lead	0.006					NA	NA		NA			0.003				0.01						
Nickel						NA	NA		NA													
Selenium						NA	NA		NA													
Silver						NA	NA		NA													
Vanadium	0.009			0.07		NA	NA		NA													
Zinc	0.023	0.039	0.018	0.018	0.06	NA	NA		NA			0.03				0.05						
t-Cyanide*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
Tin*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																						
Acetone						NA	NA		NA													
Benzene						NA	NA		NA													
Carbon Disulfide		64.4				NA	NA		NA													
Carbon Tetrachloride						NA	NA		NA													
Chlorobenzene						NA	NA		NA													
Chloroethane						NA	NA		NA													
Chloromethane						NA	NA		NA													
1,2-Dibromoethane						NA	NA		NA													
1,4-Dichlorobenzene						NA	NA		NA													
cis-1,2-Dichloroethene						NA	NA		NA													
1,1-Dichloroethane						NA	NA		NA													
1,2-Dichloroethane						NA	NA		NA													
1,1-Dichloroethene						NA	NA		NA													
Methylene Chloride						NA	NA		NA													
Tetrachloroethylene						NA	NA		NA													
Toluene						NA	NA		NA													
1,1,1-Trichloroethane						NA	NA		NA													
Trichloroethylene						NA	NA		NA													
Trichloroflouromethane						NA	NA		NA													
Vinyl Chloride						NA	NA		NA													
Xylenes						NA	NA		NA													
Dichlorodifluoromethane*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA
Diethyphthalate*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA

		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 3 (MW3)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT						MW3R										MW3 Detects		NCGS
SAMPLING DATES	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 09	detect#	detect%	
INORGANICS (mg/l)																		(mg/l)
Antimony					NA											0	0%	0.0014**
Arsenic					NA											0	0%	0.01
Barium					NA							0.124	0.107			8	24%	0.7
Beryllium	0.005	0.005	0.005	0.006	NA						0.001	0.002	0.0027	0.0032	0.0028	27	82%	0.004**
Cadmium					NA											3	9%	0.002
Chromium					NA											4	12%	0.01
Cobalt					NA											2	6%	0.07**
Copper					NA											2	6%	1
Lead					NA											3	9%	0.015
Nickel					NA											0	0%	0.1
Selenium					NA											0	0%	0.02
Silver					NA											0	0%	0.02
Vanadium					NA											2	6%	0.0035**
Zinc					NA				0.015		0.014	0.022	0.016	0.014	0.012	13	39%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	2.1**
ORGANICS (ug/l)																		(ug/l)
Acetone					NA											0	0%	700
Benzene					NA											0	0%	1
Carbon Disulfide					NA											1	3%	700
Carbon Tetrachloride					NA											0	0%	0.3
Chlorobenzene					NA											0	0%	50
Chloroethane					NA											0	0%	3000
Chloromethane					NA											0	0%	3
1,2-Dibromoethane					NA											0	0%	0.02
1,4-Dichlorobenzene					NA											0	0%	6
cis-1,2-Dichloroethene					NA											0	0%	70
1,1-Dichloroethane					NA											0	0%	6
1,2-Dichloroethane					NA											0	0%	0.4
1,1-Dichloroethene					NA											0	0%	7
Methylene Chloride					NA											0	0%	5
Tetrachloroethylene					NA											0	0%	0.7
Toluene					NA											0	0%	600
1,1,1-Trichloroethane					NA											0	0%	200
Trichloroethylene					NA											0	0%	3
Trichloroflouromethane					NA											0	0%	2000
Vinyl Chloride					NA											0	0%	0.03
Xylenes					NA											0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	3

NCGS = 2L STD or
** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 4 (MW4)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW4																					
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sept. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02
INORGANICS (mg/l)																						
Antimony						NA	NA		NA													
Arsenic						NA	NA		NA													
Barium	0.106	0.47	0.07	0.041		NA	NA		NA			0.127			0.1							
Beryllium			0.003	0.003	0.006	NA	NA	0.006	NA	0.014	0.006	0.009	0.003	0.004	0.01	0.012	0.004	0.003	0.002	0.003	0.003	0.003
Cadmium		0.001		0.004		NA	NA		NA													
Chromium	0.003	0.024				NA	NA		NA	0.011		0.01			0.01	0.03						
Cobalt		0.011				NA	NA		NA							0.01						
Copper	0.01	0.033	0.005	0.006		NA	NA		NA			0.01										
Lead	0.004	0.018	0.002	0.002		NA	NA		NA	0.018	0.012	0.013			0.01	0.02						
Nickel						NA	NA		NA			0.01										
Selenium						NA	NA		NA													
Silver						NA	NA		NA													
Vanadium		0.034				NA	NA		NA							0.05						
Zinc	0.026	0.093	0.028	0.026		NA	NA		NA		0.052	0.042			0.04	0.12						
t-Cyanide*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
Tin*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																						
Acetone						NA	NA		NA													
Benzene						NA	NA		NA													
Carbon Disulfide		21.3	21.3	6.2		NA	NA		NA													
Carbon Tetrachloride						NA	NA		NA													
Chlorobenzene						NA	NA		NA													
Chloroethane						NA	NA		NA													
Chloromethane						NA	NA		NA													
1,2-Dibromoethane						NA	NA		NA													
1,4-Dichlorobenzene						NA	NA		NA													
cis-1,2-Dichloroethene						NA	NA		NA													
1,1-Dichloroethane						NA	NA		NA													
1,2-Dichloroethane						NA	NA		NA													
1,1-Dichloroethene						NA	NA		NA													
Methylene Chloride						NA	NA		NA													
Tetrachloroethylene						NA	NA		NA													
Toluene						NA	NA		NA													
1,1,1-Trichloroethane						NA	NA		NA													
Trichloroethylene						NA	NA		NA													
Trichloroflouromethane						NA	NA		NA													
Vinyl Chloride						NA	NA		NA													
Xylenes						NA	NA		NA													
Dichlorodifluoromethane*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA
Diethyphthalate*	NA	NA	NA	NA		13			13				NA		NA		NA	NA	NA	NA	NA	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA

		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 4 (MW4)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																MW4 Detects		NCGS
SAMPLING DATES	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)																		(mg/l)
Antimony																0	0%	0.0014**
Arsenic																0	0%	0.01
Barium																6	18%	0.7
Beryllium	0.003		0.002	0.004		0.002	0.002	0.002	0.002	0.0026	0.003	0.006	0.0029	0.003	0.0028	30	88%	0.004**
Cadmium																2	6%	0.002
Chromium																6	18%	0.01
Cobalt																2	6%	0.07**
Copper																5	15%	1
Lead																9	26%	0.015
Nickel																1	3%	0.1
Selenium																0	0%	0.02
Silver																0	0%	0.02
Vanadium																2	6%	0.0035**
Zinc									0.019		0.017	0.013	0.016	0.01	0.013	14	41%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	2.1**
ORGANICS (ug/l)																		(ug/l)
Acetone																0	0%	700
Benzene																0	0%	1
Carbon Disulfide																3	9%	700
Carbon Tetrachloride																0	0%	0.3
Chlorobenzene																0	0%	50
Chloroethane																0	0%	3000
Chloromethane																0	0%	3
1,2-Dibromoethane																0	0%	0.02
1,4-Dichlorobenzene																0	0%	6
cis-1,2-Dichloroethene																0	0%	70
1,1-Dichloroethane																0	0%	6
1,2-Dichloroethane																0	0%	0.4
1,1-Dichloroethene																0	0%	7
Methylene Chloride																0	0%	5
Tetrachloroethylene																0	0%	0.7
Toluene																0	0%	600
1,1,1-Trichloroethane																0	0%	200
Trichloroethylene																0	0%	3
Trichloroflouromethane																0	0%	2000
Vinyl Chloride																0	0%	0.03
Xylenes																0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	20%	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	3

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 5 (MW5)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW5																					
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02
INORGANICS (mg/l)																						
Antimony						NA	NA		NA													
Arsenic						NA	NA		NA								0.02					
Barium	0.208	0.142	0.243	0.104		NA	NA		NA			0.127	0.1	0.2	0.2							
Beryllium						NA	NA		NA	0.002				0.002	0.003	0.006						
Cadmium			0.001			NA	NA	0.001	NA													
Chromium	0.009					NA	NA		NA													
Cobalt						NA	NA		NA													
Copper	0.017	0.006	0.007	0.006		NA	NA		NA													
Lead	0.008	0.002	0.008			NA	NA		NA			0.002										
Nickel				0.08		NA	NA		NA													
Selenium						NA	NA		NA													
Silver						NA	NA		NA													
Vanadium	0.006					NA	NA		NA													
Zinc	0.027	0.019	0.026	0.01		NA	NA		NA			0.019										
t-Cyanide*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
Tin*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																						
Acetone						NA	NA		NA													
Benzene						NA	NA		NA													
Carbon Disulfide		30.5				NA	NA		NA							6.8						
Carbon Tetrachloride						NA	NA		NA													
Chlorobenzene						NA	NA		NA													
Chloroethane						NA	NA		NA													
Chloromethane						NA	NA		NA													
1,2-Dibromoethane						NA	NA		NA													
1,4-Dichlorobenzene						NA	NA		NA													
cis-1,2-Dichloroethene						NA	NA		NA													
1,1-Dichloroethane						NA	NA		NA													
1,2-Dichloroethane						NA	NA		NA													
1,1-Dichloroethene						NA	NA		NA													
Methylene Chloride						NA	NA		NA													
Tetrachloroethylene						NA	NA		NA													
Toluene						NA	NA		NA													
1,1,1-Trichloroethane						NA	NA		NA													
Trichloroethylene						NA	NA		NA													
Trichloroflouromethane						NA	NA		NA													
Vinyl Chloride						NA	NA		NA													
Xylenes						NA	NA		NA													
Dichlorodifluoromethane*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA
Diethyphthalate*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA									NA		NA		NA	NA	NA	NA	NA	NA

	- indicates concentrations exceeding NCGS
"NE"	- not established
"NA"	- not applicable
*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 5 (MW5)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																MW5 Detects		NCGS
SAMPLING DATES	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)																		(mg/l)
Antimony																0	0%	0.0014**
Arsenic																1	3%	0.01
Barium									0.112	0.103		0.197	0.129	0.117	0.113	14	41%	0.7
Beryllium												0.003				5	15%	0.004**
Cadmium																2	6%	0.002
Chromium																1	3%	0.01
Cobalt																0	0%	0.07**
Copper																4	12%	1
Lead																4	12%	0.015
Nickel																1	3%	0.1
Selenium																0	0%	0.02
Silver																0	0%	0.02
Vanadium																1	3%	0.0035**
Zinc												0.014				6	18%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	2.1**
ORGANICS (ug/l)																		(ug/l)
Acetone																0	0%	700
Benzene																0	0%	1
Carbon Disulfide																2	6%	700
Carbon Tetrachloride																0	0%	0.3
Chlorobenzene																0	0%	50
Chloroethane																0	0%	3000
Chloromethane																0	0%	3
1,2-Dibromoethane																0	0%	0.02
1,4-Dichlorobenzene																0	0%	6
cis-1,2-Dichloroethene																0	0%	70
1,1-Dichloroethane																0	0%	6
1,2-Dichloroethane																0	0%	0.4
1,1-Dichloroethene																0	0%	7
Methylene Chloride																0	0%	5
Tetrachloroethylene																0	0%	0.7
Toluene																0	0%	600
1,1,1-Trichloroethane																0	0%	200
Trichloroethylene																0	0%	3
Trichloroflouromethane																0	0%	2000
Vinyl Chloride																0	0%	0.03
Xylenes																0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	3

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 6 (MW6)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW6																					
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct .01	Apr. 02	Oct. 02
INORGANICS (mg/l)																						
Antimony						NA	NA		NA													
Arsenic				0.005		NA	NA		NA													
Barium	0.068	0.096	0.141	0.062		NA	NA		NA			0.084	0.1	0.1								
Beryllium						NA	NA		NA													
Cadmium	0.005	0.009	0.004			NA	NA		NA													
Chromium	0.003	0.033		0.005		NA	NA	0.020	NA		0.012										0.017	
Cobalt						NA	NA		NA		0.011	0.009			0.01		0.01		0.011	0.012	0.013	
Copper		0.019	0.01	0.008		NA	NA		NA			0.020										
Lead	0.009	0.019	0.033	0.007	0.037	NA	NA	0.019	NA		0.011	0.007										
Nickel	0.005					NA	NA		NA													
Selenium						NA	NA		NA													
Silver						NA	NA		NA													
Vanadium	0.008	0.074	0.026			NA	NA	0.055	NA													
Zinc	0.038	0.047	0.029	0.018		NA	NA		NA			0.017										
t-Cyanide*	NA	NA	NA	NA		NA	NA		NA		NA				NA		NA		NA		NA	
Mercury*	NA	NA	NA	NA		NA	NA		NA		NA	0.0004	0.0004	0.0004	NA	0.002	NA		NA		NA	0.0006
Tin*	NA	NA	NA	NA		NA	NA		NA		NA	0.1			NA		NA		NA		NA	
ORGANICS (ug/l)																						
Acetone						NA			NA								170					
Benzene						NA			NA						2.7	3.4			9.50			
Carbon Disulfide		7.9				NA			NA													
Carbon Tetrachloride						NA			NA													
Chlorobenzene		4	8.5			NA			NA		13	24		70	11	5.1						
Chloroethane					38	NA	40	40	NA	64	91	46	28.6	190	44	53	53	21	78	17	19	
Chloromethane						NA			NA								46					
1,2-Dibromoethane						NA			NA													
1,4-Dichlorobenzene						NA			NA										7.20			
cis-1,2-Dichloroethene						NA			NA						1.9	2.6			13		5.8	
1,1-Dichloroethane	78.9	51.7	105	87.1	67	NA	66	61	NA	80	134	160	30.1		88	64	41	37		27	28	27.7
1,2-Dichloroethane						NA			NA													
1,1-Dichloroethene			83.2			NA			NA						1.4							
Methylene Chloride	27.5	31.4		23.2	58	NA	7.2	7.2	NA	46	158	160	10.2	240	96			66	109	47	37	34.8
Tetrachloroethylene	5.3		3.8	5.6		NA			NA						2.4	1.9			8.20			
Toluene						NA			NA													
1,1,1-Trichloroethane	15.4	16	15.1	8.3	10	NA	13	7.1	NA		7.2				2.4							
Trichloroethylene	8.4	6.7	10.6	8.8		NA	7.2		NA	6.8	11	9.9			7.9	8.7	7		17	5.4	5.2	
Trichloroflouromethane						NA			NA													
Vinyl Chloride						NA			NA										22			
Xylenes	46.7	83.8	68.9	74.8	24	NA	22	23	NA	24	32				11		6		11			
Dichlorodifluoromethane*	NA	NA	NA	NA	6.4		5	6.8	10.9		7.9		NA		2.4	2.7	NA		NA		NA	
Diethyphthalate*	NA	NA	NA	NA									NA				NA		NA		NA	
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA					6.8				NA				NA		NA		NA	
		- indicates concentrations exceeding NCGS																				
	"NE"	- not established																				
	"NA"	- not applicable																				
	*	-denotes an Appendix II constituent not included in Appendix I																				

Groundwater Monitoring Well Data
Monitoring Well 6 (MW6)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																MW6 Detects		NCGS
SAMPLING DATES	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)																		(mg/l)
Antimony																0	0%	0.0014**
Arsenic																1	3%	0.01
Barium									0.148	0.103	0.14	0.136	0.118		0.153	13	38%	0.7
Beryllium																0	0%	0.004**
Cadmium															0.0014	4	12%	0.002
Chromium																6	18%	0.01
Cobalt	0.019	0.015	0.015	0.019	0.017	0.013	0.017	0.016	0.028	0.017	0.03	0.027	0.02	0.022	0.034	22	65%	0.07**
Copper																4	12%	1
Lead															0.019	9	26%	0.015
Nickel																1	3%	0.1
Selenium																0	0%	0.02
Silver																0	0%	0.02
Vanadium																4	12%	0.0035**
Zinc				91.5						0.015	0.016				0.1	9	26%	1
t-Cyanide*	NA		NA		NA		NA		NA		NA		NA		NA	0	0%	0.07
Mercury*	NA	0.0008	NA		NA		NA		NA	0.0004	NA		NA		NA	7	41%	0.001
Tin*	NA		NA		NA		NA		NA		NA		NA		NA	1	6%	2.1**
ORGANICS (ug/l)																		(ug/l)
Acetone																1	3%	700
Benzene										6.1	4.2	4.9	2.4		3.3	8	23%	1
Carbon Disulfide																1	3%	700
Carbon Tetrachloride														2.9		1	3%	0.3
Chlorobenzene																7	20%	50
Chloroethane			15.9			12.3										17	49%	3000
Chloromethane																1	3%	3
1,2-Dibromoethane																0	0%	0.02
1,4-Dichlorobenzene						6.9			3.2	7.7	7.4	5	4.7	4.4	5.2	9	26%	6
cis-1,2-Dichloroethene						17.3	11.9	12.8	12.6	23.1	31.4	41.2	12.5	13.6	17.3	14	40%	70
1,1-Dichloroethane	6.6	18.4	13.1	7.4	8.9	33.2	18.6	18.4	13.9	22.7	9.2	8.4				30	86%	6
1,2-Dichloroethane																0	0%	0.4
1,1-Dichloroethene																2	6%	7
Methylene Chloride		28.2	12.8			64.5	20.1	12.9	8.8	33	4.1	9	1.5	6.3	1.5	29	83%	5
Tetrachloroethylene						7.1	6.2	8	6.9	9.3	4.5	3.8	1.8	5.3	4.9	16	46%	0.7
Toluene																0	0%	600
1,1,1-Trichloroethane																9	26%	200
Trichloroethylene						8.8	7.1	8.1	7.7	9.24	5.9	4.9	2.3	4.7	4.8	24	69%	3
Trichloroflouromethane																0	0%	2000
Vinyl Chloride							11.2		8	7.2	6.3	10.8	2.6	5	6.2	9	26%	0.03
Xylenes						9.8										13	37%	500
Dichlorodifluoromethane*	NA		NA		NA		NA		NA		NA		NA		NA	7	33%	1000
Diethyphthalate*	NA		NA		NA		NA		NA		NA		NA		NA	0	0%	6000
bis(2-ethylhexyl)phthalate*	NA		NA		NA		NA		NA		NA		NA		NA	1	5%	3

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 7,7B (MW7,7B)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW7				MW7B																
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct.00	Apr. 01	Oct. 01	Apr. 02
INORGANICS (mg/l)																					
Antimony		NA	NA			NA	NA		NA					NT							
Arsenic		NA	NA		0.033	NA	NA	0.010	NA	0.01	0.032	0.279		NT							
Barium	0.892	NA	NA	0.2	0.55	NA	NA		NA				0.3	NT	0.9		0.5				
Beryllium		NA	NA	0.001	0.003	NA	NA		NA		0.003			NT	0.004						
Cadmium	0.0013	NA	NA	0.001	0.004	NA	NA		NA		0.004			NT							
Chromium	0.03	NA	NA	0.040	0.09	NA	NA	0.020	NA	0.021	0.071	0.011	0.010	NT	0.09	0.01		0.014			0.013
Cobalt	0.146	NA	NA	0.013	0.04	NA	NA	0.012	NA		0.018	0.011		NT	0.07	0.02		0.019	0.020	0.014	
Copper	0.034	NA	NA	0.036		NA	NA		NA			0.013		NT	0.08						
Lead	0.519	NA	NA	0.044	0.36	NA	NA	0.196	NA	0.087	0.264	0.062	0.070	NT	0.71	0.05	0.1	0.036		0.017	0.020
Nickel	0.02	NA	NA			NA	NA		NA					NT							
Selenium		NA	NA			NA	NA		NA					NT							
Silver		NA	NA			NA	NA		NA					NT							
Vanadium	0.197	NA	NA	0.06	0.23	NA	NA	0.064	NA	0.054	0.169			NT	0.21						
Zinc	0.051	NA	NA	0.065	0.06	NA	NA		NA			0.026		NT	0.15	0.05					
t-Cyanide*	NA	NA	NA	NA		NA	NA		NA		NA		NA	NT	NA		NA		NA		NA
Mercury*	NA	NA	NA	NA		NA	NA		NA		NA	0.0006	NA	NT	NA	0.001	NA		NA	0.001	NA
Tin*	NA	NA	NA	NA		NA	NA		NA		NA		NA	NT	NA		NA		NA		NA
ORGANICS (ug/l)																					
Acetone			NA			NA			NA					NT							
Benzene			NA			NA			NA					NT	1.1						
Carbon Disulfide			NA			NA			NA					NT							
Carbon Tetrachloride			NA			NA			NA					NT							
Chlorobenzene			NA			NA			NA					NT							
Chloroethane			NA	29.3	30	NA	13	14	NA	37		4.8	177	NT	31	68	44	21	31	22	34
Chloromethane			NA			NA			NA					NT			64				
1,2-Dibromoethane			NA			NA			NA					NT							
1,4-Dichlorobenzene			NA			NA			NA					NT							
cis-1,2-Dichloroethene			NA			NA			NA					NT							
1,1-Dichloroethane	262	69.7	NA	52.4	100	NA	92	77	NA	100	56	30	99.5	NT	110	210	170	90		176	230
1,2-Dichloroethane			NA			NA			NA					NT							
1,1-Dichloroethene	8.6	8.1	NA	6.2	17	NA	15	8.8	NA	15	14	12	14.7	NT	7.2	7.4			10	5.3	7.4
Methylene Chloride		11.2	NA			NA			NA	13	28	2.2	14.6	NT	53			60	75	138	154
Tetrachloroethylene			NA			NA			NA					NT							
Toluene	31.4	13.2	NA	3.8	11	NA	9		NA					NT	3.4		5				
1,1,1-Trichloroethane	59.1	59.3	NA	29.1	78	NA	65	75	NA	65	49	27	33.4	NT	11	12	12		8.20	5.6	6.9
Trichloroethylene	9.9	10.7	NA			NA			NA			1		NT	3.6	7.8	6		5.30	7.3	8.8
Trichlorofluoromethane			NA	11.7	14	NA	8.7	11	NA	22	11	13	9.4	NT	8.3				9.10		7
Vinyl Chloride			NA			NA			NA					NT							
Xylenes	6.5	5.4	NA			NA			NA					NT	4.8		12				9.3
Dichlorodifluoromethane*	NA	NA	NA	NA	56	155	34	53	69.2	110	94		33.2	NT	31	41	NA		NA		NA
Diethyphthalate*	NA	NA	NA	NA	13									NT			NA		NA		NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	24									NT			NA		NA		NA

		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 7,7B (MW7,7B)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																	MW7,7B Detects		NCGS
SAMPLING DATES	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)																			(mg/l)
Antimony																	0	0%	0.0014**
Arsenic																	5	16%	0.01
Barium										0.341	0.345	0.268	0.64	0.626	0.453	0.364	13	42%	0.7
Beryllium																	4	13%	0.004**
Cadmium																	4	13%	0.002
Chromium																	12	39%	0.01
Cobalt	0.024	0.017	0.025	0.022	0.019	0.015	0.022	0.032	0.031	0.025	0.026	0.031	0.036	0.024	0.029	0.021	27	87%	0.07**
Copper																	4	13%	1
Lead			0.035		0.018	0.027	0.019	0.010	0.015	0.014	0.031		0.019	0.015	0.061	0.023	26	84%	0.015
Nickel																	1	3%	0.1
Selenium																	0	0%	0.02
Silver																	0	0%	0.02
Vanadium																	7	23%	0.0035**
Zinc																	6	19%	1
t-Cyanide*		NA		NA		NA		NA		NA		NA		NA		NA	0	0%	0.07
Mercury*	0.0027	NA	0.0014	NA	0.0011	NA	0.0015	NA	0.0046	NA	0.0026	NA	0.00038	NA	0.00063	NA	11	73%	0.001
Tin*	0.179	NA		NA		NA		NA		NA		NA		NA		NA	1	7%	2.1**
ORGANICS (ug/l)																			(ug/l)
Acetone																	0	0%	700
Benzene										4.7	4.1	4.2	5.8	4.6	9.4	9.5	8	24%	1
Carbon Disulfide																	0	0%	700
Carbon Tetrachloride																	0	0%	0.3
Chlorobenzene		6			5.3							3	3.9	4			5	15%	50
Chloroethane	14.9	19.9	30.7	28.5	22.6	13.6	21.9	24.9	16.1	10.5	12.4		11.1				26	79%	3000
Chloromethane																	1	3%	3
1,2-Dibromoethane																	0	0%	0.02
1,4-Dichlorobenzene													1.7	1.4	1.4	1.5	4	12%	6
cis-1,2-Dichloroethene										6			16	8.1	7.8	5.7	5	15%	70
1,1-Dichloroethane	87.1	220	141	137	113	147	22.5	176	174	153	129		15.1	114	110	136	31	94%	6
1,2-Dichloroethane		8.7															1	3%	0.4
1,1-Dichloroethene	6.5	8.1	6	5.9		5.4											20	61%	7
Methylene Chloride	26.4	174	70.3	93.3	101	75.1	59.6	79.9	74.1	74.5	45.5		69	80.9	45.3	79.9	25	76%	5
Tetrachloroethylene							9				3.7	3.2	3.7	3.3	7.3	4.9	7	21%	0.7
Toluene																	7	21%	600
1,1,1-Trichloroethane		5.1															17	52%	200
Trichloroethylene			6.8	7.6	7.7	7.5		10.5	9.9	8.8	9.2	9.1	8.8	7.8	10.9	10.2	22	67%	3
Trichlorofluoromethane	5.1										1.5	2.2	1	1.1		2.3	17	52%	2000
Vinyl Chloride										5	5	3.9	8.2	4.3	6.4	6.4	7	21%	0.03
Xylenes		6.3			5.6					4.8			9.2				9	27%	500
Dichlorodifluoromethane*	24.7	NA	20.6	NA	10.7	NA	12.6	NA	9.5	NA	7	NA	5.7	NA	5.2	NA	18	86%	1000
Diethyphthalate*		NA		NA		NA		NA		NA		NA		NA		NA	1	5%	6000
bis(2-ethylhexyl)phthalate*		NA		NA		NA		NA		NA		NA		NA		NA	1	5%	3

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 8 (MW8)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW8																					
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02
INORGANICS (mg/l)																						
Antimony						NA	NA		NA													
Arsenic						NA	NA		NA		0.015											
Barium	0.043	0.05	0.025	0.032		NA	NA		NA			0.037					0.08					
Beryllium						NA	NA		NA		0.004					0.007						
Cadmium		0.002	0.001			NA	NA		NA		0.002											
Chromium		0.013				NA	NA		NA		0.111	0.009								0.022		
Cobalt						NA	NA		NA													
Copper	0.005	0.015	0.09	0.005		NA	NA		NA			0.007										
Lead		0.008			0.011	NA	NA		NA		0.073	0.008										
Nickel						NA	NA		NA													0.053
Selenium						NA	NA		NA													
Silver						NA	NA		NA													
Vanadium		0.045				NA	NA		NA		0.410									0.063		
Zinc	0.02	0.035	0.019	0.009		NA	NA		NA		0.056	0.020		0.040								
t-Cyanide*	NA	NA	NA	NA		NA	NA		NA	0.127	NA		NA		NA		NA		NA		NA	
Mercury*	NA	NA	NA	NA		NA	NA		NA		NA		NA	0.002	NA		NA		NA		NA	
Tin*	NA	NA	NA	NA		NA	NA		NA		NA		NA		NA		NA		NA		NA	
ORGANICS (ug/l)																						
Acetone						NA			NA													
Benzene						NA			NA			2.1			1.6							
Carbon Disulfide						NA			NA													
Carbon Tetrachloride						NA			NA													
Chlorobenzene						NA			NA													
Chloroethane					16	NA	7.2		NA		31	22	12.2		14	21	41	16	19		28	15.3
Chloromethane						NA			NA							6.1	88			25		
1,2-Dibromoethane						NA			NA													
1,4-Dichlorobenzene						NA			NA													
cis-1,2-Dichloroethene						NA			NA													
1,1-Dichloroethane					6.4	NA	11	7.8	NA		45	47	10.2	39	37	59	92	44	135		80	76.8
1,2-Dichloroethane						NA			NA													
1,1-Dichloroethene						NA			NA											81		
Methylene Chloride						NA			NA		49	31	5.2	25	30			74	140	92	90	80.5
Tetrachloroethylene						NA			NA													
Toluene						NA			NA													
1,1,1-Trichloroethane						NA			NA													
Trichloroethylene						NA			NA			2.2			1.8	2.8			6.80	5.3		
Trichloroflouromethane						NA			NA													
Vinyl Chloride						NA			NA													
Xylenes						NA			NA										5			
Dichlorodifluoromethane*	NA	NA	NA	NA	7	6.8							NA		2.3	4.3	NA		NA		NA	
Diethyphthalate*	NA	NA	NA	NA									NA				NA		NA		NA	
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA									NA				NA		NA		NA	
		- indicates concentrations exceeding NCGS																				
	"NE"	- not established																				
	"NA"	- not applicable																				
	*	-denotes an Appendix II constituent not included in Appendix I																				

Groundwater Monitoring Well Data
Monitoring Well 8 (MW8)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																MW8 Detects		NCGS
SAMPLING DATES	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)																		(mg/l)
Antimony																0	0%	0.0014**
Arsenic																1	3%	0.01
Barium											0.115	0.108	0.123		0.115	10	29%	0.7
Beryllium																2	6%	0.004**
Cadmium																3	9%	0.002
Chromium																4	12%	0.01
Cobalt																0	0%	0.07**
Copper																5	15%	1
Lead																4	12%	0.015
Nickel																1	3%	0.1
Selenium																0	0%	0.02
Silver																0	0%	0.02
Vanadium																3	9%	0.0035**
Zinc													0.019			8	24%	1
t-Cyanide*	NA		NA		NA		NA		NA		NA		NA		NA	1	6%	0.07
Mercury*	NA		NA		NA		NA		NA		NA	0.0002	NA	0.0003	NA	3	19%	0.001
Tin*	NA		NA		NA		NA		NA		NA		NA		NA	0	0%	2.1**
ORGANICS (ug/l)																		(ug/l)
Acetone																0	0%	700
Benzene										2.6	2.5	2.9	2.6	25.2	5.6	8	23%	1
Carbon Disulfide																0	0%	700
Carbon Tetrachloride																0	0%	0.3
Chlorobenzene																0	0%	50
Chloroethane	12.7	13.2														14	40%	3000
Chloromethane																3	9%	3
1,2-Dibromoethane																0	0%	0.02
1,4-Dichlorobenzene										1.3	1.2	1.5	1.7	1.7	2	6	17%	6
cis-1,2-Dichloroethene									7	5.4	10.2	13.2	17.3	12.9	21.2	7	20%	70
1,1-Dichloroethane	71.5	59.2	42.7	31	38.9	59	58.6	63	49.1	54.3		61.8	32	38	38	28	80%	6
1,2-Dichloroethane																0	0%	0.4
1,1-Dichloroethene																1	3%	7
Methylene Chloride	71.2	69	44.5	39.9	40.6	63.3	64	67.2	48.4	35.9	31	48	32.5	32.3	31.4	25	71%	5
Tetrachloroethylene								5.2	5	6.5	5.5	4.7	5.7	5.2	5	8	23%	0.7
Toluene																0	0%	600
1,1,1-Trichloroethane																0	0%	200
Trichloroethylene									4	4.4	4.8	4.8	41.1	4.1	4.3	12	34%	3
Trichloroflouromethane																0	0%	2000
Vinyl Chloride											1	1.5	1.3		1.6	4	11%	0.03
Xylenes																1	3%	500
Dichlorodifluoromethane*	NA		NA		NA		NA		NA		NA		NA		NA	4	19%	1000
Diethyphthalate*	NA		NA		NA		NA		NA		NA		NA		NA	0	0%	6000
bis(2-ethylhexyl)phthalate*	NA		NA		NA		NA		NA		NA		NA		NA	0	0%	3

NCGS = 2L STD or
** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 9 (MW9)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW9																		
SAMPLING DATES	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10
INORGANICS (mg/l)																			
Antimony																			
Arsenic																			
Barium													0.103	0.123	0.129	0.140	0.105	0.15	0.126
Beryllium																			
Cadmium																			
Chromium		0.038	0.015	0.082															0.017
Cobalt																			
Copper														0.013				0.015	
Lead				0.014															0.014
Nickel																			
Selenium																			
Silver																			
Vanadium		0.078		0.189															0.039
Zinc																			
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005	NA	0.0015	NA	0.00075	NA
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA
ORGANICS (ug/l)																			
Acetone																			
Benzene	8.6	11	7.8	8.2	8.1	6.4					5.6	5.2	5	5.4	11.5	8	8.1	7.2	8.7
Carbon Disulfide																			
Carbon Tetrachloride																			
Chlorobenzene			18	23.6	19.8	18	16.2	10.3	10.1	12.1	18.2	11.7	11.1	11.8	8.1	9.6	11.2	11.7	10.1
Chloroethane	65	51	39	35.7	27.4	36	21.4	16.5	15.7	22.4	23.5	20.3	13	12.4	11.6	12.3			
Chloromethane	189																		
1,2-Dibromoethane		14																	
1,4-Dichlorobenzene														2.5	6.6	2.1	1.6	2	1.4
cis-1,2-Dichloroethene				6							6.5	7.9	5.7	8	25	13.1	10.7	11.7	14.2
1,1-Dichloroethane		126	219	170	202	135	122	75.2	81.9	110	103	87	74.7	58.1		68.1	43.3	34.3	
1,2-Dichloroethane					11.8														
1,1-Dichloroethene																			
Methylene Chloride		195	231	272	197	166	127	67.9	56.7	75.7	122	96.4	64.2	49.6		64.6	53.2	42.2	37.7
Tetrachloroethylene		5.3		5.3	5.1									2.9	4.4	2.4	1.4	1	1.2
Toluene																			
1,1,1-Trichloroethane																			
Trichloroethylene	11	15	9.8	10		9.5	8.2	5.8	7	6.5	6.2	5	4.7	3.9	5.9	4.2	2.9	2.4	2.40
Trichloroflouromethane																			
Vinyl Chloride													9.1	5.9	6.5	8.7	6.4	6.3	7.9
Xylenes	26	39	25	24.5	19.6	15.6	7.3				7.1	5.6			5.1				
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA
		- indicates concentrations exceeding NCGS																	
	"NE"	- not established																	
	"NA"	- not applicable																	
	*	-denotes an Appendix II constituent not included in Appendix I																	

Groundwater Monitoring Well Data
Monitoring Well 9 (MW9)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW9 Detects		NCGS
SAMPLING DATES	detect#	detect%	
INORGANICS (mg/l)			(mg/l)
Antimony	0	0%	0.0014**
Arsenic	0	0%	0.01
Barium	7	37%	0.7
Beryllium	0	0%	0.004**
Cadmium	0	0%	0.002
Chromium	4	21%	0.01
Cobalt	0	0%	0.07**
Copper	2	11%	1
Lead	2	11%	0.015
Nickel	0	0%	0.1
Selenium	0	0%	0.02
Silver	0	0%	0.02
Vanadium	3	16%	0.0035**
Zinc	0	0%	1
t-Cyanide*	0	NA	0.07
Mercury*	3	NA	0.001
Tin*	0	NA	2.1**
ORGANICS (ug/l)			(ug/l)
Acetone	0	0%	700
Benzene	15	79%	1
Carbon Disulfide	0	0%	700
Carbon Tetrachloride	0	0%	0.3
Chlorobenzene	17	89%	50
Chloroethane	16	84%	3000
Chloromethane	1	5%	3
1,2-Dibromoethane	1	5%	0.02
1,4-Dichlorobenzene	6	32%	6
cis-1,2-Dichloroethene	10	53%	70
1,1-Dichloroethane	16	84%	6
1,2-Dichloroethane	1	5%	0.4
1,1-Dichloroethene	0	0%	7
Methylene Chloride	17	89%	5
Tetrachloroethylene	9	47%	0.7
Toluene	0	0%	600
1,1,1-Trichloroethane	0	0%	200
Trichloroethylene	18	95%	3
Trichloroflouromethane	0	0%	2000
Vinyl Chloride	7	37%	0.03
Xylenes	10	53%	500
Dichlorodifluoromethane*	0	NA	1000
Diethyphthalate*	0	NA	6000
bis(2-ethylhexyl)phthalate*	0	NA	3
			NCGS =
			2L STD or
	** 13B GWPS as of Oct 07		

Groundwater Monitoring Well Data
Monitoring Well 10 (MW10)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW10																		
SAMPLING DATES	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10
INORGANICS (mg/l)																			
Antimony																			
Arsenic																	0.016		
Barium																			
Beryllium																			
Cadmium																			
Chromium	0.014		0.013	0.118						0.012									
Cobalt																			
Copper														0.018	0.021		0.015	0.01	
Lead				0.012															
Nickel																			
Selenium																			
Silver																			
Vanadium				0.246															
Zinc	0.052												0.019		0.013		0.01		
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	0.00029	NA
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA
ORGANICS (ug/l)																			
Acetone					156				130	419	234						2340		
Benzene	6.9	7.3	6.2										4.6	2	4.5	3.9	7	5	6.7
Carbon Disulfide																			
Carbon Tetrachloride																			
Chlorobenzene	25	33	21	9.2		6.8	5.7	6.7					3.4				3.6	3.3	3.3
Chloroethane	72	47	51	16.7	11.6	18.8	19.1	19.8	12.2										
Chloromethane																			
1,2-Dibromoethane																			
1,4-Dichlorobenzene														1.3	1.3	1.4	3	3.8	5.4
cis-1,2-Dichloroethene	17	17	20	6.9		6.8	11.7	12.6	10.7	6.5	15.8	7.9	16.9	6.9	9	13	27.4	22.1	31.2
1,1-Dichloroethane		266	109	59.3	42.6	69.1	606	53.3	34.9	25.2	19.1	9.4	10.9	9.2	7.5	7.7	5.8	6	6.2
1,2-Dichloroethane																			
1,1-Dichloroethene																			
Methylene Chloride	120	310	132	59.3	19.7	48.7	48	67.7	51.6		27.1		14.4		4.9		10	7.7	15.4
Tetrachloroethylene	12	11	13	6.8	7.1	7.3													1.1
Toluene																13.1	6	6.2	
1,1,1-Trichloroethane																			
Trichloroethylene	11	11	9.1			5.7									1.3		1.1		1.6
Trichloroflouromethane																			
Vinyl Chloride	10													1.4	2	3.3	3.9	2	3.9
Xylenes	35	39	30	7.4	5	6.4		12.3	5.5		5.3								
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA

	- indicates concentrations exceeding NCGS
"NE"	- not established
"NA"	- not applicable
*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 10 (MW10)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW10 Detects		NCGS
SAMPLING DATES	detect#	detect%	
INORGANICS (mg/l)			(mg/l)
Antimony	0	0%	0.0014**
Arsenic	1	5%	0.01
Barium	0	0%	0.7
Beryllium	0	0%	0.004**
Cadmium	0	0%	0.002
Chromium	4	21%	0.01
Cobalt	0	0%	0.07**
Copper	4	21%	1
Lead	1	5%	0.015
Nickel	0	0%	0.1
Selenium	0	0%	0.02
Silver	0	0%	0.02
Vanadium	1	5%	0.0035**
Zinc	4	21%	1
t-Cyanide*	0	NA	0.07
Mercury*	1	NA	0.001
Tin*	0	NA	2.1**
ORGANICS (ug/l)			(ug/l)
Acetone	5	26%	700
Benzene	10	53%	1
Carbon Disulfide	0	0%	700
Carbon Tetrachloride	0	0%	0.3
Chlorobenzene	11	58%	50
Chloroethane	9	47%	3000
Chloromethane	0	0%	3
1,2-Dibromoethane	0	0%	0.02
1,4-Dichlorobenzene	6	32%	6
cis-1,2-Dichloroethene	18	95%	70
1,1-Dichloroethane	18	95%	6
1,2-Dichloroethane	0	0%	0.4
1,1-Dichloroethene	0	0%	7
Methylene Chloride	15	79%	5
Tetrachloroethylene	7	37%	0.7
Toluene	3	16%	600
1,1,1-Trichloroethane	0	0%	200
Trichloroethylene	7	37%	3
Trichloroflouromethane	0	0%	2000
Vinyl Chloride	7	37%	0.03
Xylenes	9	47%	500
Dichlorodifluoromethane*	0	NA	1000
Diethyphthalate*	0	NA	6000
bis(2-ethylhexyl)phthalate*	0	NA	3
			NCGS =
			2L STD or
	** 13B GWPS as of Oct 07		

Groundwater Monitoring Well Data
Monitoring Well 11 (MW11)
Downgradient Well - Set 1 (Subset 1N)
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW11							MW11 Detects		NCGS
SAMPLING DATES	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)										(mg/l)
Antimony								0	0%	0.0014**
Arsenic								0	0%	0.01
Barium								0	0%	0.7
Beryllium								0	0%	0.004**
Cadmium								0	0%	0.002
Chromium								0	0%	0.01
Cobalt								0	0%	0.07**
Copper								0	0%	1
Lead								0	0%	0.015
Nickel								0	0%	0.1
Selenium								0	0%	0.02
Silver								0	0%	0.02
Vanadium								0	0%	0.0035**
Zinc		0.013						1	14%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	0	NA	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	0	NA	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	0	NA	2.1**
ORGANICS (ug/l)										(ug/l)
Acetone								0	0%	700
Benzene								0	0%	1
Carbon Disulfide								0	0%	700
Carbon Tetrachloride								0	0%	0.3
Chlorobenzene								0	0%	50
Chloroethane								0	0%	3000
Chloromethane								0	0%	3
1,2-Dibromoethane								0	0%	0.02
1,4-Dichlorobenzene								0	0%	6
cis-1,2-Dichloroethene								0	0%	70
1,1-Dichloroethane								0	0%	6
1,2-Dichloroethane								0	0%	0.4
1,1-Dichloroethene								0	0%	7
Methylene Chloride								0	0%	5
Tetrachloroethylene								0	0%	0.7
Toluene								0	0%	600
1,1,1-Trichloroethane								0	0%	200
Trichloroethylene								0	0%	3
Trichloroflouromethane								0	0%	2000
Vinyl Chloride								0	0%	0.03
Xylenes								0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	0	NA	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	0	NA	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	0	NA	3

		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 12 (MW12)
Downgradient Well - Set 1 (Subset 1N)
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW12							MW12 Detects		NCGS
SAMPLING DATES	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)										(mg/l)
Antimony								0	0%	0.0014**
Arsenic								0	0%	0.01
Barium								0	0%	0.7
Beryllium	0.001	0.0019	0.0015	0.002	0.0035	0.0022	0.0012	7	100%	0.004**
Cadmium								0	0%	0.002
Chromium								0	0%	0.01
Cobalt								0	0%	0.07**
Copper								0	0%	1
Lead								0	0%	0.015
Nickel								0	0%	0.1
Selenium								0	0%	0.02
Silver								0	0%	0.02
Vanadium								0	0%	0.0035**
Zinc	0.013	0.017		0.012	0.015			4	57%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	0	NA	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	0	NA	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	0	NA	2.1**
ORGANICS (ug/l)										(ug/l)
Acetone								0	0%	700
Benzene								0	0%	1
Carbon Disulfide								0	0%	700
Carbon Tetrachloride								0	0%	0.3
Chlorobenzene								0	0%	50
Chloroethane								0	0%	3000
Chloromethane								0	0%	3
1,2-Dibromoethane								0	0%	0.02
1,4-Dichlorobenzene								0	0%	6
cis-1,2-Dichloroethene								0	0%	70
1,1-Dichloroethane								0	0%	6
1,2-Dichloroethane								0	0%	0.4
1,1-Dichloroethene								0	0%	7
Methylene Chloride								0	0%	5
Tetrachloroethylene								0	0%	0.7
Toluene								0	0%	600
1,1,1-Trichloroethane								0	0%	200
Trichloroethylene								0	0%	3
Trichloroflouromethane								0	0%	2000
Vinyl Chloride								0	0%	0.03
Xylenes								0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	0	NA	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	0	NA	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	0	NA	3

		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 13 (MW13)
Downgradient Well - Set 1 (Subset 1N)
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW13							MW13 Detects		NCGS
SAMPLING DATES	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)										(mg/l)
Antimony								0	0%	0.0014**
Arsenic								0	0%	0.01
Barium								0	0%	0.7
Beryllium								0	0%	0.004**
Cadmium								0	0%	0.002
Chromium								0	0%	0.01
Cobalt								0	0%	0.07**
Copper								0	0%	1
Lead								0	0%	0.015
Nickel								0	0%	0.1
Selenium								0	0%	0.02
Silver								0	0%	0.02
Vanadium								0	0%	0.0035**
Zinc	0.012							1	14%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	0	NA	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	0	NA	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	0	NA	2.1**
ORGANICS (ug/l)										(ug/l)
Acetone								0	0%	700
Benzene								0	0%	1
Carbon Disulfide								0	0%	700
Carbon Tetrachloride								0	0%	0.3
Chlorobenzene								0	0%	50
Chloroethane								0	0%	3000
Chloromethane								0	0%	3
1,2-Dibromoethane								0	0%	0.02
1,4-Dichlorobenzene								0	0%	6
cis-1,2-Dichloroethene								0	0%	70
1,1-Dichloroethane								0	0%	6
1,2-Dichloroethane								0	0%	0.4
1,1-Dichloroethene								0	0%	7
Methylene Chloride								0	0%	5
Tetrachloroethylene								0	0%	0.7
Toluene								0	0%	600
1,1,1-Trichloroethane								0	0%	200
Trichloroethylene								0	0%	3
Trichloroflouromethane								0	0%	2000
Vinyl Chloride								0	0%	0.03
Xylenes								0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	0	NA	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	0	NA	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	0	NA	3

		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 14 (MW14)
Downgradient Well - Set 1 (Subset 1N)
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW14																MW14 Detects		NCGS
SAMPLING DATES	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10										detect#	detect%	
INORGANICS (mg/l)																			(mg/l)
Antimony																	0	0%	0.0014**
Arsenic																	0	0%	0.01
Barium																	0	0%	0.7
Beryllium					0.001												1	14%	0.004**
Cadmium																	0	0%	0.002
Chromium																	0	0%	0.01
Cobalt																	0	0%	0.07**
Copper																	0	0%	1
Lead																	0	0%	0.015
Nickel																	0	0%	0.1
Selenium																	0	0%	0.02
Silver																	0	0%	0.02
Vanadium																	0	0%	0.0035**
Zinc	0.012	0.018		0.012			0.011										4	57%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA										0	NA	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA										0	NA	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA										0	NA	2.1**
ORGANICS (ug/l)																			(ug/l)
Acetone																	0	0%	700
Benzene																	0	0%	1
Carbon Disulfide																	0	0%	700
Carbon Tetrachloride																	0	0%	0.3
Chlorobenzene																	0	0%	50
Chloroethane																	0	0%	3000
Chloromethane						1											1	14%	3
1,2-Dibromoethane																	0	0%	0.02
1,4-Dichlorobenzene																	0	0%	6
cis-1,2-Dichloroethene																	0	0%	70
1,1-Dichloroethane																	0	0%	6
1,2-Dichloroethane																	0	0%	0.4
1,1-Dichloroethene																	0	0%	7
Methylene Chloride																	0	0%	5
Tetrachloroethylene																	0	0%	0.7
Toluene																	0	0%	600
1,1,1-Trichloroethane																	0	0%	200
Trichloroethylene																	0	0%	3
Trichloroflouromethane																	0	0%	2000
Vinyl Chloride																	0	0%	0.03
Xylenes																	0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA										0	NA	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA										0	NA	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA										0	NA	3
		- indicates concentrations exceeding NCGS																	
	"NE"	- not established																	NCGS =
	"NA"	- not applicable																	2L STD or
	*	-denotes an Appendix II constituent not included in Appendix I															** 13B GWPS as of Oct 07		

Groundwater Monitoring Well Data
Monitoring Well 15 (MW15)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW15							MW15 Detects		NCGS
SAMPLING DATES	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)										(mg/l)
Antimony		NA						0	0%	0.0014**
Arsenic		NA						0	0%	0.01
Barium		NA						0	0%	0.7
Beryllium		NA						0	0%	0.004**
Cadmium		NA						0	0%	0.002
Chromium		NA						0	0%	0.01
Cobalt		NA						0	0%	0.07**
Copper		NA						0	0%	1
Lead		NA						0	0%	0.015
Nickel		NA						0	0%	0.1
Selenium		NA						0	0%	0.02
Silver		NA						0	0%	0.02
Vanadium		NA						0	0%	0.0035**
Zinc		NA						0	0%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	0	NA	0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	0	NA	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	0	NA	2.1**
ORGANICS (ug/l)										(ug/l)
Acetone		NA						0	0%	700
Benzene		NA						0	0%	1
Carbon Disulfide		NA						0	0%	700
Carbon Tetrachloride		NA						0	0%	0.3
Chlorobenzene		NA						0	0%	50
Chloroethane		NA						0	0%	3000
Chloromethane		NA						0	0%	3
1,2-Dibromoethane		NA						0	0%	0.02
1,4-Dichlorobenzene		NA						0	0%	6
cis-1,2-Dichloroethene		NA						0	0%	70
1,1-Dichloroethane		NA						0	0%	6
1,2-Dichloroethane		NA						0	0%	0.4
1,1-Dichloroethene		NA						0	0%	7
Methylene Chloride		NA						0	0%	5
Tetrachloroethylene		NA						0	0%	0.7
Toluene		NA	4.5	149	11.6	2.6		4	67%	600
1,1,1-Trichloroethane		NA						0	0%	200
Trichloroethylene		NA						0	0%	3
Trichloroflouromethane		NA						0	0%	2000
Vinyl Chloride		NA						0	0%	0.03
Xylenes		NA						0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	0	NA	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	0	NA	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	0	NA	3

		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 23B (MW23B)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW23B																				
SAMPLING DATES	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Mar. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02
INORGANICS (mg/l)																					
Antimony						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA
Arsenic						NA			NA	NA		0.064			0.006	0.015					
Barium	0.071	0.17	0.109	0.228		NA	0.076		NA	NA			0.029	0.077	0.26	1.64	0.084				
Beryllium		0.002		0.02	0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA
Cadmium	0.0008	0.001				NA			NA	NA											
Chromium	0.009	0.025		0.012	0.01	NA	0.0105		NA	NA					0.025	0.104					
Cobalt						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA
Copper	0.015	0.034	0.02	0.037		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA
Lead	0.005	0.015	0.006	0.018	0.027	NA	0.0157		NA	NA		0.005	0.002	0.009	0.049	0.089					
Nickel						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA
Selenium						NA			NA	NA						0.002					
Silver			0.105			NA			NA	NA											
Vanadium	0.013	0.05	0.006	0.04		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA
Zinc	0.043	0.035	0.021	0.047	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA					0.0017	0.0003					
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
ORGANICS (ug/l)																					
Acetone						NA			NA	NA	NA										
Benzene						NA			NA	NA	NA										
Carbon Disulfide						NA			NA	NA	NA										
Carbon Tetrachloride						NA			NA	NA	NA										
Chlorobenzene						NA			NA	NA	NA										
Chloroethane						NA			NA	NA	NA										
Chloromethane						NA			NA	NA	NA										
1,2-Dibromoethane						NA			NA	NA	NA										
1,4-Dichlorobenzene						NA			NA	NA	NA										
cis-1,2-Dichloroethene						NA			NA	NA	NA										
1,1-Dichloroethane						NA			NA	NA	NA										
1,2-Dichloroethane						NA			NA	NA	NA										
1,1-Dichloroethene						NA			NA	NA	NA										
Methylene Chloride						NA			NA	NA	NA										
Tetrachloroethylene						NA			NA	NA	NA										
Toluene						NA			NA	NA	NA										
1,1,1-Trichloroethane						NA			NA	NA	NA										
Trichloroethylene						NA			NA	NA	NA										
Trichloroflouromethane						NA			NA	NA	NA										
Vinyl Chloride						NA			NA	NA	NA										
Xylenes						NA			NA	NA	NA										
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

MW23B, a Set 2 well, is statistically compared with Set 1 since it is downgradient of Set 1 wells.

	- indicates concentrations exceeding NCGS
"NE"	- not established
"NA"	- not applicable
*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 23B (MW23B)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																MW23B Detects		NCGS
SAMPLING DATES	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 04	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	detect#	detect%	
INORGANICS (mg/l)																		(mg/l)
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.0014**
Arsenic																3	9%	0.01
Barium												0.101	0.101			12	36%	0.7
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3	43%	0.004**
Cadmium																2	6%	0.002
Chromium																7	21%	0.01
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07**
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	57%	1
Lead																11	33%	0.015
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.1
Selenium																1	3%	0.02
Silver																1	3%	0.02
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	57%	0.0035**
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	71%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07
Mercury*																2	8%	0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	2.1**
ORGANICS (ug/l)																		(ug/l)
Acetone																0	0%	700
Benzene																0	0%	1
Carbon Disulfide																0	0%	700
Carbon Tetrachloride																0	0%	0.3
Chlorobenzene																0	0%	50
Chloroethane																0	0%	3000
Chloromethane																0	0%	3
1,2-Dibromoethane																0	0%	0.02
1,4-Dichlorobenzene																0	0%	6
cis-1,2-Dichloroethene																0	0%	70
1,1-Dichloroethane																0	0%	6
1,2-Dichloroethane																0	0%	0.4
1,1-Dichloroethene																0	0%	7
Methylene Chloride																0	0%	5
Tetrachloroethylene																0	0%	0.7
Toluene																0	0%	600
1,1,1-Trichloroethane																0	0%	200
Trichloroethylene																0	0%	3
Trichloroflouromethane																0	0%	2000
Vinyl Chloride																0	0%	0.03
Xylenes																0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	1000
Diethyphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	3

NCGS = 2L STD or
** 13B GWPS as of Oct 07

Recommended Test Per Constituent
Total Detects and Percentages
Set 1 Data
Dunn-Erwin MSW Landfill
Harnett County, NC

CONSTITUENT	SET 1 DATA		RECOMMENDED TEST
	Detect #	Detect %	
INORGANICS (mg/l)			
Antimony	0	0%	QUALITATIVE
Arsenic	19	5%	QUALITATIVE
Barium	101	25%	TEST OF PROPORTIONS*
Beryllium	120	32%	TEST OF PROPORTIONS*
Cadmium	32	8%	QUALATATIVE
Chromium	70	17%	TEST OF PROPORTIONS*
Cobalt	59	16%	TEST OF PROPORTIONS*
Copper	52	14%	TEST OF PROPORTIONS*
Lead	96	24%	TEST OF PROPORTIONS*
Nickel	8	2%	QUALITATIVE
Selenium	1	0%	QUALITATIVE
Silver	1	0%	QUALITATIVE
Vanadium	43	11%	TEST OF PROPORTIONS*
Zinc	104	27%	TEST OF PROPORTIONS*
t-Cyanide**	1	1%	QUALITATIVE
Mercury**	28	24%	TEST OF PROPORTIONS*
Tin**	4	4%	QUALITATIVE
ORGANICS (ug/l)			
Acetone	6	1%	QUALITATIVE
Benzene	49	12%	TEST OF PROPORTIONS*
Carbon Disulfide	9	2%	QUALITATIVE
Carbon Tetrachloride	1	0%	QUALITATIVE
Chlorobenzene	40	10%	QUALITATIVE
Chloroethane	82	20%	TEST OF PROPORTIONS*
Chloromethane	7	2%	QUALITATIVE
1,2-Dibromoethane	1	0%	QUALITATIVE
1,4-Dichlorobenzene	31	8%	QUALITATIVE
cis-1,2-Dichloroethene	54	13%	TEST OF PROPORTIONS*
1,1-Dichloroethane	123	30%	TEST OF PROPORTIONS*
1,2-Dichloroethane	2	0%	QUALITATIVE
1,1-Dichloroethene	23	6%	QUALITATIVE
Methylene Chloride	111	27%	TEST OF PROPORTIONS*
Tetrachloroethylene	47	11%	TEST OF PROPORTIONS*
Toluene	14	3%	QUALITATIVE
1,1,1-Trichloroethane	26	6%	QUALITATIVE
Trichloroethylene	83	20%	TEST OF PROPORTIONS*
Trichlorofluoromethane	17	4%	QUALITATIVE
Vinyl Chloride	34	8%	QUALITATIVE
Xylenes	42	10%	TEST OF PROPORTIONS*
Dichlorodifluoromethane**	29	22%	TEST OF PROPORTIONS*
Diethyphthalate**	7	5%	QUALITATIVE
bis(2-ethylhexyl)phthalate**	2	2%	QUALITATIVE

NOTES:

* The Test of Proportions may be performed jointly with a qualitative test to ensure more accurate results.

** These constituents are Appendix II constituents which were analyzed for the first time in September 1995.

Predictive Interval Analysis
Monitoring Well 2 (MW2)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

Prediction Intervals Worksheet for Intrawell Comparisons
Dunn-Erwin Data Set 1
Well: MW2

Location: Data Set 1 - Shallow Aquifer

This Test compares baseline sampling concentrations to observed concentrations after waste has been deposited.

Background Data				
Parameter	Background data, mg/l		Sample Mean	Sample Stan. Dev.
Beryllium	0.012	0.035	0.024	0.016

Variables		Where
n=	2	n= Background population
n-1=	1	n-1=degrees of freedom
m=	34	m=Compliance well sample population
t=	3.75	t=95th percentile of the Bonferroni - Statistics

Prediction Interval: $K=[O, X_{ave}+S(1/m+1/n)^{1/2}\ t_{n-1.K.095)}]$

Where
X_{ave} = the mean concentration of the baseline sampling data
S = standard devation of the baseline sampling data

Note:
The Prediction Interval establishes the range for the mean concentration of all non-baseline sampling data.
Quantifications below the detection limit are entered as one-half the detection limit.

RESULTS			
Well Number	**Prediction Interval**	**Mean Concentration of Non-Baseline Sampling Data**	**Result**
Beryllium	[0,0.068]	0.002	Not Significant

Sep. 95 Dec. 95 Feb. 96 Apr. 96 July 96 Oct. 96 Apr. 97 Oct. 97 Apr. 98 Oct. 98

Prediction Intervals Worksheet for Intrawell Comparisons
Dunn-Erwin Data Set 1
Well: MW3

Location: Data Set 1 - Shallow Aquifer

This Test compares baseline sampling concentrations to observed concentrations after waste has been deposited.

Background Data						
Parameter	Background data, mg/l				Sample Mean	Sample Stan. Dev.
Beryllium	0.001	0.004	0.08	0.007	0.023	0.038

Variables		Where
n=	2	n= Background population
n-1=	1	n-1=degrees of freedom
m=	33	m=Compliance well sample population
t=	3.75	t=95th percentile of the Bonferroni - Statistics

Prediction Interval: $K=[O, X_{ave}+S(1/m+1/n)^{1/2}\ t_{n-1.K.095)}]$

Where
X_{ave} = the mean concentration of the baseline sampling data
S = standard devation of the baseline sampling data

Note:
The Prediction Interval establishes the range for the mean concentration of all non-baseline sampling data. Quantifications below the detection limit are entered as one-half the detection limit.

RESULTS			
Well Number	**Prediction Interval**	**Mean Concentration of Non-Baseline Sampling Data**	**Result**
Beryllium	[0,0.127]	0.005	Not Significant

Sep. 95 Dec. 95 Feb. 96 Apr. 96 July 96 Oct. 96 Apr. 97 Oct. 97 Apr. 98 Oct. 98

Predictive Interval Analysis
Monitoring Well 4 (MW4)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

Prediction Intervals Worksheet for Intrawell Comparisons
Dunn-Erwin Data Set 1
Well: MW4

Location: Data Set 1 - Shallow Aquifer

This Test compares baseline sampling concentrations to observed concentrations after waste has been deposited.

Background Data						
Parameter	Background data, mg/l				Sample Mean	Sample Stan. Dev.
Beryllium	0.001	0.001	0.003	0.003	0.002	0.001

Variables		Where
n=	2	n= Background population
n-1=	1	n-1=degrees of freedom
m=	34	m=Compliance well sample population
t=	3.75	t=95th percentile of the Bonferroni - Statistics

Prediction Interval: $K=[O, X_{ave}+S(1/m+1/n)^{1/2}\ t_{n-1.K.095)}]$

Where
X_{ave} = the mean concentration of the baseline sampling data
S = standard devation of the baseline sampling data

Note:
The Prediction Interval establishes the range for the mean concentration of all non-baseline sampling data. Quantifications below the detection limit are entered as one-half the detection limit.

RESULTS			
Well Number	**Prediction Interval**	**Mean Concentration of Non-Baseline Sampling Data**	**Result**
Beryllium	[0,0.005]	0.004	Not Significant

Sept. 95 Dec. 95 Feb. 96 Apr. 96 July 96 Oct. 96 Apr. 97 Oct. 97 Apr. 98 Oct. 98

Prediction Intervals Worksheet for Intrawell Comparisons
Dunn-Erwin Data Set 1
Well: MW5

Location: Data Set 1 - Shallow Aquifer

This Test compares baseline sampling concentrations to observed concentrations after waste has been deposited.

Background Data						
Parameter	Background data, mg/l				Sample Mean	Sample Stan. Dev.
Barium	0.208	0.142	0.243	0.104	0.174	0.063

Variables		Where
n=	4	n= Background population
n-1=	3	n-1=degrees of freedom
m=	34	m=Compliance well sample population
t=	3.75	t=95th percentile of the Bonferroni - Statistics

Prediction Interval: $K=[O, X_{ave}+S(1/m+1/n)^{1/2}\ t_{n-1.K.095)}]$

Where
X_{ave} = the mean concentration of the baseline sampling data
S = standard devation of the baseline sampling data

Note:
The Prediction Interval establishes the range for the mean concentration of all non-baseline sampling data. Quantifications below the detection limit are entered as one-half the detection limit as of October 2000, due to varying detection limits before this date. Non-detects prior to Oct 2000 are not used to compute the prediction interval.

RESULTS			
Well Number	**Prediction Interval**	**Mean Concentration of Non-Baseline Sampling Data**	**Result**
Barium	[0,0.299]	0.190	Not Significant

Prediction Intervals Worksheet for Intrawell Comparisons
Dunn-Erwin Data Set 1
Well: MW6

Location: Data Set 1 - Shallow Aquifer

This Test compares baseline sampling concentrations to observed concentrations after waste has been deposited.

Background Data						
Parameter	Background data, mg/l				Sample Mean	Sample Stan. Dev.
Barium	0.068	0.096	0.141	0.062	0.092	0.036

Variables		**Where**
n=	4	n= Background population
n-1=	3	n-1=degrees of freedom
m=	34	m=Compliance well sample population
t=	3.75	t=95th percentile of the Bonferroni - Statistics

Prediction Interval: $K=[O, X_{ave}+S(1/m+1/n)^{1/2}\ t_{n-1.K.095)}]$

Where
X_{ave} = the mean concentration of the baseline sampling data
S = standard devation of the baseline sampling data

Note:
The Prediction Interval establishes the range for the mean concentration of all non-baseline sampling data. Quantifications below the detection limit are entered as one-half the detection limit as of October 2000, due to varying detection limits before this date. Non-detects prior to Oct 2000 are not used to compute the prediction interval.

RESULTS			
Well Number	**Prediction Interval**	**Mean Concentration of Non-Baseline Sampling Data**	**Result**
Barium	[0,0.163]	0.193	Significant

Prediction Intervals Worksheet for Intrawell Comparisons
Dunn-Erwin Data Set 1
Well: MW7,7B

Location: Data Set 1 - Shallow Aquifer

This Test compares baseline sampling concentrations to observed concentrations after waste has been deposited.

Background Data						
Parameter	Background data, mg/l				Sample Mean	Sample Stan. Dev.
Barium	0.892	NA	NA	0.2	0.546	0.489
Cobalt	0.146	NA	NA	0.013	0.080	0.094
Lead	0.519	NA	NA	0.044	0.282	0.336

Variables		**Where**
n=	2	n= Background population
n-1=	1	n-1=degrees of freedom
m=	31	m=Compliance well sample population
t=	3.75	t=95th percentile of the Bonferroni - Statistics

Prediction Interval: $K=[O, X_{ave}+S(1/m+1/n)^{1/2}\ t_{n-1.K.095)}]$

Where
X_{ave} = the mean concentration of the baseline sampling data
S = standard devation of the baseline sampling data

Note:
The Prediction Interval establishes the range for the mean concentration of all non-baseline sampling data.
Quantifications below the detection limit are entered as one-half the detection limit.
For barium, quantifications below the detection limit are entered as one-half the detection limit as of October 2000, due to varying detection limits before this date. Non-detects prior to Oct 2000 are not used to compute the prediction interval for barium.

RESULTS			
Well Number	**Prediction Interval**	**Mean Concentration of Non-Baseline Sampling Data**	**Result**
Barium	[0,1.88]	0.356	Not Significant
Cobalt	[0,0.337]	0.022	Not Significant
Lead	[0,1.20]	0.079	Not Significant

Prediction Intervals Worksheet for Intrawell Comparisons
Dunn-Erwin Data Set 1
Well: MW12

Location: Data Set 1 - Shallow Aquifer

This Test compares baseline sampling concentrations to observed concentrations after waste has been deposited.

Background Data						
Parameter	Background data, mg/l				Sample Mean	Sample Stan. Dev.
Beryllium	0.001	0.0019	0.0015	0.002	0.002	0.0005

Variables		Where
n=	4	n= Background population
n-1=	3	n-1=degrees of freedom
m=	7	m=Compliance well sample population
t=	3.75	t=95th percentile of the Bonferroni - Statistics

Prediction Interval: $K=[O, X_{ave}+S(1/m+1/n)^{1/2}\ t_{n-1.K.095)}]$

Where
X_{ave} = the mean concentration of the baseline sampling data
S = standard devation of the baseline sampling data

Note:
The Prediction Interval establishes the range for the mean concentration of all non-baseline sampling data.
Quantifications below the detection limit are entered as one-half the detection limit.
For barium, quantifications below the detection limit are entered as one-half the detection limit as of October 2000, due to varying detection limits before this date. Non-detects prior to Oct 2000 are not used to compute the prediction interval for barium.

RESULTS			
Well Number	**Prediction Interval**	**Mean Concentration of Non-Baseline Sampling Data**	**Result**
Beryllium	[0,0.0027]	0.0023	Not Significant

Predictive Interval Analysis
Monitoring Well 23B (MW23B)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

Prediction Intervals Worksheet for Intrawell Comparisons
Dunn-Erwin Data Set 1
Well: MW23B

Location: Data Set 1 - Shallow Aquifer

This Test compares baseline sampling concentrations to observed concentrations after waste has been deposited.

Background Data						
Parameter	Background data, mg/l				Sample Mean	Sample Stan. Dev.
Barium	0.071	0.17	0.109	0.228	0.145	0.069

Variables		**Where**
n=	4	n= Background population
n-1=	3	n-1=degrees of freedom
m=	33	m=Compliance well sample population
t=	3.75	t=95th percentile of the Bonferroni - Statistics

Prediction Interval: $K=[O, X_{ave}+S(1/m+1/n)^{1/2}\, t_{n-1.K.095)}]$

Where
X_{ave} = the mean concentration of the baseline sampling data
S = standard devation of the baseline sampling data

Note:
The Prediction Interval establishes the range for the mean concentration of all non-baseline sampling data. Quantifications below the detection limit are entered as one-half the detection limit as of October 2000, due to varying detection limits before this date. Non-detects prior to Oct 2000 are not used to compute the prediction interval.

RESULTS			
Well Number	**Prediction Interval**	**Mean Concentration of Non-Baseline Sampling Data**	**Result**
Barium	[0,0.282]	0.230	Not Significant

APPENDIX B

DATA SET 2

Groundwater Monitoring Point Data
Surface Water Monitoring Point 1 (SWPT1)
Upgradient Point - Set 3
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	SWPT1																		
SAMPLE DATE	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Mar. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01
INORGANICS (mg/l)																			
Antimony						NA	NA												
Arsenic	0.007				0.013	NA	NA												
Barium	0.045	0.033	0.03	0.029		NA	NA												
Beryllium						NA	NA												
Cadmium					0.001	NA	NA												
Chromium	0.002					NA	NA												
Cobalt						NA	NA								0.010				
Copper	0.006			0.006		NA	NA												
Lead						NA	NA												
Nickel						NA	NA												
Selenium						NA	NA												
Silver						NA	NA												
Vanadium						NA	NA												
Zinc	0.011	0.016	0.021	0.013		NA	NA				0.022		0.04						
ORGANICS (ug/l)																			
Benzene						NA	NA												
Chloromethane						NA	NA												
cis-1,2 Dichloroethene						NA	NA												
Ethylbenzene						NA	NA												
Toluene						NA	NA								1.3				
Vinyl chloride						NA	NA												
Xylenes						NA	NA												
NOTES		- indicates concentrations exceeding NCGS																	
	"NE"	- not established																	
	"NT"	- not tested																	
	"NA"	- not applicable																	
	*	-denotes an Appendix II constituent not included in Appendix I																	

Groundwater Monitoring Point Data
Surface Water Monitoring Point 1 (SWPT1)
Upgradient Point - Set 3
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																
SAMPLE DATE	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09
INORGANICS (mg/l)																
Antimony								NA				NA				
Arsenic								NA				NA		0.047	0.021	0.011
Barium								NA				NA		0.183	0.222	
Beryllium								NA				NA				
Cadmium				0.001				NA				NA				
Chromium								NA				NA			0.011	
Cobalt								NA				NA		0.031	0.037	
Copper								NA				NA			0.015	
Lead								NA				NA		0.01	0.029	
Nickel								NA				NA				
Selenium								NA				NA				
Silver								NA				NA				
Vanadium								NA				NA		0.04	0.039	
Zinc								NA			0.011	NA	0.022	0.033	0.073	
ORGANICS (ug/l)																
Benzene								NA				NA				
Chloromethane								NA				NA		1.3		
cis-1,2 Dichloroethene								NA				NA				
Ethylbenzene								NA				NA				
Toluene								NA				NA				
Vinyl chloride								NA				NA				
Xylenes								NA				NA				
NOTES																

Groundwater Monitoring Point Data
Surface Water Monitoring Point 1 (SWPT1)
Upgradient Point - Set 3
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT		SWPT1 Detects		NCGS
SAMPLE DATE	Apr. 10	detect#	detect%	
INORGANICS (mg/l)				(mg/l)
Antimony		0	0%	0.0014**
Arsenic		5	16%	0.01
Barium		6	19%	0.7
Beryllium		0	0%	0.004**
Cadmium		2	6%	0.002
Chromium		2	6%	0.01
Cobalt		3	9%	0.07**
Copper		3	9%	1
Lead		2	6%	0.015
Nickel		0	0%	0.1
Selenium		0	0%	0.02
Silver		0	0%	0.02
Vanadium		2	6%	0.0035**
Zinc		10	31%	1
ORGANICS (ug/l)				(ug/l)
Benzene		0	0%	1
Chloromethane		1	3%	3
cis-1,2 Dichloroethene		0	0%	70
Ethylbenzene		0	0%	600
Toluene		1	3%	600
Vinyl chloride		0	0%	0.03
Xylenes		0	0%	500
NOTES				
				NCGS =
				2L STD or
			**	13B GWPS

Groundwater Monitoring Point Data
Surface Water Monitoring Point 2 (SWPT2)
Set 3 - Downgradient Point
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	SWPT2																		
SAMPLE DATE	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Mar. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr .01	Oct. 01
INORGANICS (mg/l)																			
Antimony						NA	NA												
Arsenic		0.005				NA	NA												
Barium	0.032	0.027	0.025	0.028		NA	NA				0.01								
Beryllium						NA	NA												
Cadmium		0.001				NA	NA												
Chromium				0.002		NA	NA												
Cobalt						NA	NA								0.01				
Copper	0.005		0.006	0.005		NA	NA												
Lead			0.002			NA	NA												
Nickel						NA	NA												
Selenium						NA	NA												
Silver						NA	NA												
Vanadium						NA	NA												
Zinc	0.007	0.005	0.01	0.016		NA	NA				0.007								
ORGANICS (ug/l)																			
Benzene						NA	NA												
Chloromethane						NA	NA												
cis-1,2 Dichloroethene						NA	NA												
Ethylbenzene						NA	NA												
Toluene						NA	NA												
Vinyl chloride						NA	NA												
Xylenes						NA	NA												
NOTES		- indicates concentrations exceeding NCGS																	
	"NE"	- not established																	
	"NT"	- not tested																	
	"NA"	- not applicable																	
	*	-denotes an Appendix II constituent not included in Appendix I																	

Groundwater Monitoring Point Data
Surface Water Monitoring Point 2 (SWPT2)
Set 3 - Downgradient Point
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																
SAMPLE DATE	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09
INORGANICS (mg/l)																
Antimony												NA				
Arsenic												NA		0.012		
Barium												NA				
Beryllium												NA				
Cadmium												NA				
Chromium												NA				
Cobalt												NA				
Copper												NA				
Lead												NA				
Nickel												NA				
Selenium												NA				
Silver												NA				
Vanadium												NA				
Zinc												NA	0.02	0.014	0.01	
ORGANICS (ug/l)																
Benzene												NA				
Chloromethane												NA				
cis-1,2 Dichloroethene												NA				
Ethylbenzene												NA				
Toluene												NA		2.3		
Vinyl chloride												NA				
Xylenes												NA				
NOTES																

Groundwater Monitoring Point Data
Surface Water Monitoring Point 2 (SWPT2)
Set 3 - Downgradient Point
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT		SWPT2 Detects		NCGS
SAMPLE DATE	Apr. 10	detect#	detect%	
INORGANICS (mg/l)				(mg/l)
Antimony		0	0%	0.0014**
Arsenic		2	6%	0.01
Barium		5	15%	0.7
Beryllium		0	0%	0.004**
Cadmium		1	3%	0.002
Chromium		1	3%	0.01
Cobalt		1	3%	0.07**
Copper		3	9%	1
Lead		1	3%	0.015
Nickel		0	0%	0.1
Selenium		0	0%	0.02
Silver		0	0%	0.02
Vanadium		0	0%	0.0035**
Zinc	0.017	9	27%	1
ORGANICS (ug/l)				(ug/l)
Benzene		0	0%	1
Chloromethane		0	0%	3
cis-1,2 Dichloroethene		0	0%	70
Ethylbenzene		0	0%	600
Toluene	1.4	2	6%	600
Vinyl chloride		0	0%	0.03
Xylenes		0	0%	500
NOTES				
				NCGS =
				2L STD or
			**	13B GWPS

Groundwater Monitoring Point Data
Surface Water Monitoring Point 3 (SWPT3)
Set 3 - Downgradient Point
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	SWPT3																		
SAMPLE DATE	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Mar. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01
INORGANICS (mg/l)																			
Antimony						NA	NA												
Arsenic					0.023	NA	NA												
Barium	0.035	0.03	0.025	0.029		NA	NA				0.032		0.2		0.036				
Beryllium						NA	NA												
Cadmium	0.0045				0.006	NA	NA												
Chromium				0.002		NA	NA					0.02							
Cobalt	0.006					NA	NA												
Copper	0.009	0.005	0.007	0.005		NA	NA												
Lead	0.003					NA	NA						0.02						
Nickel						NA	NA												
Selenium						NA	NA												
Silver						NA	NA												
Vanadium						NA	NA												
Zinc	0.013	0.005	0.009	0.01		NA	NA				0.026		0.1						
ORGANICS (ug/l)																			
Benzene					9.1	NA	NA												
Chloromethane						NA	NA												
cis-1,2 Dichloroethene					11	NA	NA												
Ethylbenzene					14	NA	NA												
Toluene					14	NA	NA								5.6				
Vinyl chloride					15	NA	NA												
Xylenes					20	NA	NA												

NOTES		
		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NT"	- not tested
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Point Data
Surface Water Monitoring Point 3 (SWPT3)
Set 3 - Downgradient Point
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT																
SAMPLE DATE	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09
INORGANICS (mg/l)																
Antimony												NA				
Arsenic												NA		0.011		
Barium												NA		0.118		
Beryllium												NA				
Cadmium												NA				
Chromium												NA				
Cobalt		0.002										NA				
Copper												NA				
Lead												NA				
Nickel												NA				
Selenium												NA				
Silver												NA				
Vanadium												NA				
Zinc					0.366							NA	0.016	0.028		
ORGANICS (ug/l)																
Benzene												NA				
Chloromethane												NA				
cis-1,2 Dichloroethene												NA				
Ethylbenzene												NA				
Toluene												NA		3.5		
Vinyl chloride												NA				
Xylenes												NA				
NOTES																

Groundwater Monitoring Point Data
Surface Water Monitoring Point 3 (SWPT3)
Set 3 - Downgradient Point
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT		SWPT3 Detects		NCGS
SAMPLE DATE	Apr. 10	detect#	detect%	
INORGANICS (mg/l)				(mg/l)
Antimony		0	0%	0.0014**
Arsenic		2	6%	0.01
Barium		8	24%	0.7
Beryllium		0	0%	0.004**
Cadmium		2	6%	0.002
Chromium		2	6%	0.01
Cobalt		2	6%	0.07**
Copper		4	12%	1
Lead		2	6%	0.015
Nickel		0	0%	0.1
Selenium		0	0%	0.02
Silver		0	0%	0.02
Vanadium		0	0%	0.0035**
Zinc		9	27%	1
ORGANICS (ug/l)				(ug/l)
Benzene		1	3%	1
Chloromethane		0	0%	3
cis-1,2 Dichloroethene		1	3%	70
Ethylbenzene		1	3%	600
Toluene		3	9%	600
Vinyl chloride		1	3%	0.03
Xylenes		1	3%	500
NOTES				
				NCGS =
				2L STD or
			**	13B GWPS

Groundwater Monitoring Point Data
Surface Water Monitoring Point 4 (SWPT4)
Set 3 - Downgradient Point
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	SWPT4	SWPT3 Detects		NCGS
SAMPLE DATE	Apr. 10	detect#	detect%	
INORGANICS (mg/l)				(mg/l)
Antimony		0	0%	0.0014**
Arsenic		0	0%	0.01
Barium		0	0%	0.7
Beryllium		0	0%	0.004**
Cadmium		0	0%	0.002
Chromium		0	0%	0.01
Cobalt		0	0%	0.07**
Copper		0	0%	1
Lead		0	0%	0.015
Nickel		0	0%	0.1
Selenium		0	0%	0.02
Silver		0	0%	0.02
Vanadium		0	0%	0.0035**
Zinc		0	0%	1
ORGANICS (ug/l)				(ug/l)
Benzene		0	0%	1
Chloromethane		0	0%	3
cis-1,2 Dichloroethene		0	0%	70
Ethylbenzene		0	0%	600
Toluene		0	0%	600
Vinyl chloride		0	0%	0.03
Xylenes		0	0%	500

SWPT4 not included in statistical analysis until background sampling is completed.

NOTES		
		- indicates concentrations exceeding NCGS
	"NE"	- not established
	"NT"	- not tested
	"NA"	- not applicable
	*	-denotes an Appendix II constituent not included in Appendix I

NCGS = 2L STD or ** 13B GWPS

Recommended Test Per Constituent
Total Detects and Percentages
Set 3 Data
Dunn-Erwin MSW Landfill
Harnett County, NC

CONSTITUENT	SET 3 DATA		RECOMMENDED TEST
	Detect #	Detect %	
INORGANICS (mg/l)			
Antimony	0	0%	QUALITATIVE
Arsenic	9	9%	QUALITATIVE
Barium	19	19%	TEST OF PROPORTIONS*
Beryllium	0	0%	QUALITATIVE
Cadmium	5	5%	QUALITATIVE
Chromium	5	5%	QUALITATIVE
Cobalt	6	6%	QUALITATIVE
Copper	10	10%	TEST OF PROPORTIONS*
Lead	5	5%	QUALITATIVE
Nickel	0	0%	QUALITATIVE
Selenium	0	0%	QUALITATIVE
Silver	0	0%	QUALITATIVE
Vanadium	2	2%	QUALITATIVE
Zinc	28	29%	TEST OF PROPORTIONS*
ORGANICS (ug/l)			
Benzene	1	1%	QUALITATIVE
Chloromethane	1	1%	QUALITATIVE
cis-1,2 Dichloroethene	1	1%	QUALITATIVE
Ethylbenzene	1	1%	QUALITATIVE
Toluene	6	6%	QUALITATIVE
Vinyl chloride	1	1%	QUALITATIVE
Xylenes	1	1%	QUALITATIVE
NOTES:			
* The Test of Proportions may be performed jointly with a qualatative test to ensure more accurate results.			

APPENDIX C

DATA SET 3

Groundwater Monitoring Well Data
Monitoring Well 16 (MW16)
Upgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW16																	
SAMPLE DATE	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01
INORGANICS (mg/l)																		
Antimony						NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic						NA	NA											
Barium	0.112	0.194	0.114	0.147		NA	NA				0.104	0.099	0.1	0.281	0.162	0.06		
Beryllium						NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.0018	0.001	0.006	0.007	0.002	NA	NA		0.0075	0.0049				0.001				
Chromium	0.004	0.007		0.005	0.01	NA	NA			0.019		0.006	0.008	0.062	0.019			
Cobalt						NA	NA		0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	0.008	0.009	0.018	0.014		NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.002	0.003		0.004	0.013	NA	NA		0.012	0.020	0.002		0.005	0.039	0.011	0.002		
Mercury						NA	NA						0.0002					
Nickel						NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium						NA	NA											
Silver						NA	NA											
Vanadium	0.005	0.012				NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	0.012	0.014	0.015	0.027		NA	NA		0.070	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																		
cis-1,2-dichloroethene						NA	NA											
methylene chloride			29.4			NA	NA											
mek; 2-butanone						NA	NA											
NOTES		- indicates concentrations exceeding NCGS																
	"NE"	- not established																
	"NT"	- not tested																
	"NA"	- not applicable																
	*	-denotes an Appendix II constituent not included in Appendix I																

Groundwater Monitoring Well Data
Monitoring Well 16 (MW16)
Upgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT															
SAMPLE DATE	Oct. 01	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08
INORGANICS (mg/l)															
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic															
Barium															
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium															
Chromium															
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead															
Mercury															
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium															
Silver															
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)															
cis-1,2-dichloroethene															
methylene chloride															
mek; 2-butanone															
NOTES															

Groundwater Monitoring Well Data
Monitoring Well 16 (MW16)
Upgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT				MW16 Detects		NCGS
SAMPLE DATE	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)						(mg/l)
Antimony	NA	NA	NA	0	0%	0.0014**
Arsenic				0	0%	0.01
Barium				10	29%	0.7
Beryllium	NA	NA	NA	0	0%	0.004**
Cadmium				8	24%	0.002
Chromium				9	26%	0.01
Cobalt	NA	NA	NA	1	14%	0.07**
Copper	NA	NA	NA	4	57%	1
Lead				11	32%	0.015
Mercury				1	3%	0.001
Nickel	NA	NA	NA	0	0%	0.1
Selenium				0	0%	0.02
Silver				0	0%	0.02
Vanadium	NA	NA	NA	2	29%	0.0035**
Zinc	NA	NA	NA	5	71%	1
ORGANICS (ug/l)						(ug/l)
cis-1,2-dichloroethene				0	0%	70
methylene chloride				1	3%	5
mek; 2-butanone				0	0%	4000
NOTES						
						NCGS =
						2L STD or
				** 13B GWPS as of Oct 07		

Groundwater Monitoring Well Data
Monitoring Well 32 (MW32)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW32																		
SAMPLE DATE	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01
INORGANICS (mg/l)																			
Antimony		0.004				NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		0.015		0.007		NA	NA							0.006	0.005				
Barium	0.097	0.646	0.145	0.251		NA	NA					0.043	0.249	0.352	0.303	0.067			
Beryllium				0.004		NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.0013	0.004				NA	NA						0.025	0.001	0.001				
Chromium	0.004	0.133	0.015	0.022		NA	NA							0.038	0.041				
Cobalt		0.039	0.013	0.009		NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	0.006	0.094	0.017	0.026		NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.002	0.09	0.01	0.02		NA	NA				0.004	0.002	0.012	0.064	0.033				
Mercury						NA	NA												
Nickel		0.05				NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium		0.002				NA	NA												
Silver						NA	NA												
Vanadium	0.005	0.41	0.045	0.09		NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	0.008	0.189	0.029	0.051		NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																			
cis-1,2-dichloroethene						NA	NA												
methylene chloride						NA	NA												
mek; 2-butanone			471			NA	NA												
NOTES		- indicates concentrations exceeding NCGS																	
	"NE"	- not established																	
	"NT"	- not tested																	
	"NA"	- not applicable																	
	*	-denotes an Appendix II constituent not included in Appendix I																	

Groundwater Monitoring Well Data
Monitoring Well 32 (MW32)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT														
SAMPLE DATE	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08
INORGANICS (mg/l)														
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic														
Barium													0.105	
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium													0.001	
Chromium			0.094	0.012										
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead			0.063				0.029		0.021		0.011	0.011	0.024	
Mercury														
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium														
Silver														
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)														
cis-1,2-dichloroethene														
methylene chloride														
mek; 2-butanone														
NOTES														

Groundwater Monitoring Well Data
Monitoring Well 32 (MW32)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT				MW32 Detects		NCGS
SAMPLE DATE	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)						(mg/l)
Antimony	NA	NA	NA	1	14%	0.0014**
Arsenic				4	12%	0.01
Barium		0.11		11	32%	0.7
Beryllium	NA	NA	NA	1	14%	0.004**
Cadmium				6	18%	0.002
Chromium				8	24%	0.01
Cobalt	NA	NA	NA	3	43%	0.07**
Copper	NA	NA	NA	4	57%	1
Lead		0.023		16	47%	0.015
Mercury				0	0%	0.001
Nickel	NA	NA	NA	1	14%	0.1
Selenium				1	3%	0.02
Silver				0	0%	0.02
Vanadium	NA	NA	NA	4	57%	0.0035**
Zinc	NA	NA	NA	4	57%	1
ORGANICS (ug/l)						(ug/l)
cis-1,2-dichloroethene				0	0%	70
methylene chloride				0	0%	5
mek; 2-butanone				1	3%	4000
NOTES						
						NCGS =
						2L STD or
				** 13B GWPS as of Oct 07		

Groundwater Monitoring Well Data
Monitoring Well 33 (MW33)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW33																		
SAMPLE DATE	Oct. 94	Nov.94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01
INORGANICS (mg/l)																			
Antimony						NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic						NA	NA												
Barium	0.1	0.332	0.184	0.12		NA	NA				0.135	0.005	0.185	0.107	0.121	0.06			
Beryllium				0.008	0.007	NA	NA		0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.0021	0.003	0.005			NA	NA												
Chromium	0.005	0.012	0.014	0.006		NA	NA						0.012	0.007					
Cobalt		0.006	0.006			NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	0.013	0.02	0.028	0.015		NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.004	0.012	0.014	0.006		NA	NA				0.004		0.016	0.01	0.011				
Mercury						NA	NA				0.0004							0.0005	
Nickel						NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium						NA	NA												
Silver						NA	NA												
Vanadium	0.008	0.02	0.02			NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	0.011	0.026	0.42	0.023		NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																			
cis-1,2-dichloroethene						NA	NA						1.8	1.2	1.8				
methylene chloride						NA	NA												
mek; 2-butanone						NA	NA												
NOTES		- indicates concentrations exceeding NCGS																	
	"NE"	- not established																	
	"NT"	- not tested																	
	"NA"	- not applicable																	
	*	-denotes an Appendix II constituent not included in Appendix I																	

Groundwater Monitoring Well Data
Monitoring Well 33 (MW33)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT														
SAMPLE DATE	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08
INORGANICS (mg/l)														
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic														
Barium														
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium														
Chromium														
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead														
Mercury														
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium														
Silver														
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)														
cis-1,2-dichloroethene														
methylene chloride														
mek; 2-butanone														
NOTES														

Groundwater Monitoring Well Data
Monitoring Well 33 (MW33)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT				MW33 Detects		NCGS
SAMPLE DATE	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)						(mg/l)
Antimony	NA	NA	NA	0	0%	0.0014**
Arsenic				0	0%	0.01
Barium				10	29%	0.7
Beryllium	NA	NA	NA	3	43%	0.004**
Cadmium				3	9%	0.002
Chromium				6	18%	0.01
Cobalt	NA	NA	NA	2	29%	0.07**
Copper	NA	NA	NA	4	57%	1
Lead				8	24%	0.015
Mercury				2	6%	0.001
Nickel	NA	NA	NA	0	0%	0.1
Selenium				0	0%	0.02
Silver				0	0%	0.02
Vanadium	NA	NA	NA	3	43%	0.0035**
Zinc	NA	NA	NA	4	57%	1
ORGANICS (ug/l)						(ug/l)
cis-1,2-dichloroethene				3	9%	70
methylene chloride				0	0%	5
mek; 2-butanone				0	0%	4000
NOTES						
						NCGS =
						2L STD or
				** 13B GWPS as of Oct 07		

Groundwater Monitoring Well Data
Monitoring Well 34 (MW34)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW34																	
SAMPLE DATE	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05
INORGANICS (mg/l)																		
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic																		
Barium			0.112	0.005	0.201	0.246	0.221	0.062										
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium																		
Chromium					0.017	0.031	0.012											
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead			0.003	0.002	0.02	0.025	0.02											
Mercury					0.0003	0.0003												
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium																		
Silver																		
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																		
cis-1,2-dichloroethene																		
methylene chloride																		
mek; 2-butanone																		

NOTES

MW34 was installed in June 1996 therefore no data prior to this date are available.

	- indicates concentrations exceeding NCGS
"NE"	- not established
"NT"	- not tested
"NA"	- not applicable
*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 34 (MW34)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT											MW34 Detects		NCGS
SAMPLE DATE	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)													(mg/l)
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0014**
Arsenic											0	0%	0.01
Barium											6	21%	0.7
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.004**
Cadmium						0.001	0.001				0	7%	0.002
Chromium											3	16%	0.01
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.07**
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Lead										0.06	5	26%	0.015
Mercury											2	11%	0.001
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1
Selenium											0	0%	0.02
Silver											0	0%	0.02
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0035**
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
ORGANICS (ug/l)													(ug/l)
cis-1,2-dichloroethene											0	0%	70
methylene chloride											0	0%	5
mek; 2-butanone											0	0%	4000

NOTES

MW34 was installed in Ju

"NE"
"NT"
"NA"
*

NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
Monitoring Well 35 (MW35)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW35																	
SAMPLE DATE	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05
INORGANICS (mg/l)																		
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		0.0681	0.021		0.016	0.008	0.010											
Barium		2.06	0.877	0.005	0.489	0.848	0.512	0.132										
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		0.0119	0.208			0.001												
Chromium		0.406			0.077	0.148	0.035	0.006										
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		0.355	0.105	0.002	0.055	0.110	0.043	0.003										
Mercury		0.002			0.0002	0.0004												
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium			0.004															
Silver																		
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																		
cis-1,2-dichloroethene																		
methylene chloride																		
mek; 2-butanone																		

NOTES

MW35 was installed in June 1996 therefore no data prior to this date are available.

	- indicates concentrations exceeding NCGS
"NE"	- not established
"NT"	- not tested
"NA"	- not applicable
*	-denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
Monitoring Well 35 (MW35)
Downgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT											MW35 Detects		NCGS
SAMPLE DATE	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	detect#	detect%	
INORGANICS (mg/l)													(mg/l)
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0014**
Arsenic											5	18%	0.01
Barium				0.132	0.318	0.225	0.25	0.179	0.29	0.179	7	50%	0.7
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.004**
Cadmium											3	11%	0.002
Chromium											5	26%	0.01
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.07**
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Lead											7	37%	0.015
Mercury											3	16%	0.001
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1
Selenium											1	4%	0.02
Silver											0	0%	0.02
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0035**
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
ORGANICS (ug/l)													(ug/l)
cis-1,2-dichloroethene											0	0%	70
methylene chloride											0	0%	5
mek; 2-butanone											0	0%	4000
NOTES													
MW35 was installed in Ju													NCGS =
													2L STD or
"NE"											** 13B GWPS as of Oct 07		
"NT"													
"NA"													
*													

Recommended Test Per Constituent
Total Detects and Percentages
Set 2 Data
Dunn-Erwin MSW Landfill
Harnett County, NC

CONSTITUENT	SET 2 DATA		RECOMMENDED TEST
	Detect #	Detect %	
INORGANICS (mg/l)			
Arsenic	9	6%	QUALITATIVE
Barium	44	28%	TEST OF PROPORTIONS*
Cadmium	20	13%	TEST OF PROPORTIONS*
Chromium	31	20%	TEST OF PROPORTIONS*
Lead	47	30%	TEST OF PROPORTIONS*
Mercury	8	5%	QUALITATIVE
Selenium	2	1%	QUALITATIVE
Silver	0	0%	QUALITATIVE
ORGANICS (ug/l)			
cis-1,2-dichloroethene	3	2%	QUALITATIVE
methylene chloride	1	1%	QUALITATIVE
mek; 2-butanone	1	1%	QUALITATIVE
NOTES:			
* The Test of Proportions may be performed jointly with a qualitative test to ensure more accurate results.			

APPENDIX D

LABORATORY RESULTS AND CHAIN OF CUSTODY FORMS

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#: 6040 A

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/20/10
DATE REPORTED : 05/11/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	SW-1	SW-2	SW-3	SW-4	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.3	6.0	6.4	5.9	04/20/10	RJH	SM4500HB
Antimony, ug/l	0.22	6.0	--- U	--- U	--- U	--- U	04/27/10	CMF	EPA200.8
Arsenic, ug/l	0.04	10.0	1.9 J	4.2 J	2.5 J	2.4 J	04/27/10	CMF	EPA200.8
Barium, ug/l	0.03	100.0	39.8 J	94.1 J	42.6 J	57.4 J	04/27/10	CMF	EPA200.8
Beryllium, ug/l	0.02	1.0	0.1 J	0.1 J	0.1 J	0.1 J	04/27/10	CMF	EPA200.8
Cadmium, ug/l	0.02	1.0	0.1 J	0.2 J	0.1 J	0.1 J	04/27/10	CMF	EPA200.8
Cobalt, ug/l	0.10	10.0	0.9 J	5.6 J	1.0 J	3.4 J	04/27/10	CMF	EPA200.8
Copper, ug/l	0.03	10.0	1.5 J	4.9 J	1.6 J	1.3 J	04/27/10	CMF	EPA200.8
Total Chromium, ug/l	0.03	10.0	1.0 J	1.9 J	1.9 J	1.2 J	04/27/10	CMF	EPA200.8
Lead, ug/l	0.01	10.0	1.2 J	2.4 J	1.9 J	0.8 J	04/27/10	CMF	EPA200.8
Nickel, ug/l	0.05	50.0	0.8 J	1.3 J	1.9 J	1.1 J	04/27/10	CMF	EPA200.8
Selenium, ug/l	0.32	10.0	--- U	--- U	--- U	--- U	04/27/10	CMF	EPA200.8
Silver, ug/l	0.03	10.0	0.1 J	--- U	0.1 J	0.1 J	04/27/10	CMF	EPA200.8
Thallium, ug/l	0.05	5.0	--- U	--- U	--- U	--- U	04/27/10	CMF	EPA200.8
Vanadium, ug/l	0.03	25.0	2.8 J	7.4 J	4.7 J	3.1 J	04/27/10	CMF	EPA200.8
Zinc, ug/l	0.08	10.0	5.3 J	17	6.4 J	9.3 J	04/27/10	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	25	90	35	29	04/21/10	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	92	83	128	88	04/20/10	RJH	SM2510B
Temperature, °C			24	19	17	17	04/20/10	RJH	SM2550B

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: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

REVIEWED BY:

CLIENT ID: 6040 A

ANALYST: MAO
DATE COLLECTED: 04/20/10
DATE ANALYZED: 04/27/10
DATE REPORTED: 05/11/10

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	SW-1	SW-2	SW-3	SW-4
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	4.00 J	18.60 J	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	1.40	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U

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

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: 6040 A **Week:** 17

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON NC 27546

(919) 233-0407

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION													
pH CHECK (LAB)													
CONTAINER TYPE, P/G						P	P	P	P	P	G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A	E	E	E
SW-1	04/2010	1350		24	6	G	G	G	G	G	G	G	G
SW-2	04/2010	1020		19	5	G	G	G	G	G	G	G	
SW-3	04/2010	0935		17	5	G	G	G	G	G	G	G	
SWS-4	04/2010	1125		17	5	G	G	G	G	G	G	G	

PARAMETERS — CHEMICAL PRESERVATION:
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) H Pope / fat

SAMPLES RECEIVED IN LAB AT 02 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Pope	04/2010	[signature]	4/20/14:14
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form 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

№ 201905

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#: 6040 B

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/21/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-1	MW-2	MW-3R	MW-4	MW-5	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.4	4.6	5.1	4.5	6.2	04/21/10	RJH	SM4500HB
Antimony, ug/l	0.22	6.0	0.5 J	--- U	1 J	0.3 J	--- U	04/28/10	LFJ	EPA200.8
Arsenic, ug/l	0.04	10.0	0.3 J	0.2 J	--- U	0.3 J	--- U	04/28/10	LFJ	EPA200.8
Barium, ug/l	0.03	100.0	17.9 J	51.8 J	87.5 J	65.5 J	113	04/28/10	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.9 J	1.7	2.8	2.8	0.2 J	04/28/10	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.2 J	0.2 J	0.1 J	0.1 J	0.1 J	04/28/10	LFJ	EPA200.8
Cobalt, ug/l	0.10	10.0	0.7 J	1.3 J	2.5 J	2.1 J	2.4 J	04/28/10	LFJ	EPA200.8
Copper, ug/l	0.03	10.0	3.7 J	1.1 J	0.7 J	1.7 J	1.1 J	04/28/10	LFJ	EPA200.8
Total Chromium, ug/l	0.03	10.0	--- U	--- U	--- U	--- U	--- U	04/28/10	LFJ	EPA200.8
Lead, ug/l	0.01	10.0	0.3 J	0.4 J	0.2 J	0.2 J	0.2 J	04/28/10	LFJ	EPA200.8
Nickel, ug/l	0.05	50.0	0.5 J	1.4 J	2.4 J	2 J	1.6 J	04/28/10	LFJ	EPA200.8
Selenium, ug/l	0.32	10.0	--- U	--- U	--- U	0.9 J	--- U	04/28/10	LFJ	EPA200.8
Silver, ug/l	0.03	10.0	0.1 J	0.1 J	0.1 J	0.1 J	0.1 J	04/28/10	LFJ	EPA200.8
Thallium, ug/l	0.05	5.0	0.1 J	--- U	--- U	--- U	--- U	04/28/10	LFJ	EPA200.8
Vanadium, ug/l	0.03	25.0	0.3 J	0.6 J	0.5 J	--- U	0.3 J	04/28/10	LFJ	EPA200.8
Zinc, ug/l	0.08	10.0	3.5 J	7.9 J	12	13	2.9 J	04/28/10	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	9.1	14	11	6.1	18	04/21/10	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	57	89	129	66	157	04/21/10	RJH	SM2510B
Temperature, °C			17	16	15	15	16	04/21/10	RJH	SM2550B
Static Water Level, feet			25.09	14.93	4.93	3.92	15.36	04/21/10	RJH	
Well Depth, feet			65.18	30.21	25.12	20.21	40.14	04/21/10	RJH	
Water Bailed, Gals.			19.8	7.2	9.6	7.8	11.7	04/21/10	RJH	

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

Environment 1, Incorporated

Drinking Water ID: 37716
Wastewater ID: 10

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

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

ID#: 6040 B

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/21/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-6	MW-7B	MW-8	MW-9	MW-10	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.4	4.8	4.3	5.2	5.6	04/21/10	RJH	SM4500HB
Antimony, ug/l	0.22	6.0	--- U	--- U	--- U	--- U	--- U	04/28/10	LFJ	EPA200.8
Arsenic, ug/l	0.04	10.0	1.7 J	0.5 J	--- U	4.1 J	5.6 J	04/28/10	LFJ	EPA200.8
Barium, ug/l	0.03	100.0	153	364	115	126	49.6 J	04/28/10	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.3 J	0.2 J	0.7 J	0.5 J	0.1 J	04/28/10	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	1.4	0.2 J	0.2 J	0.3 J	0.2 J	04/28/10	LFJ	EPA200.8
Cobalt, ug/l	0.10	10.0	34	21	1.8 J	1.1 J	2.2 J	04/28/10	LFJ	EPA200.8
Copper, ug/l	0.03	10.0	7 J	2.1 J	2.9 J	8.3 J	9.9 J	04/28/10	LFJ	EPA200.8
Total Chromium, ug/l	0.03	10.0	7.4 J	0.6 J	0.4 J	17	1.1 J	04/28/10	LFJ	EPA200.8
Lead, ug/l	0.01	10.0	19	23	1.4 J	14	1.3 J	04/28/10	LFJ	EPA200.8
Nickel, ug/l	0.05	50.0	1.6 J	1.7 J	2 J	1.7 J	1.8 J	04/28/10	LFJ	EPA200.8
Selenium, ug/l	0.32	10.0	0.4 J	--- U	--- U	0.8 J	0.5 J	04/28/10	LFJ	EPA200.8
Silver, ug/l	0.03	10.0	0.1 J	--- U	0.1 J	0.1 J	0.1 J	04/28/10	LFJ	EPA200.8
Thallium, ug/l	0.05	5.0	0.2 J	0.8 J	--- U	--- U	--- U	04/28/10	LFJ	EPA200.8
Vanadium, ug/l	0.03	25.0	24.3 J	1.6 J	1.5 J	39	2.8 J	04/28/10	LFJ	EPA200.8
Zinc, ug/l	0.08	10.0	10	4.6 J	9.8 J	9.3 J	8.9 J	04/28/10	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	260	85	24	950	85	04/21/10	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	302	157	122	226	238	04/21/10	RJH	SM2510B
Temperature, °C			15	17	16	17	17	04/21/10	RJH	SM2550B
Static Water Level, feet			15.60	24.55	15.85	11.59	10.79	04/21/10	RJH	
Well Depth, feet			19.34	30.23	25.22	13.16	16.56	04/21/10	RJH	
Water Bailed, Gals.			1.5	2.4	4.5	1.2	2.4	04/21/10	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#: 6040 B

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/21/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-31	Equipment Blank	Trip Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.0			04/21/10	RJH	SM4500HB
Antimony, ug/l	0.22	6.0	--- U	0.8 J		04/28/10	LFJ	EPA200.8
Arsenic, ug/l	0.04	10.0	0.4 J	--- U		04/28/10	LFJ	EPA200.8
Barium, ug/l	0.03	100.0	9.2 J	0.1 J		04/28/10	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.1 J	0.1 J		04/28/10	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.1 J	--- U		04/28/10	LFJ	EPA200.8
Cobalt, ug/l	0.10	10.0	0.2 J	--- U		04/28/10	LFJ	EPA200.8
Copper, ug/l	0.03	10.0	1.9 J	--- U		04/28/10	LFJ	EPA200.8
Total Chromium, ug/l	0.03	10.0	2.2 J	0.1 J		04/28/10	LFJ	EPA200.8
Lead, ug/l	0.01	10.0	1.8 J	0.1 J		04/28/10	LFJ	EPA200.8
Nickel, ug/l	0.05	50.0	--- U	--- U		04/28/10	LFJ	EPA200.8
Selenium, ug/l	0.32	10.0	--- U	--- U		04/28/10	LFJ	EPA200.8
Silver, ug/l	0.03	10.0	0.1 J	0.1 J		04/28/10	LFJ	EPA200.8
Thallium, ug/l	0.05	5.0	--- U	--- U		04/28/10	LFJ	EPA200.8
Vanadium, ug/l	0.03	25.0	4.3 J	--- U		04/28/10	LFJ	EPA200.8
Zinc, ug/l	0.08	10.0	1.9 J	--- U		04/28/10	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	130			04/21/10	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	25			04/21/10	RJH	SM2510B
Temperature, °C			18			04/21/10	RJH	SM2550B
Static Water Level, feet			22.19			04/21/10	RJH	
Well Depth, feet			39.33			04/21/10	RJH	
Water Bailed, Gals.			8.4			04/21/10	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: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

REVIEWED BY:

CLIENT ID: 6040 B

ANALYST: MAO
DATE COLLECTED: 04/21/10
DATE ANALYZED: 04/28/10
DATE REPORTED: 05/14/10

Page: 1

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-1	MW-2	MW-3R	MW-4	MW-5
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	0.40 J	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

NOTE: MW-2 received at pH>2

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: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 B

ANALYST: MAO
DATE COLLECTED: 04/21/10
DATE ANALYZED: 04/28/10
DATE REPORTED: 05/14/10

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-6	MW-7B	MW-8	MW-9	MW-10
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	6.20	6.40	1.60	7.90	3.90
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	1.40 J	6.80 J	--- U	6.00 J	2.80 J
5. Trichlorofluoromethane	0.24	1.0	--- U	2.30	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	4.00 J	0.40 J	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	26.80 J	66.50 J
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	1.50	79.90	31.40	37.70	15.40
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	3.60 J	136.00	38.00	--- U	6.20
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	17.30	5.70	21.20	14.20	31.20
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	3.30 J
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	0.60 J	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	3.30	9.50	5.60	8.70	6.70
21. 1,2-Dichloroethane	0.27	1.0	--- U	0.30 J	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	4.80	10.20	4.30	2.40	1.60
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	0.90 J
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	4.90	4.90	5.00	1.20	1.10
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	2.60 J	0.40 J	10.10	3.30
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	2.90 J	1.50 J	--- U	1.70 J	4.60 J
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	5.20	1.50	2.00	1.40	5.40
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	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

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

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

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 B

ANALYST: MAO
DATE COLLECTED: 04/21/10
DATE ANALYZED: 04/28/10
DATE REPORTED: 05/14/10

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-31	Equipment Blank	Trip Blank
1. Chloromethane	0.77	1.0	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U

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

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: 6040 B Week: 17

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON NC 27546

(919) 233-0407

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION														
pH CHECK (LAB)							<2					<2	<2	<2
CONTAINER TYPE, P/G						P	P	P	P	P		G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		E	E	E
MW-1	04/21/10	1055		17	6									
MW-2	04/21/10	0840		16	5									
MW-3R	04/21/10	0850		15	5									
MW-4	04/21/10	0855		15	5									
MW-5	04/21/10	0900		16	5									
MW-6	04/21/10	0905		15	5									
MW-7B	04/21/10	0910		17	5									
MW-8	04/21/10	0930		16	5									
MW-9	04/21/10	0920		17	5									
MW-10	04/21/10	0925		17	5									
MW-31	04/21/10	1105		18	6									

PARAMETERS:
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) H Hope / Fox

SAMPLES RECEIVED IN LAB AT 62 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Hope	04/21/10	[illegible]	4/21 1:50
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form 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

№ 201904

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: 6040 B Week: 17

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON NC 27546

(919) 233-0407

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION														
pH CHECK (LAB)							<2					<2	<2	<2
CONTAINER TYPE, P/G						P	P	P	P	P		G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		E	E	E
Trip Blank	04/21/10				2									
Equipment Blank	04/21/10				3									

PARAMETERS: 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) H Jesse Frost

SAMPLES RECEIVED IN LAB AT 0.2 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Jesse	04/21/10	[signature]	4/21 1:49
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form 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

№ 201903

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

PHONE (252) 756-6206
FAX (252) 756-0633

ID#: 6040 C

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/21/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-16	MW-32	MW-33	MW23-B	MW-34	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.3	5.4	4.8	5.2	5.5	04/21/10	RJH	SM4500HB
Arsenic, ug/l	0.04	10.0	--- U	0.5 J	0.4 J	0.2 J	--- U	04/28/10	LFJ	EPA200.8
Barium, ug/l	0.03	100.0	57.1 J	35.5 J	62.3 J	92.1 J	55.6 J	04/28/10	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.1 J	0.1 J	0.1 J	--- U	0.8 J	04/28/10	LFJ	EPA200.8
Total Chromium, ug/l	0.03	10.0	0.1 J	2.6 J	--- U	--- U	2.7 J	04/28/10	LFJ	EPA200.8
Lead, ug/l	0.01	10.0	0.1 J	3 J	0.4 J	0.6 J	60	04/28/10	LFJ	EPA200.8
Mercury, ug/l	0.08	0.20	--- U	--- U	--- U	--- U	--- U	04/28/10	LFJ	EPA200.8
Selenium, ug/l	0.32	10.0	--- U	--- U	--- U	--- U	--- U	04/28/10	LFJ	EPA200.8
Silver, ug/l	0.03	10.0	--- U	0.1 J	--- U	--- U	--- U	04/28/10	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	15	280	18	34	75	04/21/10	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	256	44	72	40	79	04/21/10	RJH	SM2510B
Temperature, °C			15	14	15	14	15	04/21/10	RJH	SM2550B
Static Water Level, feet			8.30	5.46	8.19	5.73	4.71	04/21/10	RJH	
Well Depth, feet			45.23	24.55	26.43	24.55	40.23	04/21/10	RJH	
Water Bailed, Gals.			17.7	9.3	8.7	8.7	17.4	04/21/10	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#: 6040 C

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/21/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-35	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.6	04/21/10	RJH	SM4500HB
Arsenic, ug/l	0.04	10.0	1 J	04/28/10	LFJ	EPA200.8
Barium, ug/l	0.03	100.0	179	04/28/10	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.2 J	04/28/10	LFJ	EPA200.8
Total Chromium, ug/l	0.03	10.0	1.6 J	04/28/10	LFJ	EPA200.8
Lead, ug/l	0.01	10.0	1.8 J	04/28/10	LFJ	EPA200.8
Mercury, ug/l	0.08	0.20	--- U	04/28/10	LFJ	EPA200.8
Selenium, ug/l	0.32	10.0	0.5 J	04/28/10	LFJ	EPA200.8
Silver, ug/l	0.03	10.0	--- U	04/28/10	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	140	04/21/10	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	274	04/21/10	RJH	SM2510B
Temperature, °C			15	04/21/10	RJH	SM2550B
Static Water Level, feet			5.88	04/21/10	RJH	
Well Depth, feet			22.15	04/21/10	RJH	
Water Bailed, Gals.			7.8	04/21/10	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: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 C

ANALYST: MAO
DATE COLLECTED: 04/21/10
DATE REPORTED: 05/14/10

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	04/29/10 MW-16	04/28/10 MW-32	04/29/10 MW-33	04/29/10 MW23-B	04/29/10 MW-34
	Date Analyzed:						
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	0.60 J	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	1.50 J	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	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

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

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

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 C
ANALYST: MAO
DATE COLLECTED: 04/21/10
DATE REPORTED: 05/14/10

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 04/29/10 MW-35
1. Chloromethane	0.77	1.0	--- U
2. Vinyl Chloride	0.63	1.0	--- U
3. Bromomethane	0.67	10.0	--- U
4. Chloroethane	0.48	10.0	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U
7. Acetone	9.06	100.0	--- U
8. Iodomethane	0.26	10.0	--- U
9. Carbon Disulfide	0.23	100.0	--- U
10. Methylene Chloride	0.64	1.0	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U
15. 2-Butanone	2.21	100.0	--- U
16. Bromochloromethane	0.27	3.0	--- U
17. Chloroform	0.25	5.0	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U
20. Benzene	0.24	1.0	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U
22. Trichloroethene	0.23	1.0	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U
24. Bromodichloromethane	0.21	1.0	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U
27. Toluene	0.23	1.0	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U
30. Tetrachloroethene	0.17	1.0	--- U
31. 2-Hexanone	1.57	50.0	--- U
32. Dibromochloromethane	0.24	3.0	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U
34. Chlorobenzene	0.30	3.0	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U
36. Ethylbenzene	0.21	1.0	--- U
37. Xylenes	0.68	5.0	--- U
38. Dibromomethane	0.28	10.0	--- U
39. Styrene	0.19	1.0	--- U
40. Bromoform	0.20	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U
46. Acrylonitrile	2.72	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U

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

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

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

CHAIN OF CUSTODY RECORD

CLIENT: 6040 C Week: 17

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON NC 27546

(919) 233-0407

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION		COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION															
pH CHECK (LAB)								12					12	12	12
CONTAINER TYPE, P/G							P	P	P	P	P		G	G	G
CHEMICAL PRESERVATION							A	A	A	A	A		E	E	E
MW-16	04	21 10	1025		15	6	✓	✓	✓	✓	✓	✓	✓	✓	✓
MW-32	04	21 10	0955		14	5	✓	✓	✓	✓	✓	✓	✓	✓	
MW-33	04	21 10	1015		14	5	✓	✓	✓	✓	✓	✓	✓	✓	
MW23-B	04	21 10	1040		15	5	✓	✓	✓	✓	✓	✓	✓	✓	
MW-34	04	21 10	1045		15	5	✓	✓	✓	✓	✓	✓	✓	✓	
MW-35	04	21 10	1030		15	5	✓	✓	✓	✓	✓	✓	✓	✓	

PARAMETERS

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

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

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) [illegible]

SAMPLES RECEIVED IN LAB AT (1) 2 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
[illegible]	04 21 10	[illegible]	4/21/09
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form 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

№ 201902

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#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/20/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	Piezometer SWSL #41S	Piezometer #44S	Piezometer #44D	Piezometer #46D	Piezometer #47S	Analysis Date	Analyst	Method Code
Static Water Level, feet		15.34	2.81	10.88	26.72	5.69	04/21/10	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
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ID#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/20/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	Piezometer SWSL #47D	Piezometer #48S	Piezometer #50	Piezometer #51	Piezometer #52	Analysis Date	Analyst	Method Code
Static Water Level, feet		26.55	15.15	15.65	10.86	18.66	04/21/10	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#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/20/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	Piezometer #53	GP-24-W	GP-25-W	GP-27-W	GP-28-W	Analysis Date	Analyst	Method Code
Static Water Level, feet			16.85	6.10	8.24	15.59	10.96	04/21/10	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#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/20/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	GP-30-W	GP-31-W	GP-33-W	GP-34-W	GP-35-W	Analysis Date	Analyst	Method Code
Static Water Level, feet			14.80	7.18	18.66	16.47	3.91	04/21/10	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
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ID#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/20/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	GP-36-W	GP-37-W	GP-38-W	Analysis Date	Analyst	Method Code
Static Water Level, feet			17.94	8.49	15.74	04/21/10	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

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CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 E

ANALYST: MAO
DATE COLLECTED: 04/20/10
DATE REPORTED: 05/14/10

Page: 1

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 04/27/10 Piezometer #41S	04/27/10 GP-25-W	04/27/10 GP-30-W	04/28/10 GP-37-W	04/28/10 GP-38-W
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	2.70	--- U	--- U	--- U	1.80
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	0.70 J	--- U	--- U	--- U	1.10 J
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	1.50	1.00	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	1.30 J	2.90 J	--- U	6.40	1.40 J
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	1.10 J	--- U	--- U	--- U	27.40
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	0.60 J	--- U	--- U	--- U	4.00
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	0.80 J	0.50 J	--- U	0.30 J	1.60
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	1.10	0.70 J	--- U	0.50 J	0.50 J
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	0.80 J
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

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

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: 6040 E Week: 17

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON NC 27546

(919) 233-0407

DISINFECTION
- [ ] CHLORINE
- [ ] UV
- [ ] NONE
- [ ] _____

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

CONTAINER TYPE, P/G

CHEMICAL PRESERVATION

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

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
							02	02	
							G	G	G
							E	E	E
Piezometer #41S	04/2010	0705		16	4				
Piezometer #44S	04/2010				1				
Piezometer #44D	04/2010				1				
Piezometer #46D	04/2010				1				
Piezometer #47S	04/2010				1				
Piezometer #47D	04/2010				1				
Piezometer #48S	04/2010				1				
Pizeometer #50	04/2010				1				
Piezometer #51	04/2010				1				
Piezometer #52	04/2010				1				
Piezometer #53	04/2010				1				

CLASSIFICATION:
- [ ] WASTEWATER (NPDES)
- [ ] DRINKING WATER
- [ ] DWQ/GW
- [X] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: Y / N

SAMPLES COLLECTED BY: (Please Print) N Lage / Fap

SAMPLES RECEIVED IN LAB AT 02 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob N Lage	04/30/10	[signature]	5/1/10 4:11
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form 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.

№ 201901

FORM #5

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: 6040 E Week: 17

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON NC 27546

(919) 233-0407

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION									
pH CHECK (LAB)							12	12	
CONTAINER TYPE, P/G							G	G	G
CHEMICAL PRESERVATION (PARAMETERS)							E	E	E
GP-24-W	04/20/10				1				
GP-25-W	04/20/10	1200		16	3				
GP-27-W	04/20/10				1				
GP-28-W	04/20/10				1				
GP-30-W	04/20/10	0915		15	3				
GP-31-W	04/20/10				1				
GP-33-W	04/20/10				1				
GP-34-W	04/20/10				1				
GP-35-W	04/20/10				1				
GP-36-W	04/20/10				1				
GP-37-W	04/20/10	1050		15	3				[G]

CHEMICAL PRESERVATION:
A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NATHIOSULFATE

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

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) W Page / Scott

SAMPLES RECEIVED IN LAB AT 0-2 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Scott W Page 04/20/10		[signature]	4/20/10 1414
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form 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.

№ 201900

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CHAIN OF CUSTODY RECORD

CLIENT: 6040 E Week: 17

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LILLINGTON NC 27546

(919) 233-0407

DISINFECTION
- [ ] CHLORINE
- [ ] UV
- [ ] NONE
- [ ] _____

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB): 2 12

CONTAINER TYPE, P/G: G G G

CHEMICAL PRESERVATION: E E E

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

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
GP-38-W	04/20/10	1412		18	3				

CLASSIFICATION:
- [ ] WASTEWATER (NPDES)
- [ ] DRINKING WATER
- [ ] DWQ/GW
- [x] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: Y N

SAMPLES COLLECTED BY: (Please Print) H Dagge / F of

SAMPLES RECEIVED IN LAB AT 02 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Dagge	04/20/10	[signature]	4/20 4:11
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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FORM #5

№ 201899

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27836-7085

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

ID#: 6040 F

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON ,NC 27546

DATE COLLECTED: 04/21/10
DATE REPORTED : 05/14/10

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-11	MW-12	MW-13	MW-14	MW-15	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.9	4.7	6.3	5.5	5.2	04/21/10	RJH	SM4500HB
Antimony, ug/l	0.22	6.0	--- U					04/28/10	LFJ	EPA200.8
Antimony, ug/l	0.22	6.0		--- U	--- U	0.8 J	0.2 J	04/29/10	CMF	EPA200.8
Arsenic, ug/l	0.04	10.0	--- U					04/28/10	LFJ	EPA200.8
Arsenic, ug/l	0.04	10.0		--- U	0.3 J	--- U	0.2 J	04/29/10	CMF	EPA200.8
Barium, ug/l	0.03	100.0	30.3 J					04/28/10	LFJ	EPA200.8
Barium, ug/l	0.03	100.0		33.3 J	63.5 J	52.5 J	19.4 J	04/29/10	CMF	EPA200.8
Beryllium, ug/l	0.02	1.0	0.1 J					04/28/10	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0		1.2	0.1 J	0.8 J	0.1 J	04/29/10	CMF	EPA200.8
Cadmium, ug/l	0.02	1.0	0.1 J					04/28/10	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0		0.2 J	0.8 J	0.1 J	0.2 J	04/29/10	CMF	EPA200.8
Cobalt, ug/l	0.10	10.0	0.4 J					04/28/10	LFJ	EPA200.8
Cobalt, ug/l	0.10	10.0		0.6 J	1.4 J	0.5 J	0.5 J	04/29/10	CMF	EPA200.8
Copper, ug/l	0.03	10.0	1.4 J					04/28/10	LFJ	EPA200.8
Copper, ug/l	0.03	10.0		1.0 J	1.6 J	1.7 J	1.5 J	04/29/10	CMF	EPA200.8
Total Chromium, ug/l	0.03	10.0	1.3 J					04/28/10	LFJ	EPA200.8
Total Chromium, ug/l	0.03	10.0		--- U	--- U	0.4 J	0.1 J	04/29/10	CMF	EPA200.8
Lead, ug/l	0.01	10.0	1.5 J					04/28/10	LFJ	EPA200.8
Lead, ug/l	0.01	10.0		0.6 J	0.1 J	0.9 J	0.3 J	04/29/10	CMF	EPA200.8
Nickel, ug/l	0.05	50.0	0.5 J					04/28/10	LFJ	EPA200.8
Nickel, ug/l	0.05	50.0		0.8 J	1.0 J	1.7 J	0.8 J	04/29/10	CMF	EPA200.8
Selenium, ug/l	0.32	10.0	--- U					04/28/10	LFJ	EPA200.8
Selenium, ug/l	0.32	10.0		--- U	--- U	--- U	--- U	04/29/10	CMF	EPA200.8
Silver, ug/l	0.03	10.0	--- U					04/28/10	LFJ	EPA200.8
Silver, ug/l	0.03	10.0		0.1 J	0.1 J	0.1 J	--- U	04/29/10	CMF	EPA200.8
Thallium, ug/l	0.05	5.0	--- U					04/28/10	LFJ	EPA200.8
Thallium, ug/l	0.05	5.0		0.2 J	--- U	--- U	--- U	04/29/10	CMF	EPA200.8
Vanadium, ug/l	0.03	25.0	2.4 J					04/28/10	LFJ	EPA200.8
Vanadium, ug/l	0.03	25.0		1.0 J	0.6 J	2.4 J	1.1 J	04/29/10	CMF	EPA200.8
Zinc, ug/l	0.08	10.0	3.9 J					04/28/10	LFJ	EPA200.8
Zinc, ug/l	0.08	10.0		5.4 J	4.0 J	11	8.5 J	04/29/10	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	45	34	8.5	50	27	04/21/10	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	48	68	133	127	31	04/21/10	RJH	SM2510B
Temperature, °C			15	15	16	15	14	04/21/10	RJH	SM2550B
Static Water Level, feet			18.29	5.10	24.75	7.89	9.16	04/21/10	RJH	
Well Depth, feet			27.60	22.25	50.51	29.92	14.24	04/21/10	RJH	
Water Bailed, Gals.			4.5	8.4	12.0	10.5	2.4	04/21/10	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: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 F

ANALYST: MAO
DATE COLLECTED: 04/21/10
DATE ANALYZED: 04/29/10
DATE REPORTED: 05/14/10

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-11	MW-12	MW-13	MW-14	MW-15
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	0.30 J
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

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CHAIN OF CUSTODY RECORD

CLIENT: 6040 F Week: 17

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GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON NC 27546

(919) 233-0407

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION														
pH CHECK (LAB)							✓					✓	✓	✓
CONTAINER TYPE, P/G						P	P	P	P	P		G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		E	E	E
MW-11	04/21/10	1005		15	6	✓	✓	✓	✓	✓	✓	✓	✓	✓
MW-12	04/21/10	0945		15	5	✓	✓	✓	✓	✓	✓	✓	✓	
MW-13	04/21/10	1000		16	5	✓	✓	✓	✓	✓	✓	✓	✓	
MW-14	04/21/10	0940		15	5	✓	✓	✓	✓	✓	✓	✓	✓	
MW-15	04/21/10	0935		14	5	✓	✓	✓	✓	✓	✓	✓	✓	

PARAMETERS

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) H Hogue / F Ot

SAMPLES RECEIVED IN LAB AT 02 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hogue	04/21/10	[signature]	4/21 1:50
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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FORM #5

№ 201898