

LIMITED PRELIMINARY SITE ASSESSMENT

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NCDOT - Geotechnical Engineering Unit

Parcel 112
Larry D. Edwards Property
Hair Expressions
772 East Main Street
Burnsville, NC 28714

State Project No. R-2519A
WBS Element No. 35609.1.1
EI Project No. ENMO060029.00

Prepared For:
Gregory A. Smith
State of North Carolina
Department of Transportation
Geotechnical Unit
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, NC 27699-1589

Prepared by:
Environmental Investigations, Inc.
2101 Gateway Centre Boulevard, Suite 200
Morrisville, NC 27560
PH (919) 657-7500 FAX (919) 657-7551

May 2006



LIMITED PRELIMINARY SITE ASSESSMENT (PSA)

Conducted on

Parcel 112
Larry D. Edwards Property
Hair Expressions
772 East Main Street
Burnsville, NC 28714
State Project No. R-2519A
WBS Element No. 35609.1.1
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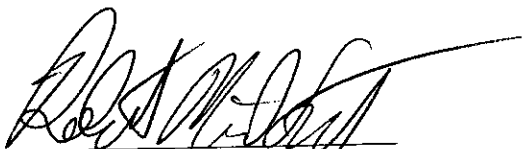
For

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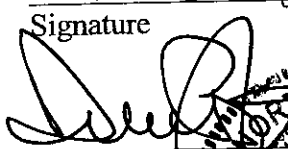
Issue Date: May 12, 2006

Robert M. Shaut
Project Geologist/Manager

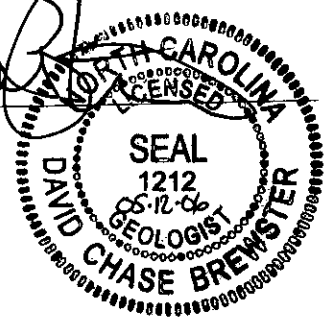
David C. Brewster, P.G.
Principal Geologist



Signature



Signature



Prepared By:

Environmental Investigations, Inc. (EI)
2101 Gateway Centre Blvd., Suite 200
Morrisville, North Carolina 27560
(919) 657-7500 FAX (919) 657-7551

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1.0 INTRODUCTION

Environmental Investigations, Inc. (EI) conducted a *Limited Preliminary Site Assessment* (PSA) within the existing and/or proposed North Carolina Department of Transportation (NCDOT) *right-of-way* (ROW) adjacent to a parcel (identified by the NCDOT as Parcel 112) located at 772 East Main Street, Burnsville, North Carolina 28714. A residence is currently located on the adjacent parcel. The report presented herein documents the findings of the PSA that was conducted within the described ROW. For purposes of this report, the terms subject site and/or site include the existing NCDOT ROW and the proposed ROW, and/or the abutting property/parcel.

1.1 Report Organization

Field activities were conducted by Mr. Robert Michael Shaut, an Environmental Geologist with EI, on March 22, 2006. The report presented herein summarizes the scope of work conducted, discusses sampling procedures, and presents our findings, conclusions and recommendations. A table entitled "Summary of Soil Analytical Results" is presented in **Table 1**, and a table entitled "Summary of Groundwater Analytical Results", is presented in **Table 2**. A "Site Location Map", a "Site Map" and "Impacted Soils Map" are presented in **Figures 1, 2, and 3**, respectively. The "Standard Field Operating Procedures (SOP)" is presented in **Appendix A**, the "Soil Boring Logs" are included in **Appendix B**, while "Analytical Laboratory Reports" are presented in **Appendix C**.

1.2 Background

Mr. Eugene Tarascio, GeoEnvironmental Project Manager with the NCDOT GeoTechnical Engineering Unit submitted to EI a "*Request for Supplemental Technical and Cost Proposal*" (RFP), dated February 24, 2006. The RFP solicited a technical and cost proposal to perform Limited PSAs on a total of 18 Parcels located within a NCDOT Highway Project, identified as WBS Element #35609.1.1, State Project #R-2519A, located in Burnsville, NC. The RFP outlined site information on each of the 18 parcels, some site photographs and NCDOT Figures (Plan Sheets) were attached to the RFP. Mr. Gregory A. Smith, LG, PE, GeoEnvironmental Supervisor with the NCDOT, GeoTechnical Engineering Unit, GeoEnvironmental Section authorized EI to perform the PSAs, as documented in a "Notice to Proceed" dated March 13, 2006.

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1.3 Objectives

The objective of performing the PSA was to determine if an existing heating oil UST or previous petroleum UST operations have impacted the subsurface of the existing and/or proposed ROW. The study (PSA) on the referenced parcel (**Parcel 112 – Larry D. Edwards Property**) included herein was performed with a reasonable effort to investigate and quantify potentially petroleum-hydrocarbon residual impacted subsurface soils. However, findings documented in the report do not constitute a guarantee that all potential sources of environmental contamination have been assessed and subsequently analyzed.

This report is provided for the sole use of the NCDOT on the project for which it was prepared. All materials and information used for this project were obtained by EI, Inc. Use of this report by any third parties other than the NCDOT will be at such party's sole risk. EI Inc. disclaims liability for any use of or reliance on this report by third parties.

2.0 SCOPE OF WORK & ENVIRONMENTAL SERVICES

2.1 Requested Scope of Work

Documented in the RFP, dated February 24, 2006, the NCDOT requested the following scope of work:

- Determine if contaminated soils are present around any USTs identified that are within the existing and/or proposed ROW;
- in addition, collect soil samples every 15.24 meters (50.0 feet) to a maximum depth of 2.44 meters (8.0 feet) along the proposed drainage if there is no proposed drainage, collect samples at same interval along the edge of existing and/or proposed ROW within the "area of investigation";
- delineate and estimate the quantity of impacted soils and indicate the approximate area of soil contamination on a site map for each site;
- if groundwater is encountered and the project manager suspects the possibility of groundwater contamination, obtain a sample for analysis by converting one (1) of the borings to a temporary monitoring well;
- for each groundwater sample collected, also obtain a 24-hour groundwater depth;
- if a groundwater sample is collected for proposed drainage, perform aquifer testing to determine the recharge rate and use this to provide an estimated quantity of contaminated water that will have to be disposed of when de-watering occurs to install the proposed drainage;
- prepare a report including field activities, findings, and recommendations for the site and submit in quadruplet to the NCDOT office.

2.2 Scope of Services

To accomplish the scope-of-services, a field reconnaissance was performed to identify general site conditions, and Direct Push Technology (DPT) was utilized to collect soil samples on the subject parcel.

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To perform the requested Limited PSA, EI personnel supervised, oversaw and performed site reconnaissance activities and collected appropriate samples to complete the project objectives. To complete the study on the subject parcel, EI performed the following scope of services:

- Supervision, and oversight of the advancement of five (5) soil test borings utilizing DPT methods to the investigative depth of 3.66 meters (12.0 feet) below the land surface (bls) within the existing and/or the proposed NCDOT ROW.
- Collection and submittal of five (5) soil samples for laboratory analytical testing.
- Installation of one (1) temporary monitoring well (piezometer).
- Collection and submittal of one (1) groundwater sample for laboratory analysis.
- Photo documentation of pertinent site features.
- Preparation of the *Limited PSA Report*, presented herein that presents our findings and conclusions along with our recommendations.

3.0 SITE CHARACTERIZATION

3.1 Site Location

A business known as the "Hair Expressions" is currently located on the north side of US 19 East approximately 300 meters (984 feet) west of SR 1428 (East Main Street). The specific address for the property is 772 East Main in Burnsville, North Carolina 28714 (**Figure 1**). The subject property is currently located immediately adjacent to the DOT ROW (**Photograph 1**) as identified in DOT's R-2519A Plan Sheet 21.

3.2 Physical Setting

The subject site parcel currently consists of a business that consists of a mobile single-wide trailer. The remaining portion of the parcel consists of a gravel parking area, while remaining portions of the parcel are covered with grass and/or shrubbery. See **Figure 2** for pertinent site features.

3.2.1 Number and Capacities of USTs

A heating oil UST is located beneath the subject property trailer. The UST appears to be situated just beyond the NCDOT proposed ROW and is located approximately 33 meters (108 feet) from the US HWY 19E centerline. A tank vent pipe was visible. The capacity of the UST is unknown, although based on the size of the vent pipe, it appears to hold a capacity between 2,082 liters (550 gallons) and 3,785 liters (1,000 gallons).

3.3 Site Topography

Site observations and review of the Burnsville, NC United States Geological Survey (USGS) Topographic Quadrangle Map (July 1, 1984), revealed that the subject site is located at an elevation of approximately 829 meters (2,720 feet) above mean sea level (msl) (**Figure 1**). Topographically, the site slopes gently to the north/northeast. Surface water runoff appears to flow directly north in the direction of Little Crabtree Creek located approximately 28 meters (50.0) feet from the site.

3.4 Land Use & Surrounding Properties

The subject property is located inside the city limits of Burnsville, NC. Land use in the immediate vicinity of the site is characterized by commercial properties. The site is bounded on the north by Little Crabtree Creek, to the west by a commercial property, by an undeveloped parcel to the west and by US HWY 19E to the south.

4.0 SUBSURFACE INVESTIAGTION

4.1 Subsurface Soils Investigation

Troxler Geologic Services, based in Raleigh, North Carolina, was selected and subcontracted to provide DPT services. On March 22, 2006, EI directed and supervised the advancement of five (5) soil test borings (GP-1 through GP-5), two (2) of which were in the vicinity of the subject UST, while the remaining three (3) were situated along the proposed drainage piping.

In general, the borings were advanced in order to evaluate the absence/presence of potential subsurface soil (vadose zone) impact and/or subsurface groundwater (petroleum smearing) impact associated with potential petroleum releases associated with either former and/or present UST system spills and/or releases into the subsurface. The soil borings were advanced to the investigative depth of 3.66 meters (12.0 feet) bls.

4.2 Soil Test Boring Methodology

A complete descriptive explanation of EI's *Standard Field Operating Procedures* that discusses specific sampling methodology is presented in **Appendix A**.

4.3 Soil Sample Collection Procedures

A total of five (5) soil samples were collected for laboratory analysis. Soil samples retained for laboratory analysis were shipped to a representative of Paradigm Analytical Laboratory, for laboratory analytical testing. Dates and times of sample shipment may be referenced in the analytical Chain-of Custodies (COC) presented in **Appendix C**.

4.4 Backfill Activities

At the completion of the exploratory subsurface advancement activities, the test borings were backfilled to surface grade. A complete descriptive explanation of EI's *Standard Field Operating Procedures* that discusses backfill procedures is presented in **Appendix A**.

4.5 Subsurface Soil Lithology

During boring advancement activities, soil samples were classified in the field by an EI geologist utilizing the Unified Soil Classification System (USCS). Subsurface soils encountered in the area of study were fairly consistent. The on-site geology consists of grass with surficial topsoil from the surface to approximately 0.31 meters (1.0 foot) below grade. A layer of soil consisting

of tan, light brown clayey SILT was encountered to the investigated depth of approximately 3.66 meters (12.0 feet) bls. Detailed descriptions are presented in *Soil Boring Logs* presented in **Appendix B**. The boring logs include an interpretation of subsurface conditions based on field samples.

4.6 Groundwater Investigation

4.6.1 Temporary Monitoring Well Installation

During the field study (March 22, 2006), soil test boring "GP-1" [located approximately 5.0 meters (16.0 feet) south of the subject property UST] was converted into a Type I (temporary) 2.54-cm (1.0-inch) diameter groundwater monitoring well (piezometer). The approximate location of the groundwater monitoring well is depicted in **Figure 2**. The well location was selected in the field by the EI Field Geologist (Robert Shaut) based on the topographic location of the boring and potential impact from the existing UST. The well was installed to a depth of 3.66 meters (12.0 feet) bls.

4.6.2 Monitoring Well Sampling

On April 26, 2006, EI personnel collected a groundwater sample from the referenced temporary monitoring well ("GP-1") for purposes of analytical testing. On the sampling date, the samples were transferred to representatives of Prism Analytical Laboratories, a NCDOT contract laboratory located in Charlotte, North Carolina for analytical testing. Groundwater sampling procedures are discussed in more detail in the *Standard Operating Procedures* presented in **Appendix B**.

The groundwater table was measured in the temporary monitoring well ("GP-1") on April 26, 2006. Groundwater was measured at approximately 1.56 meters (5.11 feet) below the top of casing (TOC). The TOC was level with the ground surface.

5.0 LABORATORY TESTING AND RESULTS

5.1 Subsurface Soil Analytical Methods

A total of five (5) soil samples ("GP1-10", "GP2-10", "GP3-8", "GP4-6", and "GP5-6") were submitted for total petroleum hydrocarbons (TPH) analyses by Method 8015B with preparation methods for the analysis of Diesel Range Organics (DRO) by GC-FID and Gasoline Range Organics (GRO) by GC-FID. The GRO method is utilized to extract volatile fuels such as gasoline, while the DRO method is utilized to extract less volatile petroleum products such as diesel fuel, No. 2 fuel oil, kerosene, and varsol.

A total of one (1) soil sample ("GP1-10") was analyzed for volatile organics by SW-846 Method 8260 (5035 Prep), for semi-volatiles (SVOCs) by SW-846 Method 8270, and for aliphatics and aromatics by Massachusetts Department of Environmental Protection's (MADEP) method for volatile petroleum hydrocarbons (VPH) and MADEP's method for extractable petroleum hydrocarbons (EPH), respectively.

These laboratory analytical methods were utilized as required in the *Guidelines* in order to compare results to the DWM's maximum soil contaminant concentration (MSCC) cleanup standards. The MSCC concentrations are also published in the *Guidelines*.

5.2 Soil Laboratory Analyses Results

Laboratory analysis of the soil samples collected did not show any concentrations of DRO or GRO above laboratory detection limits. In addition, one (1) sample which was analyzed for Risk-based methods did not show concentrations of any VOCs, SVOCs, aliphatics or aromatics above the method detection limits.

The specific results of the analytical testing of the soil samples are tabulated and presented in **Table 1**. The complete laboratory results and Chain-of-Custody Records are presented in **Appendix C**.

5.3 Groundwater Laboratory Analysis

Groundwater sample "GP-1" collected from the referenced temporary well was submitted for VOCs analysis for aromatic and halogenated volatiles by GC/PID-ELCD for EPA Method 6230D + IPE & MTBE, for semivolatile organic compounds by GC/MS for EPA Method 625 and the top ten (10) peaks identified, for extractable petroleum hydrocarbons by GC/FID by Method MADEP EPH, and for volatile petroleum hydrocarbons by GC-PID/FID by MADEP VPH.

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5.4 Groundwater Laboratory Analyses Results

- Review of the groundwater analytical data did not show concentrations of any analytes above the method laboratory detection limits. A summary of the analytical results is tabulated in **Table 2**.

6.0 SUMMARY OF FINDINGS

EI has reviewed information gathered during the Limited PSA study including the site reconnaissance activities, review of NCDOT plan sheets, review of the site investigation including soil and groundwater collection activities, and review of a laboratory analyses report. Compiled below is a summarized list of the significant findings.

- A heating oil UST is visibly located beneath the subject property business (single-wide trailer). Upon closer investigation, a tank vent pipe was visible and the tank appears to hold a capacity of product (heating oil) between 2,082 liters (550 gallons) and 3,785 liters (1,000 gallons).
- Groundwater was encountered beneath the site at a location immediately adjacent to the subject UST at a depth of 1.56 meters (5.11 feet) below the TOC.
- Laboratory analysis of the soil samples collected did not show any concentrations of DRO or GRO above laboratory detection limits. In addition, one (1) sample which was analyzed for Risk-based methods did not show concentrations of any VOCs, SVOCs, aliphatics or aromatics above the method laboratory detection limits.
- Review of the groundwater analytical data did not show concentrations of any analytes above the method detection limits.

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7.0 CONCLUSIONS AND RECOMMENDATIONS

EI personnel have reviewed information obtained during the *Limited PSA* at the site (**Parcel 112**) and present the following conclusions and recommendations.

It does not appear, based on field and laboratory analytical data, that any significant petroleum spills and/or releases have impacted the area of investigation within the existing and/or proposed NCDOT ROW. Based on the findings of this investigation, EI does not recommend any further assessment at this time.

Note: This report does not constitute a guarantee that all potential sources of environmental contamination have been assessed and subsequently analyzed.

TABLES

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
 Parcel 112
 Larry D. Edwards Property
 772 East Main Street,
 Burnsville, NC 28714
 State Project No. R-2519A
 WBS Element No. 35609.1.1

Sample Identification		GP1-10	GP2-10	GP3-8	GP4-5	GP5-6
Sample Depth Meters (Feet)			2.134m-2.438m (7'-8')			
Sample Date		3/23/2006				
Field Screening Results-PID (ppm)						
Laboratory Analysis	Cleanup Standards (MSCC)			Soil-to-GW		
	Residential MSCC (mg/kg)	Commercial MSCC (mg/kg)	Industrial MSCC (mg/kg)	Residential MSCC (mg/kg)	Commercial MSCC (mg/kg)	Industrial MSCC (mg/kg)
MADEP VPH						
C6-C8 Aliphatics	939	24528	72	<10		
C9-C12 Aliphatics	9386	245280	3255	<10		
C9-C10 Aromatics	469	12264	34	<10		
MADEP EPH						
C9-C18 Aliphatics	9386	245280	3255	<10		
C19-C36 Aliphatics	469	12264	34	<10		
C11-C22 Aromatics	93860	*	Immobile	<10		
Volatile Organic Compounds Method 8260B/6035						
Benzene	22	200	0.0056	BQL		
Toluene	3200	82000	7	BQL		
Ethylbenzene	1560	40000	0.24	BQL		
Total Xylenes	32000	200000	5	BQL		
2-Butanone (MEK)	9385	245280	0.7	BQL		
Acetone	1564	40680	3	BQL		
Diisopropyl ether (DIPE)	1564	40680	2	BQL		
Isopropylbenzene (Cumene)	NS	NS	NS	BQL		
Iodomethane	156	4088	2	BQL		
n-Propylbenzene	782	20440	8	BQL		
1,2,4-Trimethylbenzene	782	20440	7	BQL		
1,3,5-Trimethylbenzene	156	4088	3	BQL		
sec-Butylbenzene	156	4088	4	BQL		
n-Butylbenzene	63	1635	0.58	BQL		
Naphthalene	156	4088	0.37	BQL		
Isopropylether (IPE)	156	4088	0.92	BQL		
Methyl Tert-butyl Ether (MTBE)	85	763	0.02	BQL		
Methylene chloride	NS	NS	NS	BQL		
p-Isopropyltoluene	NA	NA	NA	BQL		
All Remaining Analytes	NA	NA	NA	BQL		
Semivolatile Organic Compounds SW846-8270C						
Naphthalene	63	1635	0.58	BQL		
2-methyl naphthalene	63	1635	3	BQL		
Phenanthrene	469	12264	60	BQL		
All Remaining Analytes	NA	NA	NA	BQL		
Laboratory Analysis (Total Petroleum Hydrocarbons by GC/FID 8016)						
Cleanup Standards (MSCC)				Laboratory Results (mg/kg)		
NS				BQL		
MA				BQL		
NA				BQL		
NCDENR ¹ (Volume II) Reportable Concentration (mg/kg)				Laboratory Results (mg/kg)		
10				BQL		
Gasoline Range Organics						
Diesel Range Organics						

NOTE:
 NS = No Standard
 mg/kg denotes parts per million
 MSCC = Maximum Soil Contaminant Concentrations
Bold & Italic Font = In Excess of MSCC Cleanup Standards
¹ NCDENR = North Carolina Department of Environment & Natural Resources

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Parcel 112 - Larry D. Edwards Property (Hair Expressions)
772 East Main Street
Burnsville, NC 28714
State Project: R-25190A
WBS Element: 35609.1.1

Sample Identification		GP-2
Groundwater Depth (From top of casing (Feet))		5.11
Sample Date		4/26/2006
Volatiles	2L Groundwater Standards (ug/L)	Laboratory Results (ug/L)
GC 6230D		
Benzene	1	BRL
sec-Butylbenzene	70	BRL
Diisopropyl ether (DIPE)	NS	BRL
Ethylbenzene	29	BRL
Isopropylbenzene	70	BRL
Methyl-tert butyl ether (MTBE)	200	BRL
Naphthalene	21	BRL
Total Xylenes	530	BRL
Toluene	1,000	BRL
1,2,4-Trimethylbenzene	350	BRL
1,3,5-Trimethylbenzene	350	BRL
MTBE	200	BRL
All remaining analytes	NA	BRL
MADEP VPH	2L GW Standards (ug/L)	Laboratory Results (ug/L)
C5-C8 Aliphatics	420	BRL
C9-C12 Aliphatics	4200	BRL
C9-C10 Aliphatics	210	BRL
MADEP EPH	2L GW Standards (ug/L)	Laboratory Results (ug/L)
C9-C18 Aliphatics	4200	BRL
C19-C36 Aliphatics	42000	BRL
C11-C22 Aromatics	210	BRL
Semivolatiles - GCMS Method 625	2L GW Standards (ug/L)	Laboratory Results (ug/L)
Fluorene	280	BRL
Acenaphthene	80	BRL
Acenaphthylene	210	BRL
Bis (2-ethylhexyl) Phthalate	NS	BRL
Di-n-Butylphthalate	700	BRL
Diethylphthalate	5000	BRL
Dimethylphthalate	NS	BRL
Fluoranthene	280	BRL
Fluorene	280	BRL
Naphthalene	21	BRL
Phenanthrene	210	BRL
Pyrene	210	BRL
All remaining analytes	N/A	BRL

Legend:

Italics/Bold Font = In Excess of NCAC 2L Class GA Standards
BQL = Below Quantitation Limit
NA = Not Applicable
NS = No Standard

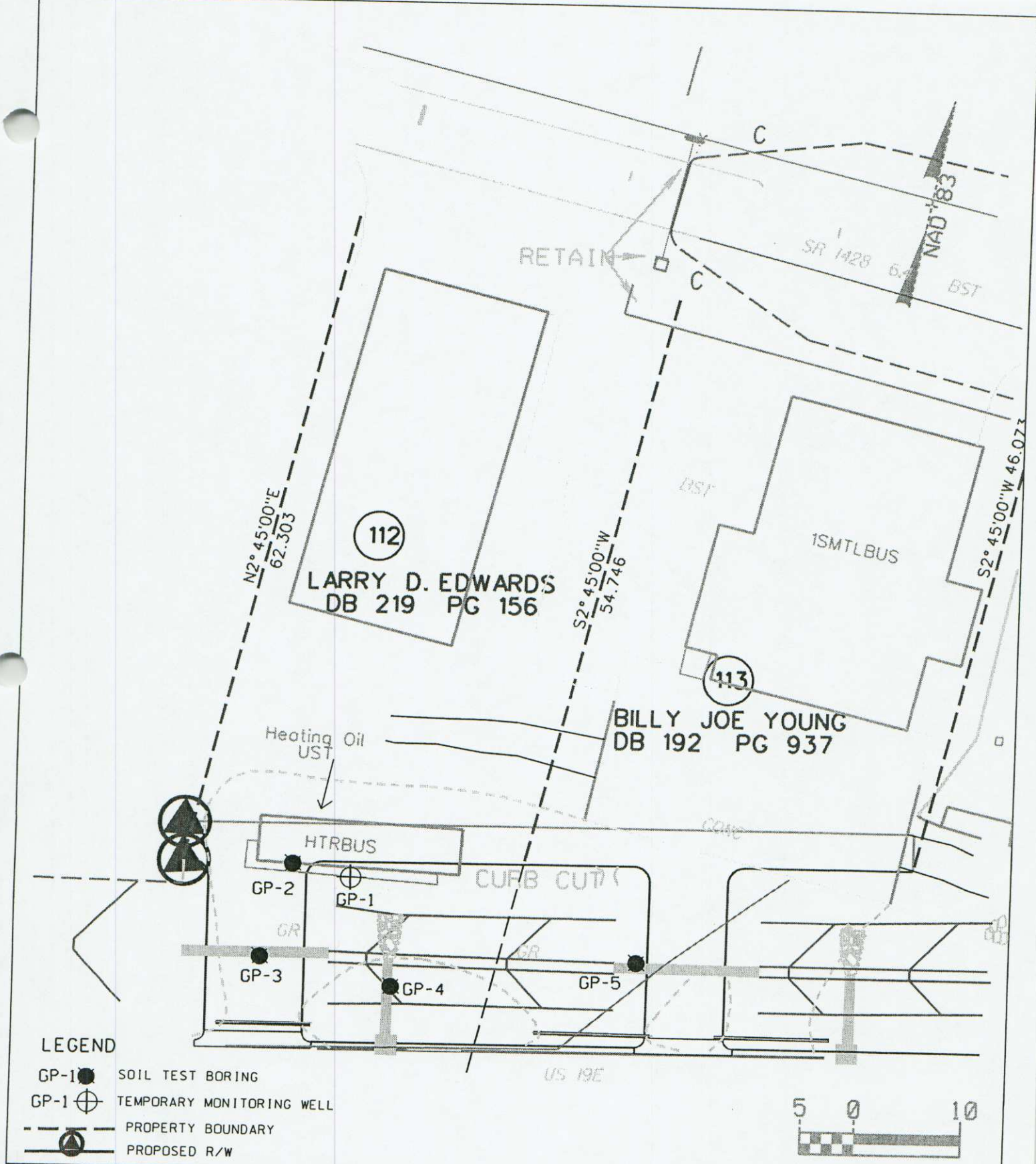


3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 350 ft Scale: 1 : 12,300 Detail: 14-0 Datum: WGS84

FIGURE NUMBER:	1
QUAD:	Burnsville
PROJECT NUMBER:	ENMO060029
SCALE:	As Shown

SITE LOCATION MAP
 Larry D. Edwards Property
 772 East Main Street
 Parcel 112
 Burnsville, North Carolina





LEGEND

- GP-1 ● SOIL TEST BORING
- GP-1 ⊕ TEMPORARY MONITORING WELL
- - - PROPERTY BOUNDARY
- ▲— PROPOSED R/W

FIGURE:	2
DRAWN BY:	NCDOT/RMS
DATE:	APR 2006
PROJ NO:	ENM0060029.00
SCALE:	1 cm = 5 m

SITE MAP
PARCEL 112
 Larry D. Edwards Property
 772 East Main Street
 Burnsville, NC 28714
 WBS Element: 35609 11



APPENDIX A
STANDARD OPERATING PROCEDURES

**STANDARD OPERATING PROCEDURES
Subsurface Assessment Methodology And Sampling Protocol**

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Prepared For:

Gregory A. Smith
State of North Carolina
Department of Transportation
Geotechnical Unit
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, NC 27699-1589

Prepared by:

Environmental Investigations, Inc.
2101 Gateway Centre Boulevard, Suite 200
Morrisville, NC 27560
PH (919) 544-7500 FAX (919) 544-2199

May 2006

STANDARD OPERATING PROCEDURES
(Subsurface Assessment Methodology And Sampling Protocol)

INTRODUCTION

Environmental Investigations, Inc. (EI) has prepared this STANDARD OPERATING PROCEDURES - Subsurface Assessment Methodology and Sampling Protocol Plan (SPP) for a commercial property owned by Larry D. Edwards property located at 772 East Main Street, Burnsville, Yancey County, North Carolina.

The document presented herein describes the methodology and protocol that was utilized during the *Limited Preliminary Site Assessment* conducted at the above referenced project "site".

SAMPLING DESIGN

Prior to conducting a subsurface assessment, a sampling strategy was developed by EI based on the objectives of the investigation. After designing our soil sampling strategy, the appropriate equipment and techniques were selected to conduct the investigation. Our sampling strategy was based upon the premise of accomplishing the following performance objectives:

- collect soil samples that are representative of conditions as they exist at the study site;
- selecting the appropriate sampling device(s);
- taking measures to avoid introducing contamination as a result of poor sampling and/or poor handling techniques;
- reducing the potential of cross contamination between samples;
- defining sampling site selections and collection procedures for the appropriate individual media;
- defining the quality control assurance procedures;
- analytical requirements and limitations; and
- Data interpretation and assessment.

The sampling plan for this study was developed using the non-probabilistic (directed sampling designs) in nature. The location and frequency was based on this approach, to allow for the flexibility of the field coordinator (Geologist) to determine the number of samples collected for analysis. This approach allowed for the study objectives, properties of the matrix, resource constraints and access to sampling points to be adequately performed. Provision for access, use of sampling equipment, was also pre-determined.

The following section of the SPP discusses the sampling equipment available and collection methods which have been utilized to be technically appropriate.

SITE ORIENTATION

Prior to conducting any soil sampling procedures, the EI Project Geologist/Manager reviewed and presented the Site and Safety Health Plan to all participants involved with the project which was developed based on the EI Safety and Health program. All monitoring, protective equipment (latex gloves, Tyvek® suits, etc.), potential hazards associated with the site and general health and safety standards were discussed.

Site Survey

Prior to conducting specific sampling activities, EI personnel will conduct a limited site survey of the target and surrounding areas. Information discovered during the survey will be utilized to better perform the sampling activities and will provide more insight into establishment of the conclusions of this study. The site survey will consist of the following:

- General site layout (UST system layouts, overhead canopies, dispensers, etc.);
- Site access;
- Soil types and depths;
- Surface water drainage pathways;
- Existing site conditions;
- Visible staining of surface soil;
- Vegetation stress, and
- Possible offsite or non-site related sources.

FIELD INVESTIGATIVE PROCEDURES

Sampling Objectives

The general objective of sampling for this project was to collect a sample representative of subsurface and/or groundwater to reduce the potential bias caused by the sampling equipment used to obtain the sample.

The chosen sample locations were evaluated as discrete samples. A discrete sample is defined as "a discrete aliquot representative of a specific location at a given point in time."

Areas of Environmental Concern

The objectives of choosing the proper sampling methods to collect appropriate samples that are representative of the conditions as they exist at the site were as follows:

- Selecting the appropriate sampling device.
- Taking measures to avoid introducing contamination as a result of poor sampling and/or handling techniques.
- Reducing the potential of cross contamination between samples.

The areas of environmental concern consisted of an existing heating oil UST.

SOIL SAMPLING ACTIVITIES

Manual techniques and equipment, such as hand augers, are usually used for surface or shallow, subsurface soil sampling. Power operated equipment is usually associated with collecting deep samples, but this equipment can also be used for collecting shallow samples when the auger hole begins to collapse, or when the soil is so tight that manual auguring is not practical. Based on the location and type of property, EI utilized Direct Push Technology (DPT). The following section discusses the DPT methods employed during the site study.

Soil Sampling Collection Methods

Soil samples were collected utilizing Direct Push Technology (DPT) methods.

Direct Push Technology Methodology

DPT refers to tools and sensors that are inserted into the subsurface without the use of drilling to remove soil and make a path for the tool. To perform the DPT activities, the contractor utilized a GeoProbe® 6600 machine. The GeoProbe® 6600 is a hydraulically-powered probing machine designed, which uses static force and a percussion hammer to advance small diameter sampling tools into the subsurface to collect soil cores, groundwater samples, and or soil gas samples. A GeoProbe relies on a relatively small amount of static (vehicle) weight combined with percussion as the energy for advancement of a tool string.

The advantages of utilizing DPT drilling methods are described as follows:

- avoids the use of drilling fluids and lubricants during drilling;
- the equipment is highly mobile;
- disturbance of geochemical conditions during installation is minimized; and
- The drilling process does not produce drill cuttings.

DPT Soil Sample Collection Methods

Soil samples utilizing DPT methods were collected from the advanced DPT soil borings continuously in 4.0-foot increments using acetate liners contained in a nickel plated macro sampling tubes. Each soil-filled liner was split for field screening and soil sample collection purposes. Soil samples were collected from the liners with disposable vinyl gloves and utilized for soil vapor screening testing and/or laboratory retention. This sampling method allows for continuous soil sampling from the ground surface to the desired depth. Soil samples selected for analyses are referenced in the text section.

Soil Sample Collection Protocol

The following soil sampling collection procedures were utilized during this study:

- Ensured that all equipment, samplers and tools that will come in contact with the sample media was thoroughly decontaminated.
- Informed driller of sample interval (s) for borehole and oversaw the sampling process.
- Prepared and labeled all sample containers. Samples collected for the analytes of volatiles (if applicable) were sampled first.
- Labeled the containers including the location, depth, analyte, date and time of sampling.
- Delegated the driller to prepare the sample liner by cutting the liner in half.
- Placed liners on a clean sheet of plastic.
- Cut the soil core with a clean decontaminated knife to allow of visual soil classification.
- Sniffed the soil core with a PID/FID and recorded instrument readings volatile organics (VOCs) in a logbook (discussed further below).
- Logged the soil core in a logbook, including borehole identification (ID), sample number, date, time and any pertinent data.

- Logged soil classification including: recording percent recovery, color, description of major constituent, soil texture/structure, grading/sorting/plasticity, relative density or hardness consistency, clay, sand, silt, gravel content, grain size, moisture content, odor, staining and the Unified Soil Classification System (USCS) identifier and symbol;
- Physically collected the selected soil samples and placed these samples into laboratory prepared containers.
- Ensured the soil sample did not contain twigs, stones, and other debris from the soil.
- Packed soil samples for shipment, prepared chain-of-custody records and shipping documentation

Soil Vapor Screening

An important tool in performing this study is performing the soil vapor screening or sniffing activities. Field screening is generally performed for a variety of reasons. The technique conducted during this study was used to screen soil samples for measurable levels of volatile organics. The results obtained from this procedure are not quantitative; however the results from several soil samples are relative and allowed the Field Geologist/Project Manager to select samples that are the most contaminated with the contaminated media. Generally, the presence of little or no organic vapor is possibly indicative of non-contaminated soils. Soil samples collected for purposes of soil headspace screening were tested by the following procedures:

- the field instrument was calibrated, prior to use;
- soil samples were collected directly from the DPT soil liners and placed into sealable plastic bags;
- soil samples within the bags were allowed to equilibrate for approximately five minutes;
- the headspace of each bagged sample was screened with the instrument probe for the presence of volatile organic compound (VOCs) with a Mini-RAE Photo-ionization Detector (PID);
- recording the instrument readings (VOCs) in a field logbook; and
- Verified that the FID/PID was reading background levels prior to exposing the probe into another sample.

Collection of Grab Soil Samples

Soil samples may provide two (2) types of soil contamination representation including grab and composite. Samples may be generally collected in random locations from a grid pattern or selected areas believed to be contaminated as evidenced by field indicators (staining, odors and/or measurable volatile organic readings).

For this study, grab samples selected from areas showing field indicators or confirmation soil samples chosen to confirm the absence of volatile organic readings were chosen. The technical definition for a grab sample is as follows: A grab sample is a discrete aliquot representative of a specific location at a given point in time. The sample is collected at one time and at one particular sampling point and depth. Refer to the text or Chain-of-Custody in this study for soil sample selection, date, time and depths of each sample chosen for laboratory analyses.

Sample Handling Procedures

The sample handling procedures were conducted as follows:

- 1) Disposable surgical latex gloves were used to avoid cross contamination of samples. Gloves were discarded in a designated "waste bag after each sample was collected.
- 2) Each confirmation sample upon collection was immediately stored in a cooler containing ice. During the sample collection process, care was taken to insure the samples were not collected in direct sunlight. In addition, during the collection process, no parts of the body without gloves touched any part of the sample.
- 3) Once placed into the cooler, each sample was protected with bubble wrap® and foam was inserted in the base, sides and top of the cooler.

Soil Boring Abandonment Procedures

Due to the fact that holes in the subsurface may act as a conduit for contamination migration, proper sealing of holes is essential for ensuring that a site assessment does not contribute to the spread of contaminants. The objective of hole-sealing is to prevent preferential migration of contaminants through the bore hole. To seal the boreholes advanced during this study, the contractor utilized a method known as surface pouring. Surface pouring entails sealing the boreholes with dry products (e.g., bentonite granules, chips and/or pellets). Once the DPT drive rods have been withdrawn, dry products are physically poured into the bottom of the

borehole and filled vertically up the column to at least two (2) feet from the base of the borehole. Once the dry products have seated into the borehole, the product is hydrated to expand the clay material. After the hydration process has been performed, the remaining portions of the boreholes are backfilled with the soil cores. Due to the nature of DPT, no soil cuttings were generated during soil boring exploration assessment work.

GROUNDWATER INVESTIGATION

The purpose of a monitoring well is to provide an access point for measuring groundwater levels and to collect groundwater samples representing actual in-situ groundwater conditions at that point of access. For the purpose of this investigation, based on the scope of work, EI chose to install temporary groundwater monitoring wells (Type I).

WELL DEVELOPMENT AND GROUNDWATER SAMPLE COLLECTION

Water Development

The groundwater monitor well was purged with a Peristaltic™ pump. Well development allows fresh water from the formation to enter the well and the groundwater samples will more accurately represent actual groundwater conditions. The well was purged of approximately three (3) to five (5) well volumes of water or until dry prior to sampling.

Groundwater Sampling Procedures

After well development activities were performed, groundwater samples were collected from the well(s) with the referenced pump. During the collection process, samples were poured directly from the bailer into the laboratory supplied containers which were placed into an ice chest filled with ice. Under no circumstances were any intermediate sample containers used, i.e. jar, beaker, etc., and then transferred to the sample container. In addition, water samples were not field filtered.

Prior to collecting the water sample, the containers were labeled accordingly. This procedure was performed prior to sampling because sample containers have a tendency to "sweat" when filled with groundwater; this makes it difficult to affix a label to the container after sampling. The sample label also was covered with a clear piece of tape, which was wrapped around the sample container. This procedure prevented the label from detaching from the container during sample storage and shipment.

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Each sample container was labeled indicating the sample location (i.e. GP-1, or MW-1, etc.), date and time of collection, sample location, collector, project site, and analysis identification. Other pertinent information was recorded in the field book.

After the groundwater sample(s) was collected, the containers were immediately placed in a sample cooler containing ice. Upon completion, the samples were transported to Paradigm Analytical Laboratories, located in Wilmington, NC using chain-of-custody documentation.

Soil Boring Abandonment Procedures

Due to the fact that holes in the subsurface may act as a conduit for contamination migration, proper sealing of holes is essential for ensuring that a site assessment does not contribute to the spread of contaminants. The objective of hole-sealing is to prevent preferential migration of contaminants through the bore hole. To seal the boreholes advanced during this study, the contractor utilized a method known as surface pouring. Surface pouring entails sealing the boreholes with dry products (e.g., bentonite granules, chips and/or pellets). Once the DPT drive rods have been withdrawn, dry products are physically poured into the bottom of the borehole and filled vertically up the column to at least two (2) feet from the base of the borehole. Once the dry products have seated into the borehole, the product is hydrated to expand the clay material. After the hydration process has been performed, the remaining portions of the boreholes are backfilled with the soil cores. Due to the nature of DPT, no soil cuttings were generated during soil boring exploration assessment work.

LABORATORY ANALYTICAL METHODS

Soil Analytical Methods

Based upon verbal information provided by NCDOT personnel (Eugene Tarascio), EI selected to analyze the chosen soil samples for total petroleum hydrocarbons (TPH) analyses by Method 8015B with preparation methods for the analysis of Diesel Range Organics (DRO) by GC-FID and Gasoline Range Organics (GRO) by GC-FID. The GRO method is utilized to extract volatile fuels such as gasoline, while the DRO method is utilized to extract less volatile petroleum products such as diesel fuel, fuel oil #2, kerosene, and varsol.

One (1) soil sample from the site was analyzed for volatile organics by SW-846 Method 8260 (5035 Prep), for semi-volatiles (SVOCs) by SW-846 Method 8270, and for aliphatics and aromatics by Massachusetts Department of Environmental Protection's (MADEP) method for volatile petroleum hydrocarbons (VPH) and MADEP's method for extractable

petroleum hydrocarbons (EPH), respectively.

These laboratory analytical methods were utilized as required in the *Guidelines* in order to compare results to the DWM's maximum soil contaminant concentration (MSCC) cleanup standards. The MSCC concentrations are also published in the *Guidelines*.

SAMPLE PACKAGING AND SHIPPING

This section discusses the sample packaging and shipping protocol that shall be used to transport collected samples to the laboratories for analytical testing. Samples collected, prepared, preserved and stored must then be readied for packaging and shipping. It is important that the presented protocol be followed to ensure that the samples reach their destination in sound condition. In addition, the samples must be under strict COC from the time they are sampled until the analysis is complete.

Samples collected for this project were classified as environmental materials samples and were not considered hazardous. In addition, the samples collected for this study were not classified as "dangerous goods".

Environmental samples collected for this field study were packed prior to shipment using the following procedures:

1. Secure drain plug on cooler with tape.
2. Place cushioned layer on bottom of cooler (vermiculite or "bubble-wrap" plastic).
3. Line cooler with large heavy duty plastic bag.
4. Place all sample containers in large plastic bag within the cooler. Be sure the lids on all bottles are tight (will not leak).
5. Cushion containers to prevent breakage.
6. Put ice that has been "double bagged" in heavy duty polyethylene bags and placed on top of and/or between the samples within the large plastic bag. Fill all remaining space between the containers with cushion materials.
7. Securely fasten the top of the large plastic bag with tape or tie.
8. Place the Chain-of-Custody Record into a plastic bag, and tape the bag to the inner side of the cooler lid.
9. Close the cooler and securely tape (preferably with fiber tape) the top of the cooler shut. Custody seals should be affixed to the top and sides of the cooler within the securing tape so that the cooler cannot be opened without breaking the seal.
10. Shipping containers (ice cooler) must be marked "THIS END UP", and arrow labels which indicate the proper upward position of the container should be affixed to the container. A label containing the name and address of the shipper should be placed on the containers exterior. Labels

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used in the shipment of hazardous materials (e.g., Cargo Only Air Craft, Flammable Solids, etc.) are not permitted to be on the outside of containers used to transport environmental samples.

Shipping Note:

"When samples are to be shipped by common carrier or sent through the United States mail, it must comply with the Department of Transportation Hazardous Materials Regulations (49 CFR 172). The person offering such material for transportation is responsible for ensuring such compliance. For the preservation requirements of 40 CFR, Part 136, Table II, the Office of Hazardous Materials, Materials Transportation Bureau, Department of Transportation has determined that the Hazardous Materials Regulations do not apply to the following materials: Hydrochloric Acid (HCL) in water solutions at concentrations of 0.04% by weight or less (pH about 1.96 or greater); Nitric acid (HN03) in water solutions at concentrations of 0.-15% by weight or less (pH about 1.62 or greater); Sulfuric acid (H2SO4) in water solutions at concentrations of 0.35% by weight or less (pH about 1.15 or greater); and Sodium Hydroxide (Na OH) in water solutions at concentrations of 0.08% by weight or less (pH about 12.30 or less). This footnote is wholly reproduced from 40 CFR 136.3, which is definitive".

Sample Transportation

The cooler(s) containing the collected soil samples was shipped overnight via Federal Express, with COC documentation, to Prism Laboratories, Inc. in Charlotte, NC. The following protocol was used for sample handling and transportation:

- 1) The lids on all bottles were tightened to reduce the potential for leakage.
- 2) The sample identification label on each individual laboratory container was covered with a clear piece of plastic tape. Each container was then placed within an appropriately sized polyethylene bag and sealed.
- 3) The containers were placed into a bubble-wrap® lined rectangular ice chest (cooler).
- 4) Ice was placed on top and surrounding bubble-wrap® sample containers. Some of the remaining spaces between the containers were filled with bubble-wrap® and/or ice.
- 5) The cooler drain plug was secured with clear tape.
- 6) The COC's was double plastic bagged and was taped to the inner side of the cooler lid.
- 7) The cooler was closed and securely taped.
- 8) A label with adhesive tape containing the name and address of the shipper and the address of the laboratory was placed on top of the cooler.

DECONTAMINATION PROCEDURES

Decontamination is the process of washing, rinsing and removing contaminants from exposed surfaces of equipment. Decontamination helps prevent the spread of contamination off-site, and avoids cross-contamination to other samples. The decontamination procedures were performed as follows:

- 1) Disposable surgical latex gloves were used in lieu of decontamination procedures to collect soil samples.

The soil samples retained for laboratory analyses were placed in the appropriate clean laboratory prepared containers, labeled and subsequently delivered with chain-of-custody documentation (COC) for analysis. Dates and times of sampling may be referenced on the COC's. Specific laboratory analysis methods are referenced in the text of this Study.

QUALITY ASSURANCE PROTOCOL

Field and Laboratory Control Samples

The purpose of this section is to describe the standard control sampling program that supported the data quality objectives for this site. These control samples will included field control Quality Assurance (QA) samples used to assess sources of error. To minimize or consider the impact these errors have on the resulting data, a combination of unique field QA/QC protocols and control samples were developed to meet the QA overall objectives.

Field Control Samples

The elements of the sampling and field QA/QC strategy included the following:

- (1) El developed a well thought out sampling strategy for the site. The plan adequately and sufficiently outlined the different types of environmental media and protocol to sample the media.
- (2) Sampling methodologies to obtain true representative samples.
- (3) Used decontamination procedures in order to reduce cross-contamination potential between sampling points.
- (4) Used the proper sample containers, and preservation requirements.
- (5) Used the proper storage, and shipping of samples protocol.

Techniques to verify the inclusion of the QA/QC program included scheduled field control samples consisting of field blanks (trip and temperature). The field control samples were

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handled similarly as the environmental samples.

Quality Control Samples

A trip and temperature blank were collected during this study.

Laboratory QA/QC Procedures

Laboratory QA/QC procedures are implemented in order to prevent, detect, and correct potential errors during the analytical process. The reliability and credibility of analytical laboratories are corroborated by the development and performance of their respective QA/QC programs. For this project, the NCDOT contracted laboratory provided and performed their program as they see fit. Standard practices used by the selected laboratory included the following quality control sample information in their generated reports:

- (a) laboratory method blanks;
- (b) temperature blanks.

INVESTIGATION DERIVED WASTE MANAGEMENT PROTOCOL

The investigation derived waste (IDW) generated during the sampling activities were placed on site. These wastes include any derivative investigative soils leftover from the sampling and backfilling protocol, decontamination water (cleaning of field equipment), bailers, bailer haul-line and PPE equipment, if applicable. The management of IDW for this project complies with applicable or relevant and appropriate requirements (ARAs). The site specific ARAs were followed in consensus with the EPA Standard Operating Procedures (SOP) and Quality Assurance Manual, Region 4 and the *Guidelines For Assessment And Corrective Action*, drafted by the North Carolina Underground Storage Tank Section, effective July 1, 2001.

APPENDIX B
SOIL BORING LOGS



EI

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2101 Gateway Centre Boulevard, Suite 200
Morrisville, North Carolina
919-544-7500

SOIL BORING LOG

Boring No. GP-1
Date Drilled: 03/22/05

Client: NCDOT
Project Name: Parcel #112 - Larry D. Edwards Property
Project/Site Location: 772 East Main Street, Burnsville, NC
Project Number: ENMO060029.00

Logged By: RMS
Drilling Company: Troxler Geologic Services
Drill Device: GeoProbe 6600
Drill Method: DPT

Total Boring Depth: 3.66m
Boring Diameter: 10.16cm

Weather Conditions: Cool
Boring Location: Upgradient of trailer

Surface Elevation: _____

Depth (Feet)	Depth (meters)	Time	Sample Analyzed	Recovery	Soil Profile	Lithological Description	Sample PID (ppm)
2.00	0.61			100%	(ML)	Tan to light brown clayey SILT (ML), dry.	NA
4.00	1.22						NA
6.00	1.83			100%			0.0
8.00	2.44	17:00	x				0.0
10.00	3.05			100%			0.0
12.00	3.66						0.0
Boring terminated at 3.66m (12.0') bls. x denotes soil sample at 2.44m - 3.05m (8-10') bls interval collected for laboratory retention. Boring converted into a temporary monitoring well.							



E.I.

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919-544-7500

SOIL BORING LOG

Boring No. GP-2
Date Drilled: 03/22/05

Client: NCDOT
Project Name: Parcel #112 - Larry D. Edwards Property
Project/Site Location: 772 East Main Street, Burnsville, NC
Project Number: ENMO060029.00

Logged By: RMS
Drilling Company: Troxler Geologic Services
Drill Device: GeoProbe 6600
Drill Method: DPT

Total Boring Depth: 3.66m
Boring Diameter: 10.16cm

Weather Conditions: Cool
Boring Location: Upgradient of trailer

Surface Elevation: _____

Depth (Feet)	Depth (meters)	Time	Sample Analyzed	Recovery	Soil Profile	Lithological Description	Sample PID (ppm)
2.00	0.61			100%	(ML)	Tan to light brown clayey SILT (ML), dry.	NA
4.00	1.22						NA
6.00	1.83			100%			0.0
8.00	2.44						0.0
10.00	3.05	17:08	x	100%			0.0
12.00	3.66						NA
						<p>Boring terminated at 3.66m (12.0') bls. x denotes soil sample at 2.44m - 3.05m (8-10') bls interval collected for laboratory retention.</p>	



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SOIL BORING LOG

Boring No. GP-3
Date Drilled: 03/22/05

Client: NCDOT
Project Name: Parcel #112 - Larry D. Edwards Property
Project/Site Location: 772 East Main Street, Burnsville, NC
Project Number: ENMO060029.00

Logged By: RMS
Drilling Company: Troxler Geologic Services
Drill Device: GeoProbe 6600
Drill Method: DPT

Total Boring Depth: 3.66m
Boring Diameter: 10.16cm

Weather Conditions: Cool
Boring Location: Upgradient of trailer

Surface Elevation: _____

Depth (Feet)	Depth (meters)	Time	Sample Analyzed	Recovery	Soil Profile	Lithological Description	Sample PID (ppm)
2.00	0.61			100%	(ML)	Tan to light brown clayey SILT (ML), dry.	NA
4.00	1.22						NA
6.00	1.83	17:20	x	100%			0.0
8.00	2.44						0.0
10.00	3.05			100%			NA
12.00	3.66						NA
						<p>-----</p> <p>Tan to light brown fine sandy SILT (ML), with little clay, dry to moist.</p> <p>-----</p> <p>Boring terminated at 3.66m (12.0') bls. x denotes soil sample at 1.83m - 2.44m (6-8') bls interval collected for laboratory retention.</p>	



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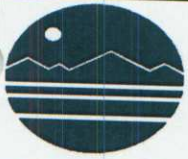
SOIL BORING LOG

Boring No. GP-4
Date Drilled: 03/22/05

Client:	<u>NCDOT</u>	Logged By:	<u>RMS</u>
Project Name:	<u>Parcel #112 - Larry D. Edwards Property</u>	Drilling Company:	<u>Troxler Geologic Services</u>
Project/Site Location:	<u>772 East Main Street, Burnsville, NC</u>	Drill Device:	<u>GeoProbe 6600</u>
Project Number:	<u>ENMO060029.00</u>	Drill Method:	<u>DPT</u>

Total Boring Depth: 3.66m Weather Conditions: Cool Surface Elevation: _____
 Boring Diameter: 10.16cm Boring Location: Upgradient of trailer

Depth (Feet)	Depth (meters)	Time	Sample Analyzed	Recovery	Soil Profile	Lithological Description	Sample PID (ppm)
2.00	0.61			100%	(ML)	Tan to light brown clayey SILT (ML), dry.	NA
4.00	1.22						0.4
6.00	1.83	17:46	x	100%			0.1
8.00	2.44						0.0
10.00	3.05			100%			NA
12.00	3.66					NA	
Boring terminated at 3.66m (12.0') bls. x denotes soil sample at 1.22m - 1.83m (4-6') bls interval collected for laboratory retention.							



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SOIL BORING LOG

Boring No. GP-5
Date Drilled: 03/22/05

Client: NCDOT
Project Name: Parcel #112 - Larry D. Edwards Property
Project/Site Location: 772 East Main Street, Burnsville, NC
Project Number: ENMO060029.00

Logged By: RMS
Drilling Company: Troxler Geologic Services
Drill Device: GeoProbe 6600
Drill Method: DPT

Total Boring Depth: 3.66m
Boring Diameter: 10.16cm

Weather Conditions: Cool
Boring Location: Upgradient of trailer

Surface Elevation: _____

Depth (Feet)	Depth (meters)	Time	Sample Analyzed	Recovery	Soil Profile	Lithological Description	Sample PID (ppm)
2.00	0.61			100%	(ML)	Tan to light brown clayey SILT (ML), dry.	NA
4.00	1.22						0.4
		17:46	x				
6.00	1.83			100%			0.1
8.00	2.44						0.0
10.00	3.05			100%		NA	
12.00	3.66					NA	
Boring terminated at 3.66m (12.0') bls. x denotes soil sample at 1.22m - 1.83m (4-6') bls interval collected for laboratory retention.							

APPENDIX C
LABORATORY RESULTS



Mr. Bob Shaut
Environmental Investigations
2101 Gateway Centre Boulevard
Suite 200
Morrisville NC 27560
Report Number: G106-577

Client Project: NCDOT-Yancey PAR 112

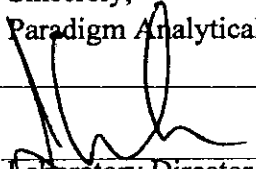
Dear Mr. Shaut:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

4/4/06
Date



Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: GP1-10
Client Project ID: NCDOT-Yancey PAR 112
Lab Sample ID: G106-577-1
Lab Project ID: G106-577
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 3/22/2006 17:00
Date Received: 3/25/2006
Matrix: Soil
Solids 63.90

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.24	5035	1	03/29/06
Diesel Range Organics	BQL	9.49	3541	1	03/30/06

Comments:

Flags:



Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: GP2-10
Client Project ID: NCDOT-Yancey PAR 112
Lab Sample ID: G106-577-2
Lab Project ID: G106-577
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 3/22/2006 17:08
Date Received: 3/25/2006
Matrix: Soil
Solids 54.46

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.56	5035	1	03/30/06
Diesel Range Organics	BQL	5.72	3541	1	03/30/06

Comments:

Flags:



Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: GP3-8
Client Project ID: NCDOT-Yancey PAR 112
Lab Sample ID: G106-577-3
Lab Project ID: G106-577
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 3/22/2006 17:20
Date Received: 3/25/2006
Matrix: Soil
Solids 74.09

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.45	5035	1	03/30/06
Diesel Range Organics	BQL	8.26	3541	1	03/30/06

Comments:

Flags:



Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: GP4-6
Client Project ID: NCDOT-Yancey PAR 112
Lab Sample ID: G106-577-4
Lab Project ID: G106-577
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 3/22/2006 17:46
Date Received: 3/25/2006
Matrix: Soil
Solids 71.49

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.65	5035	1	03/30/06
Diesel Range Organics	BQL	8.48	3541	1	03/31/06

Comments:

Flags:



Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: GP5-6
Client Project ID: NCDOT-Yancey PAR 112
Lab Sample ID: G106-577-5
Lab Project ID: G106-577
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 3/22/2006 18:00
Date Received: 3/25/2006
Matrix: Soil
Solids 82.59

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.13	5035	1	03/30/06
Diesel Range Organics	BQL	7.45	3541	1	03/31/06

Comments:

Flags:



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Environmental Investigations

Project Name: NCDOT-Yancey PAR 112

Sample Information and Analytical Results	
Sample Identification	GP1-10
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	03/22/06
Date Received	03/25/06
Date Extracted	03/22/06
Date Analyzed	03/29/06
Dry Weight	64
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	100
Surrogate % Recovery - FID	100

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g106-577-1e

Reviewed By:

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 02/11/06 PID Initial Calibration Date: 02/11/06

Calibration Ranges and Limits

Range	MDL (07/15/2004) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)
C ₅ -C ₈ Aliphatics	4.4	14	100 10
C ₉ -C ₁₂ Aliphatics	3.4	11	100 10
C ₉ -C ₁₀ Aromatics	0.13	0.41	100 10

Calibration Concentration Levels

Range	Levels (µg/L)	%RSD or CCC	Method of Quantitation
C ₅ -C ₈ Aliphatics	40	10.8	Calibration Factor
	1000		
	2000		
	3000		
	4000		
C ₉ -C ₁₂ Aliphatics	10	0.99	Linear Regression
	250		
	500		
	750		
	1000		
C ₉ -C ₁₀ Aromatics	10	19.30	Calibration Factor
	250		
	500		
	750		
	1000		

Calibration Check Date: 03/29/06

Calibration Check

Range	Levels (mg/Kg) (µg/L)	RPD
C ₅ -C ₈ Aliphatics	2000 200	1.6
C ₉ -C ₁₂ Aliphatics	500 50	-1.8
C ₉ -C ₁₀ Aromatics	500 50	9.4

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve



EPH (Aliphatics/Aromatics) Results
by MDEP-EPH

Client Name: Environmental Investigations

Project Name: NCDOT-Yancey PAR 112

Sample Information and Analytical Results	
Sample Identification	GP1-10
Sample Matrix	Soil
Date Collected	03/22/06
Date Received	03/25/06
Date Extracted	03/28/06
Date Analyzed	03/29/06
Dry Weight	63.9
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	99
Aromatic Surrogate % Recovery	97

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G106-577-1L

Reviewed By: ew



EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 12/28/05

Calibration Ranges and Limits

Range	MDL (2/2004) (µg/L)	ML (µg/L)	RL	
			(µg/L)	(mg/Kg)
C ₉ -C ₁₈ Aliphatics	3.84	12.2	100	10
C ₁₉ -C ₃₆ Aliphatics	0.57	1.8	100	10
C ₁₁ -C ₂₂ Aromatics	4.54	14.4	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	24.90	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	15.4	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	9.8	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 03/29/06

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	-0.9
C ₁₉ -C ₃₆ Aliphatics	160	3.2
C ₁₁ -C ₂₂ Aromatics	340	-14.9

MDL = Method Detection Limit
 ML = Minimum Limit
 RL = Reportable Limit

RPD = Relative Percent Difference
 %RSD = Percent Relative Standard Deviation
 CCC = Correlation Coefficient of Curve



Results for Volatiles
by GCMS 8260-5035

Client Sample ID: GP1-10
Client Project ID: NCDOT-Yancey PAR 112
Lab Sample ID G106-577-1A
Lab Project ID: G106-577
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 03-22-2006 17:00
Date Received: 3/25/2006
Matrix: Soil
%Solids: 63.9

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	68.5	1	3/28/2006
Benzene	BQL	6.85	1	3/28/2006
Bromobenzene	BQL	6.85	1	3/28/2006
Bromochloromethane	BQL	6.85	1	3/28/2006
Bromodichloromethane	BQL	6.85	1	3/28/2006
Bromoform	BQL	6.85	1	3/28/2006
Bromomethane	BQL	6.85	1	3/28/2006
2-Butanone	BQL	34.3	1	3/28/2006
n-Butylbenzene	BQL	6.85	1	3/28/2006
sec-Butylbenzene	BQL	6.85	1	3/28/2006
tert-Butylbenzene	BQL	6.85	1	3/28/2006
Carbon disulfide	BQL	6.85	1	3/28/2006
Carbon tetrachloride	BQL	6.85	1	3/28/2006
Chlorobenzene	BQL	6.85	1	3/28/2006
Chloroethane	BQL	6.85	1	3/28/2006
Chloroform	BQL	6.85	1	3/28/2006
Chloromethane	BQL	6.85	1	3/28/2006
2-Chlorotoluene	BQL	6.85	1	3/28/2006
4-Chlorotoluene	BQL	6.85	1	3/28/2006
Dibromochloromethane	BQL	6.85	1	3/28/2006
1,2-Dibromo-3-chloropropane	BQL	6.85	1	3/28/2006
Dibromomethane	BQL	6.85	1	3/28/2006
1,2-Dibromoethane (EDB)	BQL	6.85	1	3/28/2006
1,2-Dichlorobenzene	BQL	6.85	1	3/28/2006
1,3-Dichlorobenzene	BQL	6.85	1	3/28/2006
1,4-Dichlorobenzene	BQL	6.85	1	3/28/2006
trans-1,4-Dichloro-2-butene	BQL	6.85	1	3/28/2006
1,1-Dichloroethane	BQL	6.85	1	3/28/2006
1,1-Dichloroethene	BQL	6.85	1	3/28/2006
1,2-Dichloroethane	BQL	6.85	1	3/28/2006
cis-1,2-Dichloroethene	BQL	6.85	1	3/28/2006
trans-1,2-dichloroethene	BQL	6.85	1	3/28/2006
1,2-Dichloropropane	BQL	6.85	1	3/28/2006
1,3-Dichloropropane	BQL	6.85	1	3/28/2006
2,2-Dichloropropane	BQL	6.85	1	3/28/2006
1,1-Dichloropropene	BQL	6.85	1	3/28/2006
cis-1,3-Dichloropropene	BQL	6.85	1	3/28/2006
trans-1,3-Dichloropropene	BQL	6.85	1	3/28/2006
Dichlorodifluoromethane	BQL	6.85	1	3/28/2006
Diisopropyl ether (DIPE)	BQL	6.85	1	3/28/2006
Ethylbenzene	BQL	6.85	1	3/28/2006
Hexachlorobutadiene	BQL	6.85	1	3/28/2006



**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: GP1-10
 Client Project ID: NCDOT-Yancey PAR 112
 Lab Sample ID G106-577-1A
 Lab Project ID: G106-577
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 03-22-2006 17:00
 Date Received: 3/25/2006
 Matrix: Soil
 %Solids: 63.9

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	6.85	1	3/28/2006
Iodomethane	BQL	6.85	1	3/28/2006
Isopropylbenzene	BQL	6.85	1	3/28/2006
4-Isopropyltoluene	BQL	6.85	1	3/28/2006
Methylene chloride	BQL	27.4	1	3/28/2006
4-Methyl-2-pentanone	BQL	6.85	1	3/28/2006
Methyl-tert-butyl ether (MTBE)	BQL	6.85	1	3/28/2006
Naphthalene	BQL	6.85	1	3/28/2006
n-Propyl benzene	BQL	6.85	1	3/28/2006
Styrene	BQL	6.85	1	3/28/2006
1,1,1,2-Tetrachloroethane	BQL	6.85	1	3/28/2006
1,1,2,2-Tetrachloroethane	BQL	6.85	1	3/28/2006
Tetrachloroethene	BQL	6.85	1	3/28/2006
Toluene	BQL	6.85	1	3/28/2006
1,2,3-Trichlorobenzene	BQL	6.85	1	3/28/2006
1,2,4-Trichlorobenzene	BQL	6.85	1	3/28/2006
Trichloroethene	BQL	6.85	1	3/28/2006
1,1,1-Trichloroethane	BQL	6.85	1	3/28/2006
1,1,2-Trichloroethane	BQL	6.85	1	3/28/2006
Trichlorofluoromethane	BQL	6.85	1	3/28/2006
1,2,3-Trichloropropane	BQL	6.85	1	3/28/2006
1,2,4-Trimethylbenzene	BQL	6.85	1	3/28/2006
1,3,5-Trimethylbenzene	BQL	6.85	1	3/28/2006
Vinyl chloride	BQL	6.85	1	3/28/2006
m,p-Xylene	BQL	13.7	1	3/28/2006
o-Xylene	BQL	6.85	1	3/28/2006

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	50	49.5	99
1,2-Dichloroethane-d4	50	64.4	129
Toluene-d8	50	50.4	101

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:



Results for Semivolatiles
by GCMS 8270

Client Sample ID: GP1-10
Client Project ID: NCDOT-Yancey PAR 112
Lab Sample ID: G106-577-1K
Lab Project ID: G106-577
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 3/22/2006 17:00
Date Received: 3/25/2006
Date Extracted: 3/28/2006
Matrix: Soil
% Solids: 63.9

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	485	1	4/3/2006
Acenaphthylene	BQL	485	1	4/3/2006
Anthracene	BQL	485	1	4/3/2006
Benzo[a]anthracene	BQL	485	1	4/3/2006
Benzo[a]pyrene	BQL	485	1	4/3/2006
Benzo[b]fluoranthene	BQL	485	1	4/3/2006
Benzo[g,h,i]perylene	BQL	485	1	4/3/2006
Benzo[k]fluoranthene	BQL	485	1	4/3/2006
Benzoic Acid	BQL	970	1	4/3/2006
Bis(2-chloroethoxy)methane	BQL	485	1	4/3/2006
Bis(2-chloroethyl)ether	BQL	485	1	4/3/2006
Bis(2-chloroisopropyl)ether	BQL	485	1	4/3/2006
Bis(2-ethylhexyl)phthalate	BQL	485	1	4/3/2006
4-bromophenyl phenyl ether	BQL	485	1	4/3/2006
Butylbenzylphthalate	BQL	485	1	4/3/2006
2-Chloronaphthalene	BQL	485	1	4/3/2006
2-Chlorophenol	BQL	485	1	4/3/2006
4-Chloro-3-methylphenol	BQL	485	1	4/3/2006
4-Chloroaniline	BQL	2430	1	4/3/2006
4-Chlorophenyl phenyl ether	BQL	485	1	4/3/2006
Chrysene	BQL	485	1	4/3/2006
Dibenzo[a,h]anthracene	BQL	485	1	4/3/2006
Dibenzofuran	BQL	485	1	4/3/2006
Di-n-Butylphthalate	BQL	485	1	4/3/2006
1,2-Dichlorobenzene	BQL	485	1	4/3/2006
1,3-Dichlorobenzene	BQL	485	1	4/3/2006
1,4-Dichlorobenzene	BQL	485	1	4/3/2006
3,3'-Dichlorobenzidine	BQL	970	1	4/3/2006
2,4-Dichlorophenol	BQL	485	1	4/3/2006
Diethylphthalate	BQL	485	1	4/3/2006
Dimethylphthalate	BQL	485	1	4/3/2006
2,4-Dimethylphenol	BQL	485	1	4/3/2006
Di-n-octylphthalate	BQL	485	1	4/3/2006
4,6-Dinitro-2-methylphenol	BQL	2430	1	4/3/2006
2,4-Dinitrophenol	BQL	2430	1	4/3/2006
2,4-Dinitrotoluene	BQL	485	1	4/3/2006
2,6-Dinitrotoluene	BQL	485	1	4/3/2006
Diphenylamine *	BQL	485	1	4/3/2006
Fluoranthene	BQL	485	1	4/3/2006
Fluorene	BQL	485	1	4/3/2006
Hexachlorobenzene	BQL	485	1	4/3/2006
Hexachlorobutadiene	BQL	485	1	4/3/2006
Hexachlorocyclopentadiene	BQL	970	1	4/3/2006
Hexachloroethane	BQL	485	1	4/3/2006



**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: GP1-10
 Client Project ID: NCDOT-Yancey PAR 112
 Lab Sample ID: G106-577-1K
 Lab Project ID: G106-577
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 3/22/2006 17:00
 Date Received: 3/25/2006
 Date Extracted: 3/28/2006
 Matrix: Soil
 % Solids: 63.9

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Indeno(1,2,3-c,d)pyrene	BQL	485	1	4/3/2006
Isophorone	BQL	485	1	4/3/2006
2-Methylnaphthalene	BQL	485	1	4/3/2006
2-Methylphenol	BQL	485	1	4/3/2006
3- & 4-Methylphenol	BQL	485	1	4/3/2006
Naphthalene	BQL	485	1	4/3/2006
2-Nitroaniline	BQL	485	1	4/3/2006
3-Nitroaniline	BQL	2430	1	4/3/2006
4-Nitroaniline	BQL	2430	1	4/3/2006
Nitrobenzene	BQL	485	1	4/3/2006
2-Nitrophenol	BQL	485	1	4/3/2006
4-Nitrophenol	BQL	2430	1	4/3/2006
N-Nitrosodi-n-propylamine	BQL	485	1	4/3/2006
Pentachlorophenol	BQL	2430	1	4/3/2006
Phenanthrene	BQL	485	1	4/3/2006
Phenol	BQL	485	1	4/3/2006
Pyrene	BQL	485	1	4/3/2006
1,2,4-Trichlorobenzene	BQL	485	1	4/3/2006
2,4,5-Trichlorophenol	BQL	485	1	4/3/2006
2,4,6-Trichlorophenol	BQL	485	1	4/3/2006

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.7	87
2-Fluorophenol	10	10	100
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	7.6	76
2,4,6-Tribromophenol	10	10.5	105
4-Terphenyl-d14	10	12	120

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.



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1 CLIENT: FEI INC. PHONE NO: 919 657-7500

CONTACT: BOB SHAW PROJECT: NEDOT - YANCEY / SITE/PSID:

REPORTS TO: BOB SHAW - FEI FAX NO: ()

INVOICE TO: NEDOT QUOTE # 35609.1.1

STATE R-25194 WBS # 35609.1.1 P.O. NUMBER

SGS Reference: TR 112 G106-577 PAGE 1 OF 1

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE G COMB GMS	Preserved/Used	Analysis Required	REMARKS	
									INTACT	BROKEN
	Gp1-10	3-22-06	1700	Soil	3	G				
	Gp2-10		1708							
	Gp3-8		1722							
	Gp4-6		1746							
	Gp5-8		1800							

Handwritten notes in table:
 - Above Gp1-10: DR0
 - Above Gp2-10: 6120
 - Above Gp3-8: MADP VPH
 - Above Gp4-6: MADP EPH
 - Above Gp5-8: B260
 - Above Gp5-8: B270
 - In REMARKS: RUN MADP & VPH

2 Collected/Relinquished By: (4) [Signature] Date: 3/21/06 Time: 3:15 PM Received By: [Signature]

Relinquished By: (2) [Signature] Date: 3/21/06 Time: 3:15 PM Received By: [Signature]

Relinquished By: (3) [Signature] Date: 3/21/06 Time: 3:15 PM Received By: [Signature]

Relinquished By: (4) [Signature] Date: 3/21/06 Time: 3:15 PM Received By: [Signature]

3 Shipping Carrier: _____ Samples Received Cold? (Circle) YES NO

Shipping Ticket No: _____ Temperature (C): 0.3

Special Deliverable Requirements: _____ Chair of Custody Seal: (Circle) INTACT BROKEN

Requested Turnaround Time and Special Instructions: _____

4 Chair of Custody Seal: (Circle) ABSENT

200 W. Parker Drive, Archersburg, AK 98518 Tel: (907) 562-2343 Fax: (907) 561-6301
 5500 Business Park, Wilmington, NC 28403 Tel: (910) 350-1803 Fax: (910) 350-1857

1258 Greenbrier Street, Charleston, WV 25311 Tel: (304) 344-0725 Fax: (304) 344-0781

White - Retained by Lab
 Yellow - Returned with Report
 Pink - Return Sample

Case Narrative



Date: 05/09/06

Company: NC Dept. of Transportation
Contact: c/o EI / Bob Shaut
Address: Suite 200
2101 Gateway Centre Blvd.
Morrisville, NC 27560

Client Project ID: Parcel 112/NCDOT-Burnsville NC
Client Project Name or No: WBS# 356091.1
Prism COC Group No: G0506006
Collection Date(s): 04/26/06
Lab Submittal Date: 04/28/06

This data package contains the analytical results for the project identified above and includes a Case Narrative, Laboratory Report and Quality Control Data totaling 21 pages. A chain-of-custody is also attached for the samples submitted to Prism for this project.

Analysis Note for Method 625:

Prism QC Batch ID Q14589 - MS and MSD for Hexachlorocyclopentadiene was above the control limits. This compound was not detected in the samples associated with this QC batch. No further action was taken.

Data qualifiers are flagged individually on each sample. A Key Reference for the data qualifiers appears at the bottom of this page. Quality control statements and/or sample specific remarks are included in the sample comments section of the laboratory report for each sample affected.

Please call if you have any questions relating to this analytical report.

Data Reviewed by: Robbi A. Jones
Signature: Robbi A. Jones
Review Date: 05/09/06

Project Manager: Angela D. Overcash
Signature: Angela D. Overcash
Approval Date: 05/09/06

Data Qualifier Key Reference:

- #: Result outside of QC Limits
- B: Compound also detected in the method blank
- DO: Compound diluted out.
- E: Estimated concentration, calibration range exceeded
- J: The analyte was positively identified but the value is estimated below the reporting limit
- JH: Estimated concentration with a high bias
- JL: Estimated concentration with a low bias
- M: A matrix effect is present
- T: Tentatively identified compound. The concentration is estimated.

Notes: This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc. The results in this report relate only to the samples submitted for analysis.

449 Springbrook Road, P. O. Box 240543, Charlotte, NC 28224-0403
Phone: 704/529-6364 Toll Free: 800/529-6364 Fax: 704/525-0409



NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

05/09/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Parcel 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 COC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Aromatic and Halogenated Volatiles by GC/PID-ELCD</u>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	0.50	0.17	1	6230D	05/04/06 6:01	erussell	Q14508
1,1,1-Trichloroethane	BRL	µg/L	0.50	0.080	1	6230D	05/04/06 6:01	erussell	Q14508
1,1,2,2-Tetrachloroethane	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508
1,1,2-Trichloroethane	BRL	µg/L	0.50	0.080	1	6230D	05/04/06 6:01	erussell	Q14508
1,1-Dichloroethane	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508
1,1-Dichloroethene	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
1,1-Dichloropropene	BRL	µg/L	0.50	0.090	1	6230D	05/04/06 6:01	erussell	Q14508
1,2,3-Trichlorobenzene	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
1,2,3-Trichloropropane	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508
1,2,4-Trichlorobenzene	BRL	µg/L	0.50	0.040	1	6230D	05/04/06 6:01	erussell	Q14508
1,2,4-Trimethylbenzene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dibromo-3-chloropropane	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dibromoethane (EDB)	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dichlorobenzene	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dichloroethane	BRL	µg/L	0.50	0.070	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dichloropropane	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
1,3,5-Trimethylbenzene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
1,3-Dichlorobenzene	BRL	µg/L	0.50	0.050	1	6230D	05/04/06 6:01	erussell	Q14508
1,3-Dichloropropane	BRL	µg/L	0.50	0.070	1	6230D	05/04/06 6:01	erussell	Q14508
1,4-Dichlorobenzene	BRL	µg/L	0.50	0.060	1	6230D	05/04/06 6:01	erussell	Q14508
2,2-Dichloropropane	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
2-Chlorotoluene	BRL	µg/L	0.50	0.21	1	6230D	05/04/06 6:01	erussell	Q14508
4-Chlorotoluene	BRL	µg/L	0.50	0.090	1	6230D	05/04/06 6:01	erussell	Q14508
Benzene	BRL	µg/L	0.50	0.060	1	6230D	05/04/06 6:01	erussell	Q14508
Bromobenzene	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
Bromochloromethane	BRL	µg/L	0.50	0.090	1	6230D	05/04/06 6:01	erussell	Q14508
Bromodichloromethane	BRL	µg/L	0.50	0.090	1	6230D	05/04/06 6:01	erussell	Q14508

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

05/09/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Bumsville, NC
 Project ID: NCDOT - Yancey - Parcel 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 COC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Bromoform	BRL	µg/L	0.50	0.050	1	6230D	05/04/06 6:01	erussell	Q14508
Bromomethane	BRL	µg/L	0.50	0.27	1	6230D	05/04/06 6:01	erussell	Q14508
Carbon Tetrachloride	BRL	µg/L	0.50	0.060	1	6230D	05/04/06 6:01	erussell	Q14508
Chlorobenzene	BRL	µg/L	0.50	0.17	1	6230D	05/04/06 6:01	erussell	Q14508
Chloroethane	BRL	µg/L	0.50	0.41	1	6230D	05/04/06 6:01	erussell	Q14508
Chloroform	BRL	µg/L	0.50	0.060	1	6230D	05/04/06 6:01	erussell	Q14508
Chloromethane	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
cis-1,2-Dichloroethene	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
cis-1,3-Dichloropropene	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
Dibromochloromethane	BRL	µg/L	0.50	0.080	1	6230D	05/04/06 6:01	erussell	Q14508
Dibromomethane	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
Dichlorodifluoromethane	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
Ethylbenzene	BRL	µg/L	0.50	0.16	1	6230D	05/04/06 6:01	erussell	Q14508
Hexachlorobutadiene	BRL	µg/L	0.50	0.17	1	6230D	05/04/06 6:01	erussell	Q14508
Isopropyl ether (IPE)	BRL	µg/L	0.50	0.24	1	6230D	05/04/06 6:01	erussell	Q14508
Isopropylbenzene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
m,p-Xylenes	BRL	µg/L	1.0	0.43	1	6230D	05/04/06 6:01	erussell	Q14508
Methyl t-butyl ether (MTBE)	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
Methylene chloride	BRL	µg/L	2.0	0.75	1	6230D	05/04/06 6:01	erussell	Q14508
n-Butylbenzene	BRL	µg/L	0.50	0.19	1	6230D	05/04/06 6:01	erussell	Q14508
n-Propylbenzene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
Naphthalene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
o-Xylene	BRL	µg/L	0.50	0.16	1	6230D	05/04/06 6:01	erussell	Q14508
p-Isopropyltoluene	BRL	µg/L	0.50	0.17	1	6230D	05/04/06 6:01	erussell	Q14508
sec-Butylbenzene	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
Styrene	BRL	µg/L	0.50	0.050	1	6230D	05/04/06 6:01	erussell	Q14508
tert-Butylbenzene	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
Tetrachloroethene	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

05/09/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Parcel
 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 COC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Toluene	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508
trans-1,2-Dichloroethene	BRL	µg/L	0.50	0.27	1	6230D	05/04/06 6:01	erussell	Q14508
trans-1,3-Dichloropropene	BRL	µg/L	0.50	0.070	1	6230D	05/04/06 6:01	erussell	Q14508
Trichloroethene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
Trichlorofluoromethane	BRL	µg/L	0.50	0.19	1	6230D	05/04/06 6:01	erussell	Q14508
Vinyl chloride	BRL	µg/L	0.50	0.24	1	6230D	05/04/06 6:01	erussell	Q14508

Surrogate	% Recovery	Control Limits
Bromochlorobenzene-ELCD	137	60 - 144
1,4-Difluorobenzene-PID	77	50 - 141

Semivolatile Organic Compounds by GC/MS

1,2,4-Trichlorobenzene	BRL	µg/L	11	2.6	1	625	05/06/06 6:23	kelliott	Q14589
1,2-Dichlorobenzene	BRL	µg/L	11	2.8	1	625	05/06/06 6:23	kelliott	Q14589
1,3-Dichlorobenzene	BRL	µg/L	11	2.0	1	625	05/06/06 6:23	kelliott	Q14589
1,4-Dichlorobenzene	BRL	µg/L	11	2.5	1	625	05/06/06 6:23	kelliott	Q14589
2,4,5-Trichlorophenol	BRL	µg/L	11	2.7	1	625	05/06/06 6:23	kelliott	Q14589
2,4,6-Trichlorophenol	BRL	µg/L	11	1.9	1	625	05/06/06 6:23	kelliott	Q14589
2,4-Dichlorophenol	BRL	µg/L	11	2.0	1	625	05/06/06 6:23	kelliott	Q14589
2,4-Dimethylphenol	BRL	µg/L	11	0.71	1	625	05/06/06 6:23	kelliott	Q14589
2,4-Dinitrophenol	BRL	µg/L	53	0.71	1	625	05/06/06 6:23	kelliott	Q14589
2,4-Dinitrotoluene	BRL	µg/L	11	0.88	1	625	05/06/06 6:23	kelliott	Q14589
2,6-Dinitrotoluene	BRL	µg/L	11	1.7	1	625	05/06/06 6:23	kelliott	Q14589
2-Chloronaphthalene	BRL	µg/L	11	2.3	1	625	05/06/06 6:23	kelliott	Q14589
2-Chlorophenol	BRL	µg/L	11	2.3	1	625	05/06/06 6:23	kelliott	Q14589
2-Methylphenol	BRL	µg/L	11	2.9	1	625	05/06/06 6:23	kelliott	Q14589
2-Nitrophenol	BRL	µg/L	11	2.4	1	625	05/06/06 6:23	kelliott	Q14589
3&4-Methylphenol	BRL	µg/L	11	3.9	1	625	05/06/06 6:23	kelliott	Q14589

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NC Certification No. 402
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 NC Drinking Water Cert. No. 37735

Laboratory Report

05/09/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Parcel 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 COC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
3,3'-Dichlorobenzidine	BRL	µg/L	53	9.9	1	625	05/06/06 6:23	kelliott	Q14589
4,6-Dinitro-2-methylphenol	BRL	µg/L	53	0.93	1	625	05/06/06 6:23	kelliott	Q14589
4-Bromophenylphenylether	BRL	µg/L	11	2.1	1	625	05/06/06 6:23	kelliott	Q14589
4-Chloro-3-methylphenol	BRL	µg/L	11	1.8	1	625	05/06/06 6:23	kelliott	Q14589
4-Chlorophenylphenylether	BRL	µg/L	11	1.7	1	625	05/06/06 6:23	kelliott	Q14589
4-Nitrophenol	BRL	µg/L	53	0.63	1	625	05/06/06 6:23	kelliott	Q14589
Acenaphthene	BRL	µg/L	11	2.0	1	625	05/06/06 6:23	kelliott	Q14589
Acenaphthylene	BRL	µg/L	11	2.2	1	625	05/06/06 6:23	kelliott	Q14589
Anthracene	BRL	µg/L	11	1.0	1	625	05/06/06 6:23	kelliott	Q14589
Benzo(a)anthracene	BRL	µg/L	11	0.99	1	625	05/06/06 6:23	kelliott	Q14589
Benzo(a)pyrene	BRL	µg/L	11	1.1	1	625	05/06/06 6:23	kelliott	Q14589
Benzo(b)fluoranthene	BRL	µg/L	11	1.8	1	625	05/06/06 6:23	kelliott	Q14589
Benzo(g,h,i)perylene	BRL	µg/L	11	2.2	1	625	05/06/06 6:23	kelliott	Q14589
Benzo(k)fluoranthene	BRL	µg/L	11	2.0	1	625	05/06/06 6:23	kelliott	Q14589
Bis(2-chloroethoxy)methane	BRL	µg/L	11	2.3	1	625	05/06/06 6:23	kelliott	Q14589
Bis(2-chloroethyl)ether	BRL	µg/L	11	2.2	1	625	05/06/06 6:23	kelliott	Q14589
Bis(2-chloroisopropyl)ether	BRL	µg/L	11	2.5	1	625	05/06/06 6:23	kelliott	Q14589
Bis(2-ethylhexyl)phthalate	BRL	µg/L	11	0.75	1	625	05/06/06 6:23	kelliott	Q14589
Butylbenzylphthalate	BRL	µg/L	11	0.74	1	625	05/06/06 6:23	kelliott	Q14589
Chrysene	BRL	µg/L	11	0.60	1	625	05/06/06 6:23	kelliott	Q14589
Di-n-butylphthalate	BRL	µg/L	11	1.5	1	625	05/06/06 6:23	kelliott	Q14589
Di-n-octylphthalate	BRL	µg/L	11	2.3	1	625	05/06/06 6:23	kelliott	Q14589
Dibenzo(a,h)anthracene	BRL	µg/L	11	1.2	1	625	05/06/06 6:23	kelliott	Q14589
Dibenzofuran	BRL	µg/L	11	2.3	1	625	05/06/06 6:23	kelliott	Q14589
Diethylphthalate	BRL	µg/L	11	1.2	1	625	05/06/06 6:23	kelliott	Q14589
Dimethylphthalate	BRL	µg/L	11	1.5	1	625	05/06/06 6:23	kelliott	Q14589
Fluoranthene	BRL	µg/L	11	0.99	1	625	05/06/06 6:23	kelliott	Q14589
Fluorene	BRL	µg/L	11	1.5	1	625	05/06/06 6:23	kelliott	Q14589

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NC Certification No. 402
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 NC Drinking Water Cert. No. 37735

Laboratory Report

05/09/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Bumsville, NC
 Project ID: NCDOT - Yancey - Parcel 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 COC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Hexachlorobenzene	BRL	µg/L	11	1.4	1	625	05/06/06 6:23	kelliot	Q14589
Hexachlorobutadiene	BRL	µg/L	11	2.3	1	625	05/06/06 6:23	kelliot	Q14589
Hexachlorocyclopentadiene	BRL	µg/L	11	2.5	1	625	05/06/06 6:23	kelliot	Q14589
Hexachloroethane	BRL	µg/L	11	1.9	1	625	05/06/06 6:23	kelliot	Q14589
Indeno(1,2,3-cd)pyrene	BRL	µg/L	11	1.8	1	625	05/06/06 6:23	kelliot	Q14589
Isophorone	BRL	µg/L	11	1.7	1	625	05/06/06 6:23	kelliot	Q14589
N-Nitrosodi-n-propylamine	BRL	µg/L	11	2.3	1	625	05/06/06 6:23	kelliot	Q14589
Naphthalene	BRL	µg/L	11	2.3	1	625	05/06/06 6:23	kelliot	Q14589
Nitrobenzene	BRL	µg/L	11	2.0	1	625	05/06/06 6:23	kelliot	Q14589
Pentachlorophenol	BRL	µg/L	11	1.8	1	625	05/06/06 6:23	kelliot	Q14589
Phenanthrene	BRL	µg/L	11	0.95	1	625	05/06/06 6:23	kelliot	Q14589
Phenol	BRL	µg/L	11	0.95	1	625	05/06/06 6:23	kelliot	Q14589
Pyrene	BRL	µg/L	11	0.96	1	625	05/06/06 6:23	kelliot	Q14589

Surrogate recovery was outside of the control limits. Matrix interference is suspected. Severe emulsions were noted during sample extraction.

Sample Preparation: 950 mL / 1 mL 625 05/02/06 7:00 smanivanh P15273

Surrogate	% Recovery	Control Limits
Terphenyl-d14	66	10 - 154
Phenol-d5	1 #	10 - 48
Nitrobenzene-d5	78	22 - 103
2-Fluorophenol	2 #	10 - 59
2-Fluorobiphenyl	90	29 - 112

TIC's By 625

Est.Conc Units

No TICs were detected.

Extractable Petroleum Hydrocarbons by GC-FID

C11-C22 Aromatics	BRL	µg/L	100	71	1	MADEP EPH	05/08/06 13:09	grappaccioli	Q14643
C19-C36 Aliphatics	BRL	µg/L	100	31	1	MADEP EPH	05/08/06 13:09	grappaccioli	Q14643

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Laboratory Report

05/09/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Parcel 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 CDC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
C9-C18 Aliphatics	BRL	µg/L	100	75	1	MADEP EPH	05/08/06 13:09	grappaccoli	Q14643

* Analysis Note for C11-C22 Aromatics: Adjusted value.

Sample Preparation: 1000 mL / 2 mL EPH 05/06/06 10:00 smanivanh P15315

Surrogate	% Recovery	Control Limits
o-Terphenyl	78	40 - 140
2-Fluorobiphenyl	84	40 - 140
2-Bromonaphthalene	66	40 - 140
1-Chloro-octadecane	80	40 - 140

Volatile Petroleum Hydrocarbons by GC-PID/FID

C5-C8 Aliphatics	BRL	µg/L	100	50	1	MADEP VPH	05/05/06 17:46	jvogel	Q14660
C9-C10 Aromatics	BRL	µg/L	100	35	1	MADEP VPH	05/05/06 17:46	jvogel	Q14660
C9-C12 Aliphatics	BRL	µg/L	100	50	1	MADEP VPH	05/05/06 17:46	jvogel	Q14660

* Analysis Note for C5-C8 Aliphatics: Adjusted value.

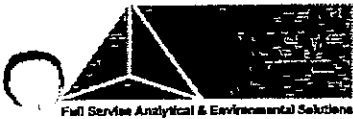
* Analysis Note for C9-C12 Aliphatics: Adjusted value.

Surrogate	% Recovery	Control Limits
2,5-Dibromotoluene-PID	71	70 - 130
2,5-Dibromotoluene-FID	92	70 - 130

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Laboratory Report

05/09/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Parcel 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 COC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

Angela D. Overcash, V.P. Laboratory Services



NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shauf/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Bumsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Aromatic and Halogenated Volatiles by GC/PID-ELCD, method 6230D

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
1,1,1,2-Tetrachloroethane	ND	0.5	<0.25	µg/L	Q14508
1,1,1-Trichloroethane	ND	0.5	<0.25	µg/L	Q14508
1,1,2,2-Tetrachloroethane	ND	0.5	<0.25	µg/L	Q14508
1,1,2-Trichloroethane	ND	0.5	<0.25	µg/L	Q14508
1,1-Dichloroethane	ND	0.5	<0.25	µg/L	Q14508
1,1-Dichloroethene	ND	0.5	<0.25	µg/L	Q14508
1,1-Dichloropropene	ND	0.5	<0.25	µg/L	Q14508
1,2,3-Trichlorobenzene	ND	0.5	<0.25	µg/L	Q14508
1,2,3-Trichloropropane	ND	0.5	<0.25	µg/L	Q14508
1,2,4-Trichlorobenzene	ND	0.5	<0.25	µg/L	Q14508
1,2,4-Trimethylbenzene	ND	0.5	<0.25	µg/L	Q14508
1,2-Dibromo-3-chloropropane	ND	0.5	<0.25	µg/L	Q14508
1,2-Dibromoethane (EDB)	ND	0.5	<0.25	µg/L	Q14508
1,2-Dichlorobenzene	ND	0.5	<0.25	µg/L	Q14508
1,2-Dichloroethane	ND	0.5	<0.25	µg/L	Q14508
1,2-Dichloropropane	ND	0.5	<0.25	µg/L	Q14508
1,3,5-Trimethylbenzene	ND	0.5	<0.25	µg/L	Q14508
1,3-Dichlorobenzene	ND	0.5	<0.25	µg/L	Q14508
1,3-Dichloropropane	ND	0.5	<0.25	µg/L	Q14508
1,4-Dichlorobenzene	ND	0.5	<0.25	µg/L	Q14508
2,2-Dichloropropane	ND	0.5	<0.25	µg/L	Q14508
2-Chlorotoluene	ND	0.5	<0.25	µg/L	Q14508
4-Chlorotoluene	ND	0.5	<0.25	µg/L	Q14508
Benzene	ND	0.5	<0.25	µg/L	Q14508
Bromobenzene	ND	0.5	<0.25	µg/L	Q14508
Bromochloromethane	ND	0.5	<0.25	µg/L	Q14508
Bromodichloromethane	ND	0.5	<0.25	µg/L	Q14508
Bromoform	ND	0.5	<0.25	µg/L	Q14508
Bromomethane	ND	0.5	<0.25	µg/L	Q14508
Carbon Tetrachloride	ND	0.5	<0.25	µg/L	Q14508
Chlorobenzene	ND	0.5	<0.25	µg/L	Q14508
Chloroethane	ND	0.5	<0.25	µg/L	Q14508
Chloroform	ND	0.5	<0.25	µg/L	Q14508
Chloromethane	ND	0.5	<0.25	µg/L	Q14508
cis-1,2-Dichloroethene	ND	0.5	<0.25	µg/L	Q14508
cis-1,3-Dichloropropene	ND	0.5	<0.25	µg/L	Q14508
Dibromochloromethane	ND	0.5	<0.25	µg/L	Q14508
Dibromomethane	ND	0.5	<0.25	µg/L	Q14508
Dichlorodifluoromethane	ND	0.5	<0.25	µg/L	Q14508
Ethylbenzene	ND	0.5	<0.25	µg/L	Q14508
Hexachlorobutadiene	ND	0.5	<0.25	µg/L	Q14508
Isopropyl ether (IPE)	ND	0.5	<0.25	µg/L	Q14508

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Level II QC Report

5/10/06



NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
Isopropylbenzene	ND	0.5	<0.25	µg/L	Q14508
m,p-Xylenes	ND	1	<0.5	µg/L	Q14508
Methyl t-butyl ether (MTBE)	ND	0.5	<0.25	µg/L	Q14508
Methylene chloride	ND	2	<1	µg/L	Q14508
n-Butylbenzene	ND	0.5	<0.25	µg/L	Q14508
n-Propylbenzene	ND	0.5	<0.25	µg/L	Q14508
Naphthalene	ND	0.5	<0.25	µg/L	Q14508
o-Xylene	ND	0.5	<0.25	µg/L	Q14508
p-Isopropyltoluene	ND	0.5	<0.25	µg/L	Q14508
sec-Butylbenzene	ND	0.5	<0.25	µg/L	Q14508
Styrene	ND	0.5	<0.25	µg/L	Q14508
tert-Butylbenzene	ND	0.5	<0.25	µg/L	Q14508
Tetrachloroethene	ND	0.5	<0.25	µg/L	Q14508
Toluene	ND	0.5	<0.25	µg/L	Q14508
trans-1,2-Dichloroethene	ND	0.5	<0.25	µg/L	Q14508
trans-1,3-Dichloropropene	ND	0.5	<0.25	µg/L	Q14508
Trichloroethene	ND	0.5	<0.25	µg/L	Q14508
Trichlorofluoromethane	ND	0.5	<0.25	µg/L	Q14508
Vinyl chloride	ND	0.5	<0.25	µg/L	Q14508

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
1,1,1,2-Tetrachloroethane	40.85	40	µg/L	102	70 - 139	Q14508
1,1,1-Trichloroethane	21.709	20	µg/L	109	60 - 140	Q14508
1,1,2,2-Tetrachloroethane	21.691	20	µg/L	108	60 - 140	Q14508
1,1,2-Trichloroethane	21.439	20	µg/L	107	60 - 140	Q14508
1,1-Dichloroethane	22.529	20	µg/L	113	60 - 140	Q14508
1,1-Dichloroethene	18.442	20	µg/L	92	60 - 140	Q14508
1,1-Dichloropropene	21.893	20	µg/L	109	62 - 140	Q14508
1,2,3-Trichlorobenzene	17.333	20	µg/L	87	72 - 119	Q14508
1,2,3-Trichloropropane	20.392	20	µg/L	102	68 - 131	Q14508
1,2,4-Trichlorobenzene	18.268	20	µg/L	91	58 - 133	Q14508
1,2,4-Trimethylbenzene	18.317	20	µg/L	92	72 - 125	Q14508
1,2-Dibromo-3-chloropropane	15.977	20	µg/L	80	50 - 135	Q14508
1,2-Dibromoethane (EDB)	19.904	20	µg/L	100	66 - 130	Q14508
1,2-Dichlorobenzene	17.833	20	µg/L	89	64 - 137	Q14508
1,2-Dichloroethane	22.195	20	µg/L	111	72 - 137	Q14508
1,2-Dichloropropane	21.674	20	µg/L	108	70 - 139	Q14508
1,3,5-Trimethylbenzene	18.408	20	µg/L	92	73 - 124	Q14508
1,3-Dichlorobenzene	17.103	20	µg/L	86	60 - 137	Q14508
1,3-Dichloropropane	21.859	20	µg/L	109	67 - 131	Q14508
1,4-Dichlorobenzene	17.802	20	µg/L	89	64 - 139	Q14508
2,2-Dichloropropane	49.69	40	µg/L	124	62 - 138	Q14508
2-Chlorotoluene	20.316	20	µg/L	102	59 - 140	Q14508

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
1,1,1,2-Tetrachloroethane	101.02	80	µg/L	126	58 - 143	Q14508
1,1,2-Trichloroethane	91.208	80	µg/L	114	58 - 138	Q14508
1,1-Dichloroethane	102.432	80	µg/L	128	57 - 131	Q14508
1,1-Dichloroethene	85.048	80	µg/L	106	53 - 141	Q14508
1,1-Dichloropropene	97.152	80	µg/L	121	53 - 135	Q14508
1,2,3-Trichlorobenzene	74.7	80	µg/L	93	53 - 129	Q14508
1,2,3-Trichloropropane	93.176	80	µg/L	116	63 - 135	Q14508
1,2,4-Trichlorobenzene	79.42	80	µg/L	99	51 - 129	Q14508
1,2,4-Trimethylbenzene	79.028	80	µg/L	99	70 - 121	Q14508
1,2-Dibromo-3-chloropropane	69.098	80	µg/L	86	46 - 137	Q14508
1,2-Dibromoethane (EDB)	89.476	80	µg/L	112	60 - 133	Q14508
1,2-Dichlorobenzene	77.712	80	µg/L	97	64 - 130	Q14508
1,2-Dichloroethane	95.22	80	µg/L	119	66 - 136	Q14508
1,2-Dichloropropane	94.94	80	µg/L	119	64 - 133	Q14508
1,3,5-Trimethylbenzene	81.108	80	µg/L	101	66 - 121	Q14508
1,3-Dichlorobenzene	74.932	80	µg/L	94	58 - 130	Q14508
1,3-Dichloropropane	92.256	80	µg/L	115	62 - 130	Q14508
1,4-Dichlorobenzene	78.056	80	µg/L	98	59 - 136	Q14508
2,2-Dichloropropane	214.88	160	µg/L	134 #	58 - 127	Q14508
2-Chlorotoluene	94.052	80	µg/L	118	56 - 134	Q14508
4-Chlorotoluene	97.836	80	µg/L	122	56 - 141	Q14508
Benzene	81.212	80	µg/L	102	69 - 122	Q14508
Bromobenzene	92.744	80	µg/L	116	61 - 128	Q14508
Bromochloromethane	98.292	80	µg/L	123	62 - 128	Q14508
Bromodichloromethane	95.236	80	µg/L	119	63 - 127	Q14508
Bromoform	86.168	80	µg/L	108	56 - 127	Q14508
Bromomethane	88.584	80	µg/L	111	57 - 134	Q14508
Carbon Tetrachloride	94.6	80	µg/L	118	64 - 133	Q14508
Chlorobenzene	77.848	80	µg/L	97	72 - 117	Q14508
Chloroethane	102.896	80	µg/L	129	57 - 143	Q14508
Chloroform	96.38	80	µg/L	120	65 - 133	Q14508
Chloromethane	94.984	80	µg/L	119	45 - 142	Q14508
cis-1,2-Dichloroethene	86.184	80	µg/L	108	58 - 127	Q14508
cis-1,3-Dichloropropene	92.376	80	µg/L	115	62 - 129	Q14508
Dibromochloromethane	94.22	80	µg/L	118	59 - 132	Q14508
Dibromomethane	99.416	80	µg/L	124	64 - 134	Q14508
Dichlorodifluoromethane	110.184	80	µg/L	138	52 - 138	Q14508
Ethylbenzene	79.052	80	µg/L	99	71 - 122	Q14508
Hexachlorobutadiene	102.944	80	µg/L	129	54 - 134	Q14508
Isopropyl ether (IPE)	87.132	80	µg/L	109	73 - 115	Q14508
Isopropylbenzene	80.784	80	µg/L	101	69 - 121	Q14508
m,p-Xylenes	155.344	160	µg/L	97	69 - 122	Q14508
Methyl t-butyl ether (MTBE)	87.144	80	µg/L	109	75 - 116	Q14508
Methylene chloride	104.252	80	µg/L	130	58 - 137	Q14508

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Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
n-Butylbenzene	81.064	80	µg/L	101	71 - 121	Q14508
n-Propylbenzene	79.252	80	µg/L	99	73 - 119	Q14508
Naphthalene	77.948	80	µg/L	97	64 - 118	Q14508
o-Xylene	78.98	80	µg/L	99	66 - 124	Q14508
p-Isopropyltoluene	80.992	80	µg/L	101	61 - 127	Q14508
sec-Butylbenzene	75.156	80	µg/L	94	65 - 126	Q14508
Styrene	75.716	80	µg/L	95	64 - 124	Q14508
tert-Butylbenzene	79.724	80	µg/L	100	63 - 123	Q14508
Tetrachloroethene	78.336	80	µg/L	98	62 - 135	Q14508
Toluene	78.896	80	µg/L	99	71 - 120	Q14508
trans-1,2-Dichloroethene	87.228	80	µg/L	109	62 - 133	Q14508
trans-1,3-Dichloropropene	91.984	80	µg/L	115	58 - 129	Q14508
Trichloroethene	76.432	80	µg/L	96	56 - 128	Q14508
Trichlorofluoromethane	98.772	80	µg/L	123	49 - 147	Q14508
Vinyl chloride	91.072	80	µg/L	114	53 - 135	Q14508

* Analysis Note for 2,2-Dichloropropane: MS and MSD recoveries outside the control limits. This compound was not detected in samples associated with this batch. No further action was taken.

Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID	
149546	1,1,1,2-Tetrachloroethane	174.28	160	µg/L	109	60 - 134	5	0 - 20	Q14508
	1,1,1-Trichloroethane	92.836	80	µg/L	116	60 - 133	4	0 - 20	Q14508
	1,1,2,2-Tetrachloroethane	95.756	80	µg/L	120	58 - 143	5	0 - 20	Q14508
	1,1,2-Trichloroethane	89.916	80	µg/L	112	58 - 138	1	0 - 20	Q14508
	1,1-Dichloroethane	99.144	80	µg/L	124	57 - 131	3	0 - 20	Q14508
	1,1-Dichloroethene	74.612	80	µg/L	93	53 - 141	13	0 - 20	Q14508
	1,1-Dichloropropene	93.12	80	µg/L	116	53 - 135	4	0 - 20	Q14508
	1,2,3-Trichlorobenzene	73.484	80	µg/L	92	53 - 129	2	0 - 20	Q14508
	1,2,3-Trichloropropane	86.992	80	µg/L	109	63 - 135	7	0 - 20	Q14508
	1,2,4-Trichlorobenzene	77.692	80	µg/L	97	51 - 129	2	0 - 20	Q14508
	1,2,4-Trimethylbenzene	76.116	80	µg/L	95	70 - 121	4	0 - 20	Q14508
	1,2-Dibromo-3-chloropropane	70.012	80	µg/L	88	46 - 137	1	0 - 20	Q14508
	1,2-Dibromoethane (EDB)	85.008	80	µg/L	106	60 - 133	5	0 - 20	Q14508
	1,2-Dichlorobenzene	76.728	80	µg/L	96	64 - 130	1	0 - 20	Q14508
	1,2-Dichloroethane	94.656	80	µg/L	118	66 - 136	1	0 - 20	Q14508
	1,2-Dichloropropane	91.476	80	µg/L	114	64 - 133	4	0 - 20	Q14508
	1,3,5-Trimethylbenzene	77.104	80	µg/L	96	66 - 121	5	0 - 20	Q14508
	1,3-Dichlorobenzene	72.26	80	µg/L	90	58 - 130	4	0 - 20	Q14508
	1,3-Dichloropropane	92.292	80	µg/L	115	62 - 130	0	0 - 20	Q14508
	1,4-Dichlorobenzene	75.816	80	µg/L	95	59 - 136	3	0 - 20	Q14508
	2,2-Dichloropropane	206.2	160	µg/L	129 #	58 - 127	4	0 - 20	Q14508
	2-Chlorotoluene	85.92	80	µg/L	107	56 - 134	9	0 - 20	Q14508
	4-Chlorotoluene	85.564	80	µg/L	107	56 - 141	13	0 - 20	Q14508
	Benzene	77.104	80	µg/L	96	69 - 122	5	0 - 20	Q14508

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Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Matrix Spike Duplicate

Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
Bromobenzene	85.556	80	µg/L	107	61 - 128	8	0 - 20	Q14508
Bromochloromethane	97.736	80	µg/L	122	62 - 128	1	0 - 20	Q14508
Bromodichloromethane	91.576	80	µg/L	114	63 - 127	4	0 - 20	Q14508
Bromoform	82.576	80	µg/L	103	56 - 127	4	0 - 20	Q14508
Bromomethane	85.096	80	µg/L	106	57 - 134	4	0 - 20	Q14508
Carbon Tetrachloride	90.908	80	µg/L	114	64 - 133	4	0 - 20	Q14508
Chlorobenzene	75.692	80	µg/L	95	72 - 117	3	0 - 20	Q14508
Chloroethane	95.84	80	µg/L	120	57 - 143	7	0 - 20	Q14508
Chloroform	96.148	80	µg/L	120	65 - 133	0	0 - 20	Q14508
Chloromethane	92.732	80	µg/L	116	45 - 142	2	0 - 20	Q14508
cis-1,2-Dichloroethene	81.876	80	µg/L	102	58 - 127	5	0 - 20	Q14508
cis-1,3-Dichloropropene	88.212	80	µg/L	110	62 - 129	5	0 - 20	Q14508
Dibromochloromethane	91.244	80	µg/L	114	59 - 132	3	0 - 20	Q14508
Dibromomethane	95.448	80	µg/L	119	64 - 134	4	0 - 20	Q14508
Dichlorodifluoromethane	95.284	80	µg/L	119	52 - 138	15	0 - 20	Q14508
Ethylbenzene	73.444	80	µg/L	92	71 - 122	7	0 - 20	Q14508
Hexachlorobutadiene	96.668	80	µg/L	121	54 - 134	6	0 - 20	Q14508
Isopropyl ether (IPE)	84.32	80	µg/L	105	73 - 115	3	0 - 20	Q14508
Isopropylbenzene	76.328	80	µg/L	95	69 - 121	6	0 - 20	Q14508
m,p-Xylenes	147.01	160	µg/L	92	69 - 122	6	0 - 20	Q14508
Methyl t-butyl ether (MTBE)	83.548	80	µg/L	104	75 - 116	4	0 - 20	Q14508
Methylene chloride	101.85	80	µg/L	127	58 - 137	2	0 - 20	Q14508
n-Butylbenzene	77.5	80	µg/L	97	71 - 121	4	0 - 20	Q14508
n-Propylbenzene	74.428	80	µg/L	93	73 - 119	6	0 - 20	Q14508
Naphthalene	76.572	80	µg/L	96	64 - 118	2	0 - 20	Q14508
o-Xylene	70.824	80	µg/L	89	66 - 124	11	0 - 20	Q14508
p-Isopropyltoluene	76.844	80	µg/L	96	61 - 127	5	0 - 20	Q14508
sec-Butylbenzene	70.892	80	µg/L	89	65 - 126	6	0 - 20	Q14508
Styrene	74.768	80	µg/L	93	64 - 124	1	0 - 20	Q14508
tert-Butylbenzene	74.004	80	µg/L	93	63 - 123	7	0 - 20	Q14508
Tetrachloroethene	73.448	80	µg/L	92	62 - 135	6	0 - 20	Q14508
Toluene	74.98	80	µg/L	94	71 - 120	5	0 - 20	Q14508
trans-1,2-Dichloroethene	81.592	80	µg/L	102	62 - 133	7	0 - 20	Q14508
trans-1,3-Dichloropropene	89.416	80	µg/L	112	58 - 129	3	0 - 20	Q14508
Trichloroethene	70.816	80	µg/L	89	56 - 128	8	0 - 20	Q14508
Trichlorofluoromethane	89.648	80	µg/L	112	49 - 147	10	0 - 20	Q14508
Vinyl chloride	84.968	80	µg/L	106	53 - 135	7	0 - 20	Q14508

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Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Semivolatile Organic Compounds by GC/MS, method 625

Method Blank	Result	RL	Control Limit	Units	QC Batch ID
1,2,4-Trichlorobenzene	ND	10	<5	µg/L	Q14589
1,2-Dichlorobenzene	ND	10	<5	µg/L	Q14589
1,3-Dichlorobenzene	ND	10	<5	µg/L	Q14589
1,4-Dichlorobenzene	ND	10	<5	µg/L	Q14589
2,4,5-Trichlorophenol	ND	10	<5	µg/L	Q14589
2,4,6-Trichlorophenol	ND	10	<5	µg/L	Q14589
2,4-Dichlorophenol	ND	10	<5	µg/L	Q14589
2,4-Dimethylphenol	ND	10	<5	µg/L	Q14589
2,4-Dinitrophenol	ND	50	<25	µg/L	Q14589
2,4-Dinitrotoluene	ND	10	<5	µg/L	Q14589
2,6-Dinitrotoluene	ND	10	<5	µg/L	Q14589
2-Chloronaphthalene	ND	10	<5	µg/L	Q14589
2-Chlorophenol	ND	10	<5	µg/L	Q14589
2-Methylphenol	ND	10	<5	µg/L	Q14589
2-Nitrophenol	ND	10	<5	µg/L	Q14589
3&4-Methylphenol	ND	10	<5	µg/L	Q14589
3,3'-Dichlorobenzidine	ND	50	<25	µg/L	Q14589
4,6-Dinitro-2-methylphenol	ND	50	<25	µg/L	Q14589
4-Bromophenylphenylether	ND	10	<5	µg/L	Q14589
4-Chloro-3-methylphenol	ND	10	<5	µg/L	Q14589
4-Chlorophenylphenylether	ND	10	<5	µg/L	Q14589
4-Nitrophenol	ND	50	<25	µg/L	Q14589
Acenaphthene	ND	10	<5	µg/L	Q14589
Acenaphthylene	ND	10	<5	µg/L	Q14589
Anthracene	ND	10	<5	µg/L	Q14589
Benzo(a)anthracene	ND	10	<5	µg/L	Q14589
Benzo(a)pyrene	ND	10	<5	µg/L	Q14589
Benzo(b)fluoranthene	ND	10	<5	µg/L	Q14589
Benzo(g,h,i)perylene	ND	10	<5	µg/L	Q14589
Benzo(k)fluoranthene	ND	10	<5	µg/L	Q14589
Bis(2-chloroethoxy)methane	ND	10	<5	µg/L	Q14589
Bis(2-chloroethyl)ether	ND	10	<5	µg/L	Q14589
Bis(2-chloroisopropyl)ether	ND	10	<5	µg/L	Q14589
Bis(2-ethylhexyl)phthalate	ND	10	<5	µg/L	Q14589
Butylbenzylphthalate	ND	10	<5	µg/L	Q14589
Chrysene	ND	10	<5	µg/L	Q14589
Di-n-butylphthalate	ND	10	<5	µg/L	Q14589
Di-n-octylphthalate	ND	10	<5	µg/L	Q14589
Dibenzo(a,h)anthracene	ND	10	<5	µg/L	Q14589
Dibenzofuran	ND	10	<5	µg/L	Q14589
Diethylphthalate	ND	10	<5	µg/L	Q14589
Dimethylphthalate	ND	10	<5	µg/L	Q14589

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
Fluoranthene	ND	10	<5	µg/L	Q14589
Fluorene	ND	10	<5	µg/L	Q14589
Hexachlorobenzene	ND	10	<5	µg/L	Q14589
Hexachlorobutadiene	ND	10	<5	µg/L	Q14589
Hexachlorocyclopentadiene	ND	10	<5	µg/L	Q14589
Hexachloroethane	ND	10	<5	µg/L	Q14589
Indeno(1,2,3-cd)pyrene	ND	10	<5	µg/L	Q14589
Isophorone	ND	10	<5	µg/L	Q14589
N-Nitrosodi-n-propylamine	ND	10	<5	µg/L	Q14589
Naphthalene	ND	10	<5	µg/L	Q14589
Nitrobenzene	ND	10	<5	µg/L	Q14589
Pentachlorophenol	ND	10	<5	µg/L	Q14589
Phenanthrene	ND	10	<5	µg/L	Q14589
Phenol	ND	10	<5	µg/L	Q14589
Pyrene	ND	10	<5	µg/L	Q14589

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
1,2,4-Trichlorobenzene	65.09	100	µg/L	65	44 - 142	Q14589
1,2-Dichlorobenzene	55.59	100	µg/L	56	32 - 129	Q14589
1,3-Dichlorobenzene	52.61	100	µg/L	53	20 - 124	Q14589
1,4-Dichlorobenzene	56.35	100	µg/L	56	20 - 124	Q14589
2,4,6-Trichlorophenol	77.57	100	µg/L	78	37 - 144	Q14589
2,4-Dichlorophenol	72.54	100	µg/L	73	39 - 135	Q14589
2,4-Dimethylphenol	69.21	100	µg/L	69	32 - 119	Q14589
2,4-Dinitrophenol	94.38	100	µg/L	94	10 - 191	Q14589
2,4-Dinitrotoluene	93.02	100	µg/L	93	39 - 139	Q14589
2,6-Dinitrotoluene	87.69	100	µg/L	88	50 - 158	Q14589
2-Chloronaphthalene	73.64	100	µg/L	74	60 - 118	Q14589
2-Chlorophenol	56.81	100	µg/L	57	23 - 134	Q14589
2-Nitrophenol	78	100	µg/L	78	29 - 182	Q14589
3,3'-Dichlorobenzidine	122.22	100	µg/L	122	10 - 262	Q14589
4,6-Dinitro-2-methylphenol	85.41	100	µg/L	85	10 - 181	Q14589
4-Bromophenylphenylether	91.4	100	µg/L	91	53 - 127	Q14589
4-Chloro-3-methylphenol	70.2	100	µg/L	70	22 - 147	Q14589
4-Chlorophenylphenylether	96.73	100	µg/L	97	25 - 158	Q14589
4-Nitrophenol	26.2	100	µg/L	26	10 - 132	Q14589
Acenaphthene	93.32	100	µg/L	93	47 - 145	Q14589
Acenaphthylene	93.57	100	µg/L	94	33 - 145	Q14589
Anthracene	89.88	100	µg/L	90	27 - 133	Q14589
Benzo(a)anthracene	100.45	100	µg/L	100	33 - 143	Q14589
Benzo(a)pyrene	103.01	100	µg/L	103	17 - 163	Q14589
Benzo(b)fluoranthene	121.63	100	µg/L	122	24 - 159	Q14589
Benzo(g,h,i)perylene	92.12	100	µg/L	92	10 - 219	Q14589

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NC Certification No. 402
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 NC Drinking Water Cert. No. 37735

Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
Benzo(k)fluoranthene	66.94	100	µg/L	67	11 - 162	Q14589
Bis(2-chloroethoxy)methane	76.44	100	µg/L	76	33 - 184	Q14589
Bis(2-chloroethyl)ether	69.85	100	µg/L	70	12 - 158	Q14589
Bis(2-chloroisopropyl)ether	69.56	100	µg/L	70	36 - 166	Q14589
Bis(2-ethylhexyl)phthalate	101.63	100	µg/L	102	10 - 158	Q14589
Butylbenzylphthalate	98.47	100	µg/L	98	10 - 152	Q14589
Chrysene	102.53	100	µg/L	103	17 - 168	Q14589
Di-n-butylphthalate	82.42	100	µg/L	82	10 - 118	Q14589
Di-n-octylphthalate	106.63	100	µg/L	107	10 - 146	Q14589
Dibenzo(a,h)anthracene	102.22	100	µg/L	102	10 - 227	Q14589
Diethylphthalate	95.37	100	µg/L	95	10 - 114	Q14589
Dimethylphthalate	75.62	100	µg/L	76	10 - 112	Q14589
Fluoranthene	89.42	100	µg/L	89	26 - 137	Q14589
Fluorene	98.11	100	µg/L	98	59 - 121	Q14589
Hexachlorobenzene	82.11	100	µg/L	82	10 - 152	Q14589
Hexachlorobutadiene	64.88	100	µg/L	65	24 - 116	Q14589
Hexachlorocyclopentadiene	95.11	100	µg/L	95	32 - 103	Q14589
Hexachloroethane	52.11	100	µg/L	52	40 - 113	Q14589
Indeno(1,2,3-cd)pyrene	93.02	100	µg/L	93	10 - 171	Q14589
Isophorone	79.04	100	µg/L	79	21 - 196	Q14589
N-Nitrosodi-n-propylamine	85.47	100	µg/L	85	10 - 230	Q14589
Naphthalene	79.48	100	µg/L	79	21 - 133	Q14589
Nitrobenzene	63.84	100	µg/L	64	35 - 180	Q14589
Pentachlorophenol	101.34	100	µg/L	101	14 - 176	Q14589
Phenanthrene	100.16	100	µg/L	100	54 - 120	Q14589
Phenol	22.88	100	µg/L	23	10 - 112	Q14589
Pyrene	96.95	100	µg/L	97	52 - 115	Q14589

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
149544	1,2,4-Trichlorobenzene	135.44	200	µg/L	68	44 - 142	Q14589
	1,2-Dichlorobenzene	120.28	200	µg/L	60	32 - 129	Q14589
	1,3-Dichlorobenzene	120.32	200	µg/L	60	20 - 124	Q14589
	1,4-Dichlorobenzene	120.6	200	µg/L	60	20 - 124	Q14589
	2,4,6-Trichlorophenol	156.96	200	µg/L	78	37 - 144	Q14589
	2,4-Dichlorophenol	143.94	200	µg/L	72	39 - 135	Q14589
	2,4-Dimethylphenol	134.96	200	µg/L	67	32 - 119	Q14589
	2,4-Dinitrophenol	150.76	200	µg/L	75	10 - 191	Q14589
	2,4-Dinitrotoluene	185.58	200	µg/L	93	39 - 139	Q14589
	2,6-Dinitrotoluene	182.2	200	µg/L	91	50 - 158	Q14589
	2-Chloronaphthalene	153.22	200	µg/L	77	60 - 118	Q14589
	2-Chlorophenol	134.48	200	µg/L	67	23 - 134	Q14589
	2-Nitrophenol	146.94	200	µg/L	73	29 - 182	Q14589
	3,3'-Dichlorobenzidine	238.92	200	µg/L	119	10 - 262	Q14589

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NC Certification No. 402
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 NC Drinking Water Cert. No. 37735

Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Matrix Spike

Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
4,6-Dinitro-2-methylphenol	153.7	200	µg/L	77	10 - 181	Q14589
4-Bromophenylphenylether	200.32	200	µg/L	100	53 - 127	Q14589
4-Chloro-3-methylphenol	151.38	200	µg/L	76	22 - 147	Q14589
4-Chlorophenylphenylether	205.96	200	µg/L	103	25 - 158	Q14589
4-Nitrophenol	72.28	200	µg/L	36	10 - 132	Q14589
Acenaphthene	195.84	200	µg/L	98	47 - 145	Q14589
Acenaphthylene	177.52	200	µg/L	89	33 - 145	Q14589
Anthracene	188.72	200	µg/L	94	27 - 133	Q14589
Benzo(a)anthracene	176.82	200	µg/L	88	33 - 143	Q14589
Benzo(a)pyrene	214.32	200	µg/L	107	17 - 163	Q14589
Benzo(b)fluoranthene	204.46	200	µg/L	102	24 - 159	Q14589
Benzo(g,h,i)perylene	220.88	200	µg/L	110	10 - 219	Q14589
Benzo(k)fluoranthene	171.04	200	µg/L	86	11 - 162	Q14589
Bis(2-chloroethoxy)methane	163.58	200	µg/L	82	33 - 184	Q14589
Bis(2-chloroethyl)ether	147.5	200	µg/L	74	12 - 158	Q14589
Bis(2-chloroisopropyl)ether	144.74	200	µg/L	72	36 - 166	Q14589
Bis(2-ethylhexyl)phthalate	242.98	200	µg/L	70	10 - 158	Q14589
Butylbenzylphthalate	206.82	200	µg/L	103	10 - 152	Q14589
Chrysene	176.38	200	µg/L	88	17 - 168	Q14589
Di-n-butylphthalate	182.72	200	µg/L	91	10 - 118	Q14589
Di-n-octylphthalate	222.86	200	µg/L	111	10 - 146	Q14589
Dibenzo(a,h)anthracene	238.38	200	µg/L	119	10 - 227	Q14589
Diethylphthalate	187.48	200	µg/L	94	10 - 114	Q14589
Dimethylphthalate	155.04	200	µg/L	78	10 - 112	Q14589
Fluoranthene	177.04	200	µg/L	89	26 - 137	Q14589
Fluorene	193.24	200	µg/L	97	59 - 121	Q14589
Hexachlorobenzene	178.26	200	µg/L	89	10 - 152	Q14589
Hexachlorobutadiene	139.76	200	µg/L	70	24 - 116	Q14589
Hexachlorocyclopentadiene	193.14	200	µg/L	97 #	48 - 94	Q14589
Hexachloroethane	116.42	200	µg/L	58	40 - 113	Q14589
Indeno(1,2,3-cd)pyrene	216.76	200	µg/L	108	10 - 171	Q14589
Isophorone	157.68	200	µg/L	79	21 - 196	Q14589
N-Nitrosodi-n-propylamine	166.34	200	µg/L	83	10 - 230	Q14589
Naphthalene	157.6	200	µg/L	79	21 - 133	Q14589
Nitrobenzene	135.28	200	µg/L	68	35 - 180	Q14589
Pentachlorophenol	163.16	200	µg/L	82	14 - 176	Q14589
Phenanthrene	203.42	200	µg/L	102	54 - 120	Q14589
Phenol	70.4	200	µg/L	35	10 - 112	Q14589
Pyrene	213.32	200	µg/L	107	52 - 115	Q14589

Matrix Spike Duplicate

Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
149544	139.26	200	µg/L	70	44 - 142	3	0 - 36	Q14589
	120.56	200	µg/L	60	32 - 129	0	0 - 38	Q14589

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NC Certification No. 402
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 NC Drinking Water Cert. No. 37735

Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Matrix Spike Duplicate

Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
1,3-Dichlorobenzene	123.06	200	µg/L	62	20 - 124	2	0 - 41	Q14589
1,4-Dichlorobenzene	121.04	200	µg/L	61	20 - 124	0	0 - 36	Q14589
2,4,6-Trichlorophenol	165.18	200	µg/L	83	37 - 144	5	0 - 30	Q14589
2,4-Dichlorophenol	146.6	200	µg/L	73	39 - 135	2	0 - 31	Q14589
2,4-Dimethylphenol	135.04	200	µg/L	68	32 - 119	0	0 - 26	Q14589
2,4-Dinitrophenol	148.18	200	µg/L	74	10 - 191	2	0 - 30	Q14589
2,4-Dinitrotoluene	192.62	200	µg/L	96	39 - 139	4	0 - 29	Q14589
2,6-Dinitrotoluene	183.82	200	µg/L	92	50 - 158	1	0 - 15	Q14589
2-Chloronaphthalene	148.02	200	µg/L	74	60 - 118	3	0 - 21	Q14589
2-Chlorophenol	133.04	200	µg/L	67	23 - 134	1	0 - 35	Q14589
2-Nitrophenol	154.52	200	µg/L	77	29 - 182	5	0 - 34	Q14589
3,3'-Dichlorobenzidine	249.84	200	µg/L	125	10 - 262	4	0 - 50	Q14589
4,6-Dinitro-2-methylphenol	163.64	200	µg/L	82	10 - 181	6	0 - 19	Q14589
4-Bromophenylphenylether	201.2	200	µg/L	101	53 - 127	0	0 - 18	Q14589
4-Chloro-3-methylphenol	151.74	200	µg/L	76	22 - 147	0	0 - 33	Q14589
4-Chlorophenylphenylether	207.02	200	µg/L	104	25 - 158	1	0 - 19	Q14589
4-Nitrophenol	74.3	200	µg/L	37	10 - 132	3	0 - 50	Q14589
Acenaphthene	193.58	200	µg/L	97	47 - 145	1	0 - 20	Q14589
Acenaphthylene	180.28	200	µg/L	90	33 - 145	2	0 - 24	Q14589
Anthracene	197.52	200	µg/L	99	27 - 133	5	0 - 30	Q14589
Benzo(a)anthracene	198	200	µg/L	99	33 - 143	11	0 - 26	Q14589
Benzo(a)pyrene	218.08	200	µg/L	109	17 - 163	2	0 - 25	Q14589
Benzo(b)fluoranthene	201.18	200	µg/L	101	24 - 159	2	0 - 29	Q14589
Benzo(g,h,i)perylene	216.28	200	µg/L	108	10 - 219	2	0 - 27	Q14589
Benzo(k)fluoranthene	176.56	200	µg/L	88	11 - 162	3	0 - 11	Q14589
Bis(2-chloroethoxy)methane	161.52	200	µg/L	81	33 - 184	1	0 - 31	Q14589
Bis(2-chloroethyl)ether	140.42	200	µg/L	70	12 - 158	5	0 - 36	Q14589
Bis(2-chloroisopropyl)ether	143.16	200	µg/L	72	36 - 166	1	0 - 40	Q14589
Bis(2-ethylhexyl)phthalate	239.68	200	µg/L	68	10 - 158	1	0 - 17	Q14589
Butylbenzylphthalate	207	200	µg/L	104	10 - 152	0	0 - 15	Q14589
Chrysene	193.82	200	µg/L	97	17 - 168	9	0 - 25	Q14589
Di-n-butylphthalate	179.7	200	µg/L	90	10 - 118	2	0 - 27	Q14589
Di-n-octylphthalate	227.26	200	µg/L	114	10 - 146	2	0 - 17	Q14589
Dibenzo(a,h)anthracene	236.88	200	µg/L	118	10 - 227	1	0 - 28	Q14589
Diethylphthalate	193.66	200	µg/L	97	10 - 114	3	0 - 16	Q14589
Dimethylphthalate	149.42	200	µg/L	75	10 - 112	4	0 - 15	Q14589
Fluoranthene	183.3	200	µg/L	92	26 - 137	3	0 - 24	Q14589
Fluorene	200	200	µg/L	100	59 - 121	3	0 - 15	Q14589
Hexachlorobenzene	180.26	200	µg/L	90	10 - 152	1	0 - 18	Q14589
Hexachlorobutadiene	145.78	200	µg/L	73	24 - 116	4	0 - 34	Q14589
Hexachlorocyclopentadiene	194.9	200	µg/L	97 #	48 - 94	1	0 - 30	Q14589
Hexachloroethane	119.22	200	µg/L	60	40 - 113	2	0 - 38	Q14589
Indeno(1,2,3-cd)pyrene	233.04	200	µg/L	117	10 - 171	7	0 - 29	Q14589
Isophorone	156.28	200	µg/L	78	21 - 196	1	0 - 32	Q14589

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Level II QC Report

5/10/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Matrix Spike Duplicate

Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
N-Nitrosodi-n-propylamine	164.54	200	µg/L	82	10 - 230	1	0 - 36	Q14589
Naphthalene	162.96	200	µg/L	81	21 - 133	3	0 - 42	Q14589
Nitrobenzene	136.12	200	µg/L	68	35 - 180	1	0 - 25	Q14589
Pentachlorophenol	189.1	200	µg/L	95	14 - 176	15	0 - 21	Q14589
Phenanthrene	211.72	200	µg/L	106	54 - 120	4	0 - 29	Q14589
Phenol	68.78	200	µg/L	34	10 - 112	2	0 - 39	Q14589
Pyrene	202.04	200	µg/L	101	52 - 115	5	0 - 15	Q14589

Extractable Petroleum Hydrocarbons by GC-FID, method MADEP EPH

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
C11-C22 Aromatics	ND	100	<50	µg/L	Q14643
C19-C36 Aliphatics	ND	100	<50	µg/L	Q14643
C9-C18 Aliphatics	ND	100	<50	µg/L	Q14643

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
C11-C22 Aromatics	1241	1700	µg/L	73	40 - 140	Q14643
C19-C36 Aliphatics	580.2	800	µg/L	73	40 - 140	Q14643
C9-C18 Aliphatics	391.6	600	µg/L	65	40 - 140	Q14643

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
149544	C11-C22 Aromatics	1236.4	1700	µg/L	73	40 - 140	Q14643
	C19-C36 Aliphatics	595.6	800	µg/L	74	40 - 140	Q14643
	C9-C18 Aliphatics	377.8	600	µg/L	63	40 - 140	Q14643

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
149544	C11-C22 Aromatics	1206.2	1700	µg/L	71	40 - 140	2	0 - 50	Q14643
	C19-C36 Aliphatics	604	800	µg/L	76	40 - 140	1	0 - 50	Q14643
	C9-C18 Aliphatics	412.2	600	µg/L	69	40 - 140	9	0 - 50	Q14643

Level II QC Report

5/10/06



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 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Par 112
 Project No.: WBS #356091.1
 COC Group Number: G0506006
 Date/Time Submitted: 4/28/06 16:45

Volatile Petroleum Hydrocarbons by GC-PID/FID, method MADEP VPH

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
C5-C8 Aliphatics	ND	100	<50	µg/L	Q14660
C9-C10 Aromatics	ND	100	<50	µg/L	Q14660
C9-C12 Aliphatics	ND	100	<50	µg/L	Q14660

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
C5-C8 Aliphatics	145	150	µg/L	97	70 - 130	Q14660
C9-C10 Aromatics	41.13	50	µg/L	82	70 - 130	Q14660
C9-C12 Aliphatics	99.9	100	µg/L	100	70 - 130	Q14660

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
149545	C5-C8 Aliphatics	163.06	150	µg/L	109	70 - 130	Q14660
	C9-C10 Aromatics	40.64	50	µg/L	81	70 - 130	Q14660
	C9-C12 Aliphatics	104.8	100	µg/L	105	70 - 130	Q14660

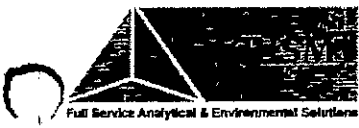
Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
149545	C5-C8 Aliphatics	158.51	150	µg/L	106	70 - 130	3	0 - 25	Q14660
	C9-C10 Aromatics	38.12	50	µg/L	76	70 - 130	6	0 - 25	Q14660
	C9-C12 Aliphatics	97.18	100	µg/L	97	70 - 130	8	0 - 25	Q14660

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

05/08/06

N. C. Department of Transportation
 Attn: Bob Shau/El
 c/o Environmental Investigations, Inc
 2101 Gateway Centre Blvd. Ste 200
 Morrisville, NC 27560

Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Parcel 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 COC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Aromatic and Halogenated Volatiles by GC/PID-ELCD</u>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	0.50	0.17	1	6230D	05/04/06 6:01	erussell	Q14508
1,1,1-Trichloroethane	BRL	µg/L	0.50	0.080	1	6230D	05/04/06 6:01	erussell	Q14508
1,1,2,2-Tetrachloroethane	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508
1,1,2-Trichloroethane	BRL	µg/L	0.50	0.080	1	6230D	05/04/06 6:01	erussell	Q14508
1,1-Dichloroethane	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508
1,1-Dichloroethene	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
1,1-Dichloropropene	BRL	µg/L	0.50	0.090	1	6230D	05/04/06 6:01	erussell	Q14508
1,2,3-Trichlorobenzene	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
1,2,3-Trichloropropane	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508
1,2,4-Trichlorobenzene	BRL	µg/L	0.50	0.040	1	6230D	05/04/06 6:01	erussell	Q14508
1,2,4-Trimethylbenzene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dibromo-3-chloropropane	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dibromoethane (EDB)	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dichlorobenzene	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dichloroethane	BRL	µg/L	0.50	0.070	1	6230D	05/04/06 6:01	erussell	Q14508
1,2-Dichloropropane	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
1,3,5-Trimethylbenzene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
1,3-Dichlorobenzene	BRL	µg/L	0.50	0.050	1	6230D	05/04/06 6:01	erussell	Q14508
1,3-Dichloropropane	BRL	µg/L	0.50	0.070	1	6230D	05/04/06 6:01	erussell	Q14508
1,4-Dichlorobenzene	BRL	µg/L	0.50	0.060	1	6230D	05/04/06 6:01	erussell	Q14508
2,2-Dichloropropane	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
2-Chlorotoluene	BRL	µg/L	0.50	0.21	1	6230D	05/04/06 6:01	erussell	Q14508
4-Chlorotoluene	BRL	µg/L	0.50	0.090	1	6230D	05/04/06 6:01	erussell	Q14508
Benzene	BRL	µg/L	0.50	0.060	1	6230D	05/04/06 6:01	erussell	Q14508
Bromobenzene	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
Bromochloromethane	BRL	µg/L	0.50	0.090	1	6230D	05/04/06 6:01	erussell	Q14508
Bromodichloromethane	BRL	µg/L	0.50	0.090	1	6230D	05/04/06 6:01	erussell	Q14508

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Laboratory Report

05/08/06

N. C. Department of Transportation
 Attn: Bob Shaut/EI
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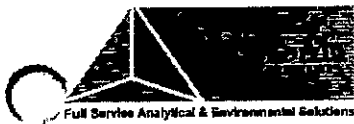
Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Parcel 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 COC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Bromoform	BRL	µg/L	0.50	0.050	1	6230D	05/04/06 6:01	erussell	Q14508
Bromomethane	BRL	µg/L	0.50	0.27	1	6230D	05/04/06 6:01	erussell	Q14508
Carbon Tetrachloride	BRL	µg/L	0.50	0.060	1	6230D	05/04/06 6:01	erussell	Q14508
Chlorobenzene	BRL	µg/L	0.50	0.17	1	6230D	05/04/06 6:01	erussell	Q14508
Chloroethane	BRL	µg/L	0.50	0.41	1	6230D	05/04/06 6:01	erussell	Q14508
Chloroform	BRL	µg/L	0.50	0.060	1	6230D	05/04/06 6:01	erussell	Q14508
Chloromethane	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
cis-1,2-Dichloroethene	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
cis-1,3-Dichloropropene	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
Dibromochloromethane	BRL	µg/L	0.50	0.080	1	6230D	05/04/06 6:01	erussell	Q14508
Dibromomethane	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
Dichlorodifluoromethane	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
Ethylbenzene	BRL	µg/L	0.50	0.16	1	6230D	05/04/06 6:01	erussell	Q14508
Hexachlorobutadiene	BRL	µg/L	0.50	0.17	1	6230D	05/04/06 6:01	erussell	Q14508
Isopropyl ether (IPE)	BRL	µg/L	0.50	0.24	1	6230D	05/04/06 6:01	erussell	Q14508
Isopropylbenzene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
m,p-Xylenes	BRL	µg/L	1.0	0.43	1	6230D	05/04/06 6:01	erussell	Q14508
Methyl t-butyl ether (MTBE)	BRL	µg/L	0.50	0.14	1	6230D	05/04/06 6:01	erussell	Q14508
Methylene chloride	BRL	µg/L	2.0	0.75	1	6230D	05/04/06 6:01	erussell	Q14508
n-Butylbenzene	BRL	µg/L	0.50	0.19	1	6230D	05/04/06 6:01	erussell	Q14508
n-Propylbenzene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
Naphthalene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
o-Xylene	BRL	µg/L	0.50	0.16	1	6230D	05/04/06 6:01	erussell	Q14508
p-Isopropyltoluene	BRL	µg/L	0.50	0.17	1	6230D	05/04/06 6:01	erussell	Q14508
sec-Butylbenzene	BRL	µg/L	0.50	0.12	1	6230D	05/04/06 6:01	erussell	Q14508
Styrene	BRL	µg/L	0.50	0.050	1	6230D	05/04/06 6:01	erussell	Q14508
tert-Butylbenzene	BRL	µg/L	0.50	0.13	1	6230D	05/04/06 6:01	erussell	Q14508
Tetrachloroethene	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508

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N. C. Department of Transportation
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Project Name: Burnsville, NC
 Project ID: NCDOT - Yancey - Parcel
 112
 Project No.: WBS #356091.1
 Sample Matrix: Water

Client Sample ID: GP-2
 Prism Sample ID: 149546
 COC Group: G0506006
 Time Collected: 04/26/06 9:15
 Time Submitted: 04/28/06 16:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Toluene	BRL	µg/L	0.50	0.11	1	6230D	05/04/06 6:01	erussell	Q14508
trans-1,2-Dichloroethene	BRL	µg/L	0.50	0.27	1	6230D	05/04/06 6:01	erussell	Q14508
trans-1,3-Dichloropropene	BRL	µg/L	0.50	0.070	1	6230D	05/04/06 6:01	erussell	Q14508
Trichloroethene	BRL	µg/L	0.50	0.10	1	6230D	05/04/06 6:01	erussell	Q14508
Trichlorofluoromethane	BRL	µg/L	0.50	0.19	1	6230D	05/04/06 6:01	erussell	Q14508
Vinyl chloride	BRL	µg/L	0.50	0.24	1	6230D	05/04/06 6:01	erussell	Q14508

Surrogate	% Recovery	Control Limits
Bromochlorobenzene-ELCD	137	60 - 144
1,4-Difluorobenzene-PID	77	50 - 141

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

Angela D. Overcash, V.P. Laboratory Services

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