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Appendix G

RI Sample Analytical Reports

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PHASE II ESA DATA PACKAGES

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

AECOM
810 Dutch Square Blvd.
Suite 202
Columbia, SC 29210
Attention: Scott Ross

Project Name: **Phase II ESA - Shakespeare**

Lot Number: **PA29010**
Date Completed: **02/06/2014**

Nisreen Saikaly
Project Manager

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

* P A 2 9 0 1 0 *

Case Narrative

AECOM

Lot Number: PA29010

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary

AECOM

Lot Number: PA29010

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	REC-1 B-1 (12-13)	Solid	01/28/2014 1020	01/28/2014
002	REC-1 B-2 (12-13)	Solid	01/28/2014 1100	01/28/2014
003	Trip Blank 2	Aqueous	01/28/2014	01/28/2014

(3 samples)

Executive Summary

AECOM

Lot Number: PA29010

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page

(0 detections)

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29010-001**
Description: **REC-1 B-1 (12-13)**
Matrix: **Solid**
Date Sampled: **01/28/2014 1020**
% Solids: **80.5** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/30/2014 1343	AAC		39458	5.98

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		21	ug/kg	1
Benzene	71-43-2	8260B	ND		5.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.2	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29010-001**
Description: **REC-1 B-1 (12-13)**
Matrix: **Solid**
Date Sampled: **01/28/2014 1020**
% Solids: **80.5** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/30/2014 1343	AAC		39458	5.98

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	53-142
Bromofluorobenzene		91	47-138
Toluene-d8		93	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29010-002**
Description: **REC-1 B-2 (12-13)**
Matrix: **Solid**
Date Sampled: **01/28/2014 1100**
% Solids: **80.3** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/30/2014 1407	AAC		39458	5.75

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		22	ug/kg	1
Benzene	71-43-2	8260B	ND		5.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		11	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.4	ug/kg	1
Styrene	100-42-5	8260B	ND		5.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.4	ug/kg	1
Toluene	108-88-3	8260B	ND		5.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.4	ug/kg	1

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P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29010-002**
Description: **REC-1 B-2 (12-13)**
Matrix: **Solid**
Date Sampled: **01/28/2014 1100**
% Solids: **80.3** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/30/2014 1407	AAC		39458	5.75

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	53-142
Bromofluorobenzene		90	47-138
Toluene-d8		96	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29010-003**
Description: **Trip Blank 2**
Matrix: **Aqueous**
Date Sampled: **01/28/2014**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/06/2014 0048	PMM2		39888

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29010-003**
Description: **Trip Blank 2**
Matrix: **Aqueous**
Date Sampled: **01/28/2014**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/06/2014 0048	PMM2		39888

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		70	70-130
Bromofluorobenzene		79	70-130
Toluene-d8		72	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39458-001
Batch: 39458
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/kg	01/30/2014 1255
Benzene	ND		1	5.0	ug/kg	01/30/2014 1255
Bromodichloromethane	ND		1	5.0	ug/kg	01/30/2014 1255
Bromoform	ND		1	5.0	ug/kg	01/30/2014 1255
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	01/30/2014 1255
2-Butanone (MEK)	ND		1	10	ug/kg	01/30/2014 1255
Carbon disulfide	ND		1	5.0	ug/kg	01/30/2014 1255
Carbon tetrachloride	ND		1	5.0	ug/kg	01/30/2014 1255
Chlorobenzene	ND		1	5.0	ug/kg	01/30/2014 1255
Chloroethane	ND		1	5.0	ug/kg	01/30/2014 1255
Chloroform	ND		1	5.0	ug/kg	01/30/2014 1255
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	01/30/2014 1255
Cyclohexane	ND		1	5.0	ug/kg	01/30/2014 1255
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	01/30/2014 1255
Dibromochloromethane	ND		1	5.0	ug/kg	01/30/2014 1255
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	01/30/2014 1255
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	01/30/2014 1255
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	01/30/2014 1255
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	01/30/2014 1255
Dichlorodifluoromethane	ND		1	5.0	ug/kg	01/30/2014 1255
1,2-Dichloroethane	ND		1	5.0	ug/kg	01/30/2014 1255
1,1-Dichloroethane	ND		1	5.0	ug/kg	01/30/2014 1255
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	01/30/2014 1255
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	01/30/2014 1255
1,1-Dichloroethene	ND		1	5.0	ug/kg	01/30/2014 1255
1,2-Dichloropropane	ND		1	5.0	ug/kg	01/30/2014 1255
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	01/30/2014 1255
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	01/30/2014 1255
Ethylbenzene	ND		1	5.0	ug/kg	01/30/2014 1255
2-Hexanone	ND		1	10	ug/kg	01/30/2014 1255
Isopropylbenzene	ND		1	5.0	ug/kg	01/30/2014 1255
Methyl acetate	ND		1	5.0	ug/kg	01/30/2014 1255
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	01/30/2014 1255
4-Methyl-2-pentanone	ND		1	10	ug/kg	01/30/2014 1255
Methylcyclohexane	ND		1	5.0	ug/kg	01/30/2014 1255
Methylene chloride	ND		1	5.0	ug/kg	01/30/2014 1255
Styrene	ND		1	5.0	ug/kg	01/30/2014 1255
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	01/30/2014 1255
Tetrachloroethene	ND		1	5.0	ug/kg	01/30/2014 1255
Toluene	ND		1	5.0	ug/kg	01/30/2014 1255
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	01/30/2014 1255
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	01/30/2014 1255
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	01/30/2014 1255
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	01/30/2014 1255

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39458-001
Batch: 39458
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	01/30/2014 1255
Trichlorofluoromethane	ND		1	5.0	ug/kg	01/30/2014 1255
Vinyl chloride	ND		1	5.0	ug/kg	01/30/2014 1255
Xylenes (total)	ND		1	5.0	ug/kg	01/30/2014 1255

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		89	47-138
1,2-Dichloroethane-d4		88	53-142
Toluene-d8		90	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39458-002
Batch: 39458
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	115	60-140	01/30/2014 1119
Benzene	50	44		1	88	69-123	01/30/2014 1119
Bromodichloromethane	50	44		1	89	69-121	01/30/2014 1119
Bromoform	50	47		1	93	61-119	01/30/2014 1119
Bromomethane (Methyl bromide)	50	43		1	87	10-168	01/30/2014 1119
2-Butanone (MEK)	100	100		1	101	57-148	01/30/2014 1119
Carbon disulfide	50	41		1	83	58-122	01/30/2014 1119
Carbon tetrachloride	50	44		1	88	58-136	01/30/2014 1119
Chlorobenzene	50	44		1	89	59-129	01/30/2014 1119
Chloroethane	50	46		1	93	42-163	01/30/2014 1119
Chloroform	50	43		1	86	71-125	01/30/2014 1119
Chloromethane (Methyl chloride)	50	45		1	91	34-134	01/30/2014 1119
Cyclohexane	50	43		1	85	53-139	01/30/2014 1119
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	95	55-125	01/30/2014 1119
Dibromochloromethane	50	45		1	91	66-119	01/30/2014 1119
1,2-Dibromoethane (EDB)	50	45		1	90	74-124	01/30/2014 1119
1,4-Dichlorobenzene	50	44		1	88	52-133	01/30/2014 1119
1,3-Dichlorobenzene	50	44		1	88	51-134	01/30/2014 1119
1,2-Dichlorobenzene	50	45		1	89	57-131	01/30/2014 1119
Dichlorodifluoromethane	50	50		1	101	10-157	01/30/2014 1119
1,2-Dichloroethane	50	43		1	86	67-129	01/30/2014 1119
1,1-Dichloroethane	50	44		1	87	71-127	01/30/2014 1119
trans-1,2-Dichloroethene	50	43		1	87	68-131	01/30/2014 1119
cis-1,2-Dichloroethene	50	43		1	86	70-122	01/30/2014 1119
1,1-Dichloroethene	50	46		1	92	69-138	01/30/2014 1119
1,2-Dichloropropane	50	44		1	89	72-124	01/30/2014 1119
trans-1,3-Dichloropropene	50	45		1	90	70-124	01/30/2014 1119
cis-1,3-Dichloropropene	50	46		1	92	70-126	01/30/2014 1119
Ethylbenzene	50	44		1	87	59-128	01/30/2014 1119
2-Hexanone	100	100		1	100	54-137	01/30/2014 1119
Isopropylbenzene	50	44		1	88	50-136	01/30/2014 1119
Methyl acetate	50	46		1	91	59-137	01/30/2014 1119
Methyl tertiary butyl ether (MTBE)	50	43		1	87	70-130	01/30/2014 1119
4-Methyl-2-pentanone	100	98		1	98	60-134	01/30/2014 1119
Methylcyclohexane	50	44		1	88	41-144	01/30/2014 1119
Methylene chloride	50	41		1	83	70-130	01/30/2014 1119
Styrene	50	45		1	90	54-136	01/30/2014 1119
1,1,2,2-Tetrachloroethane	50	45		1	91	69-132	01/30/2014 1119
Tetrachloroethene	50	42		1	84	45-150	01/30/2014 1119
Toluene	50	44		1	88	61-129	01/30/2014 1119
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	42		1	85	49-136	01/30/2014 1119
1,2,4-Trichlorobenzene	50	43		1	86	34-145	01/30/2014 1119
1,1,2-Trichloroethane	50	42		1	85	55-128	01/30/2014 1119
1,1,1-Trichloroethane	50	43		1	85	63-128	01/30/2014 1119

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39458-002
Batch: 39458
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	44		1	88	62-126	01/30/2014 1119
Trichlorofluoromethane	50	45		1	89	45-138	01/30/2014 1119
Vinyl chloride	50	49		1	98	42-132	01/30/2014 1119
Xylenes (total)	100	89		1	89	58-128	01/30/2014 1119

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	47-138
1,2-Dichloroethane-d4		91	53-142
Toluene-d8		97	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39458-003
Batch: 39458
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	120		1	120	3.8	60-140	20	01/30/2014 1143
Benzene	50	43		1	86	1.9	69-123	20	01/30/2014 1143
Bromodichloromethane	50	44		1	88	0.90	69-121	20	01/30/2014 1143
Bromoform	50	47		1	95	1.5	61-119	20	01/30/2014 1143
Bromomethane (Methyl bromide)	50	44		1	87	0.37	10-168	20	01/30/2014 1143
2-Butanone (MEK)	100	100		1	102	0.48	57-148	20	01/30/2014 1143
Carbon disulfide	50	41		1	82	1.3	58-122	20	01/30/2014 1143
Carbon tetrachloride	50	42		1	84	3.7	58-136	20	01/30/2014 1143
Chlorobenzene	50	43		1	87	2.5	59-129	20	01/30/2014 1143
Chloroethane	50	45		1	90	2.8	42-163	20	01/30/2014 1143
Chloroform	50	42		1	84	2.4	71-125	20	01/30/2014 1143
Chloromethane (Methyl chloride)	50	43		1	86	5.0	34-134	20	01/30/2014 1143
Cyclohexane	50	43		1	86	1.4	53-139	20	01/30/2014 1143
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	94	0.70	55-125	20	01/30/2014 1143
Dibromochloromethane	50	45		1	91	0.19	66-119	20	01/30/2014 1143
1,2-Dibromoethane (EDB)	50	45		1	90	0.32	74-124	20	01/30/2014 1143
1,4-Dichlorobenzene	50	43		1	86	2.1	52-133	20	01/30/2014 1143
1,3-Dichlorobenzene	50	42		1	84	4.3	51-134	20	01/30/2014 1143
1,2-Dichlorobenzene	50	43		1	86	3.5	57-131	20	01/30/2014 1143
Dichlorodifluoromethane	50	47		1	93	7.4	10-157	20	01/30/2014 1143
1,2-Dichloroethane	50	43		1	86	0.41	67-129	20	01/30/2014 1143
1,1-Dichloroethane	50	43		1	85	2.8	71-127	20	01/30/2014 1143
trans-1,2-Dichloroethene	50	42		1	84	3.2	68-131	20	01/30/2014 1143
cis-1,2-Dichloroethene	50	42		1	84	2.7	70-122	20	01/30/2014 1143
1,1-Dichloroethene	50	44		1	88	4.4	69-138	20	01/30/2014 1143
1,2-Dichloropropane	50	43		1	86	3.2	72-124	20	01/30/2014 1143
trans-1,3-Dichloropropene	50	45		1	90	0.51	70-124	20	01/30/2014 1143
cis-1,3-Dichloropropene	50	45		1	89	2.9	70-126	20	01/30/2014 1143
Ethylbenzene	50	43		1	86	1.7	59-128	20	01/30/2014 1143
2-Hexanone	100	100		1	101	1.3	54-137	20	01/30/2014 1143
Isopropylbenzene	50	42		1	83	5.0	50-136	20	01/30/2014 1143
Methyl acetate	50	47		1	93	2.0	59-137	20	01/30/2014 1143
Methyl tertiary butyl ether (MTBE)	50	44		1	87	0.83	70-130	20	01/30/2014 1143
4-Methyl-2-pentanone	100	96		1	96	1.7	60-134	20	01/30/2014 1143
Methylcyclohexane	50	42		1	84	4.3	41-144	20	01/30/2014 1143
Methylene chloride	50	41		1	82	0.71	70-130	20	01/30/2014 1143
Styrene	50	45		1	89	1.2	54-136	20	01/30/2014 1143
1,1,2,2-Tetrachloroethane	50	44		1	88	2.8	69-132	20	01/30/2014 1143
Tetrachloroethene	50	41		1	81	3.0	45-150	20	01/30/2014 1143
Toluene	50	43		1	85	3.3	61-129	20	01/30/2014 1143
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	45		1	90	6.2	49-136	20	01/30/2014 1143
1,2,4-Trichlorobenzene	50	44		1	89	3.2	34-145	20	01/30/2014 1143
1,1,2-Trichloroethane	50	43		1	85	0.45	55-128	20	01/30/2014 1143
1,1,1-Trichloroethane	50	43		1	85	0.10	63-128	20	01/30/2014 1143

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39458-003
Batch: 39458
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	43		1	86	3.0	62-126	20	01/30/2014 1143
Trichlorofluoromethane	50	44		1	88	1.0	45-138	20	01/30/2014 1143
Vinyl chloride	50	46		1	93	5.4	42-132	20	01/30/2014 1143
Xylenes (total)	100	87		1	87	1.9	58-128	20	01/30/2014 1143

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	47-138
1,2-Dichloroethane-d4		84	53-142
Toluene-d8		91	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39888-001
Batch: 39888
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	20	ug/L	02/06/2014 0002
Benzene	ND		1	5.0	ug/L	02/06/2014 0002
Bromodichloromethane	ND		1	5.0	ug/L	02/06/2014 0002
Bromoform	ND		1	5.0	ug/L	02/06/2014 0002
Bromomethane (Methyl bromide)	ND		1	5.0	ug/L	02/06/2014 0002
2-Butanone (MEK)	ND		1	10	ug/L	02/06/2014 0002
Carbon disulfide	ND		1	5.0	ug/L	02/06/2014 0002
Carbon tetrachloride	ND		1	5.0	ug/L	02/06/2014 0002
Chlorobenzene	ND		1	5.0	ug/L	02/06/2014 0002
Chloroethane	ND		1	5.0	ug/L	02/06/2014 0002
Chloroform	ND		1	5.0	ug/L	02/06/2014 0002
Chloromethane (Methyl chloride)	ND		1	5.0	ug/L	02/06/2014 0002
Cyclohexane	ND		1	5.0	ug/L	02/06/2014 0002
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/L	02/06/2014 0002
Dibromochloromethane	ND		1	5.0	ug/L	02/06/2014 0002
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/L	02/06/2014 0002
1,4-Dichlorobenzene	ND		1	5.0	ug/L	02/06/2014 0002
1,3-Dichlorobenzene	ND		1	5.0	ug/L	02/06/2014 0002
1,2-Dichlorobenzene	ND		1	5.0	ug/L	02/06/2014 0002
Dichlorodifluoromethane	ND		1	5.0	ug/L	02/06/2014 0002
1,2-Dichloroethane	ND		1	5.0	ug/L	02/06/2014 0002
1,1-Dichloroethane	ND		1	5.0	ug/L	02/06/2014 0002
trans-1,2-Dichloroethene	ND		1	5.0	ug/L	02/06/2014 0002
cis-1,2-Dichloroethene	ND		1	5.0	ug/L	02/06/2014 0002
1,1-Dichloroethene	ND		1	5.0	ug/L	02/06/2014 0002
1,2-Dichloropropane	ND		1	5.0	ug/L	02/06/2014 0002
trans-1,3-Dichloropropene	ND		1	5.0	ug/L	02/06/2014 0002
cis-1,3-Dichloropropene	ND		1	5.0	ug/L	02/06/2014 0002
Ethylbenzene	ND		1	5.0	ug/L	02/06/2014 0002
2-Hexanone	ND		1	10	ug/L	02/06/2014 0002
Isopropylbenzene	ND		1	5.0	ug/L	02/06/2014 0002
Methyl acetate	ND		1	5.0	ug/L	02/06/2014 0002
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/L	02/06/2014 0002
4-Methyl-2-pentanone	ND		1	10	ug/L	02/06/2014 0002
Methylcyclohexane	ND		1	5.0	ug/L	02/06/2014 0002
Methylene chloride	ND		1	5.0	ug/L	02/06/2014 0002
Styrene	ND		1	5.0	ug/L	02/06/2014 0002
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/L	02/06/2014 0002
Tetrachloroethene	ND		1	5.0	ug/L	02/06/2014 0002
Toluene	ND		1	5.0	ug/L	02/06/2014 0002
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/L	02/06/2014 0002
1,2,4-Trichlorobenzene	ND		1	5.0	ug/L	02/06/2014 0002
1,1,2-Trichloroethane	ND		1	5.0	ug/L	02/06/2014 0002
1,1,1-Trichloroethane	ND		1	5.0	ug/L	02/06/2014 0002

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39888-001
Batch: 39888
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/L	02/06/2014 0002
Trichlorofluoromethane	ND		1	5.0	ug/L	02/06/2014 0002
Vinyl chloride	ND		1	2.0	ug/L	02/06/2014 0002
Xylenes (total)	ND		1	5.0	ug/L	02/06/2014 0002

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		81	70-130
1,2-Dichloroethane-d4		71	70-130
Toluene-d8		73	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39888-002
Batch: 39888
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	105	60-140	02/05/2014 2230
Benzene	50	50		1	99	70-130	02/05/2014 2230
Bromodichloromethane	50	51		1	102	70-130	02/05/2014 2230
Bromoform	50	48		1	95	70-130	02/05/2014 2230
Bromomethane (Methyl bromide)	50	48		1	97	60-140	02/05/2014 2230
2-Butanone (MEK)	100	100		1	102	60-140	02/05/2014 2230
Carbon disulfide	50	51		1	102	60-140	02/05/2014 2230
Carbon tetrachloride	50	52		1	104	70-130	02/05/2014 2230
Chlorobenzene	50	49		1	98	70-130	02/05/2014 2230
Chloroethane	50	49		1	99	42-163	02/05/2014 2230
Chloroform	50	48		1	96	70-130	02/05/2014 2230
Chloromethane (Methyl chloride)	50	47		1	94	60-140	02/05/2014 2230
Cyclohexane	50	44		1	87	70-130	02/05/2014 2230
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	106	70-130	02/05/2014 2230
Dibromochloromethane	50	49		1	99	70-130	02/05/2014 2230
1,2-Dibromoethane (EDB)	50	51		1	102	70-130	02/05/2014 2230
1,4-Dichlorobenzene	50	47		1	93	70-130	02/05/2014 2230
1,3-Dichlorobenzene	50	48		1	96	70-130	02/05/2014 2230
1,2-Dichlorobenzene	50	48		1	96	70-130	02/05/2014 2230
Dichlorodifluoromethane	50	53		1	106	60-140	02/05/2014 2230
1,2-Dichloroethane	50	49		1	98	70-130	02/05/2014 2230
1,1-Dichloroethane	50	50		1	100	70-130	02/05/2014 2230
trans-1,2-Dichloroethene	50	50		1	100	70-130	02/05/2014 2230
cis-1,2-Dichloroethene	50	49		1	98	70-130	02/05/2014 2230
1,1-Dichloroethene	50	50		1	100	70-130	02/05/2014 2230
1,2-Dichloropropane	50	49		1	97	70-130	02/05/2014 2230
trans-1,3-Dichloropropene	50	54		1	107	70-130	02/05/2014 2230
cis-1,3-Dichloropropene	50	48		1	95	70-130	02/05/2014 2230
Ethylbenzene	50	48		1	96	70-130	02/05/2014 2230
2-Hexanone	100	100		1	100	60-140	02/05/2014 2230
Isopropylbenzene	50	52		1	103	70-130	02/05/2014 2230
Methyl acetate	50	51		1	101	70-130	02/05/2014 2230
Methyl tertiary butyl ether (MTBE)	50	50		1	99	70-130	02/05/2014 2230
4-Methyl-2-pentanone	100	100		1	100	60-140	02/05/2014 2230
Methylcyclohexane	50	49		1	98	70-130	02/05/2014 2230
Methylene chloride	50	45		1	91	70-130	02/05/2014 2230
Styrene	50	49		1	98	70-130	02/05/2014 2230
1,1,2,2-Tetrachloroethane	50	53		1	106	70-130	02/05/2014 2230
Tetrachloroethene	50	48		1	96	70-130	02/05/2014 2230
Toluene	50	48		1	97	70-130	02/05/2014 2230
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	54		1	107	70-130	02/05/2014 2230
1,2,4-Trichlorobenzene	50	49		1	99	70-130	02/05/2014 2230
1,1,2-Trichloroethane	50	51		1	101	70-130	02/05/2014 2230
1,1,1-Trichloroethane	50	48		1	97	70-130	02/05/2014 2230

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39888-002
Batch: 39888
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	49		1	99	70-130	02/05/2014 2230
Trichlorofluoromethane	50	49		1	97	70-130	02/05/2014 2230
Vinyl chloride	50	51		1	103	70-130	02/05/2014 2230
Xylenes (total)	100	98		1	98	70-130	02/05/2014 2230

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		77	70-130
1,2-Dichloroethane-d4		70	70-130
Toluene-d8		74	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39888-003
Batch: 39888
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	85	+	1	85	21	60-140	20	02/05/2014 2253
Benzene	50	50		1	100	0.31	70-130	20	02/05/2014 2253
Bromodichloromethane	50	51		1	101	0.86	70-130	20	02/05/2014 2253
Bromoform	50	49		1	97	2.2	70-130	20	02/05/2014 2253
Bromomethane (Methyl bromide)	50	48		1	95	1.6	60-140	20	02/05/2014 2253
2-Butanone (MEK)	100	99		1	99	3.3	60-140	20	02/05/2014 2253
Carbon disulfide	50	49		1	97	5.5	60-140	20	02/05/2014 2253
Carbon tetrachloride	50	51		1	102	2.3	70-130	20	02/05/2014 2253
Chlorobenzene	50	50		1	99	0.79	70-130	20	02/05/2014 2253
Chloroethane	50	48		1	96	2.3	42-163	20	02/05/2014 2253
Chloroform	50	46		1	92	4.0	70-130	20	02/05/2014 2253
Chloromethane (Methyl chloride)	50	46		1	92	1.9	60-140	20	02/05/2014 2253
Cyclohexane	50	42		1	83	4.7	70-130	20	02/05/2014 2253
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	105	1.3	70-130	20	02/05/2014 2253
Dibromochloromethane	50	49		1	98	1.1	70-130	20	02/05/2014 2253
1,2-Dibromoethane (EDB)	50	51		1	103	0.70	70-130	20	02/05/2014 2253
1,4-Dichlorobenzene	50	47		1	94	0.70	70-130	20	02/05/2014 2253
1,3-Dichlorobenzene	50	47		1	94	1.2	70-130	20	02/05/2014 2253
1,2-Dichlorobenzene	50	48		1	96	0.048	70-130	20	02/05/2014 2253
Dichlorodifluoromethane	50	51		1	101	4.5	60-140	20	02/05/2014 2253
1,2-Dichloroethane	50	46		1	92	5.4	70-130	20	02/05/2014 2253
1,1-Dichloroethane	50	48		1	96	3.9	70-130	20	02/05/2014 2253
trans-1,2-Dichloroethene	50	48		1	96	4.1	70-130	20	02/05/2014 2253
cis-1,2-Dichloroethene	50	47		1	94	4.6	70-130	20	02/05/2014 2253
1,1-Dichloroethene	50	48		1	95	4.5	70-130	20	02/05/2014 2253
1,2-Dichloropropane	50	48		1	97	0.32	70-130	20	02/05/2014 2253
trans-1,3-Dichloropropene	50	54		1	108	0.80	70-130	20	02/05/2014 2253
cis-1,3-Dichloropropene	50	48		1	97	1.7	70-130	20	02/05/2014 2253
Ethylbenzene	50	49		1	97	1.7	70-130	20	02/05/2014 2253
2-Hexanone	100	100		1	104	3.2	60-140	20	02/05/2014 2253
Isopropylbenzene	50	50		1	99	3.8	70-130	20	02/05/2014 2253
Methyl acetate	50	45		1	89	13	70-130	20	02/05/2014 2253
Methyl tertiary butyl ether (MTBE)	50	46		1	93	6.7	70-130	20	02/05/2014 2253
4-Methyl-2-pentanone	100	100		1	102	1.5	60-140	20	02/05/2014 2253
Methylcyclohexane	50	48		1	97	0.94	70-130	20	02/05/2014 2253
Methylene chloride	50	42		1	85	6.8	70-130	20	02/05/2014 2253
Styrene	50	50		1	100	1.8	70-130	20	02/05/2014 2253
1,1,2,2-Tetrachloroethane	50	51		1	102	3.7	70-130	20	02/05/2014 2253
Tetrachloroethene	50	48		1	95	0.56	70-130	20	02/05/2014 2253
Toluene	50	50		1	100	2.9	70-130	20	02/05/2014 2253
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	104	3.6	70-130	20	02/05/2014 2253
1,2,4-Trichlorobenzene	50	46		1	93	6.0	70-130	20	02/05/2014 2253
1,1,2-Trichloroethane	50	50		1	101	0.14	70-130	20	02/05/2014 2253
1,1,1-Trichloroethane	50	47		1	94	2.9	70-130	20	02/05/2014 2253

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39888-003
Batch: 39888
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	50		1	99	0.28	70-130	20	02/05/2014 2253
Trichlorofluoromethane	50	47		1	94	3.3	70-130	20	02/05/2014 2253
Vinyl chloride	50	50		1	100	3.4	70-130	20	02/05/2014 2253
Xylenes (total)	100	98		1	98	0.28	70-130	20	02/05/2014 2253

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		80	70-130
1,2-Dichloroethane-d4	N	68	70-130
Toluene-d8		76	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY

Chain of Custody Record

Number 32401

Client: AECOM	Report to Contact: Scott Ross	Sampler (Printed Name): Chuck Suddeth	Quote No.
Address: 810 Dutch Square Blvd, Suite 202	Telephone No. / Fax No. / Email: (803) 798-1073	Waybill No.	Page: 1 of 1
City: Columbia / State: SC / Zip Code: 29210	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH		
Project Name: Phase II ESA - Shakespeare			
Project Number	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis	Number of Containers	Bottle (See Instructions on back)	Preservative	Lot No.	Remarks / Cooler ID
									VOCs	4	2		PA2901C	
REC-1 B-1 (12-13)	1/28/14	1020	G				X		X					
REC-1 B-2 (12-13)	1/28/14	1100	G				X		X					
Trip Blank 2			G					X						

Turn Around Time Required (Prior lab approval required for expedited TAT)	Sample Disposal	QC Requirements (Specify)	Possible Hazard Identification
☒ Standard ☐ Rush (Please Specify)	☐ Return to Client ☐ Disposal by Lab		☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: Chuck K Suddeth	1/28/14	1756	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by: Rachel Fortick	1/28/14	1756

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☒ No ☐ Ice Pack Receipt Temp. _____ °C Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 13

Replaces Date: 09/24/13
Effective Date: 09/26/13

Sample Receipt Checklist (SRC)

Client: AECOM Cooler Inspected by/date: KMM 11/24/14 +NMS Lot #: PA29010

Means of receipt: ☐ SESI ☑ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☑		2. If custody seals were present, were they intact and unbroken?

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:

___/___/___°C ___/___/___°C ___/___/___°C ___/___/___°C

Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID: #3 IR Gun Correction Factor: 0.1 °C

Method of coolant: ☐ Wet Ice ☐ Blue Ice ☐ Dry Ice ☑ None

If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.

Yes ☐	No ☐	NA ☐	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☑	No ☐	NA ☐	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number)

Sample(s) _____ were received with bubbles >6 mm in diameter.

Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/phenol

Sample labels verified by: _____ Date: _____

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: unpreserved vial used for TOS

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

AECOM
810 Dutch Square Blvd.
Suite 202
Columbia, SC 29210
Attention: Scott Ross

Project Name: **Phase II ESA - Shakespeare**

Lot Number: **PA29015**
Date Completed: **02/10/2014**

Nisreen Saikaly
Project Manager

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

* P A 2 9 0 1 5 *

Case Narrative
AECOM
Lot Number: PA29015

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

PCB

The sample results associated with a P qualifier have a relative percent difference (RPD) between the two dissimilar phase GC columns which exceeds 40%. In accordance with Section 7.10.4 of SW-846 method 8000B, the higher of the two results is reported. Due to disparity of the two results, it is likely that the reported results are biased high, or maybe a false positive.

Semivolatile Organic Compounds

The MS/MSD recoveries in batch 39534 were outside acceptance criteria. All other QA/QC criteria for the batch were within acceptance criteria and method control limits. The MS/MSD recovery results are attributed to matrix interference. The associated sample results were reported and no corrective action was required.

Sample Summary

AECOM

Lot Number: PA29015

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	Trip Blank	Aqueous	01/27/2014	01/28/2014
002	REC 6	Solid	01/27/2014 1320	01/28/2014
003	REC 7b	Solid	01/27/2014 1410	01/28/2014
004	REC 7a	Solid	01/27/2014 1300	01/28/2014
005	REC 9 B-14	Solid	01/27/2014 1455	01/28/2014
006	REC 9 B-15	Solid	01/27/2014 1515	01/28/2014
007	REC 11 B-17	Solid	01/27/2014 1620	01/28/2014
008	REC 11 B-18	Solid	01/27/2014 1600	01/28/2014
009	REC 7 SW-1	Aqueous	01/27/2014 1355	01/28/2014
010	REC 3 B-5 (9-10)	Solid	01/27/2014 1445	01/28/2014
011	REC 3 B-6 (9-10)	Solid	01/27/2014 1530	01/28/2014
012	REC 3 B-7 (9-10)	Solid	01/27/2014 1605	01/28/2014

(12 samples)

Executive Summary

AECOM

Lot Number: PA29015

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	REC 6	Solid	Benzo(a)anthracene	8270D	11	J	ug/kg	7
002	REC 6	Solid	Benzo(a)pyrene	8270D	18	J	ug/kg	7
002	REC 6	Solid	Benzo(b)fluoranthene	8270D	39		ug/kg	7
002	REC 6	Solid	Chrysene	8270D	17	J	ug/kg	7
002	REC 6	Solid	Fluoranthene	8270D	36	J	ug/kg	7
002	REC 6	Solid	Phenanthrene	8270D	13	J	ug/kg	7
002	REC 6	Solid	Pyrene	8270D	28	J	ug/kg	7
002	REC 6	Solid	Aroclor 1260	8082A	11	JP	ug/kg	8
003	REC 7b	Solid	Acetone	8260B	8.3	J	ug/kg	9
003	REC 7b	Solid	Isopropylbenzene	8260B	0.26	J	ug/kg	9
003	REC 7b	Solid	Anthracene	8270D	250	J	ug/kg	11
003	REC 7b	Solid	Benzo(a)anthracene	8270D	2000		ug/kg	11
003	REC 7b	Solid	Benzo(a)pyrene	8270D	2300		ug/kg	11
003	REC 7b	Solid	Benzo(b)fluoranthene	8270D	3800		ug/kg	11
003	REC 7b	Solid	Benzo(g,h,i)perylene	8270D	1400		ug/kg	11
003	REC 7b	Solid	Benzo(k)fluoranthene	8270D	1400		ug/kg	11
003	REC 7b	Solid	Chrysene	8270D	2800		ug/kg	11
003	REC 7b	Solid	Fluoranthene	8270D	5800		ug/kg	11
003	REC 7b	Solid	Indeno(1,2,3-c,d)pyrene	8270D	1300		ug/kg	11
003	REC 7b	Solid	Phenanthrene	8270D	2000		ug/kg	11
003	REC 7b	Solid	Pyrene	8270D	4000		ug/kg	11
004	REC 7a	Solid	Fluoranthene	8270D	180	J	ug/kg	14
004	REC 7a	Solid	Phenanthrene	8270D	100	J	ug/kg	14
004	REC 7a	Solid	Pyrene	8270D	150	J	ug/kg	14
007	REC 11 B-17	Solid	Acetone	8260B	9.0	J	ug/kg	21
009	REC 7 SW-1	Aqueous	Acetone	8260B	23		ug/L	27
009	REC 7 SW-1	Aqueous	Styrene	8260B	0.53	J	ug/L	27
009	REC 7 SW-1	Aqueous	Anthracene	8270D	0.056	J	ug/L	29
009	REC 7 SW-1	Aqueous	Benzo(a)pyrene	8270D	0.16	J	ug/L	29
009	REC 7 SW-1	Aqueous	Benzo(b)fluoranthene	8270D	0.25		ug/L	29
009	REC 7 SW-1	Aqueous	Fluoranthene	8270D	0.10	J	ug/L	29
009	REC 7 SW-1	Aqueous	Pyrene	8270D	0.081	J	ug/L	29
010	REC 3 B-5 (9-10)	Solid	Acetone	8260B	53		ug/kg	30
011	REC 3 B-6 (9-10)	Solid	Acetone	8260B	120		ug/kg	32
011	REC 3 B-6 (9-10)	Solid	2-Butanone (MEK)	8260B	5.8	J	ug/kg	32
012	REC 3 B-7 (9-10)	Solid	Acetone	8260B	57		ug/kg	34
012	REC 3 B-7 (9-10)	Solid	2-Butanone (MEK)	8260B	5.4	J	ug/kg	34
012	REC 3 B-7 (9-10)	Solid	Toluene	8260B	3.3	J	ug/kg	34

(38 detections)

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Description: **Trip Blank**
Date Sampled: **01/27/2014**
Date Received: **01/28/2014**

Laboratory ID: **PA29015-001**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/06/2014 1728	ALL		39940

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.10	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-001**
Description: **Trip Blank**
Matrix: **Aqueous**
Date Sampled: **01/27/2014**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/06/2014 1728	ALL		39940

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		94	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-002**
Description: **REC 6**
Matrix: **Solid**
Date Sampled: **01/27/2014 1320**
% Solids: **86.1** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	02/06/2014 1849	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		38	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		38	12	ug/kg	1
Anthracene	120-12-7	8270D	ND		38	8.5	ug/kg	1
Benzo(a)anthracene	**56-55-3**	**8270D**	**11**	**J**	**38**	**10**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270D**	**18**	**J**	**38**	**11**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270D**	**39**		**38**	**11**	**ug/kg**	**1**
Benzo(g,h,i)perylene	191-24-2	8270D	ND		38	13	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		38	11	ug/kg	1
Chrysene	**218-01-9**	**8270D**	**17**	**J**	**38**	**13**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		38	11	ug/kg	1
Fluoranthene	**206-44-0**	**8270D**	**36**	**J**	**38**	**12**	**ug/kg**	**1**
Fluorene	86-73-7	8270D	ND		38	10	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		38	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		38	12	ug/kg	1
Phenanthrene	**85-01-8**	**8270D**	**13**	**J**	**38**	**10**	**ug/kg**	**1**
Pyrene	**129-00-0**	**8270D**	**28**	**J**	**38**	**15**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		77	33-102
Nitrobenzene-d5		70	22-109
Terphenyl-d14		91	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

PCBs by GC

Client: **AECOM**
Description: **REC 6**
Date Sampled: **01/27/2014 1320**
Date Received: **01/28/2014**

Laboratory ID: **PA29015-002**
Matrix: **Solid**
% Solids: **86.1** **01/29/2014 1710**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8082A	1	02/10/2014 1143	MPM	01/30/2014 1905	39483

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aroclor 1016	12674-11-2	8082A	ND		20	1.3	ug/kg	1
Aroclor 1221	11104-28-2	8082A	ND		20	11	ug/kg	1
Aroclor 1232	11141-16-5	8082A	ND		20	3.8	ug/kg	1
Aroclor 1242	53469-21-9	8082A	ND		20	2.7	ug/kg	1
Aroclor 1248	12672-29-6	8082A	ND		20	4.4	ug/kg	1
Aroclor 1254	11097-69-1	8082A	ND		20	2.1	ug/kg	1
Aroclor 1260	**11096-82-5**	**8082A**	**11**	**JP**	**20**	**6.6**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Decachlorobiphenyl		92	41-132
Tetrachloro-m-xylene		94	35-106

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM** Laboratory ID: **PA29015-003**

Description: **REC 7b** Matrix: **Solid**

Date Sampled: **01/27/2014 1410** % Solids: **76.6** **01/29/2014 1710**

Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1217	AAC		39504	6.02

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**8.3**	**J**	**22**	**7.3**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		5.4	1.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.4	1.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.4	0.76	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.4	2.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		11	2.6	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.4	1.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.4	2.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.4	1.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.4	1.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.4	0.90	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.4	1.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.4	0.73	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.4	1.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.4	1.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.4	0.92	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.4	1.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.4	1.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.4	1.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.4	1.7	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.4	0.79	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.4	1.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.4	1.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.4	0.82	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.4	1.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.4	0.99	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.4	0.74	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.4	0.89	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.4	1.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	1.4	ug/kg	1
Isopropylbenzene	**98-82-8**	**8260B**	**0.26**	**J**	**5.4**	**0.25**	**ug/kg**	**1**
Methyl acetate	79-20-9	8260B	ND		5.4	1.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.4	0.43	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	1.6	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.4	0.44	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.4	2.8	ug/kg	1
Styrene	100-42-5	8260B	ND		5.4	1.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.4	0.51	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.4	0.54	ug/kg	1
Toluene	108-88-3	8260B	ND		5.4	1.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.4	0.68	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.4	1.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.4	0.92	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.4	0.86	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-003**
Description: **REC 7b**
Matrix: **Solid**
Date Sampled: **01/27/2014 1410**
% Solids: **76.6** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1217	AAC		39504	6.02

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.4	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.4	1.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.4	0.93	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.4	3.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		87	47-138
Toluene-d8		94	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-003**
Description: **REC 7b**
Matrix: **Solid**
Date Sampled: **01/27/2014 1410**
% Solids: **76.6** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	10	02/06/2014 1516	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		420	140	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		420	130	ug/kg	1
Anthracene	**120-12-7**	**8270D**	**250**	**J**	**420**	**94**	**ug/kg**	**1**
Benzo(a)anthracene	**56-55-3**	**8270D**	**2000**		**420**	**110**	**ug/kg**	**1**
Benzo(a)pyrene	**50-32-8**	**8270D**	**2300**		**420**	**120**	**ug/kg**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270D**	**3800**		**420**	**120**	**ug/kg**	**1**
Benzo(g,h,i)perylene	**191-24-2**	**8270D**	**1400**		**420**	**150**	**ug/kg**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270D**	**1400**		**420**	**120**	**ug/kg**	**1**
Chrysene	**218-01-9**	**8270D**	**2800**		**420**	**140**	**ug/kg**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		420	120	ug/kg	1
Fluoranthene	**206-44-0**	**8270D**	**5800**		**420**	**130**	**ug/kg**	**1**
Fluorene	86-73-7	8270D	ND		420	110	ug/kg	1
Indeno(1,2,3-c,d)pyrene	**193-39-5**	**8270D**	**1300**		**420**	**120**	**ug/kg**	**1**
Naphthalene	91-20-3	8270D	ND		420	130	ug/kg	1
Phenanthrene	**85-01-8**	**8270D**	**2000**		**420**	**110**	**ug/kg**	**1**
Pyrene	**129-00-0**	**8270D**	**4000**		**420**	**170**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		69	33-102
Nitrobenzene-d5		64	22-109
Terphenyl-d14		75	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM** Laboratory ID: **PA29015-004**

Description: **REC 7a** Matrix: **Solid**

Date Sampled: **01/27/2014 1300** % Solids: **88.9** **01/29/2014 1710**

Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1241	AAC		39504	4.84

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		23	7.8	ug/kg	1
Benzene	71-43-2	8260B	ND		5.8	1.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.8	2.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.8	0.81	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.8	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		12	2.8	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.8	1.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.8	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.8	2.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.8	1.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.8	0.96	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.8	1.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.8	0.78	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.8	1.7	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.8	2.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.8	0.99	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.8	2.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.8	2.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.8	2.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.8	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.8	0.85	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.8	1.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.8	2.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.8	0.88	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.8	1.7	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.8	1.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.8	0.79	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.8	0.95	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.8	2.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	1.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.8	0.27	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.8	1.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.8	0.46	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	1.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.8	0.48	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.8	3.0	ug/kg	1
Styrene	100-42-5	8260B	ND		5.8	1.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.8	0.55	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.8	0.58	ug/kg	1
Toluene	108-88-3	8260B	ND		5.8	2.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.8	0.73	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.8	2.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.8	0.99	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.8	0.92	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-004**
Description: **REC 7a**
Matrix: **Solid**
Date Sampled: **01/27/2014 1300**
% Solids: **88.9** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1241	AAC		39504	4.84

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.8	2.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.8	1.7	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.8	1.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.8	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		96	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM** Laboratory ID: **PA29015-004**

Description: **REC 7a** Matrix: **Solid**

Date Sampled: **01/27/2014 1300** % Solids: **88.9** **01/29/2014 1710**

Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	10	02/06/2014 1542	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		370	120	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		370	120	ug/kg	1
Anthracene	120-12-7	8270D	ND		370	82	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		370	98	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		370	100	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		370	110	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		370	130	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		370	110	ug/kg	1
Chrysene	218-01-9	8270D	ND		370	120	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		370	100	ug/kg	1
Fluoranthene	**206-44-0**	**8270D**	**180**	**J**	**370**	**120**	**ug/kg**	**1**
Fluorene	86-73-7	8270D	ND		370	100	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		370	110	ug/kg	1
Naphthalene	91-20-3	8270D	ND		370	110	ug/kg	1
Phenanthrene	**85-01-8**	**8270D**	**100**	**J**	**370**	**100**	**ug/kg**	**1**
Pyrene	**129-00-0**	**8270D**	**150**	**J**	**370**	**150**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		54	33-102
Nitrobenzene-d5		59	22-109
Terphenyl-d14		59	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-005**
Description: **REC 9 B-14**
Matrix: **Solid**
Date Sampled: **01/27/2014 1455**
% Solids: **77.5** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1315	AAC		39504	5.86

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		22	7.4	ug/kg	1
Benzene	71-43-2	8260B	ND		5.5	1.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.5	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.5	0.77	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.5	2.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		11	2.6	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.5	1.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.5	2.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.5	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.5	1.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.5	0.91	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.5	1.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.5	0.74	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.5	1.7	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.5	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.5	0.94	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.5	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.5	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.5	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.5	1.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.5	0.80	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.5	1.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.5	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.5	0.84	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.5	1.7	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.5	1.0	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.5	0.75	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.5	0.90	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.5	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	1.4	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.5	0.25	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.5	1.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.5	0.44	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	1.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.5	0.45	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.5	2.9	ug/kg	1
Styrene	100-42-5	8260B	ND		5.5	1.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.5	0.52	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.5	0.55	ug/kg	1
Toluene	108-88-3	8260B	ND		5.5	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.5	0.69	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.5	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.5	0.94	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.5	0.87	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-005**
Description: **REC 9 B-14**
Matrix: **Solid**
Date Sampled: **01/27/2014 1455**
% Solids: **77.5** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1315	AAC		39504	5.86

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.5	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.5	1.7	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.5	0.95	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.5	3.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		114	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-005**
Description: **REC 9 B-14**
Matrix: **Solid**
Date Sampled: **01/27/2014 1455**
% Solids: **77.5** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	02/06/2014 1912	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		43	14	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		43	13	ug/kg	1
Anthracene	120-12-7	8270D	ND		43	9.5	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		43	11	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		43	12	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		43	12	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		43	15	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		43	12	ug/kg	1
Chrysene	218-01-9	8270D	ND		43	14	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		43	12	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		43	14	ug/kg	1
Fluorene	86-73-7	8270D	ND		43	12	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		43	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		43	13	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		43	12	ug/kg	1
Pyrene	129-00-0	8270D	ND		43	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		70	33-102
Nitrobenzene-d5		61	22-109
Terphenyl-d14		93	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-006**
Description: **REC 9 B-15**
Matrix: **Solid**
Date Sampled: **01/27/2014 1515**
% Solids: **79.3** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1340	AAC		39504	5.23

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		24	8.1	ug/kg	1
Benzene	71-43-2	8260B	ND		6.0	1.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.0	2.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.0	0.84	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.0	2.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		12	2.9	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.0	1.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.0	2.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.0	2.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.0	1.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.0	1.0	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.0	1.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.0	0.81	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.0	1.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.0	2.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.0	1.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.0	2.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.0	2.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.0	2.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.0	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.0	0.88	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.0	1.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.0	2.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.0	0.92	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.0	1.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.0	1.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.0	0.82	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.0	0.99	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.0	2.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	1.6	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.0	0.28	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.0	1.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.0	0.48	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	1.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.0	0.49	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.0	3.1	ug/kg	1
Styrene	100-42-5	8260B	ND		6.0	1.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.0	0.57	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.0	0.60	ug/kg	1
Toluene	108-88-3	8260B	ND		6.0	2.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.0	0.76	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.0	2.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.0	1.0	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.0	0.95	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-006**
Description: **REC 9 B-15**
Matrix: **Solid**
Date Sampled: **01/27/2014 1515**
% Solids: **79.3** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1340	AAC		39504	5.23

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.0	2.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.0	1.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.0	1.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.0	3.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		79	53-142
Bromofluorobenzene		72	47-138
Toluene-d8		81	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-006**
Description: **REC 9 B-15**
Matrix: **Solid**
Date Sampled: **01/27/2014 1515**
% Solids: **79.3** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	02/06/2014 1608	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		41	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		41	13	ug/kg	1
Anthracene	120-12-7	8270D	ND		41	9.3	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		41	11	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		41	12	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		41	12	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		41	15	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		41	12	ug/kg	1
Chrysene	218-01-9	8270D	ND		41	14	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		41	11	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		41	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		41	11	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		41	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		41	13	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		41	11	ug/kg	1
Pyrene	129-00-0	8270D	ND		41	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		59	33-102
Nitrobenzene-d5		58	22-109
Terphenyl-d14		61	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-007**
Description: **REC 11 B-17**
Matrix: **Solid**
Date Sampled: **01/27/2014 1620**
% Solids: **85.4** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1404	AAC		39504	4.91

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**9.0**	**J**	**24**	**8.0**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		6.0	1.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.0	2.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.0	0.83	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.0	2.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		12	2.9	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.0	1.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.0	2.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.0	2.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.0	1.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.0	0.99	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.0	1.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.0	0.80	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.0	1.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.0	2.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.0	1.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.0	2.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.0	2.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.0	2.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.0	1.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.0	0.87	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.0	1.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.0	2.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.0	0.91	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.0	1.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.0	1.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.0	0.81	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.0	0.98	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.0	2.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	1.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.0	0.27	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.0	1.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.0	0.48	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	1.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.0	0.49	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.0	3.1	ug/kg	1
Styrene	100-42-5	8260B	ND		6.0	1.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.0	0.56	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.0	0.60	ug/kg	1
Toluene	108-88-3	8260B	ND		6.0	2.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.0	0.75	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.0	2.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.0	1.0	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.0	0.94	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-007**
Description: **REC 11 B-17**
Matrix: **Solid**
Date Sampled: **01/27/2014 1620**
% Solids: **85.4** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1404	AAC		39504	4.91

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.0	2.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.0	1.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.0	1.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.0	3.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	53-142
Bromofluorobenzene		78	47-138
Toluene-d8		85	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-007**
Description: **REC 11 B-17**
Matrix: **Solid**
Date Sampled: **01/27/2014 1620**
% Solids: **85.4** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	02/06/2014 1634	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		38	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		38	12	ug/kg	1
Anthracene	120-12-7	8270D	ND		38	8.6	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		38	10	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		38	11	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		38	11	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		38	13	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		38	11	ug/kg	1
Chrysene	218-01-9	8270D	ND		38	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		38	11	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		38	12	ug/kg	1
Fluorene	86-73-7	8270D	ND		38	10	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		38	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		38	12	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		38	10	ug/kg	1
Pyrene	129-00-0	8270D	ND		38	15	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		86	33-102
Nitrobenzene-d5		79	22-109
Terphenyl-d14		101	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-008**
Description: **REC 11 B-18**
Matrix: **Solid**
Date Sampled: **01/27/2014 1600**
% Solids: **76.6** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1428	AAC		39504	4.91

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		27	8.9	ug/kg	1
Benzene	71-43-2	8260B	ND		6.6	1.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.6	2.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.6	0.93	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.6	2.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		13	3.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.6	1.7	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.6	2.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.6	2.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.6	1.7	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.6	1.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.6	1.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.6	0.90	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.6	2.0	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.6	2.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.6	1.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.6	2.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.6	2.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.6	2.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.6	2.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.6	0.97	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.6	1.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.6	2.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.6	1.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.6	2.0	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.6	1.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.6	0.90	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.6	1.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.6	2.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	1.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.6	0.31	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.6	1.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.6	0.53	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	2.0	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.6	0.55	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.6	3.5	ug/kg	1
Styrene	100-42-5	8260B	ND		6.6	1.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.6	0.63	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.6	0.66	ug/kg	1
Toluene	108-88-3	8260B	ND		6.6	2.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.6	0.84	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.6	2.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.6	1.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.6	1.1	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-008**
Description: **REC 11 B-18**
Matrix: **Solid**
Date Sampled: **01/27/2014 1600**
% Solids: **76.6** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1428	AAC		39504	4.91

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.6	2.5	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.6	2.0	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.6	1.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.6	3.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	53-142
Bromofluorobenzene		79	47-138
Toluene-d8		86	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-008**
Description: **REC 11 B-18**
Matrix: **Solid**
Date Sampled: **01/27/2014 1600**
% Solids: **76.6** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	02/06/2014 1701	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		43	14	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		43	13	ug/kg	1
Anthracene	120-12-7	8270D	ND		43	9.5	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		43	11	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		43	12	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		43	12	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		43	15	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		43	12	ug/kg	1
Chrysene	218-01-9	8270D	ND		43	14	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		43	12	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		43	14	ug/kg	1
Fluorene	86-73-7	8270D	ND		43	12	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		43	13	ug/kg	1
Naphthalene	91-20-3	8270D	ND		43	13	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		43	12	ug/kg	1
Pyrene	129-00-0	8270D	ND		43	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		64	33-102
Nitrobenzene-d5		60	22-109
Terphenyl-d14		78	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-009**
Description: **REC 7 SW-1**
Matrix: **Aqueous**
Date Sampled: **01/27/2014 1355**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/06/2014 2015	ALL		39940

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**23**		**20**	**6.7**	**ug/L**	**1**
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	**100-42-5**	**8260B**	**0.53**	**J**	**5.0**	**0.10**	**ug/L**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-009**
Description: **REC 7 SW-1**
Matrix: **Aqueous**
Date Sampled: **01/27/2014 1355**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/06/2014 2015	ALL		39940

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		103	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-009**
Description: **REC 7 SW-1**
Matrix: **Aqueous**
Date Sampled: **01/27/2014 1355**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	02/03/2014 1521	DRB1	01/31/2014 1716	39534

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		0.20	0.072	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		0.20	0.041	ug/L	1
Anthracene	**120-12-7**	**8270D**	**0.056**	**J**	**0.20**	**0.036**	**ug/L**	**1**
Benzo(a)anthracene	56-55-3	8270D	ND		0.20	0.082	ug/L	1
Benzo(a)pyrene	**50-32-8**	**8270D**	**0.16**	**J**	**0.20**	**0.047**	**ug/L**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270D**	**0.25**		**0.20**	**0.087**	**ug/L**	**1**
Benzo(g,h,i)perylene	191-24-2	8270D	ND		0.20	0.049	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		0.20	0.092	ug/L	1
Chrysene	218-01-9	8270D	ND		0.20	0.054	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		0.20	0.058	ug/L	1
Fluoranthene	**206-44-0**	**8270D**	**0.10**	**J**	**0.20**	**0.077**	**ug/L**	**1**
Fluorene	86-73-7	8270D	ND		0.20	0.049	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		0.20	0.039	ug/L	1
Naphthalene	91-20-3	8270D	ND		0.20	0.074	ug/L	1
Phenanthrene	85-01-8	8270D	ND		0.20	0.058	ug/L	1
Pyrene	**129-00-0**	**8270D**	**0.081**	**J**	**0.20**	**0.075**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		103	37-129
Nitrobenzene-d5		105	38-127
Terphenyl-d14		106	10-148

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-010**
Description: **REC 3 B-5 (9-10)**
Matrix: **Solid**
Date Sampled: **01/27/2014 1445**
% Solids: **80.1** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1452	AAC		39504	6.62

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**53**		**19**	**6.3**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		4.7	1.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.7	1.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.7	0.66	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.7	1.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		9.4	2.3	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.7	1.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.7	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.7	1.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.7	1.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.7	0.78	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.7	0.94	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.7	0.64	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.7	1.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.7	1.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.7	0.80	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.7	1.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.7	1.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.7	1.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.7	1.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.7	0.69	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.7	0.94	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.7	1.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.7	0.72	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.7	1.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.7	0.86	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.7	0.64	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.7	0.77	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.7	1.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.4	1.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.7	0.22	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.7	0.92	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.7	0.38	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.4	1.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.7	0.39	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.7	2.5	ug/kg	1
Styrene	100-42-5	8260B	ND		4.7	1.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.7	0.44	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.7	0.47	ug/kg	1
Toluene	108-88-3	8260B	ND		4.7	1.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.7	0.59	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.7	1.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.7	0.80	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.7	0.74	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-010**
Description: **REC 3 B-5 (9-10)**
Matrix: **Solid**
Date Sampled: **01/27/2014 1445**
% Solids: **80.1** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1452	AAC		39504	6.62

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.7	1.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.7	1.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.7	0.81	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		4.7	2.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	53-142
Bromofluorobenzene		81	47-138
Toluene-d8		88	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-011**
Description: **REC 3 B-6 (9-10)**
Matrix: **Solid**
Date Sampled: **01/27/2014 1530**
% Solids: **82.4** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1517	AAC		39504	6.19

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**120**		**20**	**6.6**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		4.9	1.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.9	1.7	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.9	0.69	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.9	1.8	ug/kg	1
2-Butanone (MEK)	**78-93-3**	**8260B**	**5.8**	**J**	**9.8**	**2.4**	**ug/kg**	**1**
Carbon disulfide	75-15-0	8260B	ND		4.9	1.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.9	1.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.9	1.7	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.9	1.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.9	0.81	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.9	0.98	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.9	0.66	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.9	1.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.9	1.7	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.9	0.83	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.9	1.7	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.9	1.7	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.9	1.7	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.9	1.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.9	0.72	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.9	0.98	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.9	1.7	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.9	0.74	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.9	1.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.9	0.89	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.9	0.67	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.9	0.80	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.9	1.7	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.8	1.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.9	0.23	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.9	0.96	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.9	0.39	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.8	1.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.9	0.40	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.9	2.5	ug/kg	1
Styrene	100-42-5	8260B	ND		4.9	1.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.9	0.46	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.9	0.49	ug/kg	1
Toluene	108-88-3	8260B	ND		4.9	1.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.9	0.62	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.9	1.7	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.9	0.83	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.9	0.77	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-011**
Description: **REC 3 B-6 (9-10)**
Matrix: **Solid**
Date Sampled: **01/27/2014 1530**
% Solids: **82.4** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1517	AAC		39504	6.19

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.9	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.9	1.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.9	0.84	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		4.9	2.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	53-142
Bromofluorobenzene		80	47-138
Toluene-d8		87	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-012**
Description: **REC 3 B-7 (9-10)**
Matrix: **Solid**
Date Sampled: **01/27/2014 1605**
% Solids: **83.7** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1541	AAC		39504	6.29

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**57**		**19**	**6.4**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		4.7	1.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.7	1.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.7	0.66	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.7	1.7	ug/kg	1
2-Butanone (MEK)	**78-93-3**	**8260B**	**5.4**	**J**	**9.5**	**2.3**	**ug/kg**	**1**
Carbon disulfide	75-15-0	8260B	ND		4.7	1.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.7	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.7	1.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.7	1.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.7	0.79	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.7	0.95	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.7	0.64	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.7	1.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.7	1.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.7	0.81	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.7	1.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.7	1.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.7	1.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.7	1.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.7	0.69	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.7	0.95	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.7	1.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.7	0.72	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.7	1.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.7	0.86	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.7	0.65	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.7	0.78	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.7	1.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.5	1.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.7	0.22	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.7	0.93	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.7	0.38	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.5	1.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.7	0.39	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.7	2.5	ug/kg	1
Styrene	100-42-5	8260B	ND		4.7	1.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.7	0.45	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.7	0.47	ug/kg	1
Toluene	**108-88-3**	**8260B**	**3.3**	**J**	**4.7**	**1.6**	**ug/kg**	**1**
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.7	0.60	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.7	1.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.7	0.81	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.7	0.75	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA29015-012**
Description: **REC 3 B-7 (9-10)**
Matrix: **Solid**
Date Sampled: **01/27/2014 1605**
% Solids: **83.7** **01/29/2014 1710**
Date Received: **01/28/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	01/31/2014 1541	AAC		39504	6.29

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.7	1.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.7	1.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.7	0.82	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		4.7	2.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	53-142
Bromofluorobenzene		83	47-138
Toluene-d8		94	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39504-001
Batch: 39504
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	6.7	ug/kg	01/31/2014 1154
Benzene	ND		1	5.0	1.1	ug/kg	01/31/2014 1154
Bromodichloromethane	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
Bromoform	ND		1	5.0	0.70	ug/kg	01/31/2014 1154
Bromomethane (Methyl bromide)	ND		1	5.0	1.8	ug/kg	01/31/2014 1154
2-Butanone (MEK)	ND		1	10	2.4	ug/kg	01/31/2014 1154
Carbon disulfide	ND		1	5.0	1.3	ug/kg	01/31/2014 1154
Carbon tetrachloride	ND		1	5.0	1.8	ug/kg	01/31/2014 1154
Chlorobenzene	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
Chloroethane	ND		1	5.0	1.3	ug/kg	01/31/2014 1154
Chloroform	ND		1	5.0	0.83	ug/kg	01/31/2014 1154
Chloromethane (Methyl chloride)	ND		1	5.0	1.0	ug/kg	01/31/2014 1154
Cyclohexane	ND		1	5.0	0.67	ug/kg	01/31/2014 1154
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	1.5	ug/kg	01/31/2014 1154
Dibromochloromethane	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
1,2-Dibromoethane (EDB)	ND		1	5.0	0.85	ug/kg	01/31/2014 1154
1,3-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
1,4-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
1,2-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
Dichlorodifluoromethane	ND		1	5.0	1.6	ug/kg	01/31/2014 1154
1,1-Dichloroethane	ND		1	5.0	0.73	ug/kg	01/31/2014 1154
1,2-Dichloroethane	ND		1	5.0	1.0	ug/kg	01/31/2014 1154
cis-1,2-Dichloroethene	ND		1	5.0	0.76	ug/kg	01/31/2014 1154
1,1-Dichloroethene	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
trans-1,2-Dichloroethene	ND		1	5.0	1.5	ug/kg	01/31/2014 1154
1,2-Dichloropropane	ND		1	5.0	0.91	ug/kg	01/31/2014 1154
trans-1,3-Dichloropropene	ND		1	5.0	0.82	ug/kg	01/31/2014 1154
cis-1,3-Dichloropropene	ND		1	5.0	0.68	ug/kg	01/31/2014 1154
Ethylbenzene	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
2-Hexanone	**1.5**	**J**	**1**	**10**	**1.3**	**ug/kg**	**01/31/2014 1154**
Isopropylbenzene	ND		1	5.0	0.23	ug/kg	01/31/2014 1154
Methyl acetate	ND		1	5.0	0.98	ug/kg	01/31/2014 1154
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/kg	01/31/2014 1154
4-Methyl-2-pentanone	ND		1	10	1.5	ug/kg	01/31/2014 1154
Methylcyclohexane	ND		1	5.0	0.41	ug/kg	01/31/2014 1154
Methylene chloride	ND		1	5.0	2.6	ug/kg	01/31/2014 1154
Styrene	ND		1	5.0	1.1	ug/kg	01/31/2014 1154
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.47	ug/kg	01/31/2014 1154
Tetrachloroethene	ND		1	5.0	0.50	ug/kg	01/31/2014 1154
Toluene	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.63	ug/kg	01/31/2014 1154
1,2,4-Trichlorobenzene	ND		1	5.0	1.7	ug/kg	01/31/2014 1154
1,1,1-Trichloroethane	ND		1	5.0	0.85	ug/kg	01/31/2014 1154
1,1,2-Trichloroethane	ND		1	5.0	0.79	ug/kg	01/31/2014 1154

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39504-001
Batch: 39504
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	1.9	ug/kg	01/31/2014 1154
Trichlorofluoromethane	ND		1	5.0	1.5	ug/kg	01/31/2014 1154
Vinyl chloride	ND		1	5.0	0.86	ug/kg	01/31/2014 1154
Xylenes (total)	ND		1	5.0	2.9	ug/kg	01/31/2014 1154

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		89	47-138
1,2-Dichloroethane-d4		96	53-142
Toluene-d8		99	68-124

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39504-002
Batch: 39504
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	130		1	127	60-140	01/31/2014 1020
Benzene	50	48		1	95	69-123	01/31/2014 1020
Bromodichloromethane	50	48		1	96	69-121	01/31/2014 1020
Bromoform	50	49		1	99	61-119	01/31/2014 1020
Bromomethane (Methyl bromide)	50	51		1	101	10-168	01/31/2014 1020
2-Butanone (MEK)	100	110		1	109	57-148	01/31/2014 1020
Carbon disulfide	50	52		1	104	58-122	01/31/2014 1020
Carbon tetrachloride	50	49		1	99	58-136	01/31/2014 1020
Chlorobenzene	50	46		1	93	59-129	01/31/2014 1020
Chloroethane	50	53		1	106	42-163	01/31/2014 1020
Chloroform	50	48		1	95	71-125	01/31/2014 1020
Chloromethane (Methyl chloride)	50	50		1	99	34-134	01/31/2014 1020
Cyclohexane	50	51		1	102	53-139	01/31/2014 1020
1,2-Dibromo-3-chloropropane (DBCP)	50	51		1	103	55-125	01/31/2014 1020
Dibromochloromethane	50	46		1	93	66-119	01/31/2014 1020
1,2-Dibromoethane (EDB)	50	47		1	94	74-124	01/31/2014 1020
1,3-Dichlorobenzene	50	45		1	90	51-134	01/31/2014 1020
1,4-Dichlorobenzene	50	45		1	90	52-133	01/31/2014 1020
1,2-Dichlorobenzene	50	46		1	91	57-131	01/31/2014 1020
Dichlorodifluoromethane	50	57		1	113	10-157	01/31/2014 1020
1,1-Dichloroethane	50	48		1	96	71-127	01/31/2014 1020
1,2-Dichloroethane	50	47		1	93	67-129	01/31/2014 1020
cis-1,2-Dichloroethene	50	48		1	96	70-122	01/31/2014 1020
1,1-Dichloroethene	50	51		1	102	69-138	01/31/2014 1020
trans-1,2-Dichloroethene	50	48		1	97	68-131	01/31/2014 1020
1,2-Dichloropropane	50	47		1	95	72-124	01/31/2014 1020
trans-1,3-Dichloropropene	50	47		1	94	70-124	01/31/2014 1020
cis-1,3-Dichloropropene	50	50		1	99	70-126	01/31/2014 1020
Ethylbenzene	50	46		1	93	59-128	01/31/2014 1020
2-Hexanone	100	110		1	107	54-137	01/31/2014 1020
Isopropylbenzene	50	46		1	91	50-136	01/31/2014 1020
Methyl acetate	50	53		1	107	59-137	01/31/2014 1020
Methyl tertiary butyl ether (MTBE)	50	48		1	96	70-130	01/31/2014 1020
4-Methyl-2-pentanone	100	110		1	108	60-134	01/31/2014 1020
Methylcyclohexane	50	50		1	99	41-144	01/31/2014 1020
Methylene chloride	50	46		1	93	70-130	01/31/2014 1020
Styrene	50	47		1	95	54-136	01/31/2014 1020
1,1,2,2-Tetrachloroethane	50	47		1	93	69-132	01/31/2014 1020
Tetrachloroethene	50	43		1	86	45-150	01/31/2014 1020
Toluene	50	48		1	96	61-129	01/31/2014 1020
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	51		1	103	49-136	01/31/2014 1020
1,2,4-Trichlorobenzene	50	47		1	95	34-145	01/31/2014 1020
1,1,1-Trichloroethane	50	49		1	99	63-128	01/31/2014 1020
1,1,2-Trichloroethane	50	44		1	87	55-128	01/31/2014 1020

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39504-002
Batch: 39504
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	47		1	95	62-126	01/31/2014 1020
Trichlorofluoromethane	50	52		1	104	45-138	01/31/2014 1020
Vinyl chloride	50	56		1	112	42-132	01/31/2014 1020
Xylenes (total)	100	93		1	93	58-128	01/31/2014 1020

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	47-138
1,2-Dichloroethane-d4		105	53-142
Toluene-d8		110	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39504-003
Batch: 39504
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	110		1	114	11	60-140	20	01/31/2014 1044
Benzene	50	38	+	1	77	22	69-123	20	01/31/2014 1044
Bromodichloromethane	50	39		1	78	20	69-121	20	01/31/2014 1044
Bromoform	50	42		1	85	15	61-119	20	01/31/2014 1044
Bromomethane (Methyl bromide)	50	41		1	82	20	10-168	20	01/31/2014 1044
2-Butanone (MEK)	100	95		1	95	13	57-148	20	01/31/2014 1044
Carbon disulfide	50	39	+	1	78	29	58-122	20	01/31/2014 1044
Carbon tetrachloride	50	39	+	1	78	24	58-136	20	01/31/2014 1044
Chlorobenzene	50	38		1	77	19	59-129	20	01/31/2014 1044
Chloroethane	50	41	+	1	82	25	42-163	20	01/31/2014 1044
Chloroform	50	39	+	1	77	21	71-125	20	01/31/2014 1044
Chloromethane (Methyl chloride)	50	40	+	1	79	22	34-134	20	01/31/2014 1044
Cyclohexane	50	39	+	1	77	28	53-139	20	01/31/2014 1044
1,2-Dibromo-3-chloropropane (DBCP)	50	45		1	90	14	55-125	20	01/31/2014 1044
Dibromochloromethane	50	40		1	81	14	66-119	20	01/31/2014 1044
1,2-Dibromoethane (EDB)	50	41		1	81	14	74-124	20	01/31/2014 1044
1,3-Dichlorobenzene	50	38		1	76	16	51-134	20	01/31/2014 1044
1,4-Dichlorobenzene	50	38		1	76	16	52-133	20	01/31/2014 1044
1,2-Dichlorobenzene	50	39		1	77	16	57-131	20	01/31/2014 1044
Dichlorodifluoromethane	50	43	+	1	86	27	10-157	20	01/31/2014 1044
1,1-Dichloroethane	50	39		1	78	20	71-127	20	01/31/2014 1044
1,2-Dichloroethane	50	40		1	79	17	67-129	20	01/31/2014 1044
cis-1,2-Dichloroethene	50	39	+	1	78	21	70-122	20	01/31/2014 1044
1,1-Dichloroethene	50	40	+	1	80	24	69-138	20	01/31/2014 1044
trans-1,2-Dichloroethene	50	39	+	1	78	22	68-131	20	01/31/2014 1044
1,2-Dichloropropane	50	39		1	79	18	72-124	20	01/31/2014 1044
trans-1,3-Dichloropropene	50	40		1	81	15	70-124	20	01/31/2014 1044
cis-1,3-Dichloropropene	50	41		1	82	19	70-126	20	01/31/2014 1044
Ethylbenzene	50	38		1	76	20	59-128	20	01/31/2014 1044
2-Hexanone	100	95		1	95	12	54-137	20	01/31/2014 1044
Isopropylbenzene	50	38		1	76	18	50-136	20	01/31/2014 1044
Methyl acetate	50	46		1	91	16	59-137	20	01/31/2014 1044
Methyl tertiary butyl ether (MTBE)	50	41		1	82	15	70-130	20	01/31/2014 1044
4-Methyl-2-pentanone	100	94		1	94	13	60-134	20	01/31/2014 1044
Methylcyclohexane	50	39	+	1	79	23	41-144	20	01/31/2014 1044
Methylene chloride	50	38		1	76	20	70-130	20	01/31/2014 1044
Styrene	50	39		1	79	18	54-136	20	01/31/2014 1044
1,1,2,2-Tetrachloroethane	50	42		1	84	11	69-132	20	01/31/2014 1044
Tetrachloroethene	50	36		1	71	19	45-150	20	01/31/2014 1044
Toluene	50	39		1	78	20	61-129	20	01/31/2014 1044
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	42		1	84	20	49-136	20	01/31/2014 1044
1,2,4-Trichlorobenzene	50	38	+	1	76	22	34-145	20	01/31/2014 1044
1,1,1-Trichloroethane	50	39	+	1	78	23	63-128	20	01/31/2014 1044
1,1,2-Trichloroethane	50	39		1	77	12	55-128	20	01/31/2014 1044

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39504-003
Batch: 39504
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	38	+	1	76	23	62-126	20	01/31/2014 1044
Trichlorofluoromethane	50	40	+	1	80	26	45-138	20	01/31/2014 1044
Vinyl chloride	50	43	+	1	85	27	42-132	20	01/31/2014 1044
Xylenes (total)	100	77		1	77	20	58-128	20	01/31/2014 1044

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		85	47-138
1,2-Dichloroethane-d4		89	53-142
Toluene-d8		95	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39940-001
Batch: 39940
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	6.7	ug/L	02/06/2014 1215
Benzene	ND		1	5.0	0.20	ug/L	02/06/2014 1215
Bromodichloromethane	ND		1	5.0	1.7	ug/L	02/06/2014 1215
Bromoform	ND		1	5.0	0.40	ug/L	02/06/2014 1215
Bromomethane (Methyl bromide)	ND		1	5.0	0.80	ug/L	02/06/2014 1215
2-Butanone (MEK)	ND		1	10	1.8	ug/L	02/06/2014 1215
Carbon disulfide	ND		1	5.0	0.30	ug/L	02/06/2014 1215
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	02/06/2014 1215
Chlorobenzene	ND		1	5.0	1.7	ug/L	02/06/2014 1215
Chloroethane	ND		1	5.0	0.50	ug/L	02/06/2014 1215
Chloroform	ND		1	5.0	1.7	ug/L	02/06/2014 1215
Chloromethane (Methyl chloride)	ND		1	5.0	0.30	ug/L	02/06/2014 1215
Cyclohexane	ND		1	5.0	0.98	ug/L	02/06/2014 1215
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.60	ug/L	02/06/2014 1215
Dibromochloromethane	ND		1	5.0	1.7	ug/L	02/06/2014 1215
1,2-Dibromoethane (EDB)	ND		1	5.0	0.30	ug/L	02/06/2014 1215
1,4-Dichlorobenzene	ND		1	5.0	1.7	ug/L	02/06/2014 1215
1,2-Dichlorobenzene	ND		1	5.0	1.7	ug/L	02/06/2014 1215
1,3-Dichlorobenzene	ND		1	5.0	1.7	ug/L	02/06/2014 1215
Dichlorodifluoromethane	ND		1	5.0	0.20	ug/L	02/06/2014 1215
1,2-Dichloroethane	ND		1	5.0	0.30	ug/L	02/06/2014 1215
1,1-Dichloroethane	ND		1	5.0	0.30	ug/L	02/06/2014 1215
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/06/2014 1215
1,1-Dichloroethene	ND		1	5.0	0.50	ug/L	02/06/2014 1215
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	02/06/2014 1215
1,2-Dichloropropane	ND		1	5.0	0.30	ug/L	02/06/2014 1215
trans-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	02/06/2014 1215
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	02/06/2014 1215
Ethylbenzene	ND		1	5.0	1.7	ug/L	02/06/2014 1215
2-Hexanone	ND		1	10	1.0	ug/L	02/06/2014 1215
Isopropylbenzene	ND		1	5.0	1.0	ug/L	02/06/2014 1215
Methyl acetate	ND		1	5.0	0.72	ug/L	02/06/2014 1215
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/06/2014 1215
4-Methyl-2-pentanone	ND		1	10	0.80	ug/L	02/06/2014 1215
Methylcyclohexane	ND		1	5.0	0.95	ug/L	02/06/2014 1215
Methylene chloride	ND		1	5.0	1.7	ug/L	02/06/2014 1215
Styrene	ND		1	5.0	0.10	ug/L	02/06/2014 1215
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	02/06/2014 1215
Tetrachloroethene	ND		1	5.0	0.40	ug/L	02/06/2014 1215
Toluene	ND		1	5.0	1.7	ug/L	02/06/2014 1215
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	02/06/2014 1215
1,2,4-Trichlorobenzene	ND		1	5.0	1.7	ug/L	02/06/2014 1215
1,1,2-Trichloroethane	ND		1	5.0	0.30	ug/L	02/06/2014 1215
1,1,1-Trichloroethane	ND		1	5.0	0.20	ug/L	02/06/2014 1215

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39940-001
Batch: 39940
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.30	ug/L	02/06/2014 1215
Trichlorofluoromethane	ND		1	5.0	0.30	ug/L	02/06/2014 1215
Vinyl chloride	ND		1	2.0	0.10	ug/L	02/06/2014 1215
Xylenes (total)	ND		1	5.0	1.7	ug/L	02/06/2014 1215

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39940-002
Batch: 39940
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	107	60-140	02/06/2014 1037
Benzene	50	52		1	103	70-130	02/06/2014 1037
Bromodichloromethane	50	52		1	105	70-130	02/06/2014 1037
Bromoform	50	51		1	103	70-130	02/06/2014 1037
Bromomethane (Methyl bromide)	50	51		1	103	60-140	02/06/2014 1037
2-Butanone (MEK)	100	110		1	106	60-140	02/06/2014 1037
Carbon disulfide	50	54		1	108	60-140	02/06/2014 1037
Carbon tetrachloride	50	52		1	105	70-130	02/06/2014 1037
Chlorobenzene	50	50		1	100	70-130	02/06/2014 1037
Chloroethane	50	56		1	112	42-163	02/06/2014 1037
Chloroform	50	52		1	105	70-130	02/06/2014 1037
Chloromethane (Methyl chloride)	50	59		1	117	60-140	02/06/2014 1037
Cyclohexane	50	53		1	106	70-130	02/06/2014 1037
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	95	70-130	02/06/2014 1037
Dibromochloromethane	50	52		1	104	70-130	02/06/2014 1037
1,2-Dibromoethane (EDB)	50	53		1	106	70-130	02/06/2014 1037
1,4-Dichlorobenzene	50	50		1	99	70-130	02/06/2014 1037
1,2-Dichlorobenzene	50	50		1	101	70-130	02/06/2014 1037
1,3-Dichlorobenzene	50	50		1	99	70-130	02/06/2014 1037
Dichlorodifluoromethane	50	67		1	134	60-140	02/06/2014 1037
1,2-Dichloroethane	50	54		1	108	70-130	02/06/2014 1037
1,1-Dichloroethane	50	52		1	105	70-130	02/06/2014 1037
trans-1,2-Dichloroethene	50	52		1	104	70-130	02/06/2014 1037
1,1-Dichloroethene	50	52		1	103	70-130	02/06/2014 1037
cis-1,2-Dichloroethene	50	52		1	105	70-130	02/06/2014 1037
1,2-Dichloropropane	50	51		1	103	70-130	02/06/2014 1037
trans-1,3-Dichloropropene	50	51		1	102	70-130	02/06/2014 1037
cis-1,3-Dichloropropene	50	53		1	107	70-130	02/06/2014 1037
Ethylbenzene	50	51		1	102	70-130	02/06/2014 1037
2-Hexanone	100	100		1	104	60-140	02/06/2014 1037
Isopropylbenzene	50	50		1	100	70-130	02/06/2014 1037
Methyl acetate	50	51		1	102	70-130	02/06/2014 1037
Methyl tertiary butyl ether (MTBE)	50	53		1	107	70-130	02/06/2014 1037
4-Methyl-2-pentanone	100	110		1	108	60-140	02/06/2014 1037
Methylcyclohexane	50	52		1	104	70-130	02/06/2014 1037
Methylene chloride	50	54		1	108	70-130	02/06/2014 1037
Styrene	50	52		1	104	70-130	02/06/2014 1037
1,1,2,2-Tetrachloroethane	50	50		1	100	70-130	02/06/2014 1037
Tetrachloroethene	50	49		1	99	70-130	02/06/2014 1037
Toluene	50	51		1	103	70-130	02/06/2014 1037
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	59		1	118	70-130	02/06/2014 1037
1,2,4-Trichlorobenzene	50	48		1	97	70-130	02/06/2014 1037
1,1,2-Trichloroethane	50	50		1	101	70-130	02/06/2014 1037
1,1,1-Trichloroethane	50	53		1	105	70-130	02/06/2014 1037

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39940-002
Batch: 39940
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	101	70-130	02/06/2014 1037
Trichlorofluoromethane	50	56		1	113	70-130	02/06/2014 1037
Vinyl chloride	50	60		1	120	70-130	02/06/2014 1037
Xylenes (total)	100	100		1	102	70-130	02/06/2014 1037

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		104	70-130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39940-003
Batch: 39940
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	88		1	88	19	60-140	20	02/06/2014 1100
Benzene	50	47		1	94	9.2	70-130	20	02/06/2014 1100
Bromodichloromethane	50	47		1	94	11	70-130	20	02/06/2014 1100
Bromoform	50	46		1	92	11	70-130	20	02/06/2014 1100
Bromomethane (Methyl bromide)	50	45		1	90	13	60-140	20	02/06/2014 1100
2-Butanone (MEK)	100	92		1	92	14	60-140	20	02/06/2014 1100
Carbon disulfide	50	49		1	98	9.8	60-140	20	02/06/2014 1100
Carbon tetrachloride	50	47		1	94	11	70-130	20	02/06/2014 1100
Chlorobenzene	50	46		1	92	8.8	70-130	20	02/06/2014 1100
Chloroethane	50	49		1	97	14	42-163	20	02/06/2014 1100
Chloroform	50	46		1	92	13	70-130	20	02/06/2014 1100
Chloromethane (Methyl chloride)	50	51		1	103	13	60-140	20	02/06/2014 1100
Cyclohexane	50	48		1	96	9.8	70-130	20	02/06/2014 1100
1,2-Dibromo-3-chloropropane (DBCP)	50	42		1	83	13	70-130	20	02/06/2014 1100
Dibromochloromethane	50	47		1	93	11	70-130	20	02/06/2014 1100
1,2-Dibromoethane (EDB)	50	47		1	94	12	70-130	20	02/06/2014 1100
1,4-Dichlorobenzene	50	43		1	86	14	70-130	20	02/06/2014 1100
1,2-Dichlorobenzene	50	44		1	87	14	70-130	20	02/06/2014 1100
1,3-Dichlorobenzene	50	43		1	87	13	70-130	20	02/06/2014 1100
Dichlorodifluoromethane	50	60		1	121	11	60-140	20	02/06/2014 1100
1,2-Dichloroethane	50	47		1	93	15	70-130	20	02/06/2014 1100
1,1-Dichloroethane	50	46		1	92	13	70-130	20	02/06/2014 1100
trans-1,2-Dichloroethene	50	46		1	92	13	70-130	20	02/06/2014 1100
1,1-Dichloroethene	50	47		1	93	10	70-130	20	02/06/2014 1100
cis-1,2-Dichloroethene	50	46		1	93	12	70-130	20	02/06/2014 1100
1,2-Dichloropropane	50	46		1	92	11	70-130	20	02/06/2014 1100
trans-1,3-Dichloropropene	50	45		1	91	12	70-130	20	02/06/2014 1100
cis-1,3-Dichloropropene	50	48		1	96	11	70-130	20	02/06/2014 1100
Ethylbenzene	50	47		1	93	8.8	70-130	20	02/06/2014 1100
2-Hexanone	100	92		1	92	13	60-140	20	02/06/2014 1100
Isopropylbenzene	50	44		1	89	12	70-130	20	02/06/2014 1100
Methyl acetate	50	44		1	88	15	70-130	20	02/06/2014 1100
Methyl tertiary butyl ether (MTBE)	50	46		1	92	15	70-130	20	02/06/2014 1100
4-Methyl-2-pentanone	100	95		1	95	13	60-140	20	02/06/2014 1100
Methylcyclohexane	50	49		1	97	6.6	70-130	20	02/06/2014 1100
Methylene chloride	50	46		1	93	15	70-130	20	02/06/2014 1100
Styrene	50	47		1	94	10	70-130	20	02/06/2014 1100
1,1,2,2-Tetrachloroethane	50	43		1	86	15	70-130	20	02/06/2014 1100
Tetrachloroethene	50	45		1	90	9.1	70-130	20	02/06/2014 1100
Toluene	50	47		1	93	9.8	70-130	20	02/06/2014 1100
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	104	13	70-130	20	02/06/2014 1100
1,2,4-Trichlorobenzene	50	41		1	83	16	70-130	20	02/06/2014 1100
1,1,2-Trichloroethane	50	44		1	89	12	70-130	20	02/06/2014 1100
1,1,1-Trichloroethane	50	46		1	93	13	70-130	20	02/06/2014 1100

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39940-003
Batch: 39940
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	47		1	93	7.5	70-130	20	02/06/2014 1100
Trichlorofluoromethane	50	50		1	101	11	70-130	20	02/06/2014 1100
Vinyl chloride	50	53		1	106	12	70-130	20	02/06/2014 1100
Xylenes (total)	100	93		1	93	9.0	70-130	20	02/06/2014 1100

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		89	70-130
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		91	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: PQ39534-001
Batch: 39534
Analytical Method: 8270D
Matrix: Aqueous
Prep Method: 3520C
Prep Date: 01/31/2014 1716

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acenaphthene	ND		1	0.20	0.072	ug/L	02/03/2014 1011
Acenaphthylene	ND		1	0.20	0.041	ug/L	02/03/2014 1011
Anthracene	ND		1	0.20	0.036	ug/L	02/03/2014 1011
Benzo(a)anthracene	ND		1	0.20	0.082	ug/L	02/03/2014 1011
Benzo(a)pyrene	ND		1	0.20	0.047	ug/L	02/03/2014 1011
Benzo(b)fluoranthene	ND		1	0.20	0.087	ug/L	02/03/2014 1011
Benzo(g,h,i)perylene	ND		1	0.20	0.049	ug/L	02/03/2014 1011
Benzo(k)fluoranthene	ND		1	0.20	0.092	ug/L	02/03/2014 1011
Chrysene	ND		1	0.20	0.054	ug/L	02/03/2014 1011
Dibenzo(a,h)anthracene	ND		1	0.20	0.058	ug/L	02/03/2014 1011
Fluoranthene	ND		1	0.20	0.077	ug/L	02/03/2014 1011
Fluorene	ND		1	0.20	0.049	ug/L	02/03/2014 1011
Indeno(1,2,3-c,d)pyrene	ND		1	0.20	0.039	ug/L	02/03/2014 1011
Naphthalene	ND		1	0.20	0.074	ug/L	02/03/2014 1011
Phenanthrene	ND		1	0.20	0.058	ug/L	02/03/2014 1011
Pyrene	ND		1	0.20	0.075	ug/L	02/03/2014 1011

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		100	37-129
Nitrobenzene-d5		102	38-127
Terphenyl-d14		108	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39534-002
Batch: 39534
Analytical Method: 8270D
Matrix: Aqueous
Prep Method: 3520C
Prep Date: 01/31/2014 1716

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	20	20		1	101	51-130	02/03/2014 1036
Acenaphthylene	20	22		1	108	46-131	02/03/2014 1036
Anthracene	20	21		1	105	48-122	02/03/2014 1036
Benzo(a)anthracene	20	21		1	106	50-143	02/03/2014 1036
Benzo(a)pyrene	20	20		1	99	55-141	02/03/2014 1036
Benzo(b)fluoranthene	20	22		1	112	48-147	02/03/2014 1036
Benzo(g,h,i)perylene	20	20		1	98	48-139	02/03/2014 1036
Benzo(k)fluoranthene	20	26		1	130	48-148	02/03/2014 1036
Chrysene	20	21		1	103	51-137	02/03/2014 1036
Dibenzo(a,h)anthracene	20	21		1	107	48-139	02/03/2014 1036
Fluoranthene	20	21		1	104	50-124	02/03/2014 1036
Fluorene	20	21		1	105	39-122	02/03/2014 1036
Indeno(1,2,3-c,d)pyrene	20	21		1	106	49-146	02/03/2014 1036
Naphthalene	20	19		1	93	45-118	02/03/2014 1036
Phenanthrene	20	20		1	100	49-122	02/03/2014 1036
Pyrene	20	22		1	111	50-130	02/03/2014 1036

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		102	37-129
Nitrobenzene-d5		117	38-127
Terphenyl-d14		119	10-148

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: PA29015-009MS
Batch: 39534
Analytical Method: 8270D
Matrix: Aqueous
Prep Method: 3520C
Prep Date: 01/31/2014 1716

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	40	42		1	104	10-133	02/03/2014 1546
Acenaphthylene	ND	40	44		1	109	34-128	02/03/2014 1546
Anthracene	0.056	40	40		1	100	48-122	02/03/2014 1546
Benzo(a)anthracene	ND	40	37		1	92	53-98	02/03/2014 1546
Benzo(a)pyrene	0.16	40	27		1	67	11-160	02/03/2014 1546
Benzo(b)fluoranthene	0.25	40	34		1	85	10-165	02/03/2014 1546
Benzo(g,h,i)perylene	ND	40	32		1	81	42-111	02/03/2014 1546
Benzo(k)fluoranthene	ND	40	38		1	95	13-175	02/03/2014 1546
Chrysene	ND	40	36		1	90	51-107	02/03/2014 1546
Dibenzo(a,h)anthracene	ND	40	32		1	81	47-116	02/03/2014 1546
Fluoranthene	0.10	40	41		1	102	50-124	02/03/2014 1546
Fluorene	ND	40	43		1	109	39-122	02/03/2014 1546
Indeno(1,2,3-c,d)pyrene	ND	40	31		1	78	43-113	02/03/2014 1546
Naphthalene	ND	40	37	N	1	93	46-89	02/03/2014 1546
Phenanthrene	ND	40	41		1	102	49-122	02/03/2014 1546
Pyrene	0.081	40	43		1	108	50-130	02/03/2014 1546

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		103	37-129
Nitrobenzene-d5		115	38-127
Terphenyl-d14		96	10-148

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: PA29015-009MD
Batch: 39534
Analytical Method: 8270D
Matrix: Aqueous
Prep Method: 3520C
Prep Date: 01/31/2014 1716

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	40	41		1	102	1.6	10-133	40	02/03/2014 1611
Acenaphthylene	ND	40	43		1	106	2.4	34-128	40	02/03/2014 1611
Anthracene	0.056	40	40		1	100	0.15	48-122	40	02/03/2014 1611
Benzo(a)anthracene	ND	40	36		1	91	0.81	53-98	40	02/03/2014 1611
Benzo(a)pyrene	0.16	40	28		1	69	2.1	11-160	40	02/03/2014 1611
Benzo(b)fluoranthene	0.25	40	37		1	92	7.4	10-165	40	02/03/2014 1611
Benzo(g,h,i)perylene	ND	40	34		1	85	4.4	42-111	40	02/03/2014 1611
Benzo(k)fluoranthene	ND	40	41		1	101	6.9	13-175	40	02/03/2014 1611
Chrysene	ND	40	36		1	90	0.56	51-107	40	02/03/2014 1611
Dibenzo(a,h)anthracene	ND	40	35		1	86	6.4	47-116	40	02/03/2014 1611
Fluoranthene	0.10	40	41		1	101	0.70	50-124	40	02/03/2014 1611
Fluorene	ND	40	43		1	108	0.15	39-122	40	02/03/2014 1611
Indeno(1,2,3-c,d)pyrene	ND	40	34		1	84	8.1	43-113	40	02/03/2014 1611
Naphthalene	ND	40	36	N	1	91	2.7	46-89	40	02/03/2014 1611
Phenanthrene	ND	40	41		1	103	0.26	49-122	40	02/03/2014 1611
Pyrene	0.081	40	43		1	107	1.2	50-130	40	02/03/2014 1611

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		102	37-129
Nitrobenzene-d5		112	38-127
Terphenyl-d14		101	10-148

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: PQ39883-001
Batch: 39883
Analytical Method: 8270D
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/05/2014 2210

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acenaphthene	ND		1	33	11	ug/kg	02/06/2014 0933
Acenaphthylene	ND		1	33	10	ug/kg	02/06/2014 0933
Anthracene	ND		1	33	7.4	ug/kg	02/06/2014 0933
Benzo(a)anthracene	ND		1	33	8.8	ug/kg	02/06/2014 0933
Benzo(a)pyrene	ND		1	33	9.3	ug/kg	02/06/2014 0933
Benzo(b)fluoranthene	ND		1	33	9.6	ug/kg	02/06/2014 0933
Benzo(g,h,i)perylene	ND		1	33	12	ug/kg	02/06/2014 0933
Benzo(k)fluoranthene	ND		1	33	9.5	ug/kg	02/06/2014 0933
Chrysene	ND		1	33	11	ug/kg	02/06/2014 0933
Dibenzo(a,h)anthracene	ND		1	33	9.1	ug/kg	02/06/2014 0933
Fluoranthene	ND		1	33	11	ug/kg	02/06/2014 0933
Fluorene	ND		1	33	9.0	ug/kg	02/06/2014 0933
Indeno(1,2,3-c,d)pyrene	ND		1	33	9.7	ug/kg	02/06/2014 0933
Naphthalene	ND		1	33	10	ug/kg	02/06/2014 0933
Phenanthrene	ND		1	33	9.0	ug/kg	02/06/2014 0933
Pyrene	ND		1	33	13	ug/kg	02/06/2014 0933

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		82	33-102
Nitrobenzene-d5		77	22-109
Terphenyl-d14		89	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39883-002
Batch: 39883
Analytical Method: 8270D
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/05/2014 2210

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	670	480		1	72	46-114	02/06/2014 0956
Acenaphthylene	670	550		1	83	44-122	02/06/2014 0956
Anthracene	670	560		1	84	50-119	02/06/2014 0956
Benzo(a)anthracene	670	560		1	84	47-121	02/06/2014 0956
Benzo(a)pyrene	670	620		1	93	55-134	02/06/2014 0956
Benzo(b)fluoranthene	670	650		1	97	28-139	02/06/2014 0956
Benzo(g,h,i)perylene	670	530		1	80	36-125	02/06/2014 0956
Benzo(k)fluoranthene	670	640		1	97	47-130	02/06/2014 0956
Chrysene	670	540		1	81	45-126	02/06/2014 0956
Dibenzo(a,h)anthracene	670	580		1	87	30-130	02/06/2014 0956
Fluoranthene	670	570		1	85	50-123	02/06/2014 0956
Fluorene	670	500		1	76	48-117	02/06/2014 0956
Indeno(1,2,3-c,d)pyrene	670	570		1	85	45-123	02/06/2014 0956
Naphthalene	670	450		1	67	36-110	02/06/2014 0956
Phenanthrene	670	530		1	79	49-117	02/06/2014 0956
Pyrene	670	550		1	83	47-119	02/06/2014 0956

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		72	33-102
Nitrobenzene-d5		72	22-109
Terphenyl-d14		89	41-120

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PCBs by GC - MB

Sample ID: PQ39483-001
Batch: 39483
Analytical Method: 8082A
Matrix: Solid
Prep Method: 3550C
Prep Date: 01/30/2014 1905

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Aroclor 1016	ND		1	17	1.1	ug/kg	01/31/2014 0938
Aroclor 1221	ND		1	17	9.7	ug/kg	01/31/2014 0938
Aroclor 1232	ND		1	17	3.3	ug/kg	01/31/2014 0938
Aroclor 1242	ND		1	17	2.3	ug/kg	01/31/2014 0938
Aroclor 1248	ND		1	17	3.8	ug/kg	01/31/2014 0938
Aroclor 1254	ND		1	17	1.8	ug/kg	01/31/2014 0938
Aroclor 1260	ND		1	17	5.7	ug/kg	01/31/2014 0938

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		85	41-132
Tetrachloro-m-xylene		80	35-106

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PCBs by GC - LCS

Sample ID: PQ39483-002
Batch: 39483
Analytical Method: 8082A
Matrix: Solid
Prep Method: 3550C
Prep Date: 01/30/2014 1905

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Aroclor 1016	83	75		1	90	70-130	01/31/2014 0949
Aroclor 1260	83	84		1	102	70-130	01/31/2014 0949

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		87	41-132
Tetrachloro-m-xylene		76	35-106

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY

Chain of Custody Record

Number 24722

Client: AECOM	Report to Contact: Scott Ross	Sampler (Printed Name): Scott Ross / Chuck Siddoth	Quote No: 16590
Address: 810 Dutch Sq. Blvd	Telephone No. / Fax No. / Email: (803) 798-1073	Waybill No.	Page: 1 of 1
City: Columbia	State: SC	Zip Code: 29210	
Project Name: Phase II ESA - Shakespeare	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na Tho. 7. NaOH		Lot No. PA29015
Project Number	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: PAHs	PCBs	VOCs	VOCs	Number of Containers	Bottle (See Instructions on back)	Preservative	Remarks / Cooler ID
													1	M	1	
													4	A		
													3	9	5	
Trip Blank	1/27/14	—						X				X				
REC 6	1/27/14	1320	G					X	✓	✓						
REC 7b	"	1400	G					X	✓		✓					
REC 7A	"	1308						X	✓		✓					
REC 9 B-14	"	1355						X	✓		✓					
REC 9 B-15	"	1515						X	✓		✓					
REC 11A B-17	"	1620						X	✓		✓					
REC 11A B-18	"	1600						X	✓		✓					
REC 7 SW-1	"	1355						X	✓		✓	✓				
REC 3 B-5 (9-10)	"	1445						X			✓					
REC 3 B-6 (9-10)	"	1530						X			✓					
REC 3 B-7 (9-10)	"	1605						X			✓					

Turn Around Time Required (Prior lab approval required for expedited TAT): ☒ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time
1. Relinquished by Sampler	1/28/14	1105
2. Relinquished by		
3. Relinquished by		
4. Relinquished by		

	Date	Time
1. Received by		
2. Received by		
3. Received by		
4. Laboratory Received by	1-28-14	1205

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check): ☒ Yes ☐ No ☐ Ice Pack — Receipt Temp. 0-8 °C — Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 13

Page 1 of 1
Replaces Date: 09/24/13
Effective Date: 09/26/13

Sample Receipt Checklist (SRC)

Client: AECOM Cooler Inspected by/date: KMM 1/24/14 +NMS Lot #: PA29015

Means of receipt: ☐ SESI ☑ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☑		2. If custody seals were present, were they intact and unbroken?
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 0.7/0.8/1 °C / / °C / / °C / / °C Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID: #3 IR Gun Correction Factor: 0.1 °C Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other:_____. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☑	No ☐	NA ☐	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s)_____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number)

Sample(s)_____ were received with bubbles >6 mm in diameter.

Sample(s)_____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/phenol

Sample labels verified by:_____ Date:_____

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee:_____ Date of response:_____

Comments:_____

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

AECOM
810 Dutch Square Blvd.
Suite 202
Columbia, SC 29210
Attention: Scott Ross

Project Name: **Phae II ESA - Shakespear**

Lot Number: **PA31056**
Date Completed: **02/11/2014**

Nisreen Saikaly
Project Manager

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

* P A 3 1 0 5 6 *

Case Narrative

AECOM

Lot Number: PA31056

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary

AECOM

Lot Number: PA31056

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TMW-3	Aqueous	01/30/2014 1348	01/31/2014
002	TMW-4	Aqueous	01/30/2014 1430	01/31/2014
003	TMW-2	Aqueous	01/30/2014 1625	01/31/2014
004	TMW-1	Aqueous	01/30/2014 1740	01/31/2014
005	REC-10 B-16 (10-11)	Solid	01/31/2014 1000	01/31/2014
006	REC-4 B-8 (2-4)	Solid	01/31/2014 0930	01/31/2014
007	REC-11b B-19 (0-2)	Solid	01/31/2014 1100	01/31/2014
008	REC-5c B-11 (12-13)	Solid	01/31/2014 1320	01/31/2014
009	REC-5a B-9 (10-11)	Solid	01/31/2014 1600	01/31/2014
010	TB-01-013114	Aqueous	01/31/2014	01/31/2014
011	REC-8a B-12 (2-4)	Solid	01/31/2014 1520	01/31/2014
012	REC-8b B-13 (1-3)	Solid	01/31/2014 1350	01/31/2014
013	REC-5B B-10 (10-11)	Solid	01/31/2014 1700	01/31/2014
014	REC-2 B-3a (5-6)	Solid	01/31/2014 1700	01/31/2014

(14 samples)

Executive Summary

AECOM

Lot Number: PA31056

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	TMW-3	Aqueous	Acetone	8260B	15	J	ug/L	6
001	TMW-3	Aqueous	Benzene	8260B	0.42	J	ug/L	6
001	TMW-3	Aqueous	1,1-Dichloroethene	8260B	0.73	J	ug/L	6
001	TMW-3	Aqueous	cis-1,2-Dichloroethene	8260B	19		ug/L	6
001	TMW-3	Aqueous	trans-1,2-Dichloroethene	8260B	1.3	J	ug/L	6
001	TMW-3	Aqueous	Styrene	8260B	0.34	J	ug/L	6
001	TMW-3	Aqueous	Trichloroethene	8260B	7.9		ug/L	7
001	TMW-3	Aqueous	Vinyl chloride	8260B	0.27	J	ug/L	7
002	TMW-4	Aqueous	cis-1,2-Dichloroethene	8260B	7.1		ug/L	8
002	TMW-4	Aqueous	Styrene	8260B	0.11	J	ug/L	8
002	TMW-4	Aqueous	Trichloroethene	8260B	2.1	J	ug/L	9
003	TMW-2	Aqueous	Styrene	8260B	0.29	J	ug/L	10
003	TMW-2	Aqueous	Vinyl chloride	8260B	0.68	J	ug/L	11
004	TMW-1	Aqueous	Acetone	8260B	10	J	ug/L	12
004	TMW-1	Aqueous	cis-1,2-Dichloroethene	8260B	0.42	J	ug/L	12
004	TMW-1	Aqueous	Styrene	8260B	1.6	J	ug/L	12
005	REC-10 B-16 (10-11)	Solid	Acetone	8260B	23		ug/kg	14
005	REC-10 B-16 (10-11)	Solid	cis-1,2-Dichloroethene	8260B	380		ug/kg	14
005	REC-10 B-16 (10-11)	Solid	trans-1,2-Dichloroethene	8260B	9.2		ug/kg	14
005	REC-10 B-16 (10-11)	Solid	Ethylbenzene	8260B	1.6	J	ug/kg	14
005	REC-10 B-16 (10-11)	Solid	Styrene	8260B	5.9		ug/kg	14
005	REC-10 B-16 (10-11)	Solid	Trichloroethene	8260B	7.3		ug/kg	15
005	REC-10 B-16 (10-11)	Solid	Vinyl chloride	8260B	1.6	J	ug/kg	15
005	REC-10 B-16 (10-11)	Solid	Xylenes (total)	8260B	16		ug/kg	15
005	REC-10 B-16 (10-11)	Solid	Arsenic	6010C	1.6		mg/kg	18
005	REC-10 B-16 (10-11)	Solid	Barium	6010C	35		mg/kg	18
005	REC-10 B-16 (10-11)	Solid	Chromium	6010C	5.4	B	mg/kg	18
005	REC-10 B-16 (10-11)	Solid	Lead	6010C	21		mg/kg	18
005	REC-10 B-16 (10-11)	Solid	Mercury	7471B	0.011	J	mg/kg	18
005	REC-10 B-16 (10-11)	Solid	Nickel	6010C	2.2		mg/kg	18
005	REC-10 B-16 (10-11)	Solid	Silver	6010C	0.21	J	mg/kg	18
006	REC-4 B-8 (2-4)	Solid	Styrene	8260B	1.3	J	ug/kg	19
007	REC-11b B-19 (0-2)	Solid	Acetone	8260B	8.3	J	ug/kg	22
008	REC-5c B-11 (12-13)	Solid	Acetone	8260B	31		ug/kg	25
008	REC-5c B-11 (12-13)	Solid	2-Butanone (MEK)	8260B	8.3	J	ug/kg	25
008	REC-5c B-11 (12-13)	Solid	2-Hexanone	8260B	2.5	J	ug/kg	25
008	REC-5c B-11 (12-13)	Solid	Isopropylbenzene	8260B	1.1	J	ug/kg	25
009	REC-5a B-9 (10-11)	Solid	Styrene	8260B	1.1	J	ug/kg	27
011	REC-8a B-12 (2-4)	Solid	Acetone	8260B	42		ug/kg	31
011	REC-8a B-12 (2-4)	Solid	2-Butanone (MEK)	8260B	4.6	J	ug/kg	31
011	REC-8a B-12 (2-4)	Solid	cis-1,2-Dichloroethene	8260B	1.4	J	ug/kg	31
011	REC-8a B-12 (2-4)	Solid	Ethylbenzene	8260B	34000		ug/kg	31
011	REC-8a B-12 (2-4)	Solid	Isopropylbenzene	8260B	0.71	J	ug/kg	31
011	REC-8a B-12 (2-4)	Solid	Xylenes (total)	8260B	170000		ug/kg	32
012	REC-8b B-13 (1-3)	Solid	Acetone	8260B	32		ug/kg	33

Executive Summary (Continued)

Lot Number: PA31056

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
012	REC-8b B-13 (1-3)	Solid	1,1-Dichloroethane	8260B	5.6		ug/kg	33
012	REC-8b B-13 (1-3)	Solid	cis-1,2-Dichloroethene	8260B	14		ug/kg	33
012	REC-8b B-13 (1-3)	Solid	Trichloroethene	8260B	5.8		ug/kg	34
012	REC-8b B-13 (1-3)	Solid	Arsenic	6010C	1.3		mg/kg	36
012	REC-8b B-13 (1-3)	Solid	Barium	6010C	39		mg/kg	36
012	REC-8b B-13 (1-3)	Solid	Chromium	6010C	7.3	B	mg/kg	36
012	REC-8b B-13 (1-3)	Solid	Lead	6010C	16		mg/kg	36
012	REC-8b B-13 (1-3)	Solid	Mercury	7471B	0.044	J	mg/kg	36
012	REC-8b B-13 (1-3)	Solid	Nickel	6010C	3.1		mg/kg	36
012	REC-8b B-13 (1-3)	Solid	Selenium	6010C	1.2	B	mg/kg	36
012	REC-8b B-13 (1-3)	Solid	Silver	6010C	0.24	J	mg/kg	36

(56 detections)

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-001**
Description: **TMW-3**
Matrix: **Aqueous**
Date Sampled: **01/30/2014 1348**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1421	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**15**	**J**	**20**	**6.7**	**ug/L**	**1**
Benzene	**71-43-2**	**8260B**	**0.42**	**J**	**5.0**	**0.20**	**ug/L**	**1**
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	**75-35-4**	**8260B**	**0.73**	**J**	**5.0**	**0.50**	**ug/L**	**1**
cis-1,2-Dichloroethene	**156-59-2**	**8260B**	**19**		**5.0**	**0.20**	**ug/L**	**1**
trans-1,2-Dichloroethene	**156-60-5**	**8260B**	**1.3**	**J**	**5.0**	**0.40**	**ug/L**	**1**
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	**100-42-5**	**8260B**	**0.34**	**J**	**5.0**	**0.10**	**ug/L**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-001**
Description: **TMW-3**
Matrix: **Aqueous**
Date Sampled: **01/30/2014 1348**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1421	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	**79-01-6**	**8260B**	**7.9**		**5.0**	**0.30**	**ug/L**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	**75-01-4**	**8260B**	**0.27**	**J**	**2.0**	**0.10**	**ug/L**	**1**
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		74	70-130
Bromofluorobenzene		80	70-130
Toluene-d8		74	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-002**
Description: **TMW-4**
Matrix: **Aqueous**
Date Sampled: **01/30/2014 1430**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1444	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	**156-59-2**	**8260B**	**7.1**		**5.0**	**0.20**	**ug/L**	**1**
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	**100-42-5**	**8260B**	**0.11**	**J**	**5.0**	**0.10**	**ug/L**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-002**
Description: **TMW-4**
Matrix: **Aqueous**
Date Sampled: **01/30/2014 1430**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1444	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	**79-01-6**	**8260B**	**2.1**	**J**	**5.0**	**0.30**	**ug/L**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		73	70-130
Bromofluorobenzene		79	70-130
Toluene-d8		79	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-003**
Description: **TMW-2**
Matrix: **Aqueous**
Date Sampled: **01/30/2014 1625**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1507	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	**100-42-5**	**8260B**	**0.29**	**J**	**5.0**	**0.10**	**ug/L**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-003**
Description: **TMW-2**
Matrix: **Aqueous**
Date Sampled: **01/30/2014 1625**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1507	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	**75-01-4**	**8260B**	**0.68**	**J**	**2.0**	**0.10**	**ug/L**	**1**
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		76	70-130
Bromofluorobenzene		84	70-130
Toluene-d8		80	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-004**
Description: **TMW-1**
Matrix: **Aqueous**
Date Sampled: **01/30/2014 1740**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1530	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**10**	**J**	**20**	**6.7**	**ug/L**	**1**
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	**156-59-2**	**8260B**	**0.42**	**J**	**5.0**	**0.20**	**ug/L**	**1**
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	**100-42-5**	**8260B**	**1.6**	**J**	**5.0**	**0.10**	**ug/L**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-004**
Description: **TMW-1**
Matrix: **Aqueous**
Date Sampled: **01/30/2014 1740**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1530	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		73	70-130
Bromofluorobenzene		77	70-130
Toluene-d8		76	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-005**
Description: **REC-10 B-16 (10-11)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1000**
% Solids: **82.5** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1322	AAC		39667	6.49
2	5035	8260B	50	02/04/2014 1924	AAC		39721	6.62

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**23**		**19**	**6.3**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		4.7	1.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.7	1.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.7	0.65	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.7	1.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		9.3	2.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.7	1.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.7	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.7	1.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.7	1.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.7	0.78	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.7	0.93	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.7	0.63	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.7	1.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.7	1.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.7	0.79	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.7	1.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.7	1.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.7	1.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.7	1.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.7	0.68	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.7	0.93	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.7	1.6	ug/kg	1
cis-1,2-Dichloroethene	**156-59-2**	**8260B**	**380**		**230**	**35**	**ug/kg**	**2**
trans-1,2-Dichloroethene	**156-60-5**	**8260B**	**9.2**		**4.7**	**1.4**	**ug/kg**	**1**
1,2-Dichloropropane	78-87-5	8260B	ND		4.7	0.85	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.7	0.64	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.7	0.77	ug/kg	1
Ethylbenzene	**100-41-4**	**8260B**	**1.6**	**J**	**4.7**	**1.6**	**ug/kg**	**1**
2-Hexanone	591-78-6	8260B	ND		9.3	1.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.7	0.21	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.7	0.92	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.7	0.37	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.3	1.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.7	0.38	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.7	2.4	ug/kg	1
Styrene	**100-42-5**	**8260B**	**5.9**		**4.7**	**1.0**	**ug/kg**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.7	0.44	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.7	0.47	ug/kg	1
Toluene	108-88-3	8260B	ND		4.7	1.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.7	0.59	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.7	1.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.7	0.79	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-005**
Description: **REC-10 B-16 (10-11)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1000**
% Solids: **82.5** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1322	AAC		39667	6.49
2	5035	8260B	50	02/04/2014 1924	AAC		39721	6.62

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.7	0.74	ug/kg	1
Trichloroethene	**79-01-6**	**8260B**	**7.3**		**4.7**	**1.8**	**ug/kg**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		4.7	1.4	ug/kg	1
Vinyl chloride	**75-01-4**	**8260B**	**1.6**	**J**	**4.7**	**0.80**	**ug/kg**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**16**		**4.7**	**2.7**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	53-142		84	53-142
Bromofluorobenzene		89	47-138		72	47-138
Toluene-d8		97	68-124		83	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-005**
Description: **REC-10 B-16 (10-11)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1000**
% Solids: **82.5** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	02/06/2014 1630	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	12	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	8.9	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		40	11	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		40	11	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		40	12	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		40	14	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		40	11	ug/kg	1
Chrysene	218-01-9	8270D	ND		40	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	11	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		40	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	11	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		40	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	12	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		40	11	ug/kg	1
Pyrene	129-00-0	8270D	ND		40	16	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		59	33-102
Nitrobenzene-d5		54	22-109
Terphenyl-d14		75	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

PCBs by GC

Client: **AECOM**
Laboratory ID: **PA31056-005**
Description: **REC-10 B-16 (10-11)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1000**
% Solids: **82.5** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8082A	1	02/10/2014 1328	MPM	02/03/2014 1150	39617

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Aroclor 1016	12674-11-2	8082A	ND		20	1.3	ug/kg	1
Aroclor 1221	11104-28-2	8082A	ND		20	12	ug/kg	1
Aroclor 1232	11141-16-5	8082A	ND		20	3.9	ug/kg	1
Aroclor 1242	53469-21-9	8082A	ND		20	2.7	ug/kg	1
Aroclor 1248	12672-29-6	8082A	ND		20	4.5	ug/kg	1
Aroclor 1254	11097-69-1	8082A	ND		20	2.1	ug/kg	1
Aroclor 1260	11096-82-5	8082A	ND		20	6.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Decachlorobiphenyl		80	41-132
Tetrachloro-m-xylene		77	35-106

PQL = Practical quantitation limit
B = Detected in the method blank
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ND = Not detected at or above the MDL
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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Metals

Client: **AECOM**
Laboratory ID: **PA31056-005**
Description: **REC-10 B-16 (10-11)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1000**
% Solids: **82.5** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	7471B	7471B	1	02/04/2014 1646	COH	02/04/2014 1456	39693
1	3050B	6010C	1	02/05/2014 0259	CDF	02/03/2014 1507	39633

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Arsenic	**7440-38-2**	**6010C**	**1.6**		**0.56**	**0.21**	**mg/kg**	**1**
Barium	**7440-39-3**	**6010C**	**35**		**1.4**	**0.10**	**mg/kg**	**1**
Cadmium	7440-43-9	6010C	ND		0.11	0.012	mg/kg	1
Chromium	**7440-47-3**	**6010C**	**5.4**	**B**	**0.28**	**0.056**	**mg/kg**	**1**
Lead	**7439-92-1**	**6010C**	**21**		**0.56**	**0.10**	**mg/kg**	**1**
Mercury	**7439-97-6**	**7471B**	**0.011**	**J**	**0.093**	**0.0066**	**mg/kg**	**1**
Nickel	**7440-02-0**	**6010C**	**2.2**		**2.2**	**0.17**	**mg/kg**	**1**
Selenium	7782-49-2	6010C	ND		0.56	0.19	mg/kg	1
Silver	**7440-22-4**	**6010C**	**0.21**	**J**	**0.28**	**0.047**	**mg/kg**	**1**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-006**
Description: **REC-4 B-8 (2-4)**
Matrix: **Solid**
Date Sampled: **01/31/2014 0930**
% Solids: **81.8** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1837	AAC		39667	5.46

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		22	7.5	ug/kg	1
Benzene	71-43-2	8260B	ND		5.6	1.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.6	1.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.6	0.78	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.6	2.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		11	2.7	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.6	1.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.6	2.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.6	1.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.6	1.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.6	0.93	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.6	1.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.6	0.75	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.6	1.7	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.6	1.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.6	0.95	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.6	1.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.6	1.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.6	1.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.6	1.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.6	0.82	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.6	1.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.6	1.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.6	0.85	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.6	1.7	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.6	1.0	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.6	0.76	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.6	0.92	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.6	1.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	1.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.6	0.26	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.6	1.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.6	0.45	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	1.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.6	0.46	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.6	2.9	ug/kg	1
Styrene	**100-42-5**	**8260B**	**1.3**	**J**	**5.6**	**1.2**	**ug/kg**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.6	0.53	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.6	0.56	ug/kg	1
Toluene	108-88-3	8260B	ND		5.6	1.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.6	0.71	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.6	1.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.6	0.95	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.6	0.88	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-006**
Description: **REC-4 B-8 (2-4)**
Matrix: **Solid**
Date Sampled: **01/31/2014 0930**
% Solids: **81.8** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1837	AAC		39667	5.46

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.6	2.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.6	1.7	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.6	0.96	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.6	3.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		87	47-138
Toluene-d8		93	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-006**
Description: **REC-4 B-8 (2-4)**
Matrix: **Solid**
Date Sampled: **01/31/2014 0930**
% Solids: **81.8** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	02/06/2014 1739	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		40	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		40	13	ug/kg	1
Anthracene	120-12-7	8270D	ND		40	9.0	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		40	11	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		40	11	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		40	12	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		40	14	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		40	12	ug/kg	1
Chrysene	218-01-9	8270D	ND		40	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		40	11	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		40	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		40	11	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		40	12	ug/kg	1
Naphthalene	91-20-3	8270D	ND		40	12	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		40	11	ug/kg	1
Pyrene	129-00-0	8270D	ND		40	16	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		67	33-102
Nitrobenzene-d5		63	22-109
Terphenyl-d14		79	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-007**
Description: **REC-11b B-19 (0-2)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1100**
% Solids: **90.2** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1550	AAC		39667	5.75

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**8.3**	**J**	**19**	**6.5**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		4.8	1.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.8	1.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.8	0.67	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.8	1.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		9.6	2.3	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.8	1.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.8	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.8	1.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.8	1.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.8	0.80	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.8	0.96	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.8	0.65	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.8	1.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.8	1.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.8	0.82	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.8	1.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.8	1.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.8	1.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.8	1.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.8	0.70	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.8	0.96	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.8	1.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.8	0.73	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.8	1.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.8	0.88	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.8	0.66	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.8	0.79	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.8	1.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.6	1.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.8	0.22	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.8	0.94	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.8	0.39	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.6	1.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.8	0.40	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.8	2.5	ug/kg	1
Styrene	100-42-5	8260B	ND		4.8	1.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.8	0.45	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.8	0.48	ug/kg	1
Toluene	108-88-3	8260B	ND		4.8	1.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.8	0.61	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.8	1.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.8	0.82	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.8	0.76	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-007**
Description: **REC-11b B-19 (0-2)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1100**
% Solids: **90.2** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1550	AAC		39667	5.75

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.8	1.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.8	1.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.8	0.83	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		4.8	2.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	53-142
Bromofluorobenzene		86	47-138
Toluene-d8		94	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-007**
Description: **REC-11b B-19 (0-2)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1100**
% Solids: **90.2** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	02/06/2014 1802	DRB1	02/05/2014 2210	39883

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		36	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		36	11	ug/kg	1
Anthracene	120-12-7	8270D	ND		36	8.0	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		36	9.6	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		36	10	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		36	10	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		36	13	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		36	10	ug/kg	1
Chrysene	218-01-9	8270D	ND		36	12	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		36	9.9	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		36	11	ug/kg	1
Fluorene	86-73-7	8270D	ND		36	9.8	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		36	11	ug/kg	1
Naphthalene	91-20-3	8270D	ND		36	11	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		36	9.8	ug/kg	1
Pyrene	129-00-0	8270D	ND		36	14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		86	33-102
Nitrobenzene-d5		78	22-109
Terphenyl-d14		100	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-008**
Description: **REC-5c B-11 (12-13)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1320**
% Solids: **82.6** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1614	AAC		39667	5.63

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**31**		**22**	**7.2**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		5.4	1.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.4	1.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.4	0.75	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.4	1.9	ug/kg	1
2-Butanone (MEK)	**78-93-3**	**8260B**	**8.3**	**J**	**11**	**2.6**	**ug/kg**	**1**
Carbon disulfide	75-15-0	8260B	ND		5.4	1.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.4	1.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.4	1.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.4	1.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.4	0.89	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.4	1.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.4	0.72	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.4	1.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.4	1.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.4	0.91	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.4	1.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.4	1.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.4	1.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.4	1.7	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.4	0.78	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.4	1.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.4	1.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.4	0.82	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.4	1.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.4	0.98	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.4	0.73	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.4	0.88	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.4	1.8	ug/kg	1
2-Hexanone	**591-78-6**	**8260B**	**2.5**	**J**	**11**	**1.4**	**ug/kg**	**1**
Isopropylbenzene	**98-82-8**	**8260B**	**1.1**	**J**	**5.4**	**0.25**	**ug/kg**	**1**
Methyl acetate	79-20-9	8260B	ND		5.4	1.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.4	0.43	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	1.6	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.4	0.44	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.4	2.8	ug/kg	1
Styrene	100-42-5	8260B	ND		5.4	1.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.4	0.51	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.4	0.54	ug/kg	1
Toluene	108-88-3	8260B	ND		5.4	1.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.4	0.68	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.4	1.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.4	0.91	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.4	0.85	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-008**
Description: **REC-5c B-11 (12-13)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1320**
% Solids: **82.6** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1614	AAC		39667	5.63

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.4	2.0	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.4	1.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.4	0.92	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.4	3.1	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		87	47-138
Toluene-d8		92	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-009**
Description: **REC-5a B-9 (10-11)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1600**
% Solids: **81.5** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1638	AAC		39667	6.00

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.9	ug/kg	1
Benzene	71-43-2	8260B	ND		5.1	1.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.1	1.7	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.1	0.72	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.1	1.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	2.5	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.1	1.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.1	1.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.1	1.7	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.1	1.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.1	0.85	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.1	1.0	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.1	0.69	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.1	1.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.1	1.7	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.1	0.87	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.1	1.7	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.1	1.7	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.1	1.7	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.1	1.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.1	0.75	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.1	1.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.1	1.7	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.1	0.78	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.1	1.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.1	0.93	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.1	0.70	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.1	0.84	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.1	1.7	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	1.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.1	0.24	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.1	1.0	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.1	0.41	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	1.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.1	0.42	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.1	2.7	ug/kg	1
Styrene	**100-42-5**	**8260B**	**1.1**	**J**	**5.1**	**1.1**	**ug/kg**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.1	0.48	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.1	0.51	ug/kg	1
Toluene	108-88-3	8260B	ND		5.1	1.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.1	0.64	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.1	1.7	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.1	0.87	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.1	0.81	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-009**
Description: **REC-5a B-9 (10-11)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1600**
% Solids: **81.5** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1638	AAC		39667	6.00

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.1	1.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.1	1.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.1	0.88	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.1	3.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		91	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-010**
Description: **TB-01-013114**
Matrix: **Aqueous**
Date Sampled: **01/31/2014**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1553	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.10	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-010**
Description: **TB-01-013114**
Matrix: **Aqueous**
Date Sampled: **01/31/2014**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 1553	ALL		40016

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		73	70-130
Bromofluorobenzene		78	70-130
Toluene-d8		75	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-011**
Description: **REC-8a B-12 (2-4)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1520**
% Solids: **92.3** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1701	AAC		39667	5.57
3	5035	8260B	2000	02/06/2014 1332	AAC		39933	6.75

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**42**		**19**	**6.5**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		4.9	1.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.9	1.7	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.9	0.68	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.9	1.7	ug/kg	1
2-Butanone (MEK)	**78-93-3**	**8260B**	**4.6**	**J**	**9.7**	**2.3**	**ug/kg**	**1**
Carbon disulfide	75-15-0	8260B	ND		4.9	1.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.9	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.9	1.7	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.9	1.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.9	0.81	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.9	0.97	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.9	0.66	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.9	1.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.9	1.7	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.9	0.83	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.9	1.7	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.9	1.7	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.9	1.7	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.9	1.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.9	0.71	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.9	0.97	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.9	1.7	ug/kg	1
cis-1,2-Dichloroethene	**156-59-2**	**8260B**	**1.4**	**J**	**4.9**	**0.74**	**ug/kg**	**1**
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.9	1.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.9	0.88	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.9	0.66	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.9	0.80	ug/kg	1
Ethylbenzene	**100-41-4**	**8260B**	**34000**		**8000**	**2700**	**ug/kg**	**3**
2-Hexanone	591-78-6	8260B	ND		9.7	1.3	ug/kg	1
Isopropylbenzene	**98-82-8**	**8260B**	**0.71**	**J**	**4.9**	**0.22**	**ug/kg**	**1**
Methyl acetate	79-20-9	8260B	ND		4.9	0.95	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.9	0.39	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.7	1.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.9	0.40	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.9	2.5	ug/kg	1
Styrene	100-42-5	8260B	ND		4.9	1.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.9	0.46	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.9	0.49	ug/kg	1
Toluene	108-88-3	8260B	ND		4.9	1.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.9	0.61	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.9	1.7	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.9	0.83	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-011**
Description: **REC-8a B-12 (2-4)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1520**
% Solids: **92.3** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1701	AAC		39667	5.57
3	5035	8260B	2000	02/06/2014 1332	AAC		39933	6.75

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.9	0.77	ug/kg	1
Trichloroethene	79-01-6	8260B	ND		4.9	1.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.9	1.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.9	0.84	ug/kg	1
Xylenes (total)	**1330-20-7**	**8260B**	**170000**		**8000**	**4700**	**ug/kg**	**3**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 3 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	53-142		95	53-142
Bromofluorobenzene		87	47-138		110	47-138
Toluene-d8		95	68-124		107	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-012**
Description: **REC-8b B-13 (1-3)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1350**
% Solids: **83.9** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1726	AAC		39667	6.38

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**32**		**19**	**6.3**	**ug/kg**	**1**
Benzene	71-43-2	8260B	ND		4.7	1.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.7	1.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.7	0.65	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.7	1.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		9.3	2.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.7	1.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.7	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.7	1.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.7	1.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.7	0.78	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.7	0.93	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.7	0.63	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.7	1.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.7	1.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.7	0.79	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.7	1.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.7	1.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.7	1.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.7	1.5	ug/kg	1
1,1-Dichloroethane	**75-34-3**	**8260B**	**5.6**		**4.7**	**0.68**	**ug/kg**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		4.7	0.93	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.7	1.6	ug/kg	1
cis-1,2-Dichloroethene	**156-59-2**	**8260B**	**14**		**4.7**	**0.71**	**ug/kg**	**1**
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.7	1.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.7	0.85	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.7	0.63	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.7	0.77	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.7	1.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.3	1.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.7	0.21	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.7	0.92	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.7	0.37	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.3	1.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.7	0.38	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.7	2.4	ug/kg	1
Styrene	100-42-5	8260B	ND		4.7	1.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.7	0.44	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.7	0.47	ug/kg	1
Toluene	108-88-3	8260B	ND		4.7	1.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.7	0.59	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.7	1.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.7	0.79	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.7	0.74	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-012**
Description: **REC-8b B-13 (1-3)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1350**
% Solids: **83.9** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1726	AAC		39667	6.38

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	**79-01-6**	**8260B**	**5.8**		**4.7**	**1.8**	**ug/kg**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		4.7	1.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.7	0.80	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		4.7	2.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	53-142
Bromofluorobenzene		85	47-138
Toluene-d8		95	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-012**
Description: **REC-8b B-13 (1-3)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1350**
% Solids: **83.9** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	3550C	8270D	1	02/10/2014 1525	RBH	02/10/2014 0940	40082

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		39	13	ug/kg	2
Acenaphthylene	208-96-8	8270D	ND		39	12	ug/kg	2
Anthracene	120-12-7	8270D	ND		39	8.7	ug/kg	2
Benzo(a)anthracene	56-55-3	8270D	ND		39	10	ug/kg	2
Benzo(a)pyrene	50-32-8	8270D	ND		39	11	ug/kg	2
Benzo(b)fluoranthene	205-99-2	8270D	ND		39	11	ug/kg	2
Benzo(g,h,i)perylene	191-24-2	8270D	ND		39	14	ug/kg	2
Benzo(k)fluoranthene	207-08-9	8270D	ND		39	11	ug/kg	2
Chrysene	218-01-9	8270D	ND		39	13	ug/kg	2
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		39	11	ug/kg	2
Fluoranthene	206-44-0	8270D	ND		39	12	ug/kg	2
Fluorene	86-73-7	8270D	ND		39	11	ug/kg	2
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		39	11	ug/kg	2
Naphthalene	91-20-3	8270D	ND		39	12	ug/kg	2
Phenanthrene	85-01-8	8270D	ND		39	11	ug/kg	2
Pyrene	129-00-0	8270D	ND		39	16	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
2-Fluorobiphenyl		65	33-102
Nitrobenzene-d5		58	22-109
Terphenyl-d14		78	41-120

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Metals

Client: **AECOM**
Laboratory ID: **PA31056-012**
Description: **REC-8b B-13 (1-3)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1350**
% Solids: **83.9** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	02/05/2014 0302	CDF	02/03/2014 1507	39633
1	7471B	7471B	1	02/04/2014 1649	COH	02/04/2014 1456	39693
2	3050B	6010C	2	02/07/2014 1718	BNW	02/03/2014 1507	39633

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Arsenic	**7440-38-2**	**6010C**	**1.3**		**1.1**	**0.41**	**mg/kg**	**2**
Barium	**7440-39-3**	**6010C**	**39**		**1.4**	**0.099**	**mg/kg**	**1**
Cadmium	7440-43-9	6010C	ND		0.11	0.011	mg/kg	1
Chromium	**7440-47-3**	**6010C**	**7.3**	**B**	**0.27**	**0.055**	**mg/kg**	**1**
Lead	**7439-92-1**	**6010C**	**16**		**1.1**	**0.20**	**mg/kg**	**2**
Mercury	**7439-97-6**	**7471B**	**0.044**	**J**	**0.089**	**0.0063**	**mg/kg**	**1**
Nickel	**7440-02-0**	**6010C**	**3.1**		**2.2**	**0.16**	**mg/kg**	**1**
Selenium	**7782-49-2**	**6010C**	**1.2**	**B**	**1.1**	**0.38**	**mg/kg**	**2**
Silver	**7440-22-4**	**6010C**	**0.24**	**J**	**0.54**	**0.091**	**mg/kg**	**2**

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-013**
Description: **REC-5B B-10 (10-11)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1700**
% Solids: **83.2** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1750	AAC		39667	6.55

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		18	6.1	ug/kg	1
Benzene	71-43-2	8260B	ND		4.6	1.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.6	1.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.6	0.64	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.6	1.7	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		9.2	2.2	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.6	1.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.6	1.7	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.6	1.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.6	1.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.6	0.76	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.6	0.92	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.6	0.62	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.6	1.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.6	1.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.6	0.78	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.6	1.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.6	1.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.6	1.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.6	1.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.6	0.67	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.6	0.92	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.6	1.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.6	0.70	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.6	1.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.6	0.83	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.6	0.62	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.6	0.75	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.6	1.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.2	1.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.6	0.21	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.6	0.90	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.6	0.37	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.2	1.4	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.6	0.38	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.6	2.4	ug/kg	1
Styrene	100-42-5	8260B	ND		4.6	1.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.6	0.43	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.6	0.46	ug/kg	1
Toluene	108-88-3	8260B	ND		4.6	1.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.6	0.58	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.6	1.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.6	0.78	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.6	0.72	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
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H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-013**
Description: **REC-5B B-10 (10-11)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1700**
% Solids: **83.2** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1750	AAC		39667	6.55

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.6	1.7	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.6	1.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.6	0.79	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		4.6	2.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		89	47-138
Toluene-d8		96	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-014**
Description: **REC-2 B-3a (5-6)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1700**
% Solids: **83.3** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1814	AAC		39667	7.06

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		17	5.7	ug/kg	1
Benzene	71-43-2	8260B	ND		4.3	0.94	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.3	1.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.3	0.60	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.3	1.5	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		8.5	2.0	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.3	1.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.3	1.5	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.3	1.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.3	1.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.3	0.71	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.3	0.85	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.3	0.57	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.3	1.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.3	1.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.3	0.72	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.3	1.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.3	1.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.3	1.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.3	1.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.3	0.62	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.3	0.85	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.3	1.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.3	0.65	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.3	1.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.3	0.77	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.3	0.58	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.3	0.70	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.3	1.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.5	1.1	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.3	0.20	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.3	0.83	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.3	0.34	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.5	1.3	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.3	0.35	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.3	2.2	ug/kg	1
Styrene	100-42-5	8260B	ND		4.3	0.94	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.3	0.40	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.3	0.43	ug/kg	1
Toluene	108-88-3	8260B	ND		4.3	1.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.3	0.54	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.3	1.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.3	0.72	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.3	0.67	ug/kg	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
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ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PA31056-014**
Description: **REC-2 B-3a (5-6)**
Matrix: **Solid**
Date Sampled: **01/31/2014 1700**
% Solids: **83.3** **01/31/2014 2136**
Date Received: **01/31/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	02/03/2014 1814	AAC		39667	7.06

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.3	1.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.3	1.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.3	0.73	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		4.3	2.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		89	47-138
Toluene-d8		99	68-124

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
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QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39667-001
Batch: 39667
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	6.7	ug/kg	02/03/2014 1147
Benzene	ND		1	5.0	1.1	ug/kg	02/03/2014 1147
Bromodichloromethane	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
Bromoform	ND		1	5.0	0.70	ug/kg	02/03/2014 1147
Bromomethane (Methyl bromide)	ND		1	5.0	1.8	ug/kg	02/03/2014 1147
2-Butanone (MEK)	ND		1	10	2.4	ug/kg	02/03/2014 1147
Carbon disulfide	ND		1	5.0	1.3	ug/kg	02/03/2014 1147
Carbon tetrachloride	ND		1	5.0	1.8	ug/kg	02/03/2014 1147
Chlorobenzene	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
Chloroethane	ND		1	5.0	1.3	ug/kg	02/03/2014 1147
Chloroform	ND		1	5.0	0.83	ug/kg	02/03/2014 1147
Chloromethane (Methyl chloride)	ND		1	5.0	1.0	ug/kg	02/03/2014 1147
Cyclohexane	ND		1	5.0	0.67	ug/kg	02/03/2014 1147
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	1.5	ug/kg	02/03/2014 1147
Dibromochloromethane	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
1,2-Dibromoethane (EDB)	ND		1	5.0	0.85	ug/kg	02/03/2014 1147
1,3-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
1,4-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
1,2-Dichlorobenzene	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
Dichlorodifluoromethane	ND		1	5.0	1.6	ug/kg	02/03/2014 1147
1,1-Dichloroethane	ND		1	5.0	0.73	ug/kg	02/03/2014 1147
1,2-Dichloroethane	ND		1	5.0	1.0	ug/kg	02/03/2014 1147
cis-1,2-Dichloroethene	ND		1	5.0	0.76	ug/kg	02/03/2014 1147
1,1-Dichloroethene	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
trans-1,2-Dichloroethene	ND		1	5.0	1.5	ug/kg	02/03/2014 1147
1,2-Dichloropropane	ND		1	5.0	0.91	ug/kg	02/03/2014 1147
trans-1,3-Dichloropropene	ND		1	5.0	0.82	ug/kg	02/03/2014 1147
cis-1,3-Dichloropropene	ND		1	5.0	0.68	ug/kg	02/03/2014 1147
Ethylbenzene	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
2-Hexanone	ND		1	10	1.3	ug/kg	02/03/2014 1147
Isopropylbenzene	ND		1	5.0	0.23	ug/kg	02/03/2014 1147
Methyl acetate	ND		1	5.0	0.98	ug/kg	02/03/2014 1147
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/kg	02/03/2014 1147
4-Methyl-2-pentanone	ND		1	10	1.5	ug/kg	02/03/2014 1147
Methylcyclohexane	ND		1	5.0	0.41	ug/kg	02/03/2014 1147
Methylene chloride	ND		1	5.0	2.6	ug/kg	02/03/2014 1147
Styrene	ND		1	5.0	1.1	ug/kg	02/03/2014 1147
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.47	ug/kg	02/03/2014 1147
Tetrachloroethene	ND		1	5.0	0.50	ug/kg	02/03/2014 1147
Toluene	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.63	ug/kg	02/03/2014 1147
1,2,4-Trichlorobenzene	ND		1	5.0	1.7	ug/kg	02/03/2014 1147
1,1,1-Trichloroethane	ND		1	5.0	0.85	ug/kg	02/03/2014 1147
1,1,2-Trichloroethane	ND		1	5.0	0.79	ug/kg	02/03/2014 1147

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39667-001
Batch: 39667
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	1.9	ug/kg	02/03/2014 1147
Trichlorofluoromethane	ND		1	5.0	1.5	ug/kg	02/03/2014 1147
Vinyl chloride	ND		1	5.0	0.86	ug/kg	02/03/2014 1147
Xylenes (total)	ND		1	5.0	2.9	ug/kg	02/03/2014 1147

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		88	47-138
1,2-Dichloroethane-d4		99	53-142
Toluene-d8		95	68-124

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39667-002
Batch: 39667
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	123	60-140	02/03/2014 1011
Benzene	50	46		1	93	69-123	02/03/2014 1011
Bromodichloromethane	50	46		1	92	69-121	02/03/2014 1011
Bromoform	50	47		1	94	61-119	02/03/2014 1011
Bromomethane (Methyl bromide)	50	53		1	106	10-168	02/03/2014 1011
2-Butanone (MEK)	100	100		1	101	57-148	02/03/2014 1011
Carbon disulfide	50	56		1	111	58-122	02/03/2014 1011
Carbon tetrachloride	50	50		1	100	58-136	02/03/2014 1011
Chlorobenzene	50	45		1	89	59-129	02/03/2014 1011
Chloroethane	50	54		1	107	42-163	02/03/2014 1011
Chloroform	50	48		1	95	71-125	02/03/2014 1011
Chloromethane (Methyl chloride)	50	51		1	102	34-134	02/03/2014 1011
Cyclohexane	50	53		1	106	53-139	02/03/2014 1011
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	95	55-125	02/03/2014 1011
Dibromochloromethane	50	45		1	90	66-119	02/03/2014 1011
1,2-Dibromoethane (EDB)	50	45		1	90	74-124	02/03/2014 1011
1,3-Dichlorobenzene	50	44		1	88	51-134	02/03/2014 1011
1,4-Dichlorobenzene	50	43		1	86	52-133	02/03/2014 1011
1,2-Dichlorobenzene	50	44		1	88	57-131	02/03/2014 1011
Dichlorodifluoromethane	50	55		1	110	10-157	02/03/2014 1011
1,1-Dichloroethane	50	49		1	97	71-127	02/03/2014 1011
1,2-Dichloroethane	50	46		1	92	67-129	02/03/2014 1011
cis-1,2-Dichloroethene	50	48		1	96	70-122	02/03/2014 1011
1,1-Dichloroethene	50	52		1	103	69-138	02/03/2014 1011
trans-1,2-Dichloroethene	50	49		1	98	68-131	02/03/2014 1011
1,2-Dichloropropane	50	45		1	91	72-124	02/03/2014 1011
trans-1,3-Dichloropropene	50	45		1	90	70-124	02/03/2014 1011
cis-1,3-Dichloropropene	50	46		1	93	70-126	02/03/2014 1011
Ethylbenzene	50	45		1	90	59-128	02/03/2014 1011
2-Hexanone	100	98		1	98	54-137	02/03/2014 1011
Isopropylbenzene	50	43		1	87	50-136	02/03/2014 1011
Methyl acetate	50	50		1	101	59-137	02/03/2014 1011
Methyl tertiary butyl ether (MTBE)	50	49		1	98	70-130	02/03/2014 1011
4-Methyl-2-pentanone	100	99		1	99	60-134	02/03/2014 1011
Methylcyclohexane	50	50		1	100	41-144	02/03/2014 1011
Methylene chloride	50	48		1	95	70-130	02/03/2014 1011
Styrene	50	46		1	92	54-136	02/03/2014 1011
1,1,2,2-Tetrachloroethane	50	45		1	90	69-132	02/03/2014 1011
Tetrachloroethene	50	42		1	85	45-150	02/03/2014 1011
Toluene	50	46		1	92	61-129	02/03/2014 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	57		1	113	49-136	02/03/2014 1011
1,2,4-Trichlorobenzene	50	45		1	89	34-145	02/03/2014 1011
1,1,1-Trichloroethane	50	51		1	101	63-128	02/03/2014 1011
1,1,2-Trichloroethane	50	43		1	85	55-128	02/03/2014 1011

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39667-002
Batch: 39667
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	46		1	92	62-126	02/03/2014 1011
Trichlorofluoromethane	50	51		1	103	45-138	02/03/2014 1011
Vinyl chloride	50	56		1	113	42-132	02/03/2014 1011
Xylenes (total)	100	91		1	91	58-128	02/03/2014 1011

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	47-138
1,2-Dichloroethane-d4		101	53-142
Toluene-d8		102	68-124

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39667-003
Batch: 39667
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	120		1	121	1.3	60-140	20	02/03/2014 1035
Benzene	50	43		1	85	8.1	69-123	20	02/03/2014 1035
Bromodichloromethane	50	43		1	86	6.4	69-121	20	02/03/2014 1035
Bromoform	50	44		1	88	5.9	61-119	20	02/03/2014 1035
Bromomethane (Methyl bromide)	50	47		1	94	12	10-168	20	02/03/2014 1035
2-Butanone (MEK)	100	100		1	100	1.0	57-148	20	02/03/2014 1035
Carbon disulfide	50	49		1	98	13	58-122	20	02/03/2014 1035
Carbon tetrachloride	50	45		1	90	10	58-136	20	02/03/2014 1035
Chlorobenzene	50	41		1	82	8.7	59-129	20	02/03/2014 1035
Chloroethane	50	47		1	94	13	42-163	20	02/03/2014 1035
Chloroform	50	43		1	85	11	71-125	20	02/03/2014 1035
Chloromethane (Methyl chloride)	50	47		1	93	9.5	34-134	20	02/03/2014 1035
Cyclohexane	50	46		1	93	14	53-139	20	02/03/2014 1035
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	92	2.8	55-125	20	02/03/2014 1035
Dibromochloromethane	50	42		1	83	7.7	66-119	20	02/03/2014 1035
1,2-Dibromoethane (EDB)	50	42		1	84	7.5	74-124	20	02/03/2014 1035
1,3-Dichlorobenzene	50	40		1	80	8.7	51-134	20	02/03/2014 1035
1,4-Dichlorobenzene	50	39		1	79	8.9	52-133	20	02/03/2014 1035
1,2-Dichlorobenzene	50	41		1	82	6.4	57-131	20	02/03/2014 1035
Dichlorodifluoromethane	50	49		1	99	11	10-157	20	02/03/2014 1035
1,1-Dichloroethane	50	44		1	89	9.5	71-127	20	02/03/2014 1035
1,2-Dichloroethane	50	42		1	85	8.0	67-129	20	02/03/2014 1035
cis-1,2-Dichloroethene	50	44		1	89	8.6	70-122	20	02/03/2014 1035
1,1-Dichloroethene	50	46		1	91	12	69-138	20	02/03/2014 1035
trans-1,2-Dichloroethene	50	44		1	88	10	68-131	20	02/03/2014 1035
1,2-Dichloropropane	50	43		1	86	5.8	72-124	20	02/03/2014 1035
trans-1,3-Dichloropropene	50	42		1	83	7.3	70-124	20	02/03/2014 1035
cis-1,3-Dichloropropene	50	44		1	89	4.3	70-126	20	02/03/2014 1035
Ethylbenzene	50	41		1	82	9.8	59-128	20	02/03/2014 1035
2-Hexanone	100	98		1	98	0.39	54-137	20	02/03/2014 1035
Isopropylbenzene	50	40		1	81	7.3	50-136	20	02/03/2014 1035
Methyl acetate	50	49		1	97	3.4	59-137	20	02/03/2014 1035
Methyl tertiary butyl ether (MTBE)	50	46		1	92	6.0	70-130	20	02/03/2014 1035
4-Methyl-2-pentanone	100	100		1	101	1.3	60-134	20	02/03/2014 1035
Methylcyclohexane	50	45		1	91	10	41-144	20	02/03/2014 1035
Methylene chloride	50	44		1	87	9.1	70-130	20	02/03/2014 1035
Styrene	50	42		1	84	9.1	54-136	20	02/03/2014 1035
1,1,2,2-Tetrachloroethane	50	44		1	88	2.6	69-132	20	02/03/2014 1035
Tetrachloroethene	50	37		1	75	12	45-150	20	02/03/2014 1035
Toluene	50	43		1	87	6.0	61-129	20	02/03/2014 1035
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	50		1	100	12	49-136	20	02/03/2014 1035
1,2,4-Trichlorobenzene	50	42		1	84	6.4	34-145	20	02/03/2014 1035
1,1,1-Trichloroethane	50	45		1	91	11	63-128	20	02/03/2014 1035
1,1,2-Trichloroethane	50	39		1	79	7.7	55-128	20	02/03/2014 1035

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39667-003
Batch: 39667
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	42		1	83	9.5	62-126	20	02/03/2014 1035
Trichlorofluoromethane	50	46		1	92	11	45-138	20	02/03/2014 1035
Vinyl chloride	50	50		1	99	13	42-132	20	02/03/2014 1035
Xylenes (total)	100	82		1	82	10	58-128	20	02/03/2014 1035

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		88	47-138
1,2-Dichloroethane-d4		94	53-142
Toluene-d8		99	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39721-001
Batch: 39721
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
cis-1,2-Dichloroethene	ND		50	250	38	ug/kg	02/04/2014 1701

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		89	47-138
1,2-Dichloroethane-d4		111	53-142
Toluene-d8		110	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39721-002
Batch: 39721
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
cis-1,2-Dichloroethene	2500	2800		50	111	70-122	02/04/2014 1725

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		77	47-138
1,2-Dichloroethane-d4		102	53-142
Toluene-d8		88	68-124

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39721-003
Batch: 39721
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
cis-1,2-Dichloroethene	2500	2900		50	114	2.5	70-122	20	02/04/2014 1749

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		89	47-138
1,2-Dichloroethane-d4		107	53-142
Toluene-d8		102	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ39933-001
Batch: 39933
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ethylbenzene	ND		50	250	85	ug/kg	02/04/2014 1701
Xylenes (total)	ND		50	250	150	ug/kg	02/04/2014 1701

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		89	47-138
1,2-Dichloroethane-d4		111	53-142
Toluene-d8		110	68-124

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39933-002
Batch: 39933
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ethylbenzene	2500	2200		50	90	59-128	02/04/2014 1725
Xylenes (total)	5000	4600		50	92	58-128	02/04/2014 1725

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		77	47-138
1,2-Dichloroethane-d4		102	53-142
Toluene-d8		88	68-124

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ39933-003
Batch: 39933
Analytical Method: 8260B
Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ethylbenzene	2500	2500		50	101	12	59-128	20	02/04/2014 1749
Xylenes (total)	5000	5100		50	102	10	58-128	20	02/04/2014 1749

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		89	47-138
1,2-Dichloroethane-d4		107	53-142
Toluene-d8		102	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ40016-001
Batch: 40016
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	6.7	ug/L	02/07/2014 1204
Benzene	ND		1	5.0	0.20	ug/L	02/07/2014 1204
Bromodichloromethane	ND		1	5.0	1.7	ug/L	02/07/2014 1204
Bromoform	ND		1	5.0	0.40	ug/L	02/07/2014 1204
Bromomethane (Methyl bromide)	ND		1	5.0	0.80	ug/L	02/07/2014 1204
2-Butanone (MEK)	ND		1	10	1.8	ug/L	02/07/2014 1204
Carbon disulfide	ND		1	5.0	0.30	ug/L	02/07/2014 1204
Carbon tetrachloride	ND		1	5.0	0.40	ug/L	02/07/2014 1204
Chlorobenzene	ND		1	5.0	1.7	ug/L	02/07/2014 1204
Chloroethane	ND		1	5.0	0.50	ug/L	02/07/2014 1204
Chloroform	ND		1	5.0	1.7	ug/L	02/07/2014 1204
Chloromethane (Methyl chloride)	ND		1	5.0	0.30	ug/L	02/07/2014 1204
Cyclohexane	ND		1	5.0	0.98	ug/L	02/07/2014 1204
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	0.60	ug/L	02/07/2014 1204
Dibromochloromethane	ND		1	5.0	1.7	ug/L	02/07/2014 1204
1,2-Dibromoethane (EDB)	ND		1	5.0	0.30	ug/L	02/07/2014 1204
1,2-Dichlorobenzene	ND		1	5.0	1.7	ug/L	02/07/2014 1204
1,4-Dichlorobenzene	ND		1	5.0	1.7	ug/L	02/07/2014 1204
1,3-Dichlorobenzene	ND		1	5.0	1.7	ug/L	02/07/2014 1204
Dichlorodifluoromethane	ND		1	5.0	0.20	ug/L	02/07/2014 1204
1,2-Dichloroethane	ND		1	5.0	0.30	ug/L	02/07/2014 1204
1,1-Dichloroethane	ND		1	5.0	0.30	ug/L	02/07/2014 1204
cis-1,2-Dichloroethene	ND		1	5.0	0.20	ug/L	02/07/2014 1204
1,1-Dichloroethene	ND		1	5.0	0.50	ug/L	02/07/2014 1204
trans-1,2-Dichloroethene	ND		1	5.0	0.40	ug/L	02/07/2014 1204
1,2-Dichloropropane	ND		1	5.0	0.30	ug/L	02/07/2014 1204
cis-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	02/07/2014 1204
trans-1,3-Dichloropropene	ND		1	5.0	0.30	ug/L	02/07/2014 1204
Ethylbenzene	ND		1	5.0	1.7	ug/L	02/07/2014 1204
2-Hexanone	ND		1	10	1.0	ug/L	02/07/2014 1204
Isopropylbenzene	ND		1	5.0	1.0	ug/L	02/07/2014 1204
Methyl acetate	ND		1	5.0	0.72	ug/L	02/07/2014 1204
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/07/2014 1204
4-Methyl-2-pentanone	ND		1	10	0.80	ug/L	02/07/2014 1204
Methylcyclohexane	ND		1	5.0	0.95	ug/L	02/07/2014 1204
Methylene chloride	ND		1	5.0	1.7	ug/L	02/07/2014 1204
Styrene	ND		1	5.0	0.10	ug/L	02/07/2014 1204
1,1,2,2-Tetrachloroethane	ND		1	5.0	0.40	ug/L	02/07/2014 1204
Tetrachloroethene	ND		1	5.0	0.40	ug/L	02/07/2014 1204
Toluene	ND		1	5.0	1.7	ug/L	02/07/2014 1204
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	0.30	ug/L	02/07/2014 1204
1,2,4-Trichlorobenzene	ND		1	5.0	1.7	ug/L	02/07/2014 1204
1,1,1-Trichloroethane	ND		1	5.0	0.20	ug/L	02/07/2014 1204
1,1,2-Trichloroethane	ND		1	5.0	0.30	ug/L	02/07/2014 1204

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ40016-001
Batch: 40016
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	0.30	ug/L	02/07/2014 1204
Trichlorofluoromethane	ND		1	5.0	0.30	ug/L	02/07/2014 1204
Vinyl chloride	ND		1	2.0	0.10	ug/L	02/07/2014 1204
Xylenes (total)	ND		1	5.0	1.7	ug/L	02/07/2014 1204

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		77	70-130
1,2-Dichloroethane-d4		73	70-130
Toluene-d8		75	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ40016-002
Batch: 40016
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	80		1	80	60-140	02/07/2014 1032
Benzene	50	49		1	98	70-130	02/07/2014 1032
Bromodichloromethane	50	50		1	101	70-130	02/07/2014 1032
Bromoform	50	49		1	98	70-130	02/07/2014 1032
Bromomethane (Methyl bromide)	50	47		1	95	60-140	02/07/2014 1032
2-Butanone (MEK)	100	92		1	92	60-140	02/07/2014 1032
Carbon disulfide	50	49		1	99	60-140	02/07/2014 1032
Carbon tetrachloride	50	49		1	98	70-130	02/07/2014 1032
Chlorobenzene	50	48		1	96	70-130	02/07/2014 1032
Chloroethane	50	48		1	95	42-163	02/07/2014 1032
Chloroform	50	47		1	93	70-130	02/07/2014 1032
Chloromethane (Methyl chloride)	50	44		1	88	60-140	02/07/2014 1032
Cyclohexane	50	40		1	81	70-130	02/07/2014 1032
1,2-Dibromo-3-chloropropane (DBCP)	50	49		1	98	70-130	02/07/2014 1032
Dibromochloromethane	50	49		1	98	70-130	02/07/2014 1032
1,2-Dibromoethane (EDB)	50	50		1	101	70-130	02/07/2014 1032
1,2-Dichlorobenzene	50	46		1	92	70-130	02/07/2014 1032
1,4-Dichlorobenzene	50	46		1	91	70-130	02/07/2014 1032
1,3-Dichlorobenzene	50	46		1	92	70-130	02/07/2014 1032
Dichlorodifluoromethane	50	47		1	93	60-140	02/07/2014 1032
1,2-Dichloroethane	50	45		1	91	70-130	02/07/2014 1032
1,1-Dichloroethane	50	48		1	96	70-130	02/07/2014 1032
cis-1,2-Dichloroethene	50	47		1	95	70-130	02/07/2014 1032
1,1-Dichloroethene	50	48		1	95	70-130	02/07/2014 1032
trans-1,2-Dichloroethene	50	48		1	96	70-130	02/07/2014 1032
1,2-Dichloropropane	50	49		1	97	70-130	02/07/2014 1032
cis-1,3-Dichloropropene	50	48		1	97	70-130	02/07/2014 1032
trans-1,3-Dichloropropene	50	54		1	107	70-130	02/07/2014 1032
Ethylbenzene	50	48		1	96	70-130	02/07/2014 1032
2-Hexanone	100	100		1	103	60-140	02/07/2014 1032
Isopropylbenzene	50	47		1	94	70-130	02/07/2014 1032
Methyl acetate	50	42		1	83	70-130	02/07/2014 1032
Methyl tertiary butyl ether (MTBE)	50	47		1	93	70-130	02/07/2014 1032
4-Methyl-2-pentanone	100	98		1	98	60-140	02/07/2014 1032
Methylcyclohexane	50	46		1	91	70-130	02/07/2014 1032
Methylene chloride	50	43		1	87	70-130	02/07/2014 1032
Styrene	50	50		1	99	70-130	02/07/2014 1032
1,1,2,2-Tetrachloroethane	50	49		1	98	70-130	02/07/2014 1032
Tetrachloroethene	50	46		1	92	70-130	02/07/2014 1032
Toluene	50	48		1	97	70-130	02/07/2014 1032
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	48		1	96	70-130	02/07/2014 1032
1,2,4-Trichlorobenzene	50	47		1	95	70-130	02/07/2014 1032
1,1,1-Trichloroethane	50	46		1	92	70-130	02/07/2014 1032
1,1,2-Trichloroethane	50	50		1	100	70-130	02/07/2014 1032

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ40016-002
Batch: 40016
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	49		1	97	70-130	02/07/2014 1032
Trichlorofluoromethane	50	47		1	93	70-130	02/07/2014 1032
Vinyl chloride	50	48		1	97	70-130	02/07/2014 1032
Xylenes (total)	100	97		1	97	70-130	02/07/2014 1032

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		79	70-130
Toluene-d8		93	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ40016-003
Batch: 40016
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	84		1	84	5.0	60-140	20	02/07/2014 1055
Benzene	50	52		1	104	6.0	70-130	20	02/07/2014 1055
Bromodichloromethane	50	52		1	104	3.3	70-130	20	02/07/2014 1055
Bromoform	50	49		1	98	0.17	70-130	20	02/07/2014 1055
Bromomethane (Methyl bromide)	50	53		1	106	11	60-140	20	02/07/2014 1055
2-Butanone (MEK)	100	96		1	96	4.8	60-140	20	02/07/2014 1055
Carbon disulfide	50	54		1	109	9.8	60-140	20	02/07/2014 1055
Carbon tetrachloride	50	55		1	109	11	70-130	20	02/07/2014 1055
Chlorobenzene	50	50		1	100	4.2	70-130	20	02/07/2014 1055
Chloroethane	50	53		1	106	11	42-163	20	02/07/2014 1055
Chloroform	50	49		1	99	5.9	70-130	20	02/07/2014 1055
Chloromethane (Methyl chloride)	50	50		1	99	12	60-140	20	02/07/2014 1055
Cyclohexane	50	46		1	93	14	70-130	20	02/07/2014 1055
1,2-Dibromo-3-chloropropane (DBCP)	50	52		1	105	6.1	70-130	20	02/07/2014 1055
Dibromochloromethane	50	50		1	99	1.1	70-130	20	02/07/2014 1055
1,2-Dibromoethane (EDB)	50	51		1	102	1.3	70-130	20	02/07/2014 1055
1,2-Dichlorobenzene	50	49		1	97	5.2	70-130	20	02/07/2014 1055
1,4-Dichlorobenzene	50	47		1	95	3.6	70-130	20	02/07/2014 1055
1,3-Dichlorobenzene	50	48		1	96	4.5	70-130	20	02/07/2014 1055
Dichlorodifluoromethane	50	54		1	108	15	60-140	20	02/07/2014 1055
1,2-Dichloroethane	50	49		1	97	6.7	70-130	20	02/07/2014 1055
1,1-Dichloroethane	50	52		1	104	8.0	70-130	20	02/07/2014 1055
cis-1,2-Dichloroethene	50	51		1	102	7.4	70-130	20	02/07/2014 1055
1,1-Dichloroethene	50	52		1	104	8.7	70-130	20	02/07/2014 1055
trans-1,2-Dichloroethene	50	52		1	103	7.2	70-130	20	02/07/2014 1055
1,2-Dichloropropane	50	51		1	102	4.6	70-130	20	02/07/2014 1055
cis-1,3-Dichloropropene	50	50		1	100	3.2	70-130	20	02/07/2014 1055
trans-1,3-Dichloropropene	50	54		1	109	1.3	70-130	20	02/07/2014 1055
Ethylbenzene	50	50		1	100	4.3	70-130	20	02/07/2014 1055
2-Hexanone	100	99		1	99	4.1	60-140	20	02/07/2014 1055
Isopropylbenzene	50	50		1	100	6.5	70-130	20	02/07/2014 1055
Methyl acetate	50	46		1	92	10	70-130	20	02/07/2014 1055
Methyl tertiary butyl ether (MTBE)	50	49		1	98	5.0	70-130	20	02/07/2014 1055
4-Methyl-2-pentanone	100	98		1	98	0.16	60-140	20	02/07/2014 1055
Methylcyclohexane	50	51		1	103	12	70-130	20	02/07/2014 1055
Methylene chloride	50	46		1	93	6.4	70-130	20	02/07/2014 1055
Styrene	50	51		1	101	2.2	70-130	20	02/07/2014 1055
1,1,2,2-Tetrachloroethane	50	50		1	101	2.5	70-130	20	02/07/2014 1055
Tetrachloroethene	50	49		1	98	7.1	70-130	20	02/07/2014 1055
Toluene	50	51		1	101	4.5	70-130	20	02/07/2014 1055
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	56		1	113	16	70-130	20	02/07/2014 1055
1,2,4-Trichlorobenzene	50	50		1	101	6.4	70-130	20	02/07/2014 1055
1,1,1-Trichloroethane	50	50		1	100	8.9	70-130	20	02/07/2014 1055
1,1,2-Trichloroethane	50	50		1	101	0.070	70-130	20	02/07/2014 1055

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ40016-003
Batch: 40016
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	52		1	103	6.1	70-130	20	02/07/2014 1055
Trichlorofluoromethane	50	53		1	106	13	70-130	20	02/07/2014 1055
Vinyl chloride	50	54		1	107	10	70-130	20	02/07/2014 1055
Xylenes (total)	100	100		1	101	4.2	70-130	20	02/07/2014 1055

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: PQ39883-001
Batch: 39883
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3550C
Prep Date: 02/05/2014 2210

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acenaphthene	ND		1	33	11	ug/kg	02/06/2014 0933
Acenaphthylene	ND		1	33	10	ug/kg	02/06/2014 0933
Anthracene	ND		1	33	7.4	ug/kg	02/06/2014 0933
Benzo(a)anthracene	ND		1	33	8.8	ug/kg	02/06/2014 0933
Benzo(a)pyrene	ND		1	33	9.3	ug/kg	02/06/2014 0933
Benzo(b)fluoranthene	ND		1	33	9.6	ug/kg	02/06/2014 0933
Benzo(g,h,i)perylene	ND		1	33	12	ug/kg	02/06/2014 0933
Benzo(k)fluoranthene	ND		1	33	9.5	ug/kg	02/06/2014 0933
Chrysene	ND		1	33	11	ug/kg	02/06/2014 0933
Dibenzo(a,h)anthracene	ND		1	33	9.1	ug/kg	02/06/2014 0933
Fluoranthene	ND		1	33	11	ug/kg	02/06/2014 0933
Fluorene	ND		1	33	9.0	ug/kg	02/06/2014 0933
Indeno(1,2,3-c,d)pyrene	ND		1	33	9.7	ug/kg	02/06/2014 0933
Naphthalene	ND		1	33	10	ug/kg	02/06/2014 0933
Phenanthrene	ND		1	33	9.0	ug/kg	02/06/2014 0933
Pyrene	ND		1	33	13	ug/kg	02/06/2014 0933

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		82	33-102
Nitrobenzene-d5		77	22-109
Terphenyl-d14		89	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: PQ39883-002
Batch: 39883
Analytical Method: 8270D
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/05/2014 2210

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	670	480		1	72	46-114	02/06/2014 0956
Acenaphthylene	670	550		1	83	44-122	02/06/2014 0956
Anthracene	670	560		1	84	50-119	02/06/2014 0956
Benzo(a)anthracene	670	560		1	84	47-121	02/06/2014 0956
Benzo(a)pyrene	670	620		1	93	55-134	02/06/2014 0956
Benzo(b)fluoranthene	670	650		1	97	28-139	02/06/2014 0956
Benzo(g,h,i)perylene	670	530		1	80	36-125	02/06/2014 0956
Benzo(k)fluoranthene	670	640		1	97	47-130	02/06/2014 0956
Chrysene	670	540		1	81	45-126	02/06/2014 0956
Dibenzo(a,h)anthracene	670	580		1	87	30-130	02/06/2014 0956
Fluoranthene	670	570		1	85	50-123	02/06/2014 0956
Fluorene	670	500		1	76	48-117	02/06/2014 0956
Indeno(1,2,3-c,d)pyrene	670	570		1	85	45-123	02/06/2014 0956
Naphthalene	670	450		1	67	36-110	02/06/2014 0956
Phenanthrene	670	530		1	79	49-117	02/06/2014 0956
Pyrene	670	550		1	83	47-119	02/06/2014 0956

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		72	33-102
Nitrobenzene-d5		72	22-109
Terphenyl-d14		89	41-120

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: PA31056-005MS
Batch: 39883
Analytical Method: 8270D
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/05/2014 2210

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	790	470		1	59	30-130	02/06/2014 1653
Acenaphthylene	ND	790	520		1	65	30-130	02/06/2014 1653
Anthracene	ND	790	550		1	70	30-130	02/06/2014 1653
Benzo(a)anthracene	ND	790	550		1	70	30-130	02/06/2014 1653
Benzo(a)pyrene	ND	790	620		1	78	30-130	02/06/2014 1653
Benzo(b)fluoranthene	ND	790	710		1	90	30-130	02/06/2014 1653
Benzo(g,h,i)perylene	ND	790	340		1	44	30-130	02/06/2014 1653
Benzo(k)fluoranthene	ND	790	710		1	90	30-130	02/06/2014 1653
Chrysene	ND	790	540		1	68	30-130	02/06/2014 1653
Dibenzo(a,h)anthracene	ND	790	410		1	52	30-130	02/06/2014 1653
Fluoranthene	ND	790	570		1	73	30-130	02/06/2014 1653
Fluorene	ND	790	490		1	62	30-130	02/06/2014 1653
Indeno(1,2,3-c,d)pyrene	ND	790	400		1	50	30-130	02/06/2014 1653
Naphthalene	ND	790	380		1	48	30-130	02/06/2014 1653
Phenanthrene	ND	790	520		1	67	30-130	02/06/2014 1653
Pyrene	ND	790	560		1	71	30-130	02/06/2014 1653

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		54	33-102
Nitrobenzene-d5		51	22-109
Terphenyl-d14		75	41-120

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: PA31056-005MD
Batch: 39883
Analytical Method: 8270D
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/05/2014 2210

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	800	490		1	62	5.7	30-130	40	02/06/2014 1716
Acenaphthylene	ND	800	550		1	68	6.3	30-130	40	02/06/2014 1716
Anthracene	ND	800	550		1	69	0.65	30-130	40	02/06/2014 1716
Benzo(a)anthracene	ND	800	550		1	68	0.34	30-130	40	02/06/2014 1716
Benzo(a)pyrene	ND	800	600		1	75	2.9	30-130	40	02/06/2014 1716
Benzo(b)fluoranthene	ND	800	660		1	82	7.1	30-130	40	02/06/2014 1716
Benzo(g,h,i)perylene	ND	800	380		1	47	8.6	30-130	40	02/06/2014 1716
Benzo(k)fluoranthene	ND	800	710		1	88	0.54	30-130	40	02/06/2014 1716
Chrysene	ND	800	530		1	66	1.3	30-130	40	02/06/2014 1716
Dibenzo(a,h)anthracene	ND	800	430		1	54	5.5	30-130	40	02/06/2014 1716
Fluoranthene	ND	800	560		1	70	2.1	30-130	40	02/06/2014 1716
Fluorene	ND	800	500		1	63	2.4	30-130	40	02/06/2014 1716
Indeno(1,2,3-c,d)pyrene	ND	800	420		1	52	5.0	30-130	40	02/06/2014 1716
Naphthalene	ND	800	420		1	53	11	30-130	40	02/06/2014 1716
Phenanthrene	ND	800	530		1	66	1.4	30-130	40	02/06/2014 1716
Pyrene	ND	800	550		1	68	1.5	30-130	40	02/06/2014 1716

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		54	33-102
Nitrobenzene-d5		56	22-109
Terphenyl-d14		73	41-120

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: PQ40082-001
Batch: 40082
Analytical Method: 8270D
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/10/2014 940

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acenaphthene	ND		1	33	11	ug/kg	02/10/2014 1435
Acenaphthylene	ND		1	33	10	ug/kg	02/10/2014 1435
Anthracene	ND		1	33	7.4	ug/kg	02/10/2014 1435
Benzo(a)anthracene	ND		1	33	8.8	ug/kg	02/10/2014 1435
Benzo(a)pyrene	ND		1	33	9.3	ug/kg	02/10/2014 1435
Benzo(b)fluoranthene	ND		1	33	9.6	ug/kg	02/10/2014 1435
Benzo(g,h,i)perylene	ND		1	33	12	ug/kg	02/10/2014 1435
Benzo(k)fluoranthene	ND		1	33	9.5	ug/kg	02/10/2014 1435
Chrysene	ND		1	33	11	ug/kg	02/10/2014 1435
Dibenzo(a,h)anthracene	ND		1	33	9.1	ug/kg	02/10/2014 1435
Fluoranthene	ND		1	33	11	ug/kg	02/10/2014 1435
Fluorene	ND		1	33	9.0	ug/kg	02/10/2014 1435
Indeno(1,2,3-c,d)pyrene	ND		1	33	9.7	ug/kg	02/10/2014 1435
Naphthalene	ND		1	33	10	ug/kg	02/10/2014 1435
Phenanthrene	ND		1	33	9.0	ug/kg	02/10/2014 1435
Pyrene	ND		1	33	13	ug/kg	02/10/2014 1435

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		70	33-102
Nitrobenzene-d5		66	22-109
Terphenyl-d14		83	41-120

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: PQ40082-002
Batch: 40082
Analytical Method: 8270D
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/10/2014 940

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	670	490		1	74	46-114	02/10/2014 1500
Acenaphthylene	670	520		1	78	44-122	02/10/2014 1500
Anthracene	670	500		1	75	50-119	02/10/2014 1500
Benzo(a)anthracene	670	500		1	75	47-121	02/10/2014 1500
Benzo(a)pyrene	670	540		1	81	55-134	02/10/2014 1500
Benzo(b)fluoranthene	670	550		1	82	28-139	02/10/2014 1500
Benzo(g,h,i)perylene	670	540		1	80	36-125	02/10/2014 1500
Benzo(k)fluoranthene	670	560		1	84	47-130	02/10/2014 1500
Chrysene	670	480		1	72	45-126	02/10/2014 1500
Dibenzo(a,h)anthracene	670	520		1	78	30-130	02/10/2014 1500
Fluoranthene	670	500		1	75	50-123	02/10/2014 1500
Fluorene	670	480		1	72	48-117	02/10/2014 1500
Indeno(1,2,3-c,d)pyrene	670	530		1	79	45-123	02/10/2014 1500
Naphthalene	670	410		1	62	36-110	02/10/2014 1500
Phenanthrene	670	480		1	72	49-117	02/10/2014 1500
Pyrene	670	480		1	71	47-119	02/10/2014 1500

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		68	33-102
Nitrobenzene-d5		65	22-109
Terphenyl-d14		79	41-120

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: PA31056-012MS
Batch: 40082
Analytical Method: 8270D
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/10/2014 940

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	790	520		1	65	30-130	02/10/2014 1550
Acenaphthylene	ND	790	540		1	69	30-130	02/10/2014 1550
Anthracene	ND	790	530		1	68	30-130	02/10/2014 1550
Benzo(a)anthracene	ND	790	520		1	66	30-130	02/10/2014 1550
Benzo(a)pyrene	ND	790	580		1	74	30-130	02/10/2014 1550
Benzo(b)fluoranthene	ND	790	590		1	75	30-130	02/10/2014 1550
Benzo(g,h,i)perylene	ND	790	580		1	73	30-130	02/10/2014 1550
Benzo(k)fluoranthene	ND	790	590		1	75	30-130	02/10/2014 1550
Chrysene	ND	790	500		1	64	30-130	02/10/2014 1550
Dibenzo(a,h)anthracene	ND	790	550		1	70	30-130	02/10/2014 1550
Fluoranthene	ND	790	530		1	67	30-130	02/10/2014 1550
Fluorene	ND	790	520		1	66	30-130	02/10/2014 1550
Indeno(1,2,3-c,d)pyrene	ND	790	560		1	71	30-130	02/10/2014 1550
Naphthalene	ND	790	420		1	53	30-130	02/10/2014 1550
Phenanthrene	ND	790	510		1	65	30-130	02/10/2014 1550
Pyrene	ND	790	500		1	63	30-130	02/10/2014 1550

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		62	33-102
Nitrobenzene-d5		58	22-109
Terphenyl-d14		70	41-120

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: PA31056-012MD
Batch: 40082
Analytical Method: 8270D
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/10/2014 940

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	780	440		1	56	17	30-130	40	02/10/2014 1616
Acenaphthylene	ND	780	460		1	59	17	30-130	40	02/10/2014 1616
Anthracene	ND	780	470		1	61	13	30-130	40	02/10/2014 1616
Benzo(a)anthracene	ND	780	440		1	57	16	30-130	40	02/10/2014 1616
Benzo(a)pyrene	ND	780	490		1	63	17	30-130	40	02/10/2014 1616
Benzo(b)fluoranthene	ND	780	510		1	65	16	30-130	40	02/10/2014 1616
Benzo(g,h,i)perylene	ND	780	470		1	60	21	30-130	40	02/10/2014 1616
Benzo(k)fluoranthene	ND	780	490		1	64	18	30-130	40	02/10/2014 1616
Chrysene	ND	780	420		1	55	17	30-130	40	02/10/2014 1616
Dibenzo(a,h)anthracene	ND	780	460		1	59	19	30-130	40	02/10/2014 1616
Fluoranthene	ND	780	470		1	60	13	30-130	40	02/10/2014 1616
Fluorene	ND	780	440		1	56	17	30-130	40	02/10/2014 1616
Indeno(1,2,3-c,d)pyrene	ND	780	460		1	59	20	30-130	40	02/10/2014 1616
Naphthalene	ND	780	350		1	45	17	30-130	40	02/10/2014 1616
Phenanthrene	ND	780	440		1	57	14	30-130	40	02/10/2014 1616
Pyrene	ND	780	430		1	55	15	30-130	40	02/10/2014 1616

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		50	33-102
Nitrobenzene-d5		48	22-109
Terphenyl-d14		60	41-120

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PCBs by GC - MB

Sample ID: PQ39617-001
Batch: 39617
Analytical Method: 8082A
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/03/2014 1150

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Aroclor 1016	ND		1	17	1.1	ug/kg	02/06/2014 1248
Aroclor 1221	ND		1	17	9.7	ug/kg	02/06/2014 1248
Aroclor 1232	ND		1	17	3.3	ug/kg	02/06/2014 1248
Aroclor 1242	ND		1	17	2.3	ug/kg	02/06/2014 1248
Aroclor 1248	ND		1	17	3.8	ug/kg	02/06/2014 1248
Aroclor 1254	ND		1	17	1.8	ug/kg	02/06/2014 1248
Aroclor 1260	ND		1	17	5.7	ug/kg	02/06/2014 1248

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		83	41-132
Tetrachloro-m-xylene		77	35-106

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PCBs by GC - LCS

Sample ID: PQ39617-002
Batch: 39617
Analytical Method: 8082A
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/03/2014 1150

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Aroclor 1016	83	71		1	86	70-130	02/06/2014 1300
Aroclor 1260	83	82		1	99	70-130	02/06/2014 1300

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		85	41-132
Tetrachloro-m-xylene		81	35-106

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PCBs by GC - MS

Sample ID: PA31056-005MS
Batch: 39617
Analytical Method: 8082A
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/03/2014 1150

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Aroclor 1016	ND	99	77		1	78	70-130	02/10/2014 1305
Aroclor 1260	ND	99	80		1	80	70-130	02/10/2014 1305

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		73	41-132
Tetrachloro-m-xylene		73	35-106

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

PCBs by GC - MSD

Sample ID: PA31056-005MD
Batch: 39617
Analytical Method: 8082A
Matrix: Solid
Prep Method: 3550C
Prep Date: 02/03/2014 1150

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Aroclor 1016	ND	99	81		1	81	4.0	70-130	20	02/10/2014 1317
Aroclor 1260	ND	99	83		1	83	4.0	70-130	20	02/10/2014 1317

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		76	41-132
Tetrachloro-m-xylene		73	35-106

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Metals - MB

Sample ID: PQ39633-001
Batch: 39633
Analytical Method: 6010C
Matrix: Solid
Prep Method: 3050B
Prep Date: 02/03/2014 1507

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Arsenic	ND		1	0.50	0.19	mg/kg	02/05/2014 0126
Barium	ND		1	1.3	0.091	mg/kg	02/05/2014 0126
Cadmium	**0.019**	**J**	**1**	**0.10**	**0.011**	**mg/kg**	**02/05/2014 0126**
Chromium	**0.23**	**J**	**1**	**0.25**	**0.051**	**mg/kg**	**02/05/2014 0126**
Lead	ND		1	0.50	0.093	mg/kg	02/05/2014 0126
Nickel	ND		1	2.0	0.15	mg/kg	02/05/2014 0126
Selenium	**0.21**	**J**	**1**	**0.50**	**0.17**	**mg/kg**	**02/05/2014 0126**
Silver	ND		1	0.25	0.042	mg/kg	02/05/2014 0126

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Metals - LCS

Sample ID: PQ39633-002
Batch: 39633
Analytical Method: 6010C
Matrix: Solid
Prep Method: 3050B
Prep Date: 02/03/2014 1507

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Arsenic	240	220		1	92	80-120	02/05/2014 0130
Barium	480	470		1	97	80-120	02/05/2014 0130
Cadmium	48	47		1	99	80-120	02/05/2014 0130
Chromium	240	240		1	99	80-120	02/05/2014 0130
Lead	240	230		1	98	80-120	02/05/2014 0130
Nickel	96	95		1	99	80-120	02/05/2014 0130
Selenium	48	43		1	89	80-120	02/05/2014 0130
Silver	240	250		1	103	80-120	02/05/2014 0130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Metals - LCSD

Sample ID: PQ39633-003
Batch: 39633
Analytical Method: 6010C
Matrix: Solid
Prep Method: 3050B
Prep Date: 02/03/2014 1507

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Arsenic	250	230		1	93	4.4	80-120	20	02/05/2014 0133
Barium	500	480		1	96	2.4	80-120	20	02/05/2014 0133
Cadmium	50	48		1	96	1.2	80-120	20	02/05/2014 0133
Chromium	250	240		1	98	3.3	80-120	20	02/05/2014 0133
Lead	250	240		1	97	3.0	80-120	20	02/05/2014 0133
Nickel	100	98		1	98	2.2	80-120	20	02/05/2014 0133
Selenium	50	45		1	89	4.4	80-120	20	02/05/2014 0133
Silver	250	260		1	104	4.5	80-120	20	02/05/2014 0133

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Metals - MB

Sample ID: PQ39693-001
Batch: 39693
Analytical Method: 7471B

Matrix: Solid
Prep Method: 7471B
Prep Date: 02/04/2014 1456

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	ND		1	0.083	0.0059	mg/kg	02/04/2014 1611

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Metals - LCS

Sample ID: PQ39693-002
Batch: 39693
Analytical Method: 7471B
Matrix: Solid
Prep Method: 7471B
Prep Date: 02/04/2014 1456

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.74	0.75		1	101	85-115	02/04/2014 1614

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Metals - LCSD

Sample ID: PQ39693-003
Batch: 39693
Analytical Method: 7471B
Matrix: Solid
Prep Method: 7471B
Prep Date: 02/04/2014 1456

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.78	0.77		1	100	2.9	85-115	20	02/04/2014 1616

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 17660

Client	Report to Contact	Sampler (Printed Name)	Quote No.
AECOM	SCOTT ROSS	James Lamphart	
Address 810 DUTCH SQUARE BLVD, STE 202	Telephone No. / Fax No. / Email 803 798 1073 SCOTT.ROSS@AECOM.COM	Waybill No.	Page 1 of 2
City Columbia / State SC / Zip Code 29210	Preservative 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH		
Project Name PHASE II ESA - SHAKESPEARE			
Project Number	P.O Number		Lot No. PA31056

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: VOC's	VOC's	PAH's PCB's RCRA Metals + Hg	PAH's	Remarks / Cooler ID
									14	20	1	1	2	Number of Containers
									A	A	M	L	M	Bottle (See Instructions on back)
									S		1	1	1	Preservative
TMW-3	1/30/14	1348	G	X					X					
TMW-4		1430	G	X					X					
TMW-2		1625	G	X					X					
TMW-1		1740	G	X					X					
REC-10 B-6 (10-11)	1/31/14	1000	G				X			X	X	X		
REC-4 B-8 (2-4)		0930	G				X			X			X	
REC-11b B-19 (0-2)		1100	G				X			X			X	
REC-5c B-11 (12-13)		1320	G				X			X				
REC-5a B-9 (11-12)		1600	G				X			X				
TB-01-013114		—							X					

Turn Around Time Required (Prior lab approval required for expedited TAT)	Sample Disposal	QC Requirements (Specify)	Possible Hazard Identification
☑ Standard ☐ Rush (Please Specify)	☐ Return to Client ☑ Disposal by Lab		☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	1/31/14	1808	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by	1-31-14	1808

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack — Receipt Temp. 5.0 °C — Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
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Level 1 Report v2.1

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Chain of Custody Record

Number 02686

Client: AECOM	Report to Contact: Scott Ross	Sampler (Printed Name): Chuck Sodestrom / James Loyd	Quote No.
Address: 810 Dutch Square Blvd. Ste 202	Telephone No. / Fax No. / Email: 803 798 1813 Scott.Ross@AECOM.com	Waybill No.	Page: 2 of 2
City: Columbia; State: SC; Zip Code: 29210	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		Number of Containers; Bottle (See Instructions on back); Preservative
Project Name: PHASE II ESA - SHAKESPEARE			Lot No. PA31054

Project Number	P.O Number			Matrix						Analysis			Remarks / Cooler ID
Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	GW	DW	WW	S	Other		VOC's	RCRA Metals + Nickel, PAH's		
REC-8a B-12 (2-4)	1/30/14	1520	G				X			X			
REC-8b B-13 (1-3)	↓	1350	G				X			X	X		
REC-5b B-10 (10-11)		1700	G				X			X			
REC-2 B-3a (5-6)	1/31/14	1700	G				X			X			

Turn Around Time Required (Prior lab approval required for expedited TAT)	Sample Disposal	QC Requirements (Specify)	Possible Hazard Identification
☒ Standard ☐ Rush (Please Specify)	☐ Return to Client ☒ Disposal by Lab		☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	1/31/14	1808	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by: Kelly W Ri	1-31-14	1808

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☒ Yes ☐ No ☐ Ice Pack
Receipt Temp. 5.0 °C
Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 13

Page 1 of 1
Replaces Date: 09/24/13
Effective Date: 09/26/13

Sample Receipt Checklist (SRC)

Client: Aecom Cooler Inspected by/date: KWP 11-3-14 Lot #: PA31056

Means of receipt: ☐ SESI ☑ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐		2. If custody seals were present, were they intact and unbroken?

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:
15315.0 °C ___/___/___ °C ___/___/___ °C ___/___/___ °C
Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID: #3 IR Gun Correction Factor: -0.3 °C
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other:_____. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number) _____.

Sample(s) _____ were received with bubbles >6 mm in diameter.

Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/phenol

Sample labels verified by: _____ Date: _____

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: _____

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

AECOM
810 Dutch Square Blvd.
Suite 202
Columbia, SC 29210
Attention: Scott Ross

Project Name: **Phase II ESA - Shakespeare**

Lot Number: **PB03028**
Date Completed: **02/11/2014**

Nisreen Saikaly
Project Manager

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

* P B 0 3 0 2 8 *

Case Narrative

AECOM

Lot Number: PB03028

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary

AECOM

Lot Number: PB03028

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TMW-5	Aqueous	02/03/2014 1050	02/03/2014
002	TMW-6	Aqueous	02/03/2014 1130	02/03/2014
003	TMW-7	Aqueous	02/03/2014 1305	02/03/2014
004	TMW-8	Aqueous	02/03/2014 1402	02/03/2014
005	TB-01-020314	Aqueous	02/03/2014	02/03/2014

(5 samples)

Executive Summary

AECOM

Lot Number: PB03028

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	TMW-5	Aqueous	Benzene	8260B	0.52	J	ug/L	5
001	TMW-5	Aqueous	Carbon disulfide	8260B	4.2	J	ug/L	5
001	TMW-5	Aqueous	1,1-Dichloroethane	8260B	1.6	J	ug/L	5
001	TMW-5	Aqueous	1,1-Dichloroethene	8260B	1.5	J	ug/L	5
001	TMW-5	Aqueous	cis-1,2-Dichloroethene	8260B	250		ug/L	5
001	TMW-5	Aqueous	trans-1,2-Dichloroethene	8260B	6.5		ug/L	5
001	TMW-5	Aqueous	Styrene	8260B	4.4	J	ug/L	5
001	TMW-5	Aqueous	Trichloroethene	8260B	43		ug/L	6
001	TMW-5	Aqueous	Vinyl chloride	8260B	38		ug/L	6
002	TMW-6	Aqueous	Acetone	8260B	21		ug/L	7
002	TMW-6	Aqueous	2-Butanone (MEK)	8260B	2.7	J	ug/L	7
002	TMW-6	Aqueous	Chloroform	8260B	2.3	J	ug/L	7
002	TMW-6	Aqueous	Styrene	8260B	5.7		ug/L	7
002	TMW-6	Aqueous	Trichloroethene	8260B	23		ug/L	8
003	TMW-7	Aqueous	Toluene	8260B	19		ug/L	9
004	TMW-8	Aqueous	Styrene	8260B	3.3	J	ug/L	11

(16 detections)

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PB03028-001**
Description: **TMW-5**
Matrix: **Aqueous**
Date Sampled: **02/03/2014 1050**
Date Received: **02/03/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 0633	PMM2		39970
2	5030B	8260B	5	02/10/2014 1527	ALL		40113

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	**71-43-2**	**8260B**	**0.52**	**J**	**5.0**	**0.20**	**ug/L**	**1**
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	**75-15-0**	**8260B**	**4.2**	**J**	**5.0**	**0.30**	**ug/L**	**1**
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	**75-34-3**	**8260B**	**1.6**	**J**	**5.0**	**0.30**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	**75-35-4**	**8260B**	**1.5**	**J**	**5.0**	**0.50**	**ug/L**	**1**
cis-1,2-Dichloroethene	**156-59-2**	**8260B**	**250**		**25**	**1.0**	**ug/L**	**2**
trans-1,2-Dichloroethene	**156-60-5**	**8260B**	**6.5**		**5.0**	**0.40**	**ug/L**	**1**
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	**100-42-5**	**8260B**	**4.4**	**J**	**5.0**	**0.10**	**ug/L**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PB03028-001**
Description: **TMW-5**
Matrix: **Aqueous**
Date Sampled: **02/03/2014 1050**
Date Received: **02/03/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 0633	PMM2		39970
2	5030B	8260B	5	02/10/2014 1527	ALL		40113

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1
Trichloroethene	**79-01-6**	**8260B**	**43**		**5.0**	**0.30**	**ug/L**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	**75-01-4**	**8260B**	**38**		**2.0**	**0.10**	**ug/L**	**1**
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130		110	70-130
Bromofluorobenzene		93	70-130		113	70-130
Toluene-d8		95	70-130		110	70-130

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N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PB03028-002**
Description: **TMW-6**
Matrix: **Aqueous**
Date Sampled: **02/03/2014 1130**
Date Received: **02/03/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 0719	PMM2		39970

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	**67-64-1**	**8260B**	**21**		**20**	**6.7**	**ug/L**	**1**
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	**78-93-3**	**8260B**	**2.7**	**J**	**10**	**1.8**	**ug/L**	**1**
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	**67-66-3**	**8260B**	**2.3**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	**100-42-5**	**8260B**	**5.7**		**5.0**	**0.10**	**ug/L**	**1**
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PB03028-002**
Description: **TMW-6**
Matrix: **Aqueous**
Date Sampled: **02/03/2014 1130**
Date Received: **02/03/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2014 0719	PMM2		39970

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	**79-01-6**	**8260B**	**23**		**5.0**	**0.30**	**ug/L**	**1**
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		94	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PB03028-003**
Description: **TMW-7**
Matrix: **Aqueous**
Date Sampled: **02/03/2014 1305**
Date Received: **02/03/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/06/2014 2344	PMM2		39970

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acetone	67-64-1	8260B	ND		20	6.7	ug/L	1
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	1.7	ug/L	1
Bromoform	75-25-2	8260B	ND		5.0	0.40	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	0.80	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	1.8	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		5.0	0.30	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	0.40	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		5.0	1.7	ug/L	1
Chloroethane	75-00-3	8260B	ND		5.0	0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		5.0	1.7	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	0.30	ug/L	1
Cyclohexane	110-82-7	8260B	ND		5.0	0.98	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	0.60	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	1.7	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	1.7	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	1.7	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	1.7	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	0.20	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	0.30	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	0.20	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	0.40	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	0.30	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	0.30	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	1.0	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		5.0	0.72	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	0.80	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	0.95	ug/L	1
Methylene chloride	75-09-2	8260B	ND		5.0	1.7	ug/L	1
Styrene	100-42-5	8260B	ND		5.0	0.10	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	0.40	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	0.40	ug/L	1
Toluene	**108-88-3**	**8260B**	**19**		**5.0**	**1.7**	**ug/L**	**1**
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	0.30	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	1.7	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	0.20	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	0.30	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **AECOM**
Laboratory ID: **PB03028-003**
Description: **TMW-7**
Matrix: **Aqueous**
Date Sampled: **02/03/2014 1305**
Date Received: **02/03/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/06/2014 2344	PMM2		39970

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	0.30	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	0.30	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		2.0	0.10	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		83	70-130
Bromofluorobenzene		87	70-130
Toluene-d8		87	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
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