January 18, 2012

Mr. Brian Kelly
On-Scene Coordinator
Emergency Response Branch
U.S. Environmental Protection Agency, Region 5
9311 Groh Road
Grosse Ile, MI 48138

Subject: **Site Assessment Report**
Rock-Tenn Site
Otsego, Allegan County, Michigan
Technical Direction Document No. TO-01-11-11-0027
OTIE Contract No. EP-S5-10-10

Dear Mr. Kelly:

OTIE is submitting the enclosed Site Assessment Report for the Rock-Tenn Site in Otsego, Michigan. If you have any questions or comments about the report or need additional copies, please contact me at (312) 220-7000 ext. 24 or Raghu Nagam at (312) 220-7005.

Sincerely,

Naren Babu
Project Manager

Enclosure

cc: Raghu Nagam, START Program Manager

SITE ASSESSMENT REPORT
ROCK-TENN SITE
OTSEGO, ALLEGAN COUNTY, MICHIGAN

Prepared for:

U.S. Environmental Protection Agency
Emergency Response Branch, Region 5
9311 Groh Road
Grosse Ile, MI 48138

TDD No.:	TO-01-11-11-0027
Date Prepared:	January 18, 2012
Contract No.:	EP-S5-10-10
Prepared by:	OTIE
START Project Manager:	Naren Babu
Telephone No.:	(312) 220-7000
U.S. EPA On-Scene Coordinator:	Brian Kelly
Telephone No.:	(734) 692-7684

100 W Monroe Street, Suite 300
Chicago, IL 60603

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1. INTRODUCTION

OTIE has prepared this Site Assessment Report in accordance with the requirements of U.S. Environmental Protection Agency (U.S. EPA) Technical Direction Document (TDD) No. TO-01-11-11-0027 under the Superfund Technical Assessment and Response Team (START) contract No. EP-S5-10-10. The scope of this TDD was to conduct a Site Assessment at the Rock-Tenn Site in Otsego, Allegan County, Michigan. START was tasked to prepare a site-specific Health and Safety Plan, field sampling and analysis plan, subcontract an analytical laboratory, collect waste liquid drum samples and solid samples, evaluate analytical data, document on-site conditions with written logbook notes and still photographs, and prepare this Site Assessment Report. START Project Manager Naren Babu and START Elisa Walker conducted sampling activities on November 16 and 17, 2011. START Caitlin Ruza collected additional soil samples on December 14, 2011.

This Site Assessment Report summarizes the site background; discusses the assessment activities; provides a summary of the analytical data; and discusses potential site-related threats. The Appendices for this report include a photographic log of the Site activities (Appendix A) and the validated sample analytical results (Appendix B).

2. SITE BACKGROUND

This section provides Site background information and the history of the Site.

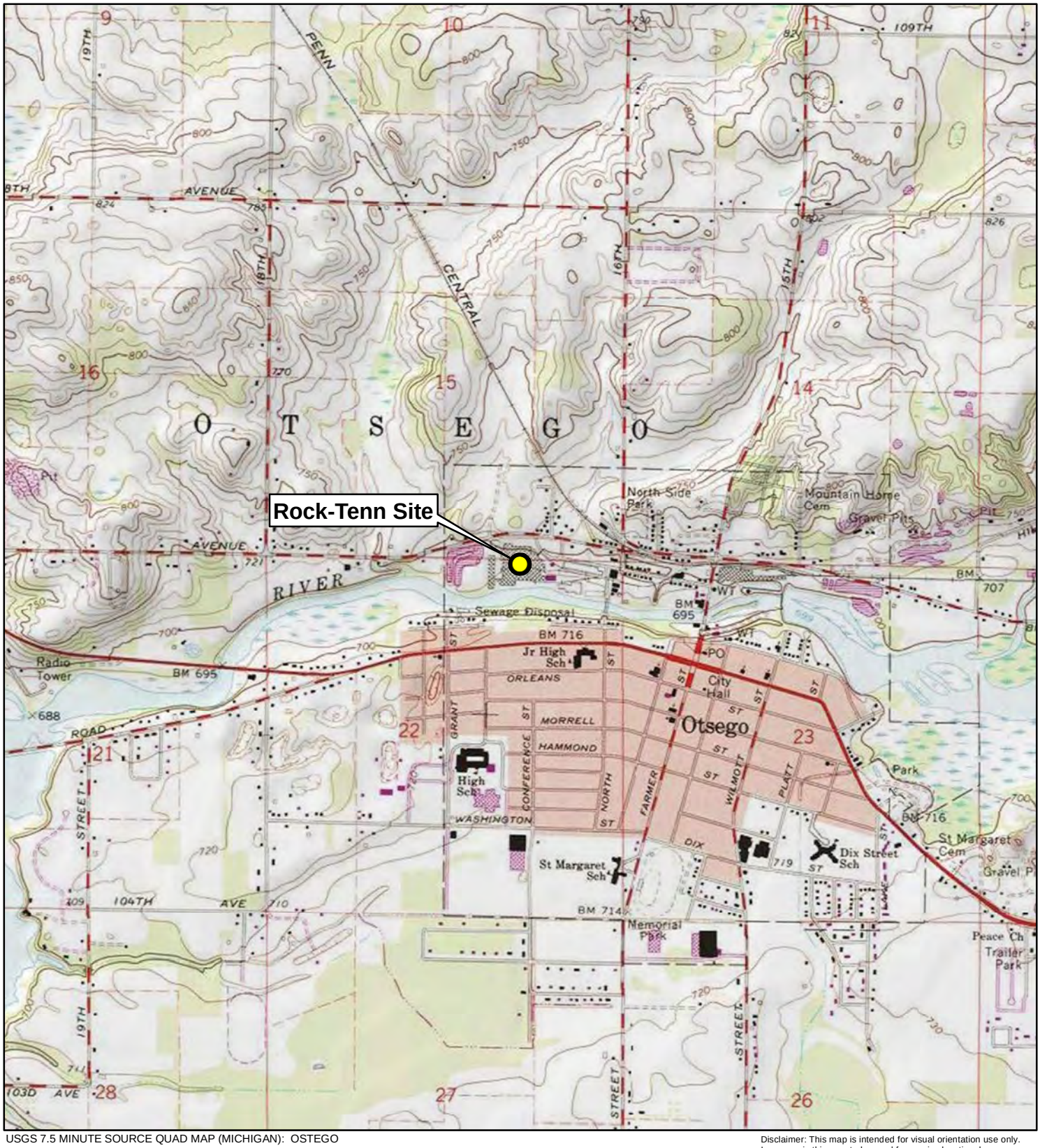
2.1 Site Description

The Rock-Tenn Site is located at 431 Helen Ave in Otsego, Allegan County, Michigan and is comprised of a former paper mill building in which representatives of Allegan County discovered over 200 drums, totes, and containers. The site is currently unoccupied. The geographical coordinates for the building are 42.464421 degrees latitude and -85.706537 degrees longitude (Figure 1 – Site Location Map). The Site occupies an approximate area of about 17 acres in an industrial setting area and is surrounded by W. River Street to the north, John Street and N. North Street to the east, the Kalamazoo River to the south and vacant land to the west.

2.2 Site History

MacSimBar Paper Company began papermaking at the Site in 1906. Paper and related products were produced at the Site for 98 years during which time the facility was operated under several different names. The plant shut down in 2004. In July 2004 approximately 100 people were employed at the facility (The Rock-Tenn mill) when it was closed. A fire damaged the plant in 2006. Cogswell Property LLC, of Redford Township near Detroit, bought the mill site in September 2006. The company's plans to revitalize the property never developed. The property entered foreclosure in April 2011 after Cogswell failed to pay overdue property taxes. Currently, the county owns the site property (Ref #1 and #2).

Otsego County and the State of Michigan have referred the Site to U.S. EPA Region 5 Superfund Division to conduct a removal assessment.



USGS 7.5 MINUTE SOURCE QUAD MAP (MICHIGAN): OSTEGO

Disclaimer: This map is intended for visual orientation use only. In no way is this map to be used for precise locational use.

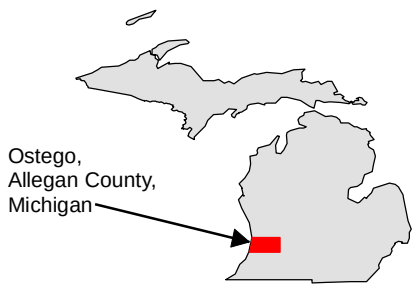
G:\GIS_Workspace\Rock-Tenn\Figure 1 - Site Location Map.mxd

Legend

- Site Location

N

0 2,000 4,000 Feet



United States Environmental Protection Agency

ROCK-TENN SITE ASSESSMENT
OTSEGO, ALLEGAN COUNTY, MICHIGAN
TDD No. TO-01-11-11-0027

FIGURE 1
SITE LOCATION MAP

OTIE
Oneida Total Integrated Enterprises

3. SITE ASSESSMENT ACTIVITIES

Site Assessment activities at the Rock-Tenn Site, including site reconnaissance and sampling, are discussed below. U.S. EPA and START performed site assessment activities which included the collection of drum and solid samples. Field screening of drum contents was performed prior to sample collection.

A site-specific Sampling and Analysis Plan (SAP) was developed for the SA prior to fieldwork. The SAP described the data quality objectives (DQO), sampling strategy, proposed sampling locations, sampling methodology, and analytical procedures used during the SA.

This section summarizes field investigation activities including site reconnaissance and field screening (subsection 3.1) and sampling (subsection 3.2). Table 1 presents a summary of the field screening results. Table 2 presents a summary of all samples collected and their associated locations. Photographic documentation is provided in Appendix A.

3.1 Site Reconnaissance

On November 16th, 2011, U.S. EPA On-Scene Coordinator (OSC), Brian Kelly, and OTIE START members Naren Babu and Elisa Walker mobilized to the site and met with local officials from Otsego City and Allegan County's consultant (Photo #1 in Appendix A). The OSC conducted a Health and Safety meeting and discussed the SAP and proposed sampling. Prior to conducting the site reconnaissance, START calibrated personal monitoring equipment-RAE Systems MultiRAE® Plus five-gas monitor. The MultiRAE instrument includes a photoionization detector that measures organic vapors, carbon monoxide (CO) sensor, hydrogen sulfide (H_2S) sensor, lower explosive limit (LEL) sensor, and oxygen (O_2) sensor.

U.S. EPA and START conducted site reconnaissance inside the building in modified Level "D" Personal Protective Equipment (PPE) in accordance with the approved site-specific HASP. Air monitoring was conducted in the breathing zone throughout the site reconnaissance using a MultiRAE® plus five-gas monitor. Even though the site is fenced and has a gate that is locked, clear signs of vandalism in the form of broken glass doors and graffiti on the doors and walls were observed (Photos #2 and #3). Drums, totes and containers with unknown material were observed at several locations inside the site buildings. Several areas inside the building had no lights and were dark. Open pits were observed with no signs of caution around them. Local officials departed from the site after identifying areas where drums and other

containers containing unknown material were stored. No readings above background in the breathing zone were detected during the site reconnaissance.

3.2 Field Screening and Container Inventory

OSC and START members donned level C PPE for the field screening activities. Field screening results from November 16, 2011 are shown in Table 1. Inside the front room of Building #14 (Figure 2),which is located north of the power house Building #1, OSC and START observed more than 100 containers each of "phoenix asphalt roof coating paint" and "FRY cold application cement" (Photo #4). Field screening conducted on a paint container with a partially opened lid indicated 450 parts per million (ppm) of volatile organic compounds (VOCs). In the back rooms of Building #14, 43 metal 55-gallon drums and approximately 40 plastic 5-gallon buckets were found. Some of the drums were labeled as "Latex Wall Paint". Field screening conducted near the bung opening of one of the drums indicated less than 5 ppm VOCs. Field screening conducted on a bucket with a partially opened lid indicated 0.7 ppm VOCs.

Near the loading dock on the west end of the building #53, 18 totes and 45 drums were observed with standing water on the floor. Several drums were observed with the following labels: Corrosive "UN1824", Corrosive "UN1760", "and PARACOL" paraffin wax emulsion. A total of 12 drums stored in this area were labeled as "non-hazardous". Field pH tests conducted on a poly drum with dark liquid indicated a pH of 2 (Photo #5). Field pH tests conducted on a drum material with a UN1760" label indicated a pH of 4. Field pH test results for liquid material in two totes with a "UN1824" label were between 8 and 9. Hissing noise was observed when the bung on a blue-colored drum was opened. Field screening conducted inside the bung opening of the blue colored metal drum indicated 15.8% O_2 and 26 ppm CO. Several of the containers were labeled Rock-Tenn Company and included Rock-Tenn's former address. Field screening conducted on the tote indicated elevated levels of VOCs at 201 ppm (Photos #6 and #7).

Hydrated lime was stored in several paper bags near an open garage door of the loading dock on the north side of Building #34A (Photo # 8). The pH of the lime was tested and results indicated that the lime material was basic in nature (Photo # 9). A possible run-off path from the lime was also observed.

Two poly drums were observed in Building #39. A field screening pH test was performed on two of the drums. The results indicated that one drum contained liquid with a pH <2 SU and the other drum contained liquid with a pH >12 SU. These highly acidic and basic liquid drums were next to each other (Photo #10). Three 55-gallon metal drums with used oil were observed in building #18 (Photo #11). One of the drums had a field screening result of 57 ppm VOCs.

Table 1
Field Screening Results
Otsego Paperboard Assessment
Otsego, Michigan

Drum/Material	Sample ID	pH	MultiRAE screening
Two Black Metal Drums outside Building #14 on the east side	Not Sampled	Neutral	CO: 200 ppm
Container Labeled "Phoenix Asphalt Roof Coating" and "Danger Mineral Spirits inside Building #14"	RT-D001	Not Tested	VOCs: 450 ppm
One Drum labeled as "Latex Wall Paint" inside Building #14	Not Sampled	Not Sampled	Paint-like odor, VOCs: < 5ppm
5-Gallon Bucket inside Building #14	Not Sampled	Not Sampled	VOCs: 0.7ppm
Poly Drum inside Building #53 near the loading dock area	RT-D002	~2	Background
Poly Tote with Rock-Tenn Label inside Building #53 near the loading dock area	RT-D003	10	VOCs: 201 ppm
Poly Tote Labeled as "1824", "corrosive", and "NaOH" inside Building #53 near the loading dock area	RT-D004	8-9	Not Screened
Poly Tote Labeled as "1824", "corrosive", and "NaOH" inside Building #53 near the loading dock area	RT-D005	8-9	Not Screened
Poly Drum with base inside Building #39 near another acid drum	RT-D006	<2	Not Screened
Poly Drum with acid inside Building #39 near the another base drum	RT-D007	>12	Not Screened
Bags of Hydrated Lime on the northern side of Building #34A near the open loading dock door	Not Sampled	9-10	Not Screened
Metal Drum with Oil	RT-D008	Neutral	VOCs: 57 ppm
Soil where pavement met vegetation at northeast corner of main building	RT-S001	Not Tested	Not Screened
Upstream of Sewer Approx. 40 ft south of RT-S001	RT-S002	Not Tested	Not Screened
Duplicate of RT-S002	RT-S002-D	Not Tested	Not Screened
"L" shaped storm water outfall collected approx. 100 ft south of RT-S002	RT-S003	Not Tested	Not Screened

Notes:
D- Identification name given for drum samples
S-Identification name given for soil samples
Screening was conducted on November 16th, 2011 under START contract EP-S5-10-10.

On December 14th, 2011 the OSC and OTIE START member Caitlin Ruza mobilized to the site and met with Special Agent Richard Porter from EPA's Criminal Investigation Division and MDEQ representative Ben Zamon. The MDEQ described observing at least 10 transformers present on the site in 2008. MDEQ indicated the transformers were dismantled on the pavement in front of the loading dock of Building #23. Oil from the transformers reportedly ran southeast along the pavement to a drain

3.3 Sampling Activities

Sampling was conducted on November 17, 2011 and December 14, 2011. Samples were collected for off-site chemical analysis at a commercial laboratory. A number of drum samples were collected using dedicated glass drum thieves and directly transferred into lab-supplied clean sample jars. Three surface soil samples were collected for PCB analysis using dedicated stainless steel spoons and trowels from the top 0-6 inches of the soil. Soil samples were grab samples per the request of the OSC. Figure 3 shows all locations of the samples collected during the SA.

On November 17th, 2011, U.S. EPA and START evaluated the field screening results and selected potential drums and solid material for sampling and laboratory analysis. A total of eight drum liquid samples were collected. Drum sampling was conducted in Level "C" PPE. Air monitoring was conducted using a MultiRAE instrument during sampling.

Sample RT-D001 was collected from a small container labeled "Phoenix Asphalt Roof Coating Paint" and "Danger Mineral Spirits" located inside the front room in Building #14. Sample RT-D002 was collected from a poly drum containing a dark liquid in building #53, which had with pH result of 2. The field pH test indicated. RT-D003 was taken from a drum labeled "Rock-Tenn" and was found to have a pH of about 10 and 201 ppm VOCs. The content of sample RT-D003 was a glue type material therefore a drum thieve could not be used to retrieve sample. Instead a spoon was used to transfer the sample to the jar. Samples RT-D004 and RT-D005 were both taken from drums labeled "1824" and "NaOH". pH results of these drums were between 8 and 9. Base and acid drums were stored next to each other and sampled as RT-D006 and RT-D007 respectively. RT-D006 was found to have a pH of >12, while RT-D007 was found to have a pH <2. Lastly, RT-D008 was collected from a metal drum containing used oil in building #18.

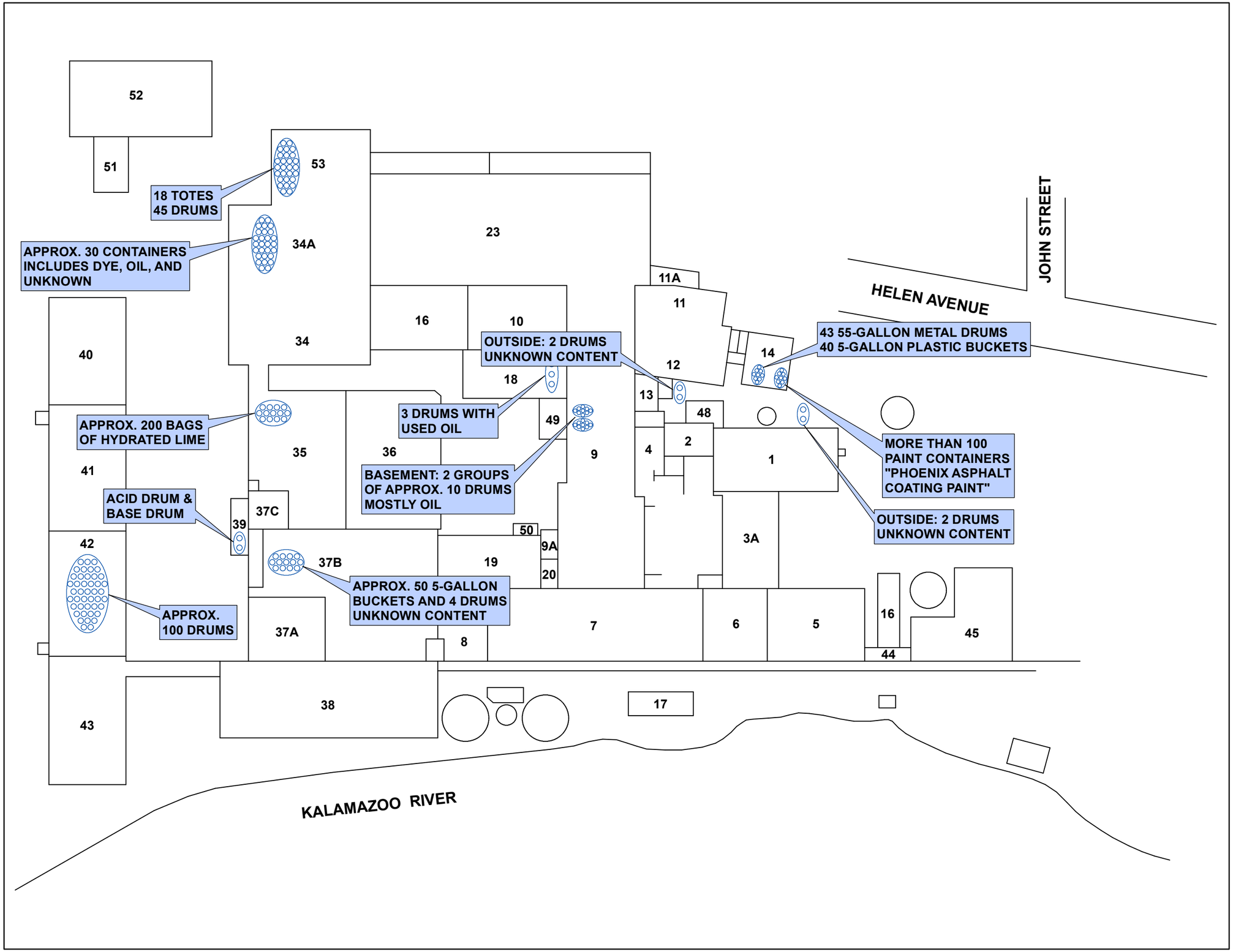
On December 14th, 2011, surface soil samples were collected for PCB analysis. START collected soil sample RT-S001 from where the pavement met vegetation at the northeast corner of building #1. Sample RT-S002 was collected from a drain opening approximately 40 feet south of the RT-S001 location. A duplicate sample RT-S002-D was also collected. A slight white/grey sheen was observed on the water

accumulated above the soil as well as on the surface of samples RT-S001, and RT-S002. . RT-S003 was collected from an "L" shaped storm water outfall approximately 100 feet south of RT-S002.

START prepared the sample jars with labels, completed the chain of custody and placed all samples on ice. START secured the samples inside a cooler for transportation. Samples were shipped to Spectrum Analytical, Inc. in Tampa, FL on November 17, 2011 and December 14, 2011.

Table 2 Sampling Summary Rock-Tenn Site Assessment Otsego, Michigan		
Sample ID	**Sample Description**	**Laboratory Analyses**
RT-D001	Waste Liquid found in container Labeled "Phoenix Asphalt Roof Coating" and "Danger Mineral Spirits inside Building #14"	Ignitability, Flashpoint
RT-D002	Waste Liquid found in Poly Drum inside Building #53 near the loading dock area	pH
RT-D003	Waste Liquid found in Poly Tote with Rock-Tenn Label inside Building #53 near the loading dock area	pH, Total & TCLP VOCs, and SVOCs
RT-D004	Waste Liquid found in Poly Tote Labeled as "1824", "corrosive", and "NaOH" inside Building #53 near the loading dock area	pH
RT-D005	Waste Liquid found in Poly Tote Labeled as "1824", "corrosive", and "NaOH" inside Building #53 near the loading dock area	pH
RT-D006	Waste Liquid found in Poly Drum with base inside Building #39 near another acid drum	PH
RT-D007	Waste Liquid found in Poly Drum with acid inside Building #39 near the another base drum	pH
RT-D008	Waste Liquid found in a Metal Drum with Oil	PCBs
RT-S001	Soil from where pavement met vegetation at northeast corner of building #1	PCBs
RT-S002	Soil from Upstream of Sewer Approx. 40 ft south of RT-S001	PCBs
RT-S002-D	Duplicate of sample RT-S002	PCBs
RT-S003	Soil from "L" shaped storm water outfall collected approx. 100 ft south of RT-S002	PCBs

Notes:
VOCs - volatile organic compounds
SVOCs - semi-volatile organic compounds
TCLP - Toxic Characteristic Leaching Procedure
Sample ID- identification names given for samples
Samples were collected on November 17th, and December 14th, 2011 under START contract EP-S5-10-10.Analyses were conducted by Spectrum Analytical, Inc. under TDD No: TO-01-11-11-0027



Legend

14 — Building with Building Number

Drums, Buckets, Containers

N

0 50 100 200

Feet

United States Environmental Protection Agency

ROCK-TENN SITE ASSESSMENT
OTSEGO, ALLEGAN COUNTY, MICHIGAN
TDD No. TO-01-11-11-0027

FIGURE 2
SITE LAYOUT MAP

OTIE
Oneida Total Integrated Enterprises

G:\GIS_Workspace\Rock-Tenn\Figure 2 - Site Layout Map.mxd

RT-D002 - Poly Acid Drum (Ph=2)

RT-D003 - Rock-Tenn Tote (PID = 201 ppm)
Glue Type Material - strong odor

RT-D004 - Labeled "1824" - Basic Poly Tote

RT-D005 - Labeled "1824" Basic Poly Tote

18 TOTES
45 DRUMS

3 DRUMS WITH
USED OIL

43 55-GALLON METAL DRUMS
40 5 GALLON PLASTIC BUCKETS

RT-D001 - Phoenix
Asphalt Paint Container

RT-S001

MORE THAN 100 PAINT CONTAINERS
"PHOENIX ASPHALT COATING PAINT"

RT-S002 & RT-S002D

RT-S003

RT-D008 - Suspected
PCB Drum - contains used oil

ACID DRUM &
BASE DRUM

RT-D006 - Base Drum

RT-D007 - Acid Drum

APPROX.
100 DRUMS

JOHN STREET

HELEN AVENUE

KALAMAZOO RIVER

52 51 53 34A 23 11A 11 16 10 34 18 12 14 40 49 13 48 9 4 2 1 41 35 36 39 37C 3A 50 9A 42 37B 19 20 16 45 8 7 6 5 44 37A 38 43 17

Legend

- Sample
- 14 — Building with Building Number
- Drums, Buckets, Containers

N

0 50 100 200

Feet

United States Environmental Protection Agency

ROCK-TENN SITE ASSESSMENT
OTSEGO, ALLEGAN
COUNTY, MICHIGAN
TDD No. TO-01-11-11-0027

FIGURE 3
SAMPLE LOCATION MAP

OTIE
Oneida Total Integrated Enterprises

G:\GIS_Workspace\Rock-Tenn\Figure 3 - Sample Location Map.mxd

4. SAMPLE ANALYTICAL RESULTS

START reviewed the sample analytical data and supporting quality assurance/quality control (QA/QC) data provided by Spectrum Analytical, Inc. The validated analytical data package is included in Appendix B. Based on START's data validation, the data are acceptable for use as qualified.

Analytical results of the drum samples and surface soil that were above the method detection level are shown in Tables 3 and 4 respectively. The results in table 3 were compared against values listed in 40 Code of Federal Regulations (CFR) Section 261.22-261.24 – "Characteristics of Hazardous Waste". Analytical results for the surface soil samples in Table 4 were compared to the EPA Regional Screening Levels (RSLs) for Industrial Soil provided in the tables at the web address: (http://www.epa.gov/region9/superfund/prg/). Industrial Soil screening level is calculated based on a 1 in a million cancer risk.

Analytical result for drum sample RT-D002 indicated a pH value of 1.96 standard units (SU), while sample RT-D007 had a pH value of 0.27 SU. These samples exceed the hazardous characterization criteria for corrosivity of <2 pH per 40 CFR Section 261.22 regulation. RT-D002 and RT-D007 are considered strong acids. pH results for RT-D003 through 006 were all between 2 and 12.5 SU and did not exceed the hazardous characterization criteria for corrosivity. Sample RT-D001 had a flash point above 140 degrees F and was not considered as "ignitable" as per to 40CFR section 261.21 regulation.

Total and TCLP analytical results did not indicate any detects for VOCs or SVOCs in the drum sample RT-D003. PCB Aroclor analytical results for drum sample RT-D008 were all below the method detection limits. Aroclor 1260 was detected in surface soil samples RT-S001, RT-S002 and RT-S003, but the levels were all below the EPA RSL of 740 micrograms per kilograms (µg/Kg).

Table 3
Detected Sample Analytical Results
Rock-Tenn Site Assessment
Otsego, Michigan

Drum Sample Results

ANALYTE/ PARAMETER	40 CFR Section 261 Regulatory Limit [1]	RT-D001	RT-D002	RT-D003	RT-D004	RT-D005	RT-D006	RT-D007	RT-D008
pH (SU)	<2 or >12.5	*NA*	**1.96**	**9.8**	**10.5**	**10.5**	**12**	**0.27**	*NA*
Flashpoint (°F)	<140	***No Flash @ 140***	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*

Surface Soil Sample Results

ANALYTE/ PARAMETER	EPA RSL for Industrial Soil[2]	RT-S001	RT-S002	RT-S002-D	RT-S003
PCBs (µg/Kg)					
Aroclor 1260	740	**9.9 J**	**12 J**	ND	**72**

Notes:
[1] - Hazardous Waste Characterization Criteria according to 40 CFR Sections 261.21-261.24
[2] - EPA Regional Screening Levels (RSL) for Industrial Soil were referenced from the RSL Tables provided at the web address: http://www.epa.gov/region9/superfund/prg/.
SU - standard units
°F - degrees Fahrenheit
NA - analyte not analyzed
PCBs - polychlorinated biphenyls
µg/Kg - micrograms per kilograms
J - result less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value
ND - analyte not detected above the laboratory method detection limit
Only detected analytes/parameters are listed in this table
Bolded results indicate detections above reporting limit
Bolded and Shaded results exceeded the regulatory limit
Samples were collected on November 17, 2011 under START contract EP-S5-10-10.
Analyses were conducted by Spectrum Analytical, Inc. under TDD No: TO-01-11-11-0027

5. POTENTIAL SITE RELATED THREATS

Threats posed by the Site contaminants were evaluated in accordance with National Contingency Plan (NCP) criteria for initiating a removal action listed under Title 40 of the CFR, Section 300.415(b) (2). Paragraph (b) (2) of 40 CFR Section 300.415 lists factors to be considered when determining the appropriateness of a potential removal action at a Site. Potential site-related threats to human health and the environment were evaluated based on the criteria listed in 40 CFR, Sections 261.20 through 261.24. Factors that are applicable to the Site are discussed below.

Actual or potential exposure of nearby human populations, animals, or the food chain to hazardous substances or pollutants or contaminants

Two of the drum samples had a pH less than 2 SUs, indicating corrosivity. Drums, containers and totes with no secondary containment are located inside the Site building. There were several signs of trespassing and vandalism at the Site. Overall, the potential for exposure to potentially hazardous substances stored at the Site is high.

Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release

Samples RT-D002 and RT-D007 - have pH values of 1.96 and 0.27, respectively. Both samples are strong acids and exceed the Title 40 CFR Section 261.22 pH criteria of <2 for hazardous corrosive characterization. Near the loading dock on the west end of building #53, three totes with a UN1760 label were located. This label indicates that the drums potentially contain phosphoric acid. Several poly totes with UN1824 label were located adjacent to the acid totes (Photo #12). The UN1824 label indicates that the drums potentially contain sodium hydroxide, which is a strong base. Vandalism and or deteriorating drums and containers could release the contents and lead to the mixing of acids and bases.

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

Hydrated lime was stored in several bags near an open garage door of the loading dock in Building #53. pH results showed that the lime material was basic in nature. If rain water and snow melt gets in through

the open garage door, the lime material may readily be dissolved in the water. The resulting basic run-off water can potentially flow to other parts of the building.

6. SUMMARY

On November 16 and 17, 2011 and December 14, 2011, U.S. EPA and START conducted a site assessment at the Rock-Tenn Site in Otsego, Michigan. Field screening tests were conducted to analyze several drums found in the building prior to sampling. During sampling, liquid drum and surface soil samples were collected and submitted for pH, flashpoint, total and TCLP VOCs and SVOCs, and PCB analyses.

Sample analytical results were evaluated against the criteria of characteristics of hazardous waste (40 CFR, Sections 261.20 through 261.24). Drums and totes containing acidic compounds and drum, totes and bags containing basic compounds were observed in the Site building and may pose a threat of release. Clear signs of trespassing and vandalism are also observed inside and outside the Site building.

REFERENCES

1. MLIVE.com, 2011.Internet Address accessed on December 29, 2011. "http://www.mlive.com/news/kalamazoo/index.ssf/2011/07/rock-tenn_paper_mill_to_go_up.html"
2. The Allegan County News, 2011. Internet Address accessed on December 29, 2011. "http://www.allegannews.com/articles/2011/09/26/ue_news/2.txt"

APPENDIX A

PHOTOGRAPHIC LOG

Photograph No.:	1	**Photographer:**	Caitlin Ruza	**Orientation:**	West
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	December 14, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	Cogswell Property Sign located at east entrance of the Site property.				

Photograph No.:	2	**Photographer:**	Naren Babu	**Orientation:**	North
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	Broken glass in doorway of facility.				

Photograph No.:	3	**Photographer:**	Naren Babu	**Orientation:**	North
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	Broken glass in doorway and graffiti on glass door.				

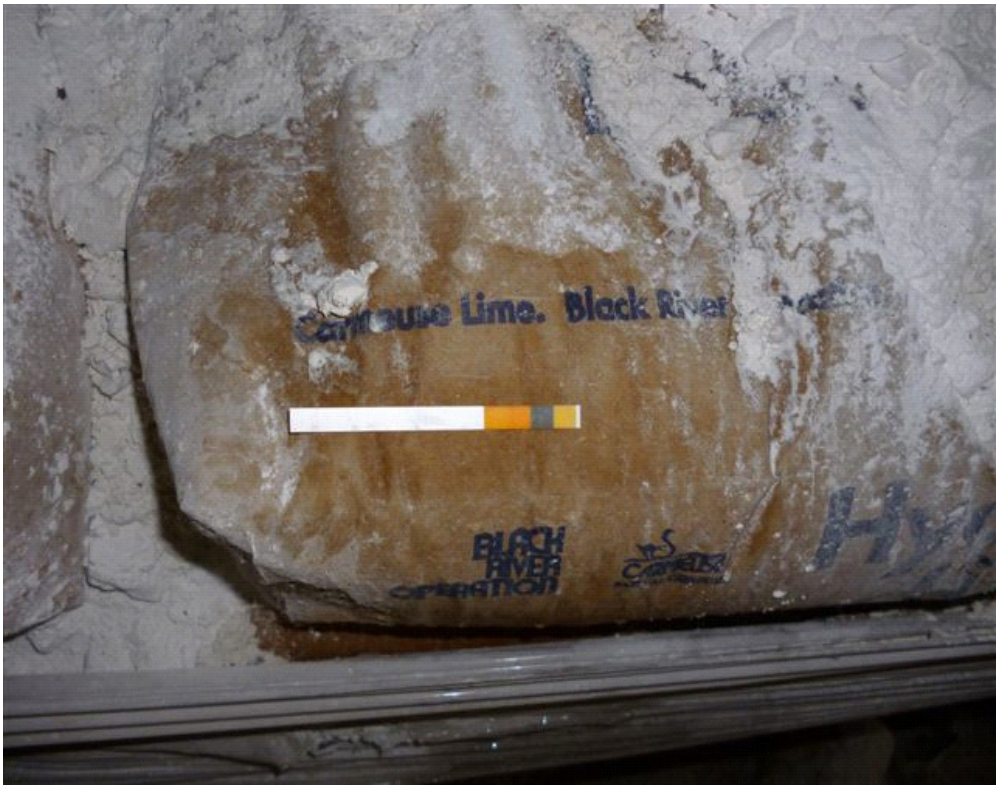
Photograph No.:	4	**Photographer:**	Naren Babu	**Orientation:**	West
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	View of small paint containers; one of them was sampled for flashpoint				

Photograph No.:	5	**Photographer:**	Naren Babu	**Orientation:**	Looking Down
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	Poly Drum with acid material; pH test showed a result below 2				

Photograph No.:	6	**Photographer:**	Naren Babu	**Orientation:**	Southwest
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	Poly tote that had high VOC readings				

Photograph No.:	7	**Photographer:**	Naren Babu	**Orientation:**	West
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	View of a label showing that a drum was sold to Rock-Tenn				

Photograph No.:	8	**Photographer:**	Naren Babu	**Orientation:**	North
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	View of the hydrated lime stored near the garage door.				



Photograph No.:	9	**Photographer:**	Naren Babu	**Orientation:**	Looking Down
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	View of the hydrated lime with pH strip				

Photograph No.:	10	**Photographer:**	Naren Babu	**Orientation:**	Looking Down
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	Acid and Base Drums stored next to each other.				

Photograph No.:	11	**Photographer:**	Naren Babu	**Orientation:**	East
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	Drums with crude motor oil.				

Photograph No.:	12	**Photographer:**	Naren Babu	**Orientation:**	Southwest
TDD Number:	TO-01-11-11-0027	**Contract:**	EP-S5-10-10, OTIE	**Date:**	November 16, 2011
Site Name & Location:	Rock-Tenn Site, Allegan County, Michigan.				
Subject:	Basic totes with corrosive label 1824.				

APPENDIX B

VALIDATED LABORATORY ANALYTICAL RESULTS

Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106 ● Atlanta, GA 30060 ● (678) 355-5550 ● (770) 528-0167 (Fax)

MEMORANDUM

Date: January 3, 2011

To: Naren Babu, Project Manager, OTIE
Superfund Technical Assessment and Response Team (START) for Region 5

Prepared by: Renea Anglin, START chemist for Region 4

QA/QC Concurrence by: Keely Meadows

Subject: Data Validation for
Rock-Tenn Site Assessment

Project TDD No. TO-01-11-11-0027

Laboratory: Spectrum Analytical, Inc. in Tampa, Florida.
Sample Delivery Group (SDG): 3504582

1.0 INTRODUCTION

The START chemist for Region 4 validated analytical data for 1 soil sample for ignitability, 1 soil sample volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), toxicity characteristic leaching procedure (TCLP) VOCs, and TCLP SVOCs, 1 soil sample for polychlorinated biphenyls (PCBs), 6 soil samples for pH, and 1 water sample for VOCs. Samples were collected for the Rock-Tenn Site Assessment on November 17, 2011. The samples were analyzed under SDG 3504582 by Spectrum Analytical, Inc. of Tampa, Florida, using U.S. Environmental Protection Agency (U.S. EPA) methods 8260B, 1311/8260B, 8270C, 1311/8270C, 8082, and 9045. One sample was subcontracted to Spectrum Analytical Rhode Island and analyzed for flashpoint by 1010OL.

Laboratory data were validated using guidelines set forth in the U.S. EPA Contract Laboratory Program National Functional Guidelines (NFG) for Organic Data Review (EPA-540-R-08-01, June 2008) and applicable methodologies. The purpose of the chemical data quality evaluation process is to assess the usability of data for the project decision-making process.

Organic and wet chemistry data validation consisted of a review of the following QC audits:

- Chain of custody and sample receipt forms review
- Sample preservation and holding time
- Blank results
- Surrogate recoveries
- Matrix spike and Matrix Spike Duplicate (MS/MSD) recovery results
- Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) recovery results

Section 2.0 of this memorandum discusses the results of organic data validation. Section 3.0 of this memorandum discusses the results of wet chemistry validation. Section 4.0 presents an overall assessment of the data. The attachment to this memorandum contains the laboratory reporting forms as well as START's handwritten data qualifications where warranted.

2.0 ORGANIC DATA VALIDATION RESULTS

The results of START's organic data validation are summarized below by QC audit reviewed. The data qualifiers listed below were applied to sample analytical results where warranted (see attachment):

- J – The analyte was detected. The reported concentration was considered estimated.
- U – The analyte was not detected.
- UJ – The analyte was not detected. The reporting limit was considered estimated.

After the START project staff received the data packages, they were inventoried for completeness and then reviewed according to matrix-specific protocols and data quality objectives established for the project.

2.1 SOIL SAMPLES BY METHOD 8260B

2.1.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on November 17, 2011 and were received on ice by the laboratory. No discrepancies were noted.

2.1.2 SAMPLE PRESERVATION AND HOLDING TIME

VOC samples were analyzed within holding time criteria. No discrepancies were noted.

2.1.3 BLANK RESULTS

The purpose of laboratory (or field) blank analysis is to determine the existence and magnitude of contamination resulting from laboratory (or field) activities. A laboratory method blank sample (120111MBLK32) was run with this SDG.

No discrepancies were noted.

2.1.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds (System Monitoring Compounds). Surrogate spike compounds included Dibromofluoromethane, Toluene-d8, 4-Bromofluorobenzene, and 1,2-Dichloroethane-d4.

No discrepancies were noted.

2.1.5 MS/MSD RECOVERY RESULTS

Data for MS/MSDs are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

No MS/MSD samples were requested for this SDG.

2.1.6 LCS/LCSD RECOVERY RESULTS

Data for the LCS/LCSD is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS/LCSD is fortified with the full list of VOCs and analyzed with each batch of samples. The LCS/LCSD accuracy performance is measured by Percent Recovery (%R).

LCS/LCSD recoveries were within limits.

2.1.7 GENERAL LABORATORY OBSERVATIONS

The laboratory noted that sample RT-D003 was diluted due to the matrix. Therefore, elevated reporting limits are provided.

2.2 TCLP SAMPLES BY METHOD 1311/8260B

2.2.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on November 17, 2011 and were received on ice by the laboratory.

No discrepancies were noted.

2.2.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were analyzed within holding time criteria. No discrepancies were noted.

2.2.3 BLANK RESULTS

The purpose of laboratory (or field) blank analysis is to determine the existence and magnitude of contamination resulting from laboratory (or field) activities. A laboratory method blank sample (120111TBLK32) was run with this SDG.

No laboratory method blank detects were noted.

2.2.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds (System Monitoring Compounds). Surrogate spike compounds included Dibromofluoromethane, Toluene-d8, 4-Bromofluorobenzene, and 1,2-Dichloroethane-d4.

No discrepancies were noted.

2.2.5 MS/MSD RECOVERY RESULTS

Data for MS/MSDs are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

No MS/MSD samples were requested for this SDG.

2.2.6 LCS RECOVERY RESULTS

Data for the LCS is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS is fortified with the full list of VOCs and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

LCS/LCSD recoveries were within limits.

2.3 SOIL SAMPLES BY METHOD 8270C

2.3.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on November 17, 2011 and were received on ice.

No discrepancies were noted.

2.3.2 SAMPLE PRESERVATION AND HOLDING TIME

SVOC samples were analyzed within holding time criteria. No discrepancies were noted.

2.3.3 BLANK RESULTS

The purpose of laboratory (or field) blank analysis is to determine the existence and magnitude of contamination resulting from laboratory (or field) activities. One laboratory method blank sample (10905MB) was run with this SDG.

No laboratory method blank detects were noted.

2.3.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds. Surrogate spike compounds included 2-Fluorophenol, Phenol-d5, Nitrobenzene-d5, 2-Fluorobiphenyl, 2,4,6-Tribromophenol, and Terphenyl-d14.

No discrepancies were noted.

2.3.5 MS/MSD RECOVERY RESULTS

Data for MS/MSD are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

No MS/MSD samples were requested for this SDG.

2.3.6 LCS RECOVERY RESULTS

Data for the LCS is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS were fortified with the full list of SVOCs and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

The LCS recovery of 109052LCS for 4,6-Dinitro-2-methylphenol was biased low at 0% and the recovery for Benzidine was biased low at 0%. The LCSD had a Benzidine recovery of 0% as well. The RPD for 4,6-

Dinitro-2-methylphenol was outside of QC limits at 200%. Therefore, 4,6-Dinitro-2-methylphenol was qualified as estimated and flagged "J" in sample RT-D003 and Benzidine was flagged as "R".

2.3.7 GENERAL LABORATORY OBSERVATIONS

The laboratory noted that the extract for sample RT-D003 would not reduce below a final volume 10ml. Therefore, elevated reporting limits are provided. The final volume of the method blank, LCS and LCSD were adjusted to 10ml to match the sample. This resulted in the Benzidine and 4,6-Dinitro-2-methylphenol being diluted out below the reporting limit.

2.4 TCLP SAMPLES BY METHOD 1311/8270C

2.4.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on November 17, 2011 and were received on ice.

No discrepancies were noted.

2.4.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were analyzed within holding time criteria.

No discrepancies were noted.

2.4.3 BLANK RESULTS

The purpose of laboratory (or field) blank analysis is to determine the existence and magnitude of contamination resulting from laboratory (or field) activities. A laboratory method blank sample (108600MB) was run with this SDG.

No laboratory method blank detects were noted.

2.4.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds. Surrogate spike compounds included 2-Fluorophenol, Phenol-d5, Nitrobenzene-d5, 2-Fluorobiphenyl, 2,4,6-Tribromophenol, and Terphenyl-d14.

Sample RT-D003 had biased low recoveries for 2-Fluorophenol (3.2%), and Phenol-d5 (2.4%). The failures were attributed to matrix interference and the sample was not re-extracted. Therefore, the laboratory director, Mr. Brian Spann, was contacted about the surrogate recoveries. He said the recoveries of the other surrogates in the sample indicated that the sample had the correct pH adjustments during the extraction process and that the sample matrix itself was the reason for the low surrogate recoveries. Samples that show difficulties during the regular 8270 analysis often exhibit difficulties during TCLP analysis as well and are therefore not re-extracted if the surrogates are low. The regular 8270 analysis of this sample produced an extract that would not reduce past 10mL and the TCLP extract chromatogram showed several large interfering peaks with these two surrogates. The lab provided a copy of the chromatogram and discussed the surrogate expected response time. Upon review of the chromatogram in detail, there were significant amounts of non-target compounds in the area of the surrogates. Therefore, 1,4-Dichlorobenzene, 2-

Methylphenol, Hexachloroethane, and 4-Methylphenol were marked as UJ since they are associated with the failing surrogates.

2.4.5 MS/MSD RECOVERY RESULTS

Data for MS/MSD are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

No MS/MSD samples were requested for this SDG.

2.4.6 LCS RECOVERY RESULTS

Data for the LCS is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS were fortified with the full list of SVOCs and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

LCS recovery for 2,4-Dinitrotoulene was biased low at 66.3%. Since 2,4-Dinitrotoluene was not detected in the sample associated with the LCS, no further action was taken.

2.5 SOIL SAMPLES BY METHOD 8082

2.5.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on November 17, 2011 and were received on ice.

2.5.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were shipped on ice and were analyzed within holding time criteria. No discrepancies were noted.

2.5.3 BLANK RESULTS

The purpose of laboratory blank analysis is to determine the existence and magnitude of contamination resulting from laboratory activities. A laboratory method blank sample (109048MB) was run with this SDG.

No laboratory method blank detects were noted.

2.5.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds. The surrogate spike compound included Decachlorobiphenyl.

The surrogate was within limits for samples analyzed in this SDG.

2.5.5 MS/MSD RECOVERY RESULTS

Data for MS/MSD are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

No MS/MSD samples were requested for this analysis.

2.5.6 LCS RECOVERY RESULTS

Data for the LCS is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS was fortified and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

LCS/LCSD recoveries and RPDs were within limits.

2.6 WATER SAMPLES BY METHOD 8260B

2.6.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. One water sample (a trip blank) was collected on November 17, 2011 and were received on ice by the laboratory. No discrepancies were noted.

2.6.2 SAMPLE PRESERVATION AND HOLDING TIME

The VOC sample was analyzed within holding time criteria. No discrepancies were noted.

2.6.3 BLANK RESULTS

The purpose of laboratory (or field) blank analysis is to determine the existence and magnitude of contamination resulting from laboratory (or field) activities. Laboratory method blank sample (112011BLK62) was run with this SDG.

The laboratory method blank sample had trace contamination of 1,3-Dichlorobenzene (0.24 ug/L) and 1.4-Dichlorobenzene (0.32 ug/L). No action was taken to qualify for this deficiency in the associated soil sample since it was not detected.

The sample RT-TRIP1 had trace contamination of methylene chloride (2.1 ug/L). No action was taken to qualify for this deficiency in the associated soil sample since it was not detected.

2.6.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds (System Monitoring Compounds). Surrogate spike compounds included Dibromofluoromethane, Toluene-d8, 4-Bromofluorobenzene, and 1,2-Dichloroethane-d4.

No discrepancies were noted.

2.6.5 MS/MSD RECOVERY RESULTS

Data for MS/MSDs are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

No MS/MSD samples were requested for this SDG.

2.6.6 LCS RECOVERY RESULTS

Data for the LCS is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS is fortified with the full list of VOCs and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

LCS/LCSD recoveries and RPDs were within limits.

3.0 WET CHEMISTRY DATA VALIDATION RESULTS

The results of START's wet chemistry data validation are summarized below by QC audit reviewed. The data qualifiers listed below were applied to sample analytical results where warranted:

- J – The analyte was detected. The reported concentration was considered estimated.
- U – The analyte was not detected.
- UJ – The analyte was not detected. The reporting limit was considered estimated.

After the START project staff received the data packages, they were inventoried for completeness and then reviewed according to matrix-specific protocols and data quality objectives established for the project.

3.1 SOIL SAMPLES BY METHOD 9045 (pH)

3.1.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on November 17, 2011 and were received on ice.

3.1.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were analyzed within the holding time criteria. No discrepancies were noted.

3.1.3 BLANK RESULTS

The assessment of blank analysis results is to determine the existence and magnitude of contamination resulting from laboratory and/or field activities. A laboratory method blank sample for method 9045 (pH) is not required.

3.1.4 LCS RECOVERY RESULTS

The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS is fortified with each analyte of interest and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

The LCS/LCSD recoveries were within acceptable recovery limits.

3.1.5 MS/MSD RECOVERY RESULTS

The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The MS/MSD accuracy performance is measured by %R.

A MS/MSD was not requested for this SDG.

3.1.6 SAMPLE DUPLICATE

For tests where the addition of spiking material is impractical, samples are run in duplicate and the relative percent difference (RPD) of the two readings is compared. The duplicate analysis provides information about the reproducibility or precision of the laboratory analysis.

A sample duplicate was performed on RT-D002. The RPD was within acceptable limits.

3.2 SOIL SAMPLES BY METHOD 1010- FLASHPOINT CLOSED CUP

3.2.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Samples were collected on November 17, 2011 and were received on ice. Samples were subcontracted to the Rhode Island Division. Samples were shipped and received on November 22, 2011. No discrepancies were noted.

3.2.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were analyzed within the holding time criteria. No discrepancies were noted.

3.2.3 BLANK RESULTS

The assessment of blank analysis results is to determine the existence and magnitude of contamination resulting from laboratory and/or field activities. A method blank is not required with this analysis.

3.2.4 LCS RECOVERY RESULTS

The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS is fortified with each analyte of interest and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

No LCS/LCSD is required to be performed with this analysis.

3.2.5 MS/MSD RECOVERY RESULTS

The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The MS/MSD accuracy performance is measured by %R.

No MS/MSD was requested for these analyses for this SDG.

3.2.6 SAMPLE DUPLICATE

For tests where the addition of spiking material is impractical, samples are run in duplicate and the RPD of the two readings is compared. The duplicate analysis provides information about the reproducibility or precision of the laboratory analysis.

A sample duplicate was performed on RT-D001. The RPD was within acceptable limits.

4.0 OVERALL ASSESSMENT OF DATA

The analytical results meet the data quality objectives defined by the applicable method and validation guidance documentation. The analytical data is usable and acceptable as reported by the laboratory.

ATTACHMENT

SUMMARY OF VALIDATED ANALYTICAL RESULTS

AND

CHAIN-OF-CUSTODY

1

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-D008

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458208 Lab File ID: 58208.D

Sample wt/vol: 1.01 Units: G Date Received: 11/18/11

Concentrated Extract Volume: 10 Date Extracted: 11/30/11

Level:(low/med) LOW Date Analyzed: 12/01/11 Time: 1440

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	30	U	13	30
11096-82-5	Aroclor-1260	30	U	6	30
11104-28-2	Aroclor-1221	30	U	12	30
11141-16-5	Aroclor-1232	30	U	20	30
53469-21-9	Aroclor-1242	30	U	11	30
12672-29-6	Aroclor-1248	30	U	11	30
11097-69-1	Aroclor-1254	30	U	9.4	30

1

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 109048MB

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 109048MB Lab File ID: 7463MB.D

Sample wt/vol: 1.03 Units: G Date Received: 11/30/11

Concentrated Extract Volume: 10 Date Extracted: 11/30/11

Level:(low/med) LOW Date Analyzed: 12/01/11 Time: 1305

PercentSolids: 100 decanted : (Dilution Factor: 1

Extraction: SONC Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	29	U	13	29
11096-82-5	Aroclor-1260	29	U	5.9	29
11104-28-2	Aroclor-1221	29	U	12	29
11141-16-5	Aroclor-1232	29	U	19	29
53469-21-9	Aroclor-1242	29	U	11	29
12672-29-6	Aroclor-1248	29	U	11	29
11097-69-1	Aroclor-1254	29	U	9.2	29

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

RT-D002

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458202

Level:(low/med) LOW Date Received: 11/18/2011

PercentSolids: 0 Station ID:

CONCENTRATION UNITS: PH

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1-00-6	pH	1.96			N/A			

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

061211 1426

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

RT-D003

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458203

Level:(low/med) LOW Date Received: 11/18/2011

PercentSolids: 0 Station ID:

CONCENTRATION UNITS: PH

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1-00-6	pH	9.8			N/A			

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

061211 1426

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

RT-D004

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458204

Level:(low/med) LOW Date Received: 11/18/2011

PercentSolids: 0 Station ID:

CONCENTRATION UNITS: PH

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1-00-6	pH	10.5			N/A			

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

061211 1426

12-19-11

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

RT-D005

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458205

Level:(low/med) LOW Date Received: 11/18/2011

PercentSolids: 0 Station ID:

CONCENTRATION UNITS: PH

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1-00-6	pH	10.5			N/A			

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

061211 1425

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

RT-D006

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458206

Level:(low/med) LOW Date Received: 11/18/2011

PercentSolids: 0 Station ID:

CONCENTRATION UNITS: PH

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1-00-6	pH	12			N/A			

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

061211 1425

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

RT-D007

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458207

Level:(low/med) LOW Date Received: 11/18/2011

PercentSolids: 0 Station ID:

CONCENTRATION UNITS: PH

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1-00-6	pH	0.27			N/A			

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

061211 1425

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-D003

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458203 Lab File ID: 58203.D

Sample wt/vol: 1.29 Units: G Date Received: 11/18/11

Concentrated Extract Volume: 10 Date Extracted: 11/28/11

Level:(low/med) LOW Date Analyzed: 12/02/11 Time: 1629

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
62-75-9	N-Nitrosodimethylamine	41400	U	11000	41400
111-44-4	Bis(2-chloroethyl)ether	41900	U	10400	41900
108-95-2	Phenol	207000	U	10100	207000
95-57-8	2-Chlorophenol	41900	U	10700	41900
541-73-1	1,3-Dichlorobenzene	41900	U	9460	41900
106-46-7	1,4-Dichlorobenzene	41900	U	9770	41900
95-50-1	1,2-Dichlorobenzene	41900	U	8840	41900
108-60-1	2,2'-Oxybis(1-chloropropane)	41900	U	34100	41900
67-72-1	Hexachloroethane	41900	U	7750	41900
621-64-7	N-Nitroso-di-n-propylamine	41900	U	9460	41900
98-95-3	Nitrobenzene	41900	U	9300	41900
78-59-1	Isophorone	41900	U	9150	41900
88-75-5	2-Nitrophenol	41900	U	11200	41900
105-67-9	2,4-Dimethylphenol	41400	U	8840	41400
111-91-1	Bis(2-chloroethoxy)methane	41400	U	8840	41400
120-83-2	2,4-Dichlorophenol	41400	U	11600	41400
120-82-1	1,2,4-Trichlorobenzene	41900	U	8990	41900
106-47-8	4-Chloroaniline	41900	U	9770	41900
87-68-3	Hexachlorobutadiene	41900	U	8990	41900
59-50-7	4-Chloro-3-methylphenol	41900	U	8680	41900
77-47-4	Hexachlorocyclopentadiene	103000	U	6200	103000
88-06-2	2,4,6-Trichlorophenol	41400	U	10500	41400
91-58-7	2-Chloronaphthalene	41900	U	10300	41900
131-11-3	Dimethylphthalate	41900	U	9150	41900
606-20-2	2,6-Dinitrotoluene	41900	U	7750	41900
51-28-5	2,4-Dinitrophenol	208000	U	34100	208000

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-D003

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458203 Lab File ID: 58203.D

Sample wt/vol: 1.29 Units: G Date Received: 11/18/11

Concentrated Extract Volume: 10 Date Extracted: 11/28/11

Level:(low/med) LOW Date Analyzed: 12/02/11 Time: 1629

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
121-14-2	2,4-Dinitrotoluene	41900	U	7600	41900
100-02-7	4-Nitrophenol	103000	U	8220	103000
7005-72-3	4-Chlorophenyl-phenylether	41900	U	7910	41900
84-66-2	Diethylphthalate	41900	U	7910	41900
534-52-1	4,6-Dinitro-2-methylphenol	41900	U J	41200	41900
86-30-6	N-Nitrosodiphenylamine	41400	U	9770	41400
101-55-3	4-Bromophenyl-phenylether	41900	U	7600	41900
118-74-1	Hexachlorobenzene	41400	U	8220	41400
87-86-5	Pentachlorophenol	41900	U	20600	41900
84-74-2	Di-n-butylphthalate	41900	U	6820	41900
92-87-5	Benzidine	104000	U R	93000	104000
85-68-7	Butylbenzylphthalate	41900	U	9770	41900
91-94-1	3,3'-Dichlorobenzidine	41900	U	9150	41900
117-81-7	Bis(2-ethylhexyl)phthalate	41900	U	12900	41900
117-84-0	Di-n-octylphthalate	41900	U	8990	41900
122-66-7	1,2 Diphenylhydrazine	41900	U	10300	41900

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 109051MB

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 109051MB Lab File ID: 7464MB.D

Sample wt/vol: 1.1 Units: G Date Received: 11/28/11

Concentrated Extract Volume: 10 Date Extracted: 11/28/11

Level:(low/med) LOW Date Analyzed: 12/01/11 Time: 1813

PercentSolids: 100 decanted : (Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
62-75-9	N-Nitrosodimethylamine	48500	U	12900	48500
111-44-4	Bis(2-chloroethyl)ether	49100	U	12200	49100
108-95-2	Phenol	242000	U	11800	242000
95-57-8	2-Chlorophenol	49100	U	12500	49100
541-73-1	1,3-Dichlorobenzene	49100	U	11100	49100
106-46-7	1,4-Dichlorobenzene	49100	U	11400	49100
95-50-1	1,2-Dichlorobenzene	49100	U	10400	49100
108-60-1	2,2'-Oxybis(1-chloropropane)	49100	U	40000	49100
67-72-1	Hexachloroethane	49100	U	9090	49100
621-64-7	N-Nitroso-di-n-propylamine	49100	U	11100	49100
98-95-3	Nitrobenzene	49100	U	10900	49100
78-59-1	Isophorone	49100	U	10700	49100
88-75-5	2-Nitrophenol	49100	U	13100	49100
105-67-9	2,4-Dimethylphenol	48500	U	10400	48500
111-91-1	Bis(2-chloroethoxy)methane	48500	U	10400	48500
120-83-2	2,4-Dichlorophenol	48500	U	13600	48500
120-82-1	1,2,4-Trichlorobenzene	49100	U	10500	49100
106-47-8	4-Chloroaniline	49100	U	11400	49100
87-68-3	Hexachlorobutadiene	49100	U	10500	49100
59-50-7	4-Chloro-3-methylphenol	49100	U	10200	49100
77-47-4	Hexachlorocyclopentadiene	121000	U	7270	121000
88-06-2	2,4,6-Trichlorophenol	48500	U	12400	48500
91-58-7	2-Chloronaphthalene	49100	U	12100	49100
131-11-3	Dimethylphthalate	49100	U	10700	49100
606-20-2	2,6-Dinitrotoluene	49100	U	9090	49100
51-28-5	2,4-Dinitrophenol	244000	U	40000	244000
121-14-2	2,4-Dinitrotoluene	49100	U	8910	49100

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 109051MB

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 109051MB Lab File ID: 7464MB.D

Sample wt/vol: 1.1 Units: G Date Received: 11/28/11

Concentrated Extract Volume: 10 Date Extracted: 11/28/11

Level:(low/med) LOW Date Analyzed: 12/01/11 Time: 1813

PercentSolids: 100 decanted : (Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
100-02-7	4-Nitrophenol	121000	U	9640	121000
7005-72-3	4-Chlorophenyl-phenylether	49100	U	9270	49100
84-66-2	Diethylphthalate	49100	U	9270	49100
534-52-1	4,6-Dinitro-2-methylphenol	49100	U	48400	49100
86-30-6	N-Nitrosodiphenylamine	48500	U	11400	48500
101-55-3	4-Bromophenyl-phenylether	49100	U	8910	49100
118-74-1	Hexachlorobenzene	48500	U	9640	48500
87-86-5	Pentachlorophenol	49100	U	24200	49100
84-74-2	Di-n-butylphthalate	49100	U	8000	49100
92-87-5	Benzidine	122000	U	109000	122000
85-68-7	Butylbenzylphthalate	49100	U	11400	49100
91-94-1	3,3'-Dichlorobenzidine	49100	U	10700	49100
117-81-7	Bis(2-ethylhexyl)phthalate	49100	U	15100	49100
117-84-0	Di-n-octylphthalate	49100	U	10500	49100
122-66-7	1,2 Diphenylhydrazine	49100	U	12100	49100

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-D003

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458203 Lab File ID: 58203T.D

Sample wt/vol: 500 Units: ML Date Received: 11/18/11

Concentrated Extract Volume: 1 Date Extracted: 11/23/11

Level:(low/med) LOW Date Analyzed: 11/23/11 Time: 1734

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 TCLP

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: MG/L

TCLP Analysis

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
110-86-1	Pyridine	0.008	U	0.0042	0.008
106-46-7	1,4-Dichlorobenzene	0.008	U J	0.0054	0.008
95-48-7	2-Methylphenol	0.008	U J	0.0052	0.008
67-72-1	Hexachloroethane	0.008	U J	0.0052	0.008
106-44-5	4-Methylphenol	0.02	U J	0.0122	0.02
98-95-3	Nitrobenzene	0.008	U	0.002	0.008
87-68-3	Hexachlorobutadiene	0.008	U	0.005	0.008
88-06-2	2,4,6-Trichlorophenol	0.008	U	0.00168	0.008
95-95-4	2,4,5-Trichlorophenol	0.008	U	0.0068	0.008
121-14-2	2,4-Dinitrotoluene	0.008	U	0.0056	0.008
118-74-1	Hexachlorobenzene	0.008	U	0.00082	0.008
87-86-5	Pentachlorophenol	0.02	U	0.0028	0.02

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 108600MB

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: WATER Lab Sample ID: 108600MB Lab File ID: 7409MB.D

Sample wt/vol: 480 Units: ML Date Received: 11/21/11

Concentrated Extract Volume: 1 Date Extracted: 11/23/11

Level:(low/med) LOW Date Analyzed: 11/23/11 Time: 1647

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270 TCLP

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: MG/L

TCLP Analysis

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
110-86-1	Pyridine	0.00833	U	0.00438	0.00833
106-46-7	1,4-Dichlorobenzene	0.00833	U	0.00562	0.00833
95-48-7	2-Methylphenol	0.00833	U	0.00542	0.00833
67-72-1	Hexachloroethane	0.00833	U	0.00542	0.00833
106-44-5	4-Methylphenol	0.0208	U	0.0127	0.0208
98-95-3	Nitrobenzene	0.00833	U	0.00208	0.00833
87-68-3	Hexachlorobutadiene	0.00833	U	0.00521	0.00833
88-06-2	2,4,6-Trichlorophenol	0.00833	U	0.00175	0.00833
95-95-4	2,4,5-Trichlorophenol	0.00833	U	0.00708	0.00833
121-14-2	2,4-Dinitrotoluene	0.00833	U	0.00583	0.00833
118-74-1	Hexachlorobenzene	0.00833	U	0.000854	0.00833
87-86-5	Pentachlorophenol	0.0208	U	0.00292	0.0208

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-D003

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458203 Lab File ID: 458203M.D

Sample wt/vol: 1.1 Units: G Date Received: 11/18/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 12/01/11 Time: 1915

PercentSolids: 100 decanted : Dilution Factor: 500

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
75-71-8	Dichlorodifluoromethane	4540	U	1360	4540
74-87-3	Chloromethane	4540	U	864	4540
75-01-4	Vinyl chloride	4540	U	1360	4540
74-83-9	Bromomethane	4540	U	2730	4540
75-00-3	Chloroethane	4540	U	1680	4540
75-69-4	Trichlorofluoromethane	4540	U	1000	4540
75-35-4	1,1-Dichloroethene	4540	U	773	4540
74-88-4	Methyl iodide	4540	U	3410	4540
75-15-0	Carbon disulfide	4540	U	3410	4540
75-09-2	Methylene chloride	11400	U	2730	11400
156-60-5	trans-1,2-Dichloroethene	4540	U	886	4540
75-34-3	1,1-Dichloroethane	4540	U	773	4540
67-64-1	Acetone	22700	U	2950	22700
594-20-7	2,2-Dichloropropane	4540	U	1340	4540
156-59-2	cis-1,2-Dichloroethene	4540	U	1410	4540
74-97-5	Bromochloromethane	4540	U	2040	4540
78-93-3	2-Butanone	22700	U	3180	22700
67-66-3	Chloroform	4540	U	1230	4540
71-55-6	1,1,1-Trichloroethane	4540	U	2270	4540
56-23-5	Carbon tetrachloride	4540	U	1360	4540
563-58-6	1,1-Dichloropropene	4540	U	932	4540
71-43-2	Benzene	4540	U	1140	4540
107-06-2	1,2-Dichloroethane	4540	U	2270	4540
79-01-6	Trichloroethene	4540	U	1000	4540
108-05-4	Vinyl acetate	4540	U	3410	4540
78-87-5	1,2-Dichloropropane	4540	U	1430	4540

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-D003

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458203 Lab File ID: 458203M.D

Sample wt/vol: 1.1 Units: G Date Received: 11/18/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 12/01/11 Time: 1915

PercentSolids: 100 decanted : Dilution Factor: 500

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
74-95-3	Dibromomethane	4540	U	1500	4540
75-27-4	Bromodichloromethane	4540	U	727	4540
10061-01-5	cis-1,3-Dichloropropene	4540	U	954	4540
108-10-1	4-Methyl-2-pentanone	22700	U	3640	22700
108-88-3	Toluene	4540	U	659	4540
10061-02-6	trans-1,3-Dichloropropene	4540	U	2270	4540
79-00-5	1,1,2-Trichloroethane	4540	U	1860	4540
127-18-4	Tetrachloroethene	4540	U	2110	4540
142-28-9	1,3-Dichloropropane	4540	U	1230	4540
591-78-6	2-Hexanone	22700	U	2950	22700
124-48-1	Dibromochloromethane	4540	U	1040	4540
106-93-4	1,2-Dibromoethane	4540	U	1860	4540
108-90-7	Chlorobenzene	4540	U	795	4540
630-20-6	1,1,1,2-Tetrachloroethane	4540	U	1680	4540
100-41-4	Ethylbenzene	4540	U	1570	4540
179601-23-1	m,p-Xylene	9090	U	1540	9090
95-47-6	o-Xylene	4540	U	795	4540
100-42-5	Styrene	4540	U	636	4540
75-25-2	Bromoform	4540	U	1040	4540
98-82-8	Isopropylbenzene	4540	U	1360	4540
108-86-1	Bromobenzene	4540	U	2500	4540
79-34-5	1,1,2,2-Tetrachloroethane	4540	U	1340	4540
96-18-4	1,2,3-Trichloropropane	4540	U	2730	4540
103-65-1	n-Propylbenzene	4540	U	1540	4540
95-49-8	2-Chlorotoluene	4540	U	1090	4540
106-43-4	4-Chlorotoluene	4540	U	1180	4540

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-D003

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458203 Lab File ID: 458203M.D

Sample wt/vol: 1.1 Units: G Date Received: 11/18/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 12/01/11 Time: 1915

PercentSolids: 100 decanted : Dilution Factor: 500

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
108-67-8	1,3,5-Trimethylbenzene	4540	U	1180	4540
98-06-6	tert-Butylbenzene	4540	U	1540	4540
95-63-6	1,2,4-Trimethylbenzene	4540	U	1000	4540
135-98-8	sec-Butylbenzene	4540	U	1450	4540
541-73-1	1,3-Dichlorobenzene	11400	U	1020	11400
106-46-7	1,4-Dichlorobenzene	11400	U	1480	11400
99-87-6	4-Isopropyltoluene	4540	U	1610	4540
104-51-8	n-Butylbenzene	4540	U	1410	4540
95-50-1	1,2-Dichlorobenzene	11400	U	1270	11400
96-12-8	1,2-Dibromo-3-chloropropane	11400	U	6360	11400
120-82-1	1,2,4-Trichlorobenzene	11400	U	1430	11400
87-68-3	Hexachlorobutadiene	4540	U	2730	4540
91-20-3	Naphthalene	11400	U	3410	11400
87-61-6	1,2,3-Trichlorobenzene	11400	U	1390	11400
1634-04-4	Methyl tert-butyl ether	4540	U	977	4540

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-TRIP1

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: WATER Lab Sample ID: 350458209 Lab File ID: 582-09.D

Sample wt/vol: 5 Units: ML Date Received: 11/18/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 11/30/11 Time: 2339

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
75-71-8	Dichlorodifluoromethane	1	U	0.17	1
74-87-3	Chloromethane	1	U	0.32	1
75-01-4	Vinyl chloride	1	U	0.18	1
74-83-9	Bromomethane	1	U	0.43	1
75-00-3	Chloroethane	1	U	0.72	1
75-69-4	Trichlorofluoromethane	1	U	0.4	1
75-35-4	1,1-Dichloroethene	0.5	U	0.19	0.5
74-88-4	Methyl iodide	1	U	0.74	1
75-15-0	Carbon disulfide	1	U	0.19	1
75-09-2	Methylene chloride	2.1	J	0.66	5
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.33	0.5
75-34-3	1,1-Dichloroethane	1	U	0.15	1
67-64-1	Acetone	10	U	1.3	10
594-20-7	2,2-Dichloropropane	1	U	0.6	1
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.19	0.5
74-97-5	Bromochloromethane	1	U	0.17	1
78-93-3	2-Butanone	4	U	2	4
67-66-3	Chloroform	0.5	U	0.16	0.5
71-55-6	1,1,1-Trichloroethane	1	U	0.14	1
56-23-5	Carbon tetrachloride	0.5	U	0.14	0.5
563-58-6	1,1-Dichloropropene	1	U	0.3	1
71-43-2	Benzene	0.5	U	0.17	0.5
107-06-2	1,2-Dichloroethane	0.5	U	0.15	0.5
79-01-6	Trichloroethene	0.5	U	0.19	0.5
108-05-4	Vinyl acetate	1	U	0.18	1
78-87-5	1,2-Dichloropropane	1	U	0.15	1

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-TRIP1

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: WATER Lab Sample ID: 350458209 Lab File ID: 582-09.D

Sample wt/vol: 5 Units: ML Date Received: 11/18/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 11/30/11 Time: 2339

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
74-95-3	Dibromomethane	1	U	0.4	1
75-27-4	Bromodichloromethane	0.5	U	0.15	0.5
10061-01-5	cis-1,3-Dichloropropene	1	U	0.4	1
108-10-1	4-Methyl-2-pentanone	4	U	1	4
108-88-3	Toluene	1	U	0.14	1
10061-02-6	trans-1,3-Dichloropropene	1	U	0.3	1
79-00-5	1,1,2-Trichloroethane	1	U	0.2	1
127-18-4	Tetrachloroethene	0.5	U	0.21	0.5
142-28-9	1,3-Dichloropropane	0.4	U	0.3	0.4
591-78-6	2-Hexanone	4	U	0.48	4
124-48-1	Dibromochloromethane	0.2	U	0.13	0.2
106-93-4	1,2-Dibromoethane	1	U	0.11	1
108-90-7	Chlorobenzene	0.5	U	0.16	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U	0.14	0.5
100-41-4	Ethylbenzene	0.5	U	0.22	0.5
179601-23-1	m,p-Xylene	0.4	U	0.23	0.4
95-47-6	o-Xylene	0.5	U	0.5	0.5
100-42-5	Styrene	1	U	0.12	1
75-25-2	Bromoform	1	U	0.19	1
98-82-8	Isopropylbenzene	0.5	U	0.14	0.5
108-86-1	Bromobenzene	1	U	0.21	1
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.13	1
96-18-4	1,2,3-Trichloropropane	1	U	0.35	1
103-65-1	n-Propylbenzene	1	U	0.14	1
95-49-8	2-Chlorotoluene	1	U	0.25	1
106-43-4	4-Chlorotoluene	1	U	0.15	1

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-TRIP1

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: WATER Lab Sample ID: 350458209 Lab File ID: 582-09.D

Sample wt/vol: 5 Units: ML Date Received: 11/18/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 11/30/11 Time: 2339

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
108-67-8	1,3,5-Trimethylbenzene	1	U	0.14	1
98-06-6	tert-Butylbenzene	1	U	0.2	1
95-63-6	1,2,4-Trimethylbenzene	1	U	0.13	1
135-98-8	sec-Butylbenzene	1	U	0.1	1
541-73-1	1,3-Dichlorobenzene	2	U	0.15	2
106-46-7	1,4-Dichlorobenzene	3	U	0.15	3
99-87-6	4-Isopropyltoluene	1	U	0.14	1
104-51-8	n-Butylbenzene	1	U	0.16	1
95-50-1	1,2-Dichlorobenzene	1	U	0.25	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2
120-82-1	1,2,4-Trichlorobenzene	1	U	0.4	1
87-68-3	Hexachlorobutadiene	0.5	U	0.36	0.5
91-20-3	Naphthalene	5	U	0.5	5
87-61-6	1,2,3-Trichlorobenzene	2	U	0.16	2
1634-04-4	Methyl tert-butyl ether	1	U	0.5	1

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 112011BLK62

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: WATER Lab Sample ID: 112011BLK62 Lab File ID: BLK62.D

Sample wt/vol: 5 Units: ML Date Received: 11/30/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 11/30/11 Time: 2314

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
75-71-8	Dichlorodifluoromethane	1	U	0.17	1
74-87-3	Chloromethane	1	U	0.32	1
75-01-4	Vinyl chloride	1	U	0.18	1
74-83-9	Bromomethane	1	U	0.43	1
75-00-3	Chloroethane	1	U	0.72	1
75-69-4	Trichlorofluoromethane	1	U	0.4	1
75-35-4	1,1-Dichloroethene	0.5	U	0.19	0.5
74-88-4	Methyl iodide	1	U	0.74	1
75-15-0	Carbon disulfide	1	U	0.19	1
75-09-2	Methylene chloride	5	U	0.66	5
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.33	0.5
75-34-3	1,1-Dichloroethane	1	U	0.15	1
67-64-1	Acetone	10	U	1.3	10
594-20-7	2,2-Dichloropropane	1	U	0.6	1
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.19	0.5
74-97-5	Bromochloromethane	1	U	0.17	1
78-93-3	2-Butanone	4	U	2	4
67-66-3	Chloroform	0.5	U	0.16	0.5
71-55-6	1,1,1-Trichloroethane	1	U	0.14	1
56-23-5	Carbon tetrachloride	0.5	U	0.14	0.5
563-58-6	1,1-Dichloropropene	1	U	0.3	1
71-43-2	Benzene	0.5	U	0.17	0.5
107-06-2	1,2-Dichloroethane	0.5	U	0.15	0.5
79-01-6	Trichloroethene	0.5	U	0.19	0.5
108-05-4	Vinyl acetate	1	U	0.18	1
78-87-5	1,2-Dichloropropane	1	U	0.15	1
74-95-3	Dibromomethane	1	U	0.4	1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 112011BLK62

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: WATER Lab Sample ID: 112011BLK62 Lab File ID: BLK62.D

Sample wt/vol: 5 Units: ML Date Received: 11/30/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 11/30/11 Time: 2314

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
75-27-4	Bromodichloromethane	0.5	U	0.15	0.5
10061-01-5	cis-1,3-Dichloropropene	1	U	0.4	1
108-10-1	4-Methyl-2-pentanone	4	U	1	4
108-88-3	Toluene	1	U	0.14	1
10061-02-6	trans-1,3-Dichloropropene	1	U	0.3	1
79-00-5	1,1,2-Trichloroethane	1	U	0.2	1
127-18-4	Tetrachloroethene	0.5	U	0.21	0.5
142-28-9	1,3-Dichloropropane	0.4	U	0.3	0.4
591-78-6	2-Hexanone	4	U	0.48	4
124-48-1	Dibromochloromethane	0.2	U	0.13	0.2
106-93-4	1,2-Dibromoethane	1	U	0.11	1
108-90-7	Chlorobenzene	0.5	U	0.16	0.5
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U	0.14	0.5
100-41-4	Ethylbenzene	0.5	U	0.22	0.5
179601-23-1	m,p-Xylene	0.4	U	0.23	0.4
95-47-6	o-Xylene	0.5	U	0.5	0.5
100-42-5	Styrene	1	U	0.12	1
75-25-2	Bromoform	1	U	0.19	1
98-82-8	Isopropylbenzene	0.5	U	0.14	0.5
108-86-1	Bromobenzene	1	U	0.21	1
79-34-5	1,1,2,2-Tetrachloroethane	1	U	0.13	1
96-18-4	1,2,3-Trichloropropane	1	U	0.35	1
103-65-1	n-Propylbenzene	1	U	0.14	1
95-49-8	2-Chlorotoluene	1	U	0.25	1
106-43-4	4-Chlorotoluene	1	U	0.15	1
108-67-8	1,3,5-Trimethylbenzene	1	U	0.14	1
98-06-6	tert-Butylbenzene	1	U	0.2	1

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 112011BLK62

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: WATER Lab Sample ID: 112011BLK62 Lab File ID: BLK62.D

Sample wt/vol: 5 Units: ML Date Received: 11/30/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 11/30/11 Time: 2314

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
95-63-6	1,2,4-Trimethylbenzene	1	U	0.13	1
135-98-8	sec-Butylbenzene	1	U	0.1	1
541-73-1	1,3-Dichlorobenzene	0.24	J	0.15	2
106-46-7	1,4-Dichlorobenzene	0.32	J	0.15	3
99-87-6	4-Isopropyltoluene	1	U	0.14	1
104-51-8	n-Butylbenzene	1	U	0.16	1
95-50-1	1,2-Dichlorobenzene	1	U	0.25	1
96-12-8	1,2-Dibromo-3-chloropropane	2	U	1	2
120-82-1	1,2,4-Trichlorobenzene	1	U	0.4	1
87-68-3	Hexachlorobutadiene	0.5	U	0.36	0.5
91-20-3	Naphthalene	5	U	0.5	5
87-61-6	1,2,3-Trichlorobenzene	2	U	0.16	2
1634-04-4	Methyl tert-butyl ether	1	U	0.5	1

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 120111MBLK32

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 120111MBLK32 Lab File ID: MBLK32.D

Sample wt/vol: 5 Units: G Date Received: 12/01/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 12/01/11 Time: 1830

PercentSolids: 100 decanted : (Dilution Factor: 50

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
75-71-8	Dichlorodifluoromethane	100	U	30	100
74-87-3	Chloromethane	100	U	19	100
75-01-4	Vinyl chloride	100	U	30	100
74-83-9	Bromomethane	100	U	60	100
75-00-3	Chloroethane	100	U	37	100
75-69-4	Trichlorofluoromethane	100	U	22	100
75-35-4	1,1-Dichloroethene	100	U	17	100
74-88-4	Methyl iodide	100	U	75	100
75-15-0	Carbon disulfide	100	U	75	100
75-09-2	Methylene chloride	250	U	60	250
156-60-5	trans-1,2-Dichloroethene	100	U	19.5	100
75-34-3	1,1-Dichloroethane	100	U	17	100
67-64-1	Acetone	500	U	65	500
594-20-7	2,2-Dichloropropane	100	U	29.5	100
156-59-2	cis-1,2-Dichloroethene	100	U	31	100
74-97-5	Bromochloromethane	100	U	45	100
78-93-3	2-Butanone	500	U	70	500
67-66-3	Chloroform	100	U	27	100
71-55-6	1,1,1-Trichloroethane	100	U	50	100
56-23-5	Carbon tetrachloride	100	U	30	100
563-58-6	1,1-Dichloropropene	100	U	20.5	100
71-43-2	Benzene	100	U	25	100
107-06-2	1,2-Dichloroethane	100	U	50	100
79-01-6	Trichloroethene	100	U	22	100
108-05-4	Vinyl acetate	100	U	75	100
78-87-5	1,2-Dichloropropane	100	U	31.5	100
74-95-3	Dibromomethane	100	U	33	100

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 120111MBLK32

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 120111MBLK32 Lab File ID: MBLK32.D

Sample wt/vol: 5 Units: G Date Received: 12/01/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 12/01/11 Time: 1830

PercentSolids: 100 decanted : (Dilution Factor: 50

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
75-27-4	Bromodichloromethane	100	U	16	100
10061-01-5	cis-1,3-Dichloropropene	100	U	21	100
108-10-1	4-Methyl-2-pentanone	500	U	80	500
108-88-3	Toluene	100	U	14.5	100
10061-02-6	trans-1,3-Dichloropropene	100	U	50	100
79-00-5	1,1,2-Trichloroethane	100	U	41	100
127-18-4	Tetrachloroethene	100	U	46.5	100
142-28-9	1,3-Dichloropropane	100	U	27	100
591-78-6	2-Hexanone	500	U	65	500
124-48-1	Dibromochloromethane	100	U	23	100
106-93-4	1,2-Dibromoethane	100	U	41	100
108-90-7	Chlorobenzene	100	U	17.5	100
630-20-6	1,1,1,2-Tetrachloroethane	100	U	37	100
100-41-4	Ethylbenzene	100	U	34.5	100
179601-23-1	m,p-Xylene	200	U	34	200
95-47-6	o-Xylene	100	U	17.5	100
100-42-5	Styrene	100	U	14	100
75-25-2	Bromoform	100	U	23	100
98-82-8	Isopropylbenzene	100	U	30	100
108-86-1	Bromobenzene	100	U	55	100
79-34-5	1,1,2,2-Tetrachloroethane	100	U	29.5	100
96-18-4	1,2,3-Trichloropropane	100	U	60	100
103-65-1	n-Propylbenzene	100	U	34	100
95-49-8	2-Chlorotoluene	100	U	24	100
106-43-4	4-Chlorotoluene	100	U	26	100
108-67-8	1,3,5-Trimethylbenzene	100	U	26	100
98-06-6	tert-Butylbenzene	100	U	34	100

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 120111MBLK32

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 120111MBLK32 Lab File ID: MBLK32.D

Sample wt/vol: 5 Units: G Date Received: 12/01/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 12/01/11 Time: 1830

PercentSolids: 100 decanted : (Dilution Factor: 50

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
95-63-6	1,2,4-Trimethylbenzene	100	U	22	100
135-98-8	sec-Butylbenzene	100	U	32	100
541-73-1	1,3-Dichlorobenzene	250	U	22.5	250
106-46-7	1,4-Dichlorobenzene	250	U	32.5	250
99-87-6	4-Isopropyltoluene	100	U	35.5	100
104-51-8	n-Butylbenzene	100	U	31	100
95-50-1	1,2-Dichlorobenzene	250	U	28	250
96-12-8	1,2-Dibromo-3-chloropropane	250	U	140	250
120-82-1	1,2,4-Trichlorobenzene	250	U	31.5	250
87-68-3	Hexachlorobutadiene	100	U	60	100
91-20-3	Naphthalene	250	U	75	250
87-61-6	1,2,3-Trichlorobenzene	250	U	30.5	250
1634-04-4	Methyl tert-butyl ether	100	U	21.5	100

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-D003

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI

Lab Code : PEL Case No. SAS No: SDG No.: 3504582

Matrix: SOIL Lab Sample ID: 350458203 Lab File ID: 458203T.D

Sample wt/vol: 0.5 Units: ML Date Received: 11/18/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 12/01/11 Time: 1939

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260 TCLP

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: MG/L

TCLP Analysis

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
75-01-4	Vinyl chloride	0.01	U	0.0018	0.01
75-35-4	1,1-Dichloroethene	0.005	U	0.0019	0.005
78-93-3	2-Butanone	0.04	U	0.02	0.04
67-66-3	Chloroform	0.005	U	0.0016	0.005
56-23-5	Carbon tetrachloride	0.005	U	0.0014	0.005
71-43-2	Benzene	0.005	U	0.0017	0.005
107-06-2	1,2-Dichloroethane	0.005	U	0.0015	0.005
79-01-6	Trichloroethene	0.005	U	0.0019	0.005
127-18-4	Tetrachloroethene	0.005	U	0.0021	0.005
108-90-7	Chlorobenzene	0.005	U	0.0016	0.005

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 120111TBLK32

Lab Name: Spectrum Analytical, Inc. Contract: ROCK-TENN SA OTSEGO, MI/2

Lab Code : PEL Case No.: SAS No: SDG No.: 3504582

Matrix: WATER Lab Sample ID: 120111TBLK32 Lab File ID: TBLK32.D

Sample wt/vol: 0.5 Units: ML Date Received: 12/01/11

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 12/01/11 Time: 1806

PercentSolids: 0 decanted : (Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260 TCLP

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: MG/L

TCLP Analysis

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
75-01-4	Vinyl chloride	0.01	U	0.0018	0.01
75-35-4	1,1-Dichloroethene	0.005	U	0.0019	0.005
78-93-3	2-Butanone	0.04	U	0.02	0.04
67-66-3	Chloroform	0.005	U	0.0016	0.005
56-23-5	Carbon tetrachloride	0.005	U	0.0014	0.005
71-43-2	Benzene	0.005	U	0.0017	0.005
107-06-2	1,2-Dichloroethane	0.005	U	0.0015	0.005
79-01-6	Trichloroethene	0.005	U	0.0019	0.005
127-18-4	Tetrachloroethene	0.005	U	0.0021	0.005
108-90-7	Chlorobenzene	0.005	U	0.0016	0.005

OTIE Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106 ● Atlanta, GA 30060 ● (678) 355-5550 ● (770) 528-0167 (Fax)

MEMORANDUM

Date: January 12, 2011

To: Naren Babu, Project Manager, OTIE
Superfund Technical Assessment and Response Team (START) for Region 5

Prepared by: Renea Anglin, START chemist for Region 4

QA/QC Concurrence by: Keely Meadows

Subject: Data Validation for
Rock-Tenn Site Assessment

Project TDD No. TO-01-11-0027

Laboratory: Spectrum Analytical, Inc. in Tampa, Florida.
Sample Delivery Group (SDG): 3504792

1.0 INTRODUCTION

The START chemist for Region 4 validated analytical data for 3 soil samples and 1 duplicate for polychlorinated biphenyls (PCBs). Samples were collected for the Rock-Tenn Site Assessment on December 14, 2011. The samples were analyzed under SDG 3504792 by Spectrum Analytical, Inc. of Tampa, Florida, using U.S. Environmental Protection Agency (U.S. EPA) method 8082.

Laboratory data were validated using guidelines set forth in the U.S. EPA Contract Laboratory Program National Functional Guidelines (NFG) for Organic Data Review (EPA-540-R-08-01, June 2008) and applicable methodologies. The purpose of the chemical data quality evaluation process is to assess the usability of data for the project decision-making process.

Organic data validation consisted of a review of the following QC audits:

- Chain of custody and sample receipt forms review
- Sample preservation and holding time
- Blank results
- Surrogate recoveries
- Matrix spike and Matrix Spike Duplicate (MS/MSD) recovery results
- Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) recovery results

Section 2.0 of this memorandum discusses the results of organic data validation. Section 3.0 presents an overall assessment of the data. The attachment to this memorandum contains the laboratory reporting forms as well as START's handwritten data qualifications where warranted.

2.0 ORGANIC DATA VALIDATION RESULTS

The results of START's organic data validation are summarized below by QC audit reviewed. The data qualifiers listed below were applied to sample analytical results where warranted (see attachment):

- J – The analyte was detected. The reported concentration was considered estimated.
- U – The analyte was not detected.

- UJ – The analyte was not detected. The reporting limit was considered estimated.

After the START project staff received the data packages, they were inventoried for completeness and then reviewed according to matrix-specific protocols and data quality objectives established for the project.

2.1 SOIL SAMPLES BY METHOD 8082

2.1.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on December 14, 2011 and were received on ice.

2.1.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were shipped on ice and were analyzed within holding time criteria. No discrepancies were noted.

2.1.3 BLANK RESULTS

The purpose of laboratory blank analysis is to determine the existence and magnitude of contamination resulting from laboratory activities. A laboratory method blank sample (111334MB) was run with this SDG.

No laboratory method blank detects were noted.

2.1.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds. The surrogate spike compound included Decachlorobiphenyl.

The surrogate was within limits for samples analyzed in this SDG.

2.1.5 MS/MSD RECOVERY RESULTS

Data for MS/MSD are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

No MS/MSD samples were requested for this analysis.

2.1.6 LCS RECOVERY RESULTS

Data for the LCS is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS was fortified and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

LCS recoveries were within QC limits.

2.1.7 FIELD DUPLICATES

Data for field duplicates were collected and analyzed for chemical constituents to measure the cumulative uncertainty (i.e., precision) of the sample collection, splitting, handling, storage, preparation and analysis operations, as well as natural sample heterogeneity that is not eliminated through simple mixing in the field.

Field duplicates are two samples prepared by mixing a volume of sample and splitting it into two separate sample containers that are labeled as individual field samples.

Sample RT-S002 had a duplicate collected (RT-S002-D). Sample RT-S002 showed a detection for AR1260 between the MDL and RL and the duplicate did not. Results are qualified as estimated and flagged as J and UJ, respectively.

3.0 OVERALL ASSESSMENT OF DATA

The analytical results meet the data quality objectives defined by the applicable method and validation guidance documentation. The analytical data is usable and acceptable as reported by the laboratory.

ATTACHMENT

SUMMARY OF VALIDATED ANALYTICAL RESULTS

AND

CHAIN-OF-CUSTODY

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-S001

Lab Name: Spectrum Analytical, Inc. Contract: ROCK - TENN SA / 2010101-

Lab Code : PEL Case No. SAS No: SDG No.: 3504792

Matrix: SOIL Lab Sample ID: 350479201 Lab File ID: 79201.D

Sample wt/vol: 33.95 Units: G Date Received: 12/15/11

Concentrated Extract Volume: 10 Date Extracted: 12/16/11

Level:(low/med) LOW Date Analyzed: 12/18/11 Time: 1824

PercentSolids: 80.4 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	36	U	16	36
11096-82-5	Aroclor-1260	9.9	J	7.4	36
11104-28-2	Aroclor-1221	36	U	14	36
11141-16-5	Aroclor-1232	36	U	24	36
53469-21-9	Aroclor-1242	36	U	13	36
12672-29-6	Aroclor-1248	36	U	13	36
11097-69-1	Aroclor-1254	36	U	11	36

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-S002

Lab Name: Spectrum Analytical, Inc. Contract: ROCK - TENN SA / 2010101-

Lab Code : PEL Case No. SAS No: SDG No.: 3504792

Matrix: SOIL Lab Sample ID: 350479202 Lab File ID: 79202.D

Sample wt/vol: 33.98 Units: G Date Received: 12/15/11

Concentrated Extract Volume: 10 Date Extracted: 12/16/11

Level:(low/med) LOW Date Analyzed: 12/18/11 Time: 1909

PercentSolids: 84.6 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	34	U	15	34
11096-82-5	Aroclor-1260	12	J	7	34
11104-28-2	Aroclor-1221	34	U	14	34
11141-16-5	Aroclor-1232	34	U	23	34
53469-21-9	Aroclor-1242	34	U	13	34
12672-29-6	Aroclor-1248	34	U	13	34
11097-69-1	Aroclor-1254	34	U	11	34

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-S002-D

Lab Name: Spectrum Analytical, Inc. Contract: ROCK - TENN SA / 2010101-

Lab Code : PEL Case No. SAS No: SDG No.: 3504792

Matrix: SOIL Lab Sample ID: 350479203 Lab File ID: 79203.D

Sample wt/vol: 33.96 Units: G Date Received: 12/15/11

Concentrated Extract Volume: 10 Date Extracted: 12/16/11

Level:(low/med) LOW Date Analyzed: 12/18/11 Time: 1924

PercentSolids: 83.2 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	35	U	15	35
11096-82-5	Aroclor-1260	35	U J	7.1	35
11104-28-2	Aroclor-1221	35	U	14	35
11141-16-5	Aroclor-1232	35	U	23	35
53469-21-9	Aroclor-1242	35	U	13	35
12672-29-6	Aroclor-1248	35	U	13	35
11097-69-1	Aroclor-1254	35	U	11	35

1-12-12

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: RT-S003

Lab Name: Spectrum Analytical, Inc. Contract: ROCK - TENN SA / 2010101-

Lab Code : PEL Case No. SAS No: SDG No.: 3504792

Matrix: SOIL Lab Sample ID: 350479204 Lab File ID: 79204.D

Sample wt/vol: 33.4 Units: G Date Received: 12/15/11

Concentrated Extract Volume: 10 Date Extracted: 12/16/11

Level:(low/med) LOW Date Analyzed: 12/18/11 Time: 1939

PercentSolids: 85.7 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	34	U	15	34
11096-82-5	Aroclor-1260	72		7	34
11104-28-2	Aroclor-1221	34	U	14	34
11141-16-5	Aroclor-1232	34	U	23	34
53469-21-9	Aroclor-1242	34	U	13	34
12672-29-6	Aroclor-1248	34	U	13	34
11097-69-1	Aroclor-1254	34	U	11	34

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 111334MB

Lab Name: Spectrum Analytical, Inc. Contract: ROCK - TENN SA / 2010101-101

Lab Code : PEL Case No.: SAS No: SDG No.: 3504792

Matrix: SOIL Lab Sample ID: 111334MB Lab File ID: 7707MB.D

Sample wt/vol: 33.99 Units: G Date Received: 12/16/11

Concentrated Extract Volume: 10 Date Extracted: 12/16/11

Level:(low/med) LOW Date Analyzed: 12/18/11 Time: 1608

PercentSolids: 100 decanted : (Dilution Factor: 1

Extraction: SONC Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	29	U	13	29
11096-82-5	Aroclor-1260	29	U	5.9	29
11104-28-2	Aroclor-1221	29	U	12	29
11141-16-5	Aroclor-1232	29	U	19	29
53469-21-9	Aroclor-1242	29	U	11	29
12672-29-6	Aroclor-1248	29	U	11	29
11097-69-1	Aroclor-1254	29	U	9.2	29

1-12-12