Limited Subsurface Investigation

9 Owasco Street
Auburn, New York

CHA Project Number: 25810

Prepared for:

The City of Auburn
24 South Street
Auburn, NY 13021

Prepared by:

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October 7, 2013

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LIST OF ACRONYMS & ABBREVIATIONS

ACM	Asbestos Containing Material
AECC	Asbestos & Environmental Consulting Corporation
BGS	Below Ground Surface
CHA	CHA Consulting Inc.
ELAP	Environmental Laboratory Approval Program
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
MGP	Manufactured Gas Plant
NYSDEC	New York State Department of Environmental Conservation
PCB	Polychlorinated Biphenyls
PID	Photoionization Detector
PPM	Parts Per Million
QAPP	Quality Assurance Project Plan
REC	Recognized Environmental Condition
SAP	Sampling and Analysis Plan
SVOC	Semi-Volatile Organic Compound
VOC	Volatile Organic Compound

1.0 INTRODUCTION

The Property consists of one tax parcel (Tax ID# 116.54-2-21) located at 9 Owasco Street in the City of Auburn, Cayuga County, New York. The site is approximately 9.63 acres in size. The property is bounded to the east by Owasco Street and to the west by Osborne Street. The property is bisected by the Owasco Outlet. The site is mainly wooded, and contains two (2) structures, one building associated with the City's Combined Sewer Overflow Control System and one building associated with hydroelectric generation on the Owasco Outlet. The surrounding areas are residential in nature with some limited commercial land use on Owasco Street.

According to a Phase I Environmental Site Assessment (ESA) of the Property (CHA, July 2012), the Property is the former site of the Auburn Woolen Mill (East side of outlet) and the Bowen Manufacturing Company (West side of outlet). Operations at the Bowen Manufacturing Company included plating and machining. In addition, an apparent manufactured gas plant (MGP), including a coal house, retort and gas holder, was present on the Auburn Woolen Mill site during the late 1800s. The ESA also identified the presence of a gasoline station with documented residual contamination located adjacent to the Property. The Phase I ESA recommended a subsurface investigation, based on the past industrial use and the offsite petroleum spill.

The ESA additionally identified the presence of demolition debris on the Property. The potential for asbestos and lead paint in the rubble was noted in the ESA, but was not identified as a recognized environmental condition (REC) and was not addressed as part of the limited subsurface investigation.

As specified in the November 25, 2012 Sampling and Analysis Plan (SAP), prepared by Asbestos & Environmental Consulting Corporation (AECC), a limited subsurface investigation was conducted on May 20 and 21, 2013.

2.0 FIELD ACTIVITIES

A CHA Consulting, Inc. (CHA) scientist oversaw the installation of nine (9) test pits and four (4) soil borings at the locations shown on Figure 1. The test pits and soil borings were installed by Trec Environmental Inc. located in Spencerport, New York using a Komatsu excavator and a track mounted Geoprobe rig.

As shown on Figure 1, the four (4) soil borings were installed along the property line adjacent to the off-site petroleum spill location. Three (3) of the test pits were installed at the former location of the coal gasification facility and three (3) test pits were installed within the footprint of both the Auburn Woolen Mill and Bowen Manufacturing Company facilities, for a total of six (6) test pits in these two (2) areas.

Each test pit was advanced to a maximum depth of twelve (12) feet below ground surface (bgs) and soil borings were advanced to depth of refusal. Soils were screened continuously for visual, olfactory, and photoionic evidence of contamination using a Minirae 3000 photoionization detector (PID). Observations including soil descriptions, texture, color, moisture content and stratigraphic changes were documented by the field scientist on subsurface field logs. Copies of the field logs are provided in Appendix A.

Based on the field screening results, one (1) soil sample from each test pit and two (2) soil samples from each soil boring were selected for laboratory analysis. Per the SAP, the soil boring samples were to be collected from 1) the strata exhibiting the highest headspace screening result; and 2) the strata immediately above the water table. However, due to the lack of organic vapors and groundwater during installation of the soil borings, the two samples were collected from two distinct strata within the soil boring. The soil samples were submitted to Chemtech laboratories located in Mountainside, New Jersey (New York State Laboratory Certification No. 20012) for laboratory analysis of volatile organic compounds (VOCs) via EPA method 8260, semi-volatile organic compounds (SVOCs) via EPA method 8270, metals via EPA method 6010, mercury via EPA method 7471, and polychlorinated biphenyls (PCBs) via EPA method 8082 following appropriate chain of custody protocols.

After the collection of the soil samples, each borehole and test pit was backfilled with excess soil generated during field activities. Additionally, test pits were tamped into place using the excavator bucket.

3.0 FINDINGS & CONCLUSIONS

3.1 SUBSURFACE INVESTIGATION

During soil boring and test pit installation activities, site soils consisted of topsoil, hard fill (including brick, concrete, glass and asphalt), and silty sand. As a result of onsite fill materials, soil borings were advanced to a maximum depth of 9.2 feet. In addition, the water table was not encountered during investigation activities.

During the course of the soil boring and test pit installation, CHA noted no visual, olfactory, or photoionic evidence of soil contamination, including petroleum or chemical odors.

During the installation of TP-109, on the west side of the Owasco Outlet, four (4) separate attempts were made to install a test pit in the area. A concrete slab was repeatedly encountered at a depth of 1-2 feet bgs. A fifth attempt reached a depth of 2.5 feet bgs before concrete was again encountered. A sample was collected from TP-109 of the fill material immediately above the concrete slab.

Copies of the field logs are included in Appendix A.

3.2 ANALYTICAL RESULTS

Table 1 summarizes the soil results (detected parameters only) as compared to the New York State Department of Environmental Conservation's (NYSDEC's) Part 375 Unrestricted Soil Cleanup Objectives (SCOs). As shown in Table 1, SVOCs and/or metals exceeded the Unrestricted SCOs in each of the soil borings and test pits, with the exception of test pit TP-103. Metals detected above the Part 375 Unrestricted SCOs include arsenic, barium, beryllium, cadmium, copper, lead, mercury, nickel, selenium, silver and zinc.

Arsenic was detected in the sample collected from TP-108 at a concentration of 18.2 ppm compared to the Unrestricted SCO of 13 ppm.

Barium was detected in exceedance of the Unrestricted SCO of 350 ppm in the samples collected from locations GP-01A (389 ppm) and TP-104 (387 ppm).

Beryllium was detected in the samples collected from locations GP-03A (7.2 ppm) and GP-03B (7.97 ppm) at concentrations equal to or slightly exceeding the Unrestricted SCO of 7.2 ppm.

Cadmium was detected in the sample collected from TP-109 at a concentration of 22.9 ppm compared to the Unrestricted SCO of 2.5 ppm.

Copper was detected in the samples collected from locations TP-101 (60.7 ppm), TP-104 (79.2 ppm), TP-105 (55.7 ppm), TP-108 (63.9 ppm) and TP-109 (343 ppm) compared to an Unrestricted SCO of 50 ppm.

Lead was detected in the samples collected from locations GP-01A (85.7 ppm), GP-02A (130 ppm), GP-04A (511ppm), TP-104 (192ppm), TP-108 (376 ppm) and TP-109 (192 ppm) compared to an Unrestricted SCO of 63 ppm.

Nickel was detected in exceedance of the Unrestricted SCO of 30 ppm for all of the soil samples collected at the site, except for GP-04A, GP-04B, TP-103 and TP-104. The concentrations detected ranged from 41.7 ppm (GP-01B) to 204 ppm (GP-03B) compared to the SCO of 30 ppm.

Selenium was detected in exceedance of the Unrestricted SCO of 30 ppm for all of the soil samples collected at the site, except for GP-04A, GP-04B, and TP-103. The concentrations detected ranged from 4.3 ppm (TP-109) to 18.3ppm (GP-03B) compared to the SCO of 3.9 ppm

Silver was detected in the sample collected from location GP-03B at a concentration of 2.31 ppm, which is slightly above the Unrestricted SCO of 2 ppm.

Zinc was detected in the samples collected from locations GP-02A (117 ppm), GP-04A (334 ppm), TP-101 (160 ppm) TP-102 (167 ppm) and TP-109 (498 ppm) compared to an Unrestricted SCO of 109 ppm.

Mercury was detected in the samples collected from locations GP-01A (1.52 ppm), GP-02A (0.452 ppm), GP-03A (1.08 ppm) and GP-04A (0.266 ppm) compared to an Unrestricted SCO of 0.18 ppm. The mercury concentrations exceeding Part 375 Unrestricted SCOs were collected between 2 and 6 feet bgs.

PCBs were not detected in any of the soil samples collected at 9 Owasco Street.

VOCs were not detected in any of the soil samples at concentrations exceeding Unrestricted SCOs. Low level detections of both acetone and methylene chloride were in several of the soil samples, however, both of these constituents are commonly attributed to laboratory contamination.

SVOCs were not detected in any of the soil samples at concentrations exceeding Unrestricted SCOs, with the exception of those collected from test pit TP-109. Several poly aromatic hydrocarbons (PAHs) including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, each with a respective standard of 1000 ppm, benzo(k)fluoranthene, chrysene, dibenzo(ah)anthracene and indeno(123)pyrene were detected in excess of Part 375 Unrestricted SCOs.

The full laboratory report is included as Appendix B.

Table 1: Analytical Results - Detected Compounds Only

Parameter	Part 375 Unrestricted SCO	Location / Date / Unit	GP-01A 5/20/2013	GP-01B 5/20/2013	GP-02A 5/20/2013	GP-02B 5/20/2013	GP-03A 5/20/2013	GP-03B 5/20/2013	GP-04A 5/20/2013	TP-101 5/20/2013	TP-102 5/20/2013	TP-103 5/20/2013	TP-104 5/20/2013	TP-105 5/20/2013	TP-106 5/20/2013	TP-107 5/21/2013	TP-108 5/21/2013	TP-109 5/21/2013
SW6010B																		
Aluminum (Fume Or Dust)		mg/kg	6180	6240	7870	4350	4280	3840	10800	3440	4970	1090	4780	6560	7150	5740	4620	11700
Antimony		mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.74 N	ND
Arsenic	13	mg/kg	12.1 N	6.05 N	8.47 N	6.69 N	7.53 N	8.1 N	3.75 N	8.14 N	8.06 N	1.77 N	9.25 N	12.8 N	4.57 N	4.46 N	18.2 N	4.66 N
Barium	350	mg/kg	389	109	133	245	69	82.6	153	52.8	47.7	46.6	387	161	77.1	92.9	176	113
Beryllium	7.2	mg/kg	3.05 N	2.77 N	3.44 N	1.6 N	7.2 N	7.97 N	1.39 N	2.06 N	2.25 N	0.18 N	3.87 N	5.6 N	3.51 N	2 N	4.23 N	1.91 N
Cadmium	2.5	mg/kg	ND	ND	ND	ND	ND	ND	0.35	0.92	1.36	ND	ND	ND	ND	ND	ND	22.9
Calcium		mg/kg	16500	16700	54400	24000	5170	3290	72100	132000	91600	4620	19300	17400	44700	85300	25800	67100
Chromium		mg/kg	12.5	12	14	9.04	11.8	13.8	12.5	3.41	5.24	2.29	41.3	19.2	12.8	7.05	21.3	12.9
Cobalt		mg/kg	13.6	15.8	21	10.9	27.4	25.2	6.78	9.49	10.5	0.7 J	12.3	33.3	16.9	9.76	15.1	6.5
Copper	50	mg/kg	21	27.3	42.2	20.4	28.7	32.5	16.8	60.7	36.7	6.84	79.2	55.7	24.3	16.2	63.9	343
Iron		mg/kg	27400	26500	28900	15900	56700	60900	13900	17200	19500	4130	37500	43400	30800	18300	36700	17900
Lead	63	mg/kg	85.7	36	130	6.65	16.9	15.3	511	36.1	15.7	7.34	192	57.4	16.8	28.6	376	192
Magnesium		mg/kg	5020	4140	11800	3220	2440	2000	14500	14200	13900	428	4120	3430	5460	17400	4060	12600
Manganese	1600	mg/kg	289	221	273	133	129	151	262	222	253	84.7	208	275	427	329	197	318
Nickel	30	mg/kg	70.2	41.7	98.5	43.8	192	204	16.4	70.9	65.7	3.83	48.3	165	88.6	27.9	69	63.5
Potassium		mg/kg	786	860	1490	849	843	608	3240	752	718	176	710	702	758	884	716	2070
Selenium	3.9	mg/kg	8.27 N	8.64 N	9.27 N	5.14 N	16.8 N	18.3 N	3.52 N	5.05 N	5.55 N	1.49 N	10.8 N	15 N	8.83 N	4.75 N	12.4 N	4.33 N
Silver	2	mg/kg	0.4	0.19 J	0.26	ND	1.98	2.31	ND	ND	ND	ND	ND	1.43	0.2 J	ND	0.35	ND
Sodium		mg/kg	23.3 J	27 J	117	45.9 J	ND	ND	328	62.7	1220	3.95 J	ND	ND	ND	86.7	ND	913
Thallium		mg/kg	2.72	1.02	1.92	0.81 J	5.57	6.21	ND	1.26	1.33	ND	1.8	4.4	1.62	0.73 J	2.4	ND
Vanadium (Fume Or Dust)		mg/kg	11.7	13.4	12.5	5.71	5.68	6.7	21.2	19.9	22.4	5.3	11.8	12.1	8.99	9.24	11.8	25
Zinc	109	mg/kg	60.4	47.3	117	24.6	40.5	42.2	334	160	167	8	100	70.1	78	47	79.2	498
SW7471A																		
Mercury	0.18	mg/kg	1.52 D	0.052	0.452	0.004 J	1.08 D	0.011 J	0.266	0.046	0.054	0.013	0.153	0.068	0.031	0.05	0.173	0.068
SW8260C																		
Acetone	50	ug/kg	ND	12.9 JQ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		37.4 Q	
Methylene Chloride	50	ug/kg	4.9 J	2.2 J	3.8 J	10.1	5.9 J	6.2 J	13	6.2	6.9	15.1	5.4 J	4.8 J	3.5 J	4.5 J	2.1 J	3.7 J

Notes: ND- Not Detected, D- Dilution, R- rejected data, J- estimated concentration, E- concentration exceeds the calibrated range of the instrument for that specific analysis, U- undetected, N- presumptive evidence of a compound

Table 1: Analytical Results - Detected Compounds Only (cont.)

Parameter	Part 375 Unrestricted SCO	Location Date Unit	GP-01A 5/20/2013	GP-01B 5/20/2013	GP-02A 5/20/2013	GP-02B 5/20/2013	GP-03A 5/20/2013	GP-03B 5/20/2013	GP-04A 5/20/2013	TP-101 5/20/2013	TP-102 5/20/2013	TP-103 5/20/2013	TP-104 5/20/2013	TP-105 5/20/2013	TP-106 5/20/2013	TP-107 5/21/2013	TP-108 5/21/2013	TP-109 5/21/2013
SW8270D																		
2-Methylnaphthalene		ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	280 J
Acenaphthene	20000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	640
Acenaphthylene	100000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	720
Anthracene	100000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	160 J	ND	ND	ND	ND	2500
Benzo(a)Anthracene	1000	ug/kg	240 J	ND	220 J	ND	ND	ND	ND	ND	ND	ND	380	ND	ND	240 J	ND	6500 D
Benzo(a)Pyrene	1000	ug/kg	210 J	ND	190 J	ND	ND	ND	ND	ND	ND	ND	300 J	ND	ND	200 J	ND	6400 D
Benzo(b)Fluoranthene	1000	ug/kg	280 J	ND	250 J	ND	ND	ND	ND	ND	ND	ND	440	160 J	ND	280 J	ND	8500 D
Benzo(G,H,I)Perylene	100000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	160 J	ND	ND	150 J	ND	4700 D
Benzo(k)Fluoranthene	800	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2100
Carbazole		ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1100
Chrysene	1000	ug/kg	180 J	ND	170 J	ND	ND	ND	ND	ND	ND	ND	270 J	ND	ND	180 J	ND	4000 E
Dibenzo(A,H)Anthracene	330	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1300
Dibenzofuran	7000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	690
Dimethylphthalate		ug/kg	280 J	210 J	230 J	220 J	190 J	250 J	610	260 J	200 J	240 J	260 J	240 J	250 J	320 J	330 J	280 J
Fluoranthene	100000	ug/kg	360 J	ND	400	ND	ND	ND	340 J	ND	ND	ND	580	320 J	ND	400	280 J	14000 D
Fluorene	30000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000
Indeno(1,2,3-Cd)Pyrene	500	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4400 D
Naphthalene	12000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	510
Phenanthrene	100000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	470	330 J	ND	220 J	ND	10400 D
Pyrene	100000	ug/kg	370 J	ND	340 J	ND	ND	ND	260 J	ND	ND	ND	470	210 J	ND	320 J	230 J	9800 D

Notes: ND- Not Detected, D- Dilution, R- rejected data, J- estimated concentration, E- concentration exceeds the calibrated range of the instrument for that specific analysis, U- undetected, N- presumptive evidence of a compound

3.3 DATA VALIDATION AND USABILITY

Upon receipt of analytical results, data validation and usability was evaluated by Nancy Potak located in Greensboro, Vermont. All data was identified as usable with the exception of the following items:

- 2,4-Dinitrophenol, an SVOC which was not detected within any of the soil samples, was flagged with the "R" qualifier and technically rejected due to the relative response factor of this compound (0.048) being less than the 0.050 quality control limit.
- All VOC reanalyzed data associated with samples TP-103, TP-104 and GP-03A were technically rejected due to recoveries being less than the 50% quality control limit. Validation recommended the use of the data from the original analyses.
- Undetected VOCs (including 1,1,2,2-tetrachloroethane, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2-dibromo-3-chloropropane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, bromoform, chloroethane and isopropylbenzene) associated with GP-02B which were quantitated against the 4th internal standard (22%) which were less than the 25% quality control limit were technically rejected.

The above items account for less than ten percent (10%) of the collected data and therefore the data as a whole is considered usable per the QAPP and SAP. Data technically rejected will not be used to evaluate site conditions. The complete data validation report is included in Appendix C.

3.4 CONCLUSIONS

Select SVOCs and metals (including mercury) were detected at concentrations exceeding the Unrestricted SCOs. However, CHA understands that the end use for the Property has not been identified. Given this uncertainty, CHA recommends that once an end use has been determined that the Phase II data be re-evaluated. Part 375 Unrestricted SCOs, which are the most stringent criteria, were used for comparison as specified in the SAP. However, a more applicable SCO may be applied dependent on the future use and subsequent soil exposure allowing for a more definitive delineation of contamination.

The historical Phase I ESA identified the presence of demolition debris on the Property. The potential for asbestos and lead paint in the rubble was noted in the ESA, but was not identified as a REC and was not addressed as part of the limited subsurface investigation.

4.0 RESOURCE SUMMARY

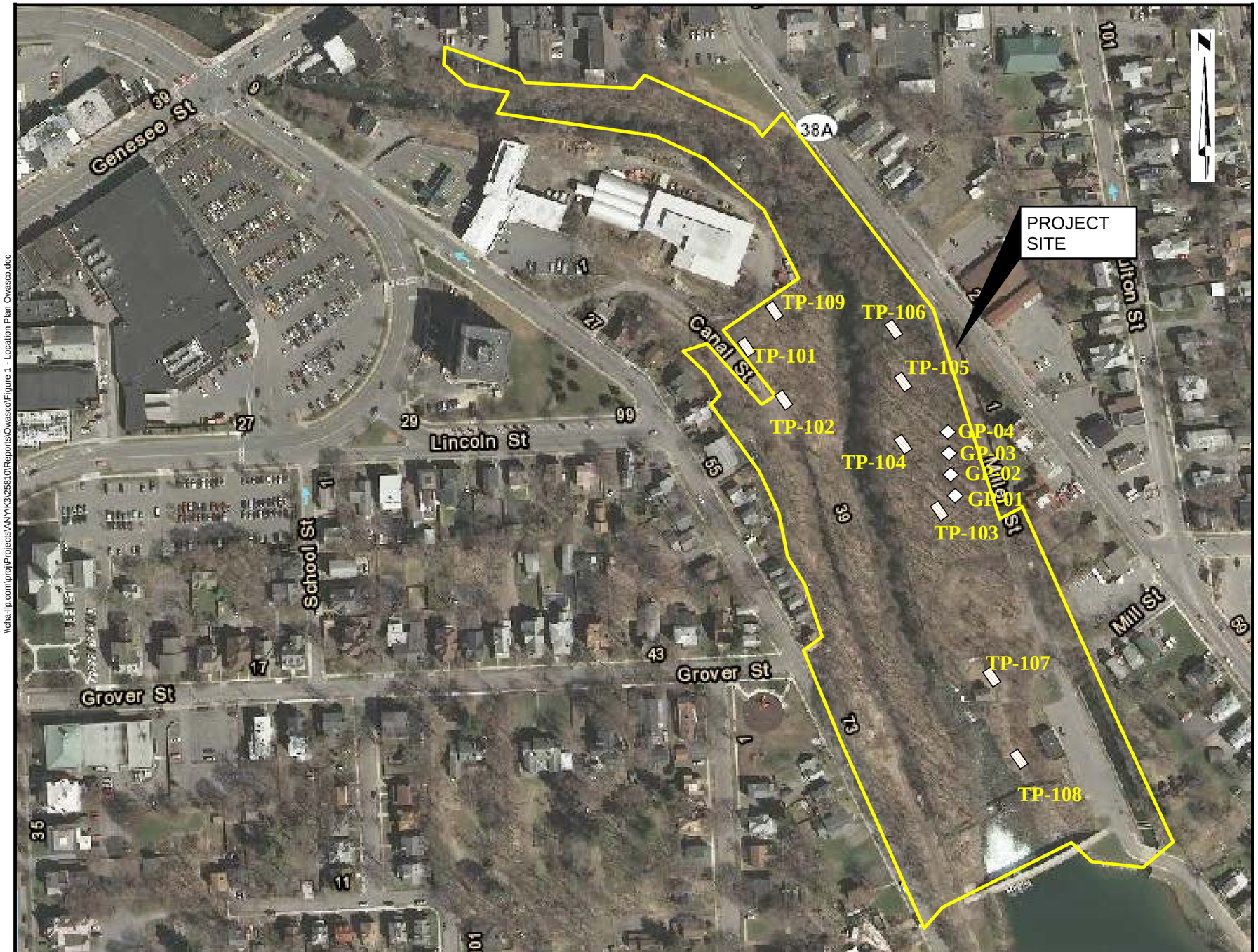
In compiling the report summarizing this investigation, the following persons/agencies were interviewed and/or contacted and resources checked.

- *Phase I ESA 9 Owasco Street*, prepared by CHA Inc., July 20, 2012

- *Auburn Brownfield Investigation Grant Limited Phase II Environmental Site Assessment Sampling and Analysis Plan. Site Location: 9 Owasco Street, Auburn, New York 13021* Prepared by Asbestos & Environmental Consulting Corporation, November 25, 2012

- *Auburn EPA Brownfield Assessment Grant Program Generic QAPP*. Prepared by Asbestos & Environmental Consulting Corporation, April 9, 2013

FIGURE 1



SOURCE: NYS Orthos Online

CHA ©2013
441 South Salina Street, Syracuse, NY 13202-4712
www.chacompanies.com

MAP NOT TO SCALE | DATE: July 2013

FIGURE 1

Sampling Location Plan

9 Owasco Street

CITY OF AUBURN

COUNTY OF CAYUGA, STATE OF NEW YORK

\\cha-llp.com\proj\Projects\ANY\K3\25810\Reports\Owasco\Figure 1 - Location Plan Owasco.doc

APPENDIX A

FIELD LOGS

CHA

Test Pit Log

Test Pit No.: TP-101

Project Name: Auburn Brownfields	Test Pit Location: TP-101
Project Location: 9 Owasco Street	Logged By: Flood
Project Number: 25810	Date: 5/20/13 Start: 1145 Finish: 1205
Excavation Contractor: Trec Environmental	Equipment: Kubota KX 121

General Information:

Length: 9' Width: 2' Max. Depth: 7'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: ____

Location Marked: ☒ Yes ☐ No With: Flag

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 1155 @4' BGS

Sample Analyses: VOCs, SVOCs, Hg, Metals, PCBs No. of Bottles: 5

Test Pit Profile

TOPSOIL w/ organics, brick, dark brown moist (FILL) 1'

SANDY SILT, Some fc Gravel, trace brick, dark brown / medium brown, moist

7' BGS

PID Readings/Test Pit Notes:

NO PID readings, PID = 0.0 ppm

Other than hard fill material, no evidence of contamination observed

CHA

Test Pit Log

Test Pit No.: TP-102

Project Name: Auburn Brownfields	Test Pit Location: See location plan
Project Location: 9 Owasco Street	Logged By: K. Flood
Project Number: 28510	Date: 5/20/13 Start: 1220 Finish: 1250
Excavation Contractor: Trec Environmental	Equipment: Kubota KX 121

General Information:

Length: 10' Width: 2' Max. Depth: 7'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: ____

Location Marked: ☒ Yes ☐ No With: flag

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 1240 @ 3' BGS

Sample Analyses: VOCs, SVOCs, PCBs, metals, mercury No. of Bottles: 15

Test Pit Profile

TOPSOIL W/ORGANICS, Some fc Gravel, trace clay, brown / dark brown / grey, moist — 10 in

SILTY SAND, Some fc Gravel, trace clay, brown / dark brown / grey, moist — 6'2"

7' BGS

PID Readings/Test Pit Notes:

PID = 0 for the entire test pit

No evidence of contamination

MS / MSD collected here

CHA

Test Pit Log

Test Pit No.: TP-103

Project Name: Auburn Brownfields	Test Pit Location: TP-103
Project Location: 9 Owasco Street	Logged By: K. Floud
Project Number: 25810	Date: 5/20/13 Start: 1400 Finish: 1445
Excavation Contractor: Trec Environmental	Equipment: Kubota Kx 121

General Information:

Length: 6' Width: 3' Max. Depth: 7'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: _____

Location Marked: ☒ Yes ☐ No With: flag

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 1430 @3' BGS

Sample Analyses: VOCs, SVOCs, metals, mercury, PCBs No. of Bottles: 5

Test Pit Profile

TOPSOIL W/ORGANICS, Some Brick, trace concrete, trace silt, trace fine sand, brown/dk brown/orange/grey, moist (FILL) — 12"

SILTY SAND, trace organics, trace clay, medium brown/brown/tan, moist

Just entering a layer of dark brown organics underlain by tan sand, moist 7' BGS

PID Readings/Test Pit Notes:

A foundation was present near the eastern end of the test pit.

PID = 0 for test pit excavation.

No evidence of contamination

CHA

Test Pit Log

Test Pit No.: TP-104

Project Name: Auburn Brownfields	Test Pit Location: TP-104, Figure 1
Project Location: 9 Owasco Street	Logged By: K. Flood
Project Number: 25810	Date: 5/20/13 Start: 1455 Finish: 1525
Excavation Contractor: Trec Environmental	Equipment: Kubota KX 121

General Information:

Length: 10' Width: 2' Max. Depth: 9'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: ____

Location Marked: ☒ Yes ☐ No With: flag

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 1515 @2' BGS

Sample Analyses: VOCs, SVOCs, PCBs, Metals, Mercury No. of Bottles: 10

Test Pit Profile

TOPSOIL w/ organics, trace brick, brown/orange, moist

6" BGS

BRICK and fc GRAVEL, orange/brown/gray, moist

1' BGS

SAND and GRAVEL, some Silt, trace Clay, dark brown, tan, black, moist

9' BGS

PID Readings/Test Pit Notes:

Several attempts needed to install this test pit. Concrete slabs encountered ~1' BGS asphalt/tar also observed.

TP-104 appeared to be installed adjacent to an old sewer or duct (concrete surrounded by pea gravel)

PID = 0.0 for entire excavation.

No evidence of contamination

CHA-2 duplicate collected here

CHA

Test Pit Log

Test Pit No.: TP-105

Project Name: Auburn Brownfields	Test Pit Location: See figure 1
Project Location: 9 Owasco Street	Logged By: K. Flood
Project Number: 25810	Date: 5/20/13 Start: 1650 Finish: 1715
Excavation Contractor: Trec Environmental	Equipment: Kubota KX 121

General Information:

Length: 9' Width: 2' Max. Depth: 9'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 9'

Location Marked: ☐ Yes ☐ No With: _____

Pictures Taken: ☐ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: Grab Sampling Time: 1705 @ 3' BGS

Sample Analyses: SVOCs, VOCs, Metals, Mercury, PCBs No. of Bottles: 5

Test Pit Profile

CONCRETE and BRICK DEBRIS w/ TOPSOIL, trace silt, trace sand, trace organics, dark brown / black / light brown, moist

2' BGS

SILTY SAND, trace clay, brown / medium brown / tan, moist trending to wet

GW @ 9' BGS

9' BGS

PID Readings/Test Pit Notes:

PID = 0 ppm through entire excavation

No evidence of contamination

CHA

Test Pit Log

Test Pit No.: TP-106

Project Name: Auburn Brownfields	Test Pit Location: See Figure 1
Project Location: 9 Owasco Street	Logged By: K. Flood
Project Number: 25810	Date: 5/20/13 Start: 1535 Finish: 1600
Excavation Contractor: Trec Environmental	Equipment: Kubota KX 121

General Information:

Length: 8' Width: 2' Max. Depth: 8'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: _____

Location Marked: ☒ Yes ☐ No With: flag

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 1710 @ 8' BGS

Sample Analyses: VOCs, SVOCs, PCBs, Metals, Mercury No. of Bottles: 5

Test Pit Profile

BRICK w/ TOPSOIL, Some Silty Sand, tr clay, orange / brown / dark brown / tan, moist (FILL)

2' BGS

SANDY SILT, Some fc Gravel, tr clay, dark brown / medium brown, moist

8' BGS

PID Readings/Test Pit Notes:

0 ppm PID readings for entire excavation

No evidence of contamination

CHA

Test Pit Log

Test Pit No.: TP-107

Project Name: Auburn Brownfields	Test Pit Location: See figure 1
Project Location: 9 Owasco Street	Logged By: K. Flood
Project Number: 25810	Date: 5/21/13 Start: 0955 Finish: 1020
Excavation Contractor: Trec Environmental	Equipment: Kubota KX 121

General Information:

Length: 8' Width: 2' Max. Depth: 9'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: ____

Location Marked: ☒ Yes ☐ No With: flag

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 1015 @ 3' BGS

Sample Analyses: VOCs, SVOCs, PCBs, Metals, Mercury No. of Bottles: 5

Test Pit Profile

few inches topsoil then
Fill material to 9' BGS depth
Fill included brick, trace metal, silt, sand and gravel

9' BGS

PID Readings/Test Pit Notes:

PID = 0.0 ppm for entire excavation

Test pit located in cleared area near building in an area that appears to have been filled/built up.

No evidence of contamination

CHA

Test Pit Log

Test Pit No.: TP-108

Project Name: Auburn Brownfields	Test Pit Location: See figure 1
Project Location: 9 Owasco Street	Logged By: K. Flood
Project Number: 25810	Date: 5/21/13 Start: 1150 Finish: 1225
Excavation Contractor: Trec Environmental	Equipment: Kubota KX 121

General Information:

Length: 6' Width: 2' Max. Depth: 4.5'

Groundwater in Pit: ☒ Yes ☐ No If yes, what depth: 4.5'

Location Marked: ☐ Yes ☒ No With: ____

Pictures Taken: ☒ Yes ☐ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 1215 @ 2' BGS

Sample Analyses: VOCs, SVOCs, PCBs, metals, mercury No. of Bottles: 5

Test Pit Profile

SAND and GRAVEL, some silt, trace clay, brown/dark brown/brown/black, moist

1' BGS

SAND and SILT w/ FRACTURED BEDROCK (shale), ~~some~~ trace clay, dark brown/dark grey/black, moist to wet

Some groundwater encountered

refusal due to bedrock 4.5' BGS

PID Readings/Test Pit Notes:

TP-108 located @ the base of the slope, just above level of Owasco Outlet

PID = 0 ppm for the excavation

NO EVIDENCE of CONTAMINATION

CHA

Test Pit Log

Test Pit No.: TP-109

Project Name: Auburn Brownfields	Test Pit Location: See figure 1
Project Location: 9 Owasco Street	Logged By: K. Flood
Project Number: 25810	Date: 5/21/13 Start: 1240 Finish: 1310
Excavation Contractor: Trec Environmental	Equipment: Kubota KX 121

General Information:

Length: 6' Width: 3' Max. Depth: 2.5'

Groundwater in Pit: ☐ Yes ☒ No If yes, what depth: ____

Location Marked: ☐ Yes ☒ No With: ____

Pictures Taken: ☐ Yes ☒ No

Sampling Information:

Sample Collected: ☒ Yes ☐ No

Sampling Method: grab Sampling Time: 1300 @ 2.5' BGS

Sample Analyses: VOCs, SVOCs, PCBs, Metals, Mercury No. of Bottles: 5

Test Pit Profile

FILL (brick, concrete, sand, SILT, trace glass trace metal)
brown / medium brown / tan / orange, moist

Concrete slab encountered — 2.5'

PID Readings/Test Pit Notes:

Attempted to install 4 test pits in the vicinity. All were met w/ refusal (concrete) ~ 1' BGS.

Fifth Attempt 2.5' D before refusal due to a concrete slab.

Collected sample just above the concrete slab in fill material.

No evidence of contamination

PID = 0 ppm during excavation

CHA

TEST BORING LOG

BORING NO. GP-01

PROJECT & LOCATION: Auburn Brownfields- 9 Owasco Street

CLIENT: City of Auburn, NY

CONTRACTOR: Trec Environmental

PROJECT NO.: 25810

SHEET NO.: 1 OF 1

GROUNDWATER MEASUREMENT						CASING	SAMPLER	CORE BARREL
DATE	TIME	DEPTH TO (FT.): WATER	BOTTOM OF CASING	BOTTOM OF BORING	TYPE:			
					SIZE I.D.:			
					HAMMER WT.:			
					HAMMER FALL:			
					DRILL FLUID:	DEPTH INTRODUCED:		
					CHECKED BY:			
IF BORING IS DRY, CHECK HERE: ☐					DATE:			

ELEVATION:

START DATE: 5/20/13 TIME: 1440

FINISH DATE: 5/20/13 TIME: 1450

RIG TYPE: Geoprobe

DRILLER:

INSPECTOR: K. Flood

DEPTH IN FEET	SAMPLE NO.	RECOVERY LENGTH	SPT BLOWS PER 6"	PID Reading (PPM)	NOTES (Evidence of Contam.)	FIELD CLASSIFICATION
	S1	3.5/4'	NA	0	driller comment: Soft C+D Debris noted	fmc SAND and SILT, Some Brick, tr clay, brown/medium brown/orange/tan, moist (FILL)
5	S2	4/4'	NA			SILTY SAND, trace clay, brown/medium brown, moist to wet 3" fractured bedrock @ bottom, dk br/black, wet water encountered @ ~8' BGS Refusal @ 8' BGS, bedrock
10	~~S3~~		~~NA~~			
15						
20						

Soil Gas Reading: _____%

Soil Sample Collected:
☒ Yes ☐ No
Time: ____ Depth: ____ to ____
GP-01A: 1445 6' D
GP-01B: 1450 8' D

Water Sample Collected:
☐ Yes ☒ No
Time: ____ Screen Interval: ____

GP-01
BORING NO.

CHA — TEST BORING LOG

BORING NO. GP-02

PROJECT & LOCATION: Auburn Brownfields- 9 Owasco Street

CLIENT: City of Auburn, NY

CONTRACTOR: Trec Environmental

PROJECT NO.: 25810

SHEET NO.: 1 OF 1

GROUNDWATER MEASUREMENT						CASING	SAMPLER	CORE BARREL
DATE	TIME	DEPTH TO (FT.): WATER	BOTTOM OF CASING	BOTTOM OF BORING	TYPE:			
					SIZE I.D.:			
					HAMMER WT.:			
					HAMMER FALL:			
					DRILL FLUID:	DEPTH INTRODUCED:		
					CHECKED BY:			
IF BORING IS DRY, CHECK HERE: ☐					DATE:			

ELEVATION:

START DATE: 5/20/13 TIME: 1455

FINISH DATE: 5/20/13 TIME: 1520

RIG TYPE: Geoprobe

DRILLER:

INSPECTOR: K. Flood

DEPTH IN FEET	SAMPLE NO.	RECOVERY LENGTH	SPT BLOWS PER 6"	PID Reading (PPM)	NOTES (Evidence of Contam.)	FIELD CLASSIFICATION
	S1	1.5/4'	NA	0	none	1" TOPSOIL W/ORGANICS, brown, moist 1.5' fmc SAND and SILT, Some Brick, trace clay, brown/orange/tan, moist
5	S2	2.25/4'	NA	0	none	2' same as above 0.25' fractured bedrock, some Silt + Sand, dark brown/black moist/wet
10	S3	1.2/1.2 ~~4/4'~~	NA	0	none	1.2' fmc SAND and SILT and fractured BEDROCK, dark brown/black, wet (some is fallback into the hole from upper layers) Refusal @ 9.2' - bedrock
15						
20						

Soil Gas Reading: _____%

Soil Sample Collected: ☒ Yes ☐ No
Time: ____ Depth: ____ to ____
GP-02A : 1505 6-7'
GP-02B : 1515 8-9.2'

Water Sample Collected: ☐ Yes ☒ No
Time: ____ Screen Interval: ____

GP-02
BORING NO.

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TEST BORING LOG

CHA

BORING NO. GP-03

PROJECT & LOCATION: Auburn Brownfields- 9 Owasco Street

CLIENT: City of Auburn, NY

CONTRACTOR: Trec Environmental

PROJECT NO.: 25810

SHEET NO.: 1 OF 1

GROUNDWATER MEASUREMENT						CASING	SAMPLER	CORE BARREL	
DATE	TIME	DEPTH TO (FT.): WATER	BOTTOM OF CASING	BOTTOM OF BORING	TYPE:				ELEVATION:
					SIZE I.D.:				START DATE: 5/20/13 TIME: 1530
					HAMMER WT.:				
					HAMMER FALL:				FINISH DATE: 5/20/13 TIME: 1550
					DRILL FLUID:	DEPTH INTRODUCED:			RIG TYPE: Geoprobe
					CHECKED BY:				DRILLER:
IF BORING IS DRY, CHECK HERE: ☐					DATE:				INSPECTOR: K. Flood

DEPTH IN FEET	SAMPLE NO.	RECOVERY LENGTH	SPT BLOWS PER 6"	PID Reading (PPM)	NOTES (Evidence of Contam.)	FIELD CLASSIFICATION
	S1	3/4'	NA	0	None	1" TOPSOIL w/ORGANICS, brown, moist 3' FILL (brick, fc gravel, SILTY SAND) brown/orange/dark brown/tan, moist
5	S2	3/4'	NA	0	None	1' Same as above but dark brown/black/orange specks 2' SILTY SAND, tr clay, trace rock, dk brown/black/orange, moist/wet
10	S3	0'/0.5'	NA	0	None	No recovery ~~to~~ except for a few rock chips Refusal @ 08.5' due to bedrock
15						
20						

Soil Gas Reading: _____%

Soil Sample Collected: ☒ Yes ☐ No
Time: ____ Depth: ____ to ____
GP-03A 15:40 @ 4'
GP-03B 15:45 @ 7-8.5'

Water Sample Collected: ☐ Yes ☒ No
Time: ____ Screen Interval: ____

GP-03
BORING NO.

CHA

TEST BORING LOG

BORING NO. GP-04

PROJECT & LOCATION: Auburn Brownfields- 9 Owasco Street

CLIENT: City of Auburn, NY

CONTRACTOR: Trec Environmental

PROJECT NO.: 25810

SHEET NO.: 1 OF 1

GROUNDWATER MEASUREMENT						CASING	SAMPLER	CORE BARREL
DATE	TIME	DEPTH TO (FT.): WATER	BOTTOM OF CASING	BOTTOM OF BORING	TYPE:			
					SIZE I.D.:			
					HAMMER WT.:			
					HAMMER FALL:			
					DRILL FLUID:	DEPTH INTRODUCED:		
					CHECKED BY:			
IF BORING IS DRY, CHECK HERE: ☐					DATE:			

ELEVATION:

START DATE: 5/20/13 TIME: 1555

FINISH DATE: 5/20/13 TIME: 1615

RIG TYPE: Geoprobe

DRILLER:

INSPECTOR: K. Flood

DEPTH IN FEET	SAMPLE NO.	RECOVERY LENGTH	SPT BLOWS PER 6"	PID Reading (PPM)	NOTES (Evidence of Contam.)	FIELD CLASSIFICATION
	S1	0.5/4'	NA	0	large chunks of brick	0.5' fmc SAND and BRICK, brown/orange, moist (FILL)
5	S2	2.5/4'	NA	0	none	1' same as above (FILL) 1.5' SILTY CLAY w/fc GRAVEL, trace f. sand, ~~mo~~ dark brown/black/tan/orange, moist to wet
10	S3		NA			Refusal @ 8' BGS -> rock
15						
20						

Soil Gas Reading: _____%

Soil Sample Collected: ☐ Yes ☐ No
Time: ____ Depth: ____ to ____
GP-04A 1610 @ 2'
GP-04B 1615 @ 7-8'

Water Sample Collected: ☐ Yes ☒ No
Time: ____ Screen Interval: ____

GP-04
BORING NO.

APPENDIX B

LABORATORY DATA PACKAGE

(Included on Disc)

APPENDIX C

DATA VALIDATION REPORT

DATA USABILITY SUMMARY REPORT
Auburn, NY

Soil and Water Volatile Organic Analyses by Method SW846 8260B
Samples Collected: May 20, 2013
Samples Received at Chemtech on May 22, 2013
Sample Delivery Group: E2324
Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Matrix
E2324-01	TRIPBLANK	Water
E2324-02	EB-2	Water
E2324-03	CHA-2	Soil
E2324-04	TP-101	Soil
E2324-05	TP-102	Soil
E2324-06	E2324-05MS	Soil
E2324-07	E2324-05MSD	Soil
E2324-08	TP-103	Soil
E2324-08 RE	TP-103 RE	Soil
E2324-09	TP-104	Soil
E2324-09 RE	TP-104 RE	Soil
E2324-10	TP-105	Soil
E2324-11	TP-106	Soil
E2324-12	GP-01A	Soil
E2324-13	GP-01B	Soil
E2324-14	GP-02A	Soil
E2324-15	GP-02B	Soil
E2324-16	GP-03A	Soil
E2324-16 RE	GP-03A RE	Soil
E2324-17	GP-03B	Soil
E2324-18	GP-04A	Soil
E2324-19	GP-04B	Soil
E2324-20	TP-107	Soil
E2324-21	TP-108	Soil
E2324-22	TP-109	Soil

Soil and water samples were validated for analyses of volatile organics by the US EPA Region II data validation SOP (HW-24, Revision 2, 2008). Data were reviewed for usability according to the following criteria:

* - Data Completeness
* - GC/MS Tuning
* - Holding Times
  - Calibrations
* - Laboratory Blanks
* - Trip Blank
* - Surrogate Compound Recoveries
  - Internal Standard Recoveries
  - Matrix Spike / Matrix Spike Duplicate
  - Laboratory Control Samples
* - Compound Identification
* - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The problems with the laboratory control samples, internal standards, calibrations and matrix spike should be noted.

These are discussed in detail below.

Holding Times

All samples analyzed within 14 days of collection.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

Surrogate Compound Recoveries

All surrogate compound recoveries were within the quality assurance limits.

Calibrations

All of the %RSDs in the 5/17 soil initial calibration were less than 20% with the exceptions of acetone (32%) and 2-butanone (28%).

This initial calibration was associated with the analyses of the following soil samples:

E2324-04	TP-101
E2324-08	TP-103
E2324-09	TP-104

None of these compounds were detected in any of the samples and the high %RSDs do not affect the use of the data.

All of the percent differences in the 5/22 continuing calibration were less than 20% with the following exceptions:

Compound	**% Rec.**
1,2,3-TRICHLOROBENZENE	60%
1,2,4-TRICHLOROBENZENE	38%
1,2-DICHLOROPROPANE	25%
BENZENE	23%
METHYL ACETATE	22%
METHYL ETHYL KETONE (2-BUTANONE)	22%
TRICHLOROFLUOROMETHANE	28%

This continuing calibration was associated with the analyses of the following soil samples:

E2324-04	TP-101
E2324-08	TP-103
E2324-09	TP-104

All of the percent differences in the 5/27 continuing calibration were less than 20% with the exception of bromomethane (27%).

This continuing calibration was associated with the following samples:

E2324-14	GP-02A
E2324-16	GP-03A
E2324-17	GP-03B
E2324-18	GP-04A
E2324-19	GP-04B
E2324-20	TP-107
E2324-21	TP-108

All of the percent differences in the 5/28 continuing calibration were less than 20% with the exceptions of methyl acetate (2%) and 4-methyl-2-pentanone (26%).

This continuing calibration was associated with the analysis of sample TP-109 / E2324-22.

All of the percent differences in the 5/28 continuing calibration were less than 20% with the following exceptions:

Compound	**%D**
BROMOFORM	21%
CHLOROETHANE	22%
METHYL ACETATE	22%
2-BUTANONE	29%
4-METHYL-2-PENTANONE	38%

This continuing calibration was associated with the analysis of sample GP-02B / E2324-15.

All of the percent differences in the continuing calibration associated with the water samples were less than 20% with the exceptions of acetone (40%), cyclohexane (21%) and 2-butanone (24%).

The data for the compounds in the continuing calibrations with percent differences above 20% were flagged with the “J” qualifier and are estimated values.

All of the relative response factors (rrfs) were greater than 0.05.

Matrix Spike

The laboratory’s in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits. The RPD of the matrix spike and matrix spike duplicate was 30% during the validation.

Soil sample E2324-05 / TP-102 was used for the soil matrix spike and matrix spike duplicate. All recoveries were within the required limits.

The RPD of 1,2-dibromo-3-chloropropene (31%) was just above the 30% quality control limit used for the validation. This compound was not detected in any of the samples and the data were not qualified for the high RPD.

Laboratory Control Sample

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits in the 5/22/13 LCS with the following exceptions:

Compound	**% Rec.**
ACETONE	160%
2-BUTANONE	170%
4-METHYL-2-PENTANONE	140%

This laboratory control sample was associated with the analyses of the following soil samples:

E2324-04	TP-101
E2324-08	TP-103
E2324-09	TP-104

All of the laboratory control samples were within the 70% - 130% limits in the 5/23/13 LCS with the following exceptions:

Compound	**%D**
ACETONE	150%
1,2-DIBROMO-3-CHLOROPROPANE	131%

This laboratory control sample was associated with the analyses of the following soil samples:

E2324-03	CHA-2	Soil
E2324-05	TP-102	Soil
E2324-08 RE	TP-103 RE	Soil
E2324-09 RE	TP-104 RE	Soil
E2324-10	TP-105	Soil
E2324-11	TP-106	Soil
E2324-12	GP-01A	Soil
E2324-13	GP-01B	Soil

If one of these compounds were detected in a sample, it was flagged with the "J" qualifier and is an estimated value.

Undetected data were not affected by high laboratory control sample recoveries.

All of the laboratory control samples were within the 70% - 130% limits in the 5/23/13 LCS with the following exceptions:

Compound	**%D**
Acetone	180%
2-Butanone	170%

This laboratory control sample was associated with the analyses of the following soil samples:

E2324-14	GP-02A
E2324-16	GP-03A
E2324-17	GP-03B
E2324-18	GP-04A
E2324-19	GP-04B
E2324-20	P-107
E2324-21	TP-108

All of the laboratory control samples were within the 70% - 130% limits in the 5/23/13 LCS with the following exceptions:

Compound	**%D**
Bromomethane	147%
Chloroethane	136%
Acetone	160%
2-Butanone	150%

This laboratory control sample was associated with the analyses of the following soil samples:

E2324-16 RE	GP-03ARE
E2324-22	TP-109

Method Blanks

No compounds were detected in any of the method blanks.

Trip Blank

No compounds were detected in the trip blank.

Internal Standard Areas and Retention Times

The recoveries of several internal standards were less than the 50% quality control limit:

Sample		IS #1	IS #2	IS #3	IS #4
E2324-08	TP-103				33%
E2324-08 RE	TP-103 RE				45%
E2324-09	TP-104				46%
E2324-09 RE	TP-104 RE	50%		43%	22%
E2324-15	GP-02B				22%
E2324-16	GP-03A				45%
E2324-16 RE	GP-03A RE				44%

It is recommended that the data from the original analyses be used for the final reporting of all of the samples.

The NYS DEC ASP program requires that any sample with internal standard recoveries outside of the quality control limits be reanalyzed. This was not done for sample E2324-15 / GP-02B.

The recovery of the 4th internal standard in this sample (22%) was less than the 25% quality control limit used to reject the data. All of the undetected compounds quantitated against this internal standard in these samples were flagged with the “R” qualifier and technically rejected.

The compounds that were quantitated from the other samples with low internal standard recoveries were flagged with the “J” qualifier and are estimated values.

The areas and retention times of all other internal standards were within the required quality control limits.

Sample Results

No other problems were detected with any of the samples.

TRIPBLANK-20130520		Conc	Lab	DV									DV	Comb.
E2324-01	Parameter	ug/l	Qual	Conc.	MB	TB	Surr	MS	LCS	IC	CC	IS	Qual	Qual
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
	1,1-DICHLOROETHANE		U										U	U
	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		U										U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		U								40%		UJ	UJ
	BENZENE		U										U	U
	BROMOCHLOROMETHANE		U										U	U
	BROMODICHLOROMETHANE		U										U	U
	BROMOFORM		U										U	U
	BROMOMETHANE		U										U	U
	CARBON DISULFIDE		U										U	U
	CARBON TETRACHLORIDE		U										U	U
	CHLOROBENZENE		U										U	U
	CHLOROETHANE		U										U	U
	CHLOROFORM		U										U	U
	CHLOROMETHANE		U										U	U
	CIS-1,2-DICHLOROETHYLENE		U										U	U
	CIS-1,3-DICHLOROPROPENE		U										U	U
	CYCLOHEXANE		U								21%		UJ	UJ
	DIBROMOCHLOROMETHANE		U										U	U
	DICHLORODIFLUOROMETHANE		U										U	U

	ETHYLBENZENE	U										U	U
	ISOPROPYLBENZENE (CUMENE)	U										U	U
	M,P-XYLENE (SUM OF ISOMERS)	U										U	U
	METHYL ACETATE	U										U	U
	METHYL ETHYL KETONE (2-BUTANONE)	U							24%			UJ	UJ
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	U										U	U
	METHYLCYCLOHEXANE	U										U	U
	METHYLENE CHLORIDE	U										U	U
	O-XYLENE (1,2-DIMETHYLBENZENE)	U										U	U
	STYRENE	U										U	U
	TERT-BUTYL METHYL ETHER	U										U	U
	TETRACHLOROETHYLENE(PCE)	U										U	U
	TOLUENE	U										U	U
	TRANS-1,2-DICHLOROETHENE	U										U	U
	TRANS-1,3-DICHLOROPROPENE	U										U	U
	TRICHLOROETHYLENE (TCE)	U										U	U
	TRICHLOROFLUOROMETHANE	U										U	U
	VINYL CHLORIDE	U										U	U

TRIPBLANK-20130520		Conc	Lab	DV									DV	Comb.
E2324-02	**Parameter**	**ug/l**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
	1,1-DICHLOROETHANE		U										U	U
	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		U										U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U

1,4-DICHLOROBENZENE		U				U	U
1,4-DIOXANE (P-DIOXANE)		U				U	U
2-HEXANONE		U				U	U
ACETONE		U			40%	UJ	UJ
BENZENE		U				U	U
BROMOCHLOROMETHANE		U				U	U
BROMODICHLOROMETHANE		U				U	U
BROMOFORM		U				U	U
BROMOMETHANE		U				U	U
CARBON DISULFIDE	3.3	J	3.29			J	J
CARBON TETRACHLORIDE		U				U	U
CHLOROBENZENE		U				U	U
CHLOROETHANE		U				U	U
CHLOROFORM		U				U	U
CHLOROMETHANE		U				U	U
CIS-1,2-DICHLOROETHYLENE		U				U	U
CIS-1,3-DICHLOROPROPENE		U				U	U
CYCLOHEXANE		U			21%	UJ	UJ
DIBROMOCHLOROMETHANE		U				U	U
DICHLORODIFLUOROMETHANE		U				U	U
ETHYLBENZENE		U				U	U
ISOPROPYLBENZENE (CUMENE)		U				U	U
M,P-XYLENE (SUM OF ISOMERS)		U				U	U
METHYL ACETATE		U				U	U
METHYL ETHYL KETONE (2-BUTANONE)		U			24%	UJ	UJ
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U				U	U
METHYLCYCLOHEXANE		U				U	U
METHYLENE CHLORIDE		U				U	U
O-XYLENE (1,2-DIMETHYLBENZENE)		U				U	U
STYRENE		U				U	U
TERT-BUTYL METHYL ETHER		U				U	U
TETRACHLOROETHYLENE(PCE)		U				U	U
TOLUENE		U				U	U
TRANS-1,2-DICHLOROETHENE		U				U	U
TRANS-1,3-DICHLOROPROPENE		U				U	U
TRICHLOROETHYLENE (TCE)		U				U	U

	TRICHLOROFLUOROMETHANE		U										U	U
	VINYL CHLORIDE		U										U	U

CHA-2-20130520		Conc	Lab	DV									DV	Comb.
E2324-03	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
4.66G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
87.2	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		UQ										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		UQ						131%				U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		UQ						150%				U	U
	BENZENE		U										U	U
	BROMOCHLOROMETHANE		U										U	U
	BROMODICHLOROMETHANE		U										U	U
	BROMOFORM		U										U	U
	BROMOMETHANE		U										U	U
	CARBON DISULFIDE		U										U	U
	CARBON TETRACHLORIDE		U										U	U
	CHLOROBENZENE		U										U	U
	CHLOROETHANE		U										U	U
	CHLOROFORM		U										U	U
	CHLOROMETHANE		U										U	U
	CIS-1,2-DICHLOROETHYLENE		U										U	U
	CIS-1,3-DICHLOROPROPENE		U										U	U

	CYCLOHEXANE		U									U	U
	DIBROMOCHLOROMETHANE		U									U	U
	DICHLORODIFLUOROMETHANE		U									U	U
	ETHYLBENZENE		U									U	U
	ISOPROPYLBENZENE (CUMENE)		U									U	U
	M,P-XYLENE (SUM OF ISOMERS)		U									U	U
	METHYL ACETATE		U									U	U
	METHYL ETHYL KETONE (2-BUTANONE)		U									U	U
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U									U	U
	METHYLCYCLOHEXANE		U									U	U
	METHYLENE CHLORIDE	3.5	J	3.482202622								J	J
	O-XYLENE (1,2-DIMETHYLBENZENE)		U									U	U
	STYRENE		U									U	U
	TERT-BUTYL METHYL ETHER		U									U	U
	TETRACHLOROETHYLENE(PCE)		U									U	U
	TOLUENE		U									U	U
	TRANS-1,2-DICHLOROETHENE		U									U	U
	TRANS-1,3-DICHLOROPROPENE		U									U	U
	TRICHLOROETHYLENE (TCE)		U									U	U
	TRICHLOROFLUOROMETHANE		U									U	U
	VINYL CHLORIDE		U									U	U

TP-101-20130520		Conc	Lab	DV									DV	Comb.
E2324-04	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**LCS**	**IC**	**CC**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
5.22 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%s =	1,1-DICHLOROETHANE		U										U	U
88.2	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U									60%	UJ	UJ
	1,2,4-TRICHLOROBENZENE		U									38%	UJ	UJ
	1,2-DIBROMO-3-CHLOROPROPANE		U										U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U

1,2-DICHLOROPROPANE	U					25%	UJ	UJ
1,3-DICHLOROBENZENE	U						U	U
1,4-DICHLOROBENZENE	U						U	U
1,4-DIOXANE (P-DIOXANE)	U						U	U
2-HEXANONE	U						U	U
ACETONE	UQ			160%	32%		UJ	UJ
BENZENE	U					23%	UJ	UJ
BROMOCHLOROMETHANE	U						U	U
BROMODICHLOROMETHANE	U						U	U
BROMOFORM	U						U	U
BROMOMETHANE	U						U	U
CARBON DISULFIDE	U						U	U
CARBON TETRACHLORIDE	U						U	U
CHLOROBENZENE	U						U	U
CHLOROETHANE	U						U	U
CHLOROFORM	U						U	U
CHLOROMETHANE	U						U	U
CIS-1,2-DICHLOROETHYLENE	U						U	U
CIS-1,3-DICHLOROPROPENE	U						U	U
CYCLOHEXANE	U						U	U
DIBROMOCHLOROMETHANE	U						U	U
DICHLORODIFLUOROMETHANE	U						U	U
ETHYLBENZENE	U						U	U
ISOPROPYLBENZENE (CUMENE)	U						U	U
M,P-XYLENE (SUM OF ISOMERS)	U						U	U
METHYL ACETATE	U					22%	UJ	UJ
METHYL ETHYL KETONE (2-BUTANONE)	UQ			170%	28%	22%	UJ	UJ
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	UQ			140%			U	U
METHYLCYCLOHEXANE	U						U	U
METHYLENE CHLORIDE	6.2		6.179355523					
O-XYLENE (1,2-DIMETHYLBENZENE)	U						U	U
STYRENE	U						U	U
TERT-BUTYL METHYL ETHER	U						U	U
TETRACHLOROETHYLENE(PCE)	U						U	U
TOLUENE	U						U	U
TRANS-1,2-DICHLOROETHENE	U						U	U

	TRANS-1,3-DICHLOROPROPENE		U										U	U
	TRICHLOROETHYLENE (TCE)		U										U	U
	TRICHLOROFLUOROMETHANE		U									28%	UJ	UJ
	VINYL CHLORIDE		U										U	U

TP-102-20130520		Conc	Lab	DV									DV	Comb.
E2324-05	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
5.63 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
85.8	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		UQ										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		UQ						131%				U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		UQ						150%				U	U
	BENZENE		U										U	U
	BROMOCHLOROMETHANE		U										U	U
	BROMODICHLOROMETHANE		U										U	U
	BROMOFORM		U										U	U
	BROMOMETHANE		U										U	U
	CARBON DISULFIDE		U										U	U
	CARBON TETRACHLORIDE		U										U	U
	CHLOROBENZENE		U										U	U
	CHLOROETHANE		U										U	U
	CHLOROFORM		U										U	U

	CHLOROMETHANE		U									U	U
	CIS-1,2-DICHLOROETHYLENE		U									U	U
	CIS-1,3-DICHLOROPROPENE		U									U	U
	CYCLOHEXANE		U									U	U
	DIBROMOCHLOROMETHANE		U									U	U
	DICHLORODIFLUOROMETHANE		U									U	U
	ETHYLBENZENE		U									U	U
	ISOPROPYLBENZENE (CUMENE)		U									U	U
	M,P-XYLENE (SUM OF ISOMERS)		U									U	U
	METHYL ACETATE		U									U	U
	METHYL ETHYL KETONE (2-BUTANONE)		U									U	U
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U									U	U
	METHYLCYCLOHEXANE		U									U	U
	METHYLENE CHLORIDE	6.9		6.852235982									
	O-XYLENE (1,2-DIMETHYLBENZENE)		U									U	U
	STYRENE		U									U	U
	TERT-BUTYL METHYL ETHER		U									U	U
	TETRACHLOROETHYLENE(PCE)		U									U	U
	TOLUENE		U									U	U
	TRANS-1,2-DICHLOROETHENE		U									U	U
	TRANS-1,3-DICHLOROPROPENE		U									U	U
	TRICHLOROETHYLENE (TCE)		U									U	U
	TRICHLOROFLUOROMETHANE		U									U	U
	VINYL CHLORIDE		U									U	U

TP-103-20130520		Conc	Lab	DV									DV	Comb.
E2324-08	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U									33%	UJ	UJ
2.71 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
84	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U								60%	33%	UJ	UJ
	1,2,4-TRICHLOROBENZENE		U								38%	33%	UJ	UJ

	1,2-DIBROMO-3-CHLOROPROPANE		U					33%	UJ	UJ
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U						U	U
	1,2-DICHLOROBENZENE		U					33%	UJ	UJ
	1,2-DICHLOROETHANE		U						U	U
	1,2-DICHLOROPROPANE		U				25%		UJ	UJ
	1,3-DICHLOROBENZENE		U					33%	UJ	UJ
	1,4-DICHLOROBENZENE		U					33%	UJ	UJ
	1,4-DIOXANE (P-DIOXANE)		U						U	U
	2-HEXANONE		U						U	U
	ACETONE		UQ		160%	32%			U	U
	BENZENE		U				23%		UJ	UJ
	BROMOCHLOROMETHANE		U						U	U
	BROMODICHLOROMETHANE		U						U	U
	BROMOFORM		U						U	U
	BROMOMETHANE		U						U	U
	CARBON DISULFIDE		U						U	U
	CARBON TETRACHLORIDE		U						U	U
	CHLOROBENZENE		U						U	U
	CHLOROETHANE		U						U	U
	CHLOROFORM		U						U	U
	CHLOROMETHANE		U						U	U
	CIS-1,2-DICHLOROETHYLENE		U						U	U
	CIS-1,3-DICHLOROPROPENE		U						U	U
	CYCLOHEXANE		U						U	U
	DIBROMOCHLOROMETHANE		U						U	U
	DICHLORODIFLUOROMETHANE		U						U	U
	ETHYLBENZENE		U						U	U
	ISOPROPYLBENZENE (CUMENE)		U					33%	UJ	UJ
	M,P-XYLENE (SUM OF ISOMERS)		U						U	U
	METHYL ACETATE		U				22%		UJ	UJ
2.71 G	METHYL ETHYL KETONE (2-BUTANONE)		UQ		170%	28%	22%		UJ	UJ
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		UQ		140%				U	U
%S =	METHYLCYCLOHEXANE		U						U	U
84	METHYLENE CHLORIDE	15.1		15.03413866						
	O-XYLENE (1,2-DIMETHYLBENZENE)		U						U	U
	STYRENE		U						U	U

	TERT-BUTYL METHYL ETHER		U									U	U
	TETRACHLOROETHYLENE(PCE)		U									U	U
	TOLUENE		U									U	U
	TRANS-1,2-DICHLOROETHENE		U									U	U
	TRANS-1,3-DICHLOROPROPENE		U									U	U
	TRICHLOROETHYLENE (TCE)		U									U	U
	TRICHLOROFLUOROMETHANE		U							28%		UJ	UJ
	VINYL CHLORIDE		U									U	U

TP-103-20130520RE		Conc	Lab	DV									DV	Comb.
E2324-08RE	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										R	R
	1,1,2,2-TETRACHLOROETHANE		U										R	R
	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										R	R
	1,1,2-TRICHLOROETHANE		U										R	R
	1,1-DICHLOROETHANE		U										R	R
	1,1-DICHLOROETHENE		U										R	R
	1,2,3-TRICHLOROBENZENE		UQ										R	R
	1,2,4-TRICHLOROBENZENE		U										R	R
	1,2-DIBROMO-3-CHLOROPROPANE		UQ						131%				R	R
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										R	R
	1,2-DICHLOROBENZENE		U										R	R
	1,2-DICHLOROETHANE		U										R	R
	1,2-DICHLOROPROPANE		U										R	R
	1,3-DICHLOROBENZENE		U										R	R
	1,4-DICHLOROBENZENE		U										R	R
	1,4-DIOXANE (P-DIOXANE)		U										R	R
	2-HEXANONE		U										R	R
	ACETONE		UQ						150%				R	R
	BENZENE		U										R	R
	BROMOCHLOROMETHANE		U										R	R
	BROMODICHLOROMETHANE		U										R	R
	BROMOFORM		U										R	R
	BROMOMETHANE		U										R	R
	CARBON DISULFIDE		U										R	R

	CARBON TETRACHLORIDE		U									R	R
	CHLOROBENZENE		U									R	R
	CHLOROETHANE		U									R	R
	CHLOROFORM		U									R	R
	CHLOROMETHANE		U									R	R
	CIS-1,2-DICHLOROETHYLENE		U									R	R
	CIS-1,3-DICHLOROPROPENE		U									R	R
	CYCLOHEXANE		U									R	R
	DIBROMOCHLOROMETHANE		U									R	R
	DICHLORODIFLUOROMETHANE		U									R	R
	ETHYLBENZENE		U									R	R
	ISOPROPYLBENZENE (CUMENE)		U									R	R
	M,P-XYLENE (SUM OF ISOMERS)		U									R	R
	METHYL ACETATE		U									R	R
	METHYL ETHYL KETONE (2-BUTANONE)		U									R	R
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U									R	R
	METHYLCYCLOHEXANE		U									R	R
	METHYLENE CHLORIDE	5.5	J									R	R
	O-XYLENE (1,2-DIMETHYLBENZENE)		U									R	R
	STYRENE		U									R	R
	TERT-BUTYL METHYL ETHER		U									R	R
	TETRACHLOROETHYLENE(PCE)		U									R	R
	TOLUENE		U									R	R
	TRANS-1,2-DICHLOROETHENE		U									R	R
	TRANS-1,3-DICHLOROPROPENE		U									R	R
	TRICHLOROETHYLENE (TCE)		U									R	R
	TRICHLOROFLUOROMETHANE		U									R	R
	VINYL CHLORIDE		U									R	R

TP-104-20130520		**Conc**	**Lab**	**DV**									**DV**	**Comb.**
E2324-09	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U									46%	UJ	UJ
4.72 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U

%S =	1,1-DICHLOROETHANE	U					U	U
87	1,1-DICHLOROETHENE	U					U	U
	1,2,3-TRICHLOROBENZENE	U			60%	46%	UJ	UJ
	1,2,4-TRICHLOROBENZENE	U			38%	46%	UJ	UJ
	1,2-DIBROMO-3-CHLOROPROPANE	U				46%	UJ	UJ
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	U					U	U
	1,2-DICHLOROBENZENE	U				46%	UJ	UJ
	1,2-DICHLOROETHANE	U					U	U
	1,2-DICHLOROPROPANE	U			25%		UJ	UJ
	1,3-DICHLOROBENZENE	U				46%	UJ	UJ
	1,4-DICHLOROBENZENE	U				46%	UJ	UJ
	1,4-DIOXANE (P-DIOXANE)	U					U	U
	2-HEXANONE	U					U	U
	ACETONE	UQ	160%	32%			UJ	UJ
	BENZENE	U			23%		UJ	UJ
	BROMOCHLOROMETHANE	U					U	U
	BROMODICHLOROMETHANE	U					U	U
	BROMOFORM	U					U	U
	BROMOMETHANE	U					U	U
	CARBON DISULFIDE	U					U	U
	CARBON TETRACHLORIDE	U					U	U
	CHLOROBENZENE	U					U	U
	CHLOROETHANE	U					U	U
	CHLOROFORM	U					U	U
	CHLOROMETHANE	U					U	U
	CIS-1,2-DICHLOROETHYLENE	U					U	U
	CIS-1,3-DICHLOROPROPENE	U					U	U
	CYCLOHEXANE	U					U	U
	DIBROMOCHLOROMETHANE	U					U	U
	DICHLORODIFLUOROMETHANE	U					U	U
	ETHYLBENZENE	U					U	U
	ISOPROPYLBENZENE (CUMENE)	U				46%	UJ	UJ
	M,P-XYLENE (SUM OF ISOMERS)	U					U	U
	METHYL ACETATE	U			22%		UJ	UJ
	METHYL ETHYL KETONE (2-BUTANONE)	UQ	170%	28%	22%		UJ	UJ
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	UQ	140%				U	U

	METHYLCYCLOHEXANE		U										U	U
	METHYLENE CHLORIDE	5.4	J	5.430547438									J	J
	O-XYLENE (1,2-DIMETHYLBENZENE)		U										U	U
	STYRENE		U										U	U
	TERT-BUTYL METHYL ETHER		U										U	U
	TETRACHLOROETHYLENE(PCE)		U										U	U
	TOLUENE		U										U	U
	TRANS-1,2-DICHLOROETHENE		U										U	U
	TRANS-1,3-DICHLOROPROPENE		U										U	U
	TRICHLOROETHYLENE (TCE)		U										U	U
	TRICHLOROFLUOROMETHANE		U								28%		UJ	UJ
	VINYL CHLORIDE		U										U	U

TP-104-20130520		Conc	Lab	DV									DV	Comb.
E2324-09RE	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										R	R
	1,1,2,2-TETRACHLOROETHANE		U										R	R
	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										R	R
	1,1,2-TRICHLOROETHANE		U										R	R
	1,1-DICHLOROETHANE		U										R	R
	1,1-DICHLOROETHENE		U										R	R
	1,2,3-TRICHLOROBENZENE		UQ										R	R
	1,2,4-TRICHLOROBENZENE		U										R	R
	1,2-DIBROMO-3-CHLOROPROPANE		UQ						131%				R	R
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										R	R
	1,2-DICHLOROBENZENE		U										R	R
	1,2-DICHLOROETHANE		U										R	R
	1,2-DICHLOROPROPANE		U										R	R
	1,3-DICHLOROBENZENE		U										R	R
	1,4-DICHLOROBENZENE		U										R	R
	1,4-DIOXANE (P-DIOXANE)		U										R	R
	2-HEXANONE		U										R	R
	ACETONE		UQ						150%				R	R
	BENZENE		U										R	R
	BROMOCHLOROMETHANE		U										R	R

	BROMODICHLOROMETHANE		U									R	R
	BROMOFORM		U									R	R
	BROMOMETHANE		U									R	R
	CARBON DISULFIDE		U									R	R
	CARBON TETRACHLORIDE		U									R	R
	CHLOROBENZENE		U									R	R
	CHLOROETHANE		U									R	R
	CHLOROFORM		U									R	R
	CHLOROMETHANE		U									R	R
	CIS-1,2-DICHLOROETHYLENE		U									R	R
	CIS-1,3-DICHLOROPROPENE		U									R	R
	CYCLOHEXANE		U									R	R
	DIBROMOCHLOROMETHANE		U									R	R
	DICHLORODIFLUOROMETHANE		U									R	R
	ETHYLBENZENE		U									R	R
	ISOPROPYLBENZENE (CUMENE)		U									R	R
	M,P-XYLENE (SUM OF ISOMERS)		U									R	R
	METHYL ACETATE		U									R	R
	METHYL ETHYL KETONE (2-BUTANONE)		U									R	R
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U									R	R
	METHYLCYCLOHEXANE		U									R	R
	METHYLENE CHLORIDE	7.4										R	R
	O-XYLENE (1,2-DIMETHYLBENZENE)		U									R	R
	STYRENE		U									R	R
	TERT-BUTYL METHYL ETHER		U									R	R
	TETRACHLOROETHYLENE(PCE)		U									R	R
	TOLUENE		U									R	R
	TRANS-1,2-DICHLOROETHENE		U									R	R
	TRANS-1,3-DICHLOROPROPENE		U									R	R
	TRICHLOROETHYLENE (TCE)		U									R	R
	TRICHLOROFLUOROMETHANE		U									R	R
	VINYL CHLORIDE		U									R	R

TP-105-20130520		**Conc**	**Lab**	**DV**									**DV**	**Comb.**
E2324-10	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**

	1,1,1-TRICHLOROETHANE	U		U	U
	1,1,2,2-TETRACHLOROETHANE	U		U	U
5.08 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	U		U	U
	1,1,2-TRICHLOROETHANE	U		U	U
%S =	1,1-DICHLOROETHANE	U		U	U
84.1	1,1-DICHLOROETHENE	U		U	U
	1,2,3-TRICHLOROBENZENE	UQ		U	U
	1,2,4-TRICHLOROBENZENE	U		U	U
	1,2-DIBROMO-3-CHLOROPROPANE	UQ	131%	U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	U		U	U
	1,2-DICHLOROBENZENE	U		U	U
	1,2-DICHLOROETHANE	U		U	U
	1,2-DICHLOROPROPANE	U		U	U
	1,3-DICHLOROBENZENE	U		U	U
	1,4-DICHLOROBENZENE	U		U	U
	1,4-DIOXANE (P-DIOXANE)	U		U	U
	2-HEXANONE	U		U	U
	ACETONE	UQ	150%	U	U
	BENZENE	U		U	U
	BROMOCHLOROMETHANE	U		U	U
	BROMODICHLOROMETHANE	U		U	U
	BROMOFORM	U		U	U
	BROMOMETHANE	U		U	U
	CARBON DISULFIDE	U		U	U
	CARBON TETRACHLORIDE	U		U	U
	CHLOROBENZENE	U		U	U
	CHLOROETHANE	U		U	U
	CHLOROFORM	U		U	U
	CHLOROMETHANE	U		U	U
	CIS-1,2-DICHLOROETHYLENE	U		U	U
	CIS-1,3-DICHLOROPROPENE	U		U	U
	CYCLOHEXANE	U		U	U
	DIBROMOCHLOROMETHANE	U		U	U
	DICHLORODIFLUOROMETHANE	U		U	U
	ETHYLBENZENE	U		U	U
	ISOPROPYLBENZENE (CUMENE)	U		U	U

	M,P-XYLENE (SUM OF ISOMERS)		U										U	U
	METHYL ACETATE		U										U	U
	METHYL ETHYL KETONE (2-BUTANONE)		U										U	U
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U										U	U
	METHYLCYCLOHEXANE		U										U	U
	METHYLENE CHLORIDE	4.8	J	4.845188049									J	J
	O-XYLENE (1,2-DIMETHYLBENZENE)		U										U	U
	STYRENE		U										U	U
	TERT-BUTYL METHYL ETHER		U										U	U
	TETRACHLOROETHYLENE(PCE)		U										U	U
	TOLUENE		U										U	U
	TRANS-1,2-DICHLOROETHENE		U										U	U
	TRANS-1,3-DICHLOROPROPENE		U										U	U
	TRICHLOROETHYLENE (TCE)		U										U	U
	TRICHLOROFLUOROMETHANE		U										U	U
	VINYL CHLORIDE		U										U	U
TP-106-20130520		**Conc**	**Lab**	**DV**									**DV**	**Comb.**
E2324-11	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
5.67 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
88.1	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		UQ										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		UQ						131%				U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U

2-HEXANONE		U		U	U
ACETONE		UQ	150%	U	U
BENZENE		U		U	U
BROMOCHLOROMETHANE		U		U	U
BROMODICHLOROMETHANE		U		U	U
BROMOFORM		U		U	U
BROMOMETHANE		U		U	U
CARBON DISULFIDE		U		U	U
CARBON TETRACHLORIDE		U		U	U
CHLOROBENZENE		U		U	U
CHLOROETHANE		U		U	U
CHLOROFORM		U		U	U
CHLOROMETHANE		U		U	U
CIS-1,2-DICHLOROETHYLENE		U		U	U
CIS-1,3-DICHLOROPROPENE		U		U	U
CYCLOHEXANE		U		U	U
DIBROMOCHLOROMETHANE		U		U	U
DICHLORODIFLUOROMETHANE		U		U	U
ETHYLBENZENE		U		U	U
ISOPROPYLBENZENE (CUMENE)		U		U	U
M,P-XYLENE (SUM OF ISOMERS)		U		U	U
METHYL ACETATE		U		U	U
METHYL ETHYL KETONE (2-BUTANONE)		U		U	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U		U	U
METHYLCYCLOHEXANE		U		U	U
METHYLENE CHLORIDE	3.5	J	3.543352011	J	J
O-XYLENE (1,2-DIMETHYLBENZENE)		U		U	U
STYRENE		U		U	U
TERT-BUTYL METHYL ETHER		U		U	U
TETRACHLOROETHYLENE(PCE)		U		U	U
TOLUENE		U		U	U
TRANS-1,2-DICHLOROETHENE		U		U	U
TRANS-1,3-DICHLOROPROPENE		U		U	U
TRICHLOROETHYLENE (TCE)		U		U	U
TRICHLOROFLUOROMETHANE		U		U	U
VINYL CHLORIDE		U		U	U

GP-01A-20130520		Conc	Lab	DV									DV	Comb.
E2324-12	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
4.82 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
84.6	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		UQ										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		UQ						131%				U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		UQ						150%				U	U
	BENZENE		U										U	U
	BROMOCHLOROMETHANE		U										U	U
	BROMODICHLOROMETHANE		U										U	U
	BROMOFORM		U										U	U
	BROMOMETHANE		U										U	U
	CARBON DISULFIDE		U										U	U
	CARBON TETRACHLORIDE		U										U	U
	CHLOROBENZENE		U										U	U
	CHLOROETHANE		U										U	U
	CHLOROFORM		U										U	U
	CHLOROMETHANE		U										U	U
	CIS-1,2-DICHLOROETHYLENE		U										U	U
	CIS-1,3-DICHLOROPROPENE		U										U	U
	CYCLOHEXANE		U										U	U

	DIBROMOCHLOROMETHANE		U										U	U
	DICHLORODIFLUOROMETHANE		U										U	U
	ETHYLBENZENE		U										U	U
	ISOPROPYLBENZENE (CUMENE)		U										U	U
	M,P-XYLENE (SUM OF ISOMERS)		U										U	U
	METHYL ACETATE		U										U	U
	METHYL ETHYL KETONE (2-BUTANONE)		U										U	U
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U										U	U
	METHYLCYCLOHEXANE		U										U	U
	METHYLENE CHLORIDE	4.9	J	4.880178139									J	J
	O-XYLENE (1,2-DIMETHYLBENZENE)		U										U	U
	STYRENE		U										U	U
	TERT-BUTYL METHYL ETHER		U										U	U
	TETRACHLOROETHYLENE(PCE)		U										U	U
	TOLUENE		U										U	U
	TRANS-1,2-DICHLOROETHENE		U										U	U
	TRANS-1,3-DICHLOROPROPENE		U										U	U
	TRICHLOROETHYLENE (TCE)		U										U	U
	TRICHLOROFLUOROMETHANE		U										U	U
	VINYL CHLORIDE		U										U	U

GP-01B-20130520		Conc	Lab	DV									DV	Comb.
E2324-13	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
7.25 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
84.3	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		UQ										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		UQ						131%				U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U

1,3-DICHLOROBENZENE		U			U	U
1,4-DICHLOROBENZENE		U			U	U
1,4-DIOXANE (P-DIOXANE)		U			U	U
2-HEXANONE		U			U	U
ACETONE	12.9	JQ	12.90137849	150%	J	J
BENZENE		U			U	U
BROMOCHLOROMETHANE		U			U	U
BROMODICHLOROMETHANE		U			U	U
BROMOFORM		U			U	U
BROMOMETHANE		U			U	U
CARBON DISULFIDE		U			U	U
CARBON TETRACHLORIDE		U			U	U
CHLOROBENZENE		U			U	U
CHLOROETHANE		U			U	U
CHLOROFORM		U			U	U
CHLOROMETHANE		U			U	U
CIS-1,2-DICHLOROETHYLENE		U			U	U
CIS-1,3-DICHLOROPROPENE		U			U	U
CYCLOHEXANE		U			U	U
DIBROMOCHLOROMETHANE		U			U	U
DICHLORODIFLUOROMETHANE		U			U	U
ETHYLBENZENE		U			U	U
ISOPROPYLBENZENE (CUMENE)		U			U	U
M,P-XYLENE (SUM OF ISOMERS)		U			U	U
METHYL ACETATE		U			U	U
METHYL ETHYL KETONE (2-BUTANONE)		U			U	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U			U	U
METHYLCYCLOHEXANE		U			U	U
METHYLENE CHLORIDE	2.2	J	2.225221909		J	J
O-XYLENE (1,2-DIMETHYLBENZENE)		U			U	U
STYRENE		U			U	U
TERT-BUTYL METHYL ETHER		U			U	U
TETRACHLOROETHYLENE(PCE)		U			U	U
TOLUENE		U			U	U
TRANS-1,2-DICHLOROETHENE		U			U	U
TRANS-1,3-DICHLOROPROPENE		U			U	U

	TRICHLOROETHYLENE (TCE)		U										U	U
	TRICHLOROFLUOROMETHANE		U										U	U
	VINYL CHLORIDE		U										U	U

GP-02A-20130520		Conc	Lab	DV									DV	Comb.
E2324-14	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
5.99G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
86.6	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		U										U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		UQ							180%			U	U
	BENZENE		U										U	U
	BROMOCHLOROMETHANE		U										U	U
	BROMODICHLOROMETHANE		U										U	U
	BROMOFORM		U										U	U
	BROMOMETHANE		U								27%		UJ	UJ
	CARBON DISULFIDE		U										U	U
	CARBON TETRACHLORIDE		U										U	U
	CHLOROBENZENE		U										U	U
	CHLOROETHANE		U										U	U
	CHLOROFORM		U										U	U
	CHLOROMETHANE		U										U	U
	CIS-1,2-DICHLOROETHYLENE		U										U	U

	CIS-1,3-DICHLOROPROPENE		U										U	U
	CYCLOHEXANE		U										U	U
	DIBROMOCHLOROMETHANE		U										U	U
	DICHLORODIFLUOROMETHANE		U										U	U
	ETHYLBENZENE		U										U	U
	ISOPROPYLBENZENE (CUMENE)		U										U	U
	M,P-XYLENE (SUM OF ISOMERS)		U										U	U
	METHYL ACETATE		U										U	U
	METHYL ETHYL KETONE (2-BUTANONE)		UQ							170%			U	U
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U										U	U
	METHYLCYCLOHEXANE		U										U	U
	METHYLENE CHLORIDE	3.8	J	3.845901753									J	J
	O-XYLENE (1,2-DIMETHYLBENZENE)		U										U	U
	STYRENE		U										U	U
	TERT-BUTYL METHYL ETHER		U										U	U
	TETRACHLOROETHYLENE(PCE)		U										U	U
	TOLUENE		U										U	U
	TRANS-1,2-DICHLOROETHENE		U										U	U
	TRANS-1,3-DICHLOROPROPENE		U										U	U
	TRICHLOROETHYLENE (TCE)		U										U	U
	TRICHLOROFLUOROMETHANE		U										U	U
	VINYL CHLORIDE		U										U	U

GP-02B-20130520		Conc	Lab	DV									DV	Comb.
E2324-15	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U									22%	R	R
6.1 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
91.2	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U									22%	R	R
	1,2,4-TRICHLOROBENZENE		U									22%	R	R
	1,2-DIBROMO-3-CHLOROPROPANE		U									22%	R	R
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U

1,2-DICHLOROBENZENE		U		22%	R	R
1,2-DICHLOROETHANE		U			U	U
1,2-DICHLOROPROPANE		U			U	U
1,3-DICHLOROBENZENE		U		22%	R	R
1,4-DICHLOROBENZENE		U		22%	R	R
1,4-DIOXANE (P-DIOXANE)		U			U	U
2-HEXANONE		U			U	U
ACETONE		U			U	U
BENZENE		U			U	U
BROMOCHLOROMETHANE		U			U	U
BROMODICHLOROMETHANE		U			U	U
BROMOFORM		U		21%	R	R
BROMOMETHANE		U			U	U
CARBON DISULFIDE		U			U	U
CARBON TETRACHLORIDE		U			U	U
CHLOROBENZENE		U			U	U
CHLOROETHANE		U		22%	R	R
CHLOROFORM		U			U	U
CHLOROMETHANE		U			U	U
CIS-1,2-DICHLOROETHYLENE		U			U	U
CIS-1,3-DICHLOROPROPENE		U			U	U
CYCLOHEXANE		U			U	U
DIBROMOCHLOROMETHANE		U			U	U
DICHLORODIFLUOROMETHANE		U			U	U
ETHYLBENZENE		U			U	U
ISOPROPYLBENZENE (CUMENE)		U		22%	R	R
M,P-XYLENE (SUM OF ISOMERS)		U			U	U
METHYL ACETATE		U		22%	UJ	UJ
METHYL ETHYL KETONE (2-BUTANONE)		U		29%	UJ	UJ
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U		38%	UJ	UJ
METHYLCYCLOHEXANE		U			U	U
METHYLENE CHLORIDE	10.1		10.05716135			
O-XYLENE (1,2-DIMETHYLBENZENE)		U			U	U
STYRENE		U			U	U
TERT-BUTYL METHYL ETHER		U			U	U
TETRACHLOROETHYLENE(PCE)		U			U	U

	TOLUENE		U									U	U
	TRANS-1,2-DICHLOROETHENE		U									U	U
	TRANS-1,3-DICHLOROPROPENE		U									U	U
	TRICHLOROETHYLENE (TCE)		U									U	U
	TRICHLOROFLUOROMETHANE		U									U	U
	VINYL CHLORIDE		U									U	U

GP-03A-20130520		Conc	Lab	DV									DV	Comb.
E2324-16	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U									45%	UJ	UJ
4.33 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
78.9	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U									45%	UJ	UJ
	1,2,4-TRICHLOROBENZENE		U									45%	UJ	UJ
	1,2-DIBROMO-3-CHLOROPROPANE		U									45%	UJ	UJ
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U									45%	UJ	UJ
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U									45%	UJ	UJ
	1,4-DICHLOROBENZENE		U									45%	UJ	UJ
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		UQ					180%					U	U
	BENZENE		U										U	U
	BROMOCHLOROMETHANE		U										U	U
	BROMODICHLOROMETHANE		U										U	U
	BROMOFORM		U										U	U
	BROMOMETHANE		U								27%		UJ	UJ
	CARBON DISULFIDE		U										U	U
	CARBON TETRACHLORIDE		U										U	U
	CHLOROBENZENE		U										U	U

	CHLOROETHANE		U										U	U
	CHLOROFORM		U										U	U
	CHLOROMETHANE		U										U	U
	CIS-1,2-DICHLOROETHYLENE		U										U	U
	CIS-1,3-DICHLOROPROPENE		U										U	U
	CYCLOHEXANE		U										U	U
	DIBROMOCHLOROMETHANE		U										U	U
	DICHLORODIFLUOROMETHANE		U										U	U
	ETHYLBENZENE		U										U	U
	ISOPROPYLBENZENE (CUMENE)		U									45%	UJ	UJ
	M,P-XYLENE (SUM OF ISOMERS)		U										U	U
	METHYL ACETATE		U										U	U
	METHYL ETHYL KETONE (2-BUTANONE)		UQ					170%					U	U
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U										U	U
	METHYLCYCLOHEXANE		U										U	U
	METHYLENE CHLORIDE	5.9	J	5.898073101									J	J
	O-XYLENE (1,2-DIMETHYLBENZENE)		U										U	U
	STYRENE		U										U	U
	TERT-BUTYL METHYL ETHER		U										U	U
	TETRACHLOROETHYLENE(PCE)		U										U	U
	TOLUENE		U										U	U
	TRANS-1,2-DICHLOROETHENE		U										U	U
	TRANS-1,3-DICHLOROPROPENE		U										U	U
	TRICHLOROETHYLENE (TCE)		U										U	U
	TRICHLOROFLUOROMETHANE		U										U	U
	VINYL CHLORIDE		U										U	U

GP-03A-20130520 RE		Conc	Lab	DV									DV	Comb.
E2324-16RE	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										R	R
Do Not Use	1,1,2,2-TETRACHLOROETHANE		U										R	R
	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										R	R
	1,1,2-TRICHLOROETHANE		U										R	R
	1,1-DICHLOROETHANE		U										R	R
	1,1-DICHLOROETHENE		U										R	R

1,2,3-TRICHLOROBENZENE		U		R	R
1,2,4-TRICHLOROBENZENE		U		R	R
1,2-DIBROMO-3-CHLOROPROPANE		U		R	R
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U		R	R
1,2-DICHLOROBENZENE		U		R	R
1,2-DICHLOROETHANE		U		R	R
1,2-DICHLOROPROPANE		U		R	R
1,3-DICHLOROBENZENE		U		R	R
1,4-DICHLOROBENZENE		U		R	R
1,4-DIOXANE (P-DIOXANE)		U		R	R
2-HEXANONE		U		R	R
ACETONE		U	160%	R	R
BENZENE		U		R	R
BROMOCHLOROMETHANE		U		R	R
BROMODICHLOROMETHANE		U		R	R
BROMOFORM		U		R	R
BROMOMETHANE		U	147%	R	R
CARBON DISULFIDE		U		R	R
CARBON TETRACHLORIDE		U		R	R
CHLOROBENZENE		U		R	R
CHLOROETHANE		U	136%	R	R
CHLOROFORM		U		R	R
CHLOROMETHANE		U		R	R
CIS-1,2-DICHLOROETHYLENE		U		R	R
CIS-1,3-DICHLOROPROPENE		U		R	R
CYCLOHEXANE		U		R	R
DIBROMOCHLOROMETHANE		U		R	R
DICHLORODIFLUOROMETHANE		U		R	R
ETHYLBENZENE		U		R	R
ISOPROPYLBENZENE (CUMENE)		U		R	R
M,P-XYLENE (SUM OF ISOMERS)		U		R	R
METHYL ACETATE		U		R	R
METHYL ETHYL KETONE (2-BUTANONE)		U	150%	R	R
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U		R	R
METHYLCYCLOHEXANE		U		R	R
METHYLENE CHLORIDE	11.2			R	R

	O-XYLENE (1,2-DIMETHYLBENZENE)		U									R	R
	STYRENE		U									R	R
	TERT-BUTYL METHYL ETHER		U									R	R
	TETRACHLOROETHYLENE(PCE)		U									R	R
	TOLUENE		U									R	R
	TRANS-1,2-DICHLOROETHENE		U									R	R
	TRANS-1,3-DICHLOROPROPENE		U									R	R
	TRICHLOROETHYLENE (TCE)		U									R	R
	TRICHLOROFLUOROMETHANE		U									R	R
	VINYL CHLORIDE		UQ									R	R

GP-03B-20130520		Conc	Lab	DV									DV	Comb.
E2324-17	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
4.79 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
80.7	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		U										U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		UQ						180%				U	U
	BENZENE		U										U	U
	BROMOCHLOROMETHANE		U										U	U
	BROMODICHLOROMETHANE		U										U	U
	BROMOFORM		U										U	U

	BROMOMETHANE		U								27%		UJ	UJ
	CARBON DISULFIDE		U										U	U
	CARBON TETRACHLORIDE		U										U	U
	CHLOROBENZENE		U										U	U
	CHLOROETHANE		U										U	U
	CHLOROFORM		U										U	U
	CHLOROMETHANE		U										U	U
	CIS-1,2-DICHLOROETHYLENE		U										U	U
	CIS-1,3-DICHLOROPROPENE		U										U	U
	CYCLOHEXANE		U										U	U
	DIBROMOCHLOROMETHANE		U										U	U
	DICHLORODIFLUOROMETHANE		U										U	U
	ETHYLBENZENE		U										U	U
	ISOPROPYLBENZENE (CUMENE)		U										U	U
	M,P-XYLENE (SUM OF ISOMERS)		U										U	U
	METHYL ACETATE		U										U	U
	METHYL ETHYL KETONE (2-BUTANONE)		UQ		170%								U	U
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U										U	U
	METHYLCYCLOHEXANE		U										U	U
	METHYLENE CHLORIDE	6.2	J	6.247526212									J	J
	O-XYLENE (1,2-DIMETHYLBENZENE)		U										U	U
	STYRENE		U										U	U
	TERT-BUTYL METHYL ETHER		U										U	U
	TETRACHLOROETHYLENE(PCE)		U										U	U
	TOLUENE		U										U	U
	TRANS-1,2-DICHLOROETHENE		U										U	U
	TRANS-1,3-DICHLOROPROPENE		U										U	U
	TRICHLOROETHYLENE (TCE)		U										U	U
	TRICHLOROFLUOROMETHANE		U										U	U
	VINYL CHLORIDE		U										U	U

GP-04A-20130520		Conc	Lab	DV									DV	Comb.
E2324-18	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U

3.27 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	U		U	U
	1,1,2-TRICHLOROETHANE	U		U	U
%S =	1,1-DICHLOROETHANE	U		U	U
68.3	1,1-DICHLOROETHENE	U		U	U
	1,2,3-TRICHLOROBENZENE	U		U	U
	1,2,4-TRICHLOROBENZENE	U		U	U
	1,2-DIBROMO-3-CHLOROPROPANE	U		U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	U		U	U
	1,2-DICHLOROBENZENE	U		U	U
	1,2-DICHLOROETHANE	U		U	U
	1,2-DICHLOROPROPANE	U		U	U
	1,3-DICHLOROBENZENE	U		U	U
	1,4-DICHLOROBENZENE	U		U	U
	1,4-DIOXANE (P-DIOXANE)	U		U	U
	2-HEXANONE	U		U	U
	ACETONE	UQ	180%	U	U
	BENZENE	U		U	U
	BROMOCHLOROMETHANE	U		U	U
	BROMODICHLOROMETHANE	U		U	U
	BROMOFORM	U		U	U
	BROMOMETHANE	U	27%	UJ	UJ
	CARBON DISULFIDE	U		U	U
	CARBON TETRACHLORIDE	U		U	U
	CHLOROBENZENE	U		U	U
	CHLOROETHANE	U		U	U
	CHLOROFORM	U		U	U
	CHLOROMETHANE	U		U	U
	CIS-1,2-DICHLOROETHYLENE	U		U	U
	CIS-1,3-DICHLOROPROPENE	U		U	U
	CYCLOHEXANE	U		U	U
	DIBROMOCHLOROMETHANE	U		U	U
	DICHLORODIFLUOROMETHANE	U		U	U
	ETHYLBENZENE	U		U	U
	ISOPROPYLBENZENE (CUMENE)	U		U	U
	M,P-XYLENE (SUM OF ISOMERS)	U		U	U
	METHYL ACETATE	U		U	U

	METHYL ETHYL KETONE (2-BUTANONE)		UQ					170%				U	U
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U									U	U
	METHYLCYCLOHEXANE		U									U	U
	METHYLENE CHLORIDE	13		13.00701618									
	O-XYLENE (1,2-DIMETHYLBENZENE)		U									U	U
	STYRENE		U									U	U
	TERT-BUTYL METHYL ETHER		U									U	U
	TETRACHLOROETHYLENE(PCE)		U									U	U
	TOLUENE		U									U	U
	TRANS-1,2-DICHLOROETHENE		U									U	U
	TRANS-1,3-DICHLOROPROPENE		U									U	U
	TRICHLOROETHYLENE (TCE)		U									U	U
	TRICHLOROFLUOROMETHANE		U									U	U
	VINYL CHLORIDE		U									U	U

GP-04B-20130522		Conc	Lab	DV									DV	Comb.
E2324-19	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
6.52 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
74.7	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		U										U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		UQ					180%					U	U

BENZENE		U				U	U
BROMOCHLOROMETHANE		U				U	U
BROMODICHLOROMETHANE		U				U	U
BROMOFORM		U				U	U
BROMOMETHANE		U			27%	UJ	UJ
CARBON DISULFIDE		U				U	U
CARBON TETRACHLORIDE		U				U	U
CHLOROBENZENE		U				U	U
CHLOROETHANE		U				U	U
CHLOROFORM		U				U	U
CHLOROMETHANE		U				U	U
CIS-1,2-DICHLOROETHYLENE		U				U	U
CIS-1,3-DICHLOROPROPENE		U				U	U
CYCLOHEXANE		U				U	U
DIBROMOCHLOROMETHANE		U				U	U
DICHLORODIFLUOROMETHANE		U				U	U
ETHYLBENZENE		U				U	U
ISOPROPYLBENZENE (CUMENE)		U				U	U
M,P-XYLENE (SUM OF ISOMERS)		U				U	U
METHYL ACETATE		U				U	U
METHYL ETHYL KETONE (2-BUTANONE)		UQ			170%	U	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U				U	U
METHYLCYCLOHEXANE		U				U	U
METHYLENE CHLORIDE	4.6	J	4.588907778			J	J
O-XYLENE (1,2-DIMETHYLBENZENE)		U				U	U
STYRENE		U				U	U
TERT-BUTYL METHYL ETHER		U				U	U
TETRACHLOROETHYLENE(PCE)		U				U	U
TOLUENE		U				U	U
TRANS-1,2-DICHLOROETHENE		U				U	U
TRANS-1,3-DICHLOROPROPENE		U				U	U
TRICHLOROETHYLENE (TCE)		U				U	U
TRICHLOROFLUOROMETHANE		U				U	U
VINYL CHLORIDE		U				U	U

TP-107-20130521	**Conc**	**Lab**	**DV**		**DV**	**Comb.**

E2324-20	Parameter	ug/kg	Qual	Conc.	MB	TB	Surr	MS	LCS	IC	CC	IS	Qual	Qual
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
5.15 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
88.4	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		U										U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		UQ						180%				U	U
	BENZENE		U										U	U
	BROMOCHLOROMETHANE		U										U	U
	BROMODICHLOROMETHANE		U										U	U
	BROMOFORM		U										U	U
	BROMOMETHANE		U								27%		UJ	UJ
	CARBON DISULFIDE		U										U	U
	CARBON TETRACHLORIDE		U										U	U
	CHLOROBENZENE		U										U	U
	CHLOROETHANE		U										U	U
	CHLOROFORM		U										U	U
	CHLOROMETHANE		U										U	U
	CIS-1,2-DICHLOROETHYLENE		U										U	U
	CIS-1,3-DICHLOROPROPENE		U										U	U
	CYCLOHEXANE		U										U	U
	DIBROMOCHLOROMETHANE		U										U	U
	DICHLORODIFLUOROMETHANE		U										U	U
	ETHYLBENZENE		U										U	U

	ISOPROPYLBENZENE (CUMENE)		U										U	U
	M,P-XYLENE (SUM OF ISOMERS)		U										U	U
	METHYL ACETATE		U										U	U
	METHYL ETHYL KETONE (2-BUTANONE)		UQ							170%			U	U
	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U										U	U
	METHYLCYCLOHEXANE		U										U	U
	METHYLENE CHLORIDE	4.5	J	4.524886878									J	J
	O-XYLENE (1,2-DIMETHYLBENZENE)		U										U	U
	STYRENE		U										U	U
	TERT-BUTYL METHYL ETHER		U										U	U
	TETRACHLOROETHYLENE(PCE)		U										U	U
	TOLUENE		U										U	U
	TRANS-1,2-DICHLOROETHENE		U										U	U
	TRANS-1,3-DICHLOROPROPENE		U										U	U
	TRICHLOROETHYLENE (TCE)		U										U	U
	TRICHLOROFLUOROMETHANE		U										U	U
	VINYL CHLORIDE		U										U	U

TP-108-20130521		Conc	Lab	DV									DV	Comb.
E2324-21	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
5.32 g	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
80.8	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		U										U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U

1,4-DIOXANE (P-DIOXANE)		U				U	U
2-HEXANONE		U				U	U
ACETONE	37.4	Q	37.37298072	180%		J	J
BENZENE		U				U	U
BROMOCHLOROMETHANE		U				U	U
BROMODICHLOROMETHANE		U				U	U
BROMOFORM		U				U	U
BROMOMETHANE		U			27%	UJ	UJ
CARBON DISULFIDE		U				U	U
CARBON TETRACHLORIDE		U				U	U
CHLOROBENZENE		U				U	U
CHLOROETHANE		U				U	U
CHLOROFORM		U				U	U
CHLOROMETHANE		U				U	U
CIS-1,2-DICHLOROETHYLENE		U				U	U
CIS-1,3-DICHLOROPROPENE		U				U	U
CYCLOHEXANE		U				U	U
DIBROMOCHLOROMETHANE		U				U	U
DICHLORODIFLUOROMETHANE		U				U	U
ETHYLBENZENE		U				U	U
ISOPROPYLBENZENE (CUMENE)		U				U	U
M,P-XYLENE (SUM OF ISOMERS)		U				U	U
METHYL ACETATE		U				U	U
METHYL ETHYL KETONE (2-BUTANONE)		UQ		170%		U	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U				U	U
METHYLCYCLOHEXANE		U				U	U
METHYLENE CHLORIDE	2.1	J	2.140251619			J	J
O-XYLENE (1,2-DIMETHYLBENZENE)		U				U	U
STYRENE		U				U	U
TERT-BUTYL METHYL ETHER		U				U	U
TETRACHLOROETHYLENE(PCE)		U				U	U
TOLUENE		U				U	U
TRANS-1,2-DICHLOROETHENE		U				U	U
TRANS-1,3-DICHLOROPROPENE		U				U	U
TRICHLOROETHYLENE (TCE)		U				U	U
TRICHLOROFLUOROMETHANE		U				U	U

	VINYL CHLORIDE		U										U	U

TP-109-20130521		Conc	Lab	DV									DV	Comb.
E2324-22	**Parameter**	**ug/kg**	**Qual**	**Conc.**	**MB**	**TB**	**Surr**	**MS**	**LCS**	**IC**	**CC**	**IS**	**Qual**	**Qual**
	1,1,1-TRICHLOROETHANE		U										U	U
	1,1,2,2-TETRACHLOROETHANE		U										U	U
3.62 G	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		U										U	U
	1,1,2-TRICHLOROETHANE		U										U	U
%S =	1,1-DICHLOROETHANE		U										U	U
81.7	1,1-DICHLOROETHENE		U										U	U
	1,2,3-TRICHLOROBENZENE		U										U	U
	1,2,4-TRICHLOROBENZENE		U										U	U
	1,2-DIBROMO-3-CHLOROPROPANE		U										U	U
	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)		U										U	U
	1,2-DICHLOROBENZENE		U										U	U
	1,2-DICHLOROETHANE		U										U	U
	1,2-DICHLOROPROPANE		U										U	U
	1,3-DICHLOROBENZENE		U										U	U
	1,4-DICHLOROBENZENE		U										U	U
	1,4-DIOXANE (P-DIOXANE)		U										U	U
	2-HEXANONE		U										U	U
	ACETONE		U										U	U
	BENZENE		U										U	U
	BROMOCHLOROMETHANE		U										U	U
	BROMODICHLOROMETHANE		U										U	U
	BROMOFORM		U										U	U
	BROMOMETHANE		U										U	U
	CARBON DISULFIDE		U										U	U
	CARBON TETRACHLORIDE		U										U	U
	CHLOROBENZENE		U										U	U
	CHLOROETHANE		U										U	U
	CHLOROFORM		U										U	U
	CHLOROMETHANE		U										U	U
	CIS-1,2-DICHLOROETHYLENE		U										U	U
	CIS-1,3-DICHLOROPROPENE		U										U	U
	CYCLOHEXANE		U										U	U

DIBROMOCHLOROMETHANE		U			U	U
DICHLORODIFLUOROMETHANE		U			U	U
ETHYLBENZENE		U			U	U
ISOPROPYLBENZENE (CUMENE)		U			U	U
M,P-XYLENE (SUM OF ISOMERS)		U			U	U
METHYL ACETATE		U		22%	UJ	UJ
METHYL ETHYL KETONE (2-BUTANONE)		U			U	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)		U		26%	UJ	UJ
METHYLCYCLOHEXANE		U			U	U
METHYLENE CHLORIDE	3.7	J	3.668589436		J	J
O-XYLENE (1,2-DIMETHYLBENZENE)		U			U	U
STYRENE		U			U	U
TERT-BUTYL METHYL ETHER		U			U	U
TETRACHLOROETHYLENE(PCE)		U			U	U
TOLUENE		U			U	U
TRANS-1,2-DICHLOROETHENE		U			U	U
TRANS-1,3-DICHLOROPROPENE		U			U	U
TRICHLOROETHYLENE (TCE)		U			U	U
TRICHLOROFLUOROMETHANE		U			U	U
VINYL CHLORIDE		UQ			U	U

SUMMARY OF THE ANALYTICAL DATA VALIDATION
9 Owasco Street, Auburn, NY

Soil and Water Semivolatile Organic Analyses by Method SW846 8270B
Samples Collected: May 20, 2013
Samples Received at Chemtech on May 22, 2013
Sample Delivery Group: E2324
Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Matrix
E2324-02	EB-2	Water
E2324-03	CHA-2	Soil
E2324-04	TP-101	Soil
E2324-05	TP-102	Soil
E2324-06	E2324-05MS	Soil
E2324-07	E2324-05MSD	Soil
E2324-08	TP-103	Soil
E2324-09	TP-104	Soil
E2324-10	TP-105	Soil
E2324-11	TP-106	Soil
E2324-12	GP-01A	Soil
E2324-13	GP-01B	Soil
E2324-14	GP-02A	Soil
E2324-15	GP-02B	Soil
E2324-16	GP-03A	Soil
E2324-17	GP-03B	Soil
E2324-18	GP-04A	Soil
E2324-19	GP-04B	Soil
E2324-20	TP-107	Soil
E2324-21	TP-108	Soil
E2324-22	TP-109	Soil
E2324-22 DL	TP-109 DL	Soil

Soil and water samples were validated for analyses of semivolatile organics by the US EPA Region II data validation SOP (HW-22, Revision 3). Data were reviewed for usability according to the following criteria:

* - Data Completeness
* - GC/MS Tuning
* - Holding Times
- Calibrations
* - Laboratory Blanks
- Laboratory Control Sample
- Surrogate Compound Recoveries
* - Internal Standard Recoveries
- Matrix Spike / Matrix Spike Duplicate
- Field Blank
* - Compound Identification
* - Compound Quantitation

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

The problems with the surrogate recoveries, calibrations blanks and matrix spike RPDs should be noted.

These are discussed in detail below.

Holding Times

All samples were extracted (14 days) and analyzed (40 days) within the contractual and technical times required by the US EPA Region II protocols.

Tunes

No problems were detected with any of the tunes associated with the samples of this delivery group.

Surrogate Recoveries

The recoveries of the phenol-d6 surrogate in sample E2324-22 DL / TP-109 DL (31%) was just under the 34% quality control limit.

The NYS DEC ASP program allows for one surrogate in each fraction to be below the quality control limit (as long as the recovery is above 10%).

Matrix Spike / Matrix Spike Duplicate

Sample E2324-05 / TP-102 was used as the matrix spike and matrix spike duplicate.

All recoveries were within the required limits, but the RPDs of 4-chloroanaline (31%), 3,3-dichlorobenzidine (36%), benzo(b)fluoranthene (30%) and benzo(k)fluoranthene (43%) were above the 20% quality control limit.

Compounds with high RPDs were only qualified when they were detected in a sample.

Laboratory Control Samples

All of the recoveries in the soil LCS were within the required limits.

All of the recoveries in the water LSC were within the required limits with the exceptions of 3&4 methylphenols (93%), 2-methylphenol (97%) and 4,6-dinitro-2-methylphenol (76%).

These compounds were not detected in the sample and the high recoveries do not affect the use of the data.

Calibrations

The %RSDs of all compounds in the 5/23 initial calibration were less than 15% with the exceptions of benzaldehyde (18%), 4,6-dinitro-2-methylphenol (37%) and 2,4-dinitrophenol (33%). This initial calibration was associated with all of the samples.

4,6-Dinitro-2-methylphenol and benzaldehyde were not detected in any of the samples and the high percent RSD does not affect the use of the data

The relative response factor of 2,4-dinitrophenol (0.048) was less than the 0.050 quality control limit. This compound was not detected in any of the samples and the data were flagged with the “R” qualifier and technically rejected.

The %Ds of all compounds in the 5/25 (10:41) continuing calibration were less than 20% with the following exceptions:

Compound	%D
1,2,4,5-TETRACHLOROBENZENE	22%
2,3,4,6-TETRACHLOROPHENOL	25%
2,4-DINITROPHENOL	38%
2,4-DINITROTOLUENE	32%
2,6-DINITROTOLUENE	27%
2-NITROPHENOL	22%
4,6-DINITRO-2-METHYLPHENOL	76%
HEXACHLOROBENZENE	21%

This continuing calibration was associated with the analyses of the following samples:

E2324-02	EB-2
E2324-05	TP-102
E2324-15	GP-02B
E2324-16	GP-03A
E2324-17	GP-03B

The %Ds of all compounds in the 5/25 (23:29) continuing calibration were less than 20% with the following exceptions:

Compound	**%D**
2,4-DINITROPHENOL	40%
2,4-DINITROTOLUENE	24%
2,6-DINITROTOLUENE	28%
4,6-DINITRO-2-METHYLPHENOL	68%

This continuing calibration was associated with the analyses of the following samples:

E2324-03	CHA-2
E2324-04	TP-101
E2324-08	TP-103
E2324-09	TP-104
E2324-10	TP-105
E2324-11	TP-106

E2324-12	GP-01A
E2324-14	GP-02A
E2324-18	GP-04A
E2324-19	GP-04B
E2324-20	TP-107
E2324-21	TP-108

The %Ds of all compounds in the 5/29 continuing calibration associated with sample GB-01B / E2324-13 were less than 20% with the following exceptions:

Compound	**%D**
2,4-DINITROPHENOL	40%
2-NITROANILINE	22%
2-NITROPHENOL	40%
4,6-DINITRO-2-METHYLPHENOL	73%

The %Ds of all compounds in the 5/30) continuing calibration were less than 20% with the following exceptions:

Compound	**%D**
2,3,4,6-TETRACHLOROPHENOL	23%
2,4-DINITROPHENOL	65%
2,4-DINITROTOLUENE	36%
2,6-DINITROTOLUENE	22%
2-NITROPHENOL	30%
4,6-DINITRO-2-METHYLPHENOL	63%
4-NITROANILINE	24%
HEXACHLOROCYCLOPENTADIENE	29%
HEXACHLOROETHANE	29%

This continuing calibration was associated with the analyses of the following samples:

E2324-22	TP-109
E2324-22 DL	TP-109 DL

Compounds in the continuing calibrations with percent differences greater than 20% were flagged with the “J” qualifier and are estimated values.

Method Blanks

No target compounds were detected in either of the method blanks.

Field Blank

A field blank was not analyzed with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard recoveries and retention times were within the required limits.

Sample Results

No problems were found with the results of any of the samples of this delivery group.

EB-2-20130520 E2324-02	Compound	ug/l	Lab Qual.	DV Conc.	MB	Surr	MS	LCS	IC	CC	IS	DV Qual.	Comb. Qual.
	1,2,4,5-TETRACHLOROBENZENE		U							22%		UJ	UJ
	2,3,4,6-TETRACHLOROPHENOL		U							25%		UJ	UJ
	2,4,5-TRICHLOROPHENOL		U									U	U
	2,4,6-TRICHLOROPHENOL		U									U	U
	2,4-DICHLOROPHENOL		U									U	U
	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	38%		R	R
	2,4-DINITROTOLUENE		U							32%		UJ	UJ
	2,6-DINITROTOLUENE		U							27%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		UQ					97%				UJ	UJ
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U							22%		UJ	UJ
	3- AND 4- METHYLPHENOL (TOTAL)		UQ					98%				UJ	UJ
	3,3'-DICHLOROBENZIDINE		U									U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	76%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U									U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U									U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE	U				U	U
BENZYL BUTYL PHTHALATE	U				U	U
BIPHENYL (DIPHENYL)	U				U	U
BIS(2-CHLOROETHOXY) METHANE	U				U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	U				U	U
BIS(2-CHLOROISOPROPYL) ETHER	U				U	U
BIS(2-ETHYLHEXYL) PHTHALATE	U				U	U
CAPROLACTAM	U				U	U
CARBAZOLE	U				U	U
CHRYSENE	U				U	U
DIBENZ(A,H)ANTHRACENE	U				U	U
DIBENZOFURAN	U				U	U
DIETHYL PHTHALATE	U				U	U
DIMETHYL PHTHALATE	U				U	U
DI-N-BUTYL PHTHALATE	U				U	U
DI-N-OCTYLPHTHALATE	U				U	U
FLUORANTHENE	U				U	U
FLUORENE	U				U	U
HEXACHLOROBENZENE	U			21% UJ	UJ	U
HEXACHLOROBUTADIENE	U				U	U
HEXACHLOROCYCLOPENTADIENE	UQ			140% UJ	UJ	U
HEXACHLOROETHANE	U				U	U
INDENO(1,2,3-C,D)PYRENE	U				U	U
ISOPHORONE	U				U	U
NAPHTHALENE	U				U	U
NITROBENZENE	U				U	U
N-NITROSODI-N-PROPYLAMINE	U				U	U
N-NITROSODIPHENYLAMINE	U				U	U
PENTACHLOROPHENOL	U				U	U
PHENANTHRENE	U				U	U
PHENOL	U				U	U
PYRENE	U				U	U

CHA-2-20130520			Lab	DV								DV	Comb.
E2324-03	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
30.05 G	2,3,4,6-TETRACHLOROPHENOL		U									U	U
	2,4,5-TRICHLOROPHENOL		U									U	U
%S=	2,4,6-TRICHLOROPHENOL		U									U	U
87.2	2,4-DICHLOROPHENOL		U									U	U
	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
%S=	BENZALDEHYDE		U						18%			U	U
87.2	BENZO(A)ANTHRACENE	270	J	x								J	J
	BENZO(A)PYRENE	260	J	268								J	J
	BENZO(B)FLUORANTHENE	390		x			RPD					J	J
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U		RPD	U	U
BENZYL BUTYL PHTHALATE		U			U	U
BIPHENYL (DIPHENYL)		U			U	U
BIS(2-CHLOROETHOXY) METHANE		U			U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U			U	U
BIS(2-CHLOROISOPROPYL) ETHER		U			U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U			U	U
CAPROLACTAM		U			U	U
CARBAZOLE		U			U	U
CHRYSENE	270	J	x		J	J
DIBENZ(A,H)ANTHRACENE		U			U	U
DIBENZOFURAN		U			U	U
DIETHYL PHTHALATE		U			U	U
DIMETHYL PHTHALATE	240	J	x		J	J
DI-N-BUTYL PHTHALATE		U			U	U
DI-N-OCTYLPHTHALATE		U			U	U
FLUORANTHENE	540		x			
FLUORENE		U			U	U
HEXACHLOROBENZENE		U			U	U
HEXACHLOROBUTADIENE		U			U	U
HEXACHLOROCYCLOPENTADIENE		U			U	U
HEXACHLOROETHANE		U			U	U
INDENO(1,2,3-C,D)PYRENE		U			U	U
ISOPHORONE		U			U	U
NAPHTHALENE		U			U	U
NITROBENZENE		U			U	U
N-NITROSODI-N-PROPYLAMINE		U			U	U
N-NITROSODIPHENYLAMINE		U			U	U
PENTACHLOROPHENOL		U			U	U
PHENANTHRENE	280	J	x		J	J
PHENOL		U			U	U
PYRENE	440		x			

TP-101-20130520			Lab	DV									DV	Comb.
E2324-04	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS		Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U										U	U
	2,3,4,6-TETRACHLOROPHENOL		U										U	U
30.08 G	2,4,5-TRICHLOROPHENOL		U										U	U
	2,4,6-TRICHLOROPHENOL		U										U	U
%S =	2,4-DICHLOROPHENOL		U										U	U
88.2	2,4-DIMETHYLPHENOL		U										U	U
	2,4-DINITROPHENOL		U						RRF	40%			R	R
	2,4-DINITROTOLUENE		U							24%			UJ	UJ
	2,6-DINITROTOLUENE		U							28%			UJ	UJ
	2-CHLORONAPHTHALENE		U										U	U
	2-CHLOROPHENOL		U										U	U
	2-METHYLNAPHTHALENE		U										U	U
	2-METHYLPHENOL (O-CRESOL)		U										U	U
	2-NITROANILINE		U										U	U
	2-NITROPHENOL		U										U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U										U	U
	3,3'-DICHLOROBENZIDINE		U				RPD						U	U
	3-NITROANILINE		U										U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%			UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U										U	U
	4-CHLORO-3-METHYLPHENOL		U										U	U
	4-CHLOROANILINE		U				RPD						U	U
	4-CHLOROPHENYL PHENYL ETHER		U										U	U
	4-NITROANILINE		U										U	U
	4-NITROPHENOL		U										U	U
	ACENAPHTHENE		U										U	U
	ACENAPHTHYLENE		U										U	U
	ACETOPHENONE		U										U	U
	ANTHRACENE		U										U	U
	ATRAZINE		U										U	U
	BENZALDEHYDE		U						18%				U	U
	BENZO(A)ANTHRACENE		U										U	U
	BENZO(A)PYRENE		U										U	U
	BENZO(B)FLUORANTHENE		U				RPD						U	U
	BENZO(G,H,I)PERYLENE		U										U	U

BENZO(K)FLUORANTHENE		U		RPD		U	U
BENZYL BUTYL PHTHALATE		U				U	U
BIPHENYL (DIPHENYL)		U				U	U
BIS(2-CHLOROETHOXY) METHANE		U				U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U				U	U
BIS(2-CHLOROISOPROPYL) ETHER		U				U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U				U	U
CAPROLACTAM		U				U	U
CARBAZOLE		U				U	U
CHRYSENE		U				U	U
DIBENZ(A,H)ANTHRACENE		U				U	U
DIBENZOFURAN		U				U	U
DIETHYL PHTHALATE		U				U	U
DIMETHYL PHTHALATE	260	J	265			J	J
DI-N-BUTYL PHTHALATE		U				U	U
DI-N-OCTYLPHTHALATE		U				U	U
FLUORANTHENE		U				U	U
FLUORENE		U				U	U
HEXACHLOROBENZENE		U				U	U
HEXACHLOROBUTADIENE		U				U	U
HEXACHLOROCYCLOPENTADIENE		U				U	U
HEXACHLOROETHANE		U				U	U
INDENO(1,2,3-C,D)PYRENE		U				U	U
ISOPHORONE		U				U	U
NAPHTHALENE		U				U	U
NITROBENZENE		U				U	U
N-NITROSODI-N-PROPYLAMINE		U				U	U
N-NITROSODIPHENYLAMINE		U				U	U
PENTACHLOROPHENOL		U				U	U
PHENANTHRENE		U				U	U
PHENOL		U				U	U
PYRENE		U				U	U

TP-102-20130520			Lab	DV								DV	Comb.
E2324-05	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U							22%		UJ	UJ
	2,3,4,6-TETRACHLOROPHENOL		U							25%		UJ	UJ
30.02 G	2,4,5-TRICHLOROPHENOL		U									U	U
	2,4,6-TRICHLOROPHENOL		U									U	U
%S =	2,4-DICHLOROPHENOL		U									U	U
85.8	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	38%		R	R
	2,4-DINITROTOLUENE		U							32%		UJ	UJ
	2,6-DINITROTOLUENE		U							27%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U							22%		UJ	UJ
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	76%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U				RPD					U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U			RPD		U	U
BENZYL BUTYL PHTHALATE		U					U	U
BIPHENYL (DIPHENYL)		U					U	U
BIS(2-CHLOROETHOXY) METHANE		U					U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U					U	U
BIS(2-CHLOROISOPROPYL) ETHER		U					U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U					U	U
CAPROLACTAM		U					U	U
CARBAZOLE		U					U	U
CHRYSENE		U					U	U
DIBENZ(A,H)ANTHRACENE		U					U	U
DIBENZOFURAN		U					U	U
DIETHYL PHTHALATE		U					U	U
DIMETHYL PHTHALATE	200	J	198				J	J
DI-N-BUTYL PHTHALATE		U					U	U
DI-N-OCTYLPHTHALATE		U					U	U
FLUORANTHENE		U					U	U
FLUORENE		U					U	U
HEXACHLOROBENZENE		U				21%	UJ	UJ
HEXACHLOROBUTADIENE		U					U	U
HEXACHLOROCYCLOPENTADIENE		U					U	U
HEXACHLOROETHANE		U					U	U
INDENO(1,2,3-C,D)PYRENE		U					U	U
ISOPHORONE		U					U	U
NAPHTHALENE		U					U	U
NITROBENZENE		U					U	U
N-NITROSODI-N-PROPYLAMINE		U					U	U
N-NITROSODIPHENYLAMINE		U					U	U
PENTACHLOROPHENOL		U					U	U
PHENANTHRENE		U					U	U
PHENOL		U					U	U
PYRENE		U					U	U

TP-103-20130520			Lab	DV								DV	Comb.
E2324-08	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
30.04 G	2,3,4,6-TETRACHLOROPHENOL		U									U	U
	2,4,5-TRICHLOROPHENOL		U									U	U
%S =	2,4,6-TRICHLOROPHENOL		U									U	U
84	2,4-DICHLOROPHENOL		U									U	U
	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U				RPD					U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U		RPD		U	U
BENZYL BUTYL PHTHALATE		U				U	U
BIPHENYL (DIPHENYL)		U				U	U
BIS(2-CHLOROETHOXY) METHANE		U				U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U				U	U
BIS(2-CHLOROISOPROPYL) ETHER		U				U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U				U	U
CAPROLACTAM		U				U	U
CARBAZOLE		U				U	U
CHRYSENE		U				U	U
DIBENZ(A,H)ANTHRACENE		U				U	U
DIBENZOFURAN		U				U	U
DIETHYL PHTHALATE		U				U	U
DIMETHYL PHTHALATE	240	J	240			J	J
DI-N-BUTYL PHTHALATE		U				U	U
DI-N-OCTYLPHTHALATE		U				U	U
FLUORANTHENE		U				U	U
FLUORENE		U				U	U
HEXACHLOROBENZENE		U				U	U
HEXACHLOROBUTADIENE		U				U	U
HEXACHLOROCYCLOPENTADIENE		U				U	U
HEXACHLOROETHANE		U				U	U
INDENO(1,2,3-C,D)PYRENE		U				U	U
ISOPHORONE		U				U	U
NAPHTHALENE		U				U	U
NITROBENZENE		U				U	U
N-NITROSODI-N-PROPYLAMINE		U				U	U
N-NITROSODIPHENYLAMINE		U				U	U
PENTACHLOROPHENOL		U				U	U
PHENANTHRENE		U				U	U
PHENOL		U				U	U
PYRENE		U				U	U

TP-104-20130520			Lab	DV								DV	Comb.
E2324-09	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
30.01 G	2,3,4,6-TETRACHLOROPHENOL		U									U	U
	2,4,5-TRICHLOROPHENOL		U									U	U
%S =	2,4,6-TRICHLOROPHENOL		U									U	U
87	2,4-DICHLOROPHENOL		U									U	U
	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE	160	J	164								J	J
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE	380		x									
	BENZO(A)PYRENE	300	J	x								J	J
	BENZO(B)FLUORANTHENE	440		x			RPD						
	BENZO(G,H,I)PERYLENE	160	J	x								J	J

BENZO(K)FLUORANTHENE		U		RPD	U	U
BENZYL BUTYL PHTHALATE		U			U	U
BIPHENYL (DIPHENYL)		U			U	U
BIS(2-CHLOROETHOXY) METHANE		U			U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U			U	U
BIS(2-CHLOROISOPROPYL) ETHER		U			U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U			U	U
CAPROLACTAM		U			U	U
CARBAZOLE		U			U	U
CHRYSENE	270	J	x		J	J
DIBENZ(A,H)ANTHRACENE		U			U	U
DIBENZOFURAN		U			U	U
DIETHYL PHTHALATE		U			U	U
DIMETHYL PHTHALATE	260	J	x		J	J
DI-N-BUTYL PHTHALATE		U			U	U
DI-N-OCTYLPHTHALATE		U			U	U
FLUORANTHENE	580		x			
FLUORENE		U			U	U
HEXACHLOROBENZENE		U			U	U
HEXACHLOROBUTADIENE		U			U	U
HEXACHLOROCYCLOPENTADIENE		U			U	U
HEXACHLOROETHANE		U			U	U
INDENO(1,2,3-C,D)PYRENE		U			U	U
ISOPHORONE		U			U	U
NAPHTHALENE		U			U	U
NITROBENZENE		U			U	U
N-NITROSODI-N-PROPYLAMINE		U			U	U
N-NITROSODIPHENYLAMINE		U			U	U
PENTACHLOROPHENOL		U			U	U
PHENANTHRENE	470		x			
PHENOL		U			U	U
PYRENE	470		x			

TP-105-20130520			Lab	DV								DV	Comb.
E2324-10	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
	2,3,4,6-TETRACHLOROPHENOL		U									U	U
30.05 G	2,4,5-TRICHLOROPHENOL		U									U	U
	2,4,6-TRICHLOROPHENOL		U									U	U
%S =	2,4-DICHLOROPHENOL		U									U	U
84.1	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE	160	J	159			RPD					J	J
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U		RPD	U	U
BENZYL BUTYL PHTHALATE		U			U	U
BIPHENYL (DIPHENYL)		U			U	U
BIS(2-CHLOROETHOXY) METHANE		U			U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U			U	U
BIS(2-CHLOROISOPROPYL) ETHER		U			U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U			U	U
CAPROLACTAM		U			U	U
CARBAZOLE		U			U	U
CHRYSENE		U			U	U
DIBENZ(A,H)ANTHRACENE		U			U	U
DIBENZOFURAN		U			U	U
DIETHYL PHTHALATE		U			U	U
DIMETHYL PHTHALATE	240	J	x		J	J
DI-N-BUTYL PHTHALATE		U			U	U
DI-N-OCTYLPHTHALATE		U			U	U
FLUORANTHENE	320	J	**x**		J	J
FLUORENE		U			U	U
HEXACHLOROBENZENE		U			U	U
HEXACHLOROBUTADIENE		U			U	U
HEXACHLOROCYCLOPENTADIENE		U			U	U
HEXACHLOROETHANE		U			U	U
INDENO(1,2,3-C,D)PYRENE		U			U	U
ISOPHORONE		U			U	U
NAPHTHALENE		U			U	U
NITROBENZENE		U			U	U
N-NITROSODI-N-PROPYLAMINE		U			U	U
N-NITROSODIPHENYLAMINE		U			U	U
PENTACHLOROPHENOL		U			U	U
PHENANTHRENE	330	J	x		J	J
PHENOL		U			U	U
PYRENE	210	J	x		J	J

TP-106-20130520			Lab	DV									DV	Comb.
E2324-11	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
30.06 G	2,3,4,6-TETRACHLOROPHENOL		U									U	U
	2,4,5-TRICHLOROPHENOL		U									U	U
%S =	2,4,6-TRICHLOROPHENOL		U									U	U
88.1	2,4-DICHLOROPHENOL		U									U	U
	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U				RPD					U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U		RPD		U	U
BENZYL BUTYL PHTHALATE		U				U	U
BIPHENYL (DIPHENYL)		U				U	U
BIS(2-CHLOROETHOXY) METHANE		U				U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U				U	U
BIS(2-CHLOROISOPROPYL) ETHER		U				U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U				U	U
CAPROLACTAM		U				U	U
CARBAZOLE		U				U	U
CHRYSENE		U				U	U
DIBENZ(A,H)ANTHRACENE		U				U	U
DIBENZOFURAN		U				U	U
DIETHYL PHTHALATE		U				U	U
DIMETHYL PHTHALATE	250	J	249			J	J
DI-N-BUTYL PHTHALATE		U				U	U
DI-N-OCTYLPHTHALATE		U				U	U
FLUORANTHENE		U				U	U
FLUORENE		U				U	U
HEXACHLOROBENZENE		U				U	U
HEXACHLOROBUTADIENE		U				U	U
HEXACHLOROCYCLOPENTADIENE		U				U	U
HEXACHLOROETHANE		U				U	U
INDENO(1,2,3-C,D)PYRENE		U				U	U
ISOPHORONE		U				U	U
NAPHTHALENE		U				U	U
NITROBENZENE		U				U	U
N-NITROSODI-N-PROPYLAMINE		U				U	U
N-NITROSODIPHENYLAMINE		U				U	U
PENTACHLOROPHENOL		U				U	U
PHENANTHRENE		U				U	U
PHENOL		U				U	U
PYRENE		U				U	U

GP-01A-20130520			Lab	DV								DV	Comb.
E2324-12	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
	2,3,4,6-TETRACHLOROPHENOL		U									U	U
30.03 G	2,4,5-TRICHLOROPHENOL		U									U	U
	2,4,6-TRICHLOROPHENOL		U									U	U
%S =	2,4-DICHLOROPHENOL		U									U	U
84.6	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
84.6	BENZO(A)ANTHRACENE	240	J	240.5								J	J
	BENZO(A)PYRENE	210	J	x								J	J
	BENZO(B)FLUORANTHENE	280	J	x			RPD					J	J
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U		RPD	U	U
BENZYL BUTYL PHTHALATE		U			U	U
BIPHENYL (DIPHENYL)		U			U	U
BIS(2-CHLOROETHOXY) METHANE		U			U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U			U	U
BIS(2-CHLOROISOPROPYL) ETHER		U			U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U			U	U
CAPROLACTAM		U			U	U
CARBAZOLE		U			U	U
CHRYSENE	180	J	x		J	J
DIBENZ(A,H)ANTHRACENE		U			U	U
DIBENZOFURAN		U			U	U
DIETHYL PHTHALATE		U			U	U
DIMETHYL PHTHALATE	280	J	x		J	J
DI-N-BUTYL PHTHALATE		U			U	U
DI-N-OCTYLPHTHALATE		U			U	U
FLUORANTHENE	360	J	x		J	J
FLUORENE		U			U	U
HEXACHLOROBENZENE		U			U	U
HEXACHLOROBUTADIENE		U			U	U
HEXACHLOROCYCLOPENTADIENE		U			U	U
HEXACHLOROETHANE		U			U	U
INDENO(1,2,3-C,D)PYRENE		U			U	U
ISOPHORONE		U			U	U
NAPHTHALENE		U			U	U
NITROBENZENE		U			U	U
N-NITROSODI-N-PROPYLAMINE		U			U	U
N-NITROSODIPHENYLAMINE		U			U	U
PENTACHLOROPHENOL		U			U	U
PHENANTHRENE		U			U	U
PHENOL		U			U	U
PYRENE	370	J	x		J	J

GP-01B-20130520			Lab	DV								DV	Comb.
E2324-13	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
	2,3,4,6-TETRACHLOROPHENOL		U									U	U
30.09 G	2,4,5-TRICHLOROPHENOL		U									U	U
	2,4,6-TRICHLOROPHENOL		U									U	U
%S =	2,4-DICHLOROPHENOL		U									U	U
84.3	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	60%		R	R
	2,4-DINITROTOLUENE		U									U	U
	2,6-DINITROTOLUENE		U									U	U
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U							22%		UJ	UJ
	2-NITROPHENOL		U							40%		UJ	UJ
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	73%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U				RPD					U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U		RPD		U	U
BENZYL BUTYL PHTHALATE		U				U	U
BIPHENYL (DIPHENYL)		U				U	U
BIS(2-CHLOROETHOXY) METHANE		U				U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U				U	U
BIS(2-CHLOROISOPROPYL) ETHER		U				U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U				U	U
CAPROLACTAM		U				U	U
CARBAZOLE		U				U	U
CHRYSENE		U				U	U
DIBENZ(A,H)ANTHRACENE		U				U	U
DIBENZOFURAN		U				U	U
DIETHYL PHTHALATE		U				U	U
DIMETHYL PHTHALATE	210	J	215			J	J
DI-N-BUTYL PHTHALATE		U				U	U
DI-N-OCTYLPHTHALATE		U				U	U
FLUORANTHENE		U				U	U
FLUORENE		U				U	U
HEXACHLOROBENZENE		U				U	U
HEXACHLOROBUTADIENE		U				U	U
HEXACHLOROCYCLOPENTADIENE		U				U	U
HEXACHLOROETHANE		U				U	U
INDENO(1,2,3-C,D)PYRENE		U				U	U
ISOPHORONE		U				U	U
NAPHTHALENE		U				U	U
NITROBENZENE		U				U	U
N-NITROSODI-N-PROPYLAMINE		U				U	U
N-NITROSODIPHENYLAMINE		U				U	U
PENTACHLOROPHENOL		U				U	U
PHENANTHRENE		U				U	U
PHENOL		U				U	U
PYRENE		U				U	U

GP-02A-20130520			Lab	DV								DV	Comb.
E2324-14	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
	2,3,4,6-TETRACHLOROPHENOL		U									U	U
30.04 G	2,4,5-TRICHLOROPHENOL		U									U	U
	2,4,6-TRICHLOROPHENOL		U									U	U
%S =	2,4-DICHLOROPHENOL		U									U	U
86.6	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		U	U
	4-BROMOPHENYL PHENYL ETHER		U									UJ	UJ
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
86.6	BENZO(A)ANTHRACENE	220	J	223								J	J
	BENZO(A)PYRENE	190	J	x								J	J
	BENZO(B)FLUORANTHENE	250	J	x			RPD					J	J
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U		RPD	U	U
BENZYL BUTYL PHTHALATE		U			U	U
BIPHENYL (DIPHENYL)		U			U	U
BIS(2-CHLOROETHOXY) METHANE		U			U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U			U	U
BIS(2-CHLOROISOPROPYL) ETHER		U			U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U			U	U
CAPROLACTAM		U			U	U
CARBAZOLE		U			U	U
CHRYSENE	170	J	x		J	J
DIBENZ(A,H)ANTHRACENE		U			U	U
DIBENZOFURAN		U			U	U
DIETHYL PHTHALATE		U			U	U
DIMETHYL PHTHALATE	230	J	x		J	J
DI-N-BUTYL PHTHALATE		U			U	U
DI-N-OCTYLPHTHALATE		U			U	U
FLUORANTHENE	400		**x**			
FLUORENE		U			U	U
HEXACHLOROBENZENE		U			U	U
HEXACHLOROBUTADIENE		U			U	U
HEXACHLOROCYCLOPENTADIENE		U			U	U
HEXACHLOROETHANE		U			U	U
INDENO(1,2,3-C,D)PYRENE		U			U	U
ISOPHORONE		U			U	U
NAPHTHALENE		U			U	U
NITROBENZENE		U			U	U
N-NITROSODI-N-PROPYLAMINE		U			U	U
N-NITROSODIPHENYLAMINE		U			U	U
PENTACHLOROPHENOL		U			U	U
PHENANTHRENE		U			U	U
PHENOL		U			U	U
PYRENE	340	J	x		J	J

GP-02B-20130520			Lab	DV								DV	Comb.
E2324-15	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U							22%		UJ	UJ
30.03 G	2,3,4,6-TETRACHLOROPHENOL		U							25%		UJ	UJ
	2,4,5-TRICHLOROPHENOL		U									U	U
%S =	2,4,6-TRICHLOROPHENOL		U									U	U
91.2	2,4-DICHLOROPHENOL		U									U	U
	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	38%		R	R
	2,4-DINITROTOLUENE		U							32%		UJ	UJ
	2,6-DINITROTOLUENE		U							27%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U							22%		UJ	UJ
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	76%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U				RPD					U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U			RPD		U	U
BENZYL BUTYL PHTHALATE		U					U	U
BIPHENYL (DIPHENYL)		U					U	U
BIS(2-CHLOROETHOXY) METHANE		U					U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U					U	U
BIS(2-CHLOROISOPROPYL) ETHER		U					U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U					U	U
CAPROLACTAM		U					U	U
CARBAZOLE		U					U	U
CHRYSENE		U					U	U
DIBENZ(A,H)ANTHRACENE		U					U	U
DIBENZOFURAN		U					U	U
DIETHYL PHTHALATE		U					U	U
DIMETHYL PHTHALATE	220	J	217				J	J
DI-N-BUTYL PHTHALATE		U					U	U
DI-N-OCTYLPHTHALATE		U					U	U
FLUORANTHENE		U					U	U
FLUORENE		U					U	U
HEXACHLOROBENZENE		U				21%	UJ	UJ
HEXACHLOROBUTADIENE		U					U	U
HEXACHLOROCYCLOPENTADIENE		U					U	U
HEXACHLOROETHANE		U					U	U
INDENO(1,2,3-C,D)PYRENE		U					U	U
ISOPHORONE		U					U	U
NAPHTHALENE		U					U	U
NITROBENZENE		U					U	U
N-NITROSODI-N-PROPYLAMINE		U					U	U
N-NITROSODIPHENYLAMINE		U					U	U
PENTACHLOROPHENOL		U					U	U
PHENANTHRENE		U					U	U
PHENOL		U					U	U
PYRENE		U					U	U

GP-03A-20130520			Lab	DV								DV	Comb.
E2324-16	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U							22%		UJ	UJ
30.05 g	2,3,4,6-TETRACHLOROPHENOL		U							25%		UJ	UJ
	2,4,5-TRICHLOROPHENOL		U									U	U
%S =	2,4,6-TRICHLOROPHENOL		U									U	U
78.9	2,4-DICHLOROPHENOL		U									U	U
	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	38%		R	R
	2,4-DINITROTOLUENE		U							32%		UJ	UJ
	2,6-DINITROTOLUENE		U							27%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U							22%		UJ	UJ
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	76%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U				RPD					U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U			RPD		U	U
BENZYL BUTYL PHTHALATE		U					U	U
BIPHENYL (DIPHENYL)		U					U	U
BIS(2-CHLOROETHOXY) METHANE		U					U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U					U	U
BIS(2-CHLOROISOPROPYL) ETHER		U					U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U					U	U
CAPROLACTAM		U					U	U
CARBAZOLE		U					U	U
CHRYSENE		U					U	U
DIBENZ(A,H)ANTHRACENE		U					U	U
DIBENZOFURAN		U					U	U
DIETHYL PHTHALATE		U					U	U
DIMETHYL PHTHALATE	190	J	194				J	J
DI-N-BUTYL PHTHALATE		U					U	U
DI-N-OCTYLPHTHALATE		U					U	U
FLUORANTHENE		U					U	U
FLUORENE		U					U	U
HEXACHLOROBENZENE		U				21%	UJ	UJ
HEXACHLOROBUTADIENE		U					U	U
HEXACHLOROCYCLOPENTADIENE		U					U	U
HEXACHLOROETHANE		U					U	U
INDENO(1,2,3-C,D)PYRENE		U					U	U
ISOPHORONE		U					U	U
NAPHTHALENE		U					U	U
NITROBENZENE		U					U	U
N-NITROSODI-N-PROPYLAMINE		U					U	U
N-NITROSODIPHENYLAMINE		U					U	U
PENTACHLOROPHENOL		U					U	U
PHENANTHRENE		U					U	U
PHENOL		U					U	U
PYRENE		U					U	U

GP-03B-20130520			Lab	DV								DV	Comb.
E2324-17	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U							22%		UJ	UJ
30.06 G	2,3,4,6-TETRACHLOROPHENOL		U							25%		UJ	UJ
	2,4,5-TRICHLOROPHENOL		U									U	U
%S =	2,4,6-TRICHLOROPHENOL		U									U	U
80.7	2,4-DICHLOROPHENOL		U									U	U
	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	38%		R	R
	2,4-DINITROTOLUENE		U							32%		UJ	UJ
	2,6-DINITROTOLUENE		U							27%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U							22%		UJ	UJ
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	76%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U				RPD					U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U			RPD		U	U
BENZYL BUTYL PHTHALATE		U					U	U
BIPHENYL (DIPHENYL)		U					U	U
BIS(2-CHLOROETHOXY) METHANE		U					U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U					U	U
BIS(2-CHLOROISOPROPYL) ETHER		U					U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U					U	U
CAPROLACTAM		U					U	U
CARBAZOLE		U					U	U
CHRYSENE		U					U	U
DIBENZ(A,H)ANTHRACENE		U					U	U
DIBENZOFURAN		U					U	U
DIETHYL PHTHALATE		U					U	U
DIMETHYL PHTHALATE	250	J	246				J	J
DI-N-BUTYL PHTHALATE		U					U	U
DI-N-OCTYLPHTHALATE		U					U	U
FLUORANTHENE		U					U	U
FLUORENE		U					U	U
HEXACHLOROBENZENE		U				21%	UJ	UJ
HEXACHLOROBUTADIENE		U					U	U
HEXACHLOROCYCLOPENTADIENE		U					U	U
HEXACHLOROETHANE		U					U	U
INDENO(1,2,3-C,D)PYRENE		U					U	U
ISOPHORONE		U					U	U
NAPHTHALENE		U					U	U
NITROBENZENE		U					U	U
N-NITROSODI-N-PROPYLAMINE		U					U	U
N-NITROSODIPHENYLAMINE		U					U	U
PENTACHLOROPHENOL		U					U	U
PHENANTHRENE		U					U	U
PHENOL		U					U	U
PYRENE		U					U	U

GP-04A-20130520			Lab	DV								DV	Comb.
E2324-18	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
	2,3,4,6-TETRACHLOROPHENOL		U									U	U
30.05 G	2,4,5-TRICHLOROPHENOL		U									U	U
	2,4,6-TRICHLOROPHENOL		U									U	U
%S =	2,4-DICHLOROPHENOL		U									U	U
68.3	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U				RPD					U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U		RPD	U	U
BENZYL BUTYL PHTHALATE		U			U	U
BIPHENYL (DIPHENYL)		U			U	U
BIS(2-CHLOROETHOXY) METHANE		U			U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U			U	U
BIS(2-CHLOROISOPROPYL) ETHER		U			U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U			U	U
CAPROLACTAM		U			U	U
CARBAZOLE		U			U	U
CHRYSENE		U			U	U
DIBENZ(A,H)ANTHRACENE		U			U	U
DIBENZOFURAN		U			U	U
DIETHYL PHTHALATE		U			U	U
DIMETHYL PHTHALATE	610		x			
DI-N-BUTYL PHTHALATE		U			U	U
DI-N-OCTYLPHTHALATE		U			U	U
FLUORANTHENE	340	J	344		J	J
FLUORENE		U			U	U
HEXACHLOROBENZENE		U			U	U
HEXACHLOROBUTADIENE		U			U	U
HEXACHLOROCYCLOPENTADIENE		U			U	U
HEXACHLOROETHANE		U			U	U
INDENO(1,2,3-C,D)PYRENE		U			U	U
ISOPHORONE		U			U	U
NAPHTHALENE		U			U	U
NITROBENZENE		U			U	U
N-NITROSODI-N-PROPYLAMINE		U			U	U
N-NITROSODIPHENYLAMINE		U			U	U
PENTACHLOROPHENOL		U			U	U
PHENANTHRENE		U			U	U
PHENOL		U			U	U
PYRENE	260	J	x		J	J

GP-04B-20130522			Lab	DV								DV	Comb.
E2324-19	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
	2,3,4,6-TETRACHLOROPHENOL		U									U	U
30.07 G	2,4,5-TRICHLOROPHENOL		U									U	U
	2,4,6-TRICHLOROPHENOL		U									U	U
%S =	2,4-DICHLOROPHENOL		U									U	U
74.7	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE		U									U	U
	BENZO(A)PYRENE		U									U	U
	BENZO(B)FLUORANTHENE		U				RPD					U	U
	BENZO(G,H,I)PERYLENE		U									U	U

BENZO(K)FLUORANTHENE		U		RPD		U	U
BENZYL BUTYL PHTHALATE		U				U	U
BIPHENYL (DIPHENYL)		U				U	U
BIS(2-CHLOROETHOXY) METHANE		U				U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U				U	U
BIS(2-CHLOROISOPROPYL) ETHER		U				U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U				U	U
CAPROLACTAM		U				U	U
CARBAZOLE		U				U	U
CHRYSENE		U				U	U
DIBENZ(A,H)ANTHRACENE		U				U	U
DIBENZOFURAN		U				U	U
DIETHYL PHTHALATE		U				U	U
DIMETHYL PHTHALATE	390	J	391			J	J
DI-N-BUTYL PHTHALATE		U				U	U
DI-N-OCTYLPHTHALATE		U				U	U
FLUORANTHENE		U				U	U
FLUORENE		U				U	U
HEXACHLOROBENZENE		U				U	U
HEXACHLOROBUTADIENE		U				U	U
HEXACHLOROCYCLOPENTADIENE		U				U	U
HEXACHLOROETHANE		U				U	U
INDENO(1,2,3-C,D)PYRENE		U				U	U
ISOPHORONE		U				U	U
NAPHTHALENE		U				U	U
NITROBENZENE		U				U	U
N-NITROSODI-N-PROPYLAMINE		U				U	U
N-NITROSODIPHENYLAMINE		U				U	U
PENTACHLOROPHENOL		U				U	U
PHENANTHRENE		U				U	U
PHENOL		U				U	U
PYRENE		U				U	U

TP-107-20130521			Lab	DV								DV	Comb.
E2324-20	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U									U	U
	2,3,4,6-TETRACHLOROPHENOL		U									U	U
30.03 G	2,4,5-TRICHLOROPHENOL		U									U	U
	2,4,6-TRICHLOROPHENOL		U									U	U
%S =	2,4-DICHLOROPHENOL		U									U	U
88.4	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	40%		R	R
	2,4-DINITROTOLUENE		U							24%		UJ	UJ
	2,6-DINITROTOLUENE		U							28%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE		U									U	U
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U									U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U									U	U
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE		U									U	U
	ACENAPHTHYLENE		U									U	U
	ACETOPHENONE		U									U	U
	ANTHRACENE		U									U	U
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
88.4	BENZO(A)ANTHRACENE	240	J	241								J	J
	BENZO(A)PYRENE	200	J	x								J	J
	BENZO(B)FLUORANTHENE	280	J	x			RPD					J	J
	BENZO(G,H,I)PERYLENE	150	J	x								J	J

BENZO(K)FLUORANTHENE		U		RPD	U	U
BENZYL BUTYL PHTHALATE		U			U	U
BIPHENYL (DIPHENYL)		U			U	U
BIS(2-CHLOROETHOXY) METHANE		U			U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U			U	U
BIS(2-CHLOROISOPROPYL) ETHER		U			U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U			U	U
CAPROLACTAM		U			U	U
CARBAZOLE		U			U	U
CHRYSENE	180	J	x		J	J
DIBENZ(A,H)ANTHRACENE		U			U	U
DIBENZOFURAN		U			U	U
DIETHYL PHTHALATE		U			U	U
DIMETHYL PHTHALATE	320	J	x		J	J
DI-N-BUTYL PHTHALATE		U			U	U
DI-N-OCTYLPHTHALATE		U			U	U
FLUORANTHENE	400		x			
FLUORENE		U			U	U
HEXACHLOROBENZENE		U			U	U
HEXACHLOROBUTADIENE		U			U	U
HEXACHLOROCYCLOPENTADIENE		U			U	U
HEXACHLOROETHANE		U			U	U
INDENO(1,2,3-C,D)PYRENE		U			U	U
ISOPHORONE		U			U	U
NAPHTHALENE		U			U	U
NITROBENZENE		U			U	U
N-NITROSODI-N-PROPYLAMINE		U			U	U
N-NITROSODIPHENYLAMINE		U			U	U
PENTACHLOROPHENOL		U			U	U
PHENANTHRENE	220	J	x		J	J
PHENOL		U			U	U
PYRENE	320	J	x		J	J

TP-108-20130521			Lab	DV									DV	Comb.
E2324-21	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS		Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U										U	U
	2,3,4,6-TETRACHLOROPHENOL		U										U	U
30.09 G	2,4,5-TRICHLOROPHENOL		U										U	U
	2,4,6-TRICHLOROPHENOL		U										U	U
%S =	2,4-DICHLOROPHENOL		U										U	U
80.8	2,4-DIMETHYLPHENOL		U										U	U
	2,4-DINITROPHENOL		U						RRF	40%			R	R
	2,4-DINITROTOLUENE		U							24%			UJ	UJ
	2,6-DINITROTOLUENE		U							28%			UJ	UJ
	2-CHLORONAPHTHALENE		U										U	U
	2-CHLOROPHENOL		U										U	U
	2-METHYLNAPHTHALENE		U										U	U
	2-METHYLPHENOL (O-CRESOL)		U										U	U
	2-NITROANILINE		U										U	U
	2-NITROPHENOL		U										U	U
	3- AND 4- METHYLPHENOL (TOTAL)		U										U	U
	3,3'-DICHLOROBENZIDINE		U				RPD						U	U
	3-NITROANILINE		U										U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	68%			UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U										U	U
	4-CHLORO-3-METHYLPHENOL		U										U	U
	4-CHLOROANILINE		U				RPD						U	U
	4-CHLOROPHENYL PHENYL ETHER		U										U	U
	4-NITROANILINE		U										U	U
	4-NITROPHENOL		U										U	U
	ACENAPHTHENE		U										U	U
	ACENAPHTHYLENE		U										U	U
	ACETOPHENONE		U										U	U
	ANTHRACENE		U										U	U
	ATRAZINE		U										U	U
	BENZALDEHYDE		U						18%				U	U
	BENZO(A)ANTHRACENE		U										U	U
	BENZO(A)PYRENE		U										U	U
	BENZO(B)FLUORANTHENE		U				RPD						U	U
	BENZO(G,H,I)PERYLENE		U										U	U

BENZO(K)FLUORANTHENE		U		RPD	U	U
BENZYL BUTYL PHTHALATE		U			U	U
BIPHENYL (DIPHENYL)		U			U	U
BIS(2-CHLOROETHOXY) METHANE		U			U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U			U	U
BIS(2-CHLOROISOPROPYL) ETHER		U			U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U			U	U
CAPROLACTAM		U			U	U
CARBAZOLE		U			U	U
CHRYSENE		U			U	U
DIBENZ(A,H)ANTHRACENE		U			U	U
DIBENZOFURAN		U			U	U
DIETHYL PHTHALATE		U			U	U
DIMETHYL PHTHALATE	330	J	x		J	J
DI-N-BUTYL PHTHALATE		U			U	U
DI-N-OCTYLPHTHALATE		U			U	U
FLUORANTHENE	280	J	278		J	J
FLUORENE		U			U	U
HEXACHLOROBENZENE		U			U	U
HEXACHLOROBUTADIENE		U			U	U
HEXACHLOROCYCLOPENTADIENE		U			U	U
HEXACHLOROETHANE		U			U	U
INDENO(1,2,3-C,D)PYRENE		U			U	U
ISOPHORONE		U			U	U
NAPHTHALENE		U			U	U
NITROBENZENE		U			U	U
N-NITROSODI-N-PROPYLAMINE		U			U	U
N-NITROSODIPHENYLAMINE		U			U	U
PENTACHLOROPHENOL		U			U	U
PHENANTHRENE		U			U	U
PHENOL		U			U	U
PYRENE	230	J	x		J	J

TP-109-20130521			Lab	DV								DV	Comb.
E2324-22	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		U							25%		UJ	UJ
30.07 g	2,3,4,6-TETRACHLOROPHENOL		U							23%		UJ	UJ
	2,4,5-TRICHLOROPHENOL		U									U	U
%S =	2,4,6-TRICHLOROPHENOL		U									U	U
81.7	2,4-DICHLOROPHENOL		U									U	U
	2,4-DIMETHYLPHENOL		U									U	U
	2,4-DINITROPHENOL		U						RRF	65%		R	R
	2,4-DINITROTOLUENE		U							36%		UJ	UJ
	2,6-DINITROTOLUENE		U							22%		UJ	UJ
	2-CHLORONAPHTHALENE		U									U	U
	2-CHLOROPHENOL		U									U	U
	2-METHYLNAPHTHALENE	280	J	282								J	J
	2-METHYLPHENOL (O-CRESOL)		U									U	U
	2-NITROANILINE		U									U	U
	2-NITROPHENOL		U							30%		UJ	UJ
	3- AND 4- METHYLPHENOL (TOTAL)		U									U	U
	3,3'-DICHLOROBENZIDINE		U				RPD					U	U
	3-NITROANILINE		U									U	U
	4,6-DINITRO-2-METHYLPHENOL		U						37%	63%		UJ	UJ
	4-BROMOPHENYL PHENYL ETHER		U									U	U
	4-CHLORO-3-METHYLPHENOL		U									U	U
	4-CHLOROANILINE		U				RPD					U	U
	4-CHLOROPHENYL PHENYL ETHER		U									U	U
	4-NITROANILINE		U							24%		UJ	UJ
	4-NITROPHENOL		U									U	U
	ACENAPHTHENE	640		x									
	ACENAPHTHYLENE	720		x									
	ACETOPHENONE		U									U	U
	ANTHRACENE	2500		x									
	ATRAZINE		U									U	U
	BENZALDEHYDE		U						18%			U	U
	BENZO(A)ANTHRACENE	5800	E	x								E	E
	BENZO(A)PYRENE	4600	E	x								E	E
	BENZO(B)FLUORANTHENE	5700	E	x			RPD					E	E
	BENZO(G,H,I)PERYLENE	3700	E	x								E	E

BENZO(K)FLUORANTHENE	2100		x	RPD		J	J
BENZYL BUTYL PHTHALATE		U				U	U
BIPHENYL (DIPHENYL)		U				U	U
BIS(2-CHLOROETHOXY) METHANE		U				U	U
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		U				U	U
BIS(2-CHLOROISOPROPYL) ETHER		U				U	U
BIS(2-ETHYLHEXYL) PHTHALATE		U				U	U
CAPROLACTAM		U				U	U
CARBAZOLE	1100		x				
CHRYSENE	4000	E	x			E	E
DIBENZ(A,H)ANTHRACENE	1300		x				
DIBENZOFURAN	690		x				
DIETHYL PHTHALATE		U				U	U
DIMETHYL PHTHALATE	280	J				J	J
DI-N-BUTYL PHTHALATE		U				U	U
DI-N-OCTYLPHTHALATE		U				U	U
FLUORANTHENE	9000	E	**x**			E	E
FLUORENE	1000		x				
HEXACHLOROBENZENE		U				U	U
HEXACHLOROBUTADIENE		U				U	U
HEXACHLOROCYCLOPENTADIENE		U			29%	UJ	UJ
HEXACHLOROETHANE		U			29%	UJ	UJ
INDENO(1,2,3-C,D)PYRENE	3900	E	x			E	E
ISOPHORONE		U				U	U
NAPHTHALENE	510		x				
NITROBENZENE		U				U	U
N-NITROSODI-N-PROPYLAMINE		U				U	U
N-NITROSODIPHENYLAMINE		U				U	U
PENTACHLOROPHENOL		U				U	U
PHENANTHRENE	7700	E				E	E
PHENOL		U				U	U
PYRENE	7200	E	x			E	E

TP-109-20130521DL			Lab	DV								DV	Comb.
E2324-22DL	Compound	ug/kg	Qual.	Conc.	MB	Surr	MS	LCS	IC	CC	IS	Qual.	Qual.
	1,2,4,5-TETRACHLOROBENZENE		UD							25%		UJD	UJD
	2,3,4,6-TETRACHLOROPHENOL		UD							23%		UJD	UJD
30.07 G	2,4,5-TRICHLOROPHENOL		UD									UD	UD
	2,4,6-TRICHLOROPHENOL		UD									UD	UD
%S =	2,4-DICHLOROPHENOL		UD									UD	UD
81.7	2,4-DIMETHYLPHENOL		UD									UD	UD
	2,4-DINITROPHENOL		UD						RRF	65%		R	R
10X DF	2,4-DINITROTOLUENE		UD							36%		UJD	UJD
	2,6-DINITROTOLUENE		UD							22%		UJD	UJD
	2-CHLORONAPHTHALENE		UD									UD	UD
	2-CHLOROPHENOL		UD									UD	UD
	2-METHYLNAPHTHALENE		UD									UD	UD
	2-METHYLPHENOL (O-CRESOL)		UD									UD	UD
	2-NITROANILINE		UD									UD	UD
	2-NITROPHENOL		UD							30%		UJD	UJD
	3- AND 4- METHYLPHENOL (TOTAL)		UD									UD	UD
	3,3'-DICHLOROBENZIDINE		UD				RPD					UD	UD
	3-NITROANILINE		UD									UD	UD
	4,6-DINITRO-2-METHYLPHENOL		UD						37%	63%		UJD	UJD
	4-BROMOPHENYL PHENYL ETHER		UD									UD	UD
	4-CHLORO-3-METHYLPHENOL		UD									UD	UD
	4-CHLOROANILINE		UD				RPD					UD	UD
	4-CHLOROPHENYL PHENYL ETHER		UD									UD	UD
	4-NITROANILINE		UD							24%		UJD	UJD
	4-NITROPHENOL		UD									UD	UD
	ACENAPHTHENE		UD									UD	UD
	ACENAPHTHYLENE		UD									UD	UD
	ACETOPHENONE		UD									UD	UD
	ANTHRACENE	2900	JD	x								JD	JD
	ATRAZINE		UD									UD	UD
	BENZALDEHYDE		UD						18%			UD	UD
	BENZO(A)ANTHRACENE	6500	D	x								D	D
	BENZO(A)PYRENE	6400	D	6383								D	D
	BENZO(B)FLUORANTHENE	8500	D	x			RPD					JD	JD
	BENZO(G,H,I)PERYLENE	4700	D	x								D	D

BENZO(K)FLUORANTHENE	2600	JD	x	RPD		JD	JD
BENZYL BUTYL PHTHALATE		UD				UD	UD
BIPHENYL (DIPHENYL)		UD				UD	UD
BIS(2-CHLOROETHOXY) METHANE		UD				UD	UD
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)		UD				UD	UD
BIS(2-CHLOROISOPROPYL) ETHER		UD				UD	UD
BIS(2-ETHYLHEXYL) PHTHALATE		UD				UD	UD
CAPROLACTAM		UD				UD	UD
CARBAZOLE		UD				UD	UD
CHRYSENE	5600	D	x			D	D
DIBENZ(A,H)ANTHRACENE		UD				UD	UD
DIBENZOFURAN		UD				UD	UD
DIETHYL PHTHALATE		UD				UD	UD
DIMETHYL PHTHALATE		UD				UD	UD
DI-N-BUTYL PHTHALATE		UD				UD	UD
DI-N-OCTYLPHTHALATE		UD				UD	UD
FLUORANTHENE	14000	D	**x**			D	D
FLUORENE		UD				UD	UD
HEXACHLOROBENZENE		UD				UD	UD
HEXACHLOROBUTADIENE		UD				UD	UD
HEXACHLOROCYCLOPENTADIENE		UD			29%	UJD	UJD
HEXACHLOROETHANE		UD			29%	UJD	UJD
INDENO(1,2,3-C,D)PYRENE	4400	D	x			D	D
ISOPHORONE		UD				UD	UD
NAPHTHALENE		UD				UD	UD
NITROBENZENE		UD				UD	UD
N-NITROSODI-N-PROPYLAMINE		UD				UD	UD
N-NITROSODIPHENYLAMINE		UD				UD	UD
PENTACHLOROPHENOL		UD				UD	UD
PHENANTHRENE	10400	D	x			D	D
PHENOL		UD				UD	UD
PYRENE	9800	D	x			D	D

SUMMARY OF THE ANALYTICAL DATA VALIDATION
9 Owasco Street, Auburn, NY

Soil PCB Analyses
Samples Collected: May 20, 2013
Samples Received at Chemtech on May 22, 2013
Sample Delivery Group: E2324
Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Matrix
E2324-02	EB-2	Water
E2324-03	CHA-2	Soil
E2324-04	TP-101	Soil
E2324-05	TP-102	Soil
E2324-06	E2324-05MS	Soil
E2324-07	E2324-05MSD	Soil
E2324-08	TP-103	Soil
E2324-09	TP-104	Soil
E2324-10	TP-105	Soil
E2324-11	TP-106	Soil
E2324-12	GP-01A	Soil
E2324-13	GP-01B	Soil
E2324-14	GP-02A	Soil
E2324-15	GP-02B	Soil
E2324-16	GP-03A	Soil
E2324-17	GP-03B	Soil
E2324-18	GP-04A	Soil
E2324-19	GP-04B	Soil
E2324-20	TP-107	Soil
E2324-21	TP-108	Soil
E2324-22	TP-109	Soil

Soil samples were validated for analyses of PCBs by the US EPA Region II data validation SOP (HW-45, Revision 1). Data were reviewed for usability according to the following criteria:

* - Data Completeness
* - Holding Times
* - Laboratory Blanks
  - Field Blanks
* - Surrogate Recoveries
* - Surrogate Retention Times
* - Matrix Spike / Matrix Spike Duplicate
* - Laboratory Control Sample
  - Calibrations
* - Method Blanks
* - Performance Evaluation Mixtures
  - Florisil Cartridge Check
  - GPC Calibration
* - Compound Identification

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

No problems were found that would affect the use of the data.

Form IX for a florisil cleanup was not included in the data package.

Holding Times

All extractions and analyses were performed within the required holding times.

Surrogate Recoveries

All surrogate recoveries were within the required limits.

Matrix Spike

Sample E2324-05 / TP-102 was used for the matrix spike and matrix spike duplicate.

All recoveries and RPDs were within the required limits.

Laboratory Control Samples

All recoveries were within the quality control limits used for the validation.

Initial Calibrations

All percent RSDs for PCB 1016 and PCB 1260 were less than 20%.

Continuing Calibrations

Most of the percent differences in the continuing calibrations were less than the 20% quality control limit.

The average of all of the percent differences of the individual peaks were less than 20%.

In the three continuing calibration standards which had one peak with a percent difference above 20%, the calculated amount was higher than the actual amount.

No PCBs were detected in the sample and the minor problems with the calibrations do not affect the use of the data.

Florisil Cartridge Check

Form IX for a florisil cleanup was not included in the data package.

GPC Calibration

A GPC cleanup was not performed on these samples.

Method Blanks

No problems were detected with any of the method blanks.

Calibration Blanks

No problems were detected with the calibration blanks associated with this sample delivery group.

Field Blank

A field blank was not analyzed with this sample delivery group.

Sample Results

The data were qualified on the basis of the percent difference of the concentrations on the two columns:

% Difference	Qualifier
0 - 25%	None
25 - 70%	"J"
70 - 100%	"JN"
> 100%	"R"
100 - 200% (Interference detected)	"JN"
> 50% (Value is < CRQL)	"U"

No problems were detected with the sample data.

EB-2-20130520			Lab	DV									DV	Comb.
E2324-02		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

CHA-2-20130520			Lab	DV									DV	Comb.
E2324-03		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

TP-101-20130520			Lab	DV									DV	Comb.
E2324-04		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

TP-102-20130520			Lab	DV									DV	Comb.
E2324-05		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

TP-103-20130520			Lab	DV									DV	Comb.
E2324-08		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

TP-103-20130520			Lab	DV									DV	Comb.
E2324-09		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

TP-105-20130520			Lab	DV									DV	Comb.
E2324-10		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

TP-106-20130520			Lab	DV									DV	Comb.
E2324-11		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

GP-01A-20130520			Lab	DV									DV	Comb.
E2324-12		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

GP-01B-20130520			Lab	DV									DV	Comb.
E2324-13		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

GP-02A-20130520			Lab	DV									DV	Comb.
E2324-14		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

GP-02B-20130520			Lab	DV									DV	Comb.
E2324-15		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

GP-03A-20130520			Lab	DV									DV	Comb.
E2324-16		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

GP-03B-20130520			Lab	DV									DV	Comb.
E2324-17		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

GP-04A-20130520			Lab	DV									DV	Comb.
E2324-18		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

GP-04B-20130522			Lab	DV									DV	Comb.
E2324-19		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

TP-107-20130521			Lab	DV									DV	Comb.
E2324-20		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

TP-108-20130521			Lab	DV									DV	Comb.
E2324-21		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

TP-109-20130521			Lab	DV									DV	Comb.
E2324-22		ug/kg	Qual.	Conc.	HT	MB	TB	Surr	MS	LCS	IC	CC	Qual.	Qual.
	Aroclor-1016		U										U	U
	Aroclor-1221		U										U	U
	Aroclor-1232		U										U	U
	Aroclor-1242		U										U	U
	Aroclor-1248		U										U	U
	Aroclor-1254		U										U	U
	Aroclor-1260		U										U	U

SUMMARY OF THE ANALYTICAL DATA VALIDATION
9 Owasco Street, Auburn, NY

Soil and Water Total Metals
Samples Collected: May 20, 2013
Samples Received at Chemtech on May 22, 2013
Sample Delivery Group: E2324
Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Matrix
E2324-02	EB-2	Water
E2324-03	CHA-2	Soil
E2324-04	TP-101	Soil
E2324-05	TP-102	Soil
E2324-06	E2324-05MS	Soil
E2324-07	E2324-05MSD	Soil
E2324-08	TP-103	Soil
E2324-09	TP-104	Soil
E2324-10	TP-105	Soil
E2324-11	TP-106	Soil
E2324-12	GP-01A	Soil
E2324-13	GP-01B	Soil
E2324-14	GP-02A	Soil
E2324-15	GP-02B	Soil
E2324-16	GP-03A	Soil
E2324-17	GP-03B	Soil
E2324-18	GP-04A	Soil
E2324-19	GP-04B	Soil
E2324-20	TP-107	Soil
E2324-21	TP-108	Soil
E2324-22	TP-109	Soil

Soil and water samples were validated for inorganic analyses by the US EPA Region II data validation SOP (HW-2, Revision 13). Data were reviewed for usability according to the following criteria:

* - Holding Times
* - Calibration Verification
* - CRDL Standard
* - Laboratory Control Sample
  - Serial Dilution
* - Calibration Blanks
  - Field Blank
  - Preparation Blanks
  - Matrix Spike
* - Duplicate Analyses
* - ICP Interference Check Sample
* - Detection Limit Results
* - Linear Range
* - Sample Results

* - Indicates that all criteria were met for this parameter.

Data Validation Summary

The problems with the matrix spike and serial dilutions should be noted. These are described in detail below.

No other problems were detected that would affect the use of the data.

Holding Times

All samples were analyzed within the required holding times.

CRDL Standards

All of the CRDL standards were within the 70% - 130% quality control limits.

Initial and Continuing Calibrations

No problems were found with any of the initial or continuing calibrations.

Preparation Blank

No compounds were detected in the one preparation blank associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

Field Blank

A field blank was not collected with this sample delivery group.

ICP Interference Check Sample

All of the ICP Interference Check Sample recoveries were within the required limits.

Matrix Spike Recovery

Sample E2324-05 / TP-102 was used as the matrix spike and matrix spike duplicate.

All recoveries were within the 75% - 125% quality control limits with the following exceptions:

Analyte	MS % Rec	MSD % Rec.
ANTIMONY	15%	15%
ARSENIC	71%	72%
BERYLLIUM	78%	79%
SELENIUM	65%	65%

The data for antimony, arsenic and selenium were flagged with the “J” qualifier and are estimated values.

The laboratory also flagged beryllium with the “N” qualifier even though the 78% recovery was within the 75% - 125% quality control limits. This was removed during the data validation.

Duplicate Analysis

Sample E2324-05 / TP-102 was used for the matrix duplicate.

All RPDs which could be accurately calculated were less than 20%.

Laboratory Control Sample

No problems were detected with the recoveries of the LCS standards.

Serial Dilutions

Sample E2324-05 / TP-102 was used for the serial dilution.

The “E” qualifier was not added to the FORM I’s or EDDs as required by the NYS DEC ASP program. These were added during the validation.

The percent differences were calculated during the data validation:

Analyte	MDL	50X MDL	Initial Concentration	% D
ALUMINUM	6.5	325	50790	31%
ANTIMONY	8	400		
ARSENIC	4.2	210	82	44%
BARIUM	4	200	487	33%
BERYLLIUM	0.7	35	23	38%
CADMIUM	0.5	25	14	39%
CALCIUM	31.8	1,590	934850	51%
CHROMIUM	1.1	55	53.51	43%
COBALT	5.8	290		
COPPER	2	100	37375	46%
IRON	20.4	1,020		
LEAD	25.6	1,280		
MAGNESIUM	32.5	1,625	142225	42%
MANGANESE	1.7	85	2586	47%
NICKEL	4.2	210	0.92	29%
POTASSIUM	38.8	1,940	9149	25%

Analyte	MDL	50X MDL	Initial Concentration	% D
SELENIUM	4.8	240	57	13%
SILVER	1.5	75		
SODIUM	13.9	695	12462	29%
THALLIUM	2.4	120	14	24%
VANADIUM	6.4	320	229	43%

The analytes noted in red were flagged with the “EJ” qualifier in the data validation summary table and in the NYS EDD.

The data for these analytes are estimated values.

Instrument Detection Limit

No problems were found with the instrument detection limits.

ICP Linear Ranges

No problems were detected with the linear ranges.

Sample Results

No problems were detected with any of the data.

EB-2-20130520 E2324-02		Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.		DV Qual	Comb. Qual
	ALUMINUM		U									U	U
	ANTIMONY		U									U	U
	ARSENIC		U									U	U
	BARIUM		U									U	U
	BERYLLIUM		U									U	U
	CADMIUM		U									U	U
	CALCIUM	40.4	J									J	J
	CHROMIUM, TOTAL		U									U	U
	COBALT		U									U	U
	COPPER		U									U	U
	IRON		U									U	U
	LEAD		U									U	U
	MAGNESIUM		U									U	U
	MANGANESE	0.96	J									J	J
	NICKEL		U									U	U
	POTASSIUM	58.4	J									J	J
	SELENIUM		U									U	U
	SILVER		U									U	U
	SODIUM	102	J									J	J
	THALLIUM		U									U	U
	VANADIUM		U									U	U
	ZINC	8.040	J									J	J

CHA-2-20130520 E2324-03		Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.		DV Qual	Comb. Qual
	ALUMINUM	5270								31%	EJ	EJ	EJ
	ANTIMONY		UN					15%				UNJ	UNJ
	ARSENIC	9.110	N					71%				NJ	NJ
	BARIUM	345								33%	EJ	EJ	EJ
	BERYLLIUM	2.760	N					78%					
	CADMIUM		U									U	U
	CALCIUM	17700								51%	EJ	EJ	EJ
	CHROMIUM, TOTAL	82.1											
	COBALT	13.8											
	COPPER	78.1								46%	EJ	EJ	EJ
	IRON	26300											
	LEAD	156											
	MAGNESIUM	4730								42%	EJ	EJ	EJ
	MANGANESE	192								47%	EJ	EJ	EJ
	NICKEL	51.8											
	POTASSIUM	760								25%	EJ	EJ	EJ
	SELENIUM	7.740	N					65%				NJ	NJ
	SILVER	0.21	J									J	J
	SODIUM		U							29%	EJ	U	U
	THALLIUM	1.540											
	VANADIUM	12.1								43%	EJ	EJ	EJ
	ZINC	88.9											

TP-101-20130520 E2324-04	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.		DV Qual	Comb. Qual
ALUMINUM	3440								31%	EJ	EJ	EJ
ANTIMONY		UN					15%				UNJ	UNJ
ARSENIC	8.140	N					71%				NJ	NJ
BARIUM	52.8								33%	EJ	EJ	EJ
BERYLLIUM	2.060	N					78%					
CADMIUM	0.92											
CALCIUM	132000								51%	EJ	EJ	EJ
CHROMIUM, TOTAL	3.410											
COBALT	9.490											
COPPER	60.7								46%	EJ	EJ	EJ
IRON	17200											
LEAD	36.1											
MAGNESIUM	14200								42%	EJ	EJ	EJ
MANGANESE	222								47%	EJ	EJ	EJ
NICKEL	70.9											
POTASSIUM	752								25%	EJ	EJ	EJ
SELENIUM	5.050	N					65%				NJ	NJ
SILVER		U									U	U
SODIUM	62.7								29%	EJ	EJ	EJ
THALLIUM	1.260											
VANADIUM	19.9								43%	EJ	EJ	EJ
ZINC	160											

TP-102-20130520 E2324-05	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.		DV Qual	Comb. Qual
ALUMINUM	4970								31%	EJ	EJ	EJ
ANTIMONY		UN					15%				UNJ	UNJ
ARSENIC	8.060	N					71%				NJ	NJ
BARIUM	47.7								33%	EJ	EJ	EJ
BERYLLIUM	2.250	N					78%				NJ	NJ
CADMIUM	1.360											
CALCIUM	91600								51%	EJ	EJ	EJ
CHROMIUM, TOTAL	5.240											
COBALT	10.5											
COPPER	36.7								46%	EJ	EJ	EJ
IRON	19500											
LEAD	15.7											
MAGNESIUM	13900								42%	EJ	EJ	EJ
MANGANESE	253								47%	EJ	EJ	EJ
NICKEL	65.7											
POTASSIUM	718								25%	EJ	EJ	EJ
SELENIUM	5.550	N					65%				NJ	NJ
SILVER		U									U	U
SODIUM	1220								29%	EJ	EJ	EJ
THALLIUM	1.330											
VANADIUM	22.4								43%	EJ	EJ	EJ
ZINC	167											

TP-103-20130520 E2324-08	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.		DV Qual	Comb. Qual
ALUMINUM	1090								31%	EJ	EJ	EJ
ANTIMONY		UN					15%				UNJ	UNJ
ARSENIC	1.770	N					71%				NJ	NJ
BARIUM	46.6								33%	EJ	EJ	EJ
BERYLLIUM	0.18	N					78%					
CADMIUM		U									U	U
CALCIUM	4620								51%	EJ	EJ	EJ
CHROMIUM, TOTAL	2.290											
COBALT	0.70	J									J	J
COPPER	6.840								46%	EJ	EJ	EJ
IRON	4130											
LEAD	7.340											
MAGNESIUM	428								42%	EJ	EJ	EJ
MANGANESE	84.7								47%	EJ	EJ	EJ
NICKEL	3.830											
POTASSIUM	176								25%	EJ	EJ	EJ
SELENIUM	1.490	N					65%				NJ	NJ
SILVER		U									U	U
SODIUM	3.950	J							29%	EJ	EJ	EJ
THALLIUM		U									U	U
VANADIUM	5.300								43%	EJ	EJ	EJ
ZINC	8.000											

TP-104-20130520 E2324-09	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.		DV Qual	Comb. Qual
ALUMINUM	4780								31%		EJ	EJ
ANTIMONY		UN					15%				UNJ	UNJ
ARSENIC	9.250	N					71%				NJ	NJ
BARIUM	387								33%		EJ	EJ
BERYLLIUM	3.870	N					78%					
CADMIUM		U									U	U
CALCIUM	19300								51%		EJ	EJ
CHROMIUM, TOTAL	41.3											
COBALT	12.3											
COPPER	79.2								46%		EJ	EJ
IRON	37500											
LEAD	192											
MAGNESIUM	4120								42%		EJ	EJ
MANGANESE	208								47%		EJ	EJ
NICKEL	48.3											
POTASSIUM	710								25%		EJ	EJ
SELENIUM	10.8	N					65%				NJ	NJ
SILVER		U									U	U
SODIUM		U							29%		UEJ	UEJ
THALLIUM	1.800											
VANADIUM	11.8								43%		EJ	EJ
ZINC	100											

TP-105-20130520 E2324-10	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	6560								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	12.8	N					71%			NJ	NJ
BARIUM	161								33%	EJ	EJ
BERYLLIUM	5.600	N					78%				
CADMIUM		U								U	U
CALCIUM	17400								51%	EJ	EJ
CHROMIUM, TOTAL	19.2										
COBALT	33.3										
COPPER	55.7								46%	EJ	EJ
IRON	43400										
LEAD	57.4										
MAGNESIUM	3430								42%	EJ	EJ
MANGANESE	275								47%	EJ	EJ
NICKEL	165										
POTASSIUM	702								25%	EJ	EJ
SELENIUM	15.0	N					65%			NJ	NJ
SILVER	1.430										
SODIUM		U							29%	UEJ	UEJ
THALLIUM	4.400										
VANADIUM	12.1								43%	EJ	EJ
ZINC	70.1										

TP-106-20130520 E2324-11	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	7150								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	4.570	N					71%			NJ	NJ
BARIUM	77.1								33%	EJ	EJ
BERYLLIUM	3.510	N					78%				
CADMIUM		U								U	U
CALCIUM	44700								51%	EJ	EJ
CHROMIUM, TOTAL	12.8										
COBALT	16.9										
COPPER	24.3								46%	EJ	EJ
IRON	30800										
LEAD	16.8										
MAGNESIUM	5460								42%	EJ	EJ
MANGANESE	427								47%	EJ	EJ
NICKEL	88.6										
POTASSIUM	758								25%	EJ	EJ
SELENIUM	8.830	N					65%			NJ	NJ
SILVER	0.20	J								J	J
SODIUM		U							29%	EU	EU
THALLIUM	1.620										
VANADIUM	8.990								43%	EJ	EJ
ZINC	78.0										

GP-01A-20130520 E2324-12	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	6180								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	12.1	N					71%			NJ	NJ
BARIUM	389								33%	EJ	EJ
BERYLLIUM	3.050	N					78%				
CADMIUM		U								U	U
CALCIUM	16500								51%	EJ	EJ
CHROMIUM, TOTAL	12.5										
COBALT	13.6										
COPPER	21.0								46%	EJ	EJ
IRON	27400										
LEAD	85.7										
MAGNESIUM	5020								42%	EJ	EJ
MANGANESE	289								47%	EJ	EJ
NICKEL	70.2										
POTASSIUM	786								25%	EJ	EJ
SELENIUM	8.270	N					65%			NJ	NJ
SILVER	0.40										
SODIUM	23.3	J							29%	EJ	EJ
THALLIUM	2.720										
VANADIUM	11.7								43%	EJ	EJ
ZINC	60.4										

GP-01B-20130520 E2324-13	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	6240								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	6.050	N					71%			NJ	NJ
BARIUM	109								33%	EJ	EJ
BERYLLIUM	2.770	N					78%				
CADMIUM		U								U	U
CALCIUM	16700								51%	EJ	EJ
CHROMIUM, TOTAL	12.0										
COBALT	15.8										
COPPER	27.3								46%	EJ	EJ
IRON	26500										
LEAD	36.0										
MAGNESIUM	4140								42%	EJ	EJ
MANGANESE	221								47%	EJ	EJ
NICKEL	41.7										
POTASSIUM	860								25%	EJ	EJ
SELENIUM	8.640	N					65%			NJ	NJ
SILVER	0.19	J								J	J
SODIUM	27.0	J							29%	EJ	EJ
THALLIUM	1.020										
VANADIUM	13.4								43%	EJ	EJ
ZINC	47.3										

GP-02A-20130520 E2324-14	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	7870								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	8.470	N					71%			NJ	NJ
BARIUM	133								33%	EJ	EJ
BERYLLIUM	3.440	N					78%				
CADMIUM		U								U	U
CALCIUM	54400								51%	EJ	EJ
CHROMIUM, TOTAL	14.0										
COBALT	21.0										
COPPER	42.2								46%	EJ	EJ
IRON	28900										
LEAD	130										
MAGNESIUM	11800								42%	EJ	EJ
MANGANESE	273								47%	EJ	EJ
NICKEL	98.5										
POTASSIUM	1490								25%	EJ	EJ
SELENIUM	9.270	N					65%			NJ	NJ
SILVER	0.26										
SODIUM	117								29%	EJ	EJ
THALLIUM	1.920										
VANADIUM	12.5								43%	EJ	EJ
ZINC	117										

GP-02B-20130520 E2324-15	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	4350								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	6.690	N					71%			NJ	NJ
BARIUM	245								33%	EJ	EJ
BERYLLIUM	1.600	N					78%				
CADMIUM		U								U	U
CALCIUM	24000								51%	EJ	EJ
CHROMIUM, TOTAL	9.040										
COBALT	10.9										
COPPER	20.4								46%	EJ	EJ
IRON	15900										
LEAD	6.650										
MAGNESIUM	3220								42%	EJ	EJ
MANGANESE	133								47%	EJ	EJ
NICKEL	43.8										
POTASSIUM	849								25%	EJ	EJ
SELENIUM	5.140	N					65%			NJ	NJ
SILVER		U								U	U
SODIUM	45.9	J							29%	EJ	EJ
THALLIUM	0.81	J								J	J
VANADIUM	5.710								43%	EJ	EJ
ZINC	24.6										

GP-03A-20130520 E2324-16	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	4280								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	7.530	N					71%			NJ	NJ
BARIUM	69.0								33%	EJ	EJ
BERYLLIUM	7.200	N					78%				
CADMIUM		U								U	U
CALCIUM	5170								51%	EJ	EJ
CHROMIUM, TOTAL	11.8										
COBALT	27.4										
COPPER	28.7								46%	EJ	EJ
IRON	56700										
LEAD	16.9										
MAGNESIUM	2440								42%	EJ	EJ
MANGANESE	129								47%	EJ	EJ
NICKEL	192										
POTASSIUM	843								25%	EJ	EJ
SELENIUM	16.8	N					65%			NJ	NJ
SILVER	1.980										
SODIUM		U							29%	EU	EU
THALLIUM	5.570										
VANADIUM	5.680								43%	EJ	EJ
ZINC	40.5										

GP-03B-20130520 E2324-17	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	3840								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	8.100	N					71%			NJ	NJ
BARIUM	82.6								33%	EJ	EJ
BERYLLIUM	7.970	N					78%				
CADMIUM		U								U	U
CALCIUM	3290								51%	EJ	EJ
CHROMIUM, TOTAL	13.8										
COBALT	25.2										
COPPER	32.5								46%	EJ	EJ
IRON	60900										
LEAD	15.3										
MAGNESIUM	2000								42%	EJ	EJ
MANGANESE	151								47%	EJ	EJ
NICKEL	204										
POTASSIUM	608								25%	EJ	EJ
SELENIUM	18.3	N					65%			NJ	NJ
SILVER	2.310										
SODIUM		U							29%	EU	EU
THALLIUM	6.210										
VANADIUM	6.700								43%	EJ	EJ
ZINC	42.2										

GP-04A-20130520 E2324-18	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	10800								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	3.750	N					71%			NJ	NJ
BARIUM	153								33%	EJ	EJ
BERYLLIUM	1.390	N					78%				
CADMIUM	0.35										
CALCIUM	72100								51%	EJ	EJ
CHROMIUM, TOTAL	12.5										
COBALT	6.780										
COPPER	16.8								46%	EJ	EJ
IRON	13900										
LEAD	511									EJ	EJ
MAGNESIUM	14500								42%	EJ	EJ
MANGANESE	262								47%	EJ	EJ
NICKEL	16.4										
POTASSIUM	3240								25%	EJ	EJ
SELENIUM	3.520	N					65%			NJ	NJ
SILVER		U								U	U
SODIUM	328								29%	EJ	EJ
THALLIUM		U								U	U
VANADIUM	21.2								43%	EJ	EJ
ZINC	334										

GP-04B-20130522 E2324-19	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	15600								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	7.530	N					71%			NJ	NJ
BARIUM	187								33%	EJ	EJ
BERYLLIUM	7.480	N					78%				
CADMIUM		U								U	U
CALCIUM	2940								51%	EJ	EJ
CHROMIUM, TOTAL	23.0										
COBALT	108										
COPPER	139								46%	EJ	EJ
IRON	57400										
LEAD	28.1										
MAGNESIUM	2280								42%	EJ	EJ
MANGANESE	259								47%	EJ	EJ
NICKEL	367										
POTASSIUM	797								25%	EJ	EJ
SELENIUM	16.9	N					65%			NJ	NJ
SILVER	1.750										
SODIUM		U							29%	EU	EU
THALLIUM	4.600										
VANADIUM	8.310								43%	EJ	EJ
ZINC	168										

TP-107-20130521 E2324-20	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	5740								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	4.460	N					71%			NJ	NJ
BARIUM	92.9								33%	EJ	EJ
BERYLLIUM	2.000	N					78%				
CADMIUM		U								U	U
CALCIUM	85300								51%	EJ	EJ
CHROMIUM, TOTAL	7.050										
COBALT	9.760										
COPPER	16.2								46%	EJ	EJ
IRON	18300										
LEAD	28.6										
MAGNESIUM	17400								42%	EJ	EJ
MANGANESE	329								47%	EJ	EJ
NICKEL	27.9										
POTASSIUM	884								25%	EJ	EJ
SELENIUM	4.750	N					65%			NJ	NJ
SILVER		U								U	U
SODIUM	86.7								29%	EJ	EJ
THALLIUM	0.73	J								J	J
VANADIUM	9.240								43%	EJ	EJ
ZINC	47.0										

TP-108-20130521 E2324-21	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	4620								31%	EJ	EJ
ANTIMONY	2.740	N					15%			NJ	NJ
ARSENIC	18.2	N					71%			NJ	NJ
BARIUM	176								33%	EJ	EJ
BERYLLIUM	4.230	N					78%				
CADMIUM		U								U	U
CALCIUM	25800								51%	EJ	EJ
CHROMIUM, TOTAL	21.3										
COBALT	15.1										
COPPER	63.9								46%	EJ	EJ
IRON	36700										
LEAD	376										
MAGNESIUM	4060								42%	EJ	EJ
MANGANESE	197								47%	EJ	EJ
NICKEL	69.0										
POTASSIUM	716								25%	EJ	EJ
SELENIUM	12.4	N					65%			NJ	NJ
SILVER	0.35										
SODIUM		U							29%	EU	EU
THALLIUM	2.400										
VANADIUM	11.8								43%	EJ	EJ
ZINC	79.2										

TP-109-20130521 E2324-22	Conc.	Lab Qual	DV Conc	FB	CRDL	CC	MS	Dup.	Ser. Dil.	DV Qual	Comb. Qual
ALUMINUM	11700								31%	EJ	EJ
ANTIMONY		UN					15%			UNJ	UNJ
ARSENIC	4.660	N					71%			NJ	NJ
BARIUM	113								33%	EJ	EJ
BERYLLIUM	1.910	N					78%				
CADMIUM	22.9										
CALCIUM	67100								51%	EJ	EJ
CHROMIUM, TOTAL	12.9										
COBALT	6.500										
COPPER	343								46%	EJ	EJ
IRON	17900										
LEAD	192										
MAGNESIUM	12600								42%	EJ	EJ
MANGANESE	318								47%	EJ	EJ
NICKEL	63.5										
POTASSIUM	2070								25%	EJ	EJ
SELENIUM	4.330	N					65%			NJ	NJ
SILVER		U								U	U
SODIUM	913								29%	EJ	EJ
THALLIUM		U								U	U
VANADIUM	25.0								43%	EJ	EJ
ZINC	498										

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