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November 9, 2012

Mr. Gordon Box NC Department of Transportation GeoEnvironmental Section 1589 Mail Service Center Raleigh, North Carolina, 27699-1589

Reference: Preliminary Site Assessment

Parcel 64

1107 Myrtle Avenue, Greenville, NC 27834

State Project: U-3315 WBS Element 35781.1.2

ATC Project No. 45.19873.0007

Dear Mr. Box:

ATC Associates of North Carolina, P.C. (ATC) has prepared this report to document the results of a preliminary site assessment (PSA) conducted at the above referenced site. The assessment was conducted in accordance with the Technical and Cost Proposal submitted to the North Carolina Department of Transportation (NCDOT) on July 27, 2012, and a Notice to Proceed letter issued by the NCDOT on August 16, 2012. This report describes field activities, laboratory results, estimated impacted soil quantities, and conclusions based on the collected data.

1.0 BACKGROUND INFORMATION

According to the request for technical and cost proposal (RFP) dated July 10, 2012, parcel 64 (site) is located at 1107 Myrtle Avenue in Greenville, North Carolina. The parcel appears vacant and contains a single-story structure. According to the RFP, it may operate as a bakery and distribution center. As cited in the RFP and referenced by the North Carolina Department of Environment and Natural Resources' (NCDENR) Underground Storage Tank (UST) Section's registry, one 1,000-gallon gasoline UST under facility ID 0-018614 was removed in 1994. Since then, assessment activities conducted at the site include soil and groundwater sampling and are documented in multiple reports including a Comprehensive Site Assessment (CSA) completed by ATC in March 2002. Following submittal of the CSA, NCDENR issued a Notice of Regulatory Requirements in June 2002 requesting the preparation of a Site Cleanup Plan (SCP). Upon approval of the SCP, ATC removed approximately 302.14 tons of impacted soil in October 2002 and subsequently, the site received a Notice of No Further Action (NFA) on February 26, 2003. A copy of the NFA is included in *Appendix A*.

The site lies within the coastal plain of North Carolina and is underlain by the Yorktown formation, which generally consists of fossiliferous clays and sands. The site lies in the Tar-Pamlico river basin and groundwater flows generally to the northeast across the site. A groundwater gradient map for the site and surrounding parcels is included as *Figure 1*.

Though parcel 64 has been identified for total take status, NCDOT requested soil and groundwater assessment was completed only for the area within the proposed NCDOT right-of-way and/or easement as indicated on the construction plans. A parcel identification map is included as *Figure 2*.

As per the Technical and Cost Proposal, ATC obtained a report provided by Environmental Data Resources, Inc. (EDR) of Milford, Connecticut. The report was reviewed for information regarding reported releases of hazardous substances and petroleum products on or near the site. ATC also reviewed the "unmappable" (also referred to as "orphan") listings within the database report, cross-referencing available address information and facility names. Unmappable sites are listings that could not be plotted with confidence, but are potentially in the general area of the property in question based on the partial street address, city, or zip code. No unmappable sites were identified by ATC as being within the approximate minimum search distance from Parcel 49 based on the site reconnaissance and/or cross-referencing to mapped listings. In addition, Parcel 64 was not listed on any federal databases reviewed for this part of the historical assessment. However, Parcel 64 was listed in the state regulatory section as an underground storage tank (UST), leaking underground storage tank (LUST), and incident management database (IMD) facility. Parcel 64 is listed as Franklin Baking Co. Inc. located at 1107 Myrtle Avenue. The EDR reported that upon the closure of the UST system, major soil contamination was confirmed. The incident was closed with a notice of residual petroleum in 2003. The Sanborn Maps do not cover the property area. The property building first appears in the 1974 aerial photograph. The complete EDR report is included in **Appendix A**.

2.0 FIELD ACTIVITIES

2.1 Geophysical Survey

Prior to performing assessment activities, ATC contracted Stantec Consulting Services, Inc. (Stantec) to perform a geophysical survey of the site. The purpose of the survey was to locate USTs and/or other buried structures on the parcel. This was to be done in the area of the proposed NCDOT right of way and included proposed excavations for drainage lines, utilities, and slope stake cuts. The survey was conducted on July 18 through 19, 2012 and included electromagnetic (EM) induction-magnetic detection and ground penetrating radar (GPR) surveys. According to Stantec's survey, one probable UST exist in the subsurface with an approximate size of 11 feet long and 5 feet wide. The probable UST was marked in the field along with utilities and/or conduit. The complete geophysical report is provided in *Appendix B*. Based on the findings of the survey and proposed construction details, ATC performed a drilling event to assess soil and groundwater conditions only in areas within the proposed (by NCDOT) right-of-way and/or easement. Details of the soil and groundwater assessment are included in *Sections* 2.2 and 2.3.

2.2 Soil Assessment

Based on the results of the geophysical survey and in anticipation of a total take by the NCDOT, a soil assessment was completed on-site. On August 20 and 21, 2012, ATC mobilized to the site with South Atlantic Environmental Drilling and Construction Company (SAEDACCO) to conduct sampling activities. Over the course of the event, 14 borings (SB64-1 through SB64-13 and TW64-1) were advanced using direct-push technology (DPT) drilling techniques. Prior to the drilling, Stantec was contracted to conduct utility clearance in conjunction with the geophysical survey investigation. The NCDOT and North Carolina's 811 service were also notified prior to field activities.

The locations of the borings are shown on the attached *Figure 3*. Each boring was advanced to a depth of five feet below ground surface (bgs) via hand auger prior to utilizing DPT drilling techniques to complete the sampling. Soil samples were collected every 1 to 3 feet and screened with a photo-ionization detector (PID). Soils encountered consisted primarily of tan to gray silty sands and clays. The highest PID reading collected during the soil assessment was 1,333 parts per million (ppm) in the 5-6 feet bgs interval of TW64-1. Boring logs are included in *Appendix C*.

One soil sample from each boring was submitted for laboratory analysis. This was determined by either submitting the interval with the highest PID reading, or, if not applicable, the deepest interval at which proposed construction would take place. Samples were submitted to SGS Analytical Perspectives (SGS) in Wilmington, North Carolina. Following proper chain-of-custody protocol, the samples were placed in laboratory supplied containers in an ice filled cooler for analysis of Total Petroleum Hydrocarbons – Gasoline Range Organics (TPH-GRO) and Diesel Range Organics (TPH-DRO) by EPA Method 8015 Modified. Due to the sites historical background, select samples (SB64-1, SB64-2, SB64-5, SB64-6, SB64-10, SB64-13 and TW64-1) were also analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) by EPA methods 8260B and 8270D, respectively. A discussion of the laboratory results is provided in *Section 3.0*.

2.3 Groundwater Assessment

ATC supervised SAEDACCO during the installation of temporary well TW64-1 on August 20, 2012. The boring was advanced to a depth of five feet bgs via hand auger prior to utilizing DPT drilling techniques to complete the well installation activities. Temporary well TW64-1 was installed to a depth of 12 feet bgs using 10 feet of 0.010-inch machine slotted 1-inch poly vinyl chloride (PVC) well screen and solid PVC riser. The annular space of the boring was filled with washed silica sand to an approximate depth of 2 feet bgs. The location of the temporary well is shown on the attached *Figure 3* and a boring log is included in *Appendix C*.

Following the temporary well installation, ATC gauged an approximate depth to water level of 9.02 feet below the top of well casing. A peristaltic pump and dedicated polyethylene tubing were used to purge approximately one gallon prior to collecting a groundwater sample. The sample was submitted to SGS under chain-of-custody protocol for analysis of VOCs by EPA Method 8260B. Following sampling, the borings were filled with native soil and finished to approximately 6 inches below surface grade with bentonite. The remainder of the boring was then filled using material to match the surrounding surface.

3.0 LABORATORY RESULTS

The results of the laboratory analyses for soil samples collected on-site indicated concentrations of TPH-GRO in sample TW64-1 and concentrations of TPH-DRO in samples SB64-8 through SB64-10 and TW64-1 above the NCDENR action level of 10 milligrams per kilogram (mg/kg). The results of the VOC and SVOC analyses indicated concentrations of benzene, toluene, ethylbenzene, total xylenes, naphthalene, 1,2,4-trimethlbenzene, 1,3,5-trimethlbenzene, 4-isopropyltoluene, and/or n-propylbenzene above the NCDENR soil-to-groundwater maximum soil contaminant concentration levels (MSCCs). The majority of the concentrations detected above MSCCs were seen in the sample collected from TW64-1. However, naphthalene and benzene were detected above MSCCs in samples collected from SB64-1 and SB64-13, respectively.

The results of laboratory analyses for groundwater sample TW64-1 indicated levels of benzene, toluene, ethylbenzene, total xylenes, naphthalene, n-propylbenzene, isoproplbenzene, 1,2,4-trimethlbenzene, and 1,3,5-trimethlbenzene at concentrations above NC Title 15A NCAC 2L .0202 Groundwater Standards (2L Standards). No other compounds were detected above laboratory detection limits. The laboratory analytical report is included in *Appendix D* and a summary of the laboratory results for the soil and groundwater sampling are provided in *Tables 1* and 2, respectively.

4.0 IMPACTED SOIL ASSESSMENT

The results of the soil and groundwater assessment indicate that soil has been impacted above the NCDENR action level. Therefore, ATC proceeded with estimating the quantity of impacted soil as directed in the RFP. Specifically, soil samples collected from borings SB64-1 (6-8' bgs), SB64-8 (0-2.5' bgs), SB64-9 (0-2.5' bgs), SB64-10 (0-2.5' bgs), SB64-13 (6-8' bgs) and TW64-1 (5-6' bgs) were used to calculate volumes in two locations. At the request of the NCDOT, volume calculations are separated into two categories. The first volume estimation represents the total quantity of impacted soil on-site. The second volume estimation represents the quantity of impacted soil that will need to be handled during the proposed construction. The volume to be handled during the proposed construction was estimated based on proposed drainage, utility, and cut/fill construction elevations provided by the NCDOT. Further delineation of impacted soil estimates are based on parcel boundaries and are classified as "on-site" and "off-site" areas. Quantities are estimated in cubic yards and converted to tons using an NCDOT provided multiplier of 1.5 tons per cubic yard.

For the first volume estimation, ATC calculated a volume of approximately 404.7 cubic yards (611.55 tons) and 155.33 cubic yards (232.99 tons) for the total volume of impacted soil on-site and off-site, respectively. For the second volume estimation, ATC calculated a volume of approximately 46.92 cubic yards (70.38 tons) for the volume of impacted soil that may need to be handled during proposed construction activities off-site. Based on the information provided by the NCDOT, construction activities are not expected to take place in the on-site "Estimated Extent of Impacted Soil" areas as denoted on *Figure 4*. In addition, off-site volume calculations take into account soil previously removed during excavation activities in 2002. The extent of this excavation is depicted in *Appendix E*. It should also be noted that the exact horizontal extent of impacted soil has not been fully delineated, with particular emphasis in the vicinity of

Myrtle Avenue. As such, ATC's estimations should be considered approximations and actual quantities may vary. If the NCDOT requires a greater level of assurance regarding the extent, additional sampling could be performed for confirmation. Detailed calculations, references, and ATC's assumptions are included in *Appendix E*.

5.0 CONCLUSIONS

ATC has completed PSA activities at the Parcel 64 site in Greenville, North Carolina. The results of the assessment indicate that soil at the site has been impacted above NCDENR action levels and soil-to-groundwater MSCCs. Groundwater assessed on-site indicated constituents above 2L Standards. Based on a review of the site's historical data, geophysical investigation, and field assessment, ATC concludes that the impacted soil is likely associated with former commercial and/or industrial activities at the site. ATC recommends that the collected data be provided to the NCDENR Division of Waste Management. If impacted soil or groundwater is encountered during construction activities, appropriate measures should be taken to ensure worker safety. In addition, any impacted soil or groundwater disturbed during construction should be handled and disposed of in accordance with applicable regulations.

ATC appreciates the opportunity to assist the NCDOT with this project. If you have questions or require additional information, please do not hesitate to contact us at (919) 871-0999.

Sincerely,

ATC Associates of North Carolina, P.C.

Corey M. Scheip Staff Scientist Justin C. Ballard, P.G. Project Geologist

Jeffrey A. Corson Project Manager

Attachments:

- 1. Table 1 Soil Analytical Data
- 2. Table 2 Groundwater Analytical Data
- 3. Figure 1 Project Groundwater Gradient Map
- 4. Figure 2 Parcel Identification Map
- 5. Figure 3 Sample Location Map
- 6. Figure 4 Soil Analytical Data Map
- 7. Figure 5 Groundwater Analytical Data Map
- 8. Appendix A NFA and EDR Report
- 9. Appendix B Geophysical Investigation Report
- 10. Appendix C Boring Logs
- 11. Appendix D Laboratory Analytical Report
- 12. Appendix E Volumetric Calculations

TABLES

TABLE 1

PSA SOIL ANALYTICAL DATA

PARCEL 64 GREENVILLE, PITT COUNTY, NORTH CAROLINA ATC PROJECT NO. 45.19873.0007 WBS ELEMENT NO. 35781.1.2

EPA Method: 5030/8015 3550/8015				3550/8015						EPA 8260 AND 827	70					
Boring I.D.	Depth (feet)	Sampling Date	PID Reading (ppm)	TPH-GRO	TPH-DRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	МТВЕ	Naphthalene	1,2,4- Trimethylbenzene	1,3,5- Trimethylbenzene	2-Butanone	4-Isopropyltoluene	n-Propylbenzene
SB64-1	6-8	8/20/2012	43	<3.85	<6.12	< 0.0469	< 0.0469	< 0.0469	< 0.0469	< 0.0469	0.328	0.105	< 0.0469	<1.17	< 0.0469	< 0.0469
SB64-2	6-8	8/20/2012	1.5	< 3.97	<7.43	< 0.00465	< 0.00465	< 0.00465	< 0.00465	< 0.00465	< 0.00465	< 0.00465	< 0.00465	< 0.0232	< 0.00465	< 0.00465
SB64-3	2.5-5	8/20/2012	0	< 3.96	< 8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB64-4	2.5-5	8/21/2012	0.1	< 3.98	<7.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB64-5	2.5-5	8/20/2012	4.2	<3.83	<7.69	< 0.00468	< 0.00633	< 0.00468	0.00948	< 0.00468	0.016	0.00878	< 0.00468	< 0.0234	< 0.00468	< 0.00468
SB64-6	0-2.5	8/21/2012	0	<3.8	<7.25	< 0.00482	< 0.00482	< 0.00482	< 0.00482	< 0.00482	< 0.00482	< 0.00482	< 0.00482	< 0.0241	< 0.00482	< 0.00482
SB64-7	5-6	8/21/2012	0.2	<3.77	<7.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB64-8	0-2.5	8/21/2012	0.2	< 2.92	63.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB64-9	0-2.5	8/21/2012	0	< 5.35	112	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB64-10	0-2.5	8/21/2012	15.5	<3.54	38.9	< 0.00441	< 0.00441	< 0.00441	< 0.00441	< 0.00441	< 0.00441	< 0.00441	< 0.00441	< 0.0221	< 0.00441	< 0.00441
SB64-11	2.5-5	8/21/2012	0	<4.2	<7.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB64-12	0-2.5	8/21/2012	0.7	<3.4	<7.49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB64-13	6-8	8/21/2012	43.9	<3.13	<6.8	0.0186	< 0.00434	0.00873	0.0108	< 0.00434	< 0.00434	0.0131	0.00468	0.0565	< 0.00434	< 0.00434
TW64-1	5-6	8/20/2012	1,333	1,530	172	<7.79	12.5	21.5	133	<7.79	73.1	196	50.7	<195	7.87	21.1
	NCDENR A	Action Level		10	10											
	Soil-to-Groun	dwater MSCC	_			0.0056	4.3	4.9	4.6	0.091	0.16	8.5	8.3	16	0.12	1.7
	Resident	ial MSCC				18	1,200	1,560	3,129	350	313	782	782	9,385	100	626
	Industrial/Con	nmercial MSCC				164	32,000	40,000	81,760	3,100	8,176	20,440	20,440	245,280	4,000	16,350

- Notes:

 1. TPH = Total petroleum hydrocarbons.

 2. GRO = Gasoline range organics.

 3. DRO = Diesel range organics.

 4. Concentrations reported in milligrams per kilogram (mg/kg).

 5. "<" = not detected at or above the laboratory detection limit.

 6. MSCC = Maximum Soil Contaminant Concentration Levels.

 7. NE = Not established.

 8. NA = Not analyzed.

 9. MTBE = Methyl tertiary butyl ether.

 10. Values in BOLD indicate levels above Soil-to-Groundwater MSCCs and/or the NCDENR Action Level.

 11. # = Health based level > 100%.

TABLE 2

PSA GROUNDWATER ANALYTICAL DATA

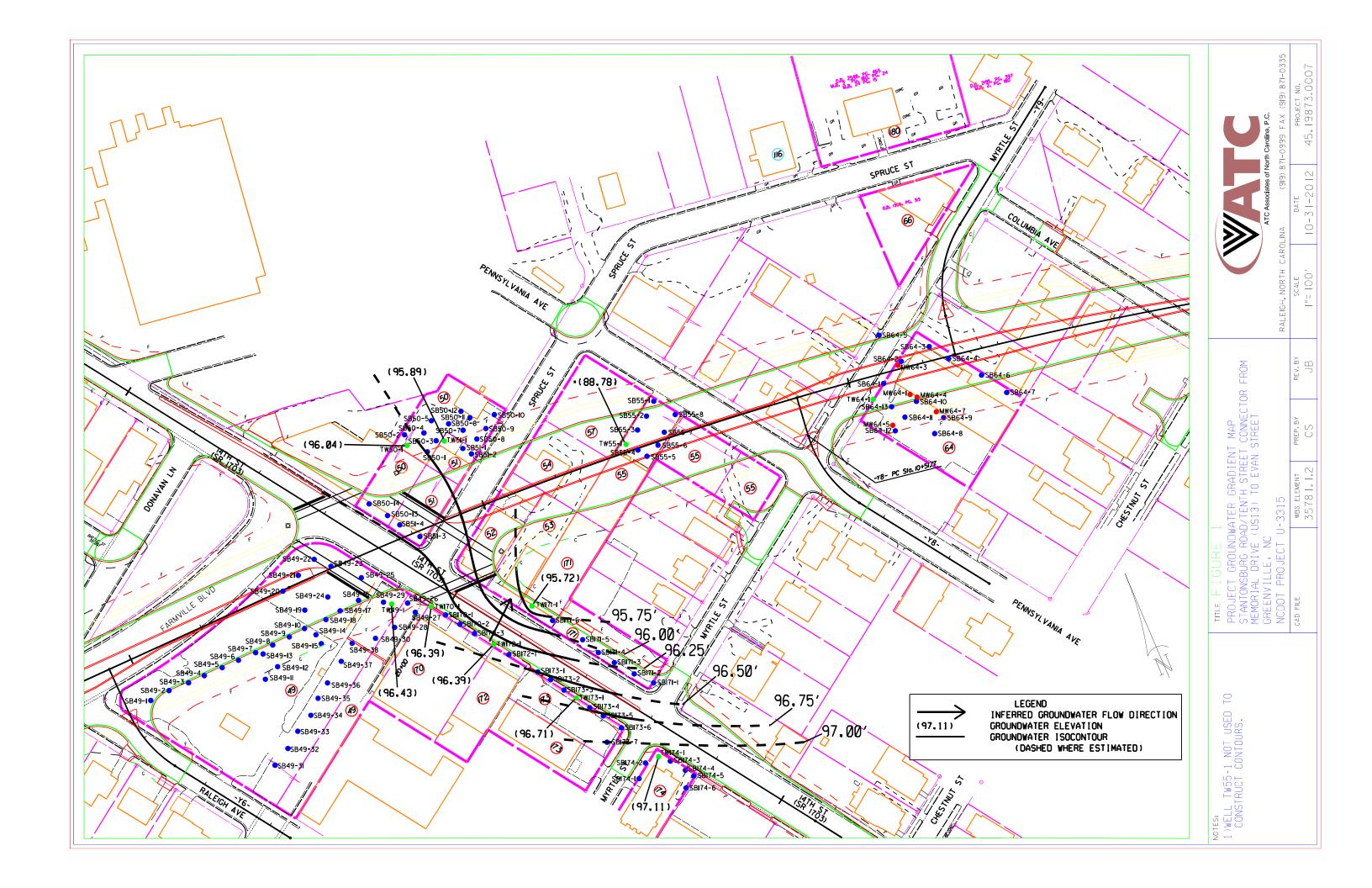
PARCEL 64 GREENVILLE, PITT COUNTY, NORTH CAROLINA ATC PROJECT NO. 45.19873.0007 WBS ELEMENT NO. 35781.1.2

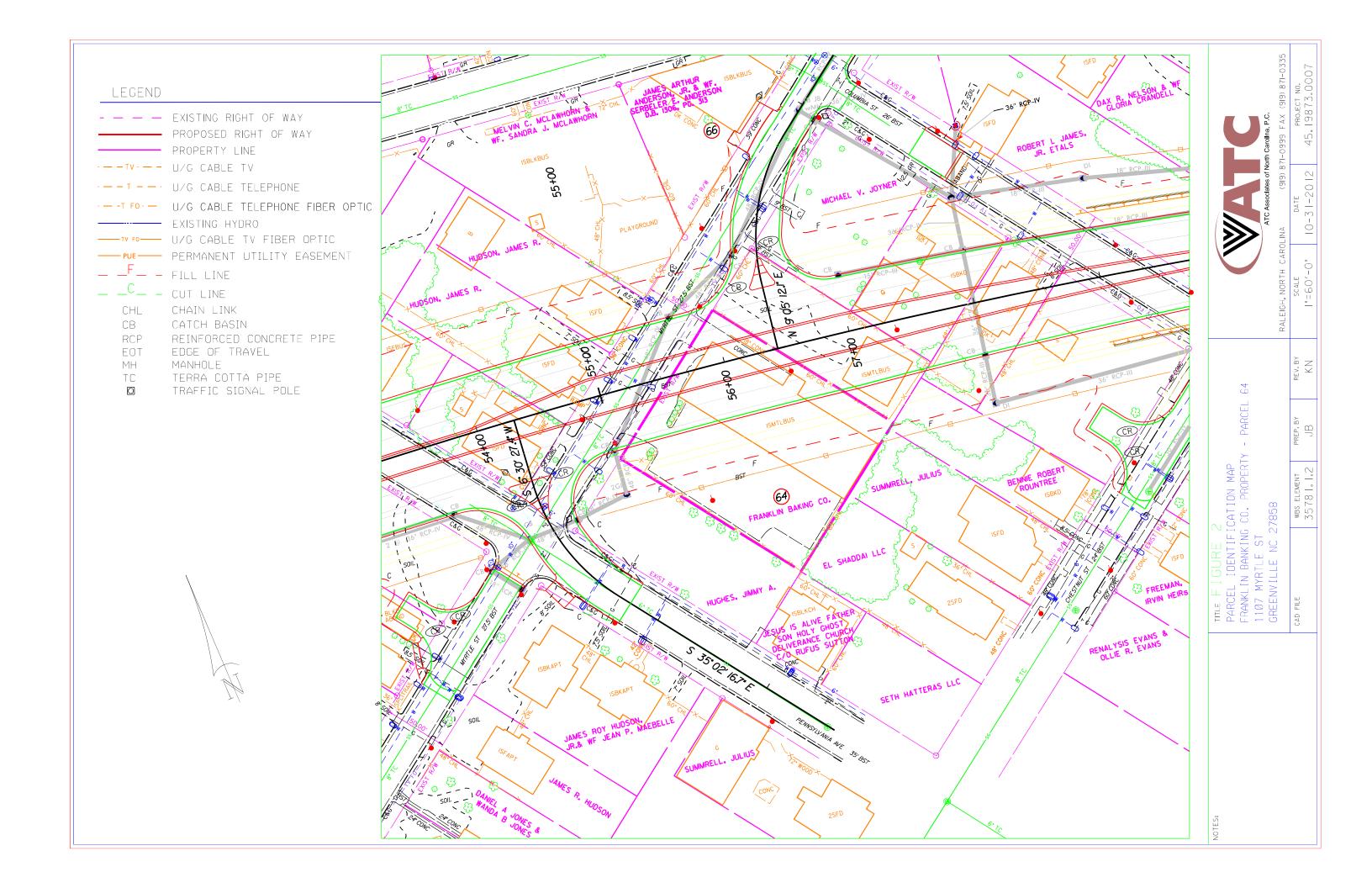
Analytica	al Method		EPA Method 8260B										
	ninant of neern Date Collected	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	n-Propylbenzene	Isoproplbenzene	4-Isopropyltoluene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
TW64-1	8/21/2012	2,330	16,400	6,450	33,200	58,380	<400	2,680	2,650	660	492	5,170	18,400
2L Stand	dard (mg/l)	1	600	600	500	NE	20	6	70	70	25	400	400
GCL	(mg/l)	5,000	260,000	84,500	85,500	NE	20,000	6,000	30,000	25,000	11,700	25,000	28,500

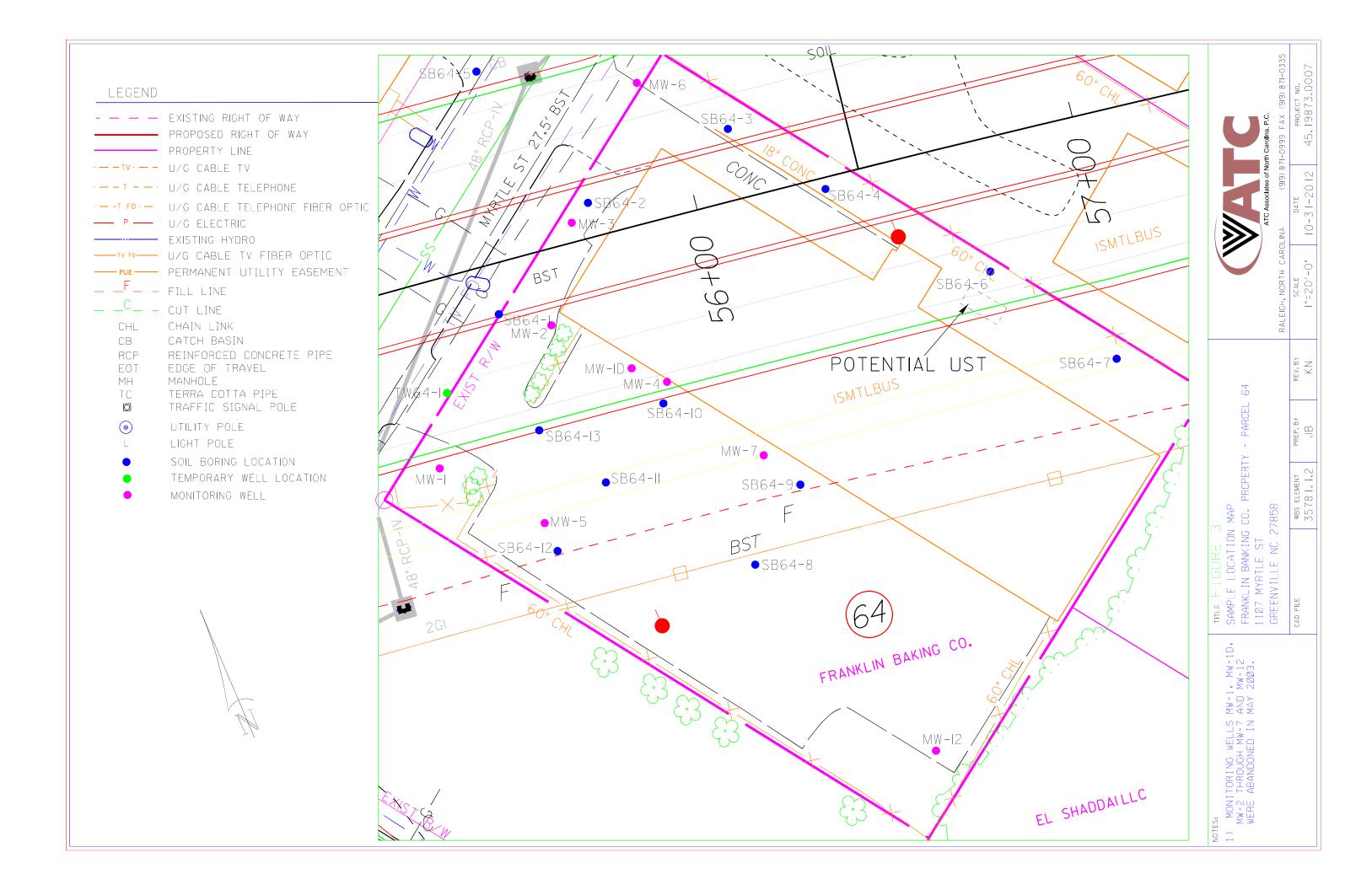
Notes:

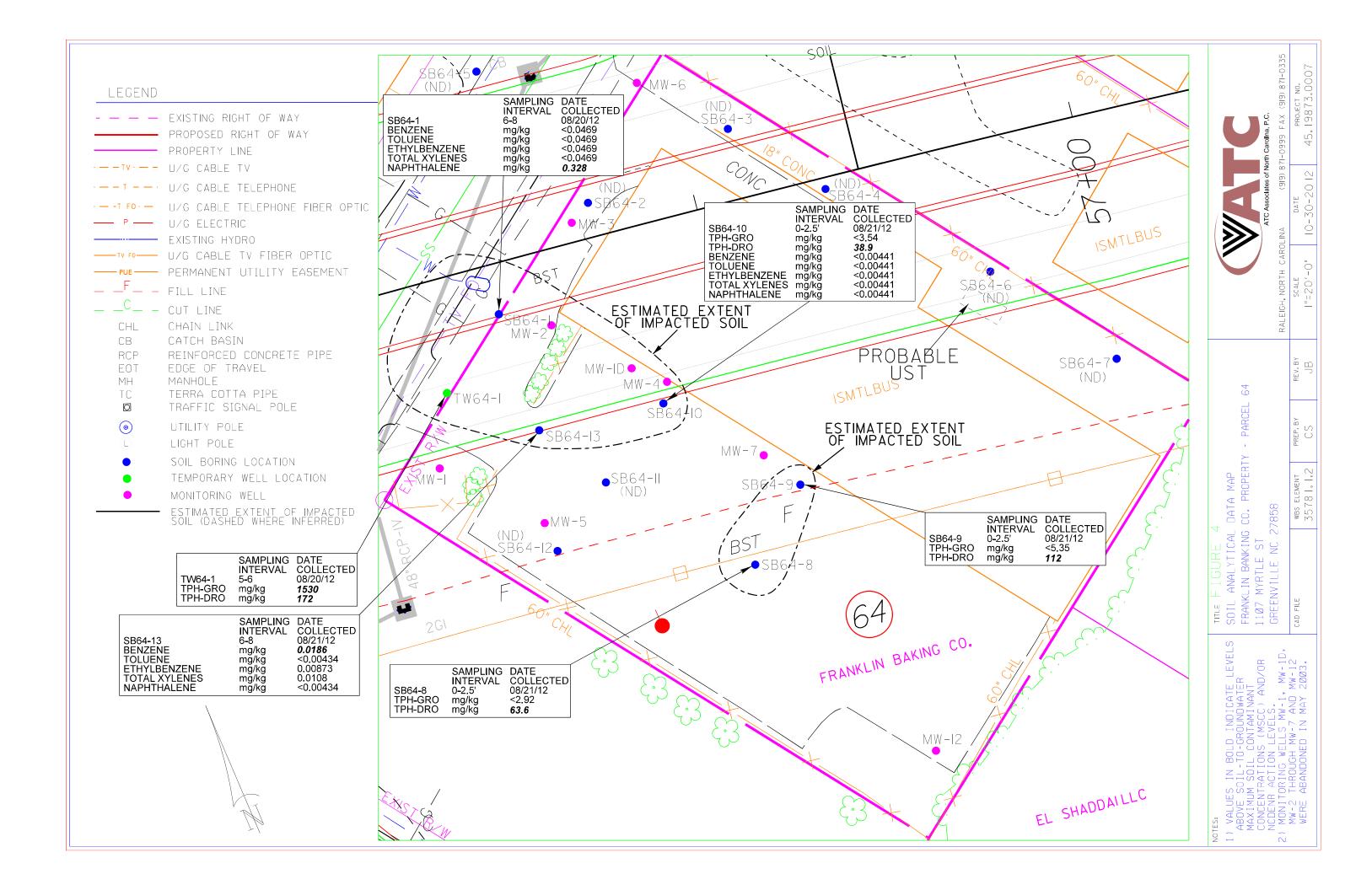
- 1. "<" or ND = Not detected at or above the laboratory detection limit.
- 2. Concentrations are reported in micrograms per liter ($\mu g/l$) = parts per billion.
- 3. Concentrations in bold print equal or exceed the NCDENR 2L Standard (2L).
- 4. NCDENR = North Carolina Department of Environment and Natural Resources.
- 5. GCL = Gross Contaminantion Level.
- 6. NE = Not Established.
- 7. MTBE = Methyl Tertiary Butyl Ether.
- Gross Contamination Levels for Groundwater are referenced in the Guidelines for Assessment and Corrective Action, November 2008, updated January 2010.
- 9. BTEX = Benzene, Toluene, Ethylbenzene, Total Xylenes
- 10. Temporary well TW64-1 was installed on 8/20/2012, sampled on 8/21/2012, and abandoned on 8/21/2012.

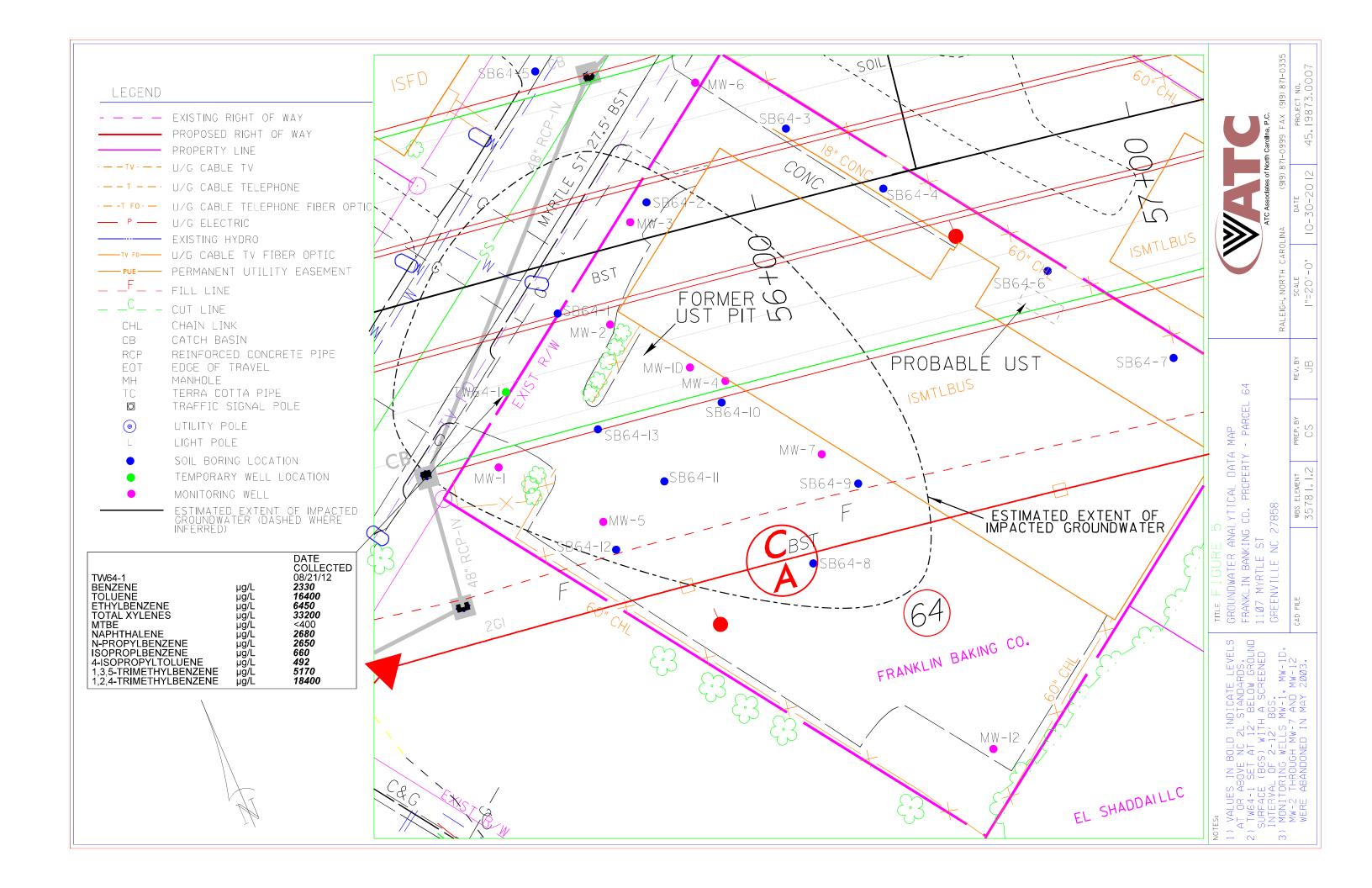
FIGURES











APPENDIX A

NFA and EDR REPORT

State of North Carolina
Department of Environment and
Natural Resources
Washington Regional Office

Michael F. Easley, Governor William G. Ross Jr., Secretary Dexter R. Matthews, Director

法国际保险基础 美国共和国共

ATC ASSOCIATES, INC.



DIVISION OF WASTE MANAGEMENT UNDERGROUND STORAGE TANK SECTION

February 26, 2003

Mr. Jerry Hancock
Flowers Bakery, Inc.

1925 Flowers Circle
Thomasville, North Carolina 31757

Re: Notice of No Further Action 15A NCAC 2L .0115(h)

Risk-based Assessment and Corrective Action for Petroleum Underground Storage Tanks
Franklin Baking Facility, 1107 Myrtle Ave.
Greenville, Pitt County, North Carolina
Incident # 12444 - Low Risk Classification

va danse trip z mentros e care e se el region Presidente de la mener

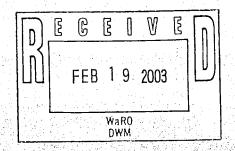
Dear Mr. Hancock:

The Underground Storage Tank (UST) Section, Division of Waste Management Washington Regional Office has received Site Closure Request and a Notice of Residual Petroleum for the above-referenced Site. The Notice of Residual Petroleum was recorded in Book 1428, Page 705 of the Pitt County Register of Deeds' Office. A review of the file shows that unsaturated soil contamination and groundwater contamination meet the cleanup requirements for a low risk site. No further assessment or remedial actions are required at this time. However, please be advised that because groundwater contamination still exceeds the groundwater quality standards established in 15A NCAC 2L .0202, groundwater within the area of contamination or within the area where contamination is expected to migrate is not suitable for use as a water supply.

Pursuant to NCGS 143B-279.9 and 143B-279.11, the approved Notice of Residual Petroleum was recorded in Book 1428, Page 705 of the Pitt County Register of Deeds' Office. This No Further Action Determination will not become valid until the public notice requirements outlined below are completed. Public notice in accordance with 15A NCAC 2L .0115(k) is required as follows. Within 30 days of receipt of this no further action letter, you must provide a copy of this letter to the following persons:

- Local health director;
- Chief administrative officer (i.e., Mayor, Chairman of the County Commissioners, County Manager, City Manager or other official of equal or similar position) of each political jurisdiction in which the contamination occurs;
- All property owners and occupants within or contiguous to the area containing contamination; and
- All property owners and occupants within or contiguous to the area where the contamination is expected to migrate.

JUDY J. TART REGISTER OF DEEDS 2003 JAN 14 PM 4: 44 PITT COUNTY, N.C.



NOTICE OF RESIDUAL PETROLEUM

Franklin Baking Company, Pitt County, North Carolina

The property that is the subject of this Notice (hereinafter referred to as the "Site") contains residual petroleum and is an Underground Storage Tank (UST) incident under North Carolina's Statutes and Regulations, which consist of N.C.G.S. 143-215.94 and regulations adopted thereunder. This Notice is part of a remedial action for the Site that has been approved by the Secretary (or his/her delegate) of the North Carolina Department of Environment and Natural Resources (or its successor in function), as authorized by N.C.G.S. Section 143B-279.9 and 143B-279.11. The North Carolina Department of Environment and Natural Resources shall hereinafter be referred to as "DENR".

NOTICE

Petroleum product was released and/or discharged at the Site. Petroleum constituents remain on the site, but are not a danger to public health and the environment, provided that the restrictions described herein, and any other measures required by DENR, are strictly complied with. This "Notice of Residual Petroleum" is composed of a description of the property, the location of the residual petroleum and the land use restrictions on the Site. The Notice has been approved and notarized by DENR pursuant to N.C.G.S. Section 143B-279.11 and has/shall be recorded at the Pitt County Register of Deeds' office Book _____, Page _____.

Franklin Baking Company of Goldsboro, North Carolina is the owner in fee simple of the Site, which is located in the County of Pitt, State of North Carolina, and is known and legally described as:

See Attachment A

For protection of public health and the environment, Franklin Baking Company, acting by and through ATC Associates of North Carolina, P.C., hereby declares that all of the real property described above shall be held, sold and conveyed subject to the following perpetual land use restrictions, which shall run with the land; shall be binding on all parties having any right, title or interest in the above-described property or any part thereof, their heirs, successors and assigns; and shall, as provided in N.C.G.S. Section 143B-279.9, be enforceable without regard to lack of privity of estate or contract, lack of benefit to particular land, or lack of any property interest in particular land. These restrictions shall continue in perpetuity and cannot be amended or cancelled unless and until the Pitt County Register of Deeds receives and records the written concurrence of the Secretary (or his/her delegate) of DENR (or its successor in function).

Return to: Caroline E Davenport 1212 Novres St Raleigh NC 27604

PERPETUAL LAND USE RESTRICTIONS

Groundwater: Groundwater from the site is prohibited from use as a water supply. Water supply wells of any kind shall not be installed or operated on the site.

ENFORCEMENT

The above land use restriction(s) shall be enforced by any owner, operator, or other party responsible for the Site. The above land use restriction(s) may also be enforced by DENR through the remedies provided in N.C.G.S. Chapter 143B, Article 7, Part 1 or by means of a civil action, and may also be enforced by any unit of local government having jurisdiction over any part of the Site. Any attempt to cancel this Notice without the approval of DENR (or its successor in function) shall be subject to enforcement by DENR to the full extent of the law. Failure by any party required or authorized to enforce any of the above restriction(s) shall in no event be deemed a waiver of the right to do so thereafter as to the same violation or as to one occurring prior or subsequent thereto.

IN WITNESS WHEREOF, Fra 2002.	unklin Baking Company has caused these presents to be executed this 19 day of
	PRESIDENT J
Signatory's name typed or printed: Tor	<u>n Buffkin</u>
STATE OF NORTH CAROLINA	
personally appeared before me this day	otary Public of said County and State, do hereby certify that <u>Tom Buffkin</u> and acknowledged that he/she is the <u>President</u> of F <u>ranklin Baking Company</u> and act of <u>Franklin Baking Company</u> , the forgoing instrument was signed in its name by
WITNESS my hand and seal this the	ay of Ucember, 2003.
	Ouday O. Oust Notary Public
My commission expires Oat. 15	<u>)</u> , 20 <u>ර්ර</u> ්."

Approved for the purposes of N.C.G.S. 143B-279.11	BOOK I 4 2 O TAUL I U I
Rihard R. Powers	
RICHARD R. POWERS, Regional Supervisor	
Washington Regional Office	도로 등 사용 호텔을 들었다. 원칙하다입니다 안하다. 등 기존에도 모든 열등 기를 보는 기료를 보고 있다.
UST Section	
Division of Waste Management	
Department of Environment and Natural Resources	
NORTH CAROLINA	
PITT COUNTY	
211011.0:	
I, Jolde Sunly a Notary Public of said County and State, do hereby certipersonally appear and sign before me this day and acknowledge that he/she is the Regional State.	fy that <u>Kichard R. Fowers</u> it
Office, Department of Environment and Natural Resources.	ipervisor of the Raleigh Regional
하지 않았다. 현장 전 경우 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전	- Tillian
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NORTH CAROLINA: Pitt County

The foregoing certificate(s) of

Sybol Filder Shirler

Notary(ies) Public is (are) certified to be correct. First for registration at 4'44 o'clock P M. this 14th

day of January 20 0.3

By Assistant/Deputy Register of Deeds

ATTACHMENT A LEGAL DESCRIPTION

. DUON E. 37 MARE 545

NORTH CAROLINA
PITT COUNTY



THIS DEED, made and entered into this the 8th day of September, 1967, by and between Lelia S. Higgs, Elizabeth H. Buchanan and husband, L. M. Buchanan, all of Pitt County, North Carolina, and Madeleine H. Haine and husband, Harold H. Haine, of the City of West Hartford, Connecticut, parties of the first part, to Franklin Baking Company. Inc., party of the second part;

WITNESSETH:

That the said parties of the first part, for and in consideration of the sum of TEN DOLLARS (\$10.00) and other valuable considerations to them in hand paid receipt of which is hereby acknowledged, have bargained and sold and by these presents do bargain, sell, grant, and convey unto the said party of the second parts its successors and assigns, in fee simple, that certain lot or parcel of land lying and being on the south side of Myrtle Street in the City of Greenville, Pitt County, North Carolina, and more particularly described as follows:

"BEGINNING at a stake in the southern property line of Myrtle Street, the northeast corner of the Fannie Mae Ange lot and running thence eastwardly and along with the southern property line of Myrtle Street, a distance of 136.2 feet more or less, to the corner of the Dora G. Howell lot, cornering; running thence southwardly and parallel with Pennsylvania Avenue a distance of 165 feet to stake, a corner; running thence westwardly and parallel with the first call a distance of 136.2 feet more or less, cornering; running thence northwardly and parallel with the eastern property line of Pennsylvania Avenue a distance of 165 feet to the point of BEGINNING; reference being directed to maps which are duly of record in the Office of the Register of Deeds of Pitt County in Map Book 2 at pages 25 and 150."

TO HAVE AND TO HOLD said lot or parcel of land, together with all privileges and appurtenances thereunto appertaining or in anywise

U-3315 West 14th Street Greenville, NC 27834

Inquiry Number: 3363129.2s

July 09, 2012

The EDR Radius Map™ Report with GeoCheck®



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Thank you for your business.

Please contact EDR at 1-800-352-0050

with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

WEST 14TH STREET GREENVILLE, NC 27834

COORDINATES

Latitude (North): 35.6079000 - 35° 36' 28.44" Longitude (West): 77.3854000 - 77° 23' 7.44"

Universal Tranverse Mercator: Zone 18 UTM X (Meters): 283925.0 UTM Y (Meters): 3942880.8

Elevation: 62 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 35077-E4 GREENVILLE SW, NC

Most Recent Revision: 2001

North Map: 35077-F4 GREENVILLE NW, NC

Most Recent Revision: 2001

East Map: 35077-E3 GREENVILLE SE, NC

Most Recent Revision: 2001

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 2009, 2010 Source: USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list	
NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	. Federal Superfund Liens
Federal Delisted NPL site lis	st
Delisted NPL	National Priority List Deletions
Federal CERCLIS list	
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY	Federal Facility Site Information listing
Federal CERCLIS NFRAP si	te List
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
Federal RCRA CORRACTS	facilities list
CORRACTS	Corrective Action Report
Federal RCRA non-CORRA	CTS TSD facilities list
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
Federal RCRA generators li	st
RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generator
Federal institutional control	ls / engineering controls registries
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
Federal ERNS list	
ERNS	. Emergency Response Notification System
State and tribal landfill and/	or solid waste disposal site lists
SWF/LF	

OLI...... Old Landfill Inventory

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

..... AST Database

INDIAN UST..... Underground Storage Tanks on Indian Land

FEMA UST...... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

INST CONTROL....... No Further Action Sites With Land Use Restrictions Monitoring

State and tribal voluntary cleanup sites

...... Responsible Party Voluntary Action Sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

_____Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

SWRCY...... Recycling Center Listing Solid Waste Facility Listing

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs

US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

LUCIS..... Land Use Control Information System

Records of Emergency Release Reports

HMIRS______ Hazardous Materials Information Reporting System

Other Ascertainable Records

DOT OPS..... Incident and Accident Data DOD...... Department of Defense Sites FUDS...... Formerly Used Defense Sites

UMTRA..... Uranium Mill Tailings Sites MINES..... Mines Master Index File

TRIS...... Toxic Chemical Release Inventory System

TSCA..... Toxic Substances Control Act

FTTS...... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)
HIST FTTS.....FIFRA/TSCA Tracking System Administrative Case Listing

PADS......PCB Activity Database System MLTS..... Material Licensing Tracking System RADINFO...... Radiation Information Database

FINDS..... Facility Index System/Facility Registry System RAATS......RCRA Administrative Action Tracking System

_____ Underground Injection Wells Listing

DRYCLEANERS..... Drycleaning Sites

NPDES Facility Location Listing

INDIAN RESERV..... Indian Reservations

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

FINANCIAL ASSURANCE.... Financial Assurance Information Listing

COAL ASH...... Coal Ash Disposal Sites

COAL ASH DOE Sleam-Electric Plan Operation Data 2020 COR ACTION 2020 Corrective Action Program List

EPA WATCH LIST..... EPA WATCH LIST

US FIN ASSUR..... Financial Assurance Information

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER PCB Transformer Registration Database

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent NPL

NC HSDS: The Hazardous Substance Disposal Sites list contains locations of uncontrolled and unregulated hazardous waste sites. The file contains sites on the national priority list as well as the state priority list. The data source is the North Carolina Center for Geographic Information and Analysis.

A review of the NC HSDS list, as provided by EDR, and dated 08/09/2011 has revealed that there is 1 NC HSDS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GREENVILLE COAL GAS PLANT		NE 1/2 - 1 (0.595 mi.)	0	7

State- and tribal - equivalent CERCLIS

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environment & Natural Resources' Inactive Hazardous Sites Program.

A review of the SHWS list, as provided by EDR, and dated 03/01/2012 has revealed that there is 1 SHWS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SOUTHERN STATES (FORMER)	125 LINE AVE	W 1/8 - 1/4 (0.229 mi.)	H26	58

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incidents Management Database contains an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environment, & Natural Resources' Incidents by Address.

A review of the LUST list, as provided by EDR, and dated 05/04/2012 has revealed that there are 45 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WILLIE SMALL PROPERTY *NRP* Incident Phase: Response	1402 SPRUCE STREET	WSW 0 - 1/8 (0.014 mi.)	6	15
EAST CAROLINA UNW-STEAM PLT. Incident Phase: Closed Out	14TH ST.	NNW 0 - 1/8 (0.119 mi.)	10	22
BUCK SUPPLY COMPANY Incident Phase: Closed Out	201 GRAND AVENUE	E 1/8 - 1/4 (0.134 mi.)	B12	26
FUSION SKATE PARK AGNES FULLILOVE SCHOOL Incident Phase: Closed Out	504 WEST TENTH STREET 1615 HALIFAX STREET	S 1/8 - 1/4 (0.147 mi.) WSW 1/8 - 1/4 (0.150 mi.)	C14 D15	31 34
OLD PONY EXPRESS Incident Phase: Closed Out	DICKINSON AVE	S 1/8 - 1/4 (0.165 mi.)	C18	41
NEW WAY/SHOP A LOT Incident Phase: Closed Out	1006 BANCROFT AVENUE	WNW 1/8 - 1/4 (0.216 mi.)	G24	55
SOUTHERN STATES (FORMER) Incident Phase: Closed Out	125 LINE AVE	W 1/8 - 1/4 (0.229 mi.)	H26	58
ANDERSON PROPERTY (DOROTHY) Incident Phase: Closed Out	801 BANCROFT AVENUE	WNW 1/4 - 1/2 (0.253 mi.)	31	66
STRINGFIELD PROPERTY (DELZORA) WILLIAMS RESIDENCE (JOCELYN) Incident Phase: Closed Out	703 MCDOWELL STREET 1611 LINCOLN DRIVE	WNW 1/4 - 1/2 (0.277 mi.) NW 1/4 - 1/2 (0.308 mi.)	32 33	68 70
SPUR STATION/FLORENCE BLOUNT E Incident Phase: Closed Out	1025 DICKINSON AVE.	SSW 1/4 - 1/2 (0.327 mi.)	J35	76
WOOTEN RESIDENCE (JOHNNY-FORME Incident Phase: Closed Out	1818 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)	K37	80
TUCKER, NINA RESIDENCE Incident Phase: Response	1820 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)	K38	82

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STOKES, MARTHA PROPERTY Incident Phase: Closed Out	1812 BATTLE AVENUE	WNW 1/4 - 1/2 (0.337 mi.)	K39	85
ST. GABRIEL'S CATHOLIC CHURCH Incident Phase: Closed Out	1101 WARD ST	N 1/4 - 1/2 (0.345 mi.)	L40	88
ST GABRIELS WARD STREET SITE MARTIN PROPERTY (ANNIE) Incident Phase: Closed Out	1100 WARD STREET 1509 E. FIFTH STREET	N 1/4 - 1/2 (0.346 mi.) NNW 1/4 - 1/2 (0.360 mi.)	L41 42	90 93
W.L. ALLEN OIL-BULK PLANT UST Incident Phase: Closed Out	120 SKINNER STREET	SSW 1/4 - 1/2 (0.368 mi.)	J47	103
AARON PENNY RESIDENCE *NRP* Incident Phase: Closed Out	405 WEST VILLAGE DRIVE	W 1/4 - 1/2 (0.403 mi.)	50	110
MOORE PROPERTY (AMY & KYLE) Incident Phase: Closed Out	1712 WEST SIXTH STREET	WNW 1/4 - 1/2 (0.462 mi.)	60	140
Lower Elevation	Address	Direction / Distance	Map ID	Page
FRANKLIN BAKING COMPANY, INC. Incident Phase: Closed Out	1107 MYRTLE DRIVE	ENE 0 - 1/8 (0.005 mi.)	A5	12
SADIE SAULTER SCHOOL Incident Phase: Closed Out	1019 FLEMING STREET	NNE 0 - 1/8 (0.086 mi.)	8	19
HERBERT COREY PROPERTY Incident Phase: Closed Out	DICKINSON AV. AND GRAND	D E 1/8 - 1/4 (0.167 mi.)	F19	44
EATON'S SHELL Incident Phase: Closed Out	601 ALBEMARLE STREET	ENE 1/8 - 1/4 (0.187 mi.)	E21	48
CITY OF GREENVILLE PROPERTY Incident Phase: Closed Out	602 CONTENTNEA STREET	NE 1/8 - 1/4 (0.191 mi.)	22	51
THE GOODYEAR TIRE & RUBBER COM Incident Phase: Closed Out	729 DICKINSON AVE	E 1/8 - 1/4 (0.207 mi.)	F23	52
FAITH VENTURES, INC./ NO NAME Incident Phase: Response	907 MARTIN LUTHER KING	NNE 1/8 - 1/4 (0.236 mi.)	28	61
SAM POLLARD & SON, INC Incident Phase: Follow Up	400 W 10TH STREET	ESE 1/4 - 1/2 (0.317 mi.)	34	73
MAGNNLIA APARTMENTS Incident Phase: Closed Out	418 WEST FIFTH STREET	ENE 1/4 - 1/2 (0.361 mi.)	M43	96
NATHANIEL VILLAGE Incident Phase: Closed Out	411 WEST FIFTH STREET	ENE 1/4 - 1/2 (0.363 mi.)	M45	99
CAROLINA TELEPHONE Incident Phase: Closed Out	401 WEST 5TH ST.	ENE 1/4 - 1/2 (0.367 mi.)	M46	101
TAYLOR, OLA RESIDENCE Incident Phase: Closed Out	1011 WEST THIRD STREET	NNE 1/4 - 1/2 (0.416 mi.)	51	113
WILCAR EXECUTIVE CENTER Incident Phase: Response	223 WEST TENTH STREET	ESE 1/4 - 1/2 (0.423 mi.)	52	115
TYSON PROPERTY (BERVERLY) Incident Phase: Closed Out	420 CADILLAC STREET	NNW 1/4 - 1/2 (0.424 mi.)	53	118
SYCAMORE HILL BAPTIST CHURCH Incident Phase: Closed Out	226 W. 8TH STREET	E 1/4 - 1/2 (0.432 mi.)	54	121
CITY OF GREENVILLE TANS. GARAG Incident Phase: Closed Out Incident Phase: Closed Out	1500 BEATTY ST.	SSE 1/4 - 1/2 (0.438 mi.)	N55	124

Lower Elevation	Address	Direction / Distance	Map ID	Page
PUGH'S SHELL STATION Incident Phase: Closed Out	5TH & GREEN STREET	ENE 1/4 - 1/2 (0.448 mi.)	O57	134
THE PANTRY #832 Incident Phase: Response	501 SOUTH MEMORIAL DRIV	NW 1/4 - 1/2 (0.465 mi.)	P61	142
FORBES RESIDENCE (SELENA) Incident Phase: Closed Out	1407 WEST 4TH STREET	NNW 1/4 - 1/2 (0.465 mi.)	Q63	144
FASTFARE NC 680-CROWN CENTRAL Incident Phase: Closed Out	506 MEMORIAL DR.	NW 1/4 - 1/2 (0.469 mi.)	P64	147
SUTTON'S SERVICE CENTER, INC. Incident Phase: Closed Out	1105 DICKINSON AVE., PO	SSW 1/4 - 1/2 (0.470 mi.)	65	150
CITY OF GREENVILLE PROPERTY-TA Incident Phase: Closed Out	527 DICKINSON AVENUE	ENE 1/4 - 1/2 (0.480 mi.)	66	155
UNIVERSITY AMOCO Incident Phase: Closed Out	101 EAST 10TH STREET	ESE 1/4 - 1/2 (0.495 mi.)	R67	157
DAUGHTRIDGE OIL-EVANS 76 Incident Phase: Closed Out	10TH ST. & EVANS ST.	ESE 1/4 - 1/2 (0.497 mi.)	R68	160

LUST TRUST: This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.

A review of the LUST TRUST list, as provided by EDR, and dated 04/11/2012 has revealed that there are 24 LUST TRUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WILLIE SMALL PROPERTY *NRP*	1402 SPRUCE STREET	WSW 0 - 1/8 (0.014 mi.)	6	15
NIMMO PROPERTY	1113 WEST 14TH STREET	SE 0 - 1/8 (0.122 mi.)	11	25
BUCK SUPPLY COMPANY	201 GRAND AVENUE	E 1/8 - 1/4 (0.134 mi.)	B12	26
FUSION SKATE PARK	504 WEST TENTH STREET	S 1/8 - 1/4 (0.147 mi.)	C14	31
AGNES FULLILOVE SCHOOL	1615 HALIFAX STREET	WSW 1/8 - 1/4 (0.150 mi.)	D15	34
ANDERSON PROPERTY (DOROTHY)	801 BANCROFT AVENUE	WNW 1/4 - 1/2 (0.253 mi.)	31	66
WILLIAMS RESIDENCE (JOCELYN)	1611 LINCOLN DRIVE	NW 1/4 - 1/2 (0.308 mi.)	33	70
WOOTEN RESIDENCE (JOHNNY-FORME	1818 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)		80
TUCKER, NINA RESIDENCE	1820 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)	K38	82
STOKES, MARTHA PROPERTY	1812 BATTLE AVENUE	WNW 1/4 - 1/2 (0.337 mi.)	K39	85
ST. GABRIEL'S CATHOLIC CHURCH	1101 WARD ST	N 1/4 - 1/2 (0.345 mi.)	L40	88
ST GABRIELS WARD STREET SITE	1100 WARD STREET	N 1/4 - 1/2 (0.346 mi.)	L41	90
AARON PENNY RESIDENCE *NRP*	405 WEST VILLAGE DRIVE	W 1/4 - 1/2 (0.403 mi.)	50	110
MOORE PROPERTY (AMY & KYLE)	1712 WEST SIXTH STREET	WNW 1/4 - 1/2 (0.462 mi.)	60	140
Lower Elevation	Address	Direction / Distance	Map ID	Page
FRANKLIN BAKING COMPANY, INC.	1107 MYRTLE DRIVE	ENE 0 - 1/8 (0.005 mi.)	A5	12
FAITH VENTURES, INC./ NO NAME	907 MARTIN LUTHER KING	NNE 1/8 - 1/4 (0.236 mi.)	28	61
MAGNOLIA APARTMENTS	418 W. FIFTH STREET	ENE 1/4 - 1/2 (0.361 mi.)	M44	98
NATHANIEL VILLAGE	411 WEST FIFTH STREET	ENE 1/4 - 1/2 (0.363 mi.)	M45	99
WILCAR EXECUTIVE CENTER	223 WEST TENTH STREET	ESE 1/4 - 1/2 (0.423 mi.)	52	115
SYCAMORE HILL BAPTIST CHURCH	226 W. 8TH STREET	E 1/4 - 1/2 (0.432 mi.)	54	121
PUGH'S SHELL SERVICE	5TH & GREENE STREETS	ENE 1/4 - 1/2 (0.448 mi.)	O58	138
THE PANTRY #832	501 SOUTH MEMORIAL DRIV		P61	142
SELINA FORBES PROPERTY	1407 W FOURTH ST	NNW 1/4 - 1/2 (0.465 mi.)	Q62	144
A & B AUTO SERVICE	103 WEST 9TH STREET	E 1/4 - 1/2 (0.499 mi.)	70	166

LAST: A listing of leaking aboveground storage tank site locations.

A review of the LAST list, as provided by EDR, and dated 05/10/2012 has revealed that there are 3 LAST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
1401 5TH STREET AST SPILL	1401 WEST 5TH STREET	NNW 1/4 - 1/2 (0.334 mi.)	36	79
Lower Elevation	Address	Direction / Distance	Map ID	Page
PITT COUNTY SCHOOLS MAINTENANC ECU/HAYNIE LAND	CONTENTNEA ST. & THIRD 10TH STREET	NNE 1/4 - 1/2 (0.401 mi.) ESE 1/4 - 1/2 (0.498 mi.)	49 R69	108 163

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environment & Natural Resources' Petroleum Underground Storage Tank Database.

A review of the UST list, as provided by EDR, and dated 05/04/2012 has revealed that there are 11 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A B WHITLEY INC	1311 WEST 14TH STREET	0 - 1/8 (0.000 mi.)	1	7
WAINWRIGHT'S AMOCO	1201 W 14TH STREET	SE 0 - 1/8 (0.057 mi.)	7	18
STEWART SANDWICHES INC.	821 DICKENSON AVENUE.	ESE 0 - 1/8 (0.108 mi.)	9	22
PONY EXPRESS (FORMER TENANT)	1202 DICKERSON AVE	S 1/8 - 1/4 (0.165 mi.)	C17	39
AGNES FULLILOVE SCHOOL	WATAUGA AVE	WSW 1/8 - 1/4 (0.181 mi.)	D20	46
SHOP A LOT	1006 BANCROFT AVENUE	WNW 1/8 - 1/4 (0.216 mi.)	G25	57
Lower Elevation	Address	Direction / Distance	Map ID	Page
MACHINE&WELDING(PREVIOUS RENTE	307 SPRUCE ST.	0 - 1/8 (0.000 mi.)	A2	9
FRANKLIN BAKING COMPANY, INC.	1107 MYRTLE DRIVE	ENE 0 - 1/8 (0.005 mi.)	A5	12
SADIE SAULTER SCHOOL	1019 FLEMING STREET	NNE 0 - 1/8 (0.086 mi.)	8	19
EATONS SHELL SERVICE	601 ALBEMARLE AVE	ENE 1/8 - 1/4 (0.164 mi.)	E16	37
THE GOODYEAR TIRE & RUBBER COM	729 DICKINSON AVE	E 1/8 - 1/4 (0.207 mi.)	F23	52

State and tribal Brownfields sites

BROWNFIELDS: A brownfield site is an abandoned, idled, or underused property where the threat of environmental contamination has hindered its redevelopment. All of the sites in the inventory are working toward a a brownfield agreement for cleanup and liabitly control.

A review of the BROWNFIELDS list, as provided by EDR, and dated 09/30/2010 has revealed that there is 1 BROWNFIELDS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
IMPERIAL CAMPUS	701 ATLANTIC AVE.	ENE 1/8 - 1/4 (0.245 mi.)	130	66

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 06/27/2011 has revealed that there are 2 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER GREENVILLE PRODUCE PROP	310 W. 9TH STREET	E 1/4 - 1/2 (0.388 mi.)	48	106
SOUTHWEST REDEVELOPMENT SITE	523 S. PITT STREET	ENE 1/4 - 1/2 (0.453 mi.)	59	138

Other Ascertainable Records

RCRA-NonGen: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 03/15/2012 has revealed that there are 3 RCRA-NonGen sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AMERICAN AUTO BODY	302 SPRUCE ST	ENE 0 - 1/8 (0.004 mi.)	A3	9
APPAREL IMPRESSIONS	715 ALBEMARLE AVE	E 1/8 - 1/4 (0.138 mi.)	B13	29
VAN WATERS & ROGERS INC	715 ATLANTIC AVE	ENE 1/8 - 1/4 (0.239 mi.)	129	64

IMD: Incident Management Database.

A review of the IMD list, as provided by EDR, and dated 07/21/2006 has revealed that there are 35 IMD sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WILLIE SMALL PROPERTY *NRP*	1402 SPRUCE STREET	WSW 0 - 1/8 (0.014 mi.)	6	15
EAST CAROLINA UNW-STEAM PLT.	14TH ST.	NNW 0 - 1/8 (0.119 mi.)	10	22
BUCK SUPPLY COMPANY	201 GRAND AVENUE	E 1/8 - 1/4 (0.134 mi.)	B12	26
FUSION SKATE PARK	504 WEST TENTH STREET	S 1/8 - 1/4 (0.147 mi.)	C14	31
AGNES FULLILOVE SCHOOL	1615 HALIFAX STREET	WSW 1/8 - 1/4 (0.150 mi.)	D15	34
OLD PONY EXPRESS	DICKINSON AVE	S 1/8 - 1/4 (0.165 mi.)	C18	41
NEW WAY/SHOP A LOT	1006 BANCROFT AVENUE	WNW 1/8 - 1/4 (0.216 mi.)	G24	55
SOUTHERN FARM AND HOME/SOUTHER	125 LINE AVENUE	W 1/8 - 1/4 (0.229 mi.)	H27	60
WILLIAMS RESIDENCE (JOCELYN)	1611 LINCOLN DRIVE	NW 1/4 - 1/2 (0.308 mi.)	33	70
SPUR STATION/FLORENCE BLOUNT E	1025 DICKINSON AVE.	SSW 1/4 - 1/2 (0.327 mi.)	J35	76
TUCKER. NINA RESIDENCE	1820 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)	K38	82
STOKES, MARTHA PROPERTY	1812 BATTLE AVENUE	WNW 1/4 - 1/2 (0.337 mi.)		85
ST GABRIELS WARD STREET SITE	1100 WARD STREET	N 1/4 - 1/2 (0.346 mi.)	L41	90
MARTIN PROPERTY (ANNIE)	1509 E. FIFTH STREET	NNW 1/4 - 1/2 (0.360 mi.)	42	93

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
W.L. ALLEN OIL-BULK PLANT UST AARON PENNY RESIDENCE *NRP*	120 SKINNER STREET 405 WEST VILLAGE DRIVE	SSW 1/4 - 1/2 (0.368 mi.) W 1/4 - 1/2 (0.403 mi.)	J47 50	103 110
Lower Elevation	Address	Direction / Distance	Map ID	Page
FRANKLIN BAKING CO. INC. HERBERT COREY PROPERTY EATON'S SHELL FAITH VENTURES, INC./ NO NAME SAM POLLARD & SON, INC MAGNNLIA APARTMENTS CAROLINA TELEPHONE TAYLOR, OLA RESIDENCE WILCAR EXECUTIVE CENTER TYSON PROPERTY (BERVERLY) SYCAMORE HILL BAPTIST CHURCH GREENVILLE PUBLIC WKS GARAGE, PUGH'S SHELL STATION FORBES RESIDENCE (SELENA) FASTFARE NC 680-CROWN CENTRAL SUTTON'S SERVICE CENTER, INC.	1107 MYRTLE AVENUE DICKINSON AV. AND GRAND 601 ALBEMARLE STREET 907 MARTIN LUTHER KING 400 W 10TH STREET 418 WEST FIFTH STREET 401 WEST 5TH ST. 1011 WEST THIRD STREET 223 WEST TENTH STREET 420 CADILLAC STREET 226 W. 8TH STREET 1500 BEATTY STREET 5TH & GREEN STREET 1407 WEST 4TH STREET 506 MEMORIAL DR. 1105 DICKINSON AVE., PO	ENE 0 - 1/8 (0.005 mi.) E 1/8 - 1/4 (0.167 mi.) ENE 1/8 - 1/4 (0.187 mi.) NNE 1/8 - 1/4 (0.236 mi.) ESE 1/4 - 1/2 (0.361 mi.) ENE 1/4 - 1/2 (0.367 mi.) NNE 1/4 - 1/2 (0.416 mi.) ESE 1/4 - 1/2 (0.423 mi.) NNW 1/4 - 1/2 (0.424 mi.) E 1/4 - 1/2 (0.432 mi.) SSE 1/4 - 1/2 (0.438 mi.) ENE 1/4 - 1/2 (0.448 mi.) ENE 1/4 - 1/2 (0.465 mi.) NW 1/4 - 1/2 (0.469 mi.) SSW 1/4 - 1/2 (0.470 mi.)	A4 F19 E21 28 34 M43 M46 51 52 53 54 N56 O57 Q63 P64 65	11 44 48 61 73 96 101 113 115 118 121 132 134 144 147
UNIVERSITY AMOCO DAUGHTRIDGE OIL-EVANS 76 ECU/HAYNIE LAND	101 EAST 10TH STREET 10TH ST. & EVANS ST. 10TH STREET	ESE 1/4 - 1/2 (0.495 mi.) ESE 1/4 - 1/2 (0.497 mi.) ESE 1/4 - 1/2 (0.497 mi.)	R67 R68 R69	157 160 163

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

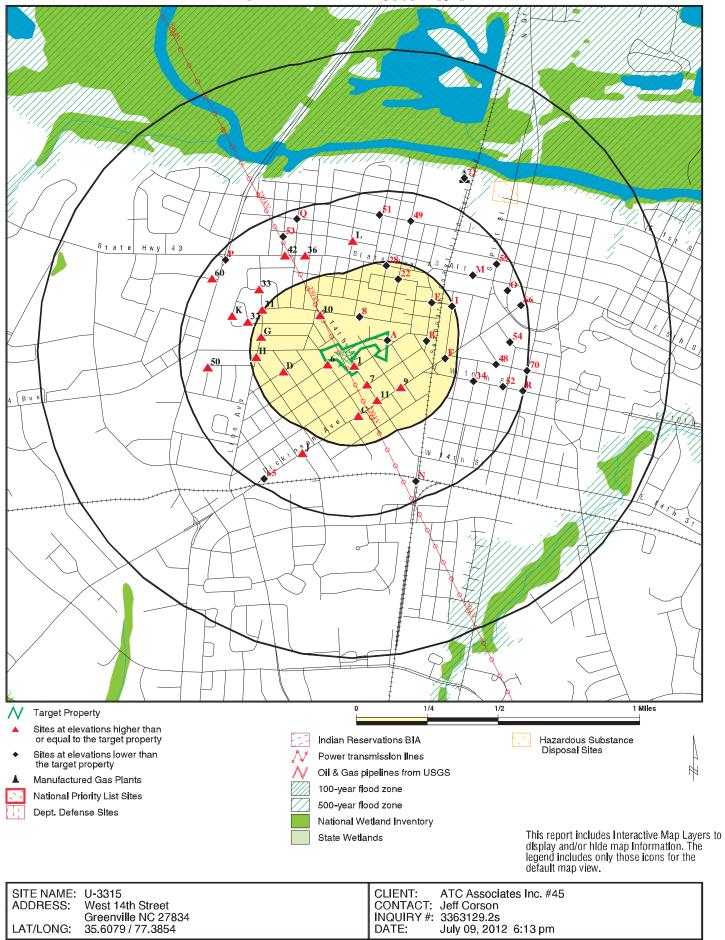
A review of the Manufactured Gas Plants list, as provided by EDR, has revealed that there is 1 Manufactured Gas Plants site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GREENVILLE MGP	PLANT STREET	NNE 1/2 - 1 (0.609 mi.)	71	166

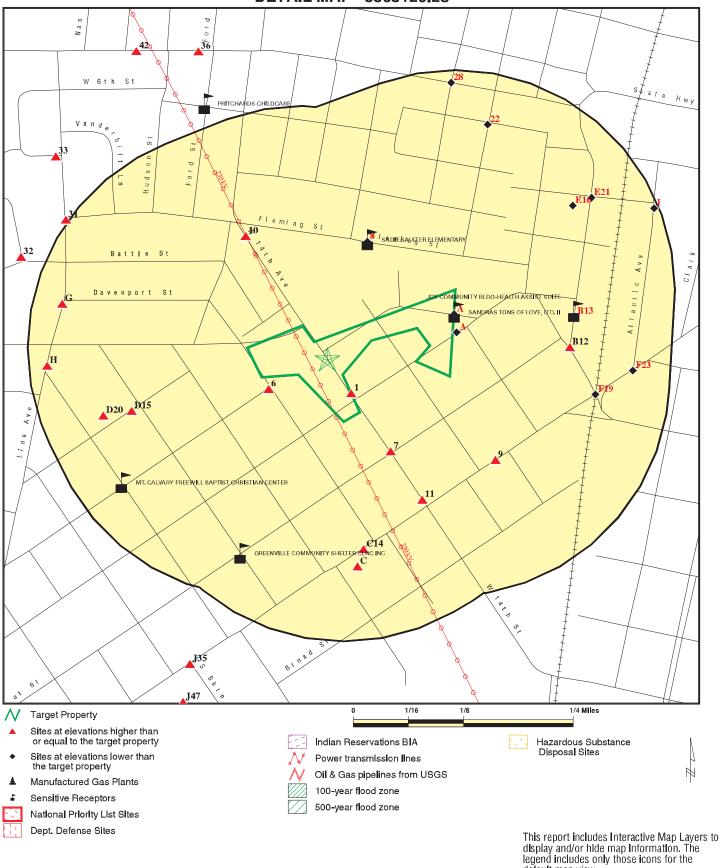
Due to poor or inadequate address information, the following sites were not mapped. Count: 40 records.

CHICOD CITGO INFINGER TRANSPORT COMPANY SMITHS FERTILIZER UST,FINANCIAL ASSURANG TRADE-WILCO 1879 UST,FINANCIAL ASSURANG BELK GROUP OF GREENVILLE/CAROL GOINS ESTATE (WILLIAM) BRANCH'S STORE (HARDMAN'S GROC JOYCE MCROY PROPERTY (QUICK FI KASH & KARRY SNYDER PROPERTY (KRISTINA) BELVOIR HARDWARE BARNHILL PROPERTY (NELL) CONVENIENT WORLD #2 FORBES, DILLON RESIDENCE ED WARREN ESTATE HARDEE PROPERTY (ROY) EIW EQUIPMENT, INC. HERTZ CORP BELVOIR ELEMENTARY SCHOOL MCNEILL RESIDENCE (JOHN) FAST FARE NC 513 IMD, LUST IMD, LUST LUST LUST LUST LUST LUST LUST LUST	
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FAST FARE NC 513 IMD,LUST	
,	
CANDO OLUD OAC CTATION	
SAM'S CLUB GAS STATION LUST	
KASH-N-KARRY#9 LUST TRUST	
FRANK D. DAIL UST	
LENNIE'S GROCERY UST	
CLARA E JONES SERVICE STATION UST	
MRS. FANNIE MAE HINES STORE UST	
NORTH PITT HIGH UST	
ROY'S MINI MART UST	
HARDMAN INC UST	
GREENVILLE PAVING & CONTRACTING UST	
FALKLAND SCHOOL UST	
WILBUR HARDEE UST	
MAYNARD SUMMERLIN UST	
TROPIGAS USA INC UST	
RED OAK CONVENIENT MART UST	
FORBES QUIK STEP UST	
D H CONLEY HIGH SCHOOL UST	
B & S COUNTRY STORE UST	
PITT COMMUNITY COLLEGE IMD	
PITT COMMUNITY COLLEGE (3000 G IMD	

OVERVIEW MAP - 3363129.2s



DETAIL MAP - 3363129.2s



default map view.

SITE NAME: U-3315

ADDRESS: West 14th Street

CLIENT: ATC Associates Inc. #45
CONTACT: Jeff Corson

Greenville NC 27834 INQUIRY #: 3363129.2s LAT/LONG: 35.6079 / 77.3854 DATE: July 09, 2012 6:14 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	AL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL site	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS FEDERAL FACILITY	0.500 1.000		0 0	0 0	0 0	NR 0	NR NR	0 0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORI	RACTS TSD f	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS US INST CONTROL	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
NC HSDS	1.000		0	0	0	1	NR	1
State- and tribal - equiva	lent CERCLIS	S						
SHWS	1.000		0	1	0	0	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
OLI	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		4	11	30	NR	NR	45

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LUST TRUST LAST INDIAN LUST	0.500 0.500 0.500		3 0 0	4 0 0	17 3 0	NR NR NR	NR NR NR	24 3 0
State and tribal registe	red storage ta	nk lists						
UST AST INDIAN UST FEMA UST	0.250 0.250 0.250 0.250		6 0 0	5 0 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	11 0 0 0
State and tribal institut control / engineering c		es						
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal volunta	ary cleanup sit	tes						
VCP INDIAN VCP	0.500 0.500		0 0	0	0	NR NR	NR NR	0 0
State and tribal Brown	fields sites							
BROWNFIELDS	0.500		0	1	0	NR	NR	1
ADDITIONAL ENVIRONME	ENTAL RECORD	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	2	NR	NR	2
Local Lists of Landfill / Waste Disposal Sites	Solid Solid							
ODI DEBRIS REGION 9 SWRCY HIST LF INDIAN ODI	0.500 0.500 0.500 0.500 0.500		0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR NR	NR NR NR NR	0 0 0 0
Local Lists of Hazardo Contaminated Sites	us waste/							
US CDL US HIST CDL	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
Local Land Records								
LIENS 2 LUCIS	TP 0.500		NR 0	NR 0	NR 0	NR NR	NR NR	0 0
Records of Emergency	Release Repo	orts						
HMIRS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Re	ecords							
RCRA-NonGen DOT OPS DOD	0.250 TP 1.000		1 NR 0	2 NR 0	NR NR 0	NR NR 0	NR NR NR	3 0 0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA FTTS	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0
HIST FTTS	TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	Ö
RADINFO	TP		NR	NR	NR	NR	NR	Ö
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
IMD	0.500		3	9	23	NR	NR	35
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
FINANCIAL ASSURANCE	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	0.500		0	0	0	NR	NR	0
COAL ASH DOE 2020 COR ACTION	TP 0.250		NR 0	NR 0	NR NR	NR NR	NR NR	0 0
EPA WATCH LIST	0.250 TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
1 05 THURION ON MEN	••							Ü
EDR PROPRIETARY RECORDS								
EDR Proprietary Records								
Manufactured Gas Plants	1.000		0	0	0	1	NR	1

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

HSDS GREENVILLE COAL GAS PLANT Region

NC HSDS S102442530 N/A

UST U003563226

N/A

NE 1/2-1

3140 ft.

, NC

HSDS:

Site Type: Federal Superfund ID: 986 188 886

Lat/Long: 35 36 57.978380 77 22 32.694728

Total area in coverage units: 15827.6660156 Total perimeter in coverage units: 505.70578002 X-value coordinate in feet: 2482728.75 Y-value coordinate in feet: 683091.9375

Sites designated as superfund cleanup sites: 434

Length of feature in internal units: 505.705724829 Area of feature in internal units squared: 15827.6626249

A B WHITLEY INC 1 1311 WEST 14TH STREET < 1/8 GREENVILLE, NC 27834

1 ft.

UST:

Relative: Higher

Contact: A B WHITLEY INC Contact Address1: 1311 WEST 14TH STREET

Contact Address2: Not reported

Actual: 63 ft.

Contact City/State/Zip: GREENVILLE, NC 27834

Installed Date: 09/24/1979 Root Tank Id: Not reported Main Tank: 0

Compartment Tank:

Manifold Tank: Not reported Gasoline, Gas Mix Product Name: Tank Status: Removed

Tank Capacity: 1000 Perm Close Date: 12/13/1990 Commercial: Yes Regulated: Yes Product Key: 3 Tank Construction: Steel Piping Construction: **FRP** Piping System Key:

Other CP Tank: Not reported

FIPS County Desc: Pitt Latitude: 0 Longitude: 0

Installed Date: 09/24/1979 Root Tank Id: Not reported

Main Tank: Compartment Tank: 0

Manifold Tank: Not reported Product Name: Diesel Tank Status: Removed Tank Capacity: 550 12/13/1990 Perm Close Date: Commercial: Yes Regulated: Yes Product Key: 1

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

A B WHITLEY INC (Continued)

U003563226

Tank Construction: Steel Piping Construction: FRP Piping System Key:

Other CP Tank: Not reported

FIPS County Desc: Pitt Latitude: 0 Longitude: 0

Installed Date: 01/01/1964 Root Tank Id: Not reported

Main Tank: Compartment Tank:

Manifold Tank: Not reported Product Name: Unknown Tank Status: Removed Tank Capacity: 550 07/19/1993 Perm Close Date: Commercial: No Regulated: Yes Product Key: 20 Tank Construction: Concrete Piping Construction: Aluminum Piping System Key:

Other CP Tank: Not reported

FIPS County Desc: Pitt Latitude: 0 Longitude: 0

Installed Date: 09/24/1979 Root Tank Id: Not reported

Main Tank: Compartment Tank:

Manifold Tank: Not reported Product Name: Oil, New/Used/Mix

Tank Status: Removed Tank Capacity: 550 Perm Close Date: 12/13/1990 Commercial: Yes Regulated: Yes Product Key: 14 Tank Construction: Steel Piping Construction: FRP Piping System Key:

Other CP Tank: Not reported FIPS County Desc: Pitt

Latitude: 0 Longitude: 0

Installed Date: 09/27/1965 Root Tank Id: Not reported

Main Tank: Compartment Tank:

Manifold Tank: Not reported Product Name: Heating Oil/Fuel Tank Status: Removed

Tank Capacity: 280 05/24/1991 Perm Close Date:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

A B WHITLEY INC (Continued)

U003563226

UST U001197869

N/A

Commercial: No Regulated: No Product Key: 6 Tank Construction: Concrete Piping Construction: FRP Piping System Key:

Other CP Tank: Not reported

FIPS County Desc: Pitt Latitude: 0 Longitude: 0

A2 MACHINE&WELDING(PREVIOUS RENTER)

307 SPRUCE ST.

< 1/8 GREENVILLE, NC 27834

0.000 mi.

2 ft. Site 1 of 4 in cluster A

UST: Relative:

Contact: UNKNOWN Lower

Contact Address1: 307 SPRUCE STREET Actual: Contact Address2:

Not reported 59 ft.

Contact City/State/Zip: GREENVILLE, NC 27834

Installed Date: 05/04/1976 Root Tank Id: Not reported

Main Tank: 0 Compartment Tank:

Manifold Tank: Not reported Product Name: Diesel Tank Status: Removed Tank Capacity: 1000 Perm Close Date: 12/31/1988 Commercial: Yes Regulated: Yes Product Key: Tank Construction: Steel Piping Construction: **FRP** Piping System Key:

Other CP Tank: Not reported

FIPS County Desc: Pitt Latitude: 0 0 Longitude:

А3 **AMERICAN AUTO BODY ENE 302 SPRUCE ST**

< 1/8 GREENVILLE, NC 27834

0.004 mi.

20 ft. Site 2 of 4 in cluster A

RCRA-NonGen: Relative:

Date form received by agency:06/27/1990 Lower

AMERICAN AUTO BODY Facility name:

Facility address: Actual: 302 SPRUCE ST 59 ft. GREENVILLE, NC 27834

NCD982122657 EPA ID:

Mailing address: SPRUCE ST

GREENVILLE, NC 27834

TC3363129.2s Page 9

RCRA-NonGen 1004745458

NCD982122657

FINDS

Direction Distance

EDR ID Number Elevation **EPA ID Number** Site Database(s)

AMERICAN AUTO BODY (Continued)

1004745458

LANGEMANN KLAUS Contact: 302 SPRUCE ST Contact address:

GREENVILLE, NC 27834

Contact country:

Contact telephone: (919) 758-7540 Contact email: Not reported

EPA Region:

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

LANGEMANN KLAUS Owner/operator name:

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported Owner/operator telephone: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: Nο Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: Nο Used oil transfer facility: No Used oil transporter: No

Hazardous Waste Summary:

Waste code: F003

THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL Waste name:

ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT

NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

MIXTURES.

Waste code: F005

THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL Waste name:

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF

Direction Distance

Distance Elevation Site EDR ID Number Database(s) EPA ID Number

AMERICAN AUTO BODY (Continued)

1004745458

ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110004033126

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

A4 FRANKLIN BAKING CO. INC. IMD \$103130272
ENE 1107 MYRTLE AVENUE N/A

< 1/8 GREENVILLE, NC

0.005 mi.

24 ft. Site 3 of 4 in cluster A

Relative: IMD:

Lower

Actual:

60 ft.

Region: WAS
Facility ID: 12444
Date Occurred: 6/22/1994
Submit Date: 7/27/1994

GW Contam: Yes, Groundwater Contamination has been detected

Soil Contam: No

Incident Desc: UPON CLOSURE OF UST MAJOR SOIL CONTAM, WAS CONFIRMED.

Operator: JERRY HANCOCK
Contact Phone: 2292272283
Owner Company: FLOWERS BAKERY, INC.
Operator Address:1925 FLOWERS CIRCLE
Operator City: THOMASVILLE

Oper City, St, Zip: THOMASVILLE, NC 31757-

Ownership: Private
Operation: Commercial
Material: GASOLINE
Oty Lost 1: Not reported
Oty Recovered 1: Not reported
Source: Leak-underground
Type: Gasoline/diesel

Setting: Urban
Risk Site: L
Site Priority: 70/E
Priority Code: L
Priority Update: 5/30/19

Priority Update: 5/30/1998
Dem Contact: JSB
Wells Affected: No
Num Affected: 0

Wells Contam: Not reported
Sampled By: Responsible Parties
Samples Include: Soil Samples

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FRANKLIN BAKING CO. INC. (Continued)

S103130272

LUST

UST

LUST TRUST

U003145210

N/A

7.5 Min Quad: Not reported 5 Min Quad: M24Q Latitude: Not reported Longitude: Not reported Latitude Number: Not reported Longitude Number: Not reported Latitude Decimal: Not reported Longitude Decimal: Not reported GPS:

Agency: DWM Facility ID: 12444 Not reported Last Modified: Incident Phase: Closed Out NOV Issued: Not reported NORR Issued: Not reported 45 Day Report: Not reported Public Meeting Held: Not reported Corrective Action Planned: Not reported SOC Sighned: Not reported Reclassification Report: Not reported RS Designation: Not reported Closure Request Date: Not reported Close-out Report: Not reported

Α5 FRANKLIN BAKING COMPANY, INC.

ENE 1107 MYRTLE DRIVE < 1/8 GREENVILLE, NC 27834

0.005 mi.

24 ft. Site 4 of 4 in cluster A

Relative:

LUST:

Facility ID: Lower

UST Number: WA-992 Incident Number: 12444

Actual: 60 ft.

Contamination Type:

Groundwater/Both

0-018614

Source Type: Leak-underground Product Type: **PETROLEUM** Date Reported: 07/15/1994 Date Occur: 06/22/1994 06/22/1994 Cleanup: Closure Request: Not reported Close Out: 02/26/2003

Level Of Soil Cleanup Achieved: Residential Tank Regulated Status: Regulated

Of Supply Wells:

Commercial/NonCommercial UST Site: COMMERCIAL

Risk Classification: Risk Class Based On Review:

Corrective Action Plan Type:

Not reported

NOV Issue Date: Not reported 07/28/1994 NORR Issue Date: Site Priority: 70E Phase Of LSA Req:

Site Risk Reason: Not reported Land Use: Residential MTBE: No MTBE1: Yes

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FRANKLIN BAKING COMPANY, INC. (Continued)

U003145210

Flag: No Flag1: No LUR Filed: 01/14/2003

Release Detection: 0

Current Status: File Located in Archives RBCA GW: Cleanups to alternate standards

PETOPT: RPL: True CD Num: 221 Reel Num: 0 RPOW: True RPOP: True Error Flag: 0 Error Code: Ν False Valid:

Lat/Long: 35 36 27 77 23 .96 Lat/Long Decimal: 35.6075 77.38361 Testlat: Not reported Regional Officer Project Mgr: **JSB**

Washington Region:

Company: FLOWERS BAKERY, INC. Contact Person: JERRY HANCOCK

Telephone: 2292272283

RP Address: 1925 FLOWERS CIRCLE RP City,St,Zip: THOMASVILLE, NC 31757

RP County: Not reported

Comments: LSA DUE 10/31/01. CSA DUE 02/13/2002.; CSA RECEIVED 4/1/02; SCP DUE

JULY 9, 2002; NRP NORR ISSUED FOR GW

5 Min Quad: M24Q

PIRF:

Facility Id: 12444 Date Occurred: 6/22/1994 Date Reported: 7/27/1994

Description Of Incident: UPON CLOSURE OF UST MAJOR SOIL CONTAM. WAS CONFIRMED.

Owner/Operator: RICKY HILL

Ownership: Operation Type: 6 Type: 3 Location: Site Priority: 70/E Priority Update: 5/30/1998 Wells Affected Y/N: Ν Samples Include: 0 7#5 Minute Quad: 3 5 Minute Quad: 2

Pirf/Min Soil: Not reported Release Code: M24Q Source Code: Pirf

Err Type: Not reported Cause: Not reported Source: Not reported Ust Number: Not reported

Last Modified: Not reported **Incident Phase:** Closed Out NOV Issued: Not reported NORR Issued: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FRANKLIN BAKING COMPANY, INC. (Continued)

U003145210

45 Day Report: Not reported Public Meeting Held: Not reported Corrective Action Planned: Not reported SOC Signed: Not reported Reclassification Report: Not reported RS Designation: Not reported Closure Request Date: Not reported Close-out Report: Not reported

LUST TRUST:

Facility ID: 0-018614 Site ID: 12444 Site Note: Not reported

Site Eligible?: True

Commercial Find: 100% Commercial Priority Rank: Not reported Deductable Amount: 20000 3rd Party Deductable Amt: Sum 3rd Party Amt Applied: 0

> Click this hyperlink while viewing on your computer to access additional NC LUST TRUST: detail in the EDR Site Report.

UST:

FRANKLIN BAKING COMPANY, INC. Contact: Contact Address1: PO DRAWER 228-500 W GRANTHAM ST

Contact Address2: Not reported

Contact City/State/Zip: GOLDSBORO, NC 27533

Installed Date: 05/04/1972 Root Tank Id: Not reported

Main Tank: 0 Compartment Tank: 0

Manifold Tank: Not reported Gasoline, Gas Mix **Product Name:**

Tank Status: Removed Tank Capacity: 1000 06/22/1994 Perm Close Date: Commercial: Yes Regulated: Yes Product Key: 3 Tank Construction: Steel FRP Piping Construction: Piping System Key:

Other CP Tank: Not reported

FIPS County Desc: Pitt Latitude: 0 Longitude: 0

U-3315

West 14th Street Greenville, NC 27834

Inquiry Number: 3363129.5

July 10, 2012

The EDR Aerial Photo Decade Package



EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Date EDR Searched Historical Sources:

Aerial Photography July 10, 2012

Target Property:

West 14th Street Greenville, NC 27834

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1957	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC;/Flight Date: March 10, 1957	EDR
1961	Aerial Photograph. Scale: 1"=1000'	Panel #: 35077-E4, Greenville SW, NC;/Flight Date: October 16, 1961	EDR
1974	Aerial Photograph. Scale: 1"=1000'	Panel #: 35077-E4, Greenville SW, NC;/Flight Date: April 10, 1974	EDR
1977	Aerial Photograph. Scale: 1"=750'	Panel #: 35077-E4, Greenville SW, NC;/Flight Date: January 30, 1977	EDR
1982	Aerial Photograph. Scale: 1"=1000'	Panel #: 35077-E4, Greenville SW, NC;/Flight Date: March 29, 1982	EDR
1993	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC;/Composite DOQQ - acquisition dates: March 08, 1993	EDR
1999	Aerial Photograph. Scale: 1"=1000'	Panel #: 35077-E4, Greenville SW, NC;/Flight Date: September 23, 1999	EDR
2005	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC;/Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC;/Flight Year: 2006	EDR
2008	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC;/Flight Year: 2008	EDR





















U-3315

West 14th Street Greenville, NC 27834

Inquiry Number: 3363129.3

July 10, 2012

Certified Sanborn® Map Report



Certified Sanborn® Map Report

7/10/12

Site Name: Client Name:

U-3315 ATC Associates Inc. #45
West 14th Street 2725 East Millbrook Road
Greenville, NC 27834 Raleigh, NC 27604

EDR Inquiry # 3363129.3 Contact: Jeff Corson



The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by ATC Associates Inc. #45 were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: U-3315

Address: West 14th Street
City, State, Zip: Greenville, NC 27834

Cross Street:

P.O. # NA Project: NA

Certification # D067-4C5F-9194

Maps Provided:

1958

1946

1929

1923



Sanborn® Library search results Certification # D067-4C5F-9194

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress

University Publications of America

▼ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1958 Source Sheets





Volume 1, Sheet 23

Volume 1, Sheet 25

1946 Source Sheets





Volume 1, Sheet 23

Volume 1, Sheet 25

1929 Source Sheets





Volume 1, Sheet 23

Volume 1, Sheet 25

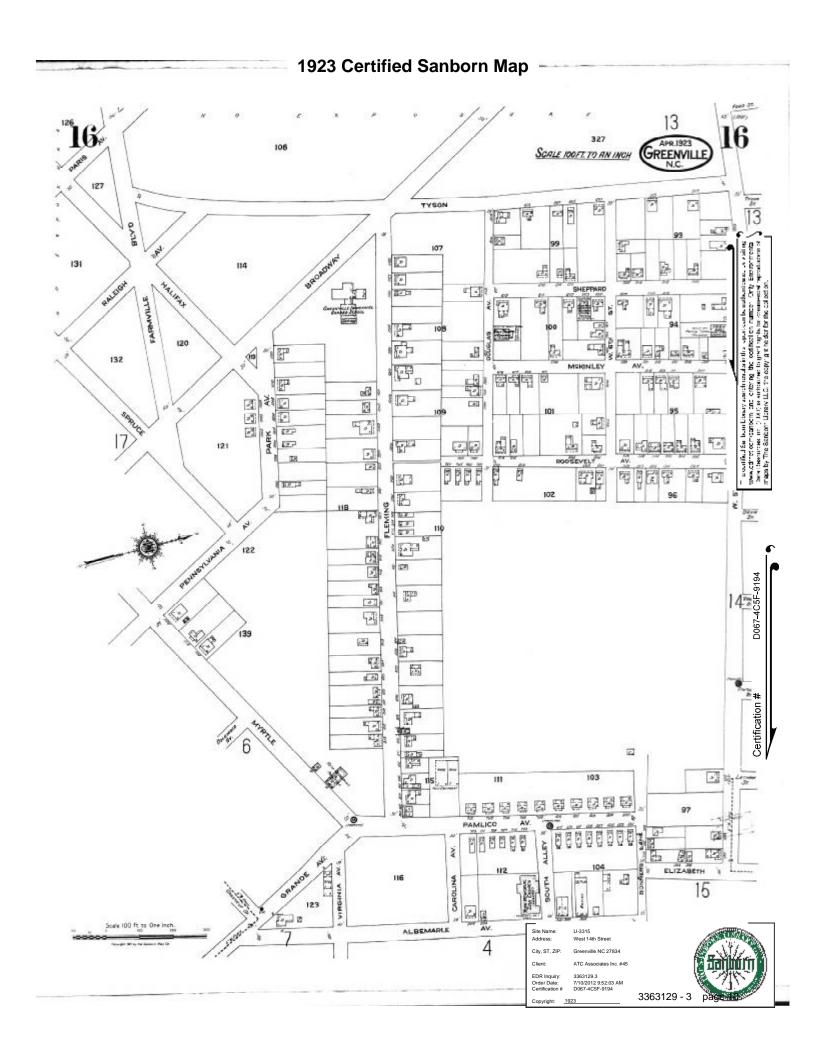
1923 Source Sheets

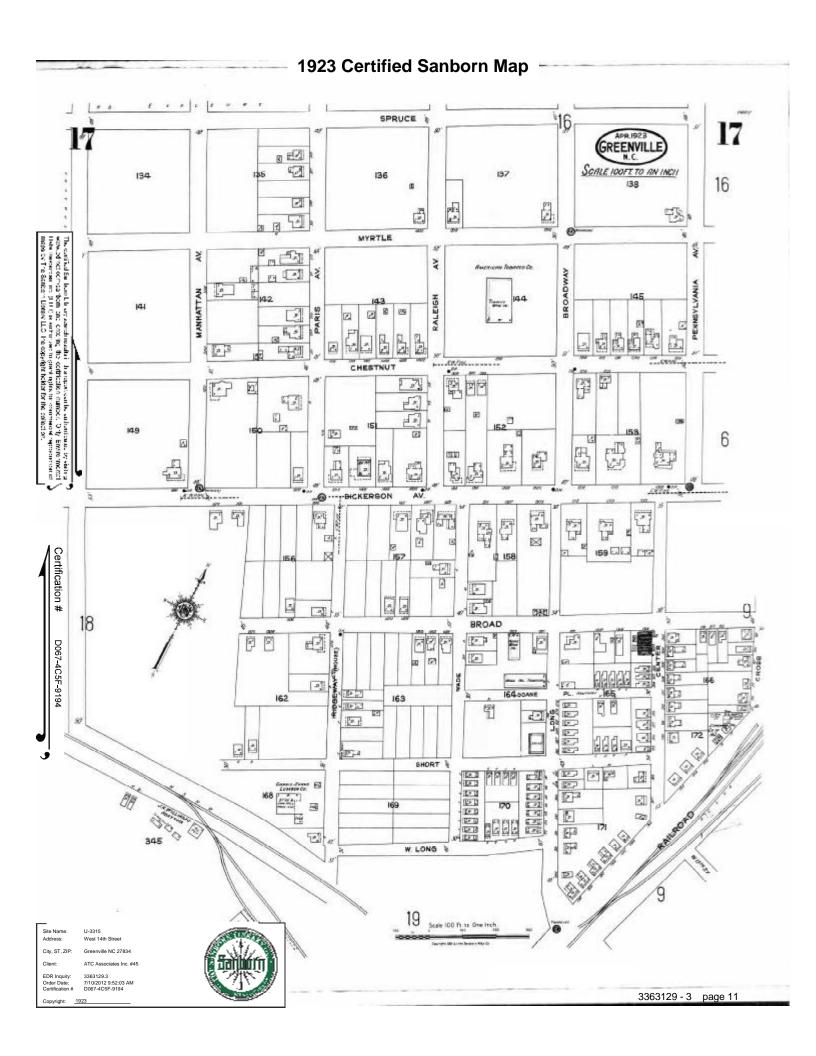


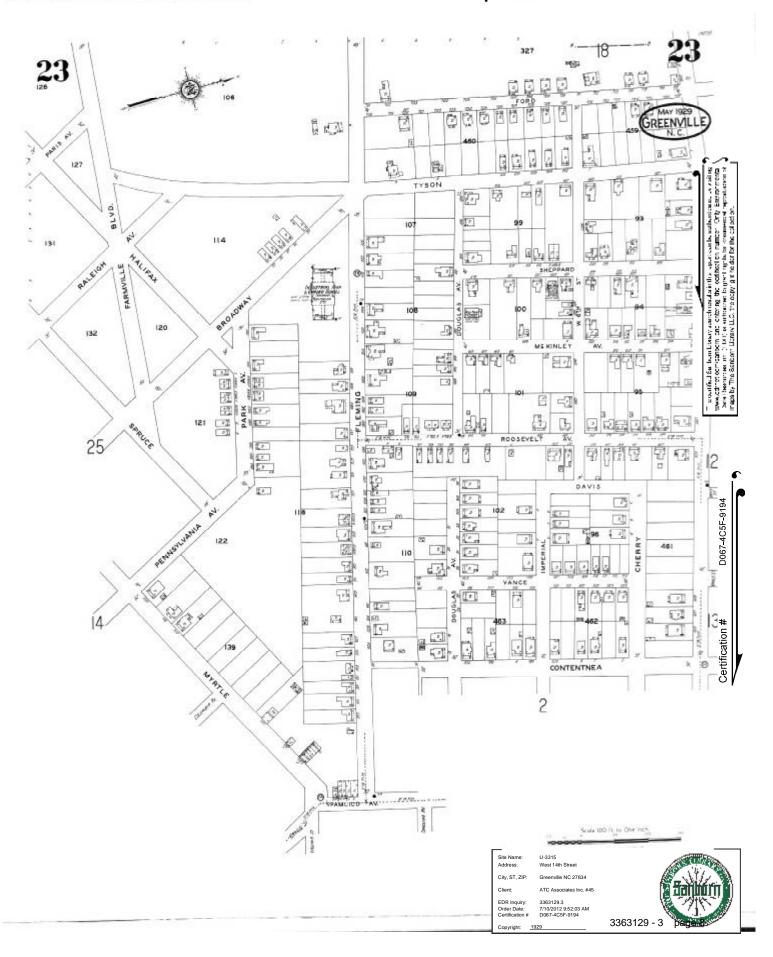


Volume 1, Sheet 16

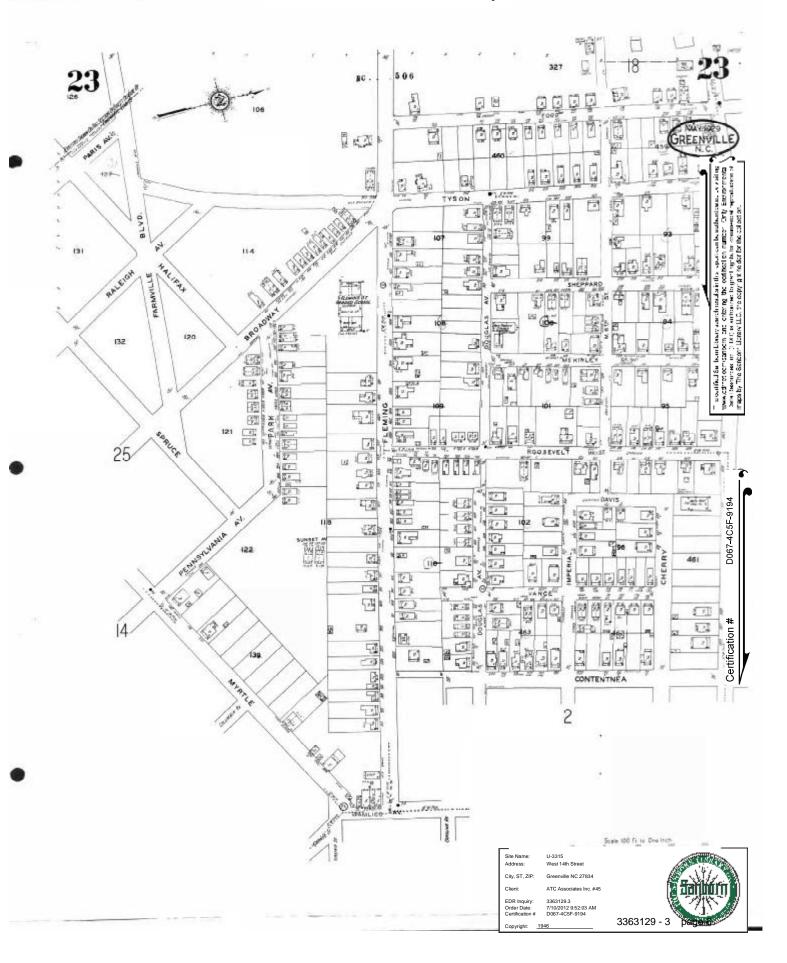
Volume 1, Sheet 17







1929 Certified Sanborn Map 23 SPRUGE MAY 1929 GREENVILLE N.C. g eld - F 137 23 B BER Œ, 0 4 MYRTLE The control for both their assertimental in transport control authorities, by determined when disclosed both care control to control to number. Only tender record to take investment in 10.0 to with one to good against a common of representation in major by The Sentier of Determined to open against bother for the collection. 7-70 AV A 3 **E**2 BROADWAY PENNSYLVANIA MANHATTAN E RAL EIGH The same 141 B 1 뎧 -- X 2074 CHESTNUT AK EZ. 2 m 14 153 152 WATAUGA Q. 5. 55T. 留。 D H 3 B [] Certification # 53 B 970 (3 27 BROAD CENTER TO THE PARTY OF THE PART 7 B D067-4C5F-9194 2013 钽 A STATE OF THE STA 100 EFF (E) 3 (d) 1 48 FR 15 TO THE TOTAL OF THE PARTY OF TH P 30 169 F 9 W. LONG Scale ICO Ft to One Inch. 28 Site Name U-3315 City, ST, ZIP EDR Inquiry: Order Date: Certification # 7/10/2012 9:52:03 AM D067-4C5F-9194 3363129 - 3 page 9 Copyright









APPENDIX B

GEOPHYSICAL REPORT

SUBSURFACE INVESTIGATION REPORT

Electromagnetic Induction, Magnetic Detection & GPR Survey

Franklin Baking Co. Property (Parcel 64)
Sunbeam Bread
1107 Myrtle Street
Greenville, North Carolina

July 19, 2012

Report prepared for: Justin C. Ballard, P.G. ATC Associates of North Carolina 2725 Millbrook Road, Suite 121 Raleigh, North Carolina 27604

Investigative Team: Shane Haniford, Joe Chiocca

Reviewed by: Bruce Beavers P.L.S. and Alex Baldwin L.S.S.

Stantec Consulting Services Inc. 801 Jones Franklin Road, Suite 300 Raleigh, NC 27606 (919) 851-6866 ATC Associates of North Carolina Subsurface Investigation Report Franklin Baking Co. Property (Parcel 64) 1107 Myrtle Street Greenville, North Carolina

1.0 PURPOSE

Stantec Consulting Services Inc. performed a subsurface investigation utilizing surface Ground Penetrating Radar (GPR), Magnetic Detection and Electromagnetic Induction (EM) to survey the subject site located at 1107 Myrtle Street in the city of Greenville, North Carolina on the south side of Myrtle Street approximately 130 feet northeast of Pennsylvania Ave.

This site is currently not in use and historically operated as a bakery and distribution center. According to NCDENR's UST Section Registry One (1) tank was removed in 1994. Groundwater Incident #12444 has been assigned to this facility.

ATC Associates representative Mr. Justin C. Ballard, P.G. provided information and maps identifying the geophysical survey area to Stantec personnel prior to conducting the investigation.

Survey was conducted at the request of Justin C. Ballard, P.G. on July 18th to 19th and September 19th 2012.

The purpose of this investigation was to:

• Survey for detectable structures (UST) and other subsurface anomalies.

The specified survey area was described as 1107 Myrtle Street in the city of Greenville, North Carolina on the south side of Myrtle Street approximately 130 feet northeast of Pennsylvania Ave.

A map depicting this area is included herein.

1.1 LIMITING CONDITIONS

In the event portions of the subject site were not accessible due to obstructions and/or stored items, those areas will be noted as inaccessible. An attempt was made to be as thorough as possible in the survey process. The surveyed area was defined, at the time of the investigation, by the Client. Client representative on site was Aaron Leff with ATC Associates of North Carolina.

In order to accurately conduct a radar survey, linear scans were made across the target area. Confined, obstructed or non-level areas which restrict the scanning pattern can impede the data collected and reduce the accuracy of the desired results.

The assessment of this site is based on our professional evaluation of the data gathered, and our experience with the properties with surface ground penetrating radar within this setting and scope. The evaluation rendered in this report meets the standards of our profession and was conducted in accordance with generally accepted guidelines for EM, Magnetic Detection and GPR surveys. It is generally recognized that the results of the EM, Magnetic Detection and GPR are non-unique and may not represent actual subsurface conditions.

Note: A diligent effort has been made to obtain the highest quality data and make useful interpretations.

Analysis of data was accomplished by visual inspection in the field and then recording the data for post processing.

1.2 APPROACH

Multiple tools involving differing technologies were used in this investigation.

For the GPR analysis, the entire subject survey area was divided logistically into manageable/workable sections.

These isometric sections represent the arrangement of the survey scans. Within these sections, scans were made in an orthogonal pattern on two foot centers. This provided two separate data sets for each section.

For Magnetic Detection and Electromagnetic Induction the area was systematically scanned in such a pattern so to cover over 100% of the accessible portions of the site. This is possible due

to the size and shape of the resulting fields produced from the sensors thus resulting in an "overlapping" of each transect covered.

2.0 METHODOLOGY

2.1 EQUIPMENT

Ground Penetrating Radar (GPR)

The GPR method transmits electromagnetic waves, which are pulsed at discrete distance/ time intervals.

The transmitted pulse radiates through the earth whereby a portion of the energy is reflected from interfaces of contrasting electrical properties (e.g. pavement and soil interface, soil stratigraphic changes and buried metallic objects) while the remaining energy continues until reaching additional reflectors where the process is repeated.

Reflected energy is received by the antennae and recorded for later processing and interpretation. Factors such as soil moisture, clay content, and variations in the dielectric constants of materials control the effectiveness of the GPR method. Wet conductive soils severely attenuate GPR signals and thus the effective depth of exploration.

The presence of foreign products leeched into the soil can eschew the data collected thereby affecting the images.

GPR energy cannot transmit through ferrous objects since metal acts as a pure reflector.

Stantec employed a MALA X3M/GPR digital radar unit with a 250 MHz center frequency, bistatic antenna to survey the site. The instrument was configured to detect moderately shallow reflectors within the geologic strata. The chosen instrument configuration facilitates the analysis. The GPR system unit was configured for data collection as follows:

• Trigger Source: Cart

• Range: 0-66 ns

• Samples per Scan: 250-512

Sampling Frequency: 10852.27 to 7234.85 MHz

Vertical High Pass Filter: 15 SamplesVertical Low Pass Filter: 5 Samples

• Point Interval: 0.669 to 0.906 in

• Pulses/Ft: 108.48

Software utilized for the collection and analysis of these data included: RAMAC Ground Vision GPR Software version 3. 1. 19. (5).

2.2 EQUIPMENT

Electromagnetic (EM) and Magnetic Detection

The magnetic detection method is a LF (30 to 300 kHz) or VLF (below 30 kHz) receiver for detecting electromagnetic fields which radiate off of metallic objects. Magnetic locators operate on a simple principal.

An electronic transmitter and receiving antennae are mounted on a support structure. The two antennae are mounted a fixed distance apart aligned opposing so that the magnetic field measured by one sensor is negative of the magnetic field measured by the other. Each measures the average magnetic field component along their axis i.e. the magnetic field component along the longitudinal axis between the antennae.

This is calibrated in the field to a position (setting) which is neutral to the earth's natural magnetic field. When a metallic object is introduced within this field, it is detected as a differing field. This differing magnetic field is the field of interest.

Stantec employed this method of locating buried metallic objects as a compliment to GPR for the subject site.

Stantec selected the following instruments for this particular task:

- Subsurface Magnetic Locator ML-1M
- Schonstedt GA-52Cx. HeliFlux magnetic field sensors—drive frequency 7.5 KHz.
- RadioDetection 8000 T-10 model utilizing 512 hertz, 8 KHz, 33 KHz, 65 KHz, 50/60 hertz, long wave radio frequencies

3.0 DATA PROCESSING AND ANALYSIS-GPR

Stantec calculated the average radar propagation velocity for the subject sites. This procedure is necessary to provide reasonably accurate depth estimates for reflection events in the subsurface strata.

The average radar velocity for the site was estimated. It should be noted that the dielectric constants and hence the corresponding radar propagation velocities did vary by an order of degree(s) of magnitude across the surveyed area. Additionally, radar propagation velocity decreases with depth in most geologic sections.

Data processing of the GPR data prior to interpretation included band pass filtering, background removal, horizontal smoothing, trace editing, and time gain adjustments. After processing, the data profiles were reviewed for analysis. These processing techniques were applied to the GPR data to provide the highest quality data and therefore facilitate the overall interpretation process.

4.0 RESULTS & CONCLUSIONS

Stantec Consulting Services Inc. has completed a subsurface investigation of the subject site.

Multiple methods and technologies were used where permitted by the environment.

Survey scans were made throughout the targeted area.

The survey revealed anomalies within the subject site.

Target A: A Probable UST of approximately five (5) feet by eleven (11) feet was noted. There is a surface lid as shown in photos over the Probable UST. A propane line is fed to the building and connects to this anomaly. This discovery was made using magnetics indicating metallic objects and ground penetrating radar as well as electromagnetic induction to delineate the propane line to the building. Surface Ground Penetrating Radar data showed a metallic signature and the stratigraphic walls of two different soil conditions. A sketch of this area is included on page 10.

Target B: An area approximately two (2) feet in diameter was noted. This discovery was made using magnetics indicating metallic objects. Surface Ground Penetrating Radar data was

inconclusive. It is possible that trash with metal content was dumped in this area. A sketch of this area is included on page 10.

- 1. A water service was detected in the property with a surface meter just off the edge of Myrtle Street. The water connected to the front of the building. This was detected using Electromagnetic Induction with 33 and 65 kHz frequencies. A sketch of this area is included on page 10.
- 2. Three (3) gas lines were discovered on the property and in Myrtle Street. These lines were discovered using Electromagnetic Induction with 65 and 200 kHz frequencies. A sketch of this area is included on page 10.
- 3. A Sanitary Sewer gravity main was detected near the center of Myrtle Street. This was discovered using ground penetrating radar. A sketch of this area is included on page 10.
- 4. A water main was detected on Myrtle Street in front of Parcel 64. This was discovered using Electromagnetic Induction with 65 and 200 kHz frequencies. A sketch of this area is included on page 10.



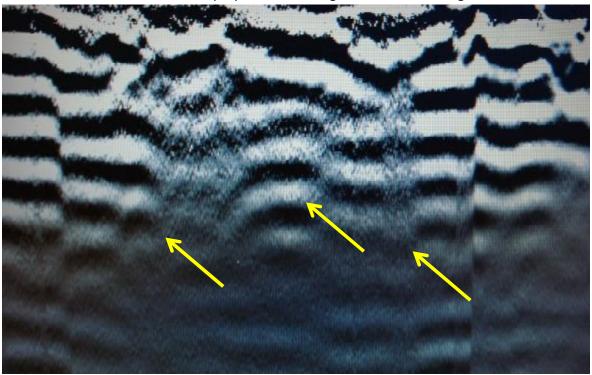
1107 Myrtle Street Parcel 64 photo from Myrtle Street facing southeast



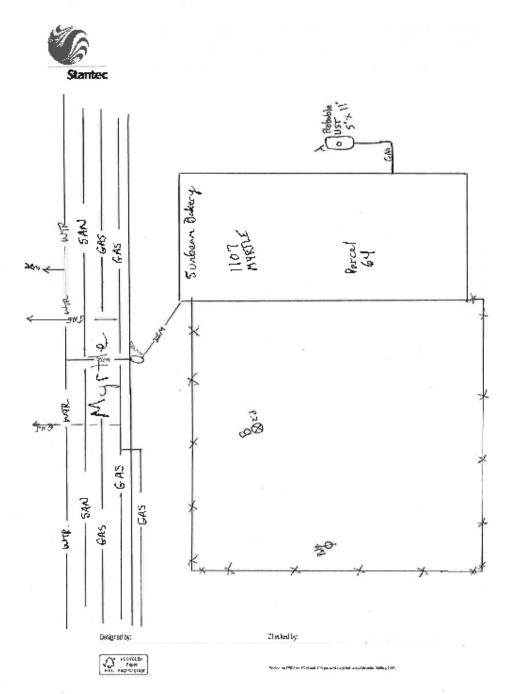
Target B 2' diameter anomaly of metal content



Probable UST propane tank with gas service to building



The hyperbolic image shown was taken over the Probable UST propane tank servicing Sunbeam Bakery. Due to recent rains the moisture content delineates the subsurface walls where the pit was originally dug to place the propane tank.





APPENDIX C

BORING LOGS



Client: NCDOT Project: U-3315 Parcel 64 Greenville, Pitt County, North Cardina WBS Element 35781.1.2 Date(s) Drilled : 8/20/2012
Driller : SAEDACCO
Drilling Method : Direct Push

Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous

		Element 3				
	ATC Proj	ect No. 45.	.19873.0007	Logged By : Aaron	Leff	
Depth In Feet	nscs	GRAPHIC		DESCRIPTION	PID VOC (ppm)	Sample
0-		ΥX	Asphalt and subbas	e		
-	AR	\times	1			
1—			Light brown, silty SA	AND	3.2	
	SW				33.4	
6- - - - -					23.8	
7-					43.0	х
-	SW		Light brown, silty SA	AND, saturated		
8-		<u> </u>	End of boring at 8' b	ogs		

Soil sample was collected from $6\mbox{'-}8\mbox{'}$ bgs interval.



Client: NCDOT
Project: U-3315 Parcel 64
Greenville, Pitt County, North Carolina
WBS Element 35781.1.2

Date(s) Drilled : 8/20/2012
Driller : SAEDACCO
Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

ATC Project No. 45, 19873,0007 Logged By : Aaron Left Logged By :	G	reenville, I	Pitt County, Element 3	North Carolina	Drilling Method	: Direct Push		Continuous	
Asphalt and subbase Tan and gray, CLAY Tan and red, silty CLAY		ATC Pro	ject No. 45.	19873.0007			Logged By :	Aaron Leff	
Tan and gray, CLAY Tan and gray, CLAY Tan and red, silty CLAY		nscs	GRAPHIC			DESCRIPTION		PID VOC (ppm)	Sample
2- CL 3-	0-	AR	X	Asphalt and subba	se				
Tan and red, silty CLAY 5— CL Gray, clayey SAND, moist 7— SW Gray and tan, silty SAND, saturated 9— 10— SW 11— 13— 14— 15— 16— 17— 18— 18— 18— 18— 18— 18— 18	2-	CL		Tan and gray, CLA	Y			0.8	
5 CL 6 Gray, clayey SAND, moist 7 SW 1.5 x Gray and tan, silty SAND, saturated 9 SW 11 SW	4-			Tan and red. silty (CLAY			0.9	
7- SW 8 Gray, clayey SAND, moist 1.5 x 8 Gray and tan, silty SAND, saturated 9- SW	-	CL		Tan and 160, only	3 - 11			0.5	
8 Gray and tan, silty SAND, saturated 10 SW 11 11 12	6-			Gray, clayey SAND), moist				
Gray and tan, silty SAND, saturated 10— SW	-	SW						1.5	х
End of boring at 12' bgs	9	SW							
	12-		•	End of boring at 12	2' bgs			,	



Client: NCDOT
Project: U-3315 Parcel 64
Greenville, Pitt County, North Carolina
WBS Element 35781.1.2

Date(s) Drilled : 8/20/2012
Driller : SAEDACCO
Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

	WBS	Element 3	5781.1.2	2 ming would 2 . 2 most 1 don	Camping interval	. Contin	idodo	
			19873.0007		Logged By	: Aaron	Leff	
Depth In Feet	nscs	GRAPHIC		DESCRIPTION			PID VOC (ppm)	Sample
0-		ΥV	Concrete and subba	ase				
1-	AR		Gray and tan, CLAY				0.0	
3-	CL						0.0	х
5- - - - - 6- - -	CL		Gray and tan, sandy	y CLAY			0.0	
7-	SW		Gray and tan, clayey Gray and tan, clayey	ey SAND, saturated			0.0	
5- 5- - - - - - - - - - - - - - - - - -	sw		Gray and tan, clayey	ey SAND, moist ey SAND, saturated			0.0	



Client: NCDOT Project: U-3315 Parcel 64 Greenville, Pitt County, North Carolina WBS Element 35781.1.2 Date(s) Drilled : 8/21/2012
Driller : SAEDACCO
Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

ATC Project No. 45.19873.0007 Logged By : Aaron Leff Depth In Feet PID VOC (ppm) GRAPHIC Sample **DESCRIPTION** 0-Concrete and subbase AR Tan and gray, silty CLAY 0.0 2. CL 3. 0.1 х 5-0.0 Gray and tan, clayey SAND 6-SW Gray and tan, silty SAND, moist SW 0.0 Gray and tan, silty SAND, saturated SW

Soil sample was collected from 2.5'-5' bgs interval.

End of boring at 8' bgs



Client: NCDOT Project: U-3315 Parcel 64 Greenville, Pitt County, North Carolina WBS Element 35781.1.2 Date(s) Drilled : 8/20/2012
Driller : SAEDACCO
Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

ATC Project No. 45.19873.0007 Logged By : Aaron Leff Depth In Feet PID VOC (ppm) GRAPHIC Sample **DESCRIPTION** Grass and clayey topsoil Gray and tan, CLAY 0.6 2-CL 3 4.2 х 5. Gray and tan, sandy CLAY 0.0 6- CL 0.0 Gray and tan, clayey SAND, moist

Soil sample was collected from 2.5'-5' bgs interval.

Gray and tan, clayey SAND, saturated

End of boring at 8' bgs

SW

SW

(W	A	TC		BORING	G LOG: SB64-6		
G	Projec reenville, F WBS	Element 3	Parcel 64 North Carolina 5781.1.2	Date(s) Drilled Driller Drilling Method	: 8/21/2012 : SAEDACCO : Hand Auger	Sampling Method : No Sampling Interval : 0	2.25 Inches Macrocore Continuous	
	ATC Proj	ect No. 45.	19873.0007			Logged By : A	Aaron Leff	
Depth In Feet	nscs	GRAPHIC			DESCRIPTION		PID VOC (ppm)	Sample
0-		- Ja- Ja-	Grass and topsoil					
1	SW		Brown, silty, coarse		urated		0.0	x
2-			End of boring at 2' b	ogs (top of undergro	ound propane tank)			
Soil sar	mple was co	ollected from	ı 0'-2.5' bgs interval.					



Client: NCDOT Project: U-3315 Parcel 64 Greenville, Pitt County, North Cardina WBS Element 35781.1.2 Date(s) Drilled : 8/21/2012
Driller : SAEDACCO
Drilling Method : Direct Push

Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous

Logged By : Aaron Leff

ATC Project No. 45.19873.0007

Depth In Feet	nscs	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample
0-			Grass and topsoil		
1 - 1 -	SW		Brown, silty, coarse grained SAND, very moist	0.0	
2			Tan and gray, CLAY		
3	CL			0.0	
5— - - - 6—				0.2	х
- - - 7	SW	/ /	Gray and tan, silty SAND	0.2	
, - - - -	SW		Gray and tan, silty SAND, saturated	5.2	
8			End of boring at 8' bgs		



Client: NCDOT
Project: U-3315 Parcel 64
Greenville, Pitt County, North Carolina
WBS Element 35781.1.2

Date(s) Drilled : 8/21/2012
Driller : SAEDACCO
Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

G	reenville, I WBS	Pitt County, Element 3	North Carolina 5781.1.2	Drilling Method	: Direct Push	Sampling Interval	: Conti	nuous	
			19873.0007	1		Logged By	: Aaror	n Leff	
Depth In Feet	nscs	GRAPHIC			DESCRIPTION			PID VOC (ppm)	Sample
0-	AR		Asphalt and subbas	se					
- 1- - - -	SW		Brown, silty SAND,	moist				0.2	х
2-	SW		Orangish tan, claye						
	CL		Orangish light brow	n, silty CLAY				0.0	
- - - 6-			Tan and gray, claye	v SAND moist				0.0	
- - - - 7-	SW							0.0	
- - -	SW		Orangish tan, silty,		ND, saturated				
8-			End of boring at 8' b	ogs					



Client: NCDOT
Project: U-3315 Parcel 64
Greenville, Pitt County, North Cardina
WBS Element 35781.1.2

Date(s) Drilled : 8/21/2012
Driller : SAEDACCO
Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

	WBS Element 35781.1.2 ATC Project No. 45.19873.0007			Drilling Method	. Direct Push	Sampling interval	. Conti	nuous	
	ATC Proj	ect No. 45.	19873.0007			Logged By	: Aaror	Leff	
Depth In Feet	nscs	GRAPHIC			DESCRIPTION			PID VOC (ppm)	Sample
0-		Υ	Asphalt and subbas	ie					
-	AR								
1	SW		Brown, silty, coarse	grained, SAND				0.0	х
2-	CL		Gray, CLAY, moist						
3— 3— 4— 5— 5—	CL		Soft, gray, silty CLA					wet	
5-			End of boring at 5' b	ogs					
1	l								



Client: NCDOT
Project: U-3315 Parcel 64
Greenville, Pitt County, North Carolina
WBS Element 35781.1.2

Date(s) Drilled : 8/21/2012
Driller : SAEDACCO
Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

G	reenville, F WBS	Pitt County, Element 35	North Carolina	Drilling Method	: Direct Push	Sampling Interv	ral : Conti	nuous	
			19873.0007	-		Logged By	: Aaroi	n Leff	
Depth In Feet	nscs	GRAPHIC			DESCRIPTION			PID VOC (ppm)	Sample
0-	AR		Asphalt and subbas	se					
1- 1- 2- 3- 3- 4- -	CL		Light brown, silty CI					15.5	x
5	SW		Gray and tan, sand					2.1	
7-	SW		Gray and tan, claye					0.9	
8-	SW	: : · : : :	Tan, silty SAND, sa						
			End of boring at 8' b	ogs					



Client: NCDOT
Project: U-3315 Parcel 64
Greenville, Pitt County, North Carolina
WBS Flement 35781 1 2

Date(s) Drilled : 8/21/2012
Driller : SAEDACCO

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

G	reenville, l	Pitt County, Element 3	North Carolina	Drilling Method	: Direct Push		ntinuous		
	ATC Pro	ject No. 45.	19873.0007			Logged By : Aa	ron Leff		
Depth In Feet	nscs	GRAPHIC			DESCRIPTION		PID VOC (ppm)	Sample	
0-	AR		Asphalt and subba	se					
1- 1- - - 2- - - 3- - - - - - - - - - - - -	CL		Gray and tan, silty	CLAY			0.0	x	
5-	SW		Gray and tan, silty				0.0		
6- - - - 7- - -	SW		Gray and tan, silty	SAND, saturated			wet		
8-	End of boring at 8' bgs								



Client: NCDOT
Project: U-3315 Parcel 64
Greenville, Pitt County, North Carolina
WBS Flement 35781 1 2

Date(s) Drilled : 8/21/2012
Driller : SAEDACCO

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

G	WBS	Element 3		Drilling Method	: Direct Push	Sampling Interval	: Conti	nuous	
	ATC Pro	ject No. 45.	.19873.0007			Logged By	: Aaror	Leff	
Depth In Feet	nscs	GRAPHIC			DESCRIPTION			PID VOC (ppm)	Sample
0-	AR		Asphalt and subba	ase					
2-	CL		Gray and tan, silty	CLAY				0.7	x
5- - - - - - - - - - - - - - - - - - -			Gray and tan, silty	SAND, moist				0.1	
7-	sw							0.0	
8-	sw		Gray and tan, silty						
			End of boring at 8'	bys					

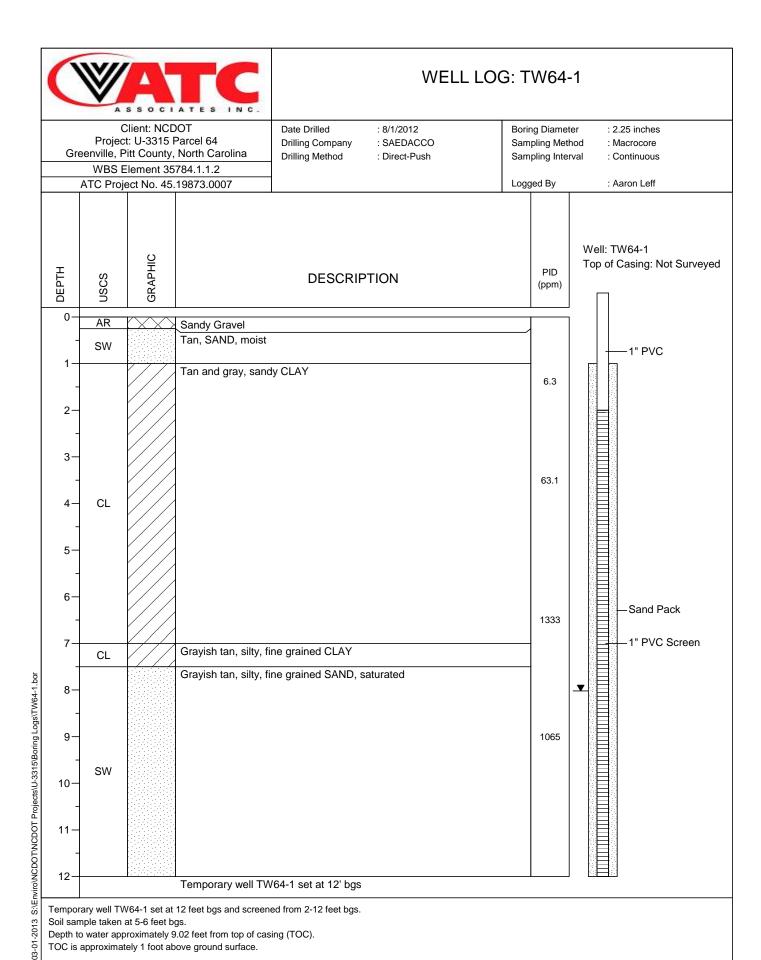


Client: NCDOT
Project: U-3315 Parcel 64
Greenville, Pitt County, North Carolina
WBS Flement 35781 1 2

Date(s) Drilled : 8/21/2012
Driller : SAEDACCO

Boring Diameter : 2.25 Inches
Sampling Method : Macrocore
Sampling Interval : Continuous

G	reenville,	Pitt County, Element 3	North Carolina	Drilling Method	: Direct Push		ontinuous			
	ATC Pro	ject No. 45.	19873.0007			Logged By : A	aron Leff			
Depth In Feet	nscs	GRAPHIC			DESCRIPTION		PID VOC (ppm)	Sample		
0-	AR		Asphalt and subba	ase						
-		$\overline{}$	Tan and gray, silty	CLAY						
1— 1— - - - 2—							0.0			
3- 3- - - - 4- -	CL						0.0			
-										
5-	CL		Tan and gray, san				16.4			
6—	sw		Gray and tan, silty	SAND			43.9	х		
-	SW		Gray and tan, silty	SAND, saturated						
8-		End of boring at 8' bgs								



Temporary well TW64-1 set at 12 feet bgs and screened from 2-12 feet bgs. Soil sample taken at 5-6 feet bgs.

Temporary well TW64-1 set at 12' bgs

Depth to water approximately 9.02 feet from top of casing (TOC).

TOC is approximately 1 foot above ground surface.

11

12-

APPENDIX D LABORATORY ANALYTICAL REPORTS





Laboratory Report of Analysis

Justin Ballard To: **ATC Associates** 2725 E. Millbrook Rd Suite 121 Raleigh, NC 27604

Report Number: 31202687

Client Project: **NCDOT U-3315**

Dear Justin Ballard.

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

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

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,

SGS North America Inc.

Digitally signed by: Michael Page Date: 2012.09.04 09:45:00 -04'00'

Michael D. Page Project Manager michael.page@sgs.com Date

Print Date: 08/31/2012 N.C. Certification # 481

ANALYTICAL PERSPECTIVES IS NOW PART OF SGS. THE WORLD'S LEADING INSPECTION. VERIFICATION, TESTING AND CERTIFICATION COMPANY.





Laboratory Qualifiers

Report Definitions

DL Method, Instrument, or Estimated Detection Limit per Analytical Method

CL Control Limits for the recovery result of a parameter

LOQ Reporting Limit **Dilution Factor** DF

RPD Relative Percent Difference

LCS(D) Laboratory Control Spike (Duplicate)

MS(D) Matrix Spike (Duplicate)

Method Blank MB

Qualifier Definitions

Recovery or RPD outside of control limits

В Analyte was detected in the Lab Method Blank at a level above the LOQ

U Undetected (Reported as ND or < DL)

V Recovery is below quality control limit. The data has been validated based on a favorable signal-to-noise

and detection limit

Α Amount detected is less than the Lower Method Calibration Limit

J Estimated Concentration.

0 The recovery of this analyte in the OPR is above the Method QC Limits and the reported concentration in

the sample may be biased high

Ε Amount detected is greater than the Upper Calibration Limit

S The amount of analyte present has saturated the detector. This situation results in an

underestimation of the affected analyte(s)

Q Indicates the presence of a quantitative interference. This situation may result in an

underestimation of the affected analyte(s)

Ι Indicates the presence of a qualitative interference that could cause a false positive or an

overestimation of the affected analyte(s)

DPE Indicates the presence of a peak in the polychlorinated diphenylether channel that could

cause a false positive or an overestimation of the affected analyte(s)

TIC Tentatively Identified Compound

EMPC Estimated Maximum possible Concentration due to ion ratio failure

ND Not Detected

Result is estimated due to ion ratio failure in High Resolution PCB Analysis Κ

Р RPD > 40% between results of dual columns

D Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1 Mis-identified peak

M2 Software did not integrate peak

М3 Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one) М4 Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane)

M5 Other - Explained in case narrative

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

Print Date: 08/31/2012 N.C. Certification # 481

Member of the SGS Group (SGS SA)





Samp	le	Sum	mary	,
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Client Sample ID	Lab Sample ID	Collected	Received	<u>Matrix</u>
TW64-1: 5-6	31202687001	08/20/2012 14:00	08/22/2012 13:00	Soil-Solid as dry weight
SB64-1: 6-8	31202687002	08/20/2012 14:45	08/22/2012 13:00	Soil-Solid as dry weight
SB64-2: 6-8	31202687003	08/20/2012 15:20	08/22/2012 13:00	Soil-Solid as dry weight
SB64-5: 2.5-5	31202687004	08/20/2012 16:00	08/22/2012 13:00	Soil-Solid as dry weight
SB64-3: 2.5-5	31202687005	08/20/2012 16:30	08/22/2012 13:00	Soil-Solid as dry weight
SB64-4: 2.5-5	31202687006	08/21/2012 06:55	08/22/2012 13:00	Soil-Solid as dry weight
SB64-6: 0-2.5	31202687007	08/21/2012 07:20	08/22/2012 13:00	Soil-Solid as dry weight
SB64-7: 5-6	31202687008	08/21/2012 07:40	08/22/2012 13:00	Soil-Solid as dry weight
SB64-8: 0-2.5	31202687009	08/21/2012 08:30	08/22/2012 13:00	Soil-Solid as dry weight
SB64-9: 0-2.5	31202687010	08/21/2012 08:15	08/22/2012 13:00	Soil-Solid as dry weight
SB64-10: 0-2.5	31202687011	08/21/2012 09:15	08/22/2012 13:00	Soil-Solid as dry weight
SB64-11: 2.5-5	31202687012	08/21/2012 09:35	08/22/2012 13:00	Soil-Solid as dry weight
SB64-12: 0-2.5	31202687013	08/21/2012 09:55	08/22/2012 13:00	Soil-Solid as dry weight
SB64-13: 6-8	31202687014	08/21/2012 10:20	08/22/2012 13:00	Soil-Solid as dry weight
TW64-1	31202687015	08/21/2012 11:10	08/22/2012 13:00	Water
Trip Blanks (Not on COC)	31202687016	08/21/2012 00:00	08/22/2012 13:00	Water

N.C. Certification # 481 Print Date: 08/31/2012





Client Sample ID: TW64-1: 5-6 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687001-D Lab Project ID: 31202687

Collection Date: 08/20/2012 14:00 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 77.40

Results by **SW-846 8260B**

esuns by 344-040 0200B		
<u>Parameter</u>	Result	<u>Qual</u>
1,1,1,2-Tetrachloroethane	ND	
I,1,1-Trichloroethane	ND	
1,1,2,2-Tetrachloroethane	ND	
1,1,2-Trichloroethane	ND	
1,1-Dichloroethane	ND	
1,1-Dichloroethene	ND	
1,1-Dichloropropene	ND	
1,2,3-Trichlorobenzene	ND	
1,2,3-Trichloropropane	ND	
1,2,4-Trichlorobenzene	ND	
1,2,4-Trimethylbenzene	196000	
1,2-Dibromo-3-chloropropane	ND	
1,2-Dibromoethane	ND	
1,2-Dichlorobenzene	ND	
1,2-Dichloroethane	ND	
1,2-Dichloropropane	ND	
1,3,5-Trimethylbenzene	50700	
1,3-Dichlorobenzene	ND	
1,3-Dichloropropane	ND	
1,4-Dichlorobenzene	ND	
2,2-Dichloropropane	ND	
2-Butanone	ND	
2-Chlorotoluene	ND	
2-Hexanone	ND	
4-Chlorotoluene	ND	
4-Isopropyltoluene	7870	
4-Methyl-2-pentanone	ND	
Acetone	ND	
Benzene	ND	
Bromobenzene	ND	
Bromochloromethane	ND	
Bromodichloromethane	ND	
Bromoform	ND	
Bromomethane	ND	
n-Butylbenzene	ND	
Carbon disulfide	ND	
Carbon tetrachloride	ND	
Chlorobenzene	ND	
Chloroethane	ND	
Chloroform	ND	
Chloromethane	ND	
Dibromochloromethane	ND	
Dibromomethane	ND	
Dichlorodifluoromethane	ND	
2.5orodinario		

Print Date: 08/31/2012 N.C. Certification # 481





Client Sample ID: TW64-1: 5-6 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687001-D Lab Project ID: 31202687

Collection Date: 08/20/2012 14:00 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 77.40

Results by SW-846 8260B

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analy
cis-1,3-Dichloropropene	ND		7790	ug/Kg	8000	08/27/201
trans-1,3-Dichloropropene	ND		7790	ug/Kg	8000	08/27/201
Diisopropyl Ether	ND		7790	ug/Kg	8000	08/27/201
Ethyl Benzene	21500		7790	ug/Kg	8000	08/27/201
Hexachlorobutadiene	ND		7790	ug/Kg	8000	08/27/201
Isopropylbenzene (Cumene)	ND		7790	ug/Kg	8000	08/27/201
Methyl iodide	ND		7790	ug/Kg	8000	08/27/201
Methylene chloride	ND		39000	ug/Kg	8000	08/27/201
Naphthalene	73100		7790	ug/Kg	8000	08/27/201
Styrene	ND		7790	ug/Kg	8000	08/27/201
Tetrachloroethene	ND		7790	ug/Kg	8000	08/27/201
Toluene	12500		7790	ug/Kg	8000	08/27/201
Trichloroethene	ND		7790	ug/Kg	8000	08/27/201
Trichlorofluoromethane	ND		7790	ug/Kg	8000	08/27/201
Vinyl chloride	ND		7790	ug/Kg	8000	08/27/201
Xylene (total)	133000		15600	ug/Kg	8000	08/27/201
cis-1,2-Dichloroethene	ND		7790	ug/Kg	8000	08/27/201
m,p-Xylene	92100		15600	ug/Kg	8000	08/27/201
n-Propylbenzene	21100		7790	ug/Kg	8000	08/27/201
o-Xylene	41200		7790	ug/Kg	8000	08/27/201
sec-Butylbenzene	ND		7790	ug/Kg	8000	08/27/201
tert-Butyl methyl ether (MTBE)	ND		7790	ug/Kg	8000	08/27/201
tert-Butylbenzene	ND		7790	ug/Kg	8000	08/27/201
trans-1,2-Dichloroethene	ND		7790	ug/Kg	8000	08/27/201
trans-1,4-Dichloro-2-butene	ND		39000	ug/Kg	8000	08/27/2012
Surrogates						
1,2-Dichloroethane-d4	109		55.0-173	%	8000	08/27/201
4-Bromofluorobenzene	96.0		23.0-141	%	8000	08/27/201
Toluene d8	96.0		57.0-134	%	8000	08/27/201

Batch Information

Analytical Batch: VMS2510 Analytical Method: SW-846 8260B

Instrument: MSD8 Analyst: **DVO**

Analytical Date/Time: 08/27/2012 16:03

Prep Batch: VXX3910

Prep Method: SW-846 5035 SM Prep Date/Time: 08/22/2012 14:30 Prep Initial Wt./Vol.: 6.63 g Prep Extract Vol: 5 mL

Print Date: 08/31/2012 N.C. Certification # 481





Client Sample ID: **TW64-1: 5-6**Client Project ID: **NCDOT U-3315**Lab Sample ID: 31202687001-E
Lab Project ID: 31202687

Collection Date: 08/20/2012 14:00 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 77.40

Results by SW-846 8015C GRO

 Parameter
 Result
 Qual
 LOQ/CL
 Units
 DF
 Date Analyzed

 Gasoline Range Organics (GRO)
 1530
 319
 mg/kg
 80
 08/30/2012
 14:12

Surrogates

4-Bromofluorobenzene 99.2 70.0-130 % 80 08/30/2012 14:12

Batch Information

Analytical Batch: VGC2115
Analytical Method: SW-846 8015C GRO
Instrument: GC7
Analyst: MDY

Analytical Date/Time: 08/30/2012 14:12

Prep Batch: VXX3931
Prep Method: SW-846 5035
Prep Date/Time: 08/22/2012 14:30
Prep Initial Wt./Vol.: 6.49 g
Prep Extract Vol: 5 mL

Print Date: 08/31/2012 N.C. Certification # 481





Client Sample ID: TW64-1: 5-6 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687001-G Lab Project ID: 31202687

Collection Date: 08/20/2012 14:00 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 77.40

Results by **SW-846 8015C DRO**

<u>Parameter</u> LOQ/CL <u>Units</u> DF Result Qual Date Analyzed Diesel Range Organics (DRO) 08/27/2012 19:39 172 7.66 mg/kg 1

Surrogates

o-Terphenyl 49.7 40.0-140 % 08/27/2012 19:39 1

Batch Information

Analytical Batch: XGC2480 Prep Batch: XXX2968 Analytical Method: SW-846 8015C DRO Prep Method: SW-846 3541 Instrument: GC6 Prep Date/Time: 08/22/2012 15:41 Analyst: DTF Prep Initial Wt./Vol.: 33.72 g Analytical Date/Time: 08/27/2012 19:39 Prep Extract Vol: 10 mL

Print Date: 08/31/2012 N.C. Certification # 481





Results of SB64-1: 6-8

Client Sample ID: SB64-1: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687002-F Lab Project ID: 31202687

Collection Date: 08/20/2012 14:45 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 93.40

Results by **SW-846 8260B**

arameter	Result	Qual
,1,1,2-Tetrachloroethane	ND	<u>Quai</u>
1,1,1-Trichloroethane	ND	
1,1,2,2-Tetrachloroethane	ND	
1,1,2-Trichloroethane	ND	
1,1-Dichloroethane	ND	
1,1-Dichloroethene	ND	
1,1-Dichloropropene	ND	
1,2,3-Trichlorobenzene	ND	
1,2,3-Trichloropropane	ND	
1,2,4-Trichlorobenzene	ND	
1,2,4-Trimethylbenzene	105	
1,2-Dibromo-3-chloropropane	ND	
1,2-Dibromoethane	ND	
1,2-Dichlorobenzene	ND	
1,2-Dichloroethane	ND	
1,2-Dichloropropane	ND	
1,3,5-Trimethylbenzene	ND	
1,3-Dichlorobenzene	ND	
1,3-Dichloropropane	ND	
1,4-Dichlorobenzene	ND	
2,2-Dichloropropane	ND	
2-Butanone	ND	
2-Chlorotoluene	ND	
2-Hexanone	ND	
4-Chlorotoluene	ND	
4-Isopropyltoluene	ND	
4-Methyl-2-pentanone	ND	
Acetone	ND	
Benzene	ND	
Bromobenzene	ND	
Bromochloromethane	ND	
Bromodichloromethane	ND	
Bromoform	ND	
Bromomethane	ND	
n-Butylbenzene	ND	
Carbon disulfide	ND	
Carbon tetrachloride	ND	
Chlorobenzene	ND	
Chloroethane	ND	
Chloroform	ND	
Chloromethane	ND	
Dibromochloromethane	ND	
Dibromomethane	ND	

Print Date: 08/31/2012 N.C. Certification # 481





Client Sample ID: SB64-1: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687002-F Lab Project ID: 31202687

Collection Date: 08/20/2012 14:45 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 93.40

Results by SW-846 8260B

<u>Parameter</u>	Result	<u>Qual</u>
cis-1,3-Dichloropropene	ND	
trans-1,3-Dichloropropene	ND	
Diisopropyl Ether	ND	
Ethyl Benzene	ND	
Hexachlorobutadiene	ND	
Isopropylbenzene (Cumene)	ND	
Methyl iodide	ND	
Methylene chloride	ND	
Naphthalene	328	
Styrene	ND	
Tetrachloroethene	ND	
Toluene	ND	
Trichloroethene	ND	
Trichlorofluoromethane	ND	
Vinyl chloride	ND	
Xylene (total)	ND	
cis-1,2-Dichloroethene	ND	
m,p-Xylene	ND	
n-Propylbenzene	ND	
o-Xylene	ND	
sec-Butylbenzene	ND	
tert-Butyl methyl ether (MTBE)	ND	
tert-Butylbenzene	ND	
trans-1,2-Dichloroethene	ND	
trans-1,4-Dichloro-2-butene	ND	
urrogates		
1,2-Dichloroethane-d4	104	
4-Bromofluorobenzene	79.0	
Toluene d8	96.0	
		

Batch Information

Analytical Batch: VMS2505 Analytical Method: SW-846 8260B

Instrument: MSD8 Analyst: **DVO**

Analytical Date/Time: 08/24/2012 16:20

Prep Batch: VXX3909

Prep Method: SW-846 5035 SM Prep Date/Time: 08/22/2012 14:33 Prep Initial Wt./Vol.: 5.71 g Prep Extract Vol: 5 mL





Client Sample ID: SB64-1: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687002-E Lab Project ID: 31202687

Collection Date: 08/20/2012 14:45 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 93.40

Results by SW-846 8015C GRO

LOQ/CL <u>Units</u> DF <u>Parameter</u> Result Qual Date Analyzed 08/30/2012 16:43 Gasoline Range Organics (GRO) ND 3.85 mg/kg 1

Surrogates

4-Bromofluorobenzene 105 70.0-130 % 08/30/2012 16:43 1

Batch Information

Analytical Batch: VGC2115 Analytical Method: SW-846 8015C GRO Instrument: GC7 Analyst: MDY

Analytical Date/Time: 08/30/2012 16:43

Prep Batch: VXX3931 Prep Method: **SW-846 5035** Prep Date/Time: 08/22/2012 14:33 Prep Initial Wt./Vol.: 5.56 g

Prep Extract Vol: 5 mL

N.C. Certification # 481 Print Date: 08/31/2012





Client Sample ID: SB64-1: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687002-G Lab Project ID: 31202687

Collection Date: 08/20/2012 14:45 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 93.40

Results by **SW-846 8015C DRO**

LOQ/CL <u>Units</u> DF <u>Parameter</u> Result Qual Date Analyzed Diesel Range Organics (DRO) ND 08/27/2012 20:08 6.12 mg/kg 1

Surrogates

o-Terphenyl 83.4 40.0-140 % 08/27/2012 20:08 1

Batch Information

Analytical Batch: XGC2480 Analytical Method: SW-846 8015C DRO Instrument: GC6 Analyst: DTF

Analytical Date/Time: 08/27/2012 20:08

Prep Batch: XXX2968 Prep Method: SW-846 3541 Prep Date/Time: 08/22/2012 15:41 Prep Initial Wt./Vol.: 34.95 g Prep Extract Vol: 10 mL

N.C. Certification # 481 Print Date: 08/31/2012





Client Sample ID: SB64-2: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687003-A Lab Project ID: 31202687

Collection Date: 08/20/2012 15:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 80.30

Results by SW-846 8260B

arameter_	Result	<u>Qual</u>
I,1,1,2-Tetrachloroethane	ND	
1,1,1-Trichloroethane	ND	
I,1,2,2-Tetrachloroethane	ND	
1,1,2-Trichloroethane	ND	
1,1-Dichloroethane	ND	
1,1-Dichloroethene	ND	
1,1-Dichloropropene	ND	
1,2,3-Trichlorobenzene	ND	
1,2,3-Trichloropropane	ND	
1,2,4-Trichlorobenzene	ND	
1,2,4-Trimethylbenzene	ND	
1,2-Dibromo-3-chloropropane	ND	
1,2-Dibromoethane	ND	
1,2-Dichlorobenzene	ND	
1,2-Dichloroethane	ND	
1,2-Dichloropropane	ND	
1,3,5-Trimethylbenzene	ND	
1,3-Dichlorobenzene	ND	
1,3-Dichloropropane	ND	
1,4-Dichlorobenzene	ND	
2,2-Dichloropropane	ND	
2-Butanone	ND	
2-Chlorotoluene	ND	
2-Hexanone	ND	
4-Chlorotoluene	ND	
4-Isopropyltoluene	ND	
4-Methyl-2-pentanone	ND	
Acetone	ND	
Benzene	ND	
Bromobenzene	ND	
Bromochloromethane	ND ND	
Bromodichloromethane	ND	
Bromoform	ND	
Bromomethane	ND ND	
n-Butylbenzene		
Carbon disulfide	ND	
Carbon tetrachloride	ND	
Chlorobenzene	ND	
Chloroethane	ND	
Chloroform	ND	
('bloromothano	ND	
Chloromethane		
Dibromochloromethane	ND	
	ND ND ND	

Print Date: 08/31/2012 N.C. Certification # 481

Member of the SGS Group (SGS SA)





Client Sample ID: SB64-2: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687003-A Lab Project ID: 31202687

Collection Date: 08/20/2012 15:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 80.30

Results by SW-846 8260B

ParameterResultQualcis-1,3-DichloropropeneNDtrans-1,3-DichloropropeneNDDiisopropyl EtherNDEthyl BenzeneNDHexachlorobutadieneNDIsopropylbenzene (Cumene)NDMethyl iodideNDMethylene chlorideNDNaphthaleneNDStyreneNDTolueneNDTrichloroetheneNDTrichlorofluoromethaneNDVinyl chlorideNDXylene (total)NDcis-1,2-DichloroetheneNDn-PropylbenzeneNDo-XyleneNDsec-ButylbenzeneNDtert-Butyl methyl ether (MTBE)NDtert-ButylbenzeneNDtrans-1,2-DichloroetheneNDtrans-1,4-Dichloro-2-buteneNDurrogates1,2-Dichloroethane-d41094-Bromofluorobenzene103			
trans-1,3-Dichloropropene ND Diisopropyl Ether ND Ethyl Benzene ND Hexachlorobutadiene ND Isopropylbenzene (Cumene) ND Methyl iodide ND Methylene chloride ND Naphthalene ND Styrene ND Tetrachloroethene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND n-Propylbenzene ND n-Propylbenzene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109	1	LOQ/CL	LOQ/CL Units
Diisopropyl Ether ND Ethyl Benzene ND Hexachlorobutadiene ND Isopropylbenzene (Cumene) ND Methyl iodide ND Methylene chloride ND Naphthalene ND Styrene ND Tetrachloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND n-Propylbenzene ND n-Propylbenzene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Ethyl Benzene ND Hexachlorobutadiene ND Isopropylbenzene (Cumene) ND Methyl iodide ND Methylene chloride ND Naphthalene ND Styrene ND Tetrachloroethene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND n-Propylbenzene ND n-Propylbenzene ND esec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND trans-1,2-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Hexachlorobutadiene ND Isopropylbenzene (Cumene) ND Methyl iodide ND Methylene chloride ND Naphthalene ND Styrene ND Tetrachloroethene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND trans-1,2-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Isopropylbenzene (Cumene) Methyl iodide Methylene chloride ND Methylene chloride ND Styrene ND Tetrachloroethene Toluene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride Xylene (total) Cis-1,2-Dichloroethene ND n-Propylbenzene ND n-Propylbenzene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) trans-1,2-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Methyl iodide ND Methylene chloride ND Naphthalene ND Styrene ND Tetrachloroethene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND n-Propylbenzene ND n-Propylbenzene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND trans-1,2-Dichloro-2-butene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Methylene chloride ND Naphthalene ND Styrene ND Tetrachloroethene ND Toluene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND teras-1,2-Dichloro-2-butene ND trans-1,4-Dichloro-2-butene ND turrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Naphthalene ND Styrene ND Tetrachloroethene ND Toluene ND Trichloroethene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Styrene ND Tetrachloroethene ND Toluene ND Trichloroethene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		18.6	18.6 ug/Kg
Tetrachloroethene ND Toluene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Toluene ND Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Trichloroethene ND Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Trichlorofluoromethane ND Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Vinyl chloride ND Xylene (total) ND cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
Xylene (total) ND cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
cis-1,2-Dichloroethene ND m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
m,p-Xylene ND n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		9.29	9.29 ug/Kg
n-Propylbenzene ND o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
o-Xylene ND sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		9.29	9.29 ug/Kg
sec-Butylbenzene ND tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
tert-Butyl methyl ether (MTBE) ND tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
tert-Butylbenzene ND trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
trans-1,2-Dichloroethene ND trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
trans-1,4-Dichloro-2-butene ND urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
urrogates 1,2-Dichloroethane-d4 109		4.65	4.65 ug/Kg
1,2-Dichloroethane-d4 109		23.2	23.2 ug/Kg
•			
•		55.0-173	55.0-173 %
		23.0-141	23.0-141 %
Toluene d8 102		57.0-134	57.0-134 %

Batch Information

Analytical Batch: VMS2507 Analytical Method: SW-846 8260B

Instrument: MSD9 Analyst: **DVO**

Analytical Date/Time: 08/24/2012 13:18

Prep Batch: VXX3893

Prep Method: SW-846 5035 SL Prep Date/Time: 08/22/2012 14:35

Prep Initial Wt./Vol.: 6.7 g Prep Extract Vol: 5 mL





Client Sample ID: **SB64-2: 6-8**Client Project ID: **NCDOT U-3315**Lab Sample ID: 31202687003-E
Lab Project ID: 31202687

Collection Date: 08/20/2012 15:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 80.30

Results by SW-846 8015C GRO

ParameterResultQualLOQ/CLUnitsDFDate AnalyzedGasoline Range Organics (GRO)ND3.97mg/kg108/29/201217:40

Surrogates

4-Bromofluorobenzene 100 70.0-130 % 1 08/29/2012 17:40

Batch Information

Analytical Batch: VGC2111
Analytical Method: SW-846 8015C GRO
Instrument: GC7
Analyst: MDY

Analytical Date/Time: 08/29/2012 17:40

Prep Batch: VXX3924
Prep Method: SW-846 5035
Prep Date/Time: 08/22/2012 14:35
Prep Initial Wt./Vol.: 6.28 g

Prep Extract Vol: 5 mL

Print Date: 08/31/2012 N.C. Certification # 481

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Client Sample ID: SB64-2: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687003-G Lab Project ID: 31202687

Collection Date: 08/20/2012 15:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 80.30

Results by **SW-846 8015C DRO**

<u>Parameter</u> Qual LOQ/CL <u>Units</u> DF Result Date Analyzed Diesel Range Organics (DRO) ND 08/25/2012 8:58 7.43 mg/kg 1

Surrogates

o-Terphenyl 77.8 40.0-140 % 08/25/2012 8:58 1

Batch Information

Analytical Batch: XGC2478 Prep Batch: XXX2968 Analytical Method: SW-846 8015C DRO Prep Method: SW-846 3541 Instrument: GC6 Prep Date/Time: 08/22/2012 15:41 Analyst: DTF Prep Initial Wt./Vol.: 33.54 g Analytical Date/Time: 08/25/2012 08:58 Prep Extract Vol: 10 mL

N.C. Certification # 481 Print Date: 08/31/2012





Client Sample ID: SB64-5: 2.5-5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687004-A Lab Project ID: 31202687

Collection Date: 08/20/2012 16:00 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 83.80

Results by **SW-846 8260B**

	4		4	4
-	LOQ/CL	·		
	4.68			
	4.68	9 9	0 0	8 8
	4.68	9 9	0 0	8 8
	4.68	9 9	3 3	8 8
	4.68	9 9	0 0	8 8
	4.68	0 0	3 3	8 8
	4.68	9 9	0 0	8 8
	4.68		3 3	3 3
	4.68	5 5	3 3	8 8
	4.68	0 0	3 3	8 8
	4.68	0 0	0 0	3 3
	28.1	8 8	9 9	9 0
4	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
4	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
4	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
4	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
4	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
4	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
4	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
4	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
:	23.4	23.4 ug/Kg	23.4 ug/Kg 1	23.4 ug/Kg 1 08/24/201
4	4.68			
•	11.7	11.7 ug/Kg	11.7 ug/Kg 1	11.7 ug/Kg 1 08/24/201
4	4.68	4.68 ug/Kg	4.68 ug/Kg 1	4.68 ug/Kg 1 08/24/201
4	4.68			
,	11.7	5 5	5 5	3 3
	46.8	3 3	3 3	3 8
	4.68	5 5	3 3	13 3
	4.68		3 3	13 3
	4.68	3 3	3 3	3 3
	4.68	3 3	3 3	13 3
	4.68		3 3	13 3
	4.68	3 3	3 3	13 3
	4.68			
	4.68	3 3	3 3	3 3
	4.68	5 5	3 3	8 8
	4.68		3 3	13 3
	4.68	0 0	13 3	13 3
	4.68	3 3	3 3	8 8
	4.68	3 3	3 3	13 3
	4.68	0 0	8 8	5 5
	4.68	0 0	5 5	3 8
	4.68	3 3	3 3	13 3
	4.00	4.00 ug/Ng	4.00 ug/Ng i	4.00 ug/Ng 1 00/24/201
z				





Client Sample ID: **SB64-5: 2.5-5** Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687004-A Lab Project ID: 31202687

Collection Date: 08/20/2012 16:00 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 83.80

Results by SW-846 8260B

<u>arameter</u>	Result	<u>Qual</u>
1,3-Dichloropropene	ND	
-1,3-Dichloropropene	ND	
sopropyl Ether	ND	
Ethyl Benzene	ND	
Hexachlorobutadiene	ND	
Isopropylbenzene (Cumene)	ND	
Methyl iodide	ND	
Methylene chloride	ND	
Naphthalene	16.0	
Styrene	ND	
Tetrachloroethene	ND	
Toluene	6.33	
Trichloroethene	ND	
Trichlorofluoromethane	ND	
Vinyl chloride	ND	
Xylene (total)	9.48	
cis-1,2-Dichloroethene	ND	
m,p-Xylene	ND	
n-Propylbenzene	ND	
o-Xylene	ND	
sec-Butylbenzene	ND	
tert-Butyl methyl ether (MTBE)	ND	
tert-Butylbenzene	ND	
trans-1,2-Dichloroethene	ND	
trans-1,4-Dichloro-2-butene	ND	
urrogates		
1,2-Dichloroethane-d4	114	
4-Bromofluorobenzene	100	
Toluene d8	103	

Batch Information

Analytical Batch: VMS2507 Analytical Method: SW-846 8260B

Instrument: MSD9 Analyst: **DVO**

Analytical Date/Time: 08/24/2012 13:44

Prep Batch: VXX3893

Prep Method: SW-846 5035 SL Prep Date/Time: 08/22/2012 14:37 Prep Initial Wt./Vol.: 6.37 g Prep Extract Vol: 5 mL





Client Sample ID: **SB64-5: 2.5-5** Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687004-E Lab Project ID: 31202687

Collection Date: 08/20/2012 16:00 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 83.80

Results by SW-846 8015C GRO

<u>Parameter</u>	Result	<u>Qual</u>	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analyzed
Gasoline Range Organics (GRO)	ND		3.83	mg/kg	1	08/29/2012 18:0

Surrogates

4-Bromofluorobenzene 104 70.0-130 08/29/2012 18:05 1

Batch Information

Analytical Batch: VGC2111 Analytical Method: SW-846 8015C GRO Instrument: GC7 Analyst: MDY

Analytical Date/Time: 08/29/2012 18:05

Prep Batch: VXX3924 Prep Method: **SW-846 5035** Prep Date/Time: 08/22/2012 14:37 Prep Initial Wt./Vol.: 6.22 g Prep Extract Vol: 5 mL





Client Sample ID: **SB64-5: 2.5-5** Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687004-G Lab Project ID: 31202687

Collection Date: 08/20/2012 16:00 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 83.80

Prep Batch: XXX2968

Prep Method: SW-846 3541

Results by **SW-846 8015C DRO**

<u>Parameter</u> Qual LOQ/CL <u>Units</u> DF Result Date Analyzed Diesel Range Organics (DRO) ND 08/25/2012 9:26 7.69 mg/kg 1

Surrogates

o-Terphenyl 88.1 40.0-140 % 08/25/2012 9:26 1

Batch Information

Analytical Batch: XGC2478 Analytical Method: SW-846 8015C DRO Instrument: GC6 Analyst: DTF

Prep Date/Time: 08/22/2012 15:41 Prep Initial Wt./Vol.: 31.01 g Analytical Date/Time: 08/25/2012 09:26 Prep Extract Vol: 10 mL

Print Date: 08/31/2012 N.C. Certification # 481

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Client Sample ID: SB64-3: 2.5-5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687005-E Lab Project ID: 31202687

Collection Date: 08/20/2012 16:30 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 77.70

Results by SW-846 8015C GRO

LOQ/CL <u>Units</u> DF <u>Parameter</u> Result Qual Date Analyzed 08/29/2012 18:30 Gasoline Range Organics (GRO) ND 3.96 mg/kg 1

Surrogates

4-Bromofluorobenzene 103 70.0-130 % 08/29/2012 18:30 1

Batch Information

Analytical Batch: VGC2111 Analytical Method: SW-846 8015C GRO Instrument: GC7 Analyst: MDY

Analytical Date/Time: 08/29/2012 18:30

Prep Batch: VXX3924 Prep Method: **SW-846 5035** Prep Date/Time: 08/22/2012 14:39

Prep Initial Wt./Vol.: 6.5 g Prep Extract Vol: 5 mL





Client Sample ID: SB64-3: 2.5-5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687005-G Lab Project ID: 31202687

Collection Date: 08/20/2012 16:30 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 77.70

Results by **SW-846 8015C DRO**

<u>Parameter</u> Qual LOQ/CL <u>Units</u> DF Result Date Analyzed Diesel Range Organics (DRO) ND 08/25/2012 9:54 8.50 mg/kg 1

Surrogates

o-Terphenyl 73.4 40.0-140 % 08/25/2012 9:54 1

Batch Information

Analytical Batch: XGC2478 Analytical Method: SW-846 8015C DRO Instrument: GC6 Analyst: DTF

Analytical Date/Time: 08/25/2012 09:54

Prep Batch: XXX2968 Prep Method: SW-846 3541 Prep Date/Time: 08/22/2012 15:41 Prep Initial Wt./Vol.: 30.3 g Prep Extract Vol: 10 mL





Client Sample ID: SB64-4: 2.5-5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687006-E Lab Project ID: 31202687 Collection Date: 08/21/2012 06:55 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 83.40

Results by SW-846 8015C GRO

<u>Parameter</u>	Result	<u>Qual</u>	LOQ/CL	<u>Units</u>	DF	Date Analyzed
Gasoline Range Organics (GRO)	ND		3.98	mg/kg	1	08/29/2012 18:55

Surrogates

4-Bromofluorobenzene 104 70.0-130 % 1 08/29/2012 18:55

Batch Information

Analytical Batch: VGC2111
Analytical Method: SW-846 8015C GRO
Instrument: GC7
Analyst: MDY

Analytical Date/Time: 08/29/2012 18:55

Prep Batch: VXX3924
Prep Method: SW-846 5035
Prep Date/Time: 08/22/2012 14:39
Prep Initial Wt./Vol.: 6.02 g

Prep Extract Vol: 5 mL

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Client Sample ID: SB64-4: 2.5-5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687006-G Lab Project ID: 31202687

Collection Date: 08/21/2012 06:55 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 83.40

Results by **SW-846 8015C DRO**

<u>Parameter</u> Qual LOQ/CL <u>Units</u> DF Result Date Analyzed Diesel Range Organics (DRO) ND 08/25/2012 10:22 7.72 mg/kg 1

Surrogates

o-Terphenyl 78.8 40.0-140 % 08/25/2012 10:22 1

Batch Information

Analytical Batch: XGC2478 Prep Batch: XXX2968 Analytical Method: SW-846 8015C DRO Prep Method: SW-846 3541 Instrument: GC6 Prep Date/Time: 08/22/2012 15:41 Analyst: DTF Prep Initial Wt./Vol.: 31.04 g Analytical Date/Time: 08/25/2012 10:22 Prep Extract Vol: 10 mL





Client Sample ID: SB64-6: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687007-A Lab Project ID: 31202687

Collection Date: 08/21/2012 07:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 84.30

Results by SW-846 8260B

<u>arameter</u>	Result	Qual
,1,1,2-Tetrachloroethane	ND	
,1,1-Trichloroethane	ND	
,1,2,2-Tetrachloroethane	ND	
I,1,2-Trichloroethane	ND	
1,1-Dichloroethane	ND	
1,1-Dichloroethene	ND	
1,1-Dichloropropene	ND	
1,2,3-Trichlorobenzene	ND	
1,2,3-Trichloropropane	ND	
1,2,4-Trichlorobenzene	ND	
1,2,4-Trimethylbenzene	ND	
1,2-Dibromo-3-chloropropane	ND	
1,2-Dibromoethane	ND	
1,2-Dichlorobenzene	ND	
1,2-Dichloroethane	ND	
1,2-Dichloropropane	ND	
1,3,5-Trimethylbenzene	ND	
1,3-Dichlorobenzene	ND	
1,3-Dichloropropane	ND	
1,4-Dichlorobenzene	ND	
2,2-Dichloropropane	ND	
2-Butanone	ND	
2-Chlorotoluene	ND	
2-Hexanone	ND	
4-Chlorotoluene	ND	
4-Isopropyltoluene	ND	
4-Methyl-2-pentanone	ND	
Acetone	ND	
Benzene	ND ND	
Bromobenzene Bromoebleremethene		
Bromochloromethane	ND	
Bromodichloromethane	ND	
Bromoform	ND	
Bromomethane	ND	
n-Butylbenzene	ND	
Carbon disulfide	ND	
Carbon tetrachloride	ND	
Chlorobenzene	ND	
Chloroethane	ND	
Chloroform	ND	
Chloromethane	ND	
Dibromochloromethane	ND	
Dibromomethane	ND	
Dichlorodifluoromethane	ND	

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Client Sample ID: SB64-6: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687007-A Lab Project ID: 31202687 Collection Date: 08/21/2012 07:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 84.30

Results by SW-846 8260B

<u>Parameter</u>	Result	<u>Qual</u>
1,3-Dichloropropene	ND	
ans-1,3-Dichloropropene	ND	
Diisopropyl Ether	ND	
Ethyl Benzene	ND	
Hexachlorobutadiene	ND	
Isopropylbenzene (Cumene)	ND	
Methyl iodide	ND	
Methylene chloride	ND	
Naphthalene	ND	
Styrene	ND	
Tetrachloroethene	ND	
Toluene	ND	
Trichloroethene	ND	
Trichlorofluoromethane	ND	
Vinyl chloride	ND	
Xylene (total)	ND	
cis-1,2-Dichloroethene	ND	
m,p-Xylene	ND	
n-Propylbenzene	ND	
o-Xylene	ND	
sec-Butylbenzene	ND	
tert-Butyl methyl ether (MTBE)	ND	
tert-Butylbenzene	ND	
trans-1,2-Dichloroethene	ND	
trans-1,4-Dichloro-2-butene	ND	
urrogates		
1,2-Dichloroethane-d4	114	
4-Bromofluorobenzene	90.0	
4-0101101100100061126116		

Batch Information

Analytical Batch: VMS2507
Analytical Method: SW-846 8260B

Instrument: MSD9
Analyst: DVO

Analytical Date/Time: 08/24/2012 12:26

Prep Batch: VXX3893

Prep Method: SW-846 5035 SL Prep Date/Time: 08/22/2012 14:42 Prep Initial Wt./Vol.: 6.15 g Prep Extract Vol: 5 mL





Client Sample ID: **SB64-6: 0-2.5** Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687007-E Lab Project ID: 31202687

Collection Date: 08/21/2012 07:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 84.30

Results by SW-846 8015C GRO

LOQ/CL <u>Units</u> DF <u>Parameter</u> Result Qual Date Analyzed Gasoline Range Organics (GRO) 08/29/2012 19:21 ND 3.80 mg/kg 1

Surrogates

4-Bromofluorobenzene 105 70.0-130 % 08/29/2012 19:21 1

Batch Information

Analytical Batch: VGC2111 Analytical Method: SW-846 8015C GRO Instrument: GC7 Analyst: MDY

Analytical Date/Time: 08/29/2012 19:21

Prep Batch: VXX3924 Prep Method: **SW-846 5035** Prep Date/Time: 08/22/2012 14:42 Prep Initial Wt./Vol.: 6.24 g

Prep Extract Vol: 5 mL





Client Sample ID: SB64-6: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687007-G Lab Project ID: 31202687

Collection Date: 08/21/2012 07:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 84.30

Results by **SW-846 8270D**

<u>arameter</u>	Result	Qual
1,2,4-Trichlorobenzene	ND	
,2-Dichlorobenzene	ND	
1,3-Dichlorobenzene	ND	
1,4-Dichlorobenzene	ND	
2,4,5-Trichlorophenol	ND	
2,4,6-Trichlorophenol	ND	
2,4-Dichlorophenol	ND	
2,4-Dinitrophenol	ND	
2,4-Dinitrotoluene	ND	
2,6-Dinitrotoluene	ND	
2-Chloronaphthalene	ND	
2-Chlorophenol	ND	
2-Methylnaphthalene	ND	
2-Methylphenol	ND	
2-Nitroaniline	ND	
2-Nitrophenol	ND	
3 and/or 4-Methylphenol	ND	
3,3'-Dichlorobenzidine	ND	
3-Nitroaniline	ND	
4,6-Dinitro-2-methylphenol	ND	
4-Chloro-3-methylphenol	ND	
4-Chloroaniline	ND	
4-Chlorophenyl phenyl ether	ND	
Acenaphthene	ND	
Acenaphthylene	ND	
Anthracene	ND	
Benzo(a)anthracene	ND	
Benzo(a)pyrene	ND	
Benzo(b)fluoranthene	ND	
Benzo(g,h,i)perylene	ND	
Benzo(k)fluoranthene	ND	
Benzoic acid	ND	
Bis(2-Chloroethoxy)methane	ND	
Bis(2-Chloroethyl)ether	ND	
Bis(2-Chloroisopropyl)ether	ND	
Bis(2-Ethylhexyl)phthalate	ND	
4-Bromophenyl phenyl ether	ND	
Butyl benzyl phthalate	ND	
Chrysene	ND	
Di-n-butyl phthalate	ND	
Di-n-octyl phthalate	ND	
Dibenz(a,h)anthracene	ND	
Dibenzofuran	ND	
Diethyl phthalate	ND	





Client Sample ID: **SB64-6: 0-2.5** Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687007-G Lab Project ID: 31202687

Collection Date: 08/21/2012 07:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 84.30

Results by SW-846 8270D

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analyz
Dimethyl phthalate	ND		359	ug/Kg	1	08/24/2012
2,4-Dimethylphenol	ND		359	ug/Kg	1	08/24/2012
Diphenylamine	ND		359	ug/Kg	1	08/24/2012
Fluoranthene	ND		359	ug/Kg	1	08/24/2012
Fluorene	ND		359	ug/Kg	1	08/24/2012
Hexachlorobenzene	ND		359	ug/Kg	1	08/24/2012
Hexachlorobutadiene	ND		359	ug/Kg	1	08/24/2012
Hexachlorocyclopentadiene	ND		359	ug/Kg	1	08/24/2012
Hexachloroethane	ND		359	ug/Kg	1	08/24/2012
Indeno(1,2,3-cd)pyrene	ND		359	ug/Kg	1	08/24/2012
Isophorone	ND		359	ug/Kg	1	08/24/2012
Naphthalene	ND		359	ug/Kg	1	08/24/2012
4-Nitroaniline	ND		359	ug/Kg	1	08/24/2012
Nitrobenzene	ND		359	ug/Kg	1	08/24/2012
4-Nitrophenol	ND		359	ug/Kg	1	08/24/2012
Pentachlorophenol	ND		359	ug/Kg	1	08/24/2012
Phenanthrene	ND		359	ug/Kg	1	08/24/2012
Phenol	ND		359	ug/Kg	1	08/24/2012
Pyrene	ND		359	ug/Kg	1	08/24/2012
n-Nitrosodi-n-propylamine	ND		359	ug/Kg	1	08/24/2012
Surrogates						
2,4,6-Tribromophenol	78.0		41.0-129	%	1	08/24/2012
2-Fluorobiphenyl	77.0		48.0-123	%	1	08/24/2012
2-Fluorophenol	80.0		42.0-123	%	1	08/24/2012
Nitrobenzene-d5	85.0		46.0-117	%	1	08/24/2012
			40.0.405	%	4	08/24/2012
Phenol-d6	92.0		48.0-125	%	1	00/24/2012

Batch Information

Analytical Batch: XMS1647 Analytical Method: SW-846 8270D

Instrument: MSD10 Analyst: CMP

Analytical Date/Time: 08/24/2012 11:36

Prep Batch: XXX2974 Prep Method: **SW-846 3541** Prep Date/Time: 08/23/2012 15:34 Prep Initial Wt./Vol.: 33.13 g

Prep Extract Vol: 10 mL





Client Sample ID: SB64-6: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687007-G Lab Project ID: 31202687

Collection Date: 08/21/2012 07:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 84.30

Results by **SW-846 8015C DRO**

Qual LOQ/CL <u>Units</u> DF <u>Parameter</u> Result Date Analyzed Diesel Range Organics (DRO) ND 08/25/2012 10:50 7.25 mg/kg 1

Surrogates

o-Terphenyl 69.0 40.0-140 % 08/25/2012 10:50 1

Batch Information

Analytical Batch: XGC2478 Analytical Method: SW-846 8015C DRO Instrument: GC6 Analyst: DTF

Analytical Date/Time: 08/25/2012 10:50

Prep Batch: XXX2968 Prep Method: SW-846 3541 Prep Date/Time: 08/22/2012 15:41 Prep Initial Wt./Vol.: 32.74 g Prep Extract Vol: 10 mL





Client Sample ID: **SB64-7: 5-6**Client Project ID: **NCDOT U-3315**Lab Sample ID: 31202687008-A
Lab Project ID: 31202687

Collection Date: 08/21/2012 07:40 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 80.50

Results by SW-846 8015C GRO

ParameterResultQualLOQ/CLUnitsDFDate AnalyzedGasoline Range Organics (GRO)ND3.77mg/kg108/29/2012 19:46

Surrogates

4-Bromofluorobenzene 104 70.0-130 % 1 08/29/2012 19:46

Batch Information

Analytical Batch: VGC2111
Analytical Method: SW-846 8015C GRO
Instrument: GC7
Analyst: MDY

Analytical Date/Time: 08/29/2012 19:46

Prep Batch: VXX3924
Prep Method: SW-846 5035
Prep Date/Time: 08/22/2012 14:44
Prep Initial Wt./Vol.: 6.59 g

Prep Extract Vol: 5 mL





Client Sample ID: SB64-7: 5-6 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687008-C Lab Project ID: 31202687

Collection Date: 08/21/2012 07:40 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 80.50

Results by SW-846 8015C DRO

<u>Parameter</u>	Result	<u>Qual</u>	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics (DRO)	ND		7.68	mg/kg	1	08/25/2012 11:18

Surrogates

o-Terphenyl 77.3 40.0-140 08/25/2012 11:18 1

Batch Information

Analytical Batch: XGC2478 Prep Batch: XXX2968 Analytical Method: SW-846 8015C DRO Prep Method: SW-846 3541 Instrument: GC6 Prep Date/Time: 08/22/2012 15:41 Analyst: DTF Prep Initial Wt./Vol.: 32.36 g Analytical Date/Time: 08/25/2012 11:18 Prep Extract Vol: 10 mL

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Client Sample ID: SB64-8: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687009-A Lab Project ID: 31202687 Collection Date: 08/21/2012 08:30 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 91.60

Results by SW-846 8015C GRO

ParameterResultQualLOQ/CLUnitsDFDate AnalyzedGasoline Range Organics (GRO)ND2.92mg/kg108/29/2012 20:11

Surrogates

4-Bromofluorobenzene 102 70.0-130 % 1 08/29/2012 20:11

Batch Information

Analytical Batch: VGC2111
Analytical Method: SW-846 8015C GRO
Instrument: GC7
Analyst: MDY

Analytical Date/Time: 08/29/2012 20:11

Prep Batch: VXX3924
Prep Method: SW-846 5035
Prep Date/Time: 08/22/2012 14:45
Prep Initial Wt./Vol.: 7.48 g

Prep Extract Vol: 5 mL





Client Sample ID: SB64-8: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687009-C Lab Project ID: 31202687

Collection Date: 08/21/2012 08:30 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 91.60

Results by **SW-846 8015C DRO**

LOQ/CL <u>Units</u> DF <u>Parameter</u> Result Qual Date Analyzed Diesel Range Organics (DRO) 08/27/2012 20:36 63.6 6.33 mg/kg 1

Surrogates

o-Terphenyl 89.7 40.0-140 % 08/27/2012 20:36 1

Batch Information

Analytical Batch: XGC2480 Prep Batch: XXX2968 Analytical Method: SW-846 8015C DRO Prep Method: SW-846 3541 Instrument: GC6 Prep Date/Time: 08/22/2012 15:41 Analyst: DTF Prep Initial Wt./Vol.: 34.46 g Analytical Date/Time: 08/27/2012 20:36 Prep Extract Vol: 10 mL

Print Date: 08/31/2012 N.C. Certification # 481

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Client Sample ID: SB64-9: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687010-A Lab Project ID: 31202687

Collection Date: 08/21/2012 08:15 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 86.00

Results by SW-846 8015C GRO

LOQ/CL <u>Units</u> DF <u>Parameter</u> Result Qual Date Analyzed 08/29/2012 20:36 Gasoline Range Organics (GRO) ND 5.35 mg/kg 1

Surrogates

4-Bromofluorobenzene 105 70.0-130 % 08/29/2012 20:36 1

Batch Information

Analytical Batch: VGC2111 Analytical Method: SW-846 8015C GRO Instrument: GC7 Analyst: MDY

Analytical Date/Time: 08/29/2012 20:36

Prep Batch: VXX3924 Prep Method: **SW-846 5035** Prep Date/Time: 08/22/2012 14:46

Prep Initial Wt./Vol.: 4.35 g Prep Extract Vol: 5 mL

Print Date: 08/31/2012 N.C. Certification # 481

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Client Sample ID: SB64-9: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687010-C Lab Project ID: 31202687

Collection Date: 08/21/2012 08:15 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 86.00

Results by **SW-846 8015C DRO**

<u>Parameter</u> LOQ/CL <u>Units</u> DF Result Qual Date Analyzed Diesel Range Organics (DRO) 08/27/2012 21:05 112 7.68 mg/kg 1

Surrogates

o-Terphenyl 86.9 40.0-140 % 08/27/2012 21:05 1

Batch Information

Analytical Batch: XGC2480 Prep Batch: XXX2968 Analytical Method: SW-846 8015C DRO Instrument: GC6 Analyst: DTF

Analytical Date/Time: 08/27/2012 21:05

Prep Method: SW-846 3541 Prep Date/Time: 08/22/2012 15:41 Prep Initial Wt./Vol.: 30.27 g Prep Extract Vol: 10 mL

Print Date: 08/31/2012 N.C. Certification # 481

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Client Sample ID: **SB64-10: 0-2.5** Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687011-A Lab Project ID: 31202687

Collection Date: 08/21/2012 09:15 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 85.90

Results by **SW-846 8260B**

230113 Dy 344-040 0200D		
<u>Parameter</u>	Result	<u>Qual</u>
I,1,1,2-Tetrachloroethane	ND	
,1,1-Trichloroethane	ND	
,1,2,2-Tetrachloroethane	ND	
1,1,2-Trichloroethane	ND	
1,1-Dichloroethane	ND	
1,1-Dichloroethene	ND	
1,1-Dichloropropene	ND	
1,2,3-Trichlorobenzene	ND	
1,2,3-Trichloropropane	ND	
1,2,4-Trichlorobenzene	ND	
1,2,4-Trimethylbenzene	ND	
1,2-Dibromo-3-chloropropane	ND	
1,2-Dibromoethane	ND	
1,2-Dichlorobenzene	ND	
1,2-Dichloroethane	ND	
1,2-Dichloropropane	ND	
1,3,5-Trimethylbenzene	ND	
1,3-Dichlorobenzene	ND	
1,3-Dichloropropane	ND	
1,4-Dichlorobenzene	ND	
2,2-Dichloropropane	ND	
2-Butanone	ND	
2-Chlorotoluene	ND	
2-Hexanone	ND	
4-Chlorotoluene	ND	
4-Isopropyltoluene	ND	
4-Methyl-2-pentanone	ND	
Acetone	ND	
Benzene	ND	
Bromobenzene	ND	
Bromochloromethane	ND	
Bromodichloromethane	ND	
Bromoform	ND	
Bromomethane	ND	
n-Butylbenzene	ND	
Carbon disulfide	ND	
Carbon tetrachloride	ND	
Chlorobenzene	ND	
Chloroethane	ND	
Chloroform	ND	
Chloromethane	ND	
Dibromochloromethane	ND	
Dibromomethane	ND	





Client Sample ID: SB64-10: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687011-A Lab Project ID: 31202687 Collection Date: 08/21/2012 09:15 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 85.90

Results by SW-846 8260B

<u>Parameter</u>	Result	<u>Qual</u>
cis-1,3-Dichloropropene	ND	
trans-1,3-Dichloropropene	ND	
Diisopropyl Ether	ND	
Ethyl Benzene	ND	
Hexachlorobutadiene	ND	
Isopropylbenzene (Cumene)	ND	
Methyl iodide	ND	
Methylene chloride	ND	
Naphthalene	ND	
Styrene	ND	
Tetrachloroethene	ND	
Toluene	ND	
Trichloroethene	ND	
Trichlorofluoromethane	ND	
Vinyl chloride	ND	
Xylene (total)	ND	
cis-1,2-Dichloroethene	ND	
m,p-Xylene	ND	
n-Propylbenzene	ND	
o-Xylene	ND	
sec-Butylbenzene	ND	
tert-Butyl methyl ether (MTBE)	ND	
tert-Butylbenzene	ND	
trans-1,2-Dichloroethene	ND	
trans-1,4-Dichloro-2-butene	ND	
Surrogates		
1,2-Dichloroethane-d4	110	
4-Bromofluorobenzene	98.0	
Toluene d8	101	

Batch Information

Analytical Batch: VMS2507
Analytical Method: SW-846 8260B

Instrument: MSD9
Analyst: DVO

Analytical Date/Time: 08/24/2012 12:52

Prep Batch: VXX3893

Prep Method: **SW-846 5035 SL** Prep Date/Time: **08/22/2012 14:47**

Prep Initial Wt./Vol.: **6.6 g** Prep Extract Vol: **5 mL**





Client Sample ID: SB64-10: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687011-E Lab Project ID: 31202687

Collection Date: 08/21/2012 09:15 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 85.90

Results by SW-846 8015C GRO

LOQ/CL <u>Units</u> DF <u>Parameter</u> Result Qual Date Analyzed 08/29/2012 21:01 Gasoline Range Organics (GRO) ND 3.54 mg/kg 1

Surrogates

4-Bromofluorobenzene 103 70.0-130 % 08/29/2012 21:01 1

Batch Information

Analytical Batch: VGC2111 Analytical Method: SW-846 8015C GRO Instrument: GC7 Analyst: MDY

Analytical Date/Time: 08/29/2012 21:01

Prep Batch: VXX3924 Prep Method: **SW-846 5035** Prep Date/Time: 08/22/2012 14:48 Prep Initial Wt./Vol.: 6.58 g

Prep Extract Vol: 5 mL





Client Sample ID: SB64-10: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687011-G Lab Project ID: 31202687

Collection Date: 08/21/2012 09:15 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 85.90

Results by SW-846 8015C DRO

<u>Parameter</u>	Result	<u>Qual</u>	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analy
Diesel Range Organics (DRO)	38.9		7.03	mg/kg	1	08/27/2012

Surrogates

o-Terphenyl 92.9 40.0-140 08/27/2012 21:33 1

Batch Information

Analytical Batch: XGC2480 Analytical Method: SW-846 8015C DRO Instrument: GC6 Analyst: DTF

Analytical Date/Time: 08/27/2012 21:33

Prep Batch: XXX2968 Prep Method: SW-846 3541 Prep Date/Time: 08/22/2012 15:41 Prep Initial Wt./Vol.: 33.12 g Prep Extract Vol: 10 mL





Client Sample ID: SB64-11: 2.5-5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687012-A Lab Project ID: 31202687

Collection Date: 08/21/2012 09:35 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 83.00

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	Qual	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analyzed
Gasoline Range Organics (GRO)	ND		4.20	mg/kg	1	08/30/2012 1:14

Surrogates

4-Bromofluorobenzene 103 70.0-130 08/30/2012 1:14 1

Batch Information

Analytical Batch: VGC2113 Analytical Method: SW-846 8015C GRO Instrument: GC7 Analyst: MDY

Analytical Date/Time: 08/30/2012 01:14

Prep Batch: VXX3929 Prep Method: **SW-846 5035** Prep Date/Time: 08/22/2012 14:49 Prep Initial Wt./Vol.: 5.74 g Prep Extract Vol: 5 mL





Client Sample ID: SB64-11: 2.5-5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687012-C Lab Project ID: 31202687

Collection Date: 08/21/2012 09:35 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 83.00

Results by **SW-846 8015C DRO**

<u>Parameter</u> Qual LOQ/CL <u>Units</u> DF Result Date Analyzed Diesel Range Organics (DRO) ND 08/27/2012 22:02 7.15 mg/kg 1

Surrogates

o-Terphenyl 89.1 40.0-140 % 08/27/2012 22:02 1

Batch Information

Analytical Batch: XGC2480 Analytical Method: SW-846 8015C DRO Instrument: GC6 Analyst: DTF

Analytical Date/Time: 08/27/2012 22:02

Prep Batch: XXX2968 Prep Method: SW-846 3541 Prep Date/Time: 08/22/2012 15:41 Prep Initial Wt./Vol.: 33.71 g Prep Extract Vol: 10 mL





Client Sample ID: SB64-12: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687013-A Lab Project ID: 31202687

Collection Date: 08/21/2012 09:55 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 84.10

Results by SW-846 8015C GRO

<u>Parameter</u>	Result	<u>Qual</u>	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analyzed
Gasoline Range Organics (GRO)	ND		3.40	mg/kg	1	08/30/2012 1:39

Surrogates

4-Bromofluorobenzene 105 70.0-130 08/30/2012 1:39 1

Batch Information

Analytical Batch: VGC2113 Analytical Method: SW-846 8015C GRO Instrument: GC7 Analyst: MDY

Analytical Date/Time: 08/30/2012 01:39

Prep Batch: VXX3929 Prep Method: **SW-846 5035** Prep Date/Time: 08/22/2012 14:50 Prep Initial Wt./Vol.: 6.99 g Prep Extract Vol: 5 mL

Print Date: 08/31/2012 N.C. Certification # 481

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Client Sample ID: SB64-12: 0-2.5 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687013-C Lab Project ID: 31202687

Collection Date: 08/21/2012 09:55 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 84.10

Results by SW-846 8015C DRO

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics (DRO)	ND		7.49	mg/kg	1	08/27/2012 22:

Surrogates

o-Terphenyl 94.4 40.0-140 08/27/2012 22:30 1

Batch Information

Analytical Batch: XGC2480 Analytical Method: SW-846 8015C DRO Instrument: GC6 Analyst: DTF

Analytical Date/Time: 08/27/2012 22:30

Prep Batch: XXX2968 Prep Method: SW-846 3541 Prep Date/Time: 08/22/2012 15:41 Prep Initial Wt./Vol.: 31.74 g Prep Extract Vol: 10 mL





Client Sample ID: SB64-13: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687014-B Lab Project ID: 31202687

Collection Date: 08/21/2012 10:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 85.50

Results by **SW-846 8260B**

arameter	Result	Qual
,1,1,2-Tetrachloroethane	ND	Qual
1,1,1-Trichloroethane	ND	
1,1,2,2-Tetrachloroethane	ND	
1,1,2-Trichloroethane	ND	
1,1-Dichloroethane	ND	
1,1-Dichloroethene	ND	
1,1-Dichloropropene	ND	
1,2,3-Trichlorobenzene	ND	
1,2,3-Trichloropropane	ND	
1,2,4-Trichlorobenzene	ND	
1,2,4-Trimethylbenzene	13.1	
1,2-Dibromo-3-chloropropane	ND	
1,2-Dibromoethane	ND	
1,2-Dichlorobenzene	ND	
1,2-Dichloroethane	ND	
1,2-Dichloropropane	ND	
1,3,5-Trimethylbenzene	4.68	
1,3-Dichlorobenzene	ND	
1,3-Dichloropropane	ND	
1,4-Dichlorobenzene	ND	
2,2-Dichloropropane	ND	
2-Butanone	56.5	
2-Chlorotoluene	ND	
2-Hexanone	ND	
4-Chlorotoluene	ND	
4-Isopropyltoluene	ND	
4-Methyl-2-pentanone	ND	
Acetone	ND	
Benzene	18.6	
Bromobenzene	ND	
Bromochloromethane	ND	
Bromodichloromethane	ND	
Bromoform	ND	
Bromomethane	ND	
n-Butylbenzene	ND	
Carbon disulfide	ND	
Carbon tetrachloride	ND	
Chlorobenzene	ND	
Chloroethane	ND	
Chloroform	ND	
Chloromethane	ND	
Dibromochloromethane	ND	
Dibromomethane	ND	
Dichlorodifluoromethane	ND	





Results of SB64-13: 6-8

Client Sample ID: SB64-13: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687014-B Lab Project ID: 31202687

Collection Date: 08/21/2012 10:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 85.50

Results by SW-846 8260B

<u>Parameter</u>	Result	Qual	<u> </u>	_OQ/CL	_OQ/CL Units
-1,3-Dichloropropene	ND		4.34		ug/Kg
ns-1,3-Dichloropropene	ND		4.34		ug/Kg
Diisopropyl Ether	ND		4.34		ug/Kg
Ethyl Benzene	8.73		4.34		ug/Kg
Hexachlorobutadiene	ND		4.34		ug/Kg
Isopropylbenzene (Cumene)	ND		4.34	ι	ug/Kg
Methyl iodide	ND		4.34	ug	/Kg
Methylene chloride	ND		17.4	ug/k	(g
Naphthalene	ND		4.34	ug/K	g
Styrene	ND		4.34	ug/Kg	
Tetrachloroethene	ND		4.34	ug/Kg	
Toluene	ND		4.34	ug/Kg	
Trichloroethene	ND		4.34	ug/Kg	
Trichlorofluoromethane	ND		4.34	ug/Kg	
Vinyl chloride	ND		4.34	ug/Kg	
Xylene (total)	10.8		8.69	ug/Kg	
cis-1,2-Dichloroethene	ND		4.34	ug/Kg	
m,p-Xylene	8.74		8.69	ug/Kg	
n-Propylbenzene	ND		4.34	ug/Kg	
o-Xylene	ND		4.34	ug/Kg	
sec-Butylbenzene	ND		4.34	ug/Kg	
tert-Butyl methyl ether (MTBE)	ND		4.34	ug/Kg	
tert-Butylbenzene	ND		4.34	ug/Kg	
trans-1,2-Dichloroethene	ND		4.34	ug/Kg	
trans-1,4-Dichloro-2-butene	ND		21.7	ug/Kg	
Surrogates					
1,2-Dichloroethane-d4	104		55.0-173	%	
4-Bromofluorobenzene	99.0		23.0-141	%	
Toluene d8	101		57.0-134	%	

Batch Information

Analytical Batch: VMS2507 Analytical Method: SW-846 8260B

Instrument: MSD9 Analyst: **DVO**

Analytical Date/Time: 08/24/2012 16:01

Prep Batch: VXX3893

Prep Method: SW-846 5035 SL Prep Date/Time: 08/22/2012 14:53 Prep Initial Wt./Vol.: 6.73 g Prep Extract Vol: 5 mL





Results of SB64-13: 6-8

Client Sample ID: SB64-13: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687014-E Lab Project ID: 31202687

Collection Date: 08/21/2012 10:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 85.50

Results by SW-846 8015C GRO

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analyzed
Gasoline Range Organics (GRO)	ND		3.13	mg/kg	1	08/30/2012 2:04

Surrogates

% 4-Bromofluorobenzene 105 70.0-130 08/30/2012 2:04 1

Batch Information

Analytical Batch: VGC2113 Analytical Method: SW-846 8015C GRO Instrument: GC7 Analyst: MDY

Analytical Date/Time: 08/30/2012 02:04

Prep Batch: VXX3929 Prep Method: **SW-846 5035** Prep Date/Time: 08/22/2012 14:53 Prep Initial Wt./Vol.: 7.46 g Prep Extract Vol: 5 mL





Results of SB64-13: 6-8

Client Sample ID: SB64-13: 6-8 Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687014-G Lab Project ID: 31202687

Collection Date: 08/21/2012 10:20 Received Date: 08/22/2012 13:00 Matrix: Soil-Solid as dry weight

Solids (%): 85.50

Results by SW-846 8015C DRO

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics (DRO)	ND		6.80	mg/kg	1	08/24/2012 1:38

Surrogates

o-Terphenyl 97.5 40.0-140 08/24/2012 1:38 1

Batch Information

Analytical Batch: XGC2475 Prep Batch: XXX2971 Analytical Method: SW-846 8015C DRO Prep Method: SW-846 3541 Instrument: GC6 Prep Date/Time: 08/23/2012 09:29 Analyst: DTF Prep Initial Wt./Vol.: 34.38 g Analytical Date/Time: 08/24/2012 01:38 Prep Extract Vol: 10 mL

Print Date: 08/31/2012 N.C. Certification # 481

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Results of TW64-1

Client Sample ID: TW64-1

Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687015-A Lab Project ID: 31202687

Collection Date: 08/21/2012 11:10 Received Date: 08/22/2012 13:00

Matrix: Water

Results by **SW-846 8260B**

esuits by 344-040 0200B		
Parameter Parameter	Result	Qual
1,1,1,2-Tetrachloroethane	ND	
1,1,1-Trichloroethane	ND	
1,1,2,2-Tetrachloroethane	ND	
1,1,2-Trichloroethane	ND	
1,1-Dichloroethane	ND	
1,1-Dichloroethene	ND	
1,1-Dichloropropene	ND	
1,2,3-Trichlorobenzene	ND	
1,2,3-Trichloropropane	ND	
1,2,4-Trichlorobenzene	ND	
1,2,4-Trimethylbenzene	18400	
1,2-Dibromo-3-chloropropane	ND	
1,2-Dibromoethane	ND	
1,2-Dichlorobenzene	ND	
1,2-Dichloroethane	ND	
1,2-Dichloropropane	ND	
1,3,5-Trimethylbenzene	5170	
1,3-Dichlorobenzene	ND	
1,3-Dichloropropane	ND	
1,4-Dichlorobenzene	ND	
2,2-Dichloropropane	ND	
2-Butanone	ND	
2-Chlorotoluene	ND	
2-Hexanone	ND	
4-Chlorotoluene	ND	
4-Isopropyltoluene	492	
4-Methyl-2-pentanone	ND	
Acetone	ND	
Benzene	2330	
Bromobenzene	ND	
Bromochloromethane	ND	
Bromodichloromethane	ND	
Bromoform	ND	
Bromomethane	ND	
n-Butylbenzene	ND	
Carbon disulfide	ND	
Carbon tetrachloride	ND	
Chlorobenzene	ND	
Chloroethane	ND	
Chloroform	ND	
Chloromethane	ND	
Dibromochloromethane	ND	
Dibromomethane	ND	
Dichlorodifluoromethane	ND	
2.5	.,,,	





Results of TW64-1

Client Sample ID: TW64-1

Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687015-A Lab Project ID: 31202687

Collection Date: 08/21/2012 11:10 Received Date: 08/22/2012 13:00

Matrix: Water

Results by SW-846 8260B

Parameter_	Result	Qual
3-Dichloropropene	ND	
ans-1,3-Dichloropropene	ND	
Diisopropyl Ether	ND	
Ethyl Benzene	6450	
Hexachlorobutadiene	ND	
Isopropylbenzene (Cumene)	660	
Methyl iodide	ND	
Methylene chloride	ND	
Naphthalene	2680	
Styrene	ND	
Tetrachloroethene	ND	
Toluene	16400	
Trichloroethene	ND	
Trichlorofluoromethane	ND	
Vinyl chloride	ND	
Xylene (total)	33200	
cis-1,2-Dichloroethene	ND	
m,p-Xylene	24500	
n-Propylbenzene	2650	
o-Xylene	8740	
sec-Butylbenzene	ND	
tert-Butyl methyl ether (MTBE)	ND	
tert-Butylbenzene	ND	
trans-1,2-Dichloroethene	ND	
trans-1,4-Dichloro-2-butene	ND	
Surrogates		
1,2-Dichloroethane-d4	101	
4-Bromofluorobenzene	100	
Toluene d8	102	

Batch Information

Analytical Batch: VMS2506 Analytical Method: SW-846 8260B

Instrument: MSD4 Analyst: **DVO**

Analytical Date/Time: 08/24/2012 13:50

Prep Batch: VXX3892 Prep Method: SW-846 5030B Prep Date/Time: 08/24/2012 08:00 Prep Initial Wt./Vol.: 40 mL

Prep Extract Vol: 40 mL





Results of Trip Blanks (Not on COC)

Client Sample ID: Trip Blanks (Not on COC)

Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687016-A Lab Project ID: 31202687

Collection Date: 08/21/2012 00:00 Received Date: 08/22/2012 13:00

Matrix: Water

Results by SW-846 8260B

Results by SW-846 8260B						
<u>Parameter</u>	Result	<u>Qual</u>	LOQ/C	L <u>Units</u>	<u>DF</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	ND		1.00	ug/L	1	08/23/2012 14:30
1,1,1-Trichloroethane	ND		1.00	ug/L	1	08/23/2012 14:30
1,1,2,2-Tetrachloroethane	ND		1.00	ug/L	1	08/23/2012 14:30
1,1,2-Trichloroethane	ND		1.00	ug/L	1	08/23/2012 14:30
1,1-Dichloroethane	ND		1.00	ug/L	1	08/23/2012 14:30
1,1-Dichloroethene	ND		1.00	ug/L	1	08/23/2012 14:30
1,1-Dichloropropene	ND		1.00	ug/L	1	08/23/2012 14:30
1,2,3-Trichlorobenzene	ND		1.00	ug/L	1	08/23/2012 14:30
1,2,3-Trichloropropane	ND		1.00	ug/L	1	08/23/2012 14:30
1,2,4-Trichlorobenzene	ND		1.00	ug/L	1	08/23/2012 14:30
1,2,4-Trimethylbenzene	ND		1.00	ug/L	1	08/23/2012 14:30
1,2-Dibromo-3-chloropropane	ND		5.00	ug/L	1	08/23/2012 14:30
1,2-Dibromoethane	ND		1.00	ug/L	1	08/23/2012 14:30
1,2-Dichlorobenzene	ND		1.00	ug/L	1	08/23/2012 14:30
1,2-Dichloroethane	ND		1.00	ug/L	1	08/23/2012 14:30
1,2-Dichloropropane	ND		1.00	ug/L	1	08/23/2012 14:30
1,3,5-Trimethylbenzene	ND		1.00	ug/L	1	08/23/2012 14:30
1,3-Dichlorobenzene	ND		1.00	ug/L	1	08/23/2012 14:30
1,3-Dichloropropane	ND		1.00	ug/L	1	08/23/2012 14:30
1,4-Dichlorobenzene	ND		1.00	ug/L	1	08/23/2012 14:30
2,2-Dichloropropane	ND		1.00	ug/L	1	08/23/2012 14:30
2-Butanone	ND		25.0	ug/L	1	08/23/2012 14:30
2-Chlorotoluene	ND		1.00	ug/L	1	08/23/2012 14:30
2-Hexanone	ND		5.00	ug/L	1	08/23/2012 14:30
4-Chlorotoluene	ND		1.00	ug/L	1	08/23/2012 14:30
4-Isopropyltoluene	ND		1.00	ug/L	1	08/23/2012 14:30
4-Methyl-2-pentanone	ND		5.00	ug/L	1	08/23/2012 14:30
Acetone	ND		25.0	ug/L	1	08/23/2012 14:30
Benzene	ND		1.00	ug/L	1	08/23/2012 14:30
Bromobenzene	ND		1.00	ug/L	1	08/23/2012 14:30
Bromochloromethane	ND		1.00	ug/L	1	08/23/2012 14:30
Bromodichloromethane	ND		1.00	ug/L	1	08/23/2012 14:30
Bromoform	ND		1.00	ug/L	1	08/23/2012 14:30
Bromomethane	ND		1.00	ug/L	1	08/23/2012 14:30
n-Butylbenzene	ND		1.00	ug/L	1	08/23/2012 14:30
Carbon disulfide	ND		1.00	ug/L	1	08/23/2012 14:30
Carbon tetrachloride	ND		1.00	ug/L	1	08/23/2012 14:30
Chlorobenzene	ND		1.00	ug/L	1	08/23/2012 14:30
Chloroethane	ND		1.00	ug/L	1	08/23/2012 14:30
Chloroform	ND		1.00	ug/L	1	08/23/2012 14:30
Chloromethane	ND		1.00	ug/L	1	08/23/2012 14:30
Dibromochloromethane	ND		1.00	ug/L	1	08/23/2012 14:30
Dibromomethane	ND		1.00	ug/L	1	08/23/2012 14:30
Dichlorodifluoromethane	ND		5.00	ug/L	1	08/23/2012 14:30





Results of Trip Blanks (Not on COC)

Client Sample ID: Trip Blanks (Not on COC)

Client Project ID: NCDOT U-3315 Lab Sample ID: 31202687016-A Lab Project ID: 31202687

Collection Date: 08/21/2012 00:00 Received Date: 08/22/2012 13:00

Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual
3-Dichloropropene	ND	
s-1,3-Dichloropropene	ND	
Diisopropyl Ether	ND	
Ethyl Benzene	ND	
Hexachlorobutadiene	ND	
Isopropylbenzene (Cumene)	ND	
Methyl iodide	ND	
Methylene chloride	ND	
Naphthalene	ND	
Styrene	ND	
Tetrachloroethene	ND	
Toluene	ND	
Trichloroethene	ND	
Trichlorofluoromethane	ND	
Vinyl chloride	ND	
Xylene (total)	ND	
cis-1,2-Dichloroethene	ND	
m,p-Xylene	ND	
n-Propylbenzene	ND	
o-Xylene	ND	
sec-Butylbenzene	ND	
tert-Butyl methyl ether (MTBE)	ND	
tert-Butylbenzene	ND	
trans-1,2-Dichloroethene	ND	
trans-1,4-Dichloro-2-butene	ND	
urrogates		
1,2-Dichloroethane-d4	116	
4-Bromofluorobenzene	92.0	
Toluene d8	99.0	

Batch Information

Analytical Batch: VMS2502 Analytical Method: SW-846 8260B

Instrument: MSD8 Analyst: **DVO**

Analytical Date/Time: 08/23/2012 14:30

Prep Batch: VXX3887 Prep Method: SW-846 5030B Prep Date/Time: 08/23/2012 08:00 Prep Initial Wt./Vol.: 40 mL

Prep Extract Vol: 40 mL



CHAIN OF CUSTODY RECORD SGS North America Inc.

Locations Nationwide
Alaska
New Jersey
North Carolina
Oh

www.us.sgs.com

107420

MarylandNew YorkOhio

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CLIENT: AT	ATC ASSOCUMES					SGS R	eference:	3/2	SGS Reference: 2/2/2/1/	^		PAGE / OF 2	
CONTACT:	CONTACT: JUSTIN BHLUAD	PHONE N	PHONE NO:(<i>1</i> /9)87/	11-0499			٦	seviatives	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-			
PROJECT: NCL	PROJECT: NUCLY ()-3315	SITE/PW	SITE/PWSID#: 3578	31.16		° (SAMPLE TYPE	<u> </u>	355 / 32 × 2	42	 		
REPORTS TO:						ပဝ	ű	Required	<u></u>	` 	` 		
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	Sta-12 6-8			1520				×	X_				
	21364-5: 215-5			500		→		>	×		-		
	SK94-35 312-5		-}	1630	*	2	-	*					
	5864-4: 2,5-5		21/16/8	5590	Sac	8	ড	×					
	S1364-6: 0-2.5		,	0.220		Ø		× ×	X Y				
	SB64-7: 5-6			0740		3		×					
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Collected/Reli	Collected/Relinquished By:(1)	Date	Time	Received By	CA:) <u> </u>	Ų.	Shipping Carrier:		Samples Re	Samples Received Cold? (Circle) YES NO	·
1/4	Was a	Blahr	000/	A-an	- King	۸		Shippin	Shipping Ticket No:		Temperature C:_	ور ع <i>گاری</i> :	
Relinquished By: (2)		Date	Time	Received By:	By: U			Special	Special Deliverable Requirements:	uirements:	Chain of Cu	Chain of Custody Seal: (Circle)	_
3		2/22/2	1300	Th	M		١				INTACT	BROKEN ABSEN	<u></u>
Relinquished By: (3)	By: (3)	Date	Time	Received By	By:			Special	Special Instructions:				\
Relinquished By: (4)	By: (4)	Date	Time	Received By:	By:			Rednes	Requested Turnaround Time:	Time:			
								RUSH		Date Needed		Фstр	

□ 200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301 □ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557

White - Retained by Lab Pink - Retained by Client



CHAIN OF CUSTODY RECORD SGS North America Inc.

Locations Nationwide

• Alaska

• New Jersey

• North Carolina

• Ohio

	_										www.us.sgs.com		107421
CLIENT:	ATC ASSOCIATES	X				SGS Re	ference:	SGS Reference: 21-02687	1.87		1500	ત	C 30.
CONTACT:	CONTACT: JINTIN PACARO	PHONE N	PHONE NO: (9) 9 1871-0799	71-099	6			3	\ \ !				
PROJECT: NZ	PROJECT: NUNCT U-3315	SITE/PWS	SITE/PWSID#:3578], 1, 2	11.12		° Z	SAMPLE U	Preservatives Used	+	\dashv		_	
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JUSTIN	JUSTIN BALLIED (AC) FAXNO.: (919) 871-0385	FAX NO.:(919,87,	7-0385	1.	z⊢	COMP	\ \@	\ \ \	<u></u>	<u></u>	_	
INVOICE TO:		QUOTE #:	au.			∢ -	GRAB	_	/0/0/	_	<i></i>	_	
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5							- (_					
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Color		8/22/2	000/	# X	7~~X	,		Shipping Ticket No:	et No:		Temperature C:	3.8%	
Relinquished By: (2)	By (2)	Date Time 8/22/12 (300	Time (300	Received By:				Special Deliv	Special Deliverable Requirements:	<u> </u>	Chain of Custody Seal: (Circle)	Seal: (Circle) BROKEN	ABSENT
Relinquished By: (3)	By: (3)	Date	Time /	Received By:	3y:			Special Instructions:	ictions:				
Relinquished By: (4)	By: (4)	Date	Time	Received By:	3y:			Requested To	Requested Turnaround Time:				
									Date Needed	pepe] - -	בֿ	

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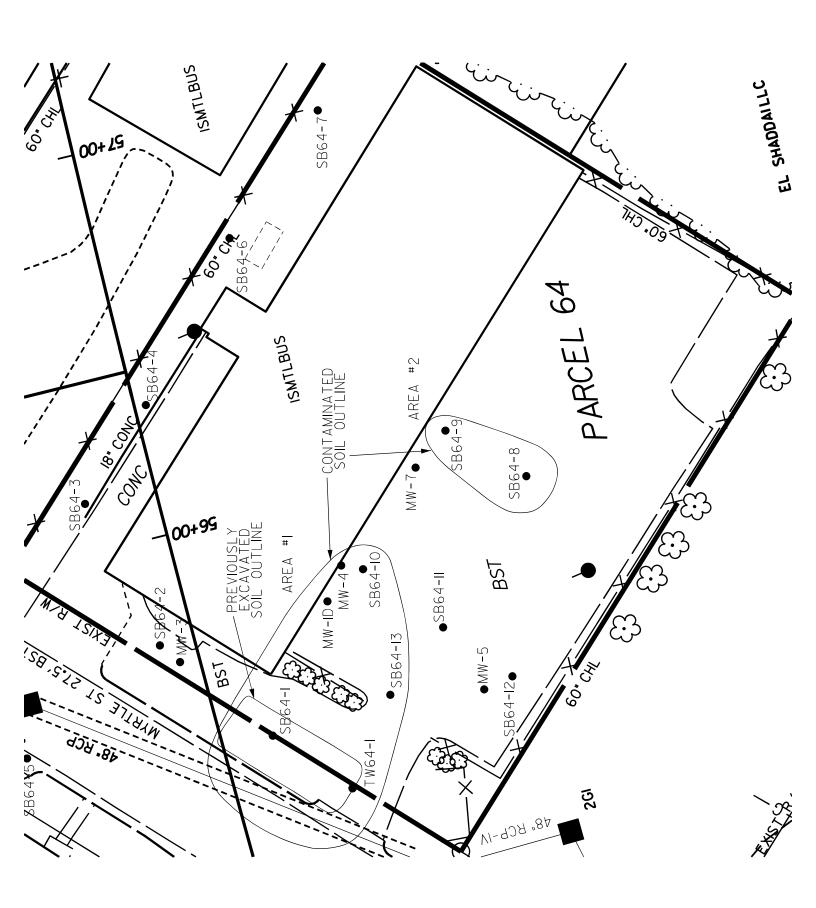
White - Retained by Lab Pink - Retained by Client

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client:	NCDOT-ATC Associates	Work Order No.:	31202687
. 1.	Shipped X Hand Delivered	Notes:	
2.	X COC Present on Receipt No COC Additional Transmittal Forms		
3.	Custody Tape on Container X No Custody Tape		
4.	X Samples Intact Samples Broken / Leaking		
5.	X Chilled on Receipt Actual Temp.(s) in °C: Ambient on Receipt Walk-in on Ice; Coming down to temp. Received Outside of Temperature Specification		
6.	X Sufficient Sample Submitted Insufficient Sample Submitted		
7.	Chlorine absent HNO3 < 2 HCL < 2 Additional Preservatives verified (see notes)		
8.	X Received Within Holding Time Not Received Within Holding Time		
9.	X No Discrepancies Noted Discrepancies Noted NCDENR notified of Discrepancies*		
10.	No Headspace present in VOC vials X Headspace present in VOC vials >6mm		
Comments:	Headspace in Trip Blanks.	·	
		•	· · · · · · · · · · · · · · · · · · ·
	Inspe	cted and Logged in by: JJ	Ved-8/22/12 00:00

APPENDIX E VOLUMETRIC CALCULATIONS



parcel_64_volume_121031

```
**********************
** Parcel 64 - AREA #1 Total volume
                                                          **
**
  TIN to TIN Volume Report -- Wed Oct 31 10:59:53 2012
  From TIN <V: \1784\active\ATC - U3315\gpk\parcel 64\_top. tin> to
  TIN <V: \1784\active\ATC - U3315\gpk\parcel 64-AREAl_bottom. tin>
**
  Prismoidal Volume
**
                                                          * *
*********************
   Total Cut AREA #1 = 676.022 Cubic Yards
   Total Fill =
                     0.000 Cubi c Yards
296.669 Sq Yards
**
**
   Area =
* *
                     676. 022 Cúbi c Yards
   Bal ance =
**********************
AREA #1 - Total Volume off-site
870. 67 Sq. Ft. x \ 8 \ Ft. \ depth = 6965. 36 \ C. Ft. = 257. 98 \ Cubi c \ Yards
AREA #1 - Total Volume on-site
676. 022 Cubi c Yards - 257. 98 Cubi c Yards = 418. 04 Cubi c Yards
**********************
AREA #2 - Total Volume
514. 10 Sq. Ft. x 2. 5 Ft. = 1285. 25 C. Ft. = 47. 60 Cubi c Yards
*********************
Previously Excavated Area
542. 00 Sq. Ft. x 8 Ft. = 4336. 00 C. Ft. = 160. 59 Cubi c Yards
102.65 Cubic Yards off-site
57.94 Cubic Yards on-site
  Parcel 64 - 48" Pipe - Total Pipe Volume through AREA #1
  TIN to TIN Volume Report -- Wed Oct 31 11:35:55 2012
  From TIN <V: \1784\active\ATC - U3315\gpk\parcel\ 64\_top.\ tin> to
  TIN <V: \1784\active\ATC - U3315\gpk\parcel 64-PIPE_bottom. tin>
  Prismoidal Volume
**
                                                          * *
* *
                                                          * *
   ***********************
   Total Cut 48" RCP = 46.920 Cubic Yards
**
* *
                     0.000 Cubic Yards
   Total Fill =
**
                     21. 944 Sq Yards
   Area =
                     46.920 Cubi c Yards
   Bal ance =
```

