PRELIMINARY SITE ASSESSMENT

SR 1100 (BRAWLEY SCHOOL ROAD) IMPROVEMENTS
TIP NO. R-3833C, WBS NO. 34554.2.4

NCDOT PARCEL NO. 68
OWNER: MARATHEA GROUP, LLC
2785 CHARLOTTE HIGHWAY
MOORESVILLE, IREDELL COUNTY, NORTH CAROLINA

PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
C/O STANTEC
801 JONES FRANKLIN ROAD SUITE 300
RALEIGH NORTH CAROLINA 27606-3394

PREPARED BY:
FALCON ENGINEERING, INC.
1210 TRINITY ROAD, SUITE 110
CARY, NC 27513

PROJECT NUMBER: G18063.02
OCTOBER 27, 2019

October 27, 2019

Mr. A. Dean Sarvis PE
Stantec
801 Jones Franklin Road, Suite 300
Raleigh, North Carolina 27606-3394

Re: **Preliminary Site Assessment**
SR 1100 (Brawley School Road) Improvements
TIP No. R-3833C, WBS No. 34554.2.4
NCDOT Parcel No. 68
Owner: Marathea Group, LLC
2785 Charlotte Highway
Mooresville, Iredell County, North Carolina

Dear: Mr. Sarvis:

Falcon is pleased to present the following Preliminary Site Assessment in support of the above-mentioned Project. Specifically, Falcon sampled soil in proximity to the project limits on this parcel in general accordance with the approved scope of work. Soils requiring remediation or special handling during construction were not identified.

Falcon recommends if drums, USTs, above ground storage tanks (ASTs), petroleum odors or sheen are observed during any excavation associated with any property involved in the project that all work in the vicinity stop until further assessment takes place. Further assessment can include but is not limited to; sampling the soil and groundwater, excavation, and proper handling and disposal of contaminated soils and groundwater.

Please review this report and advise us if you have any questions or concerns. We appreciate this opportunity to provide services to you and look forward to partnering with you on future projects. If you have any questions, please give Falcon a call at (919) 871-0800.

Sincerely,
FALCON ENGINEERING, INC.

Christopher J. Burkhardt
Environmental Services Manager

Jeremy R. Hamm, PE
Geotechnical Services Manager

TABLE OF CONTENTS

LIST OF FIGURES AND ATTACHMENTS

SECTION 1: INTRODUCTION

1.1 DESCRIPTION

Falcon Engineering, Inc. (Falcon) has completed a Preliminary Site Assessment of NCDOT TIP No. R-3833C Parcel No. 68. Parcel No. 68 is addressed as 2785 Charlotte Highway, Mooresville, Iredell County, North Carolina. NCDOT is proposing to improve SR 1100 (Brawley School Road) from SR 1116 (Talbert Road) to 1,000' east of US 21, including improvements to a number of intersecting roads and driveways throughout this corridor. The limits of the assessment are between the existing edge of NCDOT maintained pavement (within the existing NCDOT ROW) where accessible, and the proposed NCDOT ROW and/or easement (whichever boundary represents the largest area). Boring locations were placed in the vicinity of proposed excavations for drainage features, utilities, and roadway/ditch cuts to determine if soils requiring remediation or special handling were present where excavation is planned to take place.

1.2 SCOPE OF WORK

Falcon's scope of work included coordination of; public and private utility location near the proposed borings, geophysical surveys, collecting soil samples with a geoprobe, and laboratory analysis. Samples were analyzed for volatile organic compounds (VOCs) using traditional methods.

SECTION 2: HISTORY

2.1 PARCEL USAGE

Falcon performed a Phase I Environmental Site Assessment (ESA) for R-3833C under Project No. G18063.01 dated March 2019. The ESA identified this parcel as a Recognized Environmental Condition (REC) based on the parcel's history as a dry-cleaner. U.S. $2.50 Cleaners was observed at this address during our site visit. This facility performs onsite dry-cleaning and has been in operation for 17 years according to The Real Yellow Pages website. The strip mall the cleaners is in was constructed in 1998. U.S. $2.50 Cleaners is not in a database that reports spills or releases. However; this facility is considered a REC based on its use as a dry-cleaner and the potential for an undiscovered or unreported release.

2.2 FACILITY IDENTIFICATION NUMBER

Facility Identification Number 490002C was identified for this parcel.

2.3 GROUNDWATER INCIDENT NUMBER

A Groundwater Incident Number was not identified for this parcel.

SECTION 3: SITE OBSERVATIONS

3.1 GROUNDWATER MONITORING WELLS

Groundwater monitoring wells (MWs) were not observed on this parcel.

3.2 ACTIVE USTS

Active USTs were not observed within the project limits or registered at this parcel.

3.3 FEATURES APPARENT BEYOND ROW/EASEMENT

USTs, monitoring wells, remediation systems, or hydraulic lifts were not observed within the project limits.

SECTION 4: METHODOLOGY

4.1 GEOPHYSICS

Pyramid Geophysical Services (Pyramid) was subcontracted to perform a geophysical survey of the assessment area. The assessment area consists of the property frontage between the existing edge of NCDOT maintained pavement (within the existing NCDOT ROW) where accessible, and the proposed NCDOT ROW and/or easement (whichever boundary represents the largest area). The survey was used to locate private utility lines, as well as possible indications of USTs, and/or their pits.

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys. Pyramid collected the EM data using a Geonics EM61-MK2 (EM61) metal detector integrated with a Geode External GPS/GLONASS receiver. The integrated GPS system allows the location of the instrument to be recorded in real-time during data collection, resulting in an EM data set that is georeferenced and can be overlain on aerial photographs and CADD drawings.

GPR data was acquired across select EM anomalies (where identified), using a Geophysical Survey Systems, Inc. (GSSI) UtilityScan DF unit equipped with a dual frequency 300/800 MHz antenna. Pyramid marked their findings on the surface with paint. A boundary grid was established around the perimeter of the site with marks every 10 feet to maintain orientation of the instrument throughout the survey and to obtain adequate coverage. A copy of the full Geophysical Report is included in the Attachments.

4.2 BORINGS

Regional Probing was subcontracted to advance soil borings using direct push technology. Regional Probing used a truck mounted Geoprobe® 5410 unit mounted on an off-road modified Ford F350 Diesel 4x4. The unit has auger-capabilities and is equipped with a GH-42 soil-probing hammer, with 21,700 pounds of down force and 28,900 pounds of retraction force. The unit has an on-board tank for decontaminating the geoprobe rods before advancing the probe at each sample location.

4.3 SAMPLE PROTOCOL

Prior to initiating sample collection Falcon contacted NC One Call and requested public utility locations be marked around the proposed sample locations. Sampling was in general accordance with the NC Department of Environmental Quality (DEQ) Division of Waste Management's (DWM) "Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement for UST Releases" (March 1, 2007 Version Change 9 – February 1, 2019) guidance document. Sampling strategy was derived based upon the project scope and objectives as outlined above. Pace Analytical (North Carolina Field Services Certification #: 5342) was selected to perform the volatile organic compound analytical analysis. Appropriate sterile containers were received by Falcon from Pace Analytical prior to beginning the fieldwork. The containers were labeled appropriately.

A Minirae 3000 photoionization detector (PID) was used to field screen samples for volatile organics to determine if a release had occurred. The instrument was calibrated per manufacturer instructions prior to use. Falcon staff bagged composite soil samples of each boring in approximately two-foot sections. Representative samples were placed in a sealed plastic bag for approximately 10 minutes to allow soil hydrocarbons to reach equilibrium within the headspace prior to scanning with the PID. One sample per boring was collected from the depth of the proposed cut or from the section above the depth of cut with the highest PID reading.

To avoid cross contamination, a new unused pair of non-powdered nitrile gloves was worn while extracting each sample. Samples were placed in the appropriate laboratory provided containers. The labels on each container were then completed so that each provided the date and time of sampling, method of analysis, sample collector, preservative used and sampling location identification. Samples were placed in an ice filled cooler and transported to the lab. Appropriate chain-of-custody procedures, including the completion of necessary forms, were followed.

SECTION 5: RESULTS

5.1 GEOPHYSICS

The geophysical investigation was performed on August 11 and 12, 2019 to investigate for the presence of unknown, metallic underground storage tanks (USTs) beneath the surface. The geophysical investigation consisted of electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys. A total of nine EM anomalies were identified. The majority of the EM anomalies were directly attributed to visible cultural features at the ground surface. GPR was performed across areas containing significant metallic interference associated with vehicles, a reinforced concrete pipe, and known buried utility lines. No additional significant buried structures were identified. Collectively, the geophysical data did not record evidence of metallic USTs within the survey area at Parcel No. 68.

5.2 SAMPLE DATA

Falcon and our subcontractor advanced two borings (B-08, B-09) to the proposed excavation depth of the drainage features, utilities, or roadway/ditch cut being assessed. Groundwater was not observed. Please see the Boring Location Plan in the attachments for a visual depiction of the boring locations. The coordinates (latitude and longitude) that correspond to the boring locations are shown below in Table No. 1 Boring Coordinates.

TABLE NO. 1 BORING COORDINATES

Boring	Latitude	Longitude
B-08	35.5815919	-80.8397319
B-09	35.5811946	-80.8397533

The PID screening results are presented in Table No. 2 PID Readings. Borings were field screened with a PID for evidence of volatile organics in sections as indicated in Table No. 2. Falcon selected soil samples based on the field screening results and the needs of the project. Pace Analytical analyzed the selected samples and their full analytical report is attached.

Contaminants above detection levels were not reported in the samples.

TABLE NO. 2 PID READINGS

Boring	Depth BGS*	PID**
B-08	0-2	1.6
	2-4	2.1
	4-6	2.6
	6-8	2.3
	8-10	**2.6**
B-09	0-2.5	2.2
	2.5-5	1.8
	5-7.5	1.6
	7.5-10	**1.9**

*BGS = Depth below ground surface in feet
**PID readings are in parts per million
Samples shown in **bold** were selected for analysis

5.3 SAMPLE OBSERVATIONS

Obvious visual indications of a release (stained soils, odors, or oily sheen) were not observed. Table No. 3 Soil Observations lists visual soil observations of color and texture.

TABLE NO. 3 SOIL OBSERVATIONS

Sample ID	Depth	Color	Soil Type
B-08	0-2	Red	Silty Clay (A-7) w/ trace Organics
	2-4	Red Brown	Clayey Silt (A-5) w/ trace Mica
	4-6	Red	Sandy Clayey Silt (A-4) w/ trace Mica
	6-10	Red Brown	Sandy Clayey Silt (A-4) w/ trace Mica
B-09	0-2	Red	Silty Clay (A-7) w/ trace Organics
	2-4	Red Brown	Sandy Clayey Silt (A-4) w/ trace Mica & Rock Frags
	4-6	Red	Sandy Clayey Silt (A-4) w/ trace Mica
	6-10	Red	Sandy Clayey Silt (A-4) w/ trace Mica

Depth is in feet below ground surface

5.4 QUANTITIES CALCULATIONS

Soils requiring quantity calculations were not identified.

SECTION 6: CONCLUSIONS

6.1 INTERPRETATION OF RESULTS

This Preliminary Site Assessment was performed to evaluate the soils in proximity to the project limits on this parcel for the presence of VOCs. The findings are as follows:

- Soil sampling completed on the parcel did not identify contaminants in the soil sampled at levels requiring remediation.

6.2 GEOPHYSICS

The geophysical data did not record evidence of metallic USTs within the survey area at Parcel No. 68. Falcon does not anticipate USTs will be encountered within the project limits on this parcel during construction.

6.3 SAMPLING

Sampling results did not identify contaminants in the soil which require remediation in the areas sampled. Based on past project experience, Falcon does not anticipate soil remediation or special handling and disposal will be required during construction on this parcel.

6.4 QUANTITIES

Soils requiring quantities calculations were not identified.

SECTION 7: RECOMMENDATIONS

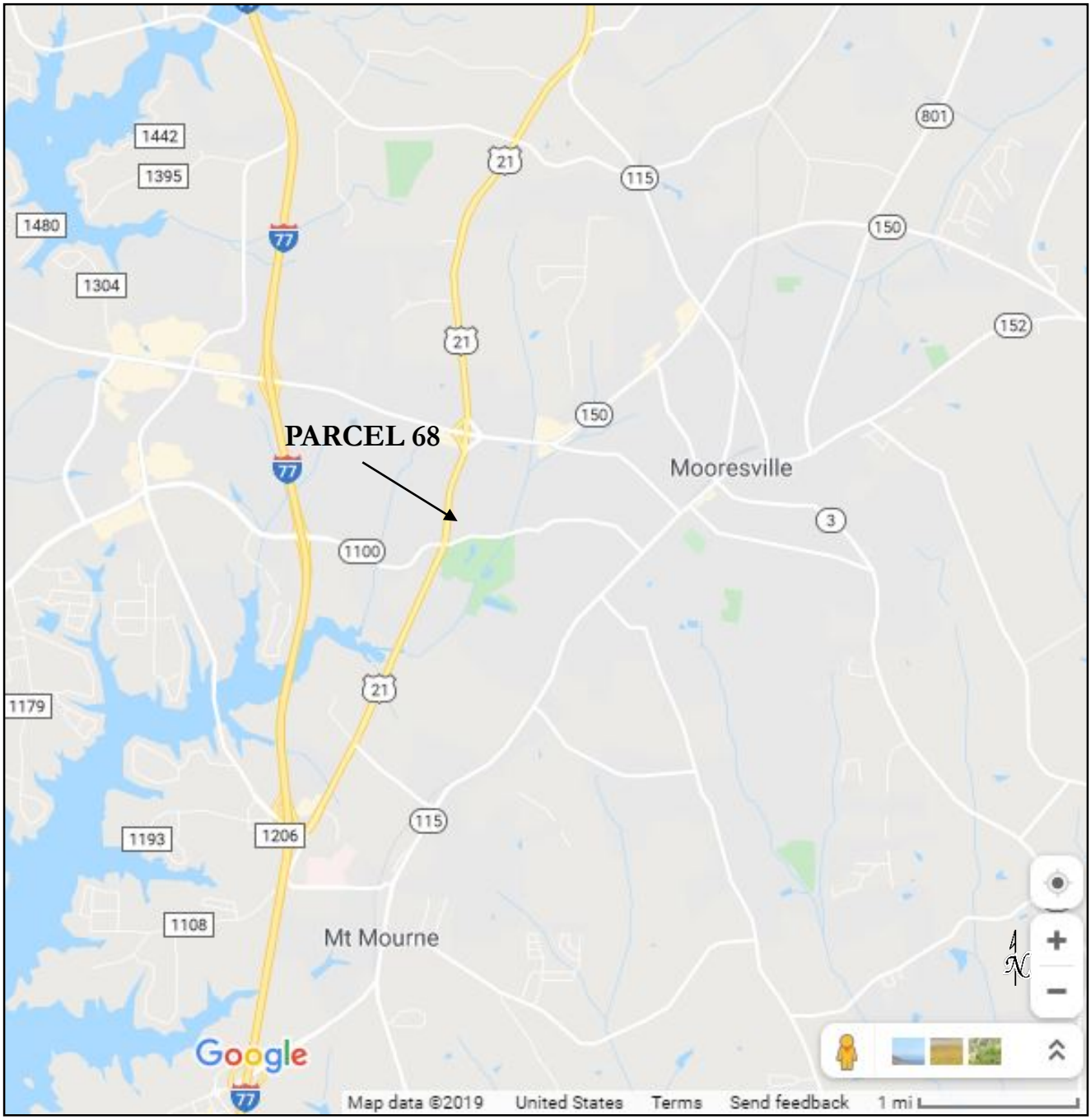
7.1 ADDITIONAL SAMPLING

Contaminants above the Industrial / Commercial Soil Cleanup Levels were not identified; therefore, additional assessment is not warranted at this time. Falcon recommends if drums, USTs, above ground storage tanks (ASTs), petroleum odors or sheen are observed during any excavation associated with any property involved in the project that all work in the vicinity stop until further assessment takes place. Further assessment can include but is not limited to; sampling the soil and groundwater, excavation, and proper handling and disposal of contaminated soils and groundwater.

7.2 SPECIAL HANDLING OF IMPACTED SOIL

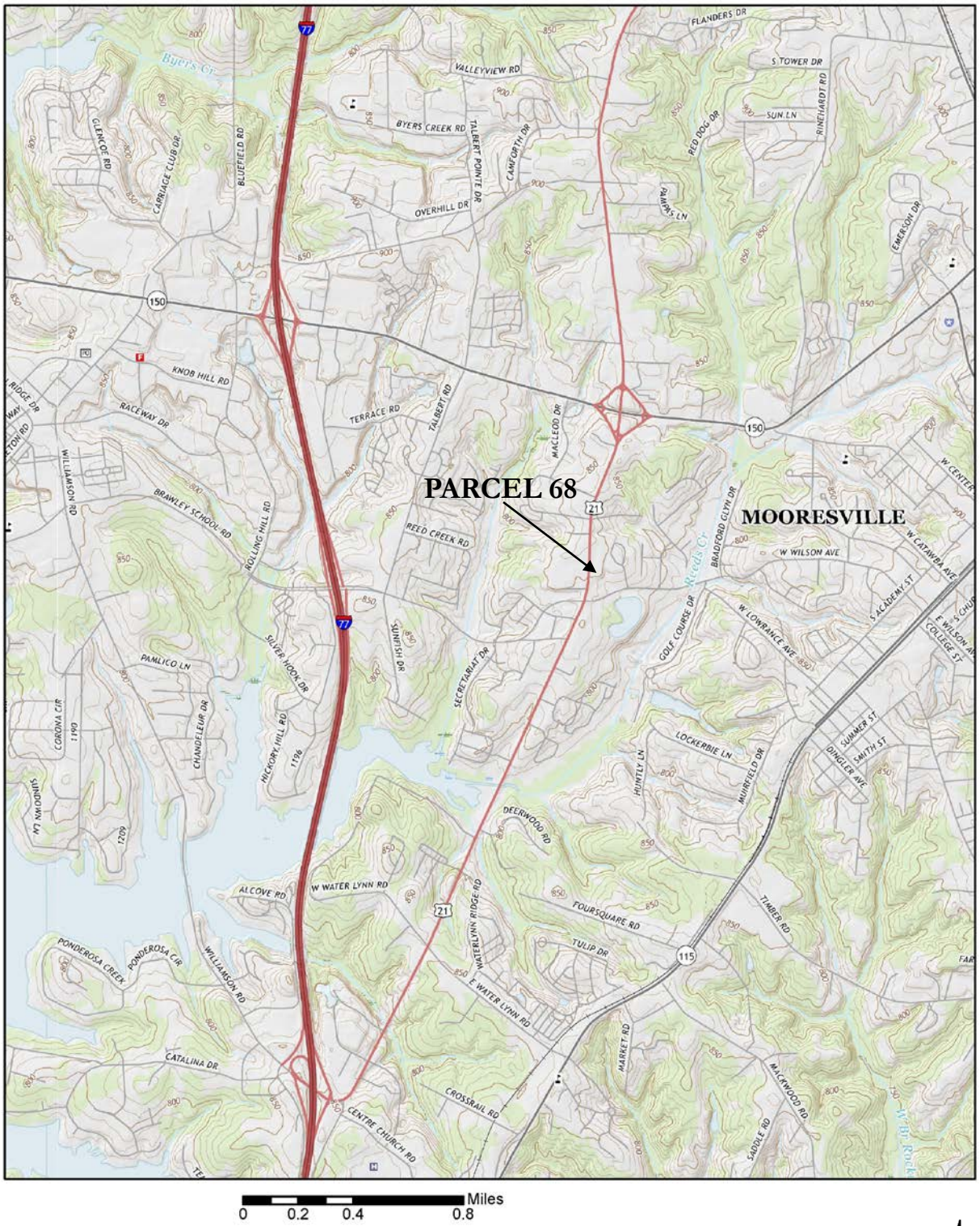
Soils requiring special handling were not identified. If suspect contaminated soils are encountered during construction Falcon and the NCDOT GeoEnvironmental Group should be contacted for proper handling instructions.

NCDOT R-3833C (SR 1100 Improvements)
Preliminary Site Assessment
Parcel 68 Vicinity Map



Project No.: G18063.02
Date: October 2019
Source: Google Maps

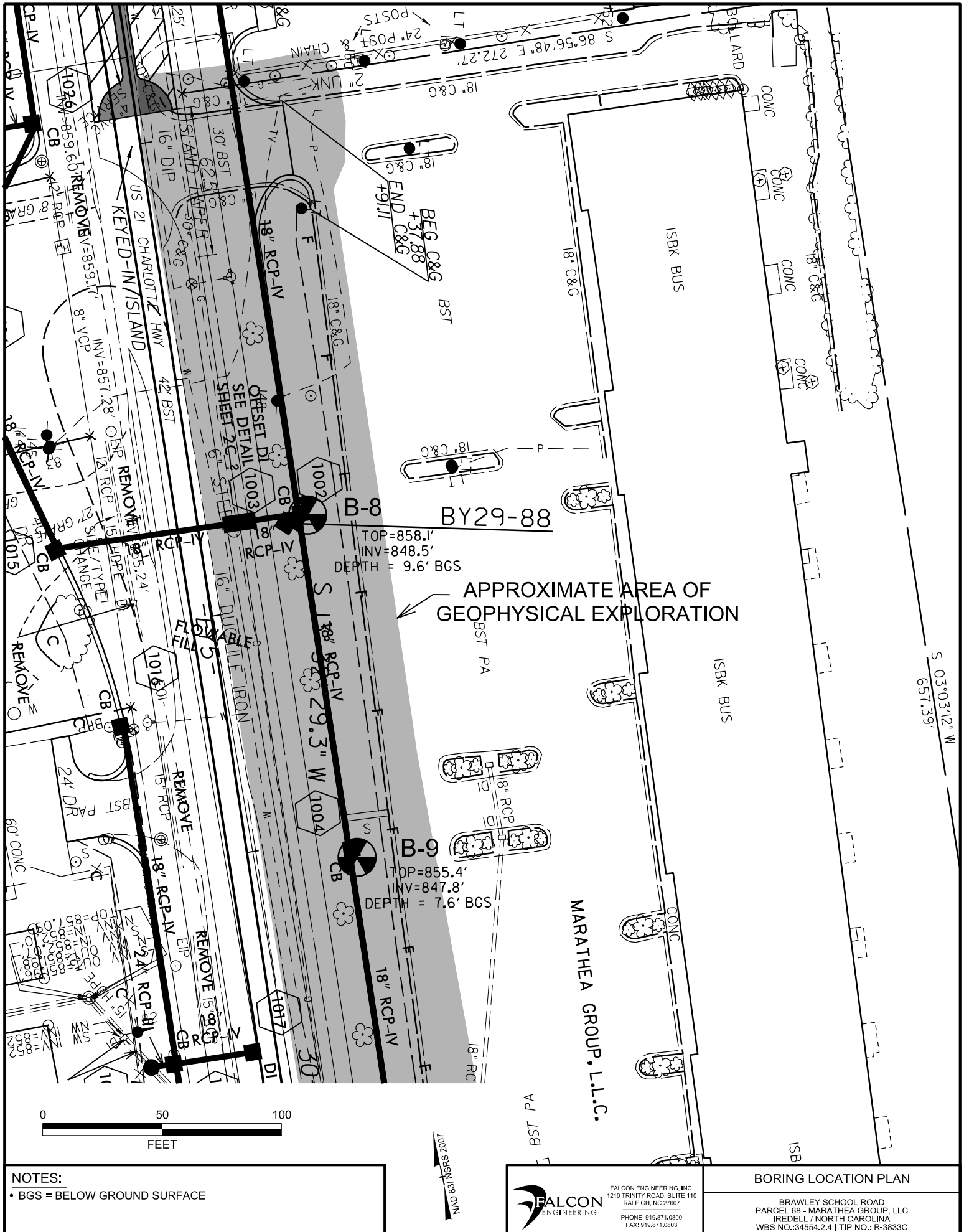
NCDOT R-3833C (SR 1100 Improvements)
Preliminary Site Assessment
Parcel 68 Topographic Map



Project No.: G18063.02
Date: October 2019
Source: "Mooresville, NC" 2016 USGS Topographic Map

NCDOT R-3833C (SR 1100 Improvements)
Preliminary Site Assessment
Parcel 68 Location Map

Project No.: G18063.02
Date: October 2019
Source: Iredell County GIS Website



NOTES:

- BGS = BELOW GROUND SURFACE

NAD 83/NSRS 2007

FALCON ENGINEERING

FALCON ENGINEERING, INC.
1210 TRINITY ROAD, SUITE 110
RALEIGH, NC 27607

PHONE: 919.871.0800
FAX: 919.871.0803

BORING LOCATION PLAN

BRAWLEY SCHOOL ROAD
PARCEL 68 - MARATHEA GROUP, LLC
IREDELL / NORTH CAROLINA
WBS NO.:34554.2.4 | TIP NO.: R-3833C
FALCON PROJECT NO. G18063.02

NCDOT R-3833C (SR 1100 Improvements)
Preliminary Site Assessment
Parcel 68 Site Photographs

Photograph No. 1: General view of Boring B-08.

Photograph No. 2: General view of Boring B-09.

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

October 21, 2019

Christopher Burkhardt
Falcon Engineering
1210 Trinity Road
Suite 110
Cary, NC 27513

RE: Project: G18063
Pace Project No.: 92449737

Dear Christopher Burkhardt:
Enclosed are the analytical results for sample(s) received by the laboratory on October 15, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Tyriek Hooks

Tyriek Hooks
tyriek.hooks@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Christopher Burkhardt, Falcon Engineering

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

CERTIFICATIONS

Project: G18063
Pace Project No.: 92449737

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

SAMPLE ANALYTE COUNT

Project: G18063
Pace Project No.: 92449737

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92449737001	**B08**	EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92449737002	**B09**	EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C

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

ANALYTICAL RESULTS

Project: G18063
Pace Project No.: 92449737

Sample: B08 **Lab ID: 92449737001** Collected: 10/15/19 10:49 Received: 10/15/19 16:39 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A Volatile Organics	Analytical Method: EPA 8260D Preparation Method: EPA 5035A							
Acetone	ND	ug/kg	114	1	10/18/19 12:39	10/18/19 15:12	67-64-1	
Benzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	71-43-2	
Bromobenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	108-86-1	
Bromochloromethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	74-97-5	
Bromodichloromethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	75-27-4	
Bromoform	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	75-25-2	
Bromomethane	ND	ug/kg	11.4	1	10/18/19 12:39	10/18/19 15:12	74-83-9	
2-Butanone (MEK)	ND	ug/kg	114	1	10/18/19 12:39	10/18/19 15:12	78-93-3	
n-Butylbenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	56-23-5	
Chlorobenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	108-90-7	
Chloroethane	ND	ug/kg	11.4	1	10/18/19 12:39	10/18/19 15:12	75-00-3	
Chloroform	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	67-66-3	
Chloromethane	ND	ug/kg	11.4	1	10/18/19 12:39	10/18/19 15:12	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	96-12-8	
Dibromochloromethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	106-93-4	
Dibromomethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	11.4	1	10/18/19 12:39	10/18/19 15:12	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	108-20-3	
Ethylbenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	87-68-3	
2-Hexanone	ND	ug/kg	57.1	1	10/18/19 12:39	10/18/19 15:12	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	99-87-6	
Methylene Chloride	ND	ug/kg	22.9	1	10/18/19 12:39	10/18/19 15:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	57.1	1	10/18/19 12:39	10/18/19 15:12	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	1634-04-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: G18063
Pace Project No.: 92449737

Sample: B08 **Lab ID: 92449737001** Collected: 10/15/19 10:49 Received: 10/15/19 16:39 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A Volatile Organics	Analytical Method: EPA 8260D Preparation Method: EPA 5035A							
Naphthalene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	91-20-3	
n-Propylbenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	103-65-1	
Styrene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	79-34-5	
Tetrachloroethene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	127-18-4	
Toluene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	79-00-5	
Trichloroethene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	108-67-8	
Vinyl acetate	ND	ug/kg	57.1	1	10/18/19 12:39	10/18/19 15:12	108-05-4	L1,v1
Vinyl chloride	ND	ug/kg	11.4	1	10/18/19 12:39	10/18/19 15:12	75-01-4	
Xylene (Total)	ND	ug/kg	11.4	1	10/18/19 12:39	10/18/19 15:12	1330-20-7	
m&p-Xylene	ND	ug/kg	11.4	1	10/18/19 12:39	10/18/19 15:12	179601-23-1	
o-Xylene	ND	ug/kg	5.7	1	10/18/19 12:39	10/18/19 15:12	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%	70-130	1	10/18/19 12:39	10/18/19 15:12	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	1	10/18/19 12:39	10/18/19 15:12	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	70-132	1	10/18/19 12:39	10/18/19 15:12	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.2**	%	0.10	1		10/17/19 13:29		

Sample: B09 **Lab ID: 92449737002** Collected: 10/15/19 10:21 Received: 10/15/19 16:39 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A Volatile Organics	Analytical Method: EPA 8260D Preparation Method: EPA 5035A							
Acetone	ND	ug/kg	104	1	10/18/19 12:39	10/18/19 15:37	67-64-1	
Benzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	71-43-2	
Bromobenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	108-86-1	
Bromochloromethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	74-97-5	
Bromodichloromethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	75-27-4	
Bromoform	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	75-25-2	
Bromomethane	ND	ug/kg	10.4	1	10/18/19 12:39	10/18/19 15:37	74-83-9	
2-Butanone (MEK)	ND	ug/kg	104	1	10/18/19 12:39	10/18/19 15:37	78-93-3	
n-Butylbenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	135-98-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: G18063
Pace Project No.: 92449737

Sample: B09 **Lab ID: 92449737002** Collected: 10/15/19 10:21 Received: 10/15/19 16:39 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A Volatile Organics	Analytical Method: EPA 8260D Preparation Method: EPA 5035A							
tert-Butylbenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	56-23-5	
Chlorobenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	108-90-7	
Chloroethane	ND	ug/kg	10.4	1	10/18/19 12:39	10/18/19 15:37	75-00-3	
Chloroform	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	67-66-3	
Chloromethane	ND	ug/kg	10.4	1	10/18/19 12:39	10/18/19 15:37	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	96-12-8	
Dibromochloromethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	106-93-4	
Dibromomethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.4	1	10/18/19 12:39	10/18/19 15:37	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	108-20-3	
Ethylbenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	87-68-3	
2-Hexanone	ND	ug/kg	52.2	1	10/18/19 12:39	10/18/19 15:37	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	99-87-6	
Methylene Chloride	ND	ug/kg	20.9	1	10/18/19 12:39	10/18/19 15:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	52.2	1	10/18/19 12:39	10/18/19 15:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	1634-04-4	
Naphthalene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	91-20-3	
n-Propylbenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	103-65-1	
Styrene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	79-34-5	
Tetrachloroethene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	127-18-4	
Toluene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	71-55-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: G18063
Pace Project No.: 92449737

Sample: B09 **Lab ID: 92449737002** Collected: 10/15/19 10:21 Received: 10/15/19 16:39 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A Volatile Organics	Analytical Method: EPA 8260D Preparation Method: EPA 5035A							
1,1,2-Trichloroethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	79-00-5	
Trichloroethene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	108-67-8	
Vinyl acetate	ND	ug/kg	52.2	1	10/18/19 12:39	10/18/19 15:37	108-05-4	L1,v1
Vinyl chloride	ND	ug/kg	10.4	1	10/18/19 12:39	10/18/19 15:37	75-01-4	
Xylene (Total)	ND	ug/kg	10.4	1	10/18/19 12:39	10/18/19 15:37	1330-20-7	
m&p-Xylene	ND	ug/kg	10.4	1	10/18/19 12:39	10/18/19 15:37	179601-23-1	
o-Xylene	ND	ug/kg	5.2	1	10/18/19 12:39	10/18/19 15:37	95-47-6	
Surrogates								
Toluene-d8 (S)	110	%	70-130	1	10/18/19 12:39	10/18/19 15:37	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130	1	10/18/19 12:39	10/18/19 15:37	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-132	1	10/18/19 12:39	10/18/19 15:37	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.9**	%	0.10	1		10/17/19 13:30		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: G18063
Pace Project No.: 92449737

QC Batch: 504508 Analysis Method: EPA 8260D
QC Batch Method: EPA 5035A Analysis Description: 8260D MSV 5035A Volatile Organics
Associated Lab Samples: 92449737001, 92449737002

METHOD BLANK: 2711188 Matrix: Solid
Associated Lab Samples: 92449737001, 92449737002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	10/18/19 14:48	
1,1,1-Trichloroethane	ug/kg	ND	5.0	10/18/19 14:48	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	10/18/19 14:48	
1,1,2-Trichloroethane	ug/kg	ND	5.0	10/18/19 14:48	
1,1-Dichloroethane	ug/kg	ND	5.0	10/18/19 14:48	
1,1-Dichloroethene	ug/kg	ND	5.0	10/18/19 14:48	
1,1-Dichloropropene	ug/kg	ND	5.0	10/18/19 14:48	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	10/18/19 14:48	
1,2,3-Trichloropropane	ug/kg	ND	5.0	10/18/19 14:48	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	10/18/19 14:48	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	10/18/19 14:48	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.0	10/18/19 14:48	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	10/18/19 14:48	
1,2-Dichlorobenzene	ug/kg	ND	5.0	10/18/19 14:48	
1,2-Dichloroethane	ug/kg	ND	5.0	10/18/19 14:48	
1,2-Dichloropropane	ug/kg	ND	5.0	10/18/19 14:48	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	10/18/19 14:48	
1,3-Dichlorobenzene	ug/kg	ND	5.0	10/18/19 14:48	
1,3-Dichloropropane	ug/kg	ND	5.0	10/18/19 14:48	
1,4-Dichlorobenzene	ug/kg	ND	5.0	10/18/19 14:48	
2,2-Dichloropropane	ug/kg	ND	5.0	10/18/19 14:48	
2-Butanone (MEK)	ug/kg	ND	100	10/18/19 14:48	
2-Chlorotoluene	ug/kg	ND	5.0	10/18/19 14:48	
2-Hexanone	ug/kg	ND	50.0	10/18/19 14:48	
4-Chlorotoluene	ug/kg	ND	5.0	10/18/19 14:48	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	50.0	10/18/19 14:48	
Acetone	ug/kg	ND	100	10/18/19 14:48	
Benzene	ug/kg	ND	5.0	10/18/19 14:48	
Bromobenzene	ug/kg	ND	5.0	10/18/19 14:48	
Bromochloromethane	ug/kg	ND	5.0	10/18/19 14:48	
Bromodichloromethane	ug/kg	ND	5.0	10/18/19 14:48	
Bromoform	ug/kg	ND	5.0	10/18/19 14:48	
Bromomethane	ug/kg	ND	10.0	10/18/19 14:48	
Carbon tetrachloride	ug/kg	ND	5.0	10/18/19 14:48	
Chlorobenzene	ug/kg	ND	5.0	10/18/19 14:48	
Chloroethane	ug/kg	ND	10.0	10/18/19 14:48	
Chloroform	ug/kg	ND	5.0	10/18/19 14:48	
Chloromethane	ug/kg	ND	10.0	10/18/19 14:48	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	10/18/19 14:48	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	10/18/19 14:48	
Dibromochloromethane	ug/kg	ND	5.0	10/18/19 14:48	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: G18063
Pace Project No.: 92449737

METHOD BLANK: 2711188 Matrix: Solid
Associated Lab Samples: 92449737001, 92449737002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	10/18/19 14:48	
Dichlorodifluoromethane	ug/kg	ND	10.0	10/18/19 14:48	
Diisopropyl ether	ug/kg	ND	5.0	10/18/19 14:48	
Ethylbenzene	ug/kg	ND	5.0	10/18/19 14:48	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	10/18/19 14:48	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	10/18/19 14:48	
m&p-Xylene	ug/kg	ND	10.0	10/18/19 14:48	
Methyl-tert-butyl ether	ug/kg	ND	5.0	10/18/19 14:48	
Methylene Chloride	ug/kg	ND	20.0	10/18/19 14:48	
n-Butylbenzene	ug/kg	ND	5.0	10/18/19 14:48	
n-Propylbenzene	ug/kg	ND	5.0	10/18/19 14:48	
Naphthalene	ug/kg	ND	5.0	10/18/19 14:48	
o-Xylene	ug/kg	ND	5.0	10/18/19 14:48	
p-Isopropyltoluene	ug/kg	ND	5.0	10/18/19 14:48	
sec-Butylbenzene	ug/kg	ND	5.0	10/18/19 14:48	
Styrene	ug/kg	ND	5.0	10/18/19 14:48	
tert-Butylbenzene	ug/kg	ND	5.0	10/18/19 14:48	
Tetrachloroethene	ug/kg	ND	5.0	10/18/19 14:48	
Toluene	ug/kg	ND	5.0	10/18/19 14:48	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	10/18/19 14:48	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	10/18/19 14:48	
Trichloroethene	ug/kg	ND	5.0	10/18/19 14:48	
Trichlorofluoromethane	ug/kg	ND	5.0	10/18/19 14:48	
Vinyl acetate	ug/kg	ND	50.0	10/18/19 14:48	v1
Vinyl chloride	ug/kg	ND	10.0	10/18/19 14:48	
Xylene (Total)	ug/kg	ND	10.0	10/18/19 14:48	
1,2-Dichloroethane-d4 (S)	%	97	70-132	10/18/19 14:48	
4-Bromofluorobenzene (S)	%	101	70-130	10/18/19 14:48	
Toluene-d8 (S)	%	111	70-130	10/18/19 14:48	

LABORATORY CONTROL SAMPLE: 2711189

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	53.7	107	70-130	
1,1,1-Trichloroethane	ug/kg	50	52.5	105	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	50	50.6	101	55-130	
1,1,2-Trichloroethane	ug/kg	50	52.1	104	70-130	
1,1-Dichloroethane	ug/kg	50	53.0	106	68-130	
1,1-Dichloroethene	ug/kg	50	56.2	112	70-130	
1,1-Dichloropropene	ug/kg	50	49.3	99	70-130	
1,2,3-Trichlorobenzene	ug/kg	50	53.7	107	70-130	
1,2,3-Trichloropropane	ug/kg	50	55.4	111	70-130	
1,2,4-Trichlorobenzene	ug/kg	50	53.3	107	70-130	
1,2,4-Trimethylbenzene	ug/kg	50	51.3	103	69-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: G18063
Pace Project No.: 92449737

LABORATORY CONTROL SAMPLE: 2711189

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/kg	50	55.0	110	57-141	
1,2-Dibromoethane (EDB)	ug/kg	50	55.0	110	70-130	
1,2-Dichlorobenzene	ug/kg	50	50.5	101	70-130	
1,2-Dichloroethane	ug/kg	50	54.9	110	70-130	
1,2-Dichloropropane	ug/kg	50	51.4	103	70-130	
1,3,5-Trimethylbenzene	ug/kg	50	52.3	105	70-130	
1,3-Dichlorobenzene	ug/kg	50	50.3	101	70-130	
1,3-Dichloropropane	ug/kg	50	55.4	111	70-130	
1,4-Dichlorobenzene	ug/kg	50	50.3	101	70-130	
2,2-Dichloropropane	ug/kg	50	55.5	111	70-130	
2-Butanone (MEK)	ug/kg	100	112	112	60-130	
2-Chlorotoluene	ug/kg	50	51.0	102	70-130	
2-Hexanone	ug/kg	100	119	119	70-132	
4-Chlorotoluene	ug/kg	50	52.3	105	70-130	
4-Methyl-2-pentanone (MIBK)	ug/kg	100	116	116	69-130	
Acetone	ug/kg	100	117	117	49-148	
Benzene	ug/kg	50	54.8	110	70-130	
Bromobenzene	ug/kg	50	50.2	100	70-130	
Bromochloromethane	ug/kg	50	50.5	101	70-130	
Bromodichloromethane	ug/kg	50	55.3	111	70-130	
Bromoform	ug/kg	50	52.7	105	68-136	
Bromomethane	ug/kg	50	53.1	106	60-140	
Carbon tetrachloride	ug/kg	50	51.2	102	70-130	
Chlorobenzene	ug/kg	50	49.8	100	70-130	
Chloroethane	ug/kg	50	56.4	113	51-147	
Chloroform	ug/kg	50	46.9	94	70-130	
Chloromethane	ug/kg	50	58.2	116	48-130	
cis-1,2-Dichloroethene	ug/kg	50	52.3	105	70-130	
cis-1,3-Dichloropropene	ug/kg	50	55.2	110	70-130	
Dibromochloromethane	ug/kg	50	54.0	108	70-130	
Dibromomethane	ug/kg	50	52.3	105	70-130	
Dichlorodifluoromethane	ug/kg	50	61.1	122	49-130	
Diisopropyl ether	ug/kg	50	55.6	111	66-130	
Ethylbenzene	ug/kg	50	51.7	103	70-130	
Hexachloro-1,3-butadiene	ug/kg	50	52.6	105	70-130	
Isopropylbenzene (Cumene)	ug/kg	50	51.0	102	70-130	
m&p-Xylene	ug/kg	100	103	103	70-130	
Methyl-tert-butyl ether	ug/kg	50	53.1	106	70-130	
Methylene Chloride	ug/kg	50	48.8	98	50-137	
n-Butylbenzene	ug/kg	50	52.4	105	70-130	
n-Propylbenzene	ug/kg	50	52.6	105	70-130	
Naphthalene	ug/kg	50	52.2	104	70-131	
o-Xylene	ug/kg	50	50.1	100	70-130	
p-Isopropyltoluene	ug/kg	50	50.9	102	70-130	
sec-Butylbenzene	ug/kg	50	51.2	102	70-130	
Styrene	ug/kg	50	48.5	97	70-130	
tert-Butylbenzene	ug/kg	50	45.5	91	69-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: G18063
Pace Project No.: 92449737

LABORATORY CONTROL SAMPLE: 2711189

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	50	52.8	106	56-130	
Toluene	ug/kg	50	51.5	103	70-130	
trans-1,2-Dichloroethene	ug/kg	50	52.5	105	70-130	
trans-1,3-Dichloropropene	ug/kg	50	57.1	114	70-130	
Trichloroethene	ug/kg	50	51.8	104	70-141	
Trichlorofluoromethane	ug/kg	50	57.0	114	67-130	
Vinyl acetate	ug/kg	100	149	149	10-136	L1,v1
Vinyl chloride	ug/kg	50	58.2	116	67-130	
Xylene (Total)	ug/kg	150	154	102	70-130	
1,2-Dichloroethane-d4 (S)	%			104	70-132	
4-Bromofluorobenzene (S)	%			102	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE SAMPLE: 2712535

Parameter	Units	92449737002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	22.2	22.2	100	52-133	
1,1,1-Trichloroethane	ug/kg	ND	22.2	26.1	117	49-137	
1,1,2,2-Tetrachloroethane	ug/kg	ND	22.2	22.2	100	39-150	
1,1,2-Trichloroethane	ug/kg	ND	22.2	23.3	105	48-140	
1,1-Dichloroethane	ug/kg	ND	22.2	24.9	112	46-135	
1,1-Dichloroethene	ug/kg	ND	22.2	28.1	126	38-149	
1,1-Dichloropropene	ug/kg	ND	22.2	24.5	110	41-140	
1,2,3-Trichlorobenzene	ug/kg	ND	22.2	21.6	97	10-158	
1,2,3-Trichloropropane	ug/kg	ND	22.2	23.6	106	33-157	
1,2,4-Trichlorobenzene	ug/kg	ND	22.2	21.3	96	10-155	
1,2,4-Trimethylbenzene	ug/kg	ND	22.2	22.0	99	24-154	
1,2-Dibromo-3-chloropropane	ug/kg	ND	22.2	24.5	110	33-158	
1,2-Dibromoethane (EDB)	ug/kg	ND	22.2	22.8	103	40-136	
1,2-Dichlorobenzene	ug/kg	ND	22.2	21.5	97	27-146	
1,2-Dichloroethane	ug/kg	ND	22.2	24.4	110	49-140	
1,2-Dichloropropane	ug/kg	ND	22.2	24.4	110	44-143	
1,3,5-Trimethylbenzene	ug/kg	ND	22.2	22.6	102	40-144	
1,3-Dichlorobenzene	ug/kg	ND	22.2	21.6	97	33-140	
1,3-Dichloropropane	ug/kg	ND	22.2	23.1	104	47-147	
1,4-Dichlorobenzene	ug/kg	ND	22.2	21.5	97	35-139	
2,2-Dichloropropane	ug/kg	ND	22.2	25.7	116	41-140	
2-Butanone (MEK)	ug/kg	ND	44.4	45.2J	102	10-181	
2-Chlorotoluene	ug/kg	ND	22.2	22.6	102	38-147	
2-Hexanone	ug/kg	ND	44.4	45.2J	102	18-169	
4-Chlorotoluene	ug/kg	ND	22.2	22.4	101	36-145	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	44.4	47.2J	106	16-175	
Acetone	ug/kg	ND	44.4	64J	129	10-200	
Benzene	ug/kg	ND	22.2	25.4	114	46-136	
Bromobenzene	ug/kg	ND	22.2	22.6	102	38-149	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: G18063
Pace Project No.: 92449737

MATRIX SPIKE SAMPLE: 2712535

Parameter	Units	92449737002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromochloromethane	ug/kg	ND	22.2	24.8	112	44-142	
Bromodichloromethane	ug/kg	ND	22.2	24.8	111	41-140	
Bromoform	ug/kg	ND	22.2	22.9	103	34-145	
Bromomethane	ug/kg	ND	22.2	23.2	104	14-162	
Carbon tetrachloride	ug/kg	ND	22.2	27.4	123	44-141	
Chlorobenzene	ug/kg	ND	22.2	22.6	102	39-141	
Chloroethane	ug/kg	ND	22.2	34.7	156	10-182	
Chloroform	ug/kg	ND	22.2	25.6	115	45-140	
Chloromethane	ug/kg	ND	22.2	28.1	126	19-149	
cis-1,2-Dichloroethene	ug/kg	ND	22.2	24.9	112	38-150	
cis-1,3-Dichloropropene	ug/kg	ND	22.2	25.3	114	30-144	
Dibromochloromethane	ug/kg	ND	22.2	21.7	98	36-145	
Dibromomethane	ug/kg	ND	22.2	23.8	107	41-145	
Dichlorodifluoromethane	ug/kg	ND	22.2	30.8	138	16-146	
Diisopropyl ether	ug/kg	ND	22.2	23.6	106	41-143	
Ethylbenzene	ug/kg	ND	22.2	23.5	106	35-144	
Hexachloro-1,3-butadiene	ug/kg	ND	22.2	22.9	103	10-160	
Isopropylbenzene (Cumene)	ug/kg	ND	22.2	22.9	103	30-152	
m&p-Xylene	ug/kg	ND	44.4	46.6	105	33-145	
Methyl-tert-butyl ether	ug/kg	ND	22.2	22.7	102	49-140	
Methylene Chloride	ug/kg	ND	22.2	23.3	105	10-174	
n-Butylbenzene	ug/kg	ND	22.2	22.6	102	10-160	
n-Propylbenzene	ug/kg	ND	22.2	23.5	106	24-159	
Naphthalene	ug/kg	ND	22.2	20.3	91	10-171	
o-Xylene	ug/kg	ND	22.2	22.9	103	31-150	
p-Isopropyltoluene	ug/kg	ND	22.2	22.9	103	21-154	
sec-Butylbenzene	ug/kg	ND	22.2	23.7	107	19-159	
Styrene	ug/kg	ND	22.2	21.3	96	15-152	
tert-Butylbenzene	ug/kg	ND	22.2	20.9	94	31-141	
Tetrachloroethene	ug/kg	ND	22.2	23.4	105	19-141	
Toluene	ug/kg	ND	22.2	24.4	110	31-146	
trans-1,2-Dichloroethene	ug/kg	ND	22.2	25.4	114	28-157	
trans-1,3-Dichloropropene	ug/kg	ND	22.2	23.4	106	25-146	
Trichloroethene	ug/kg	ND	22.2	24.6	111	34-149	
Trichlorofluoromethane	ug/kg	ND	22.2	29.4	132	10-167	
Vinyl acetate	ug/kg	ND	44.4	57.7	130	10-200	
Vinyl chloride	ug/kg	ND	22.2	28.2	127	36-155	
Xylene (Total)	ug/kg	ND	66.7	69.5	104	29-148	
1,2-Dichloroethane-d4 (S)	%				109	70-132	
4-Bromofluorobenzene (S)	%				97	70-130	
Toluene-d8 (S)	%				101	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: G18063
Pace Project No.: 92449737

SAMPLE DUPLICATE: 2712534

Parameter	Units	92449737001 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		
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		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: G18063
Pace Project No.: 92449737

SAMPLE DUPLICATE: 2712534

Parameter	Units	92449737001 Result	Dup Result	RPD	Qualifiers
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		
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	108	100		
4-Bromofluorobenzene (S)	%	101	99		
Toluene-d8 (S)	%	103	108		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: G18063
Pace Project No.: 92449737

QC Batch: 504241
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 92449737001, 92449737002

SAMPLE DUPLICATE: 2709812

Parameter	Units	92449529001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	25.1	25.5	1	

SAMPLE DUPLICATE: 2709813

Parameter	Units	92449810001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	12.2	12.8	4	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: G18063
Pace Project No.: 92449737

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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 TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: G18063
Pace Project No.: 92449737

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92449737001	**B08**	EPA 5035A	504508	EPA 8260D	504512
92449737002	**B09**	EPA 5035A	504508	EPA 8260D	504512
92449737001	**B08**	ASTM D2974-87	504241		
92449737002	**B09**	ASTM D2974-87	504241		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

WO# : 92449737

92449737

Company: FAICON	Billing Information: SAME
Address: 1210 TRINITY Rd STE 110	
Report To: CB CARY NC 27513	Email To: CburKhardt@falconengineers.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: G18063	State: NC County/City: Mooresville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: 9197300084 Email:	Site/Facility ID #: Compliance Monitoring? [ ] Yes [X] No
Collected By (print): C BURKHARDT	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: 10-18-19 Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [X] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis: 8260

Container Preservative Type **: 6 7 0

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other DI WATER

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: 8260 Chlorinated Solvents
B08	SL	G	10/15/19	1049				6	X
B09	SL	G	10/15/19	1021				6	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

LAB USE ONLY:
Lab Sample # / Comments:
92449737

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2409979

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: 917005
Cooler 1 Temp Upon Receipt: 6.1 oC
Cooler 1 Therm Corr. Factor: 0.1 oC
Cooler 1 Corrected Temp: 6.0 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
FAICON	10/15/19 1639		10/15/19 1639
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: of:

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: FAICON	Billing Information: SAME
Address: 1210 TRINITY Rd ST 110	
Report To: CB CARY NC 27513	Email To: cburkhardt@faiconengineers.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: G18063	State: NC County/City: Mooresville Time Zone Collected: [ ] PT [ ] MT [ ] CT [X] ET
Phone: 9197300064 Email:	Site/Facility ID #: Compliance Monitoring? [ ] Yes [X] No
Collected By (print): C BURKHARDT	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: 10-18-19 Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [X] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis: 8260

Container Preservative Type **: 6 7 0

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other DI WATER

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: 8260 Chlorinated Solvents
B08	SL	G	101519	1049				6	X
B09	SL	G	101519	1021				6	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2409979

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: 917005
Cooler 1 Temp Upon Receipt: 6.1 oC
Cooler 1 Therm Corr. Factor: -0.1 oC
Cooler 1 Corrected Temp: 6.0 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
FAICON	10/15/19 1639		10/15/19 1639

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: _____ of: _____

PYRAMID GEOPHYSICAL SERVICES
(PROJECT 2019-260)

GEOPHYSICAL SURVEY

METALLIC UST INVESTIGATION:
PARCEL 68
NCDOT PROJECT R-3833C

2785 CHARLOTTE HIGHWAY, MOORESVILLE, NC

September 6, 2019

Report prepared for: **Christopher J. Burkhardt, PWS**
Falcon Engineers
1210 Trinity Rd. #110
Raleigh, NC 27607

Prepared by: _____

Eric C. Cross, P.G.
NC License #2181

Reviewed by: _____

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C257: GEOLOGY C1251: ENGINEERING

GEOPHYSICAL INVESTIGATION REPORT
Parcel 68 - 2785 Charlotte Highway
Mooresville, Iredell County, North Carolina

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Figures

LIST OF ACRONYMS

CADD .....Computer Assisted Drafting and Design
DF .....Dual Frequency
EM.....Electromagnetic
GPR.....Ground Penetrating Radar
GPS .....Global Positioning System
NCDOT.....North Carolina Department of Transportation
ROW .....Right-of-Way
UST .....Underground Storage Tank

EXECUTIVE SUMMARY

Project Description: Pyramid Environmental conducted a geophysical investigation for Falcon Engineers at Parcel 68, located at 2785 Charlotte Highway in Mooresville, NC. The survey was part of an NCDOT Right-of-Way (ROW) investigation (NCDOT Project R-3833C). The survey was designed to extend from the existing edge of pavement into the proposed ROW and/or easements, whichever distance was greater. Conducted from August 11-12, 2019, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

Geophysical Results: The geophysical investigation consisted of electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys. A total of nine EM anomalies were identified. The majority of the EM anomalies were directly attributed to visible cultural features at the ground surface. GPR was performed across areas containing significant metallic interference associated with vehicles, a reinforced concrete pipe, and known buried utility lines. No additional significant buried structures were identified. Collectively, the geophysical data did not record any evidence of metallic USTs within the survey area at Parcel 68.

INTRODUCTION

Pyramid Environmental conducted a geophysical investigation for Falcon Engineers at Parcel 68, located at 2785 Charlotte Highway in Mooresville, NC. The survey was part of an NCDOT Right-of-Way (ROW) investigation (NCDOT Project R-3833C). The survey was designed to extend from the existing edge of pavement into the proposed ROW and/or easements, whichever distance was greater. Conducted from August 11-12, 2019, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

The site included a strip mall surrounded by concrete, grass, and asphalt surfaces. An aerial photograph showing the survey area boundaries and ground-level photographs are shown in **Figure 1**.

FIELD METHODOLOGY

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys. Pyramid collected the EM data using a Geonics EM61-MK2 (EM61) metal detector integrated with a Geode External GPS/GLONASS receiver. The integrated GPS system allows the location of the instrument to be recorded in real-time during data collection, resulting in an EM data set that is geo-referenced and can be overlain on aerial photographs and CADD drawings. A boundary grid was established around the perimeter of the site with marks every 10 feet to maintain orientation of the instrument throughout the survey and assure complete coverage of the area.

According to the instrument specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. Smaller objects (1-foot or less in size) can be detected to a maximum depth of 4 to 5 feet. The EM61 data were digitally collected at approximately 0.8-foot intervals along north-south trending or east-west trending, generally parallel survey lines, spaced five feet apart. The data were downloaded to a

computer and reviewed in the field and office using the Geonics NAV61 and Surfer for Windows Version 15.0 software programs.

GPR data were acquired across select EM anomalies on August 12, 2019, using a Geophysical Survey Systems, Inc. (GSSI) SIR 4000 controller with a 350 MHz HS antenna. Data were collected both in reconnaissance fashion as well as along formal transect lines across EM features. The GPR data were viewed in real-time using a vertical scan of 512 samples, at a rate of 48 scans per second. GPR data were viewed down to a maximum depth of approximately 6 feet, based on dielectric constants calculated by the DF unit in the field during the reconnaissance scans. GPR transects across specific anomalies were saved to the hard drive of the DF unit for post-processing and figure generation.

Pyramid's classifications of USTs for the purposes of this report are based directly on the geophysical UST ratings provided by the NCDOT. These ratings are as follows:

Geophysical Surveys for Underground Storage Tanks
on NCDOT Projects

High Confidence	Intermediate Confidence	Low Confidence	No Confidence
Known UST Active tank - spatial location, orientation, and approximate depth determined by geophysics.	**Probable UST** Sufficient geophysical data from both magnetic and radar surveys that is characteristic of a tank. Interpretation may be supported by physical evidence such as fill/vent pipe, metal cover plate, asphalt/concrete patch, etc.	**Possible UST** Sufficient geophysical data from either magnetic or radar surveys that is characteristic of a tank. Additional data is not sufficient enough to confirm or deny the presence of a UST.	Anomaly noted but not characteristic of a UST. Should be noted in the text and may be called out in the figures at the geophysicist's discretion.

DISCUSSION OF RESULTS

Discussion of EM Results

A contour plot of the EM61 results obtained across the survey area at the property is presented in **Figure 2**. Each EM anomaly is numbered for reference in the figure. The following table presents the list of EM anomalies and the cause of the metallic response, if known:

LIST OF METALLIC ANOMALIES IDENTIFIED BY EM SURVEY

Metallic Anomaly #	Cause of Anomaly	Investigated with GPR
1	Known Buried Utilities	✓
2	Vehicles	✓
3	Light Pole	
4	Hydrant	
5	Sign	
6	Vehicles	✓
7	Drop Inlet	
8	Reinforced Concrete Pipe	✓
9	Utilities	

The majority of the EM anomalies were directly attributed to visible cultural features at the ground surface, including vehicles, a light pole, a hydrant, a sign, a drop inlet, a reinforced concrete pipe, and utilities. EM Anomaly 1 was in the location of known buried utilities and was investigated to confirm that the anomaly was a result of these utilities. EM Anomalies 2 and 6 were associated with vehicles at the site and were investigated with GPR to confirm that the metallic interference associated with these vehicles did not obscure any significant buried structures such as USTs. EM Anomaly 8 was in the location of a suspected reinforced concrete pipe and was investigated with GPR to confirm that the anomaly was a result of the reinforced concrete pipe.

Discussion of GPR Results

Figure 3 presents the locations of the formal GPR transects performed at the property as well as the transect images. A total of four formal GPR transects were performed at the site.

GPR Transects 1 and 2 were performed across EM Anomalies 8 and 1, respectively. These transects confirmed the presence of a reinforced concrete pipe and known buried utilities and verified that the EM anomaly observed in this area is a result of this known utility.

GPR Transects 3 and 4 were performed across EM Anomalies 6 and 2, respectively. These transects confirmed that the metallic interference caused by the vehicles at the site did not obscure any significant buried structures such as USTs.

Collectively, the geophysical data did not record any evidence of metallic USTs within the survey area at Parcel 68. **Figure 4** provides an overlay of the metal detection results on the NCDOT MicroStation engineering plans for reference.

SUMMARY & CONCLUSIONS

Pyramid's evaluation of the EM61 and GPR data collected at Parcel 68 in Mooresville, North Carolina, provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the accessible portions of the geophysical survey area.
- The majority of the EM anomalies were directly attributed to visible cultural features at the ground surface.
- GPR was performed across areas containing significant metallic interference associated with vehicles, a reinforced concrete pipe, and known buried utility lines. No additional significant buried structures were identified.
- Collectively, the geophysical data did not record any evidence of metallic USTs within the survey area at Parcel 68.

LIMITATIONS

Geophysical surveys have been performed and this report was prepared for Falcon Engineers in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR surveys are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project have not conclusively determined the definitive presence or absence of metallic USTs, but the evidence collected is sufficient to result in the conclusions made in this report. Additionally, it should be understood that areas containing extensive

vegetation, reinforced concrete, or other restrictions to the accessibility of the geophysical instruments could not be fully investigated.

APPROXIMATE BOUNDARIES OF GEOPHYSICAL SURVEY AREA

View of Survey Area
(Facing Approximately South)

View of Survey Area
(Facing Approximately North)

N

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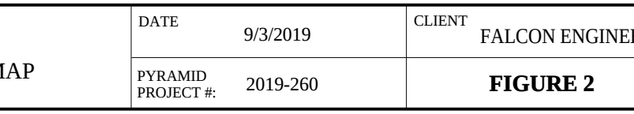
PROJECT: PARCEL 68 MOORESVILLE, NORTH CAROLINA NCDOT PROJECT R-3833C	TITLE: PARCEL 68 - GEOPHYSICAL SURVEY BOUNDARIES AND SITE PHOTOGRAPHS	DATE: 9/3/2019 PYRAMID PROJECT #: 2019-260	CLIENT: FALCON ENGINEERS **FIGURE 1**

EM61 METAL DETECTION RESULTS

NO EVIDENCE OF METALLIC USTs WAS OBSERVED.

The contour plot shows the differential results of the EM61 instrument in millivolts (mV). The differential results focus on larger metallic objects such as USTs and drums. The EM data were collected on August 11, 2019, using a Geonics EM61-MK2 instrument. Verification GPR data were collected using a GSSI SIR 4000 controller equipped with a 350 MHz HS antenna on August 12, 2019.

EM61 Metal Detection Response (millivolts)



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PROJECT
PARCEL 68
MOORESVILLE, NORTH CAROLINA
NCDOT PROJECT R-3833C

TITLE
PARCEL 68 -
EM61 METAL DETECTION CONTOUR MAP

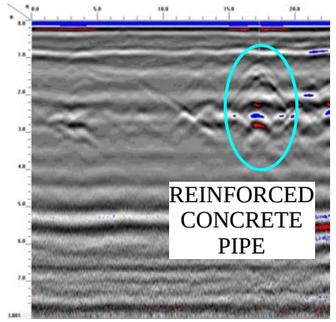
DATE 9/3/2019

PYRAMID PROJECT #: 2019-260

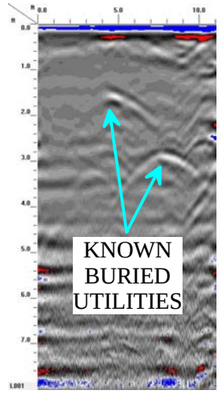
CLIENT FALCON ENGINEERS

FIGURE 2

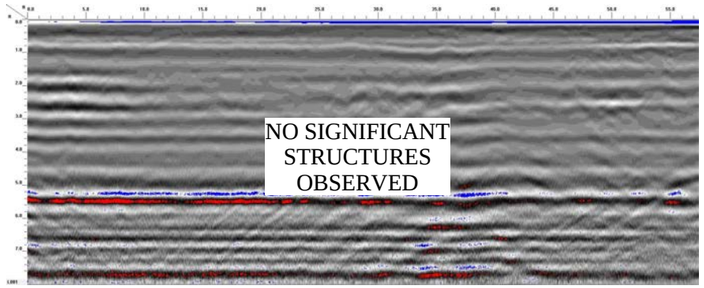
LOCATIONS OF GPR TRANSECTS



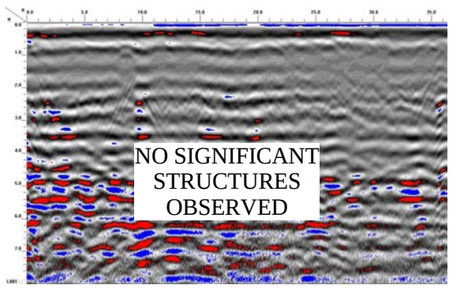
GPR TRANSECT 1 (T1)



GPR TRANSECT 2 (T2)



GPR TRANSECT 3 (T3)



GPR TRANSECT 4 (T4)

N

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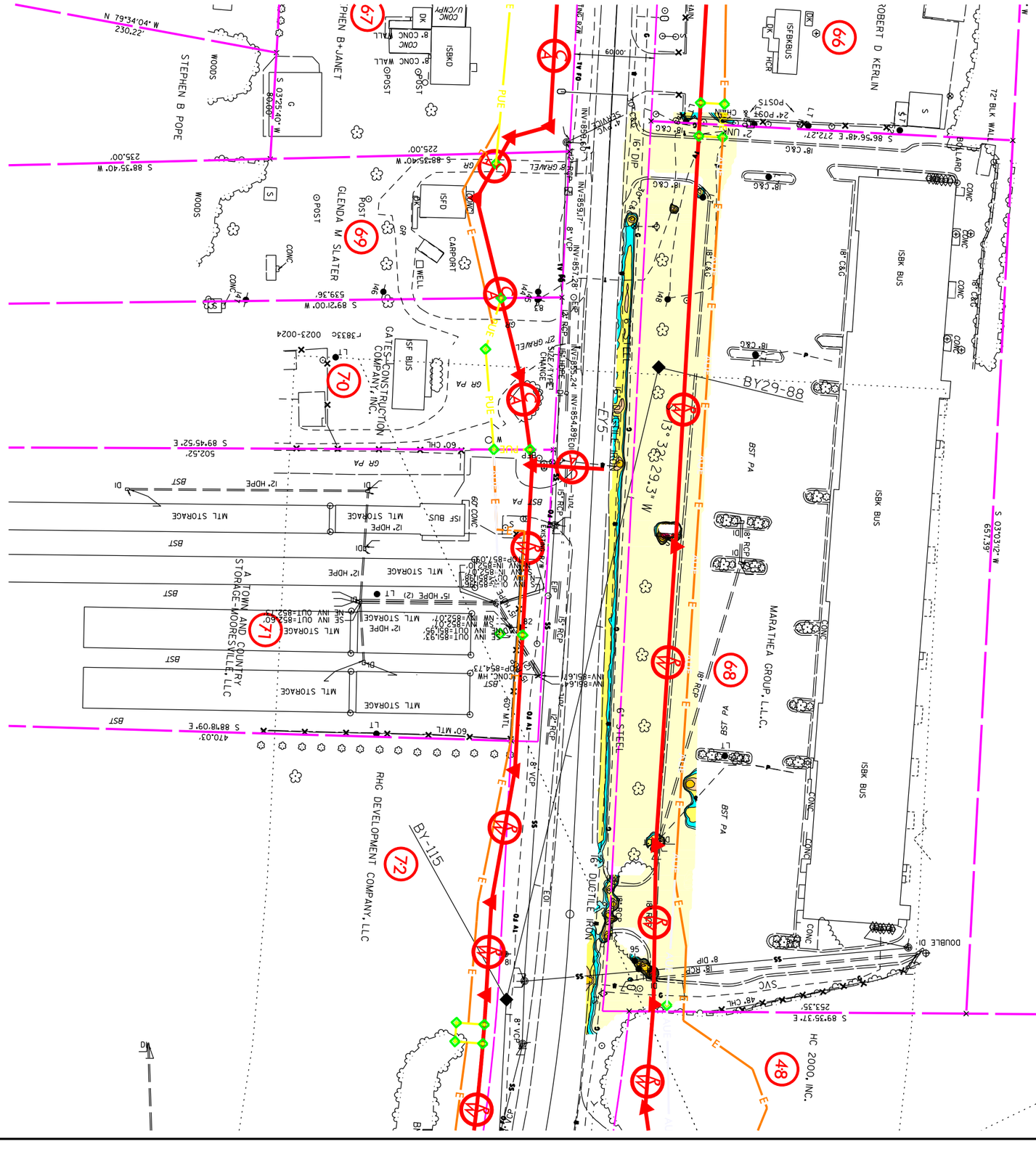
PROJECT: PARCEL 68 MOORESVILLE, NORTH CAROLINA NCDOT PROJECT R-3833C	TITLE: PARCEL 68 - GPR TRANSECT LOCATIONS AND IMAGES	DATE: 9/3/2019 PYRAMID PROJECT #: 2019-260	CLIENT: FALCON ENGINEERS **FIGURE 3**



LEGEND

- EXISTING ROW
- EXISTING PROPERTY BOUNDARY
- PROPOSED ROW LINE
- TEMPORARY CONSTRUCTION EASEMENT
- PROPOSED PERMANENT UTILITY EASEMENT
- PROPOSED SS CUT LINE
- PROPOSED SS FILL LINE

MILLIVOLTS (mV)

1000 750 500 400 300 200 150 100 75 60 50 40 30 -90 -100 -200 -400 -1000

TITLE

OVERLAY OF METAL DETECTION RESULTS ON NCDOT ENGINEERING PLANS

PROJECT

PARCEL 68
MOORESVILLE, NORTH CAROLINA
NCDOT PROJECT R-3833C

PYRAMID GEOPHYSICS
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DATE: 09-06-2019	REVISION NO. 0
PYRAMID PROJECT NO. 2019-260	FIGURE NO. 4

NORTH CAROLINA DIVISION OF WASTE MANAGEMENT
Dry Cleaning Solvent Cleanup Act (DSCA) Compliance Program
Inspection Report
Date: 6/14/2018

Facility Identification
U.S. 2.50 Cleaners
Facility ID: 490002C
EPA Generator ID: CESQG
County/FIPS: Iredell/097
DSCA Cleanup ID: --

Facility Data
U.S. 2.50 Cleaners
2785 Charlotte Hwy, Ste 11
Mooresville NC 28117
Lat: 35.581111 **Long:** -80.839444
SIC: 7216 / Dry Cleaning Plants, Except Rugs
NAICS: 81232/ Dry Cleaning and Laundry Services (except Coin-Operated)
Date of Facility Establishment: 1/1/2000

Compliance Data
Inspection Date: 6/14/2018
Time In: 08:00 AM **Time Out:** 08:55 AM
Inspectors: Aram Kim, Rachel Clarke
Operating Status: OO/Operating
Compliance Codes: In Violation of MMP
Action Code: 01/Inspection

Contact Data

Facility Contact	Facility Owner	Property Owner
Paul Lee 2785 Charlotte Hwy, Ste 11 Mooresville, NC 28117 (704) 799-0059	Paul Lee 2785 Charlotte Hwy, Ste 11 Mooresville, NC 28117 (704) 799-0059 (704) 818-7615	Marathea Group LLC P.O. Box 26104 Winston Salem, NC 27114

Classification Data
Service Type: Full Service (Active)
Solvent: Perchloroethylene
System: Dry-to-Dry
Installation Date: 2000
Installation Category: New
Consumption Category: Small
HW Generator Status: CESQG

Inspector's Signature: Aram Kim

Date of Signature: 6/14/18

Comments:
NOV/NRE will be issued.

(I) DIRECTIONS: From the Mooresville Regional Office at 610 East Center Avenue in Mooresville, go west on East Center Avenue. Turn left onto S. Broad St./ NC-115. Turn right onto W. Wilson Ave. Turn right onto Charlotte Hwy / US-21. The dry cleaning facility is located on the right at 2785 Charlotte Hwy, in the Marathea Shopping Center.

(II) FACILITY HISTORY: U.S. 2.50 Cleaners was established in 2000 by Paul Lee. Mr. Lee sold the business to Mr. Nam Cho in 2007, who operated the plant until 2009 when he left the country. Mr. Lee took over the business again after Mr. Cho left. Mr. Lee owned another facility called U.S. 2.50 Cleaners, located at 7558 Hwy. 73, #101, in Denver, NC. This was a full service plant until Mr. Lee shut down the machine and operated the facility as a drop-off/pick-up store until it was closed permanently.

Solvent History:

Solvent	Dates Used
Perchloroethylene	2000 to Present

Previous Inspections:

Date	Visit Type	Violation Type(s)	Worst Violation(s)	Action(s) Taken	Response Due	Received Date	Inspector
8/31/2016	Inspection	MMP, NESHAP	Improper maintenance of WWTU, NESHAP Procedural Violations, NESHAP Recordkeeping Violations, No WWTU records	NOVNRE sent on 10/4/2016	10/25/2016	N/A or Not Rec'd	Aram Kim

8/31/2016	Inspection	MMP, NESHAP	Improper maintenance of WWTU, NESHAP Procedural Violations, NESHAP Recordkeeping Violations, No WWTU records	CHKLST sent on 8/31/2016	None	N/A or Not Rec'd	Aram Kim
12/8/2015	Inspection	MMP, NESHAP	Discharging vacuum pump condensate into floor drain, NESHAP Procedural Violations, NESHAP Recordkeeping Violations	NOV sent on 12/10/2015	1/8/2016	1/12/2016	Aram Kim
				CHKLST sent on 12/8/2015	None	N/A or Not Rec'd	
2/25/2014	Inspection	MMP, NESHAP	NESHAP Procedural Violations & Recordkeeping Violations, No WWTU records	CHKLST sent on 2/25/2014	3/18/2014	3/24/2014	Alicia Roh
6/7/2011	Initial Inspection	MMP, NESHAP	No spill cont. (waste, wwtu), No records on site	CHKLST sent on 6/7/2011	6/21/2011	6/20/2011	Jason Gill
				NOVNRE sent on 8/31/2011	9/21/2011	9/23/2011	
2/19/2008	Outreach Training Visit	MMP, NESHAP	No spill cont. (waste drum, wwtu), No records on site	CAL sent on 2/25/2008	3/17/2008	N/A or Not Rec'd	Alicia Roh

Complaints: None

DSCA Sampling: None

(III) FACILITY CLASSIFICATION:

NESHAP INSTALLATION CATEGORY – New: U.S. 2.50 Cleaners utilizes a 4th Generation dry-to-dry dry cleaning machine that was installed in 2000. Since the dry cleaning machine was installed after December 9, 1991, the dry cleaning machine is classified as a 'New' machine installation.

Dry Cleaning Equipment Summary

No	Type of Machine	Gen	Manufacturer (Mfr)	Model #	Serial #	Mfr Date	Install Date	Solvent Used	Observed Operating?
1	Dry-to-Dry	4th	Firbimatic	Axial 50-plus	139F00106	2000	2000	Perchloroethylene	yes

NESHAP SOURCE CATEGORY - SMALL: U.S. 2.50 Cleaners is classified as a Small Area Source because it purchased less than 140 gallons of perc during the previous 12-month period. Based on a review of the receipts for the past year, U.S. 2.50 Cleaners purchased 30 gallons of perc from Phenix Supply Company in the last 12 months.

HAZARDOUS WASTE GENERATOR CATEGORY - CESQG: U.S. 2.50 Cleaners is classified as a Conditionally Exempt Small Quantity Generator (CESQG) because the facility has routinely generated less than 220 pounds of waste per month during the past 12 months, and stores less than 2,200 pounds of hazardous waste on site. U.S. 2.50 Cleaners has contracted with Safety Kleen (EPA ID# TXR000050930) to transport the facility-generated hazardous waste to a licensed Treatment Storage or Disposal (TSD) facility. The most recent hazardous waste generated was transported to Safety Kleen in Charlotte, NC (EPA ID# NCD079060059). Three years of hazardous waste manifests were not on site and available for review. The last waste pickup occurred on September 21, 2012, when a total of 450 pounds of

hazardous waste were transported off site (Liquid & Filters waste). One partially full 15-gallon drum of hazardous waste was observed on site at the time of the inspection (approx. 80 lbs). The facility utilizes an onsite wastewater treatment unit (WWTU) to dispose of facility-generated contact water.

(IV) INSPECTION SUMMARY: On June 14, 2018, Aram Kim and Rachel Clarke, Compliance Inspectors, with the North Carolina Division of Waste Management, Dry Cleaning Solvent Cleanup Act (DSCA) Program conducted a Compliance Inspection at U.S. 2.50 Cleaners. The inspectors met with Mr. Paul Lee, store owner, who provided the inspectors access to the facility's equipment and available records.

The facility continues to use the same dry cleaning machine that was observed during previous inspections. Mr. Lee stated that the machine is operated only 2-3 loads per week, and wet-cleans mostly. Mr. Lee said that he usually operates the machine on Tuesday and Wednesday, but he does not have specific schedule to operate the machine. The machine was observed in operation at the time of the inspection. No vapor leaks were discovered with the inspector's halogen leak detector. Mr. Lee showed his halogen detector that he uses at least once a month for required leak detection inspections. Separator water was collected in a container that was stored within the machine spill pan. About a cup of separator water was observed and Mr. Lee estimated that about 0.5 gallon or less separator water is generated per month.

The vacuum pump is located in the boiler room. No pump condensate was observed at the time of the inspection and Mr. Lee said that almost nothing comes out from the vacuum pump.

Facility generated contact water is treated in the onsite wastewater treatment unit (WWTU) manufactured by Galaxy. The WWTU is stored within spill containment and the misting nozzle is mounted on the rear exterior wall of the facility. Mr. Lee stated that he changes the filters on the WWTU every 12 months. However, the inspector observed the date of filter change, 9/15/16, on the secondary filter of the Galaxy mister and asked Mr. Lee if he changed filters on the WWTU after 9/15/16. Mr. Lee said that he does not recall if he did change filter after 9/15/16 or not. Ms. Kim told the owner to go ahead and change filters on the WWTU since 9/15/16 could be the most recent filter change which was over a year ago. The operation manual was kept on site. The misting nozzles were mounted on the exterior wall of the building in a visible location. Ms. Kim recommended Mr. Lee to not operate the WWTU until he changes the filters.

The hazardous waste drum (15-gallon, about 2/3 full) is stored next to the dry cleaning machine without spill containment. The inspector told the owner that any drums containing liquid waste should be stored within adequate spill containment. Mr. Lee apologized said that he will ask his son to help moving the waste drum onto spill containment as soon as possible. The only type of spotting agent used on site is POG. No spotting agents containing PCE or TCE are used on site.

Five years of perc purchase receipts were kept on site available for review. However, the owner was not able to locate the waste disposal manifest. Ms. Kim told the owner to contact his waste hauler to obtain the waste pickup records. The inspectors reminded Mr. Lee that three years of waste disposal manifests should be maintained on site. DSCA Compliance Calendars were maintained on site with required recordkeeping completed.

Emergency spill cleanup material was stored on site. Emergency information form was completed and posted on site.

The following is a summary of U.S. 2.50 Cleaners' compliance with respect to the DSCA Required Minimum Management Practices provided in 15A NCAC 02S.0202, National Emission Standards for Hazardous Air Pollutants (NESHAP) found in 40 CFR Part 63 Subpart M and Resource Conservation, and Recovery Act (RCRA) referenced in 40 CFR part 261.5 and 262.

MMP VIOLATIONS - 15A NCAC 02S.0202

1. Wastewater treatment equipment was not operated in accordance with the manufacturer's specifications, which allowed water containing dry-cleaning solvent to be discharged into the environment.

2. A complete three year history of dry-cleaning solvent waste disposal invoices was not made available to the Department.

3. Spill containment was not installed under and around the waste solvent storage containers.

4. Emergency spill clean-up materials were not available at the time of the inspection.

NESHAP VIOLATIONS - 40 CFR Part 63 Subpart M

None

RCRA VIOLATIONS - Hazardous Waste Regulations: 40 CFR Part 262.34

None

(V) CONCLUSIONS: Based on observations documented by the DSCA Inspectors during the June 14, 2018 inspection, U.S. 2.50 Cleaners is currently in violation of the following regulations:

MMPs - 15A NCAC 02S.0202

(b)(1)	Failure to prevent solvent waste from discharging into the environment. [15 NCAC 0202 (b)(1)].
(b)(1)	Failure to maintain complete and current invoices for waste disposal [15A NCAC 02S.0202(b)(1)]. Waste manifests are required to be kept on site for three years and available for review.
(b)(2)	Failure to maintain spill containment under and around the waste solvent storage area by January 1, 2002 [15 NCAC 0202 (b)(2)]. Spill containment shall have a volumetric capacity of 110 percent of the largest vessel, tank, or container within the spill containment area and shall be capable of preventing the release of the applicable dry cleaning solvent beyond the spill containment area for a period of at least 72 hours.
(b)(2)	Failure to maintain emergency absorbent spill cleanup materials on site. [15 NCAC 0202 (b)(2)].

NESHAP - 40 CFR Part 63 Subpart M

None

RCRA- Hazardous Waste Regulations: 40 CFR Part 261 - 262

None

(VI) ENFORCEMENT HISTORY (Penalties): None

(VII) RECOMMENDATIONS: A DSCA Compliance Program Checklist (#02697) was issued to Mr. Paul Lee, owner of U.S. 2.50 Cleaners, indicating the compliance issues to be addressed. A Notice of Violation (NOV)/Notice of Recommendation for Enforcement (NRE) will be issued to Mr. Paul Lee for the violations observed during the inspection. DSCA Supervisors will determine if enforcement and civil penalties are warranted after reviewing a written response from U.S. 2.50 Cleaners. A follow-up inspection should be conducted by June 14, 2019 to confirm compliance.

Christopher Burkhardt

From: Chapman, Al <al.chapman@ncdenr.gov>
Sent: Monday, December 10, 2018 7:48 AM
To: Christopher Burkhardt
Subject: RE: [External] Request for File Review: 2.50 Cleaners 2785 Charlotte Highway
Attachments: 20180614US250Clnrs_RPT.pdf

Mr. Burkhardt,

This dry-cleaner facility has not been identified as a possible solvent release site to date. The facility has been inspected by DSCA Compliance Group from 2010 to 2018. See the attached latest compliance inspection report Dated June 14, 2018. This inspection report does not mean that a release has or has not occurred, just no information has been submitted to NCDEQ that a release has occurred. Let me know if you need additional information.

Al Chapman

Al Chapman, P.G. (NC & GA)
Hydrogeologist – Project Manager
North Carolina Department of Environmental Quality
919.707.8602 (Office)
919.707.8368 (Fax)
Al.Chapman@ncdenr.gov

From: Christopher Burkhardt <cburkhardt@falconengineers.com>
Sent: Friday, December 07, 2018 4:20 PM
To: Chapman, Al <al.chapman@ncdenr.gov>
Subject: [External] Request for File Review: 2.50 Cleaners 2785 Charlotte Highway

Good Afternoon Al,

I am trying to find out more information about a delisted Cleaners located at 2785 Charlotte Highway Mooresville. It is not mapped in the GIS database or a database that reports spills the only information I have on it is below. DOT is considering roadway improvements near this address and I am wondering if there has ever been a release or even active on-site cleaning (perhaps it was a coin operated laundry and not a dry cleaners?).

Any info you can provide would be helpful thanks.

U.S. 2.50 Cleaners
2785 Charlotte Hwy, Ste 11
Mooresville NC
Facility ID: 490002C
File Type: List of Drycleaner Compliance Inspection Visits During 2016
County: Iredell
Original Source: DRYC

Record Date: 31-DEC-2016
Registry ID: 110016687110
FIPS Code: 37097
Program Acronyms: AIRS/AFS, NC-FITS

Christopher J. Burkhardt, PWS
Environmental Services Manager

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