



July 14, 2011

Mr. Ethan Caldwell, L.G., P.E.
North Carolina Department of Transportation
Geotechnical Unit
1589 Mail Service Center
Raleigh, NC 27699-1589

**Re: Excavation, UST Removal and Soil Sampling Activities
State Project R-3405 – Helen G. Brown Property
TIP: R-3405
WBS Element: 35579.1.1
AMEC Project: 56211R340**

Dear Mr. Caldwell:

AMEC Earth & Environmental, Inc. of North Carolina (AMEC) is pleased to provide a summary of UST removal as well as soil sampling activities performed at the above-referenced Site on May 13, 2011. This work was conducted in accordance with your notice to proceed dated May 10, 2011. Three onsite USTs were intended to be closed by removal but the two larger USTs could not be excavated at this time due to access challenges.

SITE LOCATION

Facility I.D.: N/A UST Incident Number: N/A
Site Name: R-3405 – Helen G Brown Property
Site Street Address: 1967 Sparta Rd
City/Town: North Wilkesboro Zip Code: 28659 County: Wilkes
Description of Geographical Point: N/A
Location Method (GPS, Topographical Map, Other): Google Maps
Latitude: 36°22'12" Longitude: 81°16'83"

CONTACTS

Responsible Party:	NCDOT	
Contact Person:	Ethan Caldwell, L.G., P.E.	
Address:	1589 Mail Service Center, Raleigh, NC,27699	Phone: (919)707-6869
Property Owner:	Helen G Brown	
Address:	1965 and 1967 Sparta Rd North Wilkesboro, NC 28659	Phone:
Contact Person:		
Property Occupant:	Helen G Brown	
Address:	1967 Sparta Rd North Wilkesboro, NC 28659	Phone:
Primary Consultant:	AMEC North Carolina Inc.	
Address:	2801 Yorkmont Road Suite 100 Charlotte, NC 28208	Phone: (704)357-5516
Soil Removal Contractor:	EVO Corporation 1703 Vargrave St Winston Salem, NC	Phone: 336-231-0068
Analytical Laboratory:	Pace Analytical	
Address:	9800 Kincey Ave, Ste 100 Huntersville, NC 28078	Phone: 704-875-9092
State Certificate No.:	12	

PHYSICAL SETTING AND BACKGROUND INFORMATION

The Site most recently operated as a hair salon, however historically operated as a gas station. There is one multi-tenant building on the parcel. Formerly Nicole's Hair Salon was located in the southern three quarters of the building. The northern quarter of the building is an office for a Baptist Church. At the time of this May 2011 UST removal the rear of the building was occupied as a residence.

The proposed DOT project will take the entire parcel. Three USTs were observed at this facility. One UST had a visible fuel port while the other two were not identified until the geophysical survey.

In a February 2011 Preliminary Site Assessment, AMEC reported in that an estimated 267 cubic yards of potentially impacted soil was onsite. Field observations and soil sample analyses suggests that release did occur however the source of the release is unknown.

The Helen G. Brown Property parcel is located on the northwestern corner of the intersection of Sparta and Brown Berry Roads in North Wilkesboro, Wilkes County, North Carolina, as shown in Figure 1. The properties to the north, south, east and west are residential with single family homes.

The Helen G. Brown Property is located within the Alligator Back Formation of the Ocoee Supergroup located in the Blue Ridge Physiographic Province of western North Carolina. The Alligator Back Formation comprises metamorphic sedimentary rocks that are 750 million years in age. The rocks include mica schist and phyllite that are interlayered with minor biotite. The Alligator Back rocks were named for the large sections of gneiss that descend from the peak of Bluff Mountain that resemble an alligator.

Native soils encountered during sampling activities predominantly consisted of orange clayey silt. An excavation log is included in the attachments following this letter.

UST REMOVAL AND SOIL SAMPLING ACTIVITIES

Prior to excavation activities, AMEC requested and received a utility walk-through from North Carolina One Call. The proximal utilities had already been located by Priority Underground Locating for the PSA activities. The local Fire Marshal and NCDENR were also notified prior to field activities.

AMEC retained EVO to perform evacuation of residual fluids from the USTs, to excavate and properly dispose the USTs, and to potentially excavate and properly dispose of up to 20 cubic yards of potentially affected soils. AMEC provided oversight and direction during evacuation, excavation and removal activities, which were performed on the 13th of May 2011.

UST closure commenced with fluids removal from the three USTs using a vacuum truck. A total of 1,720 gallons of a mixture of water, gasoline and #2 fuel oil was evacuated from the USTs. The USTs were rendered inert by dropping dry ice into them. The lower explosive limit (LEL) within each tank was then checked with a PID to verify safe conditions for removal. The smallest tank, UST-3, was completely uncovered and removed from the ground. The UST removal confirmed the 550 gallon size of the UST as it was listed in the geophysical survey presented in the Preliminary Site Assessment. Tank UST-3 was slightly rusted and pitted but in overall good condition. The disposal certificates and NCDENR's Form UST2 are included in the attachments following this letter.

Sampling was accomplished with the use of a mini excavator operated by EVO. Sample P-128-UST-3 was collected at 5.0 feet bgs which is within 2 feet of the bottom and center of the UST. Field screening did not indicate that the soil in the tank bed was impacted so over excavation was not conducted. Field screening data are shown in Table 1.

The sample was collected using nitrile-gloved hands and a laboratory-provided disposable syringe. The sample was then placed into a clean laboratory-supplied glass sample container, with proper preservative, and immediately placed in a cooler on ice. The sample was hand delivered to Pace Analytical of Huntersville, North Carolina (NC Laboratory Certification Number 12). Sample P-128-UST-3 was analyzed for volatile organic compounds (VOCs) by US EPA Method 8260B; semi-volatile organic compounds (SVOCs) by EPA Method 8270C; and volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) by the Massachusetts Department of Environmental Protection Methods (MADEP).

While tank UST-3 removal activities were proceeding, other EVO personnel cut the overlying concrete with a concrete cutting saw to expose tanks UST-1 and UST-2. After UST-3 excavation activities were complete the excavator moved to the UST-1 and UST-2 tank bed and

began to uncover them. Once the USTs were uncovered to a point that EVO personnel could measure the diameter of the tanks, EVO and AMEC personnel determined that the geophysical survey underestimated the size of both USTs. The geophysical survey estimated the size of UST-1 to be a 1,000 gallon capacity tank and UST-2 to be a 1,500 gallon capacity tank. Based on the actual diameters of both being 53 inches, it was determined that these USTs were actually 2,000 gallon capacity tanks with 12 feet lengths while the anticipated length had been 9 feet. Thus it was determined that the western ends of both tanks were underneath the southeastern corner of the building and their removal could cause a collapse of the building. It was then agreed upon by NCDOT, AMEC and EVO personnel to postpone the removal of these two USTs. EVO then backfilled the exposed tank bed around UST-1 and UST-2 and completed the ground surface with gravel.

FINDINGS

The sample location and results are shown in Figures 2 and 3. Closure sample P-128-UST-3 was collected from within 2 feet of the bottom of UST-3. Its sample results reported no detections for VOCs, SVOCs, and VPH. Detections of EPH were reported for Aliphatics C9-C18 and C19-C-36 at respective concentrations of 70.8 mg/kg and 95.9 mg/kg. These results are included in Table 2. None of the Maximum Soil Contaminant Concentrations (MSCC) were exceeded.

CONCLUSIONS

The following conclusions are derived from Site conditions and sample results from field activities conducted in May 2011.

- Tank UST-3 was 550 gallon in capacity and most recently stored fuel oil.
- Laboratory results indicate that VOCs, SVOCs, VPH were not detected above reporting limits for the UST sample. EPH Aliphatic concentrations in two carbon ranges were reported but no MSCC were exceeded.
- Two 2,000-gallon capacity UST remain on site and should be removed after demolition of the building.

Based on visual field observations and laboratory results, AMEC does not propose further action with respect to tank UST-3. Should you have any questions or need further information please contact Ms. Corley at (704) 236-3494.

Mr. Ethan Caldwell
Helen G Brown Property, North Wilkesboro
July 14, 2011



Best Regards,

AMEC Earth & Environmental, Inc. of North Carolina

A handwritten signature in blue ink that reads "Troy L. Holzschuh".

Troy L. Holzschuh
Engineering Technician



A handwritten signature in blue ink that reads "Helen P. Corley".

Helen P. Corley, LG
NCDOT Program Manager

TABLES

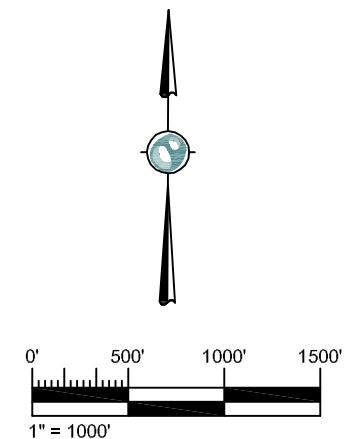
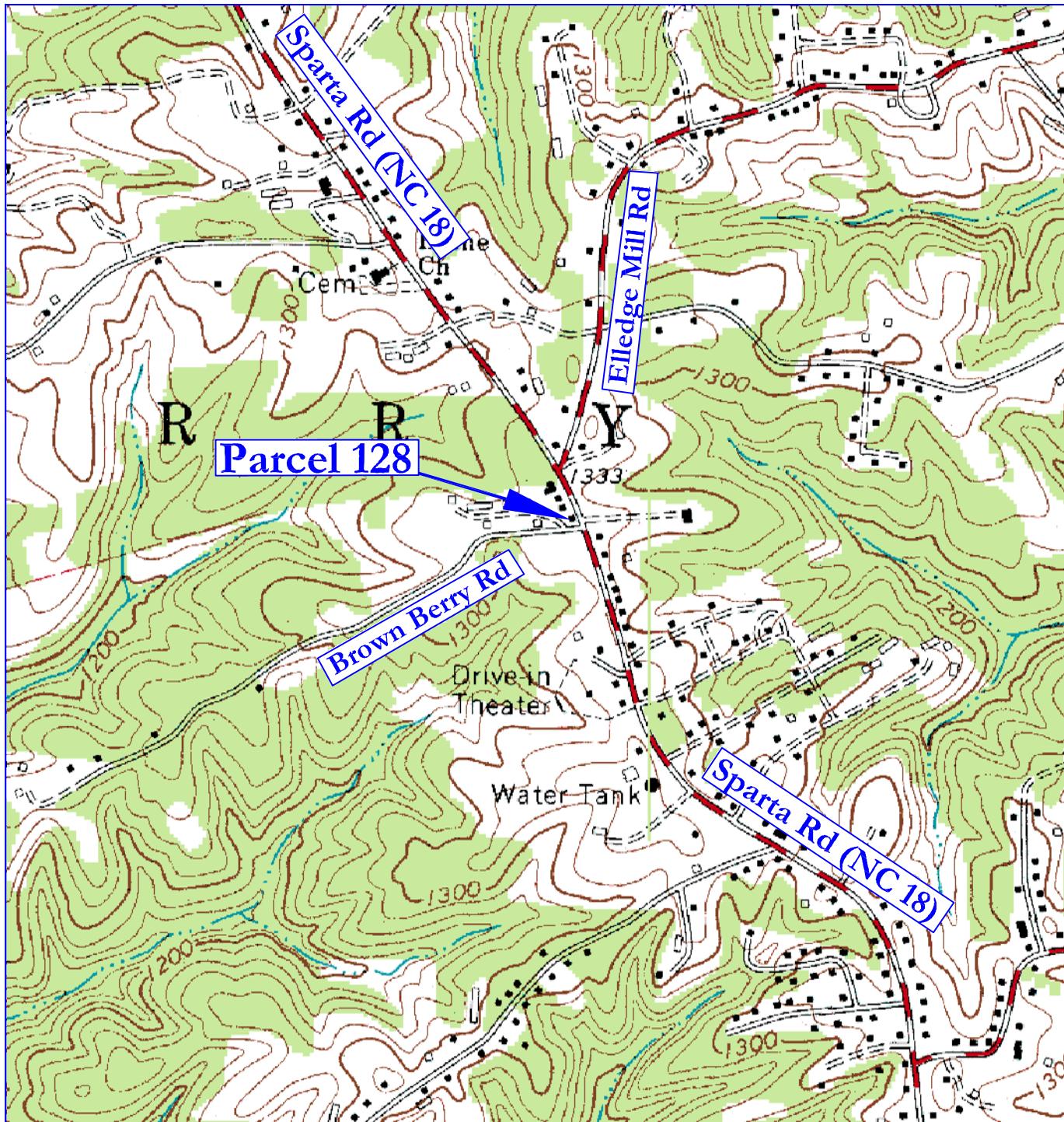
Table 1
PID Field Screening
NCDOT - Parcel 128
Sparta Rd, North Wilkesboro, North Carolina

SAMPLE ID	Sample Date	Comments	Sample Depth (feet bgs)	Field Screening (ppm)
P-1	5/13/2011	P-128-UST-3	5	0
P-2	5/13/2011	West wall of UST bed	5	0
P-3	5/13/2011	South wall of UST bed	5	0
P-4	5/13/2011	East wall of UST bed	5	0
P-5	5/13/2011	North wall of UST bed	5	0

Table 2
Soil Analytical Data
Volatile Petroleum Hydrocarbons/Extractable Petroleum Hydrocarbons
1967 Sparta Road
North Wilkesboro, North Carolina

Sample ID Number	Sample Date	Sample Depth (ft bgs)	Aliphatics (mg/kg)				Aromatics (mg/kg)			
			VPH C5-C8	VPH C9-C12	EPH C9-C18	EPH C19-C36	VPH C9-C10	EPH C11-C22		
Industrial/Commercial MSCC			24,528	245,280		>100%	12,264			
Residential MSCC			939	9,386		93,860	469			
Soil-to-Groundwater MSCC			72	3,300		Immobile	34			
P-128-UST-3	5/13/2011	5	< 1.8	<1.8	70.8	95.9	<1.8	<12.2		

FIGURES



7.5 Minute Quadrangle
North Carolina, 1983
Photorevised 1993

VICINITY MAP

Parcel #128, Helen G. Brown Property
(Nicole's Salon)
North Wilkesboro, Wilkes County, NC

DRAWING NAME: J:\NCDOT\Wilkes\FIG1 DATE: 2/24/11

SCALE: 1 INCH = 1,000 FEET DR CHK HPC REV

PREPARED FOR:

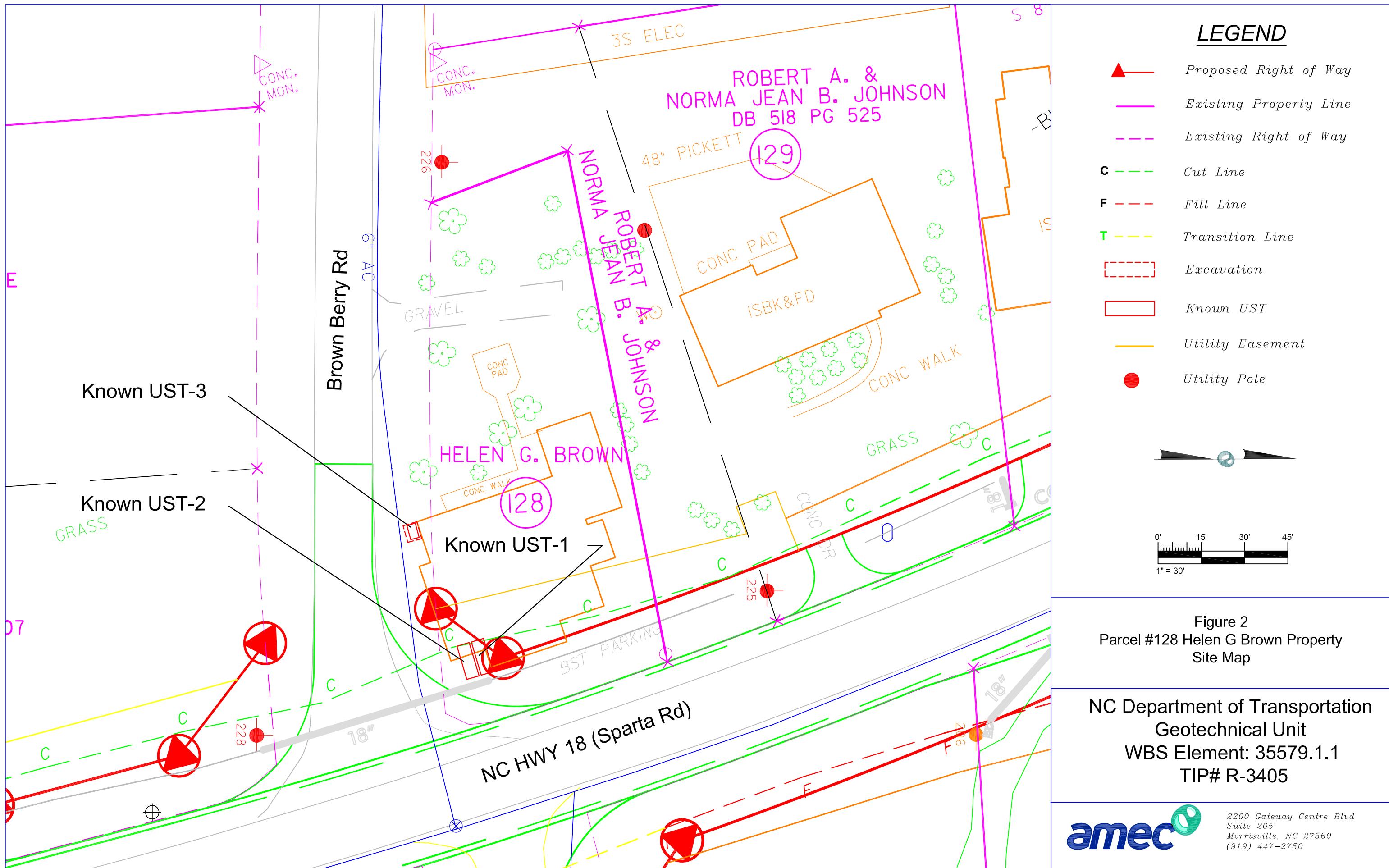
NC Department Of Transportation
Geotechnical Unit
WBS Element: 35579.1.1
TIP# R-3405

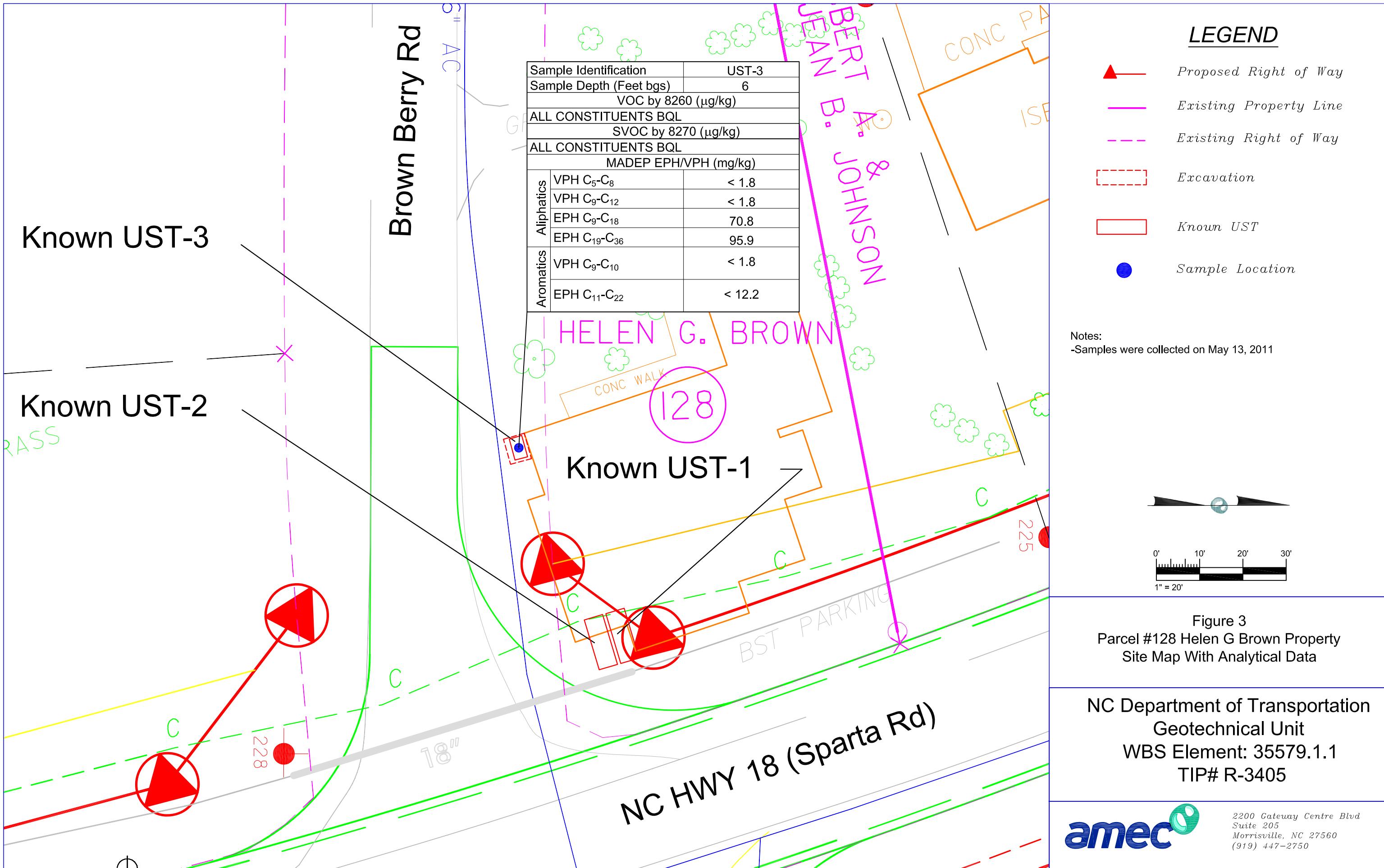
Prepared By:



2200 Gateway Center Blvd
Suite 205
Burlough, NC 27560
(910) 447-2766

Figure:
Figure 1





EXCAVATION LOG



EXCAVATION NO: UST-3

EXCAVATION LOG: Parcel 128 - WBS Element: 35579.1.1

PAGE 1 OF 1

LOCATION: 1967 Sparta Rd, North Wilkesboro, North Carolina

DATE: 5/20/11

CONTRACTOR: Evo Corporation.

START: 5/13/11

HELPER: N/A

FINISH: 5/13/11

EXCAVATION METHOD: Track Hoe

LOGGED BY: TLH

NOTES:

No groundwater encountered

DEPTH TO ROCK: No bedrock was encountered

TOTAL DEPTH OF EXCAVATION: 5.5 ft bgs

MANIFESTS AND DISPOSAL CERTIFICATES



1703 Vargrave Street
Winston-Salem, NC 27107
ph 336-725-5844
fax 336-725-6244

TANK DISPOSAL CERTIFICATE

Tank Owner: Helen G. Brown (Parcel 128)

Site Address: 1967 Sparta Road
North Wilkesboro, NC

Tank Description:

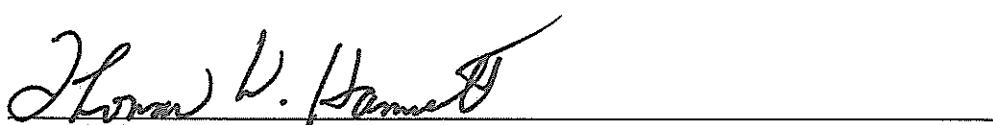
<u>Tank Number</u>	<u>Size of Tank</u>	<u>Contents</u>
1	550 Gallons	#2 Fuel Oil

Transporter: Evo Corporation

EC Project #: 051127

Disposal Certification:

Evo Corporation does hereby certify that the above named storage tank was transported to OmniSource Southeast in Winston-Salem, NC for proper disposal and recycling.



Signature

Thomas W. Hammett
CEO
Evo Corporation



1703 Vargrave Street
Winston-Salem, NC 27107
ph 336-725-5844
fax 336-725-6244

CERTIFICATE OF DISPOSAL

Evo Corporation does hereby certify that 1,720 gallons of non-hazardous contaminated water received on 05/11/2011 from:

Generator: Helen G. Brown (Parcel 128)

Originating at: 1967 Sparta Road
North Wilkesboro, NC

EC Waste ID #: 051127

has been disposed of by Evo Corporation in a manner approved by the North Carolina Department of Environment and Natural Resources.

A handwritten signature in black ink that reads "Thomas W. Hammett".

Signature

Thomas W. Hammett
CEO
Evo Corporation

EVO CORPORATION

1703 Vargrave Street, Winston-Salem, NC 27107
www.evocorp.net

NON-HAZARDOUS MATERIALS MANIFEST

Load #

Manifest No. 71368

GENERATOR INFORMATION

Generator: Helen G Brown (Parcel 128) Phone: 704-236-3494

Site Address: 1967 Sparta Road

City/State: North Wilkesboro, NC 28659

Contact: Helen Corley

MATERIAL DESCRIPTION / QUANTITY / WEIGHT

Gross Weight (lbs): 1720

Material: Water

Empty Weight (lbs):

Contaminant: Gasoline & #2 Fuel Oil

Net Weight (lbs):

Quantity

1720

Tons Drums Pails Sacs Yards Other: 5/1

TRANSPORTER INFORMATION

Transporter: Evo Corporation Phone: 336-725-5844

Truck #: 402 Contact: Tony Disher

As the transporter, I certify that the materials described above being shipped under this non-hazardous materials manifest are properly classified, packaged, labeled, secured and are in proper condition for transport in commerce under the applicable regulations governing transportation, and I hereby receive this material for delivery to the facility designate.

Driver Signature:

Date: 5/1/11

EVO CORPORATION
1703 Vargrave Street
Winston-Salem, NC 27107

FACILITY INFORMATION

Evo Project #: 051127

Phone: (336) 725-5844

Contact: Tony Disher

I certify that the carrier has delivered the materials described above to this facility, and I hereby accept this material for treatment and/or disposal in a manner that has been authorized by the State of North Carolina.

Facility Signature:

Date: 5/1/11

White/Facility

Canary/Invoice

Goldenrod/Generator

Pink/Carrier

UST-2 FORM

UST-2 Site Investigation Report for Permanent Closure or Change-in-Service of UST

Return completed form to:

The DWM Regional Office located in the area where the facility is located. Send a copy to the Central Office in Raleigh so that the status of the tank may be changed to "PERMANENTLY CLOSED" and your tank fee account can be closed out.
SEE MAP ON THE BACK OF THIS FORM FOR THE CENTRAL AND REGIONAL OFFICE ADDRESSES.

STATE USE ONLY:

I.D. # _____

Date Received _____

INSTRUCTIONS (READ THIS FIRST)

If more than five UST systems you may attach additional forms as needed.

Permanent closure - For permanent closure, complete all sections of this form.

Change-in-service - For change-in-service where UST systems will be converted from containing a regulated substance to storing a non-regulated substance, complete sections I, II, III, IV, and VIII

Effective February 1, 1995, all UST closure/change-in-service reports must be submitted in the format provided in the UST-12 form. UST closure and change-in-services must be completed in accordance with the latest version of the *Guidelines for Tank Closure*. A copy of the UST-12 form and the *Guidelines for Tank Closure* can be obtained at www.wastenotnc.org.

You must make sure that USTs removed from your property are disposed of properly. When choosing a closure contractor, ask where the tank(s) will be taken for disposal. Usually, USTs are cleaned and cut up for scrap metal. This is dangerous work and must be performed by a qualified company. Tanks disposed of illegally in fields or other dumpsites can leak petroleum products and sludge into the environment. If your tanks are disposed of improperly, you could be held responsible for the cleanup of any environmental damage that occurs.

NOTE: If a release from the tank(s) has occurred, the site assessment portion of the tank closure must be conducted under the supervision of a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G.

I. OWNERSHIP OF TANKS

II. LOCATION OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity) <i>Helen G Brown</i>	Facility Name or Company <i>(Former) Nicolas Saloon</i>
Street Address <i>1965 Sparta Rd</i>	Facility ID # (If known) <i>None Identified</i>
City <i>North Wilkesboro</i>	Street Address <i>1967 Sparta Rd</i>
State <i>North Carolina</i>	City <i>North Wilkesboro</i>
Zip Code <i>28659</i>	County <i>Wilkes</i>
Phone Number	Zip Code <i>28659</i>

III. CONTACT PERSONNEL

Contact for Facility: <i>Ethan Caldwell</i>	Job Title: <i>LG PE</i>	Phone. No: <i>919-707-6850</i>
Closure Contractor Name: <i>Tony Fischer</i>	Closure Contractor Company: <i>EVO Corp</i>	Address: <i>1703 Vagrave St Winston-Salem, NC</i>
Primary Consultant Name: <i>Troy L Holzschnuh</i>	Primary Consultant Company: <i>AMEL ETI</i>	Address: <i>2200 Gateway Centre Blvd Morrisville, NC</i>
		Phone. No: <i>919-447-2750</i>

IV. UST INFORMATION FOR REGISTERED UST SYSTEMS

V. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Tank Dimensions	Last Contents	Last Use Date	Permanent Close Date	Change-in-Service Date	Water in excavation		Free product		Notable odor or visible soil contamination	
							Yes	No	Yes	No	Yes	No
							<input type="checkbox"/>	<input type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>				
							<input type="checkbox"/>	<input type="checkbox"/>				

VI. UST INFORMATION FOR UNREGISTERED UST SYSTEMS

VII. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Tank Dimensions	Last Contents	Last Use Date	Permanent Close Date	Tank Owner Name *	Water in excavation		Free product		Notable odor or visible soil contamination	
							Yes	No	Yes	No	Yes	No
						<i>NC DOT</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* If the tank owner address is different from the one listed in Section I., then enter the street address, city, state, zip code and telephone no. below:

1589 Mail Service Center, Raleigh, NC 27699

VI. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true accurate and complete.

Print name and official title of owner or owner's authorized representative

Signature

Date Signed

Troy L Holzschnuh Engineering Tech

Troy L Holzschnuh

6-20-11

**ANALYTICAL REPORT AND CHAIN OF CUSTODY
DOCUMENTATION**

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

May 26, 2011

Chemical Testing Engineer
NCDOT
Materials & Tests Unit
1801 Blueridge Road
Raleigh, NC 27607

RE: Project: 35579.1.1 WILKES CO UST
Pace Project No.: 9294182

Dear Chemical Engineer:

Enclosed are the analytical results for sample(s) received by the laboratory on May 13, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

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

Sincerely,



Kevin Herring

kevin.herring@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
 Louisiana/LELAP Certification #: 04034
 New Jersey Certification #: NC012
 North Carolina Drinking Water Certification #: 37706
 North Carolina Field Services Certification #: 5342
 North Carolina Wastewater Certification #: 12
 Pennsylvania Certification #: 68-00784
 South Carolina Certification #: 99006001

South Carolina Drinking Water Cert. #: 99006003
 Virginia Certification #: 00213
 Connecticut Certification #: PH-0104
 Florida/NELAP Certification #: E87627
 Kentucky UST Certification #: 84
 Louisiana DHH Drinking Water # LA 100031
 West Virginia Certification #: 357

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 35579.1.1 WILKES CO UST
 Pace Project No.: 9294182

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9294182001	P-128-UST-3 (5)	MADEP EPH	RES	7	PASI-C
		MADEP VPH	AW	5	PASI-C
		EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	KDF	1	PASI-C

REPORT OF LABORATORY ANALYSIS

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HITS ONLY

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Lab Sample ID	Client Sample ID	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
9294182001	P-128-UST-3 (5)						
MADEP EPH	Aliphatic (C09-C18)		70.8	mg/kg	24.5	05/18/11 17:04	N2
MADEP EPH	Aliphatic (C19-C36)		95.9	mg/kg	24.5	05/18/11 17:04	N2
ASTM D2974-87	Percent Moisture		18.3	%	0.10	05/17/11 08:19	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Method: **MADEP EPH**

Description: MADEP EPH NC Soil

Client: NCDOT

Date: May 26, 2011

General Information:

1 sample was analyzed for MADEP EPH. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with MADEP EPH with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/13613

N2: The lab does not hold NELAC accreditation for this parameter.

- BLANK (Lab ID: 607167)
 - Aliphatic (C09-C18)
 - Aliphatic (C19-C36)
 - Aromatic (C11-C22)
- LCS (Lab ID: 607168)
 - Aliphatic (C09-C18)
 - Aliphatic (C19-C36)
 - Aromatic (C11-C22)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Method: MADEP EPH

Description: MADEP EPH NC Soil

Client: NCDOT

Date: May 26, 2011

Analyte Comments:

QC Batch: OEXT/13613

N2: The lab does not hold NELAC accreditation for this parameter.

- LCSD (Lab ID: 607169)
 - Aliphatic (C09-C18)
 - Aliphatic (C19-C36)
 - Aromatic (C11-C22)
- P-128-UST-3 (5) (Lab ID: 9294182001)
 - Aliphatic (C09-C18)
 - Aliphatic (C19-C36)
 - Aromatic (C11-C22)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Method: MADEP VPH

Description: VPH NC Soil

Client: NCDOT

Date: May 26, 2011

General Information:

1 sample was analyzed for MADEP VPH. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with MADEP VPH with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: GCV/5024

1g: Surrogate fails after Moisture Correction for Methanol.

- P-128-UST-3 (5) (Lab ID: 9294182001)
 - 2,5-Dibromotoluene (PID)(S)
 - 2,5-Dibromotoluene (FID)(S)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Method: MADEP VPH

Description: VPH NC Soil

Client: NCDOT

Date: May 26, 2011

Analyte Comments:

QC Batch: GCV/5024

N2: The lab does not hold NELAC accreditation for this parameter.

- BLANK (Lab ID: 609850)
 - Aliphatic (C05-C08)
 - Aliphatic (C09-C12)
 - Aromatic (C09-C10)
- LCS (Lab ID: 609851)
 - Aliphatic (C05-C08)
 - Aliphatic (C09-C12)
 - Aromatic (C09-C10)
- LCSD (Lab ID: 609852)
 - Aliphatic (C05-C08)
 - Aliphatic (C09-C12)
 - Aromatic (C09-C10)
- P-128-UST-3 (5) (Lab ID: 9294182001)
 - Aliphatic (C05-C08)
 - Aliphatic (C09-C12)
 - Aromatic (C09-C10)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Method: **EPA 8270**

Description: 8270 MSSV Microwave

Client: NCDOT

Date: May 26, 2011

General Information:

1 sample was analyzed for EPA 8270. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

QC Batch: OEXT/13634

P3: Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

- P-128-UST-3 (5) (Lab ID: 9294182001)

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/13634

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 9294260002

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 608135)
- 2,4-Dinitrophenol

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 608135)
- 2,4-Dinitrophenol

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PROJECT NARRATIVE

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Method: EPA 8270

Description: 8270 MSSV Microwave

Client: NCDOT

Date: May 26, 2011

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Method: **EPA 8260**

Description: 8260/5035A Volatile Organics

Client: NCDOT

Date: May 26, 2011

General Information:

1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Sample: P-128-UST-3 (5) Lab ID: 9294182001 Collected: 05/13/11 09:35 Received: 05/13/11 13:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
MADEP EPH NC Soil		Analytical Method: MADEP EPH Preparation Method: MADEP EPH						
Aliphatic (C09-C18)	70.8 mg/kg		24.5	2	05/17/11 07:00	05/18/11 17:04		N2
Aliphatic (C19-C36)	95.9 mg/kg		24.5	2	05/17/11 07:00	05/18/11 17:04		N2
Aromatic (C11-C22)	ND mg/kg		12.2	1	05/17/11 07:00	05/18/11 05:31		N2
Nonatriacontane (S)	79 %		40-140	2	05/17/11 07:00	05/18/11 17:04	7194-86-7	
o-Terphenyl (S)	93 %		40-140	1	05/17/11 07:00	05/18/11 05:31	84-15-1	
2-Fluorobiphenyl (S)	97 %		40-140	1	05/17/11 07:00	05/18/11 05:31	321-60-8	
2-Bromonaphthalene (S)	104 %		40-140	1	05/17/11 07:00	05/18/11 05:31	580-13-2	
VPH NC Soil		Analytical Method: MADEP VPH Preparation Method: MADEP VPH						
Aliphatic (C05-C08)	ND mg/kg		1.8	1	05/22/11 15:54	05/22/11 18:48		N2
Aliphatic (C09-C12)	ND mg/kg		1.8	1	05/22/11 15:54	05/22/11 18:48		N2
Aromatic (C09-C10)	ND mg/kg		1.8	1	05/22/11 15:54	05/22/11 18:48		N2
2,5-Dibromotoluene (PID)(S)	146 %		70-130	1	05/22/11 15:54	05/22/11 18:48		1g
2,5-Dibromotoluene (FID)(S)	143 %		70-130	1	05/22/11 15:54	05/22/11 18:48		1g
8270 MSSV Microwave		Analytical Method: EPA 8270 Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	83-32-9	
Acenaphthylene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	208-96-8	
Aniline	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	62-53-3	
Anthracene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	120-12-7	
Benzo(a)anthracene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	56-55-3	
Benzo(a)pyrene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	207-08-9	
Benzoic Acid	ND ug/kg		10100	1	05/18/11 14:30	05/25/11 18:20	65-85-0	
Benzyl alcohol	ND ug/kg		4040	1	05/18/11 14:30	05/25/11 18:20	100-51-6	
4-Bromophenylphenyl ether	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	101-55-3	
Butylbenzylphthalate	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	85-68-7	
4-Chloro-3-methylphenol	ND ug/kg		4040	1	05/18/11 14:30	05/25/11 18:20	59-50-7	
4-Chloroaniline	ND ug/kg		10100	1	05/18/11 14:30	05/25/11 18:20	106-47-8	
bis(2-Chloroethoxy)methane	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	111-91-1	
bis(2-Chloroethyl) ether	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	111-44-4	
bis(2-Chloroisopropyl) ether	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	108-60-1	
2-Chloronaphthalene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	91-58-7	
2-Chlorophenol	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	95-57-8	
4-Chlorophenylphenyl ether	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	7005-72-3	
Chrysene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	218-01-9	
Dibenzo(a,h)anthracene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	53-70-3	
Dibenzofuran	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	132-64-9	
1,2-Dichlorobenzene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	106-46-7	
3,3'-Dichlorobenzidine	ND ug/kg		10100	1	05/18/11 14:30	05/25/11 18:20	91-94-1	
2,4-Dichlorophenol	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	120-83-2	

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ANALYTICAL RESULTS

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Sample: P-128-UST-3 (5) Lab ID: 9294182001 Collected: 05/13/11 09:35 Received: 05/13/11 13:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Microwave		Analytical Method: EPA 8270 Preparation Method: EPA 3546						
Diethylphthalate	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	84-66-2	
2,4-Dimethylphenol	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	105-67-9	
Dimethylphthalate	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	131-11-3	
Di-n-butylphthalate	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	84-74-2	
4,6-Dinitro-2-methylphenol	ND ug/kg		4040	1	05/18/11 14:30	05/25/11 18:20	534-52-1	
2,4-Dinitrophenol	ND ug/kg		10100	1	05/18/11 14:30	05/25/11 18:20	51-28-5	
2,4-Dinitrotoluene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	121-14-2	
2,6-Dinitrotoluene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	606-20-2	
Di-n-octylphthalate	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	117-84-0	
bis(2-Ethylhexyl)phthalate	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	117-81-7	
Fluoranthene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	206-44-0	
Fluorene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	86-73-7	
Hexachloro-1,3-butadiene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	87-68-3	
Hexachlorobenzene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	118-74-1	
Hexachlorocyclopentadiene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	77-47-4	
Hexachloroethane	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	67-72-1	
Indeno(1,2,3-cd)pyrene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	193-39-5	
Isophorone	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	78-59-1	
1-Methylnaphthalene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	90-12-0	
2-Methylnaphthalene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	91-57-6	
2-Methylphenol(o-Cresol)	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20		
Naphthalene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	91-20-3	
2-Nitroaniline	ND ug/kg		10100	1	05/18/11 14:30	05/25/11 18:20	88-74-4	
3-Nitroaniline	ND ug/kg		10100	1	05/18/11 14:30	05/25/11 18:20	99-09-2	
4-Nitroaniline	ND ug/kg		4040	1	05/18/11 14:30	05/25/11 18:20	100-01-6	
Nitrobenzene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	98-95-3	
2-Nitrophenol	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	88-75-5	
4-Nitrophenol	ND ug/kg		10100	1	05/18/11 14:30	05/25/11 18:20	100-02-7	
N-Nitrosodimethylamine	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	62-75-9	
N-Nitroso-di-n-propylamine	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	621-64-7	
N-Nitrosodiphenylamine	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	86-30-6	
Pentachlorophenol	ND ug/kg		10100	1	05/18/11 14:30	05/25/11 18:20	87-86-5	
Phenanthrene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	85-01-8	
Phenol	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	108-95-2	P3
Pyrene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	129-00-0	
1,2,4-Trichlorobenzene	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	120-82-1	
2,4,5-Trichlorophenol	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	95-95-4	
2,4,6-Trichlorophenol	ND ug/kg		2020	1	05/18/11 14:30	05/25/11 18:20	88-06-2	
Nitrobenzene-d5 (S)	61 %		23-110	1	05/18/11 14:30	05/25/11 18:20	4165-60-0	
2-Fluorobiphenyl (S)	70 %		30-110	1	05/18/11 14:30	05/25/11 18:20	321-60-8	
Terphenyl-d14 (S)	68 %		28-110	1	05/18/11 14:30	05/25/11 18:20	1718-51-0	
Phenol-d6 (S)	56 %		22-110	1	05/18/11 14:30	05/25/11 18:20	13127-88-3	
2-Fluorophenol (S)	57 %		13-110	1	05/18/11 14:30	05/25/11 18:20	367-12-4	
2,4,6-Tribromophenol (S)	58 %		27-110	1	05/18/11 14:30	05/25/11 18:20	118-79-6	

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ANALYTICAL RESULTS

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Sample: P-128-UST-3 (5) Lab ID: 9294182001 Collected: 05/13/11 09:35 Received: 05/13/11 13:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Acetone	ND ug/kg		105	1		05/19/11 16:40	67-64-1	
Benzene	ND ug/kg		5.3	1		05/19/11 16:40	71-43-2	
Bromobenzene	ND ug/kg		5.3	1		05/19/11 16:40	108-86-1	
Bromochloromethane	ND ug/kg		5.3	1		05/19/11 16:40	74-97-5	
Bromodichloromethane	ND ug/kg		5.3	1		05/19/11 16:40	75-27-4	
Bromoform	ND ug/kg		5.3	1		05/19/11 16:40	75-25-2	
Bromomethane	ND ug/kg		10.5	1		05/19/11 16:40	74-83-9	
2-Butanone (MEK)	ND ug/kg		105	1		05/19/11 16:40	78-93-3	
n-Butylbenzene	ND ug/kg		5.3	1		05/19/11 16:40	104-51-8	
sec-Butylbenzene	ND ug/kg		5.3	1		05/19/11 16:40	135-98-8	
tert-Butylbenzene	ND ug/kg		5.3	1		05/19/11 16:40	98-06-6	
Carbon tetrachloride	ND ug/kg		5.3	1		05/19/11 16:40	56-23-5	
Chlorobenzene	ND ug/kg		5.3	1		05/19/11 16:40	108-90-7	
Chloroethane	ND ug/kg		10.5	1		05/19/11 16:40	75-00-3	
Chloroform	ND ug/kg		5.3	1		05/19/11 16:40	67-66-3	
Chloromethane	ND ug/kg		10.5	1		05/19/11 16:40	74-87-3	
2-Chlorotoluene	ND ug/kg		5.3	1		05/19/11 16:40	95-49-8	
4-Chlorotoluene	ND ug/kg		5.3	1		05/19/11 16:40	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		5.3	1		05/19/11 16:40	96-12-8	
Dibromochloromethane	ND ug/kg		5.3	1		05/19/11 16:40	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.3	1		05/19/11 16:40	106-93-4	
Dibromomethane	ND ug/kg		5.3	1		05/19/11 16:40	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.3	1		05/19/11 16:40	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		5.3	1		05/19/11 16:40	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.3	1		05/19/11 16:40	106-46-7	
Dichlorodifluoromethane	ND ug/kg		10.5	1		05/19/11 16:40	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.3	1		05/19/11 16:40	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.3	1		05/19/11 16:40	107-06-2	
1,1-Dichloroethene	ND ug/kg		5.3	1		05/19/11 16:40	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.3	1		05/19/11 16:40	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.3	1		05/19/11 16:40	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.3	1		05/19/11 16:40	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.3	1		05/19/11 16:40	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.3	1		05/19/11 16:40	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.3	1		05/19/11 16:40	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		5.3	1		05/19/11 16:40	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		5.3	1		05/19/11 16:40	10061-02-6	
Diisopropyl ether	ND ug/kg		5.3	1		05/19/11 16:40	108-20-3	
Ethylbenzene	ND ug/kg		5.3	1		05/19/11 16:40	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		5.3	1		05/19/11 16:40	87-68-3	
2-Hexanone	ND ug/kg		52.5	1		05/19/11 16:40	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		5.3	1		05/19/11 16:40	98-82-8	
p-Isopropyltoluene	ND ug/kg		5.3	1		05/19/11 16:40	99-87-6	
Methylene Chloride	ND ug/kg		21.0	1		05/19/11 16:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		52.5	1		05/19/11 16:40	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		5.3	1		05/19/11 16:40	1634-04-4	

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ANALYTICAL RESULTS

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Sample: P-128-UST-3 (5) Lab ID: 9294182001 Collected: 05/13/11 09:35 Received: 05/13/11 13:45 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Naphthalene	ND ug/kg		5.3	1		05/19/11 16:40	91-20-3	
n-Propylbenzene	ND ug/kg		5.3	1		05/19/11 16:40	103-65-1	
Styrene	ND ug/kg		5.3	1		05/19/11 16:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		5.3	1		05/19/11 16:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		5.3	1		05/19/11 16:40	79-34-5	
Tetrachloroethene	ND ug/kg		5.3	1		05/19/11 16:40	127-18-4	
Toluene	ND ug/kg		5.3	1		05/19/11 16:40	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		5.3	1		05/19/11 16:40	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		5.3	1		05/19/11 16:40	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		5.3	1		05/19/11 16:40	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		5.3	1		05/19/11 16:40	79-00-5	
Trichloroethene	ND ug/kg		5.3	1		05/19/11 16:40	79-01-6	
Trichlorofluoromethane	ND ug/kg		5.3	1		05/19/11 16:40	75-69-4	
1,2,3-Trichloroproppane	ND ug/kg		5.3	1		05/19/11 16:40	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		5.3	1		05/19/11 16:40	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		5.3	1		05/19/11 16:40	108-67-8	
Vinyl acetate	ND ug/kg		52.5	1		05/19/11 16:40	108-05-4	
Vinyl chloride	ND ug/kg		10.5	1		05/19/11 16:40	75-01-4	
Xylene (Total)	ND ug/kg		10.5	1		05/19/11 16:40	1330-20-7	
m&p-Xylene	ND ug/kg		10.5	1		05/19/11 16:40	179601-23-1	
o-Xylene	ND ug/kg		5.3	1		05/19/11 16:40	95-47-6	
Dibromofluoromethane (S)	82 %		70-130	1		05/19/11 16:40	1868-53-7	
Toluene-d8 (S)	95 %		70-130	1		05/19/11 16:40	2037-26-5	
4-Bromofluorobenzene (S)	92 %		70-130	1		05/19/11 16:40	460-00-4	
1,2-Dichloroethane-d4 (S)	73 %		70-132	1		05/19/11 16:40	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	18.3 %		0.10	1		05/17/11 08:19		

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

QC Batch: OEXT/13613

Analysis Method: MADEP EPH

QC Batch Method: MADEP EPH

Analysis Description: MADEP EPH NC Soil

METHIOD BLANK: 603463

Matrix Solid

Associated Lab Samples: 0294182001

Parameter	Units	Blank Result	Reporting Limit		Analyzed	Qualifiers
			Limit	Value		
Aliphatic (C09-C18)	mg/kg	ND	10.0	05/17/11 16:14	N2	
Aliphatic (C19-C36)	mg/kg	ND	10.0	05/17/11 16:14	N2	
Aromatic (C11-C22)	mg/kg	ND	10.0	05/17/11 16:14	N2	
2-Bromonaphthalene (S)	%	113	40-140	05/17/11 16:14		
2-Fluorobiphenyl (S)	%	108	40-140	05/17/11 16:14		
Nonatriacontane (S)	%	66	40-140	05/17/11 16:14		
o-Terphenyl (S)	%	96	40-140	05/17/11 16:14		

LABORATORY CONTROL SAMPLE & LCSD: 607168

607169

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Aliphatic (C09-C18)	mg/kg	10	ND	ND	73	74	40-140		50	N2
Aliphatic (C19-C36)	mg/kg	13.3	10.2	10.9	76	81	40-140	7	50	N2
Aromatic (C11-C22)	mg/kg	28.3	19.8	22.1	70	78	40-140	11	50	N2
2-Bromonaphthalene (S)	%				74	83	40-140			
2-Fluorobiphenyl (S)	%				70	82	40-140			
Nonatriacontane (S)	%				79	85	40-140			
o-Terphenyl (S)	%				63	75	40-140			

QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

QC Batch: GCV/5024 Analysis Method: MADEP VPH
QC Batch Method: MADEP VPH Analysis Description: VPH NC Soil
Associated Lab Samples: 9294182001

METHOD BLANK: 609850 Matrix: Solid

Associated Lab Samples: 9294182001

Parameter	Units	Blank Result	Reporting		Analyzed	Qualifiers
			Limit			
Aliphatic (C05-C08)	mg/kg	ND	1.5	05/22/11 15:47	N2	
Aliphatic (C09-C12)	mg/kg	ND	1.5	05/22/11 15:47	N2	
Aromatic (C09-C10)	mg/kg	ND	1.5	05/22/11 15:47	N2	
2,5-Dibromotoluene (FID)(S)	%	126	70-130	05/22/11 15:47		
2,5-Dibromotoluene (PID)(S)	%	129	70-130	05/22/11 15:47		

LABORATORY CONTROL SAMPLE & LCSD: 609851 609852

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Aliphatic (C05-C08)	mg/kg	15	13.8	12.6	92	84	70-130	9	25	N2
Aliphatic (C09-C12)	mg/kg	15	16.6	18.0	111	120	30-130	8	25	N2
Aromatic (C09-C10)	mg/kg	5	5.1	4.9	101	99	70-130	2	25	N2
2,5-Dibromotoluene (FID)(S)	%				126	125	70-130			
2,5-Dibromotoluene (PID)(S)	%				128	126	70-130			

QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

QC Batch:	OEXT/13634	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3546	Analysis Description:	8270 Solid MSSV Microwave
Associated Lab Samples: 9294182001			

METHOD BLANK: 608133 Matrix: Solid

Associated Lab Samples: 9294182001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	05/20/11 15:46	
1,2-Dichlorobenzene	ug/kg	ND	330	05/20/11 15:46	
1,3-Dichlorobenzene	ug/kg	ND	330	05/20/11 15:46	
1,4-Dichlorobenzene	ug/kg	ND	330	05/20/11 15:46	
1-Methylnaphthalene	ug/kg	ND	330	05/20/11 15:46	
2,4,5-Trichlorophenol	ug/kg	ND	330	05/20/11 15:46	
2,4,6-Trichlorophenol	ug/kg	ND	330	05/20/11 15:46	
2,4-Dichlorophenol	ug/kg	ND	330	05/20/11 15:46	
2,4-Dimethylphenol	ug/kg	ND	330	05/20/11 15:46	
2,4-Dinitrophenol	ug/kg	ND	1650	05/20/11 15:46	
2,4-Dinitrotoluene	ug/kg	ND	330	05/20/11 15:46	
2,6-Dinitrotoluene	ug/kg	ND	330	05/20/11 15:46	
2-Chloronaphthalene	ug/kg	ND	330	05/20/11 15:46	
2-Chlorophenol	ug/kg	ND	330	05/20/11 15:46	
2-Methylnaphthalene	ug/kg	ND	330	05/20/11 15:46	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	05/20/11 15:46	
2-Nitroaniline	ug/kg	ND	1650	05/20/11 15:46	
2-Nitrophenol	ug/kg	ND	330	05/20/11 15:46	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	330	05/20/11 15:46	
3,3'-Dichlorobenzidine	ug/kg	ND	1650	05/20/11 15:46	
3-Nitroaniline	ug/kg	ND	1650	05/20/11 15:46	
4,6-Dinitro-2-methylphenol	ug/kg	ND	660	05/20/11 15:46	
4-Bromophenylphenyl ether	ug/kg	ND	330	05/20/11 15:46	
4-Chloro-3-methylphenol	ug/kg	ND	660	05/20/11 15:46	
4-Chloroaniline	ug/kg	ND	1650	05/20/11 15:46	
4-Chlorophenylphenyl ether	ug/kg	ND	330	05/20/11 15:46	
4-Nitroaniline	ug/kg	ND	660	05/20/11 15:46	
4-Nitrophenol	ug/kg	ND	1650	05/20/11 15:46	
Acenaphthene	ug/kg	ND	330	05/20/11 15:46	
Acenaphthylene	ug/kg	ND	330	05/20/11 15:46	
Aniline	ug/kg	ND	330	05/20/11 15:46	
Anthracene	ug/kg	ND	330	05/20/11 15:46	
Benzo(a)anthracene	ug/kg	ND	330	05/20/11 15:46	
Benzo(a)pyrene	ug/kg	ND	330	05/20/11 15:46	
Benzo(b)fluoranthene	ug/kg	ND	330	05/20/11 15:46	
Benzo(g,h,i)perylene	ug/kg	ND	330	05/20/11 15:46	
Benzo(k)fluoranthene	ug/kg	ND	330	05/20/11 15:46	
Benzoic Acid	ug/kg	ND	1650	05/20/11 15:46	
Benzyl alcohol	ug/kg	ND	660	05/20/11 15:46	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	05/20/11 15:46	
bis(2-Chloroethyl) ether	ug/kg	ND	330	05/20/11 15:46	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	05/20/11 15:46	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	05/20/11 15:46	

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

METHOD BLANK: 608133

Matrix: Solid

Associated Lab Samples: 9294182001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Butylbenzylphthalate	ug/kg	ND	330	05/20/11 15:46	
Chrysene	ug/kg	ND	330	05/20/11 15:46	
Di-n-butylphthalate	ug/kg	ND	330	05/20/11 15:46	
Di-n-octylphthalate	ug/kg	ND	330	05/20/11 15:46	
Dibenz(a,h)anthracene	ug/kg	ND	330	05/20/11 15:46	
Dibenzofuran	ug/kg	ND	330	05/20/11 15:46	
Diethylphthalate	ug/kg	ND	330	05/20/11 15:46	
Dimethylphthalate	ug/kg	ND	330	05/20/11 15:46	
Fluoranthene	ug/kg	ND	330	05/20/11 15:46	
Fluorene	ug/kg	ND	330	05/20/11 15:46	
Hexachloro-1,3-butadiene	ug/kg	ND	330	05/20/11 15:46	
Hexachlorobenzene	ug/kg	ND	330	05/20/11 15:46	
Hexachlorocyclopentadiene	ug/kg	ND	330	05/20/11 15:46	
Hexachloroethane	ug/kg	ND	330	05/20/11 15:46	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	05/20/11 15:46	
Isophorone	ug/kg	ND	330	05/20/11 15:46	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	05/20/11 15:46	
N-Nitrosodimethylamine	ug/kg	ND	330	05/20/11 15:46	
N-Nitrosodiphenylamine	ug/kg	ND	330	05/20/11 15:46	
Naphthalene	ug/kg	ND	330	05/20/11 15:46	
Nitrobenzene	ug/kg	ND	330	05/20/11 15:46	
Pentachlorophenol	ug/kg	ND	1650	05/20/11 15:46	
Phenanthrene	ug/kg	ND	330	05/20/11 15:46	
Phenol	ug/kg	ND	330	05/20/11 15:46	
Pyrene	ug/kg	ND	330	05/20/11 15:46	
2,4,6-Tribromophenol (S)	%	64	27-110	05/20/11 15:46	
2-Fluorobiphenyl (S)	%	62	30-110	05/20/11 15:46	
2-Fluorophenol (S)	%	62	13-110	05/20/11 15:46	
Nitrobenzene-d5 (S)	%	55	23-110	05/20/11 15:46	
Phenol-d6 (S)	%	63	22-110	05/20/11 15:46	
Terphenyl-d14 (S)	%	72	28-110	05/20/11 15:46	

LABORATORY CONTROL SAMPLE: 608134

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1220	73	39-101	
1,2-Dichlorobenzene	ug/kg	1670	1210	73	36-110	
1,3-Dichlorobenzene	ug/kg	1670	1200	72	35-110	
1,4-Dichlorobenzene	ug/kg	1670	1190	72	35-110	
1-Methylnaphthalene	ug/kg	1670	1220	73	45-105	
2,4,5-Trichlorophenol	ug/kg	1670	1310	78	48-109	
2,4,6-Trichlorophenol	ug/kg	1670	1430	86	45-111	
2,4-Dichlorophenol	ug/kg	1670	1290	77	51-116	
2,4-Dimethylphenol	ug/kg	1670	1360	82	42-103	
2,4-Dinitrophenol	ug/kg	8330	5120	61	28-103	

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

LABORATORY CONTROL SAMPLE: 608134

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dinitrotoluene	ug/kg	1670	1260	76	46-114	
2,6-Dinitrotoluene	ug/kg	1670	1230	74	48-112	
2-Chloronaphthalene	ug/kg	1670	1300	78	44-105	
2-Chlorophenol	ug/kg	1670	1300	78	36-110	
2-Methylnaphthalene	ug/kg	1670	1160	69	39-112	
2-Methylphenol(o-Cresol)	ug/kg	1670	1240	75	39-101	
2-Nitroaniline	ug/kg	3330	2560	77	44-111	
2-Nitrophenol	ug/kg	1670	1250	75	41-100	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1260	75	43-103	
3,3'-Dichlorobenzidine	ug/kg	3330	2450	74	10-150	
3-Nitroaniline	ug/kg	3330	2210	66	35-110	
4,6-Dinitro-2-methylphenol	ug/kg	3330	2480	74	38-118	
4-Bromophenylphenyl ether	ug/kg	1670	1290	77	47-115	
4-Chloro-3-methylphenol	ug/kg	3330	2520	76	43-127	
4-Chloroaniline	ug/kg	3330	2050	62	34-109	
4-Chlorophenylphenyl ether	ug/kg	1670	1280	77	44-115	
4-Nitroaniline	ug/kg	3330	2460	74	37-111	
4-Nitrophenol	ug/kg	8330	6560	79	21-152	
Acenaphthene	ug/kg	1670	1430	86	38-117	
Acenaphthylene	ug/kg	1670	1370	82	46-107	
Aniline	ug/kg	1670	1150	69	29-110	
Anthracene	ug/kg	1670	1430	86	50-110	
Benzo(a)anthracene	ug/kg	1670	1400	84	47-116	
Benzo(a)pyrene	ug/kg	1670	1240	74	47-106	
Benzo(b)fluoranthene	ug/kg	1670	1270	76	47-109	
Benzo(g,h,i)perylene	ug/kg	1670	1390	83	39-115	
Benzo(k)fluoranthene	ug/kg	1670	1250	75	45-117	
Benzoic Acid	ug/kg	8330	4350	52	16-110	
Benzyl alcohol	ug/kg	3330	2600	78	38-105	
bis(2-Chloroethoxy)methane	ug/kg	1670	1160	69	39-110	
bis(2-Chloroethyl) ether	ug/kg	1670	1230	74	19-119	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1140	68	21-110	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1430	86	35-116	
Butylbenzylphthalate	ug/kg	1670	1380	83	38-110	
Chrysene	ug/kg	1670	1370	82	49-110	
Di-n-butylphthalate	ug/kg	1670	1320	79	43-109	
Di-n-octylphthalate	ug/kg	1670	1460	88	37-109	
Dibenz(a,h)anthracene	ug/kg	1670	1320	79	43-116	
Dibenzofuran	ug/kg	1670	1350	81	45-106	
Diethylphthalate	ug/kg	1670	1190	71	41-114	
Dimethylphthalate	ug/kg	1670	1200	72	43-110	
Fluoranthene	ug/kg	1670	1420	85	50-114	
Fluorene	ug/kg	1670	1340	80	46-114	
Hexachloro-1,3-butadiene	ug/kg	1670	1230	74	28-111	
Hexachlorobenzene	ug/kg	1670	1350	81	46-120	
Hexachlorocyclopentadiene	ug/kg	1670	1290	77	18-119	
Hexachloroethane	ug/kg	1670	1170	70	33-110	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1340	81	42-115	

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

LABORATORY CONTROL SAMPLE: 608134

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Isophorone	ug/kg	1670	1220	73	44-109	
N-Nitroso-di-n-propylamine	ug/kg	1670	1100	66	43-104	
N-Nitrosodimethylamine	ug/kg	1670	1220	73	29-110	
N-Nitrosodiphenylamine	ug/kg	1670	1350	81	48-113	
Naphthalene	ug/kg	1670	1270	76	41-110	
Nitrobenzene	ug/kg	1670	1180	71	38-110	
Pentachlorophenol	ug/kg	3330	2860	86	32-128	
Phenanthrene	ug/kg	1670	1350	81	50-110	
Phenol	ug/kg	1670	1420	85	28-106	
Pyrene	ug/kg	1670	1380	83	45-114	
2,4,6-Tribromophenol (S)	%			79	27-110	
2-Fluorobiphenyl (S)	%			77	30-110	
2-Fluorophenol (S)	%			74	13-110	
Nitrobenzene-d5 (S)	%			70	23-110	
Phenol-d6 (S)	%			71	22-110	
Terphenyl-d14 (S)	%			80	28-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608135 608136

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		9294260002	Result	Spike Conc.	MS Result					
1,2,4-Trichlorobenzene	ug/kg	ND	1920	1920	1210	1180	63	62	18-119	2
1,2-Dichlorobenzene	ug/kg	ND	1920	1920	1220	1130	64	59	50-110	8
1,3-Dichlorobenzene	ug/kg	ND	1920	1920	1210	1130	63	59	27-110	7
1,4-Dichlorobenzene	ug/kg	ND	1920	1920	1210	1140	63	59	28-110	6
1-Methylnaphthalene	ug/kg	ND	1920	1920	1190	1180	62	62	24-116	1
2,4,5-Trichlorophenol	ug/kg	ND	1920	1920	1220	1190	63	62	28-110	2
2,4,6-Trichlorophenol	ug/kg	ND	1920	1920	1280	1270	67	66	17-117	1
2,4-Dichlorophenol	ug/kg	ND	1920	1920	1200	1210	63	63	21-128	1
2,4-Dimethylphenol	ug/kg	ND	1920	1920	881	956	46	50	10-120	8
2,4-Dinitrophenol	ug/kg	ND	9600	9600	638J	1190J	7	12	10-107	M0,M1
2,4-Dinitrotoluene	ug/kg	ND	1920	1920	1150	1180	60	61	36-109	3
2,6-Dinitrotoluene	ug/kg	ND	1920	1920	1190	1150	62	60	32-110	3
2-Chloronaphthalene	ug/kg	ND	1920	1920	1290	1270	67	66	30-107	2
2-Chlorophenol	ug/kg	ND	1920	1920	1140	1080	59	56	14-106	5
2-Methylnaphthalene	ug/kg	ND	1920	1920	1130	1110	59	58	10-135	2
2-Methylphenol(o-Cresol)	ug/kg	ND	1920	1920	983	974	51	51	10-124	1
2-Nitroaniline	ug/kg	ND	3840	3840	2460	2450	64	64	26-116	0
2-Nitrophenol	ug/kg	ND	1920	1920	1110	1130	58	59	28-103	2
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	1920	1920	986	973	51	51	10-109	1
3,3'-Dichlorobenzidine	ug/kg	ND	3840	3840	1610J	1700J	42	44	10-150	
3-Nitroaniline	ug/kg	ND	3840	3840	1870J	1980	49	51	22-110	
4,6-Dinitro-2-methylphenol	ug/kg	ND	3840	3840	1300	1430	34	37	13-121	9
4-Bromophenylphenyl ether	ug/kg	ND	1920	1920	1250	1130	65	59	31-109	9
4-Chloro-3-methylphenol	ug/kg	ND	3840	3840	2270	2330	59	61	13-128	3
4-Chloroaniline	ug/kg	ND	3840	3840	1830J	1870J	48	49	18-102	

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Parameter	Units	MS		MSD		MS	% Rec	MSD	% Rec	% Rec	RPD	Qual
		9294260002	Result	Spike Conc.	Spike Conc.							
4-Chlorophenylphenyl ether	ug/kg	ND	1920	1920	1250	1190	65	62	29-112	5		
4-Nitroaniline	ug/kg	ND	3840	3840	1790	1950	47	51	16-111	8		
4-Nitrophenol	ug/kg	ND	9600	9600	3660	4150	38	43	14-135	13		
Acenaphthene	ug/kg	ND	1920	1920	1410	1380	73	72	26-114	2		
Acenaphthylene	ug/kg	ND	1920	1920	1320	1300	69	67	32-108	2		
Aniline	ug/kg				484	448						8
Anthracene	ug/kg	ND	1920	1920	1380	1350	72	70	32-111	2		
Benz(a)anthracene	ug/kg	ND	1920	1920	1170	1180	61	61	25-117	1		
Benz(a)pyrene	ug/kg	ND	1920	1920	1080	1060	56	55	25-106	2		
Benz(b)fluoranthene	ug/kg	ND	1920	1920	1070	1060	56	55	24-110	1		
Benz(g,h,i)perylene	ug/kg	ND	1920	1920	1190	1120	62	58	19-112	7		
Benz(k)fluoranthene	ug/kg	ND	1920	1920	1210	1200	63	62	24-114	1		
Benzoic Acid	ug/kg	ND	9600	9600	1070J	1320J	11	14	10-110			
Benzyl alcohol	ug/kg	ND	3840	3840	2330	2210	61	58	24-106	5		
bis(2-Chloroethoxy)methane	ug/kg	ND	1920	1920	1180	1160	62	60	13-119	2		
bis(2-Chloroethyl) ether	ug/kg	ND	1920	1920	1200	1120	62	58	10-134	7		
bis(2-Chloroisopropyl) ether	ug/kg	ND	1920	1920	1200	1120	63	58	10-113	7		
bis(2-Ethylhexyl)phthalate	ug/kg	ND	1920	1920	1150	1170	60	61	10-125	2		
Butylbenzylphthalate	ug/kg	ND	1920	1920	1180	1210	62	63	18-110	2		
Chrysene	ug/kg	ND	1920	1920	1240	1260	64	65	30-110	2		
Di-n-butylphthalate	ug/kg	ND	1920	1920	1190	1190	62	62	19-112	0		
Di-octylphthalate	ug/kg	ND	1920	1920	903	892	47	46	17-105	1		
Dibenz(a,h)anthracene	ug/kg	ND	1920	1920	1150	1070	60	56	23-111	7		
Dibenzofuran	ug/kg	ND	1920	1920	1350	1290	70	67	35-103	4		
Diethylphthalate	ug/kg	ND	1920	1920	1210	1160	63	60	27-113	4		
Dimethylphthalate	ug/kg	ND	1920	1920	1220	1150	63	60	26-111	6		
Fluoranthene	ug/kg	ND	1920	1920	1180	1170	61	61	33-109	0		
Fluorene	ug/kg	ND	1920	1920	1350	1320	70	69	32-113	2		
Hexachloro-1,3-butadiene	ug/kg	ND	1920	1920	1300	1220	67	63	16-116	6		
Hexachlorobenzene	ug/kg	ND	1920	1920	1300	1230	68	64	27-120	6		
Hexachlorocyclopentadiene	ug/kg	ND	1920	1920	1120	995	58	52	10-108	12		
Hexachloroethane	ug/kg	ND	1920	1920	1200	1110	63	58	10-117	8		
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1920	1920	1140	1090	60	57	10-122	5		
Isophorone	ug/kg	ND	1920	1920	1230	1240	64	64	28-114	0		
N-Nitroso-di-n-propylamine	ug/kg	ND	1920	1920	1090	1040	57	54	27-113	5		
N-Nitrosodimethylamine	ug/kg	ND	1920	1920	1180	1150	61	60	10-109	3		
N-Nitrosodiphenylamine	ug/kg	ND	1920	1920	1350	1250	70	65	10-128	7		
Naphthalene	ug/kg	ND	1920	1920	1240	1210	65	63	25-110	3		
Nitrobenzene	ug/kg	ND	1920	1920	1220	1210	64	63	18-114	1		
Pentachlorophenol	ug/kg	ND	3840	3840	1720J	1650J	45	43	10-122			
Phenanthrene	ug/kg	ND	1920	1920	1320	1290	69	67	30-114	3		
Phenol	ug/kg	ND	1920	1920	1140	1090	59	57	11-102	4		
Pyrene	ug/kg	ND	1920	1920	1470	1540	77	80	25-116	5		
2,4,6-Tribromophenol (S)	%						59	56	27-110			
2-Fluorobiphenyl (S)	%						65	63	30-110			
2-Fluorophenol (S)	%						55	53	13-110			
Nitrobenzene-d5 (S)	%						60	59	23-110			

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 608135 608136

Parameter	Units	Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	Spike Conc.							
Phenol-d6 (S)	%						50	48	22-110		
Terphenyl-d14 (S)	%						70	71	28-110		

QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

QC Batch:	MSV/15331	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Samples:	9294182001		

METHOD BLANK: 608565 Matrix: Solid

Associated Lab Samples: 9294182001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	05/19/11 13:21	
1,1,1-Trichloroethane	ug/kg	ND	5.0	05/19/11 13:21	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	05/19/11 13:21	
1,1,2-Trichloroethane	ug/kg	ND	5.0	05/19/11 13:21	
1,1-Dichloroethane	ug/kg	ND	5.0	05/19/11 13:21	
1,1-Dichloroethene	ug/kg	ND	5.0	05/19/11 13:21	
1,1-Dichloropropene	ug/kg	ND	5.0	05/19/11 13:21	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	05/19/11 13:21	
1,2,3-Trichloropropane	ug/kg	ND	5.0	05/19/11 13:21	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	05/19/11 13:21	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	05/19/11 13:21	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.0	05/19/11 13:21	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	05/19/11 13:21	
1,2-Dichlorobenzene	ug/kg	ND	5.0	05/19/11 13:21	
1,2-Dichloroethane	ug/kg	ND	5.0	05/19/11 13:21	
1,2-Dichloropropane	ug/kg	ND	5.0	05/19/11 13:21	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	05/19/11 13:21	
1,3-Dichlorobenzene	ug/kg	ND	5.0	05/19/11 13:21	
1,3-Dichloropropane	ug/kg	ND	5.0	05/19/11 13:21	
1,4-Dichlorobenzene	ug/kg	ND	5.0	05/19/11 13:21	
2,2-Dichloropropane	ug/kg	ND	5.0	05/19/11 13:21	
2-Butanone (MEK)	ug/kg	ND	100	05/19/11 13:21	
2-Chlorotoluene	ug/kg	ND	5.0	05/19/11 13:21	
2-Hexanone	ug/kg	ND	50.0	05/19/11 13:21	
4-Chlorotoluene	ug/kg	ND	5.0	05/19/11 13:21	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	50.0	05/19/11 13:21	
Acetone	ug/kg	ND	100	05/19/11 13:21	
Benzene	ug/kg	ND	5.0	05/19/11 13:21	
Bromobenzene	ug/kg	ND	5.0	05/19/11 13:21	
Bromochloromethane	ug/kg	ND	5.0	05/19/11 13:21	
Bromodichloromethane	ug/kg	ND	5.0	05/19/11 13:21	
Bromoform	ug/kg	ND	5.0	05/19/11 13:21	
Bromomethane	ug/kg	ND	10.0	05/19/11 13:21	
Carbon tetrachloride	ug/kg	ND	5.0	05/19/11 13:21	
Chlorobenzene	ug/kg	ND	5.0	05/19/11 13:21	
Chloroethane	ug/kg	ND	10.0	05/19/11 13:21	
Chloroform	ug/kg	ND	5.0	05/19/11 13:21	
Chloromethane	ug/kg	ND	10.0	05/19/11 13:21	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	05/19/11 13:21	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	05/19/11 13:21	
Dibromochloromethane	ug/kg	ND	5.0	05/19/11 13:21	
Dibromomethane	ug/kg	ND	5.0	05/19/11 13:21	
Dichlorodifluoromethane	ug/kg	ND	10.0	05/19/11 13:21	

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

METHOD BLANK: 608565

Matrix: Solid

Associated Lab Samples: 9294182001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diisopropyl ether	ug/kg	ND	5.0	05/19/11 13:21	
Ethylbenzene	ug/kg	ND	5.0	05/19/11 13:21	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	05/19/11 13:21	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	05/19/11 13:21	
m&p-Xylene	ug/kg	ND	10.0	05/19/11 13:21	
Methyl-tert-butyl ether	ug/kg	ND	5.0	05/19/11 13:21	
Methylene Chloride	ug/kg	ND	20.0	05/19/11 13:21	
n-Butylbenzene	ug/kg	ND	5.0	05/19/11 13:21	
n-Propylbenzene	ug/kg	ND	5.0	05/19/11 13:21	
Naphthalene	ug/kg	ND	5.0	05/19/11 13:21	
o-Xylene	ug/kg	ND	5.0	05/19/11 13:21	
p-Isopropyltoluene	ug/kg	ND	5.0	05/19/11 13:21	
sec-Butylbenzene	ug/kg	ND	5.0	05/19/11 13:21	
Styrene	ug/kg	ND	5.0	05/19/11 13:21	
tert-Butylbenzene	ug/kg	ND	5.0	05/19/11 13:21	
Tetrachloroethene	ug/kg	ND	5.0	05/19/11 13:21	
Toluene	ug/kg	ND	5.0	05/19/11 13:21	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	05/19/11 13:21	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	05/19/11 13:21	
Trichloroethene	ug/kg	ND	5.0	05/19/11 13:21	
Trichlorofluoromethane	ug/kg	ND	5.0	05/19/11 13:21	
Vinyl acetate	ug/kg	ND	50.0	05/19/11 13:21	
Vinyl chloride	ug/kg	ND	10.0	05/19/11 13:21	
Xylene (Total)	ug/kg	ND	10.0	05/19/11 13:21	
1,2-Dichloroethane-d4 (S)	%	95	70-132	05/19/11 13:21	
4-Bromofluorobenzene (S)	%	98	70-130	05/19/11 13:21	
Dibromofluoromethane (S)	%	101	70-130	05/19/11 13:21	
Toluene-d8 (S)	%	99	70-130	05/19/11 13:21	

LABORATORY CONTROL SAMPLE: 608566

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	48.0	96	70-131	
1,1,1-Trichloroethane	ug/kg	50	46.2	92	70-141	
1,1,2,2-Tetrachloroethane	ug/kg	50	45.9	92	70-130	
1,1,2-Trichloroethane	ug/kg	50	47.4	95	70-132	
1,1-Dichloroethane	ug/kg	50	44.4	89	70-143	
1,1-Dichloroethene	ug/kg	50	42.4	85	70-137	
1,1-Dichloropropene	ug/kg	50	42.9	86	70-135	
1,2,3-Trichlorobenzene	ug/kg	50	47.9	96	69-153	
1,2,3-Trichloropropane	ug/kg	50	42.9	86	70-130	
1,2,4-Trichlorobenzene	ug/kg	50	47.8	96	55-171	
1,2,4-Trimethylbenzene	ug/kg	50	47.1	94	70-149	
1,2-Dibromo-3-chloropropane	ug/kg	50	42.8	86	68-141	
1,2-Dibromoethane (EDB)	ug/kg	50	46.7	93	70-130	

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

LABORATORY CONTROL SAMPLE: 608566

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichlorobenzene	ug/kg	50	46.5	93	70-140	
1,2-Dichloroethane	ug/kg	50	44.4	89	70-137	
1,2-Dichloropropane	ug/kg	50	45.4	91	70-133	
1,3,5-Trimethylbenzene	ug/kg	50	47.0	94	70-143	
1,3-Dichlorobenzene	ug/kg	50	46.1	92	70-144	
1,3-Dichloropropane	ug/kg	50	45.7	91	70-132	
1,4-Dichlorobenzene	ug/kg	50	45.8	92	70-142	
2,2-Dichloropropane	ug/kg	50	44.3	89	68-152	
2-Butanone (MEK)	ug/kg	100	88J	88	70-149	
2-Chlorotoluene	ug/kg	50	47.8	96	70-141	
2-Hexanone	ug/kg	100	82.9	83	70-149	
4-Chlorotoluene	ug/kg	50	48.3	97	70-149	
4-Methyl-2-pentanone (MIBK)	ug/kg	100	87.5	87	70-153	
Acetone	ug/kg	100	82.6J	83	70-157	
Benzene	ug/kg	50	45.1	90	70-130	
Bromobenzene	ug/kg	50	44.5	89	70-141	
Bromo(chloromethane	ug/kg	50	45.3	91	70-149	
Bromodichloromethane	ug/kg	50	45.4	91	70-130	
Bromoform	ug/kg	50	47.4	95	70-131	
Bromomethane	ug/kg	50	52.3	105	64-136	
Carbon tetrachloride	ug/kg	50	47.4	95	70-154	
Chlorobenzene	ug/kg	50	46.2	92	70-135	
Chloroethane	ug/kg	50	45.8	92	68-151	
Chloroform	ug/kg	50	48.6	97	70-130	
Chloromethane	ug/kg	50	46.7	93	70-132	
cis-1,2-Dichloroethene	ug/kg	50	43.7	87	70-140	
cis-1,3-Dichloropropene	ug/kg	50	47.6	95	70-137	
Dibromochloromethane	ug/kg	50	45.3	91	70-130	
Dibromomethane	ug/kg	50	47.9	96	70-136	
Dichlorodifluoromethane	ug/kg	50	51.1	102	36-148	
Diisopropyl ether	ug/kg	50	44.3	89	70-139	
Ethylbenzene	ug/kg	50	47.6	95	70-137	
Hexachloro-1,3-butadiene	ug/kg	50	47.0	94	70-145	
Isopropylbenzene (Cumene)	ug/kg	50	48.0	96	70-141	
m&p-Xylene	ug/kg	100	95.4	95	70-140	
Methyl-tert-butyl ether	ug/kg	50	45.0	90	45-150	
Methylene Chloride	ug/kg	50	41.3	83	70-133	
n-Butylbenzene	ug/kg	50	48.2	96	65-155	
n-Propylbenzene	ug/kg	50	47.4	95	70-148	
Naphthalene	ug/kg	50	48.5	97	70-148	
o-Xylene	ug/kg	50	49.2	98	70-141	
p-Isopropyltoluene	ug/kg	50	48.6	97	70-148	
sec-Butylbenzene	ug/kg	50	47.1	94	70-145	
Styrene	ug/kg	50	50.6	101	70-138	
tert-Butylbenzene	ug/kg	50	48.3	97	70-143	
Tetrachloroethene	ug/kg	50	48.2	96	70-140	
Toluene	ug/kg	50	46.8	94	70-130	
trans-1,2-Dichloroethene	ug/kg	50	42.7	85	70-136	

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

LABORATORY CONTROL SAMPLE: 608566

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropene	ug/kg	50	47.6	95	70-138	
Trichloroethene	ug/kg	50	45.8	92	70-132	
Trichlorofluoromethane	ug/kg	50	49.0	98	69-134	
Vinyl acetate	ug/kg	100	104	104	24-161	
Vinyl chloride	ug/kg	50	47.3	95	55-140	
Xylene (Total)	ug/kg	150	145	96	70-141	
1,2-Dichloroethane-d4 (S)	%			96	70-132	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			97	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 609096

Parameter	Units	9294107003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	ND	45.3	33.8	74	49-180	
Benzene	ug/kg	ND	45.3	38.1	84	50-166	
Chlorobenzene	ug/kg	ND	45.3	40.1	88	43-169	
Toluene	ug/kg	ND	45.3	37.9	84	52-163	
Trichloroethene	ug/kg	ND	45.3	36.9	81	49-167	
1,2-Dichloroethane-d4 (S)	%				97	70-132	
4-Bromofluorobenzene (S)	%				89	70-130	
Dibromofluoromethane (S)	%				102	70-130	
Toluene-d8 (S)	%				96	70-130	

SAMPLE DUPLICATE: 609097

Parameter	Units	9294259003 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND		
1,1-Dichloroethene	ug/kg	ND	ND		
1,1-Dichloropropene	ug/kg	ND	ND		
1,2,3-Trichlorobenzene	ug/kg	ND	ND		
1,2,3-Trichloropropane	ug/kg	ND	ND		
1,2,4-Trichlorobenzene	ug/kg	ND	ND		
1,2,4-Trimethylbenzene	ug/kg	ND	ND		
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		
1,2-Dichlorobenzene	ug/kg	ND	ND		
1,2-Dichloroethane	ug/kg	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND		
1,3,5-Trimethylbenzene	ug/kg	ND	ND		
1,3-Dichlorobenzene	ug/kg	ND	ND		

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

SAMPLE DUPLICATE: 609097

Parameter	Units	9294259003 Result	Dup Result	RPD	Qualifiers
1,3-Dichloropropane	ug/kg	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND		
2,2-Dichloropropane	ug/kg	ND	ND		
2-Butanone (MEK)	ug/kg	ND	ND		
2-Chlorotoluene	ug/kg	ND	ND		
2-Hexanone	ug/kg	ND	ND		
4-Chlorotoluene	ug/kg	ND	ND		
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		
Acetone	ug/kg	ND	ND		
Benzene	ug/kg	ND	ND		
Bromobenzene	ug/kg	ND	ND		
Bromochloromethane	ug/kg	ND	ND		
Bromodichloromethane	ug/kg	ND	ND		
Bromoform	ug/kg	ND	ND		
Bromomethane	ug/kg	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND		
Chlorobenzene	ug/kg	ND	ND		
Chloroethane	ug/kg	ND	ND		
Chloroform	ug/kg	ND	ND		
Chloromethane	ug/kg	ND	ND		
cis-1,2-Dichloroethene	ug/kg	ND	ND		
cis-1,3-Dichloropropene	ug/kg	ND	ND		
Dibromochloromethane	ug/kg	ND	ND		
Dibromomethane	ug/kg	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND		
Diisopropyl ether	ug/kg	ND	ND		
Ethylbenzene	ug/kg	ND	ND		
Hexachloro-1,3-butadiene	ug/kg	ND	ND		
Isopropylbenzene (Cumene)	ug/kg	ND	ND		
m&p-Xylene	ug/kg	ND	ND		
Methyl-tert-butyl ether	ug/kg	ND	ND		
Methylene Chloride	ug/kg	ND	ND		
n-Butylbenzene	ug/kg	ND	ND		
n-Propylbenzene	ug/kg	ND	ND		
Naphthalene	ug/kg	ND	ND		
o-Xylene	ug/kg	ND	ND		
p-Isopropyltoluene	ug/kg	ND	ND		
sec-Butylbenzene	ug/kg	ND	ND		
Styrene	ug/kg	ND	ND		
tert-Butylbenzene	ug/kg	ND	ND		
Tetrachloroethene	ug/kg	ND	ND		
Toluene	ug/kg	ND	ND		
trans-1,2-Dichloroethene	ug/kg	ND	ND		
trans-1,3-Dichloropropene	ug/kg	ND	ND		
Trichloroethene	ug/kg	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND		
Vinyl acetate	ug/kg	ND	ND		
Vinyl chloride	ug/kg	ND	ND		

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

SAMPLE DUPLICATE: 609097

Parameter	Units	9294259003	Dup Result	RPD	Qualifiers
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	97	100	17	
4-Bromofluorobenzene (S)	%	93	93	14	
Dibromofluoromethane (S)	%	97	102	19	
Toluene-d8 (S)	%	98	100	16	

Date: 05/26/2011 02:15 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

QC Batch:	PMST/3929	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	9294182001		

SAMPLE DUPLICATE: 606805

Parameter	Units	Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	15.2	14.8	2	

SAMPLE DUPLICATE: 606806

Parameter	Units	Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	8.6	9.0	4	

QUALIFIERS

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

1g Surrogate fails after Moisture Correction for Methanol.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

N2 The lab does not hold NELAC accreditation for this parameter.

P3 Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 35579.1.1 WILKES CO UST

Pace Project No.: 9294182

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
9294182001	P-128-UST-3 (5)	MADEP EPH	OEXT/13613	MADEP EPH	GCSV/9794
9294182001	P-128-UST-3 (5)	MADEP VPH	GCV/5024	MADEP VPH	GCV/5026
9294182001	P-128-UST-3 (5)	EPA 3546	OEXT/13634	EPA 8270	MSSV/4956
9294182001	P-128-UST-3 (5)	EPA 8260		MSV/15331	
9294182001	P-128-UST-3 (5)	ASTM D2974-87		PMST/3929	

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: AMEC E+E Address: 2200 Gateway Center Blvd Morrisville, NC Email To: helen.corley@amec.com Phone: 919-447-2750 Fax: 919-447-2750 Requested Due Date/TAT:		Report To: Helen Corley Copy To: Purchase Order No.: WBS: 355579.1 Project Name: Wilkes Co UST Closure		Attention: Ethan Caldwell Company Name: NC DOT Address: 1509 Main Service Center Page Quote Reference: WBS: 355579.1.1 Pace Project Manager: Kevin Herring Pace Profile #: 4098-1	
				REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input checked="" type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
				Site Location: NC STATE: NC	
Section D Required Client Information		Matrix Codes MATRIX / CODE		Requested Analysis Filtered (Y/N)	
SAMPLE ID (A-Z, 0-9, -,) Sample IDs MUST BE UNIQUE		Drinking Water DW Water WW Waste Water WT Product P Soil/Solid SL Oil OL Wipe WP Air AR Tissue TS Other OT		COLLECTED Preservatives Y/N	
ITEM # P-128-LST-3 (5')		MATRIX CODE (see valid codes to left) SL G		SAMPLE TEMP AT COLLECTION # OF CONTAINERS Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	
1 2 3 4 5 6 7 8 9 10 11 12		DATE TIME DATE TIME 5-13-11 9:35		Analysis Test ↓ 8260/5035 E 8270 VPH EPH XXX	
				Residual Chlorine (Y/N) Pace Project No./Lab ID. 001	
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		SAMPLE CONDITIONS	
Troy L Hobbs		DATE TIME 5-13-11 1345		DATE TIME 05/13/11 1345 4:44 4 2 4 4	
				Temp in °C Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

Troy L Hobbs

DATE Signed

5-13-11

Sample Condition Upon Receipt

Pace Analytical

Client Name: AMEC E+E

Project # 9294182

Where Received: Huntersville Asheville Eden

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

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

Optional

Proj. Due Date:

Proj. Name:

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used: IR Gun : T1101

Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Temp Correction Factor: Add / Subtract 0 °C

Corrected Cooler Temp.: 4.6 C

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 5/13/11 *[Signature]*

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>8L</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review: Kef

Date: 5/13/11

SRF Review: Kut

Date: 5/16/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)