

Semivolatile Organic Compounds by GC/MS (SIM) - MB

Sample ID: KQ12156-001

Matrix: Solid

Batch: 12156

Prep Method: 3550C

Analytical Method: 8270D (SIM)

Prep Date: 06/10/2009 1159

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1-Methylnaphthalene	ND		1	3.3	0.98	ug/kg	06/14/2009 1548
2-Methylnaphthalene	ND		1	3.3	0.99	ug/kg	06/14/2009 1548
Acenaphthene	ND		1	3.3	0.83	ug/kg	06/14/2009 1548
Acenaphthylene	ND		1	3.3	0.95	ug/kg	06/14/2009 1548
Anthracene	ND		1	3.3	0.51	ug/kg	06/14/2009 1548
Benzo(a)anthracene	ND		1	3.3	0.59	ug/kg	06/14/2009 1548
Benzo(a)pyrene	ND		1	3.3	0.66	ug/kg	06/14/2009 1548
Benzo(b)fluoranthene	ND		1	3.3	0.50	ug/kg	06/14/2009 1548
Benzo(g,h,i)perylene	ND		1	3.3	0.65	ug/kg	06/14/2009 1548
Benzo(k)fluoranthene	ND		1	3.3	0.48	ug/kg	06/14/2009 1548
Chrysene	ND		1	3.3	0.45	ug/kg	06/14/2009 1548
Dibenzo(a,h)anthracene	ND		1	3.3	0.51	ug/kg	06/14/2009 1548
Fluoranthene	ND		1	3.3	0.42	ug/kg	06/14/2009 1548
Fluorene	ND		1	3.3	0.57	ug/kg	06/14/2009 1548
Indeno(1,2,3-c,d)pyrene	ND		1	3.3	1.0	ug/kg	06/14/2009 1548
Naphthalene	ND		1	3.3	0.97	ug/kg	06/14/2009 1548
Phenanthrene	ND		1	3.3	0.72	ug/kg	06/14/2009 1548
Pyrene	ND		1	3.3	0.50	ug/kg	06/14/2009 1548
Surrogate	Q	% Rec	Acceptance Limit				
2-Methylnaphthalene-d10		31	20-150				
Fluoranthene-d10		46	20-150				

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 $\geq$ 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 (SIM) - LCS

Sample ID: KQ12156-002

Matrix: Solid

Batch: 12156

Prep Method: 3550C

Analytical Method: 8270D (SIM)

Prep Date: 06/10/2009 1159

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
2-Methylnaphthalene	13	6.8		1	52	20-150	06/14/2009 1428
Acenaphthene	13	6.5		1	50	20-150	06/14/2009 1428
Acenaphthylene	13	8.8		1	68	20-150	06/14/2009 1428
Anthracene	13	8.0		1	62	20-150	06/14/2009 1428
Benzo(a)anthracene	13	7.5		1	58	20-150	06/14/2009 1428
Benzo(a)pyrene	13	10		1	80	20-150	06/14/2009 1428
Benzo(b)fluoranthene	13	8.2		1	63	20-150	06/14/2009 1428
Benzo(g,h,i)perylene	13	18		1	137	20-150	06/14/2009 1428
Benzo(k)fluoranthene	13	8.1		1	62	20-150	06/14/2009 1428
Chrysene	13	7.7		1	59	20-150	06/14/2009 1428
Dibenzo(a,h)anthracene	13	17		1	129	20-150	06/14/2009 1428
Fluoranthene	13	7.8		1	60	20-150	06/14/2009 1428
Fluorene	13	6.6		1	50	20-150	06/14/2009 1428
Indeno(1,2,3-c,d)pyrene	13	17		1	131	20-150	06/14/2009 1428
Naphthalene	13	7.5		1	58	20-150	06/14/2009 1428
Phenanthrene	13	7.1		1	54	20-150	06/14/2009 1428
Pyrene	13	9.7		1	75	20-150	06/14/2009 1428
Surrogate	Q	% Rec	Acceptance Limit				
2-Methylnaphthalene-d10		47	20-150				
Fluoranthene-d10		62	20-150				

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 $\geq$ 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 (SIM) - MS

Sample ID: KF04029-016MS

Matrix: Solid

Batch: 12156

Prep Method: 3550C

Analytical Method: 8270D (SIM)

Prep Date: 06/10/2009 1159

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	26	16	29	N	1	20	30-130	06/13/2009 1231
Acenaphthylene	22	16	28		1	42	30-130	06/13/2009 1231
Anthracene	ND	16	11		1	72	30-130	06/13/2009 1231
Benzo(a)anthracene	7.2	16	12	N	1	28	30-130	06/13/2009 1231
Benzo(a)pyrene	11	16	15	N	1	24	30-130	06/13/2009 1231
Benzo(b)fluoranthene	13	16	13	N	1	0.69	30-130	06/13/2009 1231
Benzo(g,h,i)perylene	7.4	16	12		1	32	30-130	06/13/2009 1231
Benzo(k)fluoranthene	6.4	16	11	N	1	29	30-130	06/13/2009 1231
Chrysene	7.8	16	11	N	1	22	30-130	06/13/2009 1231
Dibenzo(a,h)anthracene	ND	16	10		1	66	30-130	06/13/2009 1231
Fluoranthene	9.4	16	14		1	32	30-130	06/13/2009 1231
Fluorene	18	16	21	N	1	14	30-130	06/13/2009 1231
Indeno(1,2,3-c,d)pyrene	6.6	16	11		1	31	30-130	06/13/2009 1231
2-Methylnaphthalene	1200	16	950	N	1	-1020	30-130	06/13/2009 1231
Naphthalene	680	16	500	N	1	-849	30-130	06/13/2009 1231
Phenanthrene	7.9	16	14		1	38	30-130	06/13/2009 1231
Pyrene	16	16	28		1	76	30-130	06/13/2009 1231
Surrogate	Q	% Rec	Acceptance Limit					
Fluoranthene-d10		55	20-150					
2-Methylnaphthalene-d10		97	20-150					

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 $\geq$ 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 (SIM) - MSD

Sample ID: KF04029-016MD

Batch: 12156

Analytical Method: 8270D (SIM)

Matrix: Solid

Prep Method: 3550C

Prep Date: 06/10/2009 1159

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	26	15	21	N,+	1	-32	33	30-130	20	06/13/2009 1257
Acenaphthylene	22	15	21	N,+	1	-7.6	32	30-130	20	06/13/2009 1257
Anthracene	ND	15	13		1	83	14	30-130	20	06/13/2009 1257
Benzo(a)anthracene	7.2	15	13		1	37	10	30-130	20	06/13/2009 1257
Benzo(a)pyrene	11	15	16		1	31	6.6	30-130	20	06/13/2009 1257
Benzo(b)fluoranthene	13	15	14	N	1	5.1	5.2	30-130	20	06/13/2009 1257
Benzo(g,h,i)perylene	7.4	15	12		1	32	1.5	30-130	20	06/13/2009 1257
Benzo(k)fluoranthene	6.4	15	14	+	1	48	24	30-130	20	06/13/2009 1257
Chrysene	7.8	15	12		1	31	11	30-130	20	06/13/2009 1257
Dibenzo(a,h)anthracene	ND	15	10		1	65	3.3	30-130	20	06/13/2009 1257
Fluoranthene	9.4	15	16		1	43	11	30-130	20	06/13/2009 1257
Fluorene	18	15	15	N,+	1	-19	29	30-130	20	06/13/2009 1257
Indeno(1,2,3-c,d)pyrene	6.6	15	12		1	32	0.97	30-130	20	06/13/2009 1257
2-Methylnaphthalene	1200	15	1100	N	1	28	16	30-130	20	06/13/2009 1257
Naphthalene	680	15	550	N	1	-559	8.9	30-130	20	06/13/2009 1257
Phenanthrene	7.9	15	16		1	54	16	30-130	20	06/13/2009 1257
Pyrene	16	15	42	N,+	1	168	40	30-130	20	06/13/2009 1257
Surrogate	Q	% Rec	Acceptance Limit							
Fluoranthene-d10		55	20-150							
2-Methylnaphthalene-d10		98	20-150							

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

TPH - DRO - MB

Sample ID: KQ12158-001

Batch: 12158

Analytical Method: 8015B

Matrix: Solid

Prep Method: 3550B

Prep Date: 06/10/2009 1145

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TPH-DRO	3900	J	1	6700	1200	ug/kg	06/13/2009 0635
Surrogate	Q	% Rec	Acceptance Limit				
o - Terphenyl		72	55-120				

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and $\geq$ MDL

N - Recovery is out of criteria

+ - RPD is out of criteria

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

TPH - DRO - LCS

Sample ID: KQ12158-002

Matrix: Solid

Batch: 12158

Prep Method: 3550B

Analytical Method: 8015B

Prep Date: 06/10/2009 1145

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-DRO	83000	70000		1	84	50-130	06/13/2009 0655
Surrogate	Q	% Rec	Acceptance Limit				
o - Terphenyl		77	55-120				

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 $\geq$ 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

TPH - DRO - MS

Sample ID: KF04029-006MS

Matrix: Solid

Batch: 12158

Prep Method: 3550B

Analytical Method: 8015B

Prep Date: 06/10/2009 1145

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-DRO	220000	100000	520000	N	1	298	50-130	06/13/2009 0812
Surrogate	Q	% Rec	Acceptance Limit					
o - Terphenyl		72	55-120					

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 $\geq$ 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

TPH - DRO - MSD

Sample ID: KF04029-006MD

Matrix: Solid

Batch: 12158

Prep Method: 3550B

Analytical Method: 8015B

Prep Date: 06/10/2009 1145

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TPH-DRO	220000	100000	590000	N	1	362	12	50-130	20	06/13/2009 0831
Surrogate	Q	% Rec	Acceptance Limit							
o - Terphenyl		79	55-120							

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 $\geq$ 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

TPH - GRO - MB

Sample ID: KQ12560-001

Matrix: Solid

Batch: 12560

Prep Method: 5030B

Analytical Method: 8015C

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TPH-GRO	650	J	1	5000	620	ug/kg	06/16/2009 1059
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		126	45-132				

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 $\geq$ 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, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

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TPH - GRO - LCS

Sample ID: KQ12560-002

Matrix: Solid

Batch: 12560

Prep Method: 5030B

Analytical Method: 8015C

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-GRO	50000	62000		1	124	70-130	06/16/2009 1639
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		97	45-132				

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 $\geq$ 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

TPH - GRO - LCSD

Sample ID: KQ12560-003

Matrix: Solid

Batch: 12560

Prep Method: 5030B

Analytical Method: 8015C

Parameter	Spike Amount (ug/kg)		Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TPH-GRO	50000		54000		1	108	13	70-130	20	06/16/2009 1704
Surrogate	Q	% Rec	Acceptance Limit							
Bromofluorobenzene		94	45-132							

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 $\geq$ 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


 Laboratory Task Order No./P.O. No. 6-PO8HAFS.H09A.KG0EX

CHAIN-OF-CUSTODY RECORD

 Page 1 of 2

 Project Number/Name 6-PO8HAFS.H09A.KG0EX

 Project Location Hunter Army Airfield HAA-9

 Laboratory Shealy

 Project Manager Chuck Bantz

 Sampler(s)/Affiliation Arcadis

ANALYSIS / METHOD / SIZE

 BTX
PAH
TPH
TOC

KF04029

Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	Remarks	Total
HA09SB27(2-4)	S	6-3-09/0845	4	1	5
HA09SB22(4-6)	S	6-3-09/0900	4	1	5
HA09SB23(2-4)	S	6-3-09/0915	4	1	5
HA09SB24(6-7)	S	6-3-09/0945	4	1	5
HA09SB25(4-6)	S	6-3-09/1000	4	1	5
HA09SB26(4-6)	S	6-3-09/1020	4	1	6
HA09SB27(4-6)	S	6-3-09/1035	4	1	5
HA09SB28(2-3)	S	6-3-09/1050	4	1	6
HA09SB29(4-6)	S	6-3-09/1100	4	1	6
HA09SB30(2-4)	S	6-3-09/1110	4	1	5
HA09SB31(2-4)	S	6-3-09/1120	4	1	5
HA09SB32(4-6)	S	6-3-09/1130	4	1	6
HA09SB33(2-4)	S	6-3-09/1300	4	1	6
HA09SB34(4-6)	S	6-3-09/1330	4	1	5
HA09SB35(4-6)	S	6-3-09/1345	4	1	5
Total No. of Bottles/Containers					74

Sample Matrix: L = Liquid; S = Solid; A = Air

T=6.0

Relinquished by: <u>[Signature]</u>	Organization: <u>Arcadis</u>	Date: <u>6-13-09</u>	Time: <u>1800</u>	Seal Intact? <u>Yes</u>
Received by: <u>[Signature]</u>	Organization: <u></u>	Date: <u>1-1</u>	Time: <u></u>	Seal Intact? <u>N/A</u>
Relinquished by: <u>[Signature]</u>	Organization: <u></u>	Date: <u>6-14-09</u>	Time: <u>0940</u>	Seal Intact? <u>Yes</u>
Received by: <u>[Signature]</u>	Organization: <u></u>	Date: <u>6-14-09</u>	Time: <u>0940</u>	Seal Intact? <u>N/A</u>

Special Instructions/Remarks:

T-4.6, 3.9

 Delivery Method: ☐ In Person

☒ Common Carrier Fed Ex
☐ Lab Courier

☐ Other

 SPECIFY
AS 06-1061

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 6

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Replaces Date: 09/22/06
Effective Date: 05/29/07

Sample Receipt Checklist (SRC)

Client: Arcadis Cooler Inspected by/date: AMP 6/4/06 Lot #: KF04029

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☒ FedEx ☐ Airborne Exp ☐ Other		
Yes ☒	No ☐	NA ☐
1. Were custody seals present on the cooler?		
Yes ☒	No ☐	NA ☐
2. If custody seals were present, were they intact and unbroken?		
Cooler ID/temperature upon receipt <u>4-6</u> °C <u>3-4</u> °C <u> </u> / <u> </u> °C <u> </u> / <u> </u> °C		
Method: ☐ Temperature Blank ☒ Against Bottles		
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: <u> </u> . (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 ☒	NA ☐
5. Were proper custody procedures (relinquished/received) followed?		
Yes ☒	No ☐	NA ☐
6. Were sample IDs listed?		
Yes ☒	No ☐	NA ☐
7. Was collection date & time listed?		
Yes ☒	No ☐	NA ☐
8. Were tests to be performed listed on the COC or was quote # provided?		
Yes ☒	No ☐	NA ☐
9. Did all samples arrive in the proper containers for each test?		
Yes ☒	No ☐	NA ☐
10. Did all container label information (ID, date, time) agree with COC?		
Yes ☒	No ☐	NA ☐
11. Did all containers arrive in good condition (unbroken, lids on, etc.)?		
Yes ☒	No ☐	NA ☐
12. Was adequate sample volume available?		
Yes ☒	No ☐	NA ☐
13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?		
Yes ☐	No ☒	NA ☐
14. Were any samples containers missing?		
Yes ☐	No ☒	NA ☐
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/BNA/pest/PCB/herb (<0.2mg/L) and toxicity (<0.1mg/L) samples free of residual chlorine?		
Yes ☐	No ☐	NA ☒
20. Were collection temperatures documented on the COC for NC samples?		
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)		
Sample(s) <u> </u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u> </u> (H ₂ SO ₄ , HNO ₃ , HCl, NaOH) with the SR # (number) <u> </u>		
Sample(s) <u> </u> were received with bubbles >6 mm in diameter.		
Sample(s) <u> </u> were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.		
Toxicity sample(s) <u> </u> were received with TRC >0.1 mg/L and were analyzed by method 330.5.		

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐

Did client respond: Yes ☐ No ☐

SESI employee:

Date of response:

Comments:

Report of Analysis

ARCADIS U.S., Inc.
30 Patewood Drive
Suite 155
Greenville, SC 29615
Attention: Janet Christy

Project Name: Hunter Army Airfield HAA-9

Project Number: GP08HAFS.H09A.KG0EX

Lot Number: KF05010

Date Completed: 06/18/2009

Date Revised: 06/29/2009



Nisreen Saikaly
Project Manager



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

* KF05010 *

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DEHNR No: 329

Case Narrative ARCADIS U.S., Inc. Lot Number: KF05010

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.

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.

Semivolatile Organic Compounds

The surrogate recovery for sample -003, -004, -005, -007, -008, -011 and -012 were outside the acceptance limit. These sample were diluted. The dilution impacted the surrogate recoveries, thus negating their usefulness concerning quality control. The sample results are reported and no corrective action is required.

The concentration in the MS/MSD for batch 12041 and 12078 were greater than five times the spike concentration, and is impacting the MS/MSD recoveries, thus negating their usefulness concerning quality control. All other QC/QA criteria were within acceptance limits. Associated sample data was reported, and no corrective action was required.

Volatile Organic Compounds

The surrogate recovery for sample -004, -008, -011 and -012 were outside the acceptance limit. This sample was diluted. The dilution impacted the surrogate recoveries, thus negating their usefulness concerning quality control. The sample results are reported and no corrective action is required.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary ARCADIS U.S., Inc. Lot Number: KF05010

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	HA09GW01 (6-10)	Aqueous	06/04/2009 1600	06/05/2009
002	HA09GW01 (11-15)	Aqueous	06/04/2009 1615	06/05/2009
003	HA09SB54 (2-4)	Solid	06/04/2009 1530	06/05/2009
004	HA09SB53 (2-4)	Solid	06/04/2009 1515	06/05/2009
005	HA09SB52(4-6)	Solid	06/04/2009 1505	06/05/2009
006	HA09SB51(2-4)	Solid	06/04/2009 1500	06/05/2009
007	HA09SB45(2-4)	Solid	06/04/2009 1420	06/05/2009
008	HA09SB44(4-6)	Solid	06/04/2009 1415	06/05/2009
009	HA09SB43(4-6)	Solid	06/04/2009 1405	06/05/2009
010	HA09SB50(2-4)	Solid	06/04/2009 1400	06/05/2009
011	HA09SB49(2-4)	Solid	06/04/2009 1350	06/05/2009
012	HA09SB48(2-4)	Solid	06/04/2009 1340	06/05/2009
013	Trip Blank	Aqueous	06/05/2009 0930	06/05/2009

(13 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary

ARCADIS U.S., Inc.

Lot Number: KF05010

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	HA09GW01 (6-10)	Aqueous	Benzene	8260B	0.76		ug/L	7
001	HA09GW01 (6-10)	Aqueous	Ethylbenzene	8260B	2.8		ug/L	7
001	HA09GW01 (6-10)	Aqueous	Xylenes (total)	8260B	9.5		ug/L	7
001	HA09GW01 (6-10)	Aqueous	1-Methylnaphthalene	8270D (SIM)	2.0		ug/L	8
001	HA09GW01 (6-10)	Aqueous	2-Methylnaphthalene	8270D (SIM)	2.9		ug/L	8
001	HA09GW01 (6-10)	Aqueous	Naphthalene	8270D (SIM)	2.7		ug/L	8
002	HA09GW01 (11-15)	Aqueous	Benzene	8260B	0.80		ug/L	9
002	HA09GW01 (11-15)	Aqueous	Ethylbenzene	8260B	5.0		ug/L	9
002	HA09GW01 (11-15)	Aqueous	Toluene	8260B	0.21	J	ug/L	9
002	HA09GW01 (11-15)	Aqueous	Xylenes (total)	8260B	17		ug/L	9
002	HA09GW01 (11-15)	Aqueous	Benzo(g,h,i)perylene	8270D (SIM)	0.71	J	ug/L	10
002	HA09GW01 (11-15)	Aqueous	Dibenzo(a,h)anthracene	8270D (SIM)	0.59	J	ug/L	10
002	HA09GW01 (11-15)	Aqueous	Indeno(1,2,3-c,d)pyrene	8270D (SIM)	0.56	J	ug/L	10
002	HA09GW01 (11-15)	Aqueous	1-Methylnaphthalene	8270D (SIM)	5.2		ug/L	10
002	HA09GW01 (11-15)	Aqueous	2-Methylnaphthalene	8270D (SIM)	7.3		ug/L	10
002	HA09GW01 (11-15)	Aqueous	Naphthalene	8270D (SIM)	6.2		ug/L	10
003	HA09SB54 (2-4)	Solid	Benzene	8260B	65	J	ug/kg	11
003	HA09SB54 (2-4)	Solid	Ethylbenzene	8260B	2900		ug/kg	11
003	HA09SB54 (2-4)	Solid	Xylenes (total)	8260B	980		ug/kg	11
003	HA09SB54 (2-4)	Solid	Acenaphthene	8270D (SIM)	140		ug/kg	12
003	HA09SB54 (2-4)	Solid	Acenaphthylene	8270D (SIM)	62		ug/kg	12
003	HA09SB54 (2-4)	Solid	Fluoranthene	8270D (SIM)	620		ug/kg	12
003	HA09SB54 (2-4)	Solid	Fluorene	8270D (SIM)	96		ug/kg	12
003	HA09SB54 (2-4)	Solid	1-Methylnaphthalene	8270D (SIM)	420		ug/kg	12
003	HA09SB54 (2-4)	Solid	2-Methylnaphthalene	8270D (SIM)	430		ug/kg	12
003	HA09SB54 (2-4)	Solid	Naphthalene	8270D (SIM)	1700		ug/kg	12
003	HA09SB54 (2-4)	Solid	Phenanthrene	8270D (SIM)	55		ug/kg	12
004	HA09SB53 (2-4)	Solid	Benzene	8260B	4000	J	ug/kg	13
004	HA09SB53 (2-4)	Solid	Ethylbenzene	8260B	32000		ug/kg	13
004	HA09SB53 (2-4)	Solid	Toluene	8260B	5600		ug/kg	13
004	HA09SB53 (2-4)	Solid	Xylenes (total)	8260B	180000		ug/kg	13
004	HA09SB53 (2-4)	Solid	1-Methylnaphthalene	8270D (SIM)	6700		ug/kg	14
004	HA09SB53 (2-4)	Solid	2-Methylnaphthalene	8270D (SIM)	10000		ug/kg	14
004	HA09SB53 (2-4)	Solid	Naphthalene	8270D (SIM)	6200		ug/kg	14
005	HA09SB52(4-6)	Solid	Benzene	8260B	91	J	ug/kg	15
005	HA09SB52(4-6)	Solid	Ethylbenzene	8260B	350		ug/kg	15
005	HA09SB52(4-6)	Solid	Toluene	8260B	51	J	ug/kg	15
005	HA09SB52(4-6)	Solid	Xylenes (total)	8260B	1800		ug/kg	15
005	HA09SB52(4-6)	Solid	1-Methylnaphthalene	8270D (SIM)	4500		ug/kg	16
005	HA09SB52(4-6)	Solid	2-Methylnaphthalene	8270D (SIM)	6300		ug/kg	16
005	HA09SB52(4-6)	Solid	Naphthalene	8270D (SIM)	4100		ug/kg	16
006	HA09SB51(2-4)	Solid	Ethylbenzene	8260B	11		ug/kg	17
006	HA09SB51(2-4)	Solid	Xylenes (total)	8260B	91		ug/kg	17
006	HA09SB51(2-4)	Solid	Acenaphthene	8270D (SIM)	61		ug/kg	18
006	HA09SB51(2-4)	Solid	1-Methylnaphthalene	8270D (SIM)	480		ug/kg	18

Executive Summary (Continued)

Lot Number: KF05010

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	HA09SB51(2-4)	Solid	2-Methylnaphthalene	8270D (SIM)	630		ug/kg	18
006	HA09SB51(2-4)	Solid	Naphthalene	8270D (SIM)	220		ug/kg	18
007	HA09SB45(2-4)	Solid	Ethylbenzene	8260B	1300		ug/kg	19
007	HA09SB45(2-4)	Solid	Xylenes (total)	8260B	6400		ug/kg	19
007	HA09SB45(2-4)	Solid	1-Methylnaphthalene	8270D (SIM)	2000		ug/kg	20
007	HA09SB45(2-4)	Solid	2-Methylnaphthalene	8270D (SIM)	2700		ug/kg	20
007	HA09SB45(2-4)	Solid	Naphthalene	8270D (SIM)	1600		ug/kg	20
008	HA09SB44(4-6)	Solid	Benzene	8260B	330	J	ug/kg	21
008	HA09SB44(4-6)	Solid	Ethylbenzene	8260B	9400		ug/kg	21
008	HA09SB44(4-6)	Solid	Xylenes (total)	8260B	38000		ug/kg	21
008	HA09SB44(4-6)	Solid	Acenaphthene	8270D (SIM)	62		ug/kg	22
008	HA09SB44(4-6)	Solid	Acenaphthylene	8270D (SIM)	50		ug/kg	22
008	HA09SB44(4-6)	Solid	Anthracene	8270D (SIM)	20		ug/kg	22
008	HA09SB44(4-6)	Solid	Benzo(a)anthracene	8270D (SIM)	21		ug/kg	22
008	HA09SB44(4-6)	Solid	Benzo(a)pyrene	8270D (SIM)	16		ug/kg	22
008	HA09SB44(4-6)	Solid	Benzo(b)fluoranthene	8270D (SIM)	20		ug/kg	22
008	HA09SB44(4-6)	Solid	Benzo(g,h,i)perylene	8270D (SIM)	6.3		ug/kg	22
008	HA09SB44(4-6)	Solid	Benzo(k)fluoranthene	8270D (SIM)	9.2		ug/kg	22
008	HA09SB44(4-6)	Solid	Chrysene	8270D (SIM)	18		ug/kg	22
008	HA09SB44(4-6)	Solid	Fluoranthene	8270D (SIM)	62		ug/kg	22
008	HA09SB44(4-6)	Solid	Fluorene	8270D (SIM)	40		ug/kg	22
008	HA09SB44(4-6)	Solid	Indeno(1,2,3-c,d)pyrene	8270D (SIM)	5.8		ug/kg	22
008	HA09SB44(4-6)	Solid	1-Methylnaphthalene	8270D (SIM)	1400		ug/kg	22
008	HA09SB44(4-6)	Solid	2-Methylnaphthalene	8270D (SIM)	2000		ug/kg	22
008	HA09SB44(4-6)	Solid	Naphthalene	8270D (SIM)	1000		ug/kg	22
008	HA09SB44(4-6)	Solid	Phenanthrene	8270D (SIM)	65		ug/kg	22
008	HA09SB44(4-6)	Solid	Pyrene	8270D (SIM)	96		ug/kg	22
009	HA09SB43(4-6)	Solid	Xylenes (total)	8260B	3.3	J	ug/kg	23
010	HA09SB50(2-4)	Solid	Benzene	8260B	1200		ug/kg	25
010	HA09SB50(2-4)	Solid	Ethylbenzene	8260B	6100		ug/kg	25
010	HA09SB50(2-4)	Solid	Toluene	8260B	520	J	ug/kg	25
010	HA09SB50(2-4)	Solid	Xylenes (total)	8260B	27000		ug/kg	25
010	HA09SB50(2-4)	Solid	Acenaphthene	8270D (SIM)	55		ug/kg	26
010	HA09SB50(2-4)	Solid	Acenaphthylene	8270D (SIM)	49		ug/kg	26
010	HA09SB50(2-4)	Solid	Fluorene	8270D (SIM)	46		ug/kg	26
010	HA09SB50(2-4)	Solid	1-Methylnaphthalene	8270D (SIM)	910		ug/kg	26
010	HA09SB50(2-4)	Solid	2-Methylnaphthalene	8270D (SIM)	1200		ug/kg	26
010	HA09SB50(2-4)	Solid	Naphthalene	8270D (SIM)	370		ug/kg	26
011	HA09SB49(2-4)	Solid	Benzene	8260B	7400		ug/kg	27
011	HA09SB49(2-4)	Solid	Ethylbenzene	8260B	50000		ug/kg	27
011	HA09SB49(2-4)	Solid	Toluene	8260B	6600		ug/kg	27
011	HA09SB49(2-4)	Solid	Xylenes (total)	8260B	180000		ug/kg	27
011	HA09SB49(2-4)	Solid	1-Methylnaphthalene	8270D (SIM)	6300		ug/kg	28
011	HA09SB49(2-4)	Solid	2-Methylnaphthalene	8270D (SIM)	8900		ug/kg	28
011	HA09SB49(2-4)	Solid	Naphthalene	8270D (SIM)	4500		ug/kg	28
012	HA09SB48(2-4)	Solid	Benzene	8260B	1700	J	ug/kg	29
012	HA09SB48(2-4)	Solid	Ethylbenzene	8260B	12000		ug/kg	29
012	HA09SB48(2-4)	Solid	Toluene	8260B	23000		ug/kg	29

Executive Summary (Continued)

Lot Number: KF05010

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
012	HA09SB48(2-4)	Solid	Xylenes (total)	8260B	53000		ug/kg	29
012	HA09SB48(2-4)	Solid	Acenaphthene	8270D (SIM)	930		ug/kg	30
012	HA09SB48(2-4)	Solid	1-Methylnaphthalene	8270D (SIM)	27000		ug/kg	30
012	HA09SB48(2-4)	Solid	2-Methylnaphthalene	8270D (SIM)	36000		ug/kg	30
012	HA09SB48(2-4)	Solid	Naphthalene	8270D (SIM)	23000		ug/kg	30

(98 detections)

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF05010-001			
Description: HA09GW01 (6-10)				Matrix: Aqueous			
Date Sampled: 06/04/2009 1600							
Date Received: 06/05/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/09/2009 0216	Analyst DLB	Prep Date	Batch 12069
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.76		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	2.8		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	9.5		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	52-138
Bromofluorobenzene		109	70-147
Toluene-d8		108	76-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-001

Description: HA09GW01 (6-10)

Matrix: Aqueous

Date Sampled: 06/04/2009 1600

Date Received: 06/05/2009

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	06/14/2009 2108	DC	06/08/2009 1724	12078

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D (SIM)	ND		0.20	0.021	ug/L	1
Acenaphthylene	208-96-8	8270D (SIM)	ND		0.20	0.024	ug/L	1
Anthracene	120-12-7	8270D (SIM)	ND		0.20	0.016	ug/L	1
Benzo(a)anthracene	56-55-3	8270D (SIM)	ND		0.20	0.019	ug/L	1
Benzo(a)pyrene	50-32-8	8270D (SIM)	ND		0.20	0.020	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	ND		0.20	0.019	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D (SIM)	ND		0.20	0.063	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	ND		0.20	0.024	ug/L	1
Chrysene	218-01-9	8270D (SIM)	ND		0.20	0.021	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	ND		0.20	0.040	ug/L	1
Fluoranthene	206-44-0	8270D (SIM)	ND		0.20	0.018	ug/L	1
Fluorene	86-73-7	8270D (SIM)	ND		0.20	0.022	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D (SIM)	ND		0.20	0.050	ug/L	1
1-Methylnaphthalene	90-12-0	8270D (SIM)	2.0		0.20	0.025	ug/L	1
2-Methylnaphthalene	91-57-6	8270D (SIM)	2.9		0.20	0.027	ug/L	1
Naphthalene	91-20-3	8270D (SIM)	2.7		0.20	0.030	ug/L	1
Phenanthrene	85-01-8	8270D (SIM)	ND		0.20	0.023	ug/L	1
Pyrene	129-00-0	8270D (SIM)	ND		0.20	0.017	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10		40	20-150
2-Methylnaphthalene-d10		67	20-150

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF05010-002			
Description: HA09GW01 (11-15)				Matrix: Aqueous			
Date Sampled: 06/04/2009 1615							
Date Received: 06/05/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/09/2009 0237	Analyst DLB	Prep Date	Batch 12069
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.80		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	5.0		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	0.21	J	0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	17		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	52-138
Bromofluorobenzene		98	70-147
Toluene-d8		110	76-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-002

Description: HA09GW01 (11-15)

Matrix: Aqueous

Date Sampled: 06/04/2009 1615

Date Received: 06/05/2009

Run 1	Prep Method 3520C	Analytical Method 8270D (SIM)	Dilution 5	Analysis Date 06/14/2009 2134	Analyst DC	Prep Date 06/08/2009 1724	Batch 12078			
Parameter			CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene			83-32-9	8270D (SIM)	ND		1.0	0.11	ug/L	1
Acenaphthylene			208-96-8	8270D (SIM)	ND		1.0	0.12	ug/L	1
Anthracene			120-12-7	8270D (SIM)	ND		1.0	0.081	ug/L	1
Benzo(a)anthracene			56-55-3	8270D (SIM)	ND		1.0	0.096	ug/L	1
Benzo(a)pyrene			50-32-8	8270D (SIM)	ND		1.0	0.10	ug/L	1
Benzo(b)fluoranthene			205-99-2	8270D (SIM)	ND		1.0	0.096	ug/L	1
Benzo(g,h,i)perylene			191-24-2	8270D (SIM)	0.71	J	1.0	0.31	ug/L	1
Benzo(k)fluoranthene			207-08-9	8270D (SIM)	ND		1.0	0.12	ug/L	1
Chrysene			218-01-9	8270D (SIM)	ND		1.0	0.11	ug/L	1
Dibenzo(a,h)anthracene			53-70-3	8270D (SIM)	0.59	J	1.0	0.20	ug/L	1
Fluoranthene			206-44-0	8270D (SIM)	ND		1.0	0.091	ug/L	1
Fluorene			86-73-7	8270D (SIM)	ND		1.0	0.11	ug/L	1
Indeno(1,2,3-c,d)pyrene			193-39-5	8270D (SIM)	0.56	J	1.0	0.25	ug/L	1
1-Methylnaphthalene			90-12-0	8270D (SIM)	5.2		1.0	0.13	ug/L	1
2-Methylnaphthalene			91-57-6	8270D (SIM)	7.3		1.0	0.14	ug/L	1
Naphthalene			91-20-3	8270D (SIM)	6.2		1.0	0.15	ug/L	1
Phenanthrene			85-01-8	8270D (SIM)	ND		1.0	0.12	ug/L	1
Pyrene			129-00-0	8270D (SIM)	ND		1.0	0.086	ug/L	1
Surrogate			Q	Run 1 % Recovery	Acceptance Limits					
Fluoranthene-d10				25	20-150					
2-Methylnaphthalene-d10				58	20-150					

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.		Laboratory ID: KF05010-003	
Description: HA09SB54 (2-4)		Matrix: Solid	
Date Sampled: 06/04/2009 1530		% Solids: 83.3 06/05/2009 2353	
Date Received: 06/05/2009			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	50	06/09/2009 1201	DLB		12101	13.85

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	65	J	110	24	ug/kg	1
Ethylbenzene	100-41-4	8260B	2900		110	37	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		110	8.7	ug/kg	1
Toluene	108-88-3	8260B	ND		110	37	ug/kg	1
Xylenes (total)	1330-20-7	8260B	980		110	63	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		91	47-138
Toluene-d8		89	68-124

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-003

Description: HA09SB54 (2-4)

Matrix: Solid

Date Sampled: 06/04/2009 1530

% Solids: 83.3 06/05/2009 2353

Date Received: 06/05/2009

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	10	06/14/2009 2254	DC	06/08/2009 1730	12041
2	3550C	8270D (SIM)	50	06/17/2009 1636	DC	06/08/2009 1730	12041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D (SIM)	140		40	9.9	ug/kg	1
Acenaphthylene	208-96-8	8270D (SIM)	62		40	11	ug/kg	1
Anthracene	120-12-7	8270D (SIM)	ND		40	6.1	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D (SIM)	ND		40	7.1	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D (SIM)	ND		40	7.9	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	ND		40	6.0	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D (SIM)	ND		40	7.8	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	ND		40	5.7	ug/kg	1
Chrysene	218-01-9	8270D (SIM)	ND		40	5.4	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	ND		40	6.1	ug/kg	1
Fluoranthene	206-44-0	8270D (SIM)	620		40	5.0	ug/kg	1
Fluorene	86-73-7	8270D (SIM)	96		40	6.8	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D (SIM)	ND		40	12	ug/kg	1
1-Methylnaphthalene	90-12-0	8270D (SIM)	420		200	59	ug/kg	2
2-Methylnaphthalene	91-57-6	8270D (SIM)	430		200	59	ug/kg	2
Naphthalene	91-20-3	8270D (SIM)	1700		40	12	ug/kg	1
Phenanthrene	85-01-8	8270D (SIM)	55		40	8.6	ug/kg	1
Pyrene	129-00-0	8270D (SIM)	ND		40	6.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Fluoranthene-d10	N	0.0	20-150	N	0.0	20-150
2-Methylnaphthalene-d10	N	0.0	20-150	N	0.0	20-150

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.		Laboratory ID: KF05010-004	
Description: HA09SB53 (2-4)		Matrix: Solid	
Date Sampled: 06/04/2009 1515		% Solids: 85.3 06/05/2009 2353	
Date Received: 06/05/2009			

Run 1	Prep Method 5035	Analytical Method 8260B	Dilution 2000	Analysis Date 06/09/2009 1225	Analyst DLB	Prep Date	Batch 12101	Sample Wt.(g) 11.43
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	4000	J	5100	1100	ug/kg	1
Ethylbenzene	100-41-4	8260B	32000		5100	1700	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5100	410	ug/kg	1
Toluene	108-88-3	8260B	5600		5100	1700	ug/kg	1
Xylenes (total)	1330-20-7	8260B	180000		5100	3000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	189	53-142
Bromofluorobenzene		129	47-138
Toluene-d8	N	140	68-124

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-004

Description: HA09SB53 (2-4)

Matrix: Solid

Date Sampled: 06/04/2009 1515

% Solids: 85.3 06/05/2009 2353

Date Received: 06/05/2009

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	100	06/15/2009 2055	DC	06/08/2009 1730	12041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D (SIM)	ND		380	95	ug/kg	1
Acenaphthylene	208-96-8	8270D (SIM)	ND		380	110	ug/kg	1
Anthracene	120-12-7	8270D (SIM)	ND		380	59	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D (SIM)	ND		380	68	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D (SIM)	ND		380	76	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	ND		380	58	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D (SIM)	ND		380	75	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	ND		380	55	ug/kg	1
Chrysene	218-01-9	8270D (SIM)	ND		380	52	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	ND		380	59	ug/kg	1
Fluoranthene	206-44-0	8270D (SIM)	ND		380	48	ug/kg	1
Fluorene	86-73-7	8270D (SIM)	ND		380	66	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D (SIM)	ND		380	120	ug/kg	1
1-Methylnaphthalene	90-12-0	8270D (SIM)	6700		380	110	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D (SIM)	10000		380	110	ug/kg	1
Naphthalene	91-20-3	8270D (SIM)	6200		380	110	ug/kg	1
Phenanthrene	85-01-8	8270D (SIM)	ND		380	83	ug/kg	1
Pyrene	129-00-0	8270D (SIM)	ND		380	58	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10	N	0.0	20-150
2-Methylnaphthalene-d10	N	0.0	20-150

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF05010-005			
Description: HA09SB52(4-6)				Matrix: Solid			
Date Sampled: 06/04/2009 1505				% Solids: 85.6 06/05/2009 2353			
Date Received: 06/05/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	50	06/09/2009 1248	DLB		12101	10.79

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	91	J	140	30	ug/kg	1
Ethylbenzene	100-41-4	8260B	350		140	46	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		140	11	ug/kg	1
Toluene	108-88-3	8260B	51	J	140	46	ug/kg	1
Xylenes (total)	1330-20-7	8260B	1800		140	78	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	53-142
Bromofluorobenzene		88	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

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-005

Description: HA09SB52(4-6)

Matrix: Solid

Date Sampled: 06/04/2009 1505

% Solids: 85.6 06/05/2009 2353

Date Received: 06/05/2009

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	100	06/16/2009 1708	DC	06/08/2009 1730	12041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D (SIM)	ND		370	94	ug/kg	1
Acenaphthylene	208-96-8	8270D (SIM)	ND		370	110	ug/kg	1
Anthracene	120-12-7	8270D (SIM)	ND		370	58	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D (SIM)	ND		370	67	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D (SIM)	ND		370	75	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	ND		370	57	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D (SIM)	ND		370	74	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	ND		370	54	ug/kg	1
Chrysene	218-01-9	8270D (SIM)	ND		370	51	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	ND		370	58	ug/kg	1
Fluoranthene	206-44-0	8270D (SIM)	ND		370	48	ug/kg	1
Fluorene	86-73-7	8270D (SIM)	ND		370	65	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D (SIM)	ND		370	110	ug/kg	1
1-Methylnaphthalene	90-12-0	8270D (SIM)	4500		370	110	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D (SIM)	6300		370	110	ug/kg	1
Naphthalene	91-20-3	8270D (SIM)	4100		370	110	ug/kg	1
Phenanthrene	85-01-8	8270D (SIM)	ND		370	82	ug/kg	1
Pyrene	129-00-0	8270D (SIM)	ND		370	57	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10	N	0.0	20-150
2-Methylnaphthalene-d10	N	0.0	20-150

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF05010-006			
Description: HA09SB51(2-4)				Matrix: Solid			
Date Sampled: 06/04/2009 1500				% Solids: 83.6 06/05/2009 2353			
Date Received: 06/05/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	06/08/2009 2038	DLB		12087	12.81

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		2.3	0.51	ug/kg	1
Ethylbenzene	100-41-4	8260B	11		2.3	0.79	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		2.3	0.19	ug/kg	1
Toluene	108-88-3	8260B	ND		2.3	0.79	ug/kg	1
Xylenes (total)	1330-20-7	8260B	91		2.3	1.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	53-142
Bromofluorobenzene		92	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

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-006

Description: HA09SB51(2-4)

Matrix: Solid

Date Sampled: 06/04/2009 1500

% Solids: 83.6 06/05/2009 2353

Date Received: 06/05/2009

Run 1	Prep Method 3550C	Analytical Method 8270D (SIM)	Dilution 5	Analysis Date 06/15/2009 0237	Analyst DC	Prep Date 06/08/2009 1730	Batch 12041			
Parameter			CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene			83-32-9	8270D (SIM)	61		20	5.0	ug/kg	1
Acenaphthylene			208-96-8	8270D (SIM)	ND		20	5.7	ug/kg	1
Anthracene			120-12-7	8270D (SIM)	ND		20	3.0	ug/kg	1
Benzo(a)anthracene			56-55-3	8270D (SIM)	ND		20	3.5	ug/kg	1
Benzo(a)pyrene			50-32-8	8270D (SIM)	ND		20	3.9	ug/kg	1
Benzo(b)fluoranthene			205-99-2	8270D (SIM)	ND		20	3.0	ug/kg	1
Benzo(g,h,i)perylene			191-24-2	8270D (SIM)	ND		20	3.9	ug/kg	1
Benzo(k)fluoranthene			207-08-9	8270D (SIM)	ND		20	2.9	ug/kg	1
Chrysene			218-01-9	8270D (SIM)	ND		20	2.7	ug/kg	1
Dibenzo(a,h)anthracene			53-70-3	8270D (SIM)	ND		20	3.0	ug/kg	1
Fluoranthene			206-44-0	8270D (SIM)	ND		20	2.5	ug/kg	1
Fluorene			86-73-7	8270D (SIM)	ND		20	3.4	ug/kg	1
Indeno(1,2,3-c,d)pyrene			193-39-5	8270D (SIM)	ND		20	6.0	ug/kg	1
1-Methylnaphthalene			90-12-0	8270D (SIM)	480		20	5.9	ug/kg	1
2-Methylnaphthalene			91-57-6	8270D (SIM)	630		20	5.9	ug/kg	1
Naphthalene			91-20-3	8270D (SIM)	220		20	5.8	ug/kg	1
Phenanthrene			85-01-8	8270D (SIM)	ND		20	4.3	ug/kg	1
Pyrene			129-00-0	8270D (SIM)	ND		20	3.0	ug/kg	1
Surrogate			Q	Run 1 % Recovery	Acceptance Limits					
Fluoranthene-d10				58	20-150					
2-Methylnaphthalene-d10				31	20-150					

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.		Laboratory ID: KF05010-007	
Description: HA09SB45(2-4)		Matrix: Solid	
Date Sampled: 06/04/2009 1420		% Solids: 85.8 06/05/2009 2353	
Date Received: 06/05/2009			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	50	06/09/2009 1312	DLB		12101	9.58

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		150	33	ug/kg	1
Ethylbenzene	100-41-4	8260B	1300		150	52	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		150	12	ug/kg	1
Toluene	108-88-3	8260B	ND		150	52	ug/kg	1
Xylenes (total)	1330-20-7	8260B	6400		150	88	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		75	53-142
Bromofluorobenzene		69	47-138
Toluene-d8		70	68-124

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-007

Description: HA09SB45(2-4)

Matrix: Solid

Date Sampled: 06/04/2009 1420

% Solids: 85.8 06/05/2009 2353

Date Received: 06/05/2009

Run 1	Prep Method 3550C	Analytical Method 8270D (SIM)	Dilution 50	Analysis Date 06/15/2009 2149	Analyst DC	Prep Date 06/08/2009 1730	Batch 12041			
Parameter			CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene			83-32-9	8270D (SIM)	ND		190	48	ug/kg	1
Acenaphthylene			208-96-8	8270D (SIM)	ND		190	55	ug/kg	1
Anthracene			120-12-7	8270D (SIM)	ND		190	29	ug/kg	1
Benzo(a)anthracene			56-55-3	8270D (SIM)	ND		190	34	ug/kg	1
Benzo(a)pyrene			50-32-8	8270D (SIM)	ND		190	38	ug/kg	1
Benzo(b)fluoranthene			205-99-2	8270D (SIM)	ND		190	29	ug/kg	1
Benzo(g,h,i)perylene			191-24-2	8270D (SIM)	ND		190	37	ug/kg	1
Benzo(k)fluoranthene			207-08-9	8270D (SIM)	ND		190	28	ug/kg	1
Chrysene			218-01-9	8270D (SIM)	ND		190	26	ug/kg	1
Dibenzo(a,h)anthracene			53-70-3	8270D (SIM)	ND		190	29	ug/kg	1
Fluoranthene			206-44-0	8270D (SIM)	ND		190	24	ug/kg	1
Fluorene			86-73-7	8270D (SIM)	ND		190	33	ug/kg	1
Indeno(1,2,3-c,d)pyrene			193-39-5	8270D (SIM)	ND		190	58	ug/kg	1
1-Methylnaphthalene			90-12-0	8270D (SIM)	2000		190	56	ug/kg	1
2-Methylnaphthalene			91-57-6	8270D (SIM)	2700		190	57	ug/kg	1
Naphthalene			91-20-3	8270D (SIM)	1600		190	56	ug/kg	1
Phenanthrene			85-01-8	8270D (SIM)	ND		190	41	ug/kg	1
Pyrene			129-00-0	8270D (SIM)	ND		190	29	ug/kg	1
Surrogate			Q	Run 1 % Recovery	Acceptance Limits					
Fluoranthene-d10			N	0.0	20-150					
2-Methylnaphthalene-d10			N	0.0	20-150					

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.		Laboratory ID: KF05010-008	
Description: HA09SB44(4-6)		Matrix: Solid	
Date Sampled: 06/04/2009 1415		% Solids: 80.1 06/05/2009 2353	
Date Received: 06/05/2009			

Run 1	Prep Method 5035	Analytical Method 8260B	Dilution 500	Analysis Date 06/09/2009 1335	Analyst DLB	Prep Date	Batch 12101	Sample Wt.(g) 12.50
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	330	J	1200	270	ug/kg	1
Ethylbenzene	100-41-4	8260B	9400		1200	420	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1200	100	ug/kg	1
Toluene	108-88-3	8260B	ND		1200	420	ug/kg	1
Xylenes (total)	1330-20-7	8260B	38000		1200	720	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		94	47-138
Toluene-d8	N	134	68-124

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-008

Description: HA09SB44(4-6)

Matrix: Solid

Date Sampled: 06/04/2009 1415

% Solids: 80.1 06/05/2009 2353

Date Received: 06/05/2009

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	1	06/13/2009 0237	DC	06/08/2009 1730	12041
2	3550C	8270D (SIM)	20	06/15/2009 0330	DC	06/08/2009 1730	12041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D (SIM)	62		4.1	1.0	ug/kg	1
Acenaphthylene	208-96-8	8270D (SIM)	50		4.1	1.2	ug/kg	1
Anthracene	120-12-7	8270D (SIM)	20		4.1	0.63	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D (SIM)	21		4.1	0.73	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D (SIM)	16		4.1	0.82	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	20		4.1	0.62	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D (SIM)	6.3		4.1	0.80	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	9.2		4.1	0.59	ug/kg	1
Chrysene	218-01-9	8270D (SIM)	18		4.1	0.56	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	ND		4.1	0.63	ug/kg	1
Fluoranthene	206-44-0	8270D (SIM)	62		4.1	0.52	ug/kg	1
Fluorene	86-73-7	8270D (SIM)	40		4.1	0.70	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D (SIM)	5.8		4.1	1.2	ug/kg	1
1-Methylnaphthalene	90-12-0	8270D (SIM)	1400		82	24	ug/kg	2
2-Methylnaphthalene	91-57-6	8270D (SIM)	2000		82	24	ug/kg	2
Naphthalene	91-20-3	8270D (SIM)	1000		82	24	ug/kg	2
Phenanthrene	85-01-8	8270D (SIM)	65		4.1	0.89	ug/kg	1
Pyrene	129-00-0	8270D (SIM)	96		4.1	0.62	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Fluoranthene-d10		65	20-150	N	0.0	20-150
2-Methylnaphthalene-d10		148	20-150	N	0.0	20-150

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.		Laboratory ID: KF05010-009	
Description: HA09SB43(4-6)		Matrix: Solid	
Date Sampled: 06/04/2009 1405		% Solids: 85.1 06/05/2009 2353	
Date Received: 06/05/2009			

Run 1	Prep Method 5035	Analytical Method 8260B	Dilution 1	Analysis Date 06/08/2009 2008	Analyst DLB	Prep Date	Batch 12087	Sample Wt.(g) 7.46	
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		3.9	0.87	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		3.9	1.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		3.9	0.32	ug/kg	1
Toluene	108-88-3	8260B	ND		3.9	1.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	3.3	J	3.9	2.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		80	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		84	68-124

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-009

Description: HA09SB43(4-6)

Matrix: Solid

Date Sampled: 06/04/2009 1405

% Solids: 85.1 06/05/2009 2353

Date Received: 06/05/2009

Run 1	Prep Method 3550C	Analytical Method 8270D (SIM)	Dilution 1	Analysis Date 06/15/2009 2215	Analyst DC	Prep Date 06/08/2009 1730	Batch 12041								
								CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene				83-32-9	8270D (SIM)	ND			3.8	0.95	ug/kg	1			
Acenaphthylene				208-96-8	8270D (SIM)	ND			3.8	1.1	ug/kg	1			
Anthracene				120-12-7	8270D (SIM)	ND			3.8	0.59	ug/kg	1			
Benzo(a)anthracene				56-55-3	8270D (SIM)	ND			3.8	0.68	ug/kg	1			
Benzo(a)pyrene				50-32-8	8270D (SIM)	ND			3.8	0.76	ug/kg	1			
Benzo(b)fluoranthene				205-99-2	8270D (SIM)	ND			3.8	0.57	ug/kg	1			
Benzo(g,h,i)perylene				191-24-2	8270D (SIM)	ND			3.8	0.75	ug/kg	1			
Benzo(k)fluoranthene				207-08-9	8270D (SIM)	ND			3.8	0.55	ug/kg	1			
Chrysene				218-01-9	8270D (SIM)	ND			3.8	0.52	ug/kg	1			
Dibenzo(a,h)anthracene				53-70-3	8270D (SIM)	ND			3.8	0.59	ug/kg	1			
Fluoranthene				206-44-0	8270D (SIM)	ND			3.8	0.48	ug/kg	1			
Fluorene				86-73-7	8270D (SIM)	ND			3.8	0.66	ug/kg	1			
Indeno(1,2,3-c,d)pyrene				193-39-5	8270D (SIM)	ND			3.8	1.1	ug/kg	1			
1-Methylnaphthalene				90-12-0	8270D (SIM)	ND			3.8	1.1	ug/kg	1			
2-Methylnaphthalene				91-57-6	8270D (SIM)	ND			3.8	1.1	ug/kg	1			
Naphthalene				91-20-3	8270D (SIM)	ND			3.8	1.1	ug/kg	1			
Phenanthrene				85-01-8	8270D (SIM)	ND			3.8	0.83	ug/kg	1			
Pyrene				129-00-0	8270D (SIM)	ND			3.8	0.57	ug/kg	1			
Surrogate			Q	Run 1 % Recovery	Acceptance Limits										
Fluoranthene-d10				34	20-150										
2-Methylnaphthalene-d10				23	20-150										

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.		Laboratory ID: KF05010-010	
Description: HA09SB50(2-4)		Matrix: Solid	
Date Sampled: 06/04/2009 1400		% Solids: 84.2 06/05/2009 2353	
Date Received: 06/05/2009			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	400	06/09/2009 1358	DLB		12101	12.38

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	1200		960	210	ug/kg	1
Ethylbenzene	100-41-4	8260B	6100		960	330	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		960	77	ug/kg	1
Toluene	108-88-3	8260B	520	J	960	330	ug/kg	1
Xylenes (total)	1330-20-7	8260B	27000		960	560	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		79	53-142
Bromofluorobenzene		83	47-138
Toluene-d8		80	68-124

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-010

Description: HA09SB50(2-4)

Matrix: Solid

Date Sampled: 06/04/2009 1400

% Solids: 84.2 06/05/2009 2353

Date Received: 06/05/2009

Run 1	Prep Method 3550C	Analytical Method 8270D (SIM)	Dilution 10	Analysis Date 06/15/2009 2242	Analyst DC	Prep Date 06/08/2009 1730	Batch 12041			
Parameter			CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene			83-32-9	8270D (SIM)	55		39	9.8	ug/kg	1
Acenaphthylene			208-96-8	8270D (SIM)	49		39	11	ug/kg	1
Anthracene			120-12-7	8270D (SIM)	ND		39	6.0	ug/kg	1
Benzo(a)anthracene			56-55-3	8270D (SIM)	ND		39	7.0	ug/kg	1
Benzo(a)pyrene			50-32-8	8270D (SIM)	ND		39	7.8	ug/kg	1
Benzo(b)fluoranthene			205-99-2	8270D (SIM)	ND		39	5.9	ug/kg	1
Benzo(g,h,i)perylene			191-24-2	8270D (SIM)	ND		39	7.7	ug/kg	1
Benzo(k)fluoranthene			207-08-9	8270D (SIM)	ND		39	5.7	ug/kg	1
Chrysene			218-01-9	8270D (SIM)	ND		39	5.3	ug/kg	1
Dibenzo(a,h)anthracene			53-70-3	8270D (SIM)	ND		39	6.0	ug/kg	1
Fluoranthene			206-44-0	8270D (SIM)	ND		39	5.0	ug/kg	1
Fluorene			86-73-7	8270D (SIM)	46		39	6.8	ug/kg	1
Indeno(1,2,3-c,d)pyrene			193-39-5	8270D (SIM)	ND		39	12	ug/kg	1
1-Methylnaphthalene			90-12-0	8270D (SIM)	910		39	12	ug/kg	1
2-Methylnaphthalene			91-57-6	8270D (SIM)	1200		39	12	ug/kg	1
Naphthalene			91-20-3	8270D (SIM)	370		39	11	ug/kg	1
Phenanthrene			85-01-8	8270D (SIM)	ND		39	8.5	ug/kg	1
Pyrene			129-00-0	8270D (SIM)	ND		39	5.9	ug/kg	1
Surrogate			Q	Run 1 % Recovery	Acceptance Limits					
Fluoranthene-d10				60	20-150					
2-Methylnaphthalene-d10				147	20-150					

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.		Laboratory ID: KF05010-011	
Description: HA09SB49(2-4)		Matrix: Solid	
Date Sampled: 06/04/2009 1350		% Solids: 85.4 06/05/2009 2353	
Date Received: 06/05/2009			

Run 1	Prep Method 5035	Analytical Method 8260B	Dilution 1000	Analysis Date 06/09/2009 1524	Analyst DLB	Prep Date	Batch 12101	Sample Wt.(g) 8.53
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	7400		3400	750	ug/kg	1
Ethylbenzene	100-41-4	8260B	50000		3400	1200	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		3400	270	ug/kg	1
Toluene	108-88-3	8260B	6600		3400	1200	ug/kg	1
Xylenes (total)	1330-20-7	8260B	180000		3400	2000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	167	53-142
Bromofluorobenzene		123	47-138
Toluene-d8		105	68-124

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-011

Description: HA09SB49(2-4)

Matrix: Solid

Date Sampled: 06/04/2009 1350

% Solids: 85.4 06/05/2009 2353

Date Received: 06/05/2009

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D (SIM)	100	06/15/2009 2308	DC	06/08/2009 1730	12041

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D (SIM)	ND		380	95	ug/kg	1
Acenaphthylene	208-96-8	8270D (SIM)	ND		380	110	ug/kg	1
Anthracene	120-12-7	8270D (SIM)	ND		380	58	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D (SIM)	ND		380	68	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D (SIM)	ND		380	76	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	ND		380	57	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D (SIM)	ND		380	74	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	ND		380	55	ug/kg	1
Chrysene	218-01-9	8270D (SIM)	ND		380	52	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	ND		380	58	ug/kg	1
Fluoranthene	206-44-0	8270D (SIM)	ND		380	48	ug/kg	1
Fluorene	86-73-7	8270D (SIM)	ND		380	65	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D (SIM)	ND		380	110	ug/kg	1
1-Methylnaphthalene	90-12-0	8270D (SIM)	6300		380	110	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D (SIM)	8900		380	110	ug/kg	1
Naphthalene	91-20-3	8270D (SIM)	4500		380	110	ug/kg	1
Phenanthrene	85-01-8	8270D (SIM)	ND		380	82	ug/kg	1
Pyrene	129-00-0	8270D (SIM)	ND		380	57	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Fluoranthene-d10	N	0.0	20-150
2-Methylnaphthalene-d10	N	0.0	20-150

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.	Laboratory ID: KF05010-012
Description: HA09SB48(2-4)	Matrix: Solid
Date Sampled: 06/04/2009 1340	% Solids: 84.1 06/05/2009 2353
Date Received: 06/05/2009	

Run 1	Prep Method 5035	Analytical Method 8260B	Dilution 500	Analysis Date 06/09/2009 1445	Analyst DLB	Prep Date	Batch 12101	Sample Wt.(g) 7.98
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	1700	J	1900	410	ug/kg	1
Ethylbenzene	100-41-4	8260B	12000		1900	630	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1900	150	ug/kg	1
Toluene	108-88-3	8260B	23000		1900	630	ug/kg	1
Xylenes (total)	1330-20-7	8260B	53000		1900	1100	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		64	53-142
Bromofluorobenzene		62	47-138
Toluene-d8	N	51	68-124

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF05010-012

Description: HA09SB48(2-4)

Matrix: Solid

Date Sampled: 06/04/2009 1340

% Solids: 84.1 06/05/2009 2353

Date Received: 06/05/2009

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3550C	8270D (SIM)	200	06/16/2009 1735	DC	06/08/2009 1730	12041		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Acenaphthene	83-32-9	8270D (SIM)	930		770	190	ug/kg	1	
Acenaphthylene	208-96-8	8270D (SIM)	ND		770	220	ug/kg	1	
Anthracene	120-12-7	8270D (SIM)	ND		770	120	ug/kg	1	
Benzo(a)anthracene	56-55-3	8270D (SIM)	ND		770	140	ug/kg	1	
Benzo(a)pyrene	50-32-8	8270D (SIM)	ND		770	150	ug/kg	1	
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	ND		770	120	ug/kg	1	
Benzo(g,h,i)perylene	191-24-2	8270D (SIM)	ND		770	150	ug/kg	1	
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	ND		770	110	ug/kg	1	
Chrysene	218-01-9	8270D (SIM)	ND		770	100	ug/kg	1	
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	ND		770	120	ug/kg	1	
Fluoranthene	206-44-0	8270D (SIM)	ND		770	98	ug/kg	1	
Fluorene	86-73-7	8270D (SIM)	ND		770	130	ug/kg	1	
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D (SIM)	ND		770	230	ug/kg	1	
1-Methylnaphthalene	90-12-0	8270D (SIM)	27000		770	230	ug/kg	1	
2-Methylnaphthalene	91-57-6	8270D (SIM)	36000		770	230	ug/kg	1	
Naphthalene	91-20-3	8270D (SIM)	23000		770	230	ug/kg	1	
Phenanthrene	85-01-8	8270D (SIM)	ND		770	170	ug/kg	1	
Pyrene	129-00-0	8270D (SIM)	ND		770	120	ug/kg	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Fluoranthene-d10	N	0.0	20-150						
2-Methylnaphthalene-d10	N	0.0	20-150						

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF05010-013			
Description: Trip Blank				Matrix: Aqueous			
Date Sampled: 06/05/2009 0930							
Date Received: 06/05/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/09/2009 0259	Analyst DLB	Prep Date	Batch 12069
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	52-138
Bromofluorobenzene		96	70-147
Toluene-d8		108	76-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: KQ12069-001

Matrix: Aqueous

Batch: 12069

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	06/08/2009 2302
Ethylbenzene	ND		1	0.50	0.17	ug/L	06/08/2009 2302
Toluene	ND		1	0.50	0.17	ug/L	06/08/2009 2302
Xylenes (total)	ND		1	0.50	0.17	ug/L	06/08/2009 2302
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		95	70-130				
1,2-Dichloroethane-d4		106	70-130				
Toluene-d8		107	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 $\geq$ 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: KQ12069-002

Matrix: Aqueous

Batch: 12069

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	50		1	101	70-130	06/08/2009 2136
Ethylbenzene	50	50		1	99	70-130	06/08/2009 2136
Toluene	50	50		1	99	70-130	06/08/2009 2136
Xylenes (total)	100	99		1	99	70-130	06/08/2009 2136
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	70-130				
1,2-Dichloroethane-d4		102	70-130				
Toluene-d8		108	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 $\geq$ 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: KQ12069-003

Matrix: Aqueous

Batch: 12069

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	51		1	102	1.4	70-130	20	06/08/2009 2158
Ethylbenzene	50	51		1	103	3.6	70-130	20	06/08/2009 2158
Toluene	50	50		1	100	0.55	70-130	20	06/08/2009 2158
Xylenes (total)	100	100		1	101	1.9	70-130	20	06/08/2009 2158
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		99	70-130						
1,2-Dichloroethane-d4		104	70-130						
Toluene-d8		107	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 $\geq$ 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: KQ12087-001

Matrix: Solid

Batch: 12087

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	1.1	ug/kg	06/08/2009 1411
Ethylbenzene	ND		1	5.0	1.7	ug/kg	06/08/2009 1411
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/kg	06/08/2009 1411
Toluene	ND		1	5.0	1.7	ug/kg	06/08/2009 1411
Xylenes (total)	ND		1	5.0	2.9	ug/kg	06/08/2009 1411
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		99	47-138				
1,2-Dichloroethane-d4		73	53-142				
Toluene-d8		81	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 $\geq$ 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: KQ12087-002

Matrix: Solid

Batch: 12087

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	46		1	93	69-123	06/08/2009 1300
Ethylbenzene	50	48		1	96	59-128	06/08/2009 1300
Methyl tertiary butyl ether (MTBE)	50	41		1	82	72-122	06/08/2009 1300
Toluene	50	46		1	92	61-129	06/08/2009 1300
Xylenes (total)	100	93		1	93	58-128	06/08/2009 1300
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		99	47-138				
1,2-Dichloroethane-d4		72	53-142				
Toluene-d8		81	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 $\geq$ 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: KQ12087-003

Matrix: Solid

Batch: 12087

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	45		1	90	3.1	69-123	20	06/08/2009 1324
Ethylbenzene	50	47		1	93	3.3	59-128	20	06/08/2009 1324
Methyl tertiary butyl ether (MTBE)	50	40		1	79	3.3	72-122	20	06/08/2009 1324
Toluene	50	45		1	90	2.4	61-129	20	06/08/2009 1324
Xylenes (total)	100	90		1	90	3.5	58-128	20	06/08/2009 1324
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		100	47-138						
1,2-Dichloroethane-d4		73	53-142						
Toluene-d8		81	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 $\geq$ 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: KQ12101-001

Matrix: Solid

Batch: 12101

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		50	250	55	ug/kg	06/09/2009 1043
Ethylbenzene	ND		50	250	85	ug/kg	06/09/2009 1043
Methyl tertiary butyl ether (MTBE)	ND		50	250	20	ug/kg	06/09/2009 1043
Toluene	ND		50	250	85	ug/kg	06/09/2009 1043
Xylenes (total)	ND		50	250	140	ug/kg	06/09/2009 1043
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		108	47-138				
1,2-Dichloroethane-d4		109	53-142				
Toluene-d8		108	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 $\geq$ 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: KQ12101-002

Matrix: Solid

Batch: 12101

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	2500	2300		50	91	69-123	06/09/2009 0933
Ethylbenzene	2500	2300		50	93	59-128	06/09/2009 0933
Methyl tertiary butyl ether (MTBE)	2500	2000		50	79	72-122	06/09/2009 0933
Toluene	2500	2200		50	89	61-129	06/09/2009 0933
Xylenes (total)	5000	4500		50	90	58-128	06/09/2009 0933
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		102	47-138				
1,2-Dichloroethane-d4		101	53-142				
Toluene-d8		101	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 $\geq$ 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: KQ12101-003

Matrix: Solid

Batch: 12101

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	2500	2600		50	102	11	69-123	20	06/09/2009 0956
Ethylbenzene	2500	2600		50	102	9.4	59-128	20	06/09/2009 0956
Methyl tertiary butyl ether (MTBE)	2500	2100		50	82	4.0	72-122	20	06/09/2009 0956
Toluene	2500	2500		50	99	11	61-129	20	06/09/2009 0956
Xylenes (total)	5000	5000		50	99	10	58-128	20	06/09/2009 0956
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		107	47-138						
1,2-Dichloroethane-d4		104	53-142						
Toluene-d8		105	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 $\geq$ 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 (SIM) - MB

Sample ID: KQ12041-001

Matrix: Solid

Batch: 12041

Prep Method: 3550C

Analytical Method: 8270D (SIM)

Prep Date: 06/08/2009 1730

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1-Methylnaphthalene	ND		1	3.3	0.98	ug/kg	06/12/2009 2211
2-Methylnaphthalene	ND		1	3.3	0.99	ug/kg	06/12/2009 2211
Acenaphthene	ND		1	3.3	0.83	ug/kg	06/12/2009 2211
Acenaphthylene	ND		1	3.3	0.95	ug/kg	06/12/2009 2211
Anthracene	ND		1	3.3	0.51	ug/kg	06/12/2009 2211
Benzo(a)anthracene	ND		1	3.3	0.59	ug/kg	06/12/2009 2211
Benzo(a)pyrene	ND		1	3.3	0.66	ug/kg	06/12/2009 2211
Benzo(b)fluoranthene	ND		1	3.3	0.50	ug/kg	06/12/2009 2211
Benzo(g,h,i)perylene	ND		1	3.3	0.65	ug/kg	06/12/2009 2211
Benzo(k)fluoranthene	ND		1	3.3	0.48	ug/kg	06/12/2009 2211
Chrysene	ND		1	3.3	0.45	ug/kg	06/12/2009 2211
Dibenzo(a,h)anthracene	ND		1	3.3	0.51	ug/kg	06/12/2009 2211
Fluoranthene	ND		1	3.3	0.42	ug/kg	06/12/2009 2211
Fluorene	ND		1	3.3	0.57	ug/kg	06/12/2009 2211
Indeno(1,2,3-c,d)pyrene	ND		1	3.3	1.0	ug/kg	06/12/2009 2211
Naphthalene	ND		1	3.3	0.97	ug/kg	06/12/2009 2211
Phenanthrene	ND		1	3.3	0.72	ug/kg	06/12/2009 2211
Pyrene	ND		1	3.3	0.50	ug/kg	06/12/2009 2211
Surrogate	Q	% Rec	Acceptance Limit				
2-Methylnaphthalene-d10		62	20-150				
Fluoranthene-d10		78	20-150				

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 $\geq$ 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 (SIM) - LCS

Sample ID: KQ12041-002

Matrix: Solid

Batch: 12041

Prep Method: 3550C

Analytical Method: 8270D (SIM)

Prep Date: 06/08/2009 1730

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
2-Methylnaphthalene	13	19		1	149	20-150	06/13/2009 1445
Acenaphthene	13	4.0		1	31	20-150	06/13/2009 1445
Acenaphthylene	13	6.5		1	50	20-150	06/13/2009 1445
Anthracene	13	6.8		1	52	20-150	06/13/2009 1445
Benzo(a)anthracene	13	7.0		1	54	20-150	06/13/2009 1445
Benzo(a)pyrene	13	10		1	76	20-150	06/13/2009 1445
Benzo(b)fluoranthene	13	7.1		1	55	20-150	06/13/2009 1445
Benzo(g,h,i)perylene	13	9.2		1	70	20-150	06/13/2009 1445
Benzo(k)fluoranthene	13	7.7		1	59	20-150	06/13/2009 1445
Chrysene	13	7.2		1	56	20-150	06/13/2009 1445
Dibenzo(a,h)anthracene	13	8.6		1	66	20-150	06/13/2009 1445
Fluoranthene	13	7.5		1	58	20-150	06/13/2009 1445
Fluorene	13	4.2		1	32	20-150	06/13/2009 1445
Indeno(1,2,3-c,d)pyrene	13	9.1		1	70	20-150	06/13/2009 1445
Naphthalene	13	18		1	142	20-150	06/13/2009 1445
Phenanthrene	13	6.4		1	49	20-150	06/13/2009 1445
Pyrene	13	7.9		1	60	20-150	06/13/2009 1445
Surrogate	Q	% Rec	Acceptance Limit				
2-Methylnaphthalene-d10		40	20-150				
Fluoranthene-d10		52	20-150				

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 $\geq$ 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 (SIM) - MS

Sample ID: KF05010-003MS

Matrix: Solid

Batch: 12041

Prep Method: 3550C

Analytical Method: 8270D (SIM)

Prep Date: 06/08/2009 1730

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	140	16	250	N	10	766	30-130	06/14/2009 2320
Acenaphthylene	62	16	130	N	10	443	30-130	06/14/2009 2320
Anthracene	ND	16	100	N	10	640	30-130	06/14/2009 2320
Benzo(a)anthracene	ND	16	24	N	10	156	30-130	06/14/2009 2320
Benzo(a)pyrene	ND	16	49	N	10	317	30-130	06/14/2009 2320
Benzo(b)fluoranthene	ND	16	38	N	10	242	30-130	06/14/2009 2320
Benzo(g,h,i)perylene	ND	16	44	N	10	280	30-130	06/14/2009 2320
Benzo(k)fluoranthene	ND	16	26	N	10	166	30-130	06/14/2009 2320
Chrysene	ND	16	16		10	102	30-130	06/14/2009 2320
Dibenzo(a,h)anthracene	ND	16	27	N	10	176	30-130	06/14/2009 2320
Fluoranthene	620	16	5700	N	10	32900	30-130	06/14/2009 2320
Fluorene	96	16	160	N	10	408	30-130	06/14/2009 2320
Indeno(1,2,3-c,d)pyrene	ND	16	33	N	10	213	30-130	06/14/2009 2320
2-Methylnaphthalene	430	16	13000	N	10	55300	30-130	06/14/2009 2320
Naphthalene	1700	16	7300	N	10	35900	30-130	06/14/2009 2320
Phenanthrene	55	16	210	N	10	995	30-130	06/14/2009 2320
Pyrene	ND	16	100	N	10	644	30-130	06/14/2009 2320
Surrogate	Q	% Rec	Acceptance Limit					
Fluoranthene-d10	N	0.0	20-150					
2-Methylnaphthalene-d10	N	0.0	20-150					

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 $\geq$ 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 (SIM) - MSD

Sample ID: KF05010-003MD

Matrix: Solid

Batch: 12041

Prep Method: 3550C

Analytical Method: 8270D (SIM)

Prep Date: 06/08/2009 1730

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	140	15	210	N	10	491	19	30-130	20	06/14/2009 2347
Acenaphthylene	62	15	120	N	10	405	5.5	30-130	20	06/14/2009 2347
Anthracene	ND	15	39	N,+	10	253	88	30-130	20	06/14/2009 2347
Benzo(a)anthracene	ND	15	16	+	10	101	44	30-130	20	06/14/2009 2347
Benzo(a)pyrene	ND	15	29	N,+	10	192	50	30-130	20	06/14/2009 2347
Benzo(b)fluoranthene	ND	15	21	N,+	10	140	55	30-130	20	06/14/2009 2347
Benzo(g,h,i)perylene	ND	15	43	N	10	281	1.3	30-130	20	06/14/2009 2347
Benzo(k)fluoranthene	ND	15	14	+	10	94	57	30-130	20	06/14/2009 2347
Chrysene	ND	15	11	+	10	71	37	30-130	20	06/14/2009 2347
Dibenzo(a,h)anthracene	ND	15	34	N,+	10	221	21	30-130	20	06/14/2009 2347
Fluoranthene	620	15	1500	N,+	10	6020	120	30-130	20	06/14/2009 2347
Fluorene	96	15	130	N,+	10	212	22	30-130	20	06/14/2009 2347
Indeno(1,2,3-c,d)pyrene	ND	15	35	N	10	228	5.2	30-130	20	06/14/2009 2347
2-Methylnaphthalene	430	15	4600	N,+	10	2530	95	30-130	20	06/14/2009 2347
Naphthalene	1700	15	2900	N,+	10	7700	86	30-130	20	06/14/2009 2347
Phenanthrene	55	15	74	+	10	126	95	30-130	20	06/14/2009 2347
Pyrene	ND	15	42	N,+	10	272	83	30-130	20	06/14/2009 2347
Surrogate	Q	% Rec	Acceptance Limit							
Fluoranthene-d10	N	0.0	20-150							
2-Methylnaphthalene-d10	N	0.0	20-150							

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 (SIM) - MB

Sample ID: KQ12078-001

Matrix: Aqueous

Batch: 12078

Prep Method: 3520C

Analytical Method: 8270D (SIM)

Prep Date: 06/08/2009 1724

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1-Methylnaphthalene	ND		1	0.20	0.025	ug/L	06/13/2009 0832
2-Methylnaphthalene	ND		1	0.20	0.027	ug/L	06/13/2009 0832
Acenaphthene	ND		1	0.20	0.021	ug/L	06/13/2009 0832
Acenaphthylene	ND		1	0.20	0.024	ug/L	06/13/2009 0832
Anthracene	ND		1	0.20	0.016	ug/L	06/13/2009 0832
Benzo(a)anthracene	ND		1	0.20	0.019	ug/L	06/13/2009 0832
Benzo(a)pyrene	ND		1	0.20	0.020	ug/L	06/13/2009 0832
Benzo(b)fluoranthene	ND		1	0.20	0.019	ug/L	06/13/2009 0832
Benzo(g,h,i)perylene	ND		1	0.20	0.062	ug/L	06/13/2009 0832
Benzo(k)fluoranthene	ND		1	0.20	0.024	ug/L	06/13/2009 0832
Chrysene	ND		1	0.20	0.021	ug/L	06/13/2009 0832
Dibenzo(a,h)anthracene	ND		1	0.20	0.040	ug/L	06/13/2009 0832
Fluoranthene	ND		1	0.20	0.018	ug/L	06/13/2009 0832
Fluorene	ND		1	0.20	0.022	ug/L	06/13/2009 0832
Indeno(1,2,3-c,d)pyrene	ND		1	0.20	0.050	ug/L	06/13/2009 0832
Naphthalene	ND		1	0.20	0.030	ug/L	06/13/2009 0832
Phenanthrene	ND		1	0.20	0.023	ug/L	06/13/2009 0832
Pyrene	ND		1	0.20	0.017	ug/L	06/13/2009 0832
Surrogate	Q	% Rec	Acceptance Limit				
2-Methylnaphthalene-d10		66	20-150				
Fluoranthene-d10		74	20-150				

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 $\geq$ 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 (SIM) - LCS

Sample ID: KQ12078-002

Matrix: Aqueous

Batch: 12078

Prep Method: 3520C

Analytical Method: 8270D (SIM)

Prep Date: 06/08/2009 1724

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
2-Methylnaphthalene	0.40	0.27		1	67	30-150	06/13/2009 0858
Acenaphthene	0.40	0.28		1	70	20-150	06/13/2009 0858
Acenaphthylene	0.40	0.39		1	97	30-130	06/13/2009 0858
Anthracene	0.40	0.30		1	74	20-150	06/13/2009 0858
Benzo(a)anthracene	0.40	0.29		1	72	30-150	06/13/2009 0858
Benzo(a)pyrene	0.40	0.36		1	90	20-150	06/13/2009 0858
Benzo(b)fluoranthene	0.40	0.30		1	74	30-150	06/13/2009 0858
Benzo(g,h,i)perylene	0.40	0.29		1	72	20-150	06/13/2009 0858
Benzo(k)fluoranthene	0.40	0.33		1	84	30-150	06/13/2009 0858
Chrysene	0.40	0.28		1	71	20-150	06/13/2009 0858
Dibenzo(a,h)anthracene	0.40	0.29		1	72	30-150	06/13/2009 0858
Fluoranthene	0.40	0.29		1	72	20-150	06/13/2009 0858
Fluorene	0.40	0.30		1	76	30-150	06/13/2009 0858
Indeno(1,2,3-c,d)pyrene	0.40	0.29		1	72	20-150	06/13/2009 0858
Naphthalene	0.40	0.29		1	72	30-150	06/13/2009 0858
Phenanthrene	0.40	0.29		1	72	20-150	06/13/2009 0858
Pyrene	0.40	0.39		1	97	30-150	06/13/2009 0858
Surrogate	Q	% Rec	Acceptance Limit				
2-Methylnaphthalene-d10		70	20-150				
Fluoranthene-d10		74	20-150				

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 $\geq$ 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 (SIM) - MS

Sample ID: KF05010-002MS

Matrix: Aqueous

Batch: 12078

Prep Method: 3520C

Analytical Method: 8270D (SIM)

Prep Date: 06/08/2009 1724

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	0.87	0.28		5	33	30-130	06/14/2009 2201
Acenaphthylene	ND	0.87	0.39		5	45	30-130	06/14/2009 2201
Anthracene	ND	0.87	0.23	N	5	26	30-130	06/14/2009 2201
Benzo(a)anthracene	ND	0.87	0.21	N	5	24	30-130	06/14/2009 2201
Benzo(a)pyrene	ND	0.87	0.34		5	39	30-130	06/14/2009 2201
Benzo(b)fluoranthene	ND	0.87	0.23	N	5	26	30-130	06/14/2009 2201
Benzo(g,h,i)perylene	0.71	0.87	0.61	N	5	-12	30-130	06/14/2009 2201
Benzo(k)fluoranthene	ND	0.87	0.23	N	5	26	30-130	06/14/2009 2201
Chrysene	ND	0.87	0.20	N	5	23	30-130	06/14/2009 2201
Dibenzo(a,h)anthracene	0.59	0.87	0.67	N	5	9.5	30-130	06/14/2009 2201
Fluoranthene	ND	0.87	0.22	N	5	26	30-130	06/14/2009 2201
Fluorene	ND	0.87	0.26	N	5	29	30-130	06/14/2009 2201
Indeno(1,2,3-c,d)pyrene	0.56	0.87	0.55	N	5	-1.5	30-130	06/14/2009 2201
2-Methylnaphthalene	7.3	0.87	1.7	N	5	-648	30-130	06/14/2009 2201
Naphthalene	6.2	0.87	1.8	N	5	-496	30-130	06/14/2009 2201
Phenanthrene	ND	0.87	0.26		5	30	30-130	06/14/2009 2201
Pyrene	ND	0.87	0.25	N	5	28	30-130	06/14/2009 2201
Surrogate	Q	% Rec	Acceptance Limit					
Fluoranthene-d10		62	20-150					
2-Methylnaphthalene-d10		66	20-150					

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 $\geq$ 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 (SIM) - MSD

Sample ID: KF05010-002MD

Matrix: Aqueous

Batch: 12078

Prep Method: 3520C

Analytical Method: 8270D (SIM)

Prep Date: 06/08/2009 1724

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	0.87	0.28		5	33	0.35	30-130	20	06/14/2009 2227
Acenaphthylene	ND	0.87	0.37		5	42	6.5	30-130	20	06/14/2009 2227
Anthracene	ND	0.87	0.22	N	5	25	2.7	30-130	20	06/14/2009 2227
Benzo(a)anthracene	ND	0.87	0.21	N	5	24	1.5	30-130	20	06/14/2009 2227
Benzo(a)pyrene	ND	0.87	0.28		5	33	16	30-130	20	06/14/2009 2227
Benzo(b)fluoranthene	ND	0.87	0.24	N	5	28	6.9	30-130	20	06/14/2009 2227
Benzo(g,h,i)perylene	0.71	0.87	0.59	N	5	-14	3.6	30-130	20	06/14/2009 2227
Benzo(k)fluoranthene	ND	0.87	0.27		5	31	18	30-130	20	06/14/2009 2227
Chrysene	ND	0.87	0.23	N	5	26	14	30-130	20	06/14/2009 2227
Dibenzo(a,h)anthracene	0.59	0.87	0.50	N, +	5	-10	29	30-130	20	06/14/2009 2227
Fluoranthene	ND	0.87	0.24	N	5	28	9.2	30-130	20	06/14/2009 2227
Fluorene	ND	0.87	0.27		5	31	6.4	30-130	20	06/14/2009 2227
Indeno(1,2,3-c,d)pyrene	0.56	0.87	0.50	N	5	-7.1	9.2	30-130	20	06/14/2009 2227
2-Methylnaphthalene	7.3	0.87	1.4	N	5	-680	18	30-130	20	06/14/2009 2227
Naphthalene	6.2	0.87	1.5	N	5	-532	19	30-130	20	06/14/2009 2227
Phenanthrene	ND	0.87	0.26		5	30	0.27	30-130	20	06/14/2009 2227
Pyrene	ND	0.87	0.26		5	30	6.7	30-130	20	06/14/2009 2227
Surrogate	Q	% Rec	Acceptance Limit							
Fluoranthene-d10		87	20-150							
2-Methylnaphthalene-d10		54	20-150							

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 $\geq$ 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



Page 1 of 1

CHAIN-OF-CUSTODY RECORD

Laboratory Task Order No./P.O. No.

Project Number/Name GPO8HAFS.H89A.K6-0EX

ANALYSIS / METHOD / SIZE

Project Location Hunter Army Airfield HAA-9

Laboratory Shealy

Project Manager Chuck Bantz

Sampler(s)/Affiliation Josh Frazell/Enrica Moller Arcadis

KF05010

BTX PAH

Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	Remarks	Total
HA09G601(6-10)	L	6-4-09/1600	3	2	5
HA09G601(11-15)	L	6-4-09/1615	3	2	1
HA09SB54(2-4)	S	6-4-09/1530	4	1	
HA09SB53(2-4)	S	6-4-09/1515	4	1	
HA09SB52(4-6)	S	6-4-09/1505	4	1	
HA09SB51(2-4)	S	6-4-09/1500	4	1	
HA09SB45(2-4)	S	6-4-09/1430	4	1	
HA09SB44(4-6)	S	6-4-09/1415	4	1	
HA09SB43(4-6)	S	6-4-09/1405	4	1	
HA09SB50(2-4)	S	6-4-09/1400	4	1	
HA09SB49(2-4)	S	6-4-09/1350	4	1	
HA09SB48(2-4)	S	6-4-09/1340	4	1	
Trip Blank	L	6-4-09	2		2

Total No. of Bottles/Containers 6062

Sample Matrix: L = Liquid; S = Solid; A = Air

Relinquished by: Enrica Moller Organization: Arcadis Date: 6-4-09 Time: 1800 Seal Intact? Yes

Received by: Shealy Environmental Services Organization: Shealy Environmental Services Date: 6-15-09 Time: 0930 Seal Intact? Yes

Relinquished by: FEDEX Organization: FEDEX Date: 6-15-09 Time: 0930 Seal Intact? Yes

Received by: Shealy Environmental Services Organization: Shealy Environmental Services Date: 6-15-09 Time: 0930 Seal Intact? Yes

Special Instructions/Remarks:

First Cooler Received at 5.8°C

Second Cooler Received at 7.8°C

Delivery Method: ☐ In Person ☒ Common Carrier ☐ Other

Fed Ex

Lab Courier

SPECIFY

42 98-101

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 6

Page 1 of 1
Replaces Date: 09/22/06
Effective Date: 05/29/07

Sample Receipt Checklist (SRC)

Client: Arcadis Cooler Inspected by/date: DMP / 6/5/09 Lot #: KF05010

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/temperature upon receipt <u>15.8°C</u> <u>17.8°C</u> <u>1</u> °C <u>1</u> °C		
Method: ☐ Temperature Blank ☒ Against Bottles		
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 ☐	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by <u>SRC</u> phone, note (circle one), other: <u></u> . (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☒	No ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☒	No ☐	5. Were proper custody procedures (relinquished/received) followed?
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 or was quote # provided?
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 ☒	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) and toxicity (<0.1 mg/L) samples free of residual chlorine?
Yes ☐	No ☐	20. Were collection temperatures documented on the COC for NC samples?
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)		
Sample(s) <u></u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u></u> (H ₂ SO ₄ , HNO ₃ , HCl, NaOH) with the SR # (number) <u></u>		
Sample(s) <u></u> were received with bubbles >6 mm in diameter.		
Sample(s) <u></u> were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.		
Toxicity sample(s) <u></u> were received with TRC >0.1 mg/L and were analyzed by method 330.5.		

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐

SESI employee:

Comments:

Did client respond: Yes ☐ No ☐

Date of response:

Report of Analysis

ARCADIS U.S., Inc.
30 Patewood Drive
Suite 155
Greenville, SC 29615
Attention: Janet Christy

Project Name: Hunter Army Airfield HAA-9

Project Number: GP08HAFS.HA09A.JG0EX

Lot Number: KF06028

Date Completed: 06/19/2009



Nisreen Saikaly
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

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

*** KF06028 ***

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DEHNR No: 329

Case Narrative ARCADIS U.S., Inc. Lot Number: KF06028

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.

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.

pH

As per method the holding time for pH analysis is 15 minutes from collection.

TCLP Volatiles

The concentration in the MS for batch 12714 was greater than five times the spike concentration, and is impacting the surrogate recoveries, thus negating their usefulness concerning quality control. All other QC/QA criteria were within acceptance limits. Associated sample data was reported, and no corrective action was required.

TCLP Semivolatiles

The MS recovery for Pyridine in batch 12128 and 12216 was outside acceptance criteria. All other QA/QC criteria for the batch were within acceptance criteria and method control limits. The MS recovery results are attributed to matrix interference. The associated sample results were reported and no corrective action was required.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary ARCADIS U.S., Inc. Lot Number: KF06028

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	HA09IDW01	Solid	06/05/2009 1500	06/06/2009
002	HA09IDW02	Aqueous	06/05/2009 1505	06/06/2009
003	TRIP BLANK	Aqueous	06/06/2009 0930	06/06/2009
004	HAI3R2IDW-1(060509)	Aqueous	06/05/2009 1520	06/06/2009
005	HA09SB55 (2-4)	Solid	06/05/2009 1520	06/06/2009

(5 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary

ARCADIS U.S., Inc.

Lot Number: KF06028

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	HA09IDW01	Solid	Ignitability (Pensky-Martens Closed-	1010A	>140		° F	5
001	HA09IDW01	Solid	Barium	6010B	0.66	B	mg/L	8
001	HA09IDW01	Solid	Mercury	7470A	0.000042	BJ	mg/L	8
001	HA09IDW01	Solid	Silver	6010B	0.024	BJ	mg/L	8
002	HA09IDW02	Aqueous	Ignitability (Pensky-Martens Closed-	1010A	>140		° F	9
004	HAI3R2IDW-1(060509)	Aqueous	Ignitability (Pensky-Martens Closed-	1010A	>140		° F	13
005	HA09SB55 (2-4)	Solid	Benzene	8260B	32		ug/kg	16
005	HA09SB55 (2-4)	Solid	Ethylbenzene	8260B	120		ug/kg	16
005	HA09SB55 (2-4)	Solid	Xylenes (total)	8260B	240		ug/kg	16
005	HA09SB55 (2-4)	Solid	1-Methylnaphthalene	8270D (SIM)	140		ug/kg	17
005	HA09SB55 (2-4)	Solid	2-Methylnaphthalene	8270D (SIM)	220		ug/kg	17
005	HA09SB55 (2-4)	Solid	Naphthalene	8270D (SIM)	220		ug/kg	17

(12 detections)

Inorganic non-metals

Client: ARCADIS U.S., Inc.				Laboratory ID: KF06028-001			
Description: HA09IDW01				Matrix: Solid			
Date Sampled: 06/05/2009 1500				% Solids: 86.0 06/07/2009 1112			
Date Received: 06/06/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Ignitability) 1010A	1	06/10/2009 1548	PMM		
1		(pH) 9045C	1	06/06/2009 1700	MML		12002

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ignitability (Pensky-Martens Closed-Cup)		1010A	>140				° F	1
pH		9045C	6.09	H			su	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Shealy Environmental Services, Inc.

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

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Level 1 Report v2.1

TCLP Volatiles

Client: ARCADIS U.S., Inc.				Laboratory ID: KF06028-001			
Description: HA09IDW01				Matrix: Solid			
Date Sampled: 06/05/2009 1500				% Solids: 86.0 06/07/2009 1112			
Date Received: 06/06/2009							

Run 1	Prep Method 1311/5030B	Analytical Method 8260B	Dilution 10	Analysis Date 06/18/2009 1256	Analyst DLB	Prep Date	Batch 12714	Leachate Date 06/08/2009 2232
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050	0.0020	mg/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		0.10	0.018	mg/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.050	0.0040	mg/L	1
Chlorobenzene	108-90-7	8260B	ND		0.050	0.0020	mg/L	1
Chloroform	67-66-3	8260B	ND		0.050	0.0030	mg/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.050	0.0030	mg/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.050	0.0050	mg/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.050	0.0040	mg/L	1
Trichloroethene	79-01-6	8260B	ND		0.050	0.0030	mg/L	1
Vinyl chloride	75-01-4	8260B	ND		0.010	0.0010	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Shealy Environmental Services, Inc.

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

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Level 1 Report v2.1

TCLP Semivolatiles

Client: ARCADIS U.S., Inc.			Laboratory ID: KF06028-001		
Description: HA09IDW01			Matrix: Solid		
Date Sampled:06/05/2009 1500			% Solids: 86.0 06/07/2009 1112		
Date Received: 06/06/2009					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/3520C	8270C	1	06/12/2009 2136	GLR	06/09/2009 2358	12128	06/08/2009 2222

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dichlorobenzene	106-46-7	8270C	ND		0.050	0.0030	mg/L	1
2,4-Dinitrotoluene	121-14-2	8270C	ND		0.10	0.011	mg/L	1
Hexachlorobenzene	118-74-1	8270C	ND		0.050	0.0080	mg/L	1
Hexachlorobutadiene	87-68-3	8270C	ND		0.050	0.0030	mg/L	1
Hexachloroethane	67-72-1	8270C	ND		0.050	0.0030	mg/L	1
2-Methylphenol	95-48-7	8270C	ND		0.050	0.0040	mg/L	1
3 & 4-Methylphenol	106-44-5	8270C	ND		0.10	0.010	mg/L	1
Nitrobenzene	98-95-3	8270C	ND		0.050	0.0030	mg/L	1
Pentachlorophenol	87-86-5	8270C	ND		0.25	0.018	mg/L	1
Pyridine	110-86-1	8270C	ND		0.050	0.016	mg/L	1
2,4,5-Trichlorophenol	95-95-4	8270C	ND		0.050	0.0060	mg/L	1
2,4,6-Trichlorophenol	88-06-2	8270C	ND		0.050	0.0050	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2,4,6-Tribromophenol		96	41-144
2-Fluorobiphenyl		103	37-129
2-Fluorophenol		70	24-127
Nitrobenzene-d5		94	38-127
Phenol-d5		96	28-128
Terphenyl-d14		98	10-148

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

TCLP Metals

Client: ARCADIS U.S., Inc.		Laboratory ID: KF06028-001	
Description: HA09IDW01		Matrix: Solid	
Date Sampled: 06/05/2009 1500		% Solids: 86.0 06/07/2009 1112	
Date Received: 06/06/2009			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/3010A	6010B	10	06/18/2009 0724	KJC	06/16/2009 1633	12551	06/11/2009 1419
1	1311/7470A	7470A	1	06/18/2009 2315	BNW	06/18/2009 1700	12584	06/11/2009 1419
2	1311/3010A	6010B	10	06/18/2009 1705	KJC	06/16/2009 1633	12551	06/11/2009 1419

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Arsenic	7440-38-2	6010B	ND		0.10	0.023	mg/L	1
Barium	7440-39-3	6010B	0.66	B	0.25	0.023	mg/L	1
Cadmium	7440-43-9	6010B	ND		0.020	0.0030	mg/L	1
Chromium	7440-47-3	6010B	ND		0.050	0.014	mg/L	1
Lead	7439-92-1	6010B	ND		0.10	0.017	mg/L	1
Mercury	7439-97-6	7470A	0.000042	BJ	0.00020	0.000033	mg/L	1
Selenium	7782-49-2	6010B	ND		0.10	0.032	mg/L	1
Silver	7440-22-4	6010B	0.024	BJ	0.050	0.0090	mg/L	2

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Inorganic non-metals

Client: ARCADIS U.S., Inc.				Laboratory ID: KF06028-002			
Description: HA09IDW02				Matrix: Aqueous			
Date Sampled: 06/05/2009 1505							
Date Received: 06/06/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Ignitability) 1010A	1	06/10/2009 1548	PMM		
1		(pH) SM 4500-H B	1	06/06/2009 1700	MML		12023

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ignitability (Pensky-Martens Closed-Cup)		1010A	>140				° F	1
pH		SM 4500-H B	6.71	H			su	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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TCLP Volatiles

Client: ARCADIS U.S., Inc.					Laboratory ID: KF06028-002			
Description: HA09IDW02					Matrix: Aqueous			
Date Sampled: 06/05/2009 1505								
Date Received: 06/06/2009								

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260B	10	06/17/2009 1940	IVC		12691	06/10/2009 0000

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050		mg/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		0.10		mg/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.050		mg/L	1
Chlorobenzene	108-90-7	8260B	ND		0.050		mg/L	1
Chloroform	67-66-3	8260B	ND		0.050		mg/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.050		mg/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.050		mg/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.050		mg/L	1
Trichloroethene	79-01-6	8260B	ND		0.050		mg/L	1
Vinyl chloride	75-01-4	8260B	ND		0.010		mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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TCLP Semivolatiles

Client: ARCADIS U.S., Inc.					Laboratory ID: KF06028-002				
Description: HA09IDW02					Matrix: Aqueous				
Date Sampled: 06/05/2009 1505									
Date Received: 06/06/2009									

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/3520C	8270D	1	06/18/2009 1626	DC	06/10/2009 2350	12216	06/10/2009 0000

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dichlorobenzene	106-46-7	8270D	ND		0.050		mg/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		0.10		mg/L	1
Hexachlorobenzene	118-74-1	8270D	ND		0.050		mg/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		0.050		mg/L	1
Hexachloroethane	67-72-1	8270D	ND		0.050		mg/L	1
2-Methylphenol	95-48-7	8270D	ND		0.050		mg/L	1
3 & 4-Methylphenol	106-44-5	8270D	ND		0.10		mg/L	1
Nitrobenzene	98-95-3	8270D	ND		0.050		mg/L	1
Pentachlorophenol	87-86-5	8270D	ND		0.25		mg/L	1
Pyridine	110-86-1	8270D	ND		0.050		mg/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		0.050		mg/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		0.050		mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2,4,6-Tribromophenol		98	41-144
2-Fluorobiphenyl		107	37-129
2-Fluorophenol		88	24-127
Nitrobenzene-d5		109	38-127
Phenol-d5		107	28-128
Terphenyl-d14		46	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF06028-003			
Description: TRIP BLANK				Matrix: Aqueous			
Date Sampled: 06/06/2009 0930							
Date Received: 06/06/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/09/2009 0342	Analyst DLB	Prep Date	Batch 12069
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	52-138
Bromofluorobenzene		93	70-147
Toluene-d8		107	76-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Inorganic non-metals

Client: ARCADIS U.S., Inc.				Laboratory ID: KF06028-004			
Description: HAI3R2IDW-1(060509)				Matrix: Aqueous			
Date Sampled: 06/05/2009 1520							
Date Received: 06/06/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Ignitability) 1010A	1	06/10/2009 1548	PMM		
1		(pH) SM 4500-H B	1	06/06/2009 1700	MML		12023

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ignitability (Pensky-Martens Closed-Cup)		1010A	>140				° F	1
pH		SM 4500-H B	6.76	H			su	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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TCLP Volatiles

Client: ARCADIS U.S., Inc.					Laboratory ID: KF06028-004			
Description: HAI3R2IDW-1(060509)					Matrix: Aqueous			
Date Sampled: 06/05/2009 1520								
Date Received: 06/06/2009								

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260B	10	06/17/2009 2002	IVC		12691	06/10/2009 0000

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050		mg/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		0.10		mg/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.050		mg/L	1
Chlorobenzene	108-90-7	8260B	ND		0.050		mg/L	1
Chloroform	67-66-3	8260B	ND		0.050		mg/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.050		mg/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.050		mg/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.050		mg/L	1
Trichloroethene	79-01-6	8260B	ND		0.050		mg/L	1
Vinyl chloride	75-01-4	8260B	ND		0.010		mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

TCLP Semivolatiles

Client: ARCADIS U.S., Inc.					Laboratory ID: KF06028-004				
Description: HAI3R2IDW-1(060509)					Matrix: Aqueous				
Date Sampled: 06/05/2009 1520									
Date Received: 06/06/2009									

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/3520C	8270D	1	06/13/2009 0051	DC	06/10/2009 2350	12216	06/10/2009 0000

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dichlorobenzene	106-46-7	8270D	ND		0.050		mg/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		0.10		mg/L	1
Hexachlorobenzene	118-74-1	8270D	ND		0.050		mg/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		0.050		mg/L	1
Hexachloroethane	67-72-1	8270D	ND		0.050		mg/L	1
2-Methylphenol	95-48-7	8270D	ND		0.050		mg/L	1
3 & 4-Methylphenol	106-44-5	8270D	ND		0.10		mg/L	1
Nitrobenzene	98-95-3	8270D	ND		0.050		mg/L	1
Pentachlorophenol	87-86-5	8270D	ND		0.25		mg/L	1
Pyridine	110-86-1	8270D	ND		0.050		mg/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		0.050		mg/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		0.050		mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2,4,6-Tribromophenol		142	41-144
2-Fluorobiphenyl		106	37-129
2-Fluorophenol		102	24-127
Nitrobenzene-d5		94	38-127
Phenol-d5		98	28-128
Terphenyl-d14		100	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.		Laboratory ID: KF06028-005	
Description: HA09SB55 (2-4)		Matrix: Solid	
Date Sampled: 06/05/2009 1520		% Solids: 83.0 06/09/2009 2331	
Date Received: 06/06/2009			

Run 1	Prep Method 5035	Analytical Method 8260B	Dilution 1	Analysis Date 06/15/2009 1648	Analyst DLB	Prep Date	Batch 12434	Sample Wt.(g) 9.92
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	32		3.0	0.67	ug/kg	1
Ethylbenzene	100-41-4	8260B	120		3.0	1.0	ug/kg	1
Toluene	108-88-3	8260B	ND		3.0	1.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	240		3.0	1.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		133	53-142
Bromofluorobenzene		94	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

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Semivolatile Organic Compounds by GC/MS (SIM)

Client: ARCADIS U.S., Inc.

Laboratory ID: KF06028-005

Description: HA09SB55 (2-4)

Matrix: Solid

Date Sampled: 06/05/2009 1520

% Solids: 83.0 06/09/2009 2331

Date Received: 06/06/2009

Run 1	Prep Method 3550C	Analytical Method 8270D (SIM)	Dilution 5	Analysis Date 06/16/2009 1803	Analyst DC	Prep Date 06/10/2009 1159	Batch 12156			
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Acenaphthene		83-32-9	8270D (SIM)	ND		20	4.9	ug/kg	1	
Acenaphthylene		208-96-8	8270D (SIM)	ND		20	5.7	ug/kg	1	
Anthracene		120-12-7	8270D (SIM)	ND		20	3.0	ug/kg	1	
Benzo(a)anthracene		56-55-3	8270D (SIM)	ND		20	3.5	ug/kg	1	
Benzo(a)pyrene		50-32-8	8270D (SIM)	ND		20	3.9	ug/kg	1	
Benzo(b)fluoranthene		205-99-2	8270D (SIM)	ND		20	3.0	ug/kg	1	
Benzo(g,h,i)perylene		191-24-2	8270D (SIM)	ND		20	3.9	ug/kg	1	
Benzo(k)fluoranthene		207-08-9	8270D (SIM)	ND		20	2.9	ug/kg	1	
Chrysene		218-01-9	8270D (SIM)	ND		20	2.7	ug/kg	1	
Dibenzo(a,h)anthracene		53-70-3	8270D (SIM)	ND		20	3.0	ug/kg	1	
Fluoranthene		206-44-0	8270D (SIM)	ND		20	2.5	ug/kg	1	
Fluorene		86-73-7	8270D (SIM)	ND		20	3.4	ug/kg	1	
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D (SIM)	ND		20	6.0	ug/kg	1	
1-Methylnaphthalene		90-12-0	8270D (SIM)	140		20	5.8	ug/kg	1	
2-Methylnaphthalene		91-57-6	8270D (SIM)	220		20	5.9	ug/kg	1	
Naphthalene		91-20-3	8270D (SIM)	220		20	5.8	ug/kg	1	
Phenanthrene		85-01-8	8270D (SIM)	ND		20	4.3	ug/kg	1	
Pyrene		129-00-0	8270D (SIM)	ND		20	3.0	ug/kg	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
Fluoranthene-d10		48	20-150							
2-Methylnaphthalene-d10		39	20-150							

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

QC Summary

Inorganic non-metals - Duplicate

Sample ID: KF06028-001DU

Matrix: Solid

Batch: 12002

Analytical Method: 9045C

Parameter	Sample Amount (su)	Result (mg/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
pH	6.09	6.08		1	0.16	20	06/06/2009 1700

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 $\geq$ 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

Inorganic non-metals - MB

Sample ID: KQ12023-001

Matrix: Aqueous

Batch: 12023

Analytical Method: SM 4500-H B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
pH	ND		1	0.0		su	06/06/2009 1150

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 $\geq$ 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: KQ12069-001

Matrix: Aqueous

Batch: 12069

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	06/08/2009 2302
Ethylbenzene	ND		1	0.50	0.17	ug/L	06/08/2009 2302
Toluene	ND		1	0.50	0.17	ug/L	06/08/2009 2302
Xylenes (total)	ND		1	0.50	0.17	ug/L	06/08/2009 2302
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		95	70-130				
1,2-Dichloroethane-d4		106	70-130				
Toluene-d8		107	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 $\geq$ 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: KQ12069-002

Matrix: Aqueous

Batch: 12069

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	50		1	101	70-130	06/08/2009 2136
Ethylbenzene	50	50		1	99	70-130	06/08/2009 2136
Toluene	50	50		1	99	70-130	06/08/2009 2136
Xylenes (total)	100	99		1	99	70-130	06/08/2009 2136
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		98	70-130				
1,2-Dichloroethane-d4		102	70-130				
Toluene-d8		108	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 $\geq$ 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: KQ12069-003

Matrix: Aqueous

Batch: 12069

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	51		1	102	1.4	70-130	20	06/08/2009 2158
Ethylbenzene	50	51		1	103	3.6	70-130	20	06/08/2009 2158
Toluene	50	50		1	100	0.55	70-130	20	06/08/2009 2158
Xylenes (total)	100	100		1	101	1.9	70-130	20	06/08/2009 2158
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		99	70-130						
1,2-Dichloroethane-d4		104	70-130						
Toluene-d8		107	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 $\geq$ 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: KQ12434-001

Matrix: Solid

Batch: 12434

Prep Method: 5035

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	1.1	ug/kg	06/15/2009 1145
Ethylbenzene	ND		1	5.0	1.7	ug/kg	06/15/2009 1145
Toluene	ND		1	5.0	1.7	ug/kg	06/15/2009 1145
Xylenes (total)	ND		1	5.0	2.9	ug/kg	06/15/2009 1145
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		95	47-138				
1,2-Dichloroethane-d4		89	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 $\geq$ 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: KQ12434-002

Matrix: Solid

Batch: 12434

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	51		1	102	69-123	06/15/2009 1035
Ethylbenzene	50	48		1	96	59-128	06/15/2009 1035
Toluene	50	48		1	97	61-129	06/15/2009 1035
Xylenes (total)	100	92		1	92	58-128	06/15/2009 1035
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		99	47-138				
1,2-Dichloroethane-d4		93	53-142				
Toluene-d8		92	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 $\geq$ 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: KQ12434-003

Matrix: Solid

Batch: 12434

Prep Method: 5035

Analytical Method: 8260B

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	54		1	109	6.9	69-123	20	06/15/2009 1058
Ethylbenzene	50	51		1	102	6.8	59-128	20	06/15/2009 1058
Toluene	50	52		1	104	7.7	61-129	20	06/15/2009 1058
Xylenes (total)	100	98		1	98	6.2	58-128	20	06/15/2009 1058
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		96	47-138						
1,2-Dichloroethane-d4		89	53-142						
Toluene-d8		91	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 $\geq$ 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

TCLP Volatiles - MB

Sample ID: KQ12691-001

Matrix: Aqueous

Batch: 12691

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/10/2009 0000

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		10	0.050		mg/L	06/17/2009 1443
2-Butanone (MEK)	ND		10	0.10		mg/L	06/17/2009 1443
Carbon tetrachloride	ND		10	0.050		mg/L	06/17/2009 1443
Chlorobenzene	ND		10	0.050		mg/L	06/17/2009 1443
Chloroform	ND		10	0.050		mg/L	06/17/2009 1443
1,2-Dichloroethane	ND		10	0.050		mg/L	06/17/2009 1443
1,1-Dichloroethene	ND		10	0.050		mg/L	06/17/2009 1443
Tetrachloroethene	ND		10	0.050		mg/L	06/17/2009 1443
Trichloroethene	ND		10	0.050		mg/L	06/17/2009 1443
Vinyl chloride	ND		10	0.010		mg/L	06/17/2009 1443
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		100	70-130				
1,2-Dichloroethane-d4		80	70-130				
Toluene-d8		94	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 $\geq$ 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

TCLP Volatiles - LCS

Sample ID: KQ12691-002

Matrix: Aqueous

Batch: 12691

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/10/2009 0000

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	0.50	0.48		10	95	72-127	06/17/2009 1338
2-Butanone (MEK)	1.0	0.88		10	88	60-140	06/17/2009 1338
Carbon tetrachloride	0.50	0.44		10	87	37-166	06/17/2009 1338
Chlorobenzene	0.50	0.46		10	93	78-129	06/17/2009 1338
Chloroform	0.50	0.40		10	80	63-123	06/17/2009 1338
1,2-Dichloroethane	0.50	0.42		10	84	59-143	06/17/2009 1338
1,1-Dichloroethene	0.50	0.48		10	96	50-132	06/17/2009 1338
Tetrachloroethene	0.50	0.48		10	96	70-130	06/17/2009 1338
Trichloroethene	0.50	0.49		10	98	73-124	06/17/2009 1338
Vinyl chloride	0.50	0.41		10	82	29-159	06/17/2009 1338
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		96	70-130				
1,2-Dichloroethane-d4		74	70-130				
Toluene-d8		96	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 $\geq$ 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

TCLP Volatiles - MS

Sample ID: KF06028-004MS

Matrix: Aqueous

Batch: 12691

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/10/2009 0000

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	0.50	0.46		10	92	70-127	06/17/2009 2023
2-Butanone (MEK)	ND	1.0	0.95		10	95	60-140	06/17/2009 2023
Carbon tetrachloride	ND	0.50	0.49		10	97	37-166	06/17/2009 2023
Chlorobenzene	ND	0.50	0.44		10	89	78-129	06/17/2009 2023
Chloroform	ND	0.50	0.44		10	89	63-123	06/17/2009 2023
1,2-Dichloroethane	ND	0.50	0.50		10	99	59-143	06/17/2009 2023
1,1-Dichloroethene	ND	0.50	0.48		10	95	50-132	06/17/2009 2023
Tetrachloroethene	ND	0.50	0.46		10	92	70-130	06/17/2009 2023
Trichloroethene	ND	0.50	0.47		10	94	73-124	06/17/2009 2023
Vinyl chloride	ND	0.50	0.46		10	91	29-159	06/17/2009 2023
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		106	70-130					
1,2-Dichloroethane-d4		96	70-130					
Toluene-d8		98	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 $\geq$ 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

TCLP Volatiles - MB

Sample ID: KQ12714-001

Matrix: Solid

Batch: 12714

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/08/2009 2232

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		10	0.050	0.0020	mg/L	06/18/2009 1235
2-Butanone (MEK)	ND		10	0.10	0.018	mg/L	06/18/2009 1235
Carbon tetrachloride	ND		10	0.050	0.0040	mg/L	06/18/2009 1235
Chlorobenzene	ND		10	0.050	0.0020	mg/L	06/18/2009 1235
Chloroform	ND		10	0.050	0.0030	mg/L	06/18/2009 1235
1,2-Dichloroethane	ND		10	0.050	0.0030	mg/L	06/18/2009 1235
1,1-Dichloroethene	ND		10	0.050	0.0050	mg/L	06/18/2009 1235
Tetrachloroethene	ND		10	0.050	0.0040	mg/L	06/18/2009 1235
Trichloroethene	ND		10	0.050	0.0030	mg/L	06/18/2009 1235
Vinyl chloride	ND		10	0.010	0.0010	mg/L	06/18/2009 1235
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		95	70-130				
1,2-Dichloroethane-d4		103	70-130				
Toluene-d8		106	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 $\geq$ 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

TCLP Volatiles - LCS

Sample ID: KQ12714-002

Matrix: Solid

Batch: 12714

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/08/2009 2232

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	0.50	0.50		10	101	72-127	06/18/2009 1152
2-Butanone (MEK)	1.0	0.98		10	98	60-140	06/18/2009 1152
Carbon tetrachloride	0.50	0.52		10	104	37-166	06/18/2009 1152
Chlorobenzene	0.50	0.46		10	93	78-129	06/18/2009 1152
Chloroform	0.50	0.47		10	95	63-123	06/18/2009 1152
1,2-Dichloroethane	0.50	0.52		10	105	59-143	06/18/2009 1152
1,1-Dichloroethene	0.50	0.54		10	108	50-132	06/18/2009 1152
Tetrachloroethene	0.50	0.46		10	93	70-130	06/18/2009 1152
Trichloroethene	0.50	0.48		10	95	73-124	06/18/2009 1152
Vinyl chloride	0.50	0.58		10	115	29-159	06/18/2009 1152
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		100	70-130				
1,2-Dichloroethane-d4		107	70-130				
Toluene-d8		105	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 $\geq$ 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

TCLP Volatiles - MS

Sample ID: KF06028-001MS

Matrix: Solid

Batch: 12714

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/08/2009 2232

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	0.50			10	102	70-127	06/18/2009 1213
2-Butanone (MEK)	ND	1.0			10	106	60-140	06/18/2009 1213
Carbon tetrachloride	ND	0.50			10	103	37-166	06/18/2009 1213
Chlorobenzene	ND	0.50			10	94	78-129	06/18/2009 1213
Chloroform	ND	0.50			10	96	63-123	06/18/2009 1213
1,2-Dichloroethane	ND	0.50			10	105	59-143	06/18/2009 1213
1,1-Dichloroethene	ND	0.50			10	107	50-132	06/18/2009 1213
Tetrachloroethene	ND	0.50			10	95	70-130	06/18/2009 1213
Trichloroethene	ND	0.50			10	97	73-124	06/18/2009 1213
Vinyl chloride	ND	0.50			10	114	29-159	06/18/2009 1213
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene	N	0.0	70-130					
1,2-Dichloroethane-d4	N	0.0	70-130					
Toluene-d8	N	0.0	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 $\geq$ 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

TCLP Semivolatiles - MB

Sample ID: KQ12128-001

Matrix: Solid

Batch: 12128

Prep Method: 1311/3520C

Analytical Method: 8270C

Prep Date: 06/09/2009 2358 Leachate Date: 06/08/2009 2222

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dichlorobenzene	ND		1	0.050	0.0030	mg/L	06/12/2009 2053
2,4,5-Trichlorophenol	ND		1	0.050	0.0060	mg/L	06/12/2009 2053
2,4,6-Trichlorophenol	ND		1	0.050	0.0050	mg/L	06/12/2009 2053
2,4-Dinitrotoluene	ND		1	0.10	0.011	mg/L	06/12/2009 2053
2-Methylphenol	ND		1	0.050	0.0040	mg/L	06/12/2009 2053
3 & 4-Methylphenol	ND		1	0.10	0.010	mg/L	06/12/2009 2053
Hexachlorobenzene	ND		1	0.050	0.0080	mg/L	06/12/2009 2053
Hexachlorobutadiene	ND		1	0.050	0.0030	mg/L	06/12/2009 2053
Hexachloroethane	ND		1	0.050	0.0030	mg/L	06/12/2009 2053
Nitrobenzene	ND		1	0.050	0.0030	mg/L	06/12/2009 2053
Pentachlorophenol	ND		1	0.25	0.018	mg/L	06/12/2009 2053
Pyridine	ND		1	0.050	0.016	mg/L	06/12/2009 2053
Surrogate	Q	% Rec	Acceptance Limit				
2,4,6-Tribromophenol		94	41-144				
2-Fluorobiphenyl		102	37-129				
2-Fluorophenol		90	24-127				
Nitrobenzene-d5		91	38-127				
Phenol-d5		94	28-128				
Terphenyl-d14		98	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 $\geq$ 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

TCLP Semivolatiles - LCS

Sample ID: KQ12128-002

Matrix: Solid

Batch: 12128

Prep Method: 1311/3520C

Analytical Method: 8270C

Prep Date: 06/09/2009 2358 Leachate Date: 06/08/2009 2222

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dichlorobenzene	1.0	0.79		1	79	30-130	06/12/2009 2114
2,4,5-Trichlorophenol	1.0	0.80		1	80	30-130	06/12/2009 2114
2,4,6-Trichlorophenol	1.0	0.75		1	75	30-130	06/12/2009 2114
2,4-Dinitrotoluene	1.0	0.77		1	77	30-130	06/12/2009 2114
2-Methylphenol	1.0	0.73		1	73	30-130	06/12/2009 2114
3 & 4-Methylphenol	2.0	1.7		1	84	30-130	06/12/2009 2114
Hexachlorobenzene	1.0	0.94		1	94	30-130	06/12/2009 2114
Hexachlorobutadiene	1.0	0.74		1	74	30-130	06/12/2009 2114
Hexachloroethane	1.0	0.78		1	78	30-130	06/12/2009 2114
Nitrobenzene	1.0	0.87		1	87	30-130	06/12/2009 2114
Pentachlorophenol	1.0	0.82		1	82	30-130	06/12/2009 2114
Pyridine	1.0	0.55		1	55	30-130	06/12/2009 2114
Surrogate	Q	% Rec	Acceptance Limit				
2,4,6-Tribromophenol		93	41-144				
2-Fluorobiphenyl		102	37-129				
2-Fluorophenol		80	24-127				
Nitrobenzene-d5		95	38-127				
Phenol-d5		95	28-128				
Terphenyl-d14		97	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 $\geq$ 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

TCLP Semivolatiles - MS

Sample ID: KF06028-001MS

Matrix: Solid

Batch: 12128

Prep Method: 1311/3520C

Analytical Method: 8270C

Prep Date: 06/09/2009 2358 Leachate Date: 06/08/2009 2222

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dichlorobenzene	ND	1.2	0.97		1	97	30-130	06/15/2009 2027
2,4-Dinitrotoluene	ND	1.2	0.90		1	90	30-130	06/15/2009 2027
Hexachlorobenzene	ND	1.2	1.0		1	102	30-130	06/15/2009 2027
Hexachlorobutadiene	ND	1.2	0.97		1	97	30-130	06/15/2009 2027
Hexachloroethane	ND	1.2	1.0		1	104	30-130	06/15/2009 2027
2-Methylphenol	ND	1.2	0.87		1	87	30-130	06/15/2009 2027
3 & 4-Methylphenol	ND	2.3	2.0		1	101	30-130	06/15/2009 2027
Nitrobenzene	ND	1.2	1.0		1	103	30-130	06/15/2009 2027
Pentachlorophenol	ND	1.2	0.90		1	90	30-130	06/15/2009 2027
Pyridine	ND	1.2	ND	N	1	0.0	30-130	06/15/2009 2027
2,4,5-Trichlorophenol	ND	1.2	0.95		1	95	30-130	06/15/2009 2027
2,4,6-Trichlorophenol	ND	1.2	0.89		1	89	30-130	06/15/2009 2027
Surrogate	Q	% Rec	Acceptance Limit					
2,4,6-Tribromophenol		112	41-144					
2-Fluorobiphenyl		113	37-129					
2-Fluorophenol		103	24-127					
Nitrobenzene-d5		111	38-127					
Phenol-d5		107	28-128					
Terphenyl-d14		111	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 $\geq$ 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 (SIM) - MB

Sample ID: KQ12156-001

Matrix: Solid

Batch: 12156

Prep Method: 3550C

Analytical Method: 8270D (SIM)

Prep Date: 06/10/2009 1159

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1-Methylnaphthalene	ND		1	3.3	0.98	ug/kg	06/14/2009 1548
2-Methylnaphthalene	ND		1	3.3	0.99	ug/kg	06/14/2009 1548
Acenaphthene	ND		1	3.3	0.83	ug/kg	06/14/2009 1548
Acenaphthylene	ND		1	3.3	0.95	ug/kg	06/14/2009 1548
Anthracene	ND		1	3.3	0.51	ug/kg	06/14/2009 1548
Benzo(a)anthracene	ND		1	3.3	0.59	ug/kg	06/14/2009 1548
Benzo(a)pyrene	ND		1	3.3	0.66	ug/kg	06/14/2009 1548
Benzo(b)fluoranthene	ND		1	3.3	0.50	ug/kg	06/14/2009 1548
Benzo(g,h,i)perylene	ND		1	3.3	0.65	ug/kg	06/14/2009 1548
Benzo(k)fluoranthene	ND		1	3.3	0.48	ug/kg	06/14/2009 1548
Chrysene	ND		1	3.3	0.45	ug/kg	06/14/2009 1548
Dibenzo(a,h)anthracene	ND		1	3.3	0.51	ug/kg	06/14/2009 1548
Fluoranthene	ND		1	3.3	0.42	ug/kg	06/14/2009 1548
Fluorene	ND		1	3.3	0.57	ug/kg	06/14/2009 1548
Indeno(1,2,3-c,d)pyrene	ND		1	3.3	1.0	ug/kg	06/14/2009 1548
Naphthalene	ND		1	3.3	0.97	ug/kg	06/14/2009 1548
Phenanthrene	ND		1	3.3	0.72	ug/kg	06/14/2009 1548
Pyrene	ND		1	3.3	0.50	ug/kg	06/14/2009 1548
Surrogate	Q	% Rec	Acceptance Limit				
2-Methylnaphthalene-d10		31	20-150				
Fluoranthene-d10		46	20-150				

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 $\geq$ 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 (SIM) - LCS

Sample ID: KQ12156-002

Matrix: Solid

Batch: 12156

Prep Method: 3550C

Analytical Method: 8270D (SIM)

Prep Date: 06/10/2009 1159

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
2-Methylnaphthalene	13	6.8		1	52	20-150	06/14/2009 1428
Acenaphthene	13	6.5		1	50	20-150	06/14/2009 1428
Acenaphthylene	13	8.8		1	68	20-150	06/14/2009 1428
Anthracene	13	8.0		1	62	20-150	06/14/2009 1428
Benzo(a)anthracene	13	7.5		1	58	20-150	06/14/2009 1428
Benzo(a)pyrene	13	10		1	80	20-150	06/14/2009 1428
Benzo(b)fluoranthene	13	8.2		1	63	20-150	06/14/2009 1428
Benzo(g,h,i)perylene	13	18		1	137	20-150	06/14/2009 1428
Benzo(k)fluoranthene	13	8.1		1	62	20-150	06/14/2009 1428
Chrysene	13	7.7		1	59	20-150	06/14/2009 1428
Dibenzo(a,h)anthracene	13	17		1	129	20-150	06/14/2009 1428
Fluoranthene	13	7.8		1	60	20-150	06/14/2009 1428
Fluorene	13	6.6		1	50	20-150	06/14/2009 1428
Indeno(1,2,3-c,d)pyrene	13	17		1	131	20-150	06/14/2009 1428
Naphthalene	13	7.5		1	58	20-150	06/14/2009 1428
Phenanthrene	13	7.1		1	54	20-150	06/14/2009 1428
Pyrene	13	9.7		1	75	20-150	06/14/2009 1428
Surrogate	Q	% Rec	Acceptance Limit				
2-Methylnaphthalene-d10		47	20-150				
Fluoranthene-d10		62	20-150				

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 $\geq$ 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

TCLP Semivolatiles - MB

Sample ID: KQ12216-001

Matrix: Aqueous

Batch: 12216

Prep Method: 1311/3520C

Analytical Method: 8270D

Prep Date: 06/10/2009 2350 Leachate Date: 06/10/2009 0000

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dichlorobenzene	ND		1	0.050		mg/L	06/12/2009 2351
2,4,5-Trichlorophenol	ND		1	0.050		mg/L	06/12/2009 2351
2,4,6-Trichlorophenol	ND		1	0.050		mg/L	06/12/2009 2351
2,4-Dinitrotoluene	ND		1	0.10		mg/L	06/12/2009 2351
2-Methylphenol	ND		1	0.050		mg/L	06/12/2009 2351
3 & 4-Methylphenol	ND		1	0.10		mg/L	06/12/2009 2351
Hexachlorobenzene	ND		1	0.050		mg/L	06/12/2009 2351
Hexachlorobutadiene	ND		1	0.050		mg/L	06/12/2009 2351
Hexachloroethane	ND		1	0.050		mg/L	06/12/2009 2351
Nitrobenzene	ND		1	0.050		mg/L	06/12/2009 2351
Pentachlorophenol	ND		1	0.25		mg/L	06/12/2009 2351
Pyridine	ND		1	0.050		mg/L	06/12/2009 2351
Surrogate	Q	% Rec	Acceptance Limit				
2,4,6-Tribromophenol		125	41-144				
2-Fluorobiphenyl		115	37-129				
2-Fluorophenol		110	24-127				
Nitrobenzene-d5		104	38-127				
Phenol-d5		103	28-128				
Terphenyl-d14		104	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 $\geq$ 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

TCLP Semivolatiles - LCS

Sample ID: KQ12216-002

Matrix: Aqueous

Batch: 12216

Prep Method: 1311/3520C

Analytical Method: 8270D

Prep Date: 06/10/2009 2350 Leachate Date: 06/10/2009 0000

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dichlorobenzene	1.0	0.95		1	95	30-130	06/13/2009 0011
2,4,5-Trichlorophenol	1.0	1.1		1	110	30-130	06/13/2009 0011
2,4,6-Trichlorophenol	1.0	1.0		1	103	30-130	06/13/2009 0011
2,4-Dinitrotoluene	1.0	0.94		1	94	30-130	06/13/2009 0011
2-Methylphenol	1.0	0.94		1	94	30-130	06/13/2009 0011
3 & 4-Methylphenol	2.0	2.0		1	98	30-130	06/13/2009 0011
Hexachlorobenzene	1.0	1.1		1	111	30-130	06/13/2009 0011
Hexachlorobutadiene	1.0	1.0		1	106	30-130	06/13/2009 0011
Hexachloroethane	1.0	0.94		1	94	30-130	06/13/2009 0011
Nitrobenzene	1.0	0.93		1	93	30-130	06/13/2009 0011
Pentachlorophenol	1.0	0.90		1	90	30-130	06/13/2009 0011
Pyridine	1.0	0.87		1	87	30-130	06/13/2009 0011
Surrogate	Q	% Rec	Acceptance Limit				
2,4,6-Tribromophenol		130	41-144				
2-Fluorobiphenyl		114	37-129				
2-Fluorophenol		118	24-127				
Nitrobenzene-d5		100	38-127				
Phenol-d5		110	28-128				
Terphenyl-d14		103	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 $\geq$ 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

TCLP Semivolatiles - MS

Sample ID: KF06028-004MS

Matrix: Aqueous

Batch: 12216

Prep Method: 1311/3520C

Analytical Method: 8270D

Prep Date: 06/10/2009 2350 Leachate Date: 06/10/2009 0000

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dichlorobenzene	ND	1.0	0.81		1	81	30-130	06/13/2009 0111
2,4-Dinitrotoluene	ND	1.0	1.0		1	103	30-130	06/13/2009 0111
Hexachlorobenzene	ND	1.0	1.1		1	112	30-130	06/13/2009 0111
Hexachlorobutadiene	ND	1.0	0.84		1	84	30-130	06/13/2009 0111
Hexachloroethane	ND	1.0	0.78		1	78	30-130	06/13/2009 0111
2-Methylphenol	ND	1.0	0.87		1	87	30-130	06/13/2009 0111
3 & 4-Methylphenol	ND	2.0	1.7		1	85	30-130	06/13/2009 0111
Nitrobenzene	ND	1.0	0.86		1	86	30-130	06/13/2009 0111
Pentachlorophenol	ND	1.0	1.2		1	117	30-130	06/13/2009 0111
Pyridine	ND	1.0	ND	N	1	0.0	30-130	06/13/2009 0111
2,4,5-Trichlorophenol	ND	1.0	1.1		1	112	30-130	06/13/2009 0111
2,4,6-Trichlorophenol	ND	1.0	1.0		1	104	30-130	06/13/2009 0111
Surrogate	Q	% Rec	Acceptance Limit					
2,4,6-Tribromophenol		140	41-144					
2-Fluorobiphenyl		106	37-129					
2-Fluorophenol		105	24-127					
Nitrobenzene-d5		94	38-127					
Phenol-d5		101	28-128					
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 $\geq$ 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

TCLP Metals - MB

Sample ID: KQ12551-001

Matrix: Solid

Batch: 12551

Prep Method: 1311/3010A

Analytical Method: 6010B

Prep Date: 06/16/2009 1633 Leachate Date: 06/11/2009 1419

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Arsenic	ND		10	0.10	0.023	mg/L	06/18/2009 0648
Barium	0.024	J	10	0.25	0.023	mg/L	06/18/2009 0648
Cadmium	ND		10	0.020	0.0030	mg/L	06/18/2009 0648
Chromium	ND		10	0.050	0.014	mg/L	06/18/2009 0648
Lead	ND		10	0.10	0.017	mg/L	06/18/2009 0648
Selenium	ND		10	0.10	0.032	mg/L	06/18/2009 0648
Silver	0.064		10	0.050	0.0090	mg/L	06/18/2009 1647

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 $\geq$ 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

TCLP Metals - LCS

Sample ID: KQ12551-002

Matrix: Solid

Batch: 12551

Prep Method: 1311/3010A

Analytical Method: 6010B

Prep Date: 06/16/2009 1633 Leachate Date: 06/11/2009 1419

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Arsenic	5.0	4.9		10	98	80-120	06/18/2009 0653
Barium	10	10		10	100	80-120	06/18/2009 0653
Cadmium	1.0	0.97		10	97	80-120	06/18/2009 0653
Chromium	5.0	5.1		10	102	80-120	06/18/2009 0653
Lead	5.0	4.8		10	97	80-120	06/18/2009 0653
Selenium	1.0	0.95		10	95	80-120	06/18/2009 0653
Silver	5.0	5.4		10	108	80-120	06/18/2009 1653

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 $\geq$ 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

TCLP Metals - LCSD

Sample ID: KQ12551-003

Matrix: Solid

Batch: 12551

Prep Method: 1311/3010A

Analytical Method: 6010B

Prep Date: 06/16/2009 1633 Leachate Date: 06/11/2009 1419

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Arsenic	5.0	5.0		10	99	1.7	80-120	20	06/18/2009 0658
Barium	10	10		10	101	0.97	80-120	20	06/18/2009 0658
Cadmium	1.0	0.99		10	99	1.9	80-120	20	06/18/2009 0658
Chromium	5.0	5.1		10	103	0.62	80-120	20	06/18/2009 0658
Lead	5.0	4.9		10	98	1.2	80-120	20	06/18/2009 0658
Selenium	1.0	0.96		10	96	0.77	80-120	20	06/18/2009 0658
Silver	5.0	5.6		10	111	3.3	80-120	20	06/18/2009 1659

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 $\geq$ 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

TCLP Metals - MS

Sample ID: KF06028-001MS

Matrix: Solid

Batch: 12551

Prep Method: 1311/3010A

Analytical Method: 6010B

Prep Date: 06/16/2009 1633 Leachate Date: 06/11/2009 1419

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Arsenic	ND	5.0	5.0		10	100	75-125	06/18/2009 0729
Barium	0.66	10	11		10	100	75-125	06/18/2009 0729
Cadmium	ND	1.0	0.99		10	99	75-125	06/18/2009 0729
Chromium	ND	5.0	5.1		10	102	75-125	06/18/2009 0729
Lead	ND	5.0	4.9		10	98	75-125	06/18/2009 0729
Selenium	ND	1.0	0.94		10	94	75-125	06/18/2009 0729
Silver	0.024	5.0	5.6		10	111	75-125	06/18/2009 1711

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 $\geq$ 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

TCLP Metals - MSD

Sample ID: KF06028-001MD

Matrix: Solid

Batch: 12551

Prep Method: 1311/3010A

Analytical Method: 6010B

Prep Date: 06/16/2009 1633 Leachate Date: 06/11/2009 1419

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Arsenic	ND	5.0	5.0		10	99	0.21	75-125	20	06/18/2009 0734
Barium	0.66	10	10		10	99	0.99	75-125	20	06/18/2009 0734
Cadmium	ND	1.0	0.99		10	99	0.25	75-125	20	06/18/2009 0734
Chromium	ND	5.0	5.1		10	101	0.36	75-125	20	06/18/2009 0734
Lead	ND	5.0	4.9		10	98	0.29	75-125	20	06/18/2009 0734
Selenium	ND	1.0	0.97		10	97	2.7	75-125	20	06/18/2009 0734
Silver	0.024	5.0	5.4		10	108	2.2	75-125	20	06/18/2009 1717

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 $\geq$ 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

TCLP Metals - MB

Sample ID: KQ12584-001

Batch: 12584

Analytical Method: 7470A

Matrix: Solid

Prep Method: 1311/7470A

Prep Date: 06/18/2009 1700 Leachate Date: 06/11/2009 1419

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Mercury	0.000045	J	1	0.00020	0.000033	mg/L	06/18/2009 2307

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 $\geq$ 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

TCLP Metals - LCS

Sample ID: KQ12584-002

Batch: 12584

Analytical Method: 7470A

Matrix: Solid

Prep Method: 1311/7470A

Prep Date: 06/18/2009 1700 Leachate Date: 06/11/2009 1419

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0020	0.0022		1	108	85-115	06/18/2009 2309

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 $\geq$ 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

TCLP Metals - LCSD

Sample ID: KQ12584-003

Batch: 12584

Analytical Method: 7470A

Matrix: Solid

Prep Method: 1311/7470A

Prep Date: 06/18/2009 1700 Leachate Date: 06/11/2009 1419

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.0020	0.0020		1	102	5.7	85-115	20	06/18/2009 2311

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 $\geq$ 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

TCLP Metals - MS

Sample ID: KF06028-001MS

Matrix: Solid

Batch: 12584

Prep Method: 1311/7470A

Analytical Method: 7470A

Prep Date: 06/18/2009 1700 Leachate Date: 06/11/2009 1419

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.000042	0.0020	0.0022		1	110	85-115	06/18/2009 2318

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 $\geq$ 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

TCLP Metals - MSD

Sample ID: KF06028-001MD

Matrix: Solid

Batch: 12584

Prep Method: 1311/7470A

Analytical Method: 7470A

Prep Date: 06/18/2009 1700 Leachate Date: 06/11/2009 1419

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.000042	0.0020	0.0022		1	109	0.45	85-115	20	06/18/2009 2321

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 $\geq$ 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

CHAIN-OF-CUSTODY RECORD

Page 7 of 7

Project Number/Name GPO84AFS.H09A.KG0EX

Project Location Hunter Army Airfield HAA-9

Laboratory Shealy

Project Manager
Chuck Bertz

Sampler(s)/Affiliation Josh Fizzell/Acad.3

[illegible]Delivery Method: ☐ In Person☒ Common Carrier.

Y-113345
SPECIFY

☐ Lab Courier *T=5.9*☐ Other:SPECIFY
AC 01-1201

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 6

Page 1 of 1
Replaces Date: 09/22/06
Effective Date: 05/29/07

Sample Receipt Checklist (SRC)

Client: Arcadis Cooler Inspected by/date: DMP 1/6/09 Lot #: KF06028

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☒ FedEx ☐ Airborne Exp ☐ Other		
Yes ☐	No ☒	NA ☐
1. Were custody seals present on the cooler?		
Yes ☐	No ☐	NA ☒
2. If custody seals were present, were they intact and unbroken?		
Cooler ID/temperature upon receipt: <u>5.9</u> / <u>1</u> °C <u>1</u> / <u>1</u> °C <u>1</u> / <u>1</u> °C <u>1</u> / <u>1</u> °C		
Method: ☐ Temperature Blank ☒ Against Bottles		
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 ☒	NA ☐
5. Were proper custody procedures (relinquished/received) followed?		
Yes ☒	No ☐	NA ☐
6. Were sample IDs listed?		
Yes ☒	No ☐	NA ☐
7. Was collection date & time listed?		
Yes ☒	No ☐	NA ☐
8. Were tests to be performed listed on the COC or was quote # provided?		
Yes ☒	No ☐	NA ☐
9. Did all samples arrive in the proper containers for each test?		
Yes ☒	No ☐	NA ☐
10. Did all container label information (ID, date, time) agree with COC?		
Yes ☒	No ☐	NA ☐
11. Did all containers arrive in good condition (unbroken, lids on, etc.)?		
Yes ☒	No ☐	NA ☐
12. Was adequate sample volume available?		
Yes ☒	No ☐	NA ☐
13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?		
Yes ☒	No ☒	NA ☐
14. Were any samples containers missing? <u>HA095B55 (2-9)</u>		
Yes ☐	No ☒	NA ☐
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/BNA/pest/PCB/herb (<0.2mg/L) and toxicity (<0.1mg/L) samples free of residual chlorine?		
Yes ☐	No ☐	NA ☒
20. Were collection temperatures documented on the COC for NC samples?		
Yes ☐	No ☐	NA ☒
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 ₂ SO 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/BNA/pest/PCB/herb.		
Toxicity sample(s) _____ were received with TRC >0.1 mg/L and were analyzed by method 330.5.		

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐

SESI employee: _____

Comments: _____

Did client respond: Yes ☐ No ☐

Date of response: _____

Report of Analysis

ARCADIS U.S., Inc.
30 Patewood Drive
Suite 155
Greenville, SC 29615
Attention: Janet Christy

Project Name: HAA-13 Pumphouse 1, Release 1

Project Number: GP08HAFS.H13A.NA1R1

Lot Number: KF09013

Date Completed: 06/22/2009



Nisreen Saikaly
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

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

*** KF09013 ***

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DEHNR No: 329

Case Narrative ARCADIS U.S., Inc. Lot Number: KF09013

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.

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.

TCLP Semivolatiles

The LCS recovery for Pyridine was outside method control limits in batch 12257. The MS results were within limits. Therefore the associated sample results were reported and no corrective action was required.

The surrogate recovery in batch 12257 was outside the acceptance limit. The surrogate recovery is attributed to matrix interference. The sample results are reported and no corrective action is required.

DRO

Samples -001 and -002 have an unknown pattern associated with the DRO analysis.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary ARCADIS U.S., Inc. Lot Number: KF09013

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	D-MW37(060809)	Aqueous	06/08/2009 1350	06/09/2009
002	D-MW11(060809)	Aqueous	06/08/2009 1345	06/09/2009
003	IB-01(060809)	Aqueous	06/08/2009 1200	06/09/2009
004	HA13R1IDW-1(060809)	Aqueous	06/08/2009 1430	06/09/2009
(4 samples)				

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary

ARCADIS U.S., Inc.

Lot Number: KF09013

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	D-MW37(060809)	Aqueous	Alkalinity	SM 2320B	8.9	J	mg/L	5
001	D-MW37(060809)	Aqueous	DOC	SM 5310D	16		mg/L	5
001	D-MW37(060809)	Aqueous	Sulfate	300.0	0.45	J	mg/L	5
001	D-MW37(060809)	Aqueous	Sulfide	SM 4500-S2 F	2.0	B	mg/L	5
001	D-MW37(060809)	Aqueous	Benzene	8260B	260		ug/L	6
001	D-MW37(060809)	Aqueous	Ethylbenzene	8260B	230		ug/L	6
001	D-MW37(060809)	Aqueous	Toluene	8260B	1200		ug/L	6
001	D-MW37(060809)	Aqueous	Xylenes (total)	8260B	850		ug/L	6
001	D-MW37(060809)	Aqueous	TPH-DRO	8015C	8900	B	ug/L	7
001	D-MW37(060809)	Aqueous	TPH-GRO	8015B	5600		ug/L	8
001	D-MW37(060809)	Aqueous	Dissolved Iron	6010B	0.70		mg/L	9
001	D-MW37(060809)	Aqueous	Dissolved Lead	6010B	0.0047	J	mg/L	9
001	D-MW37(060809)	Aqueous	Iron	6010B	1.6		mg/L	10
001	D-MW37(060809)	Aqueous	Lead	6010B	0.0048	J	mg/L	10
002	D-MW11(060809)	Aqueous	Alkalinity	SM 2320B	7.1	J	mg/L	11
002	D-MW11(060809)	Aqueous	DOC	SM 5310D	14		mg/L	11
002	D-MW11(060809)	Aqueous	Sulfate	300.0	1.2		mg/L	11
002	D-MW11(060809)	Aqueous	Sulfide	SM 4500-S2 F	2.9	B	mg/L	11
002	D-MW11(060809)	Aqueous	Benzene	8260B	62		ug/L	12
002	D-MW11(060809)	Aqueous	Ethylbenzene	8260B	270		ug/L	12
002	D-MW11(060809)	Aqueous	Toluene	8260B	340		ug/L	12
002	D-MW11(060809)	Aqueous	Xylenes (total)	8260B	1500		ug/L	12
002	D-MW11(060809)	Aqueous	TPH-DRO	8015C	14000	B	ug/L	13
002	D-MW11(060809)	Aqueous	TPH-GRO	8015B	5000		ug/L	14
002	D-MW11(060809)	Aqueous	Dissolved Iron	6010B	0.37		mg/L	15
002	D-MW11(060809)	Aqueous	Dissolved Lead	6010B	0.0081	J	mg/L	15
002	D-MW11(060809)	Aqueous	Iron	6010B	0.38		mg/L	16
002	D-MW11(060809)	Aqueous	Lead	6010B	0.0086	J	mg/L	16
004	HA13R1IDW-1(060809)	Aqueous	Ignitability (Pensky-Martens Closed-	1010A	>140		° F	18

(29 detections)

Inorganic non-metals

Client: ARCADIS U.S., Inc.

Laboratory ID: KF09013-001

Description: D-MW37(060809)

Matrix: Aqueous

Date Sampled: 06/08/2009 1350

Date Received: 06/09/2009

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Alkalinity) SM 2320B	1	06/10/2009 1528	PMM		12132
1		(DOC) SM 5310D	1	06/11/2009 1418	PMM		12218
1		(Nitrate - N) 353.2	1	06/10/2009 1047	WD		12171
1		(Sulfate) 300.0	1	06/19/2009 1319	DAS		12908
1		(Sulfide) SM 4500-S2 F	1	06/15/2009 1325	BM		12486

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Alkalinity		SM 2320B	8.9	J	10	3.9	mg/L	1
DOC		SM 5310D	16		1.0	0.063	mg/L	1
Nitrate - N		353.2	ND		0.020	0.0013	mg/L	1
Sulfate		300.0	0.45	J	1.0	0.13	mg/L	1
Sulfide	18496-25-8	SM 4500-S2 F	2.0	B	1.0	0.62	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF09013-001			
Description: D-MW37(060809)				Matrix: Aqueous			
Date Sampled: 06/08/2009 1350							
Date Received: 06/09/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 20	Analysis Date 06/11/2009 1507	Analyst DLB	Prep Date	Batch 12302
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	260		10	0.54	ug/L	1
Ethylbenzene	100-41-4	8260B	230		10	3.4	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		10	0.38	ug/L	1
Toluene	108-88-3	8260B	1200		10	3.4	ug/L	1
Xylenes (total)	1330-20-7	8260B	850		10	3.4	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	52-138
Bromofluorobenzene		95	70-147
Toluene-d8		90	76-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

TPH - DRO

Client: ARCADIS U.S., Inc.				Laboratory ID: KF09013-001			
Description: D-MW37(060809)				Matrix: Aqueous			
Date Sampled: 06/08/2009 1350							
Date Received: 06/09/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch				
1	3520C	8015C	1	06/13/2009 1320	ASB	06/09/2009 2234	12123				

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
TPH-DRO		8015C	8900	B	200	23	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		69	53-118

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

TPH - GRO

Client: ARCADIS U.S., Inc.				Laboratory ID: KF09013-001			
Description: D-MW37(060809)				Matrix: Aqueous			
Date Sampled: 06/08/2009 1350							
Date Received: 06/09/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
2	5030B	8015B	5	06/18/2009 1649	IVC		12765			
Parameter			CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
TPH-GRO				8015B	5600		500	100	ug/L	2
Surrogate	Q	Run 2 % Recovery	Acceptance Limits							
Bromofluorobenzene		127	70-130							

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

ICP-AES

Client: ARCADIS U.S., Inc.

Laboratory ID: KF09013-001

Description: D-MW37(060809)

Matrix: Aqueous

Date Sampled: 06/08/2009 1350

Date Received: 06/09/2009

Run 1	Prep Method 3005A	Analytical Method 6010B	Dilution 1	Analysis Date 06/16/2009 2209	Analyst CDF	Prep Date 06/15/2009 1800	Batch 12463
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Dissolved Iron	7439-89-6	6010B	0.70		0.10	0.023	mg/L	1
Dissolved Lead	7439-92-1	6010B	0.0047	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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ICP-AES

Client: ARCADIS U.S., Inc.

Laboratory ID: KF09013-001

Description: D-MW37(060809)

Matrix: Aqueous

Date Sampled: 06/08/2009 1350

Date Received: 06/09/2009

Run 1	Prep Method 3005A	Analytical Method 6010B	Dilution 1	Analysis Date 06/16/2009 2204	Analyst CDF	Prep Date 06/15/2009 1800	Batch 12463
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Iron	7439-89-6	6010B	1.6		0.10	0.023	mg/L	1
Lead	7439-92-1	6010B	0.0048	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Inorganic non-metals

Client: ARCADIS U.S., Inc.				Laboratory ID: KF09013-002			
Description: D-MW11(060809)				Matrix: Aqueous			
Date Sampled: 06/08/2009 1345							
Date Received: 06/09/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Alkalinity) SM 2320B	1	06/10/2009 1602	PMM		12132
1		(DOC) SM 5310D	1	06/11/2009 1438	PMM		12218
1		(Nitrate - N) 353.2	1	06/10/2009 1048	WD		12171
1		(Sulfate) 300.0	1	06/19/2009 1342	DAS		12908
1		(Sulfide) SM 4500-S2 F	1	06/15/2009 1325	BM		12486

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Alkalinity		SM 2320B	7.1	J	10	3.9	mg/L	1
DOC		SM 5310D	14		1.0	0.063	mg/L	1
Nitrate - N		353.2	ND		0.020	0.0013	mg/L	1
Sulfate		300.0	1.2		1.0	0.13	mg/L	1
Sulfide	18496-25-8	SM 4500-S2 F	2.9	B	1.0	0.62	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF09013-002			
Description: D-MW11(060809)				Matrix: Aqueous			
Date Sampled: 06/08/2009 1345							
Date Received: 06/09/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 5	Analysis Date 06/11/2009 1756	Analyst DLB	Prep Date	Batch 12302
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	62		2.5	0.14	ug/L	1
Ethylbenzene	100-41-4	8260B	270		2.5	0.85	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		2.5	0.094	ug/L	1
Toluene	108-88-3	8260B	340		2.5	0.85	ug/L	1
Xylenes (total)	1330-20-7	8260B	1500		2.5	0.85	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	52-138
Bromofluorobenzene		100	70-147
Toluene-d8		90	76-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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TPH - DRO

Client: ARCADIS U.S., Inc.					Laboratory ID: KF09013-002		
Description: D-MW11(060809)					Matrix: Aqueous		
Date Sampled: 06/08/2009 1345							
Date Received: 06/09/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch				
1	3520C	8015C	1	06/13/2009 1339	ASB	06/09/2009 2234	12123				
Parameter				CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
TPH-DRO					8015C	14000	B	200	23	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits								
o - Terphenyl		82	53-118								

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

TPH - GRO

Client: ARCADIS U.S., Inc.				Laboratory ID: KF09013-002			
Description: D-MW11(060809)				Matrix: Aqueous			
Date Sampled: 06/08/2009 1345							
Date Received: 06/09/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch				
2	5030B	8015B	2	06/18/2009 1714	IVC		12765				

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
TPH-GRO		8015B	5000		200	40	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		122	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

B = Detected in the method blank

J = Estimated result < PQL and $\geq$ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

ICP-AES

Client: ARCADIS U.S., Inc.

Laboratory ID: KF09013-002

Description: D-MW11(060809)

Matrix: Aqueous

Date Sampled: 06/08/2009 1345

Date Received: 06/09/2009

Run 1	Prep Method 3005A	Analytical Method 6010B	Dilution 1	Analysis Date 06/16/2009 2219	Analyst CDF	Prep Date 06/15/2009 1800	Batch 12463
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Dissolved Iron	7439-89-6	6010B	0.37		0.10	0.023	mg/L	1
Dissolved Lead	7439-92-1	6010B	0.0081	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

ICP-AES

Client: ARCADIS U.S., Inc.

Laboratory ID: KF09013-002

Description: D-MW11(060809)

Matrix: Aqueous

Date Sampled: 06/08/2009 1345

Date Received: 06/09/2009

Run 1	Prep Method 3005A	Analytical Method 6010B	Dilution 1	Analysis Date 06/16/2009 2214	Analyst CDF	Prep Date 06/15/2009 1800	Batch 12463
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Iron	7439-89-6	6010B	0.38		0.10	0.023	mg/L	1
Lead	7439-92-1	6010B	0.0086	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF09013-003			
Description: IB-01(060809)				Matrix: Aqueous			
Date Sampled: 06/08/2009 1200							
Date Received: 06/09/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/11/2009 1334	Analyst DLB	Prep Date	Batch 12302
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	0.019	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	52-138
Bromofluorobenzene		95	70-147
Toluene-d8		90	76-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Inorganic non-metals

Client: ARCADIS U.S., Inc.				Laboratory ID: KF09013-004			
Description: HA13R1DW-1(060809)				Matrix: Aqueous			
Date Sampled: 06/08/2009 1430							
Date Received: 06/09/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Ignitability) 1010A	1	06/10/2009 1548	PMM		
1		(pH) SM 4500-H B	1	06/09/2009 1430	HBB		12150

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ignitability (Pensky-Martens Closed-Cup)		1010A	>140				° F	1
pH		SM 4500-H B	5.24				su	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Level 1 Report v2.1

TCLP Volatiles

Client: ARCADIS U.S., Inc.					Laboratory ID: KF09013-004			
Description: HA13R1DW-1(060809)					Matrix: Aqueous			
Date Sampled: 06/08/2009 1430								
Date Received: 06/09/2009								

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260B	10	06/19/2009 1442	DLB		12825	06/11/2009 0000

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050		mg/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		0.10		mg/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.050		mg/L	1
Chlorobenzene	108-90-7	8260B	ND		0.050		mg/L	1
Chloroform	67-66-3	8260B	ND		0.050		mg/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.050		mg/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.050		mg/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.050		mg/L	1
Trichloroethene	79-01-6	8260B	ND		0.050		mg/L	1
Vinyl chloride	75-01-4	8260B	ND		0.010		mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		92	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

TCLP Semivolatiles

Client: ARCADIS U.S., Inc.					Laboratory ID: KF09013-004				
Description: HA13R1IDW-1(060809)					Matrix: Aqueous				
Date Sampled: 06/08/2009 1430									
Date Received: 06/09/2009									

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/3520C	8270D	1	06/14/2009 0640	GLR	06/11/2009 1723	12257	06/11/2009 0000

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,4-Dichlorobenzene	106-46-7	8270D	ND		0.050		mg/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		0.10		mg/L	1
Hexachlorobenzene	118-74-1	8270D	ND		0.050		mg/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		0.050		mg/L	1
Hexachloroethane	67-72-1	8270D	ND		0.050		mg/L	1
2-Methylphenol	95-48-7	8270D	ND		0.050		mg/L	1
3 & 4-Methylphenol	106-44-5	8270D	ND		0.10		mg/L	1
Nitrobenzene	98-95-3	8270D	ND		0.050		mg/L	1
Pentachlorophenol	87-86-5	8270D	ND		0.25		mg/L	1
Pyridine	110-86-1	8270D	ND		0.050		mg/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		0.050		mg/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		0.050		mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2,4,6-Tribromophenol		108	41-144
2-Fluorobiphenyl		109	37-129
2-Fluorophenol		96	24-127
Nitrobenzene-d5		123	38-127
Phenol-d5		98	28-128
Terphenyl-d14		105	10-148

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

QC Summary

Inorganic non-metals - MB

Sample ID: KQ12132-001

Matrix: Aqueous

Batch: 12132

Analytical Method: SM 2320B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Alkalinity	ND		1	10	3.9	mg/L	06/10/2009 0713

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 $\geq$ 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

Inorganic non-metals - LCS

Sample ID: KQ12132-002

Matrix: Aqueous

Batch: 12132

Analytical Method: SM 2320B

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Alkalinity	100	100		1	100	90-110	06/10/2009 0729

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 $\geq$ 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

Inorganic non-metals - LCSD

Sample ID: KQ12132-003

Matrix: Aqueous

Batch: 12132

Analytical Method: SM 2320B

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Alkalinity	100	100		1	102	2.2	90-110	20	06/10/2009 0745

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 $\geq$ 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

Inorganic non-metals - MS

Sample ID: KF09013-001MS

Matrix: Aqueous

Batch: 12132

Analytical Method: SM 2320B

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Alkalinity	8.9	100	110		1	101	70-130	06/10/2009 1540

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 $\geq$ 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

Inorganic non-metals - MSD

Sample ID: KF09013-001MD

Matrix: Aqueous

Batch: 12132

Analytical Method: SM 2320B

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Alkalinity	8.9	100	110		1	103	1.9	70-130	20	06/10/2009 1553

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 $\geq$ 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

Inorganic non-metals - MB

Sample ID: KQ12150-001

Matrix: Aqueous

Batch: 12150

Analytical Method: SM 4500-H B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
pH	ND		1	0.0		su	06/09/2009 1430

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 $\geq$ 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

Inorganic non-metals - Duplicate

Sample ID: KF09013-004DU

Matrix: Aqueous

Batch: 12150

Analytical Method: SM 4500-H B

Parameter	Sample Amount (su)	Result	Q	Dil	% RPD	% RPD Limit	Analysis Date
pH	5.24	5.32		1	1.5	20	06/09/2009 1430

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 $\geq$ 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

Inorganic non-metals - MB

Sample ID: KQ12171-001

Matrix: Aqueous

Batch: 12171

Analytical Method: 353.2

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Nitrate - N	ND		1	0.020	0.0013	mg/L	06/10/2009 0000

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 $\geq$ 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

Inorganic non-metals - LCS

Sample ID: KQ12171-002

Matrix: Aqueous

Batch: 12171

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.80	0.86		1	108	90-110	06/10/2009 0000

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 $\geq$ 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

Inorganic non-metals - LCSD

Sample ID: KQ12171-003

Matrix: Aqueous

Batch: 12171

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	0.80	0.87		1	108	0.81	90-110	20	06/10/2009 0000

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 $\geq$ 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

Inorganic non-metals - MB

Sample ID: KQ12218-001

Matrix: Aqueous

Batch: 12218

Analytical Method: SM 5310D

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
DOC	ND		1	1.0	0.063	mg/L	06/11/2009 1316

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 $\geq$ 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

Inorganic non-metals - LCS

Sample ID: KQ12218-002

Matrix: Aqueous

Batch: 12218

Analytical Method: SM 5310D

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
DOC	20	20		1	100	90-110	06/11/2009 1337

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 $\geq$ 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

Inorganic non-metals - LCSD

Sample ID: KQ12218-003

Matrix: Aqueous

Batch: 12218

Analytical Method: SM 5310D

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
DOC	20	20		1	99	1.0	90-110	20	06/11/2009 1357

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 $\geq$ 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

Inorganic non-metals - MS

Sample ID: KF09013-002MS

Matrix: Aqueous

Batch: 12218

Analytical Method: SM 5310D

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
DOC	14	20	33		1	94	70-130	06/11/2009 1459

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 $\geq$ 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

Inorganic non-metals - MSD

Sample ID: KF09013-002MD

Matrix: Aqueous

Batch: 12218

Analytical Method: SM 5310D

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
DOC	14	20	33		1	94	0.21	70-130	20	06/11/2009 1519

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 $\geq$ 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

Inorganic non-metals - MB

Sample ID: KQ12486-001

Matrix: Aqueous

Batch: 12486

Analytical Method: SM 4500-S2 F

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfide	0.64	J	1	1.0	0.62	mg/L	06/15/2009 1325

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 $\geq$ 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

Inorganic non-metals - LCS

Sample ID: KQ12486-002

Matrix: Aqueous

Batch: 12486

Analytical Method: SM 4500-S2 F

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfide	10	10		1	100	80-120	06/15/2009 1325

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 $\geq$ 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

Inorganic non-metals - LCSD

Sample ID: KQ12486-003

Matrix: Aqueous

Batch: 12486

Analytical Method: SM 4500-S2 F

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfide	10	10		1	103	3.5	80-120	20	06/15/2009 1325

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 $\geq$ 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

Inorganic non-metals - MB

Sample ID: KQ12908-001

Matrix: Aqueous

Batch: 12908

Analytical Method: 300.0

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Sulfate	ND		1	1.0	0.13	mg/L	06/19/2009 1030

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 $\geq$ 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

Inorganic non-metals - LCS

Sample ID: KQ12908-002

Matrix: Aqueous

Batch: 12908

Analytical Method: 300.0

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Sulfate	20	19		1	97	90-110	06/19/2009 1053

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 $\geq$ 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

Inorganic non-metals - LCSD

Sample ID: KQ12908-003

Matrix: Aqueous

Batch: 12908

Analytical Method: 300.0

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Sulfate	20	20		1	101	4.0	90-110	20	06/19/2009 1115

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 $\geq$ 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: KQ12302-001

Matrix: Aqueous

Batch: 12302

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	06/11/2009 1137
Ethylbenzene	ND		1	0.50	0.17	ug/L	06/11/2009 1137
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.019	ug/L	06/11/2009 1137
Toluene	ND		1	0.50	0.17	ug/L	06/11/2009 1137
Xylenes (total)	ND		1	0.50	0.17	ug/L	06/11/2009 1137
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		97	70-130				
1,2-Dichloroethane-d4		88	70-130				
Toluene-d8		89	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 $\geq$ 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: KQ12302-002

Matrix: Aqueous

Batch: 12302

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	51		1	102	70-130	06/11/2009 1004
Ethylbenzene	50	49		1	99	70-130	06/11/2009 1004
Methyl tertiary butyl ether (MTBE)	50	52		1	105	70-130	06/11/2009 1004
Toluene	50	49		1	99	70-130	06/11/2009 1004
Xylenes (total)	100	98		1	98	70-130	06/11/2009 1004
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		97	70-130				
1,2-Dichloroethane-d4		85	70-130				
Toluene-d8		87	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 $\geq$ 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: KQ12302-003

Matrix: Aqueous

Batch: 12302

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	52		1	103	1.6	70-130	20	06/11/2009 1027
Ethylbenzene	50	51		1	102	3.5	70-130	20	06/11/2009 1027
Methyl tertiary butyl ether (MTBE)	50	53		1	106	1.0	70-130	20	06/11/2009 1027
Toluene	50	51		1	101	2.7	70-130	20	06/11/2009 1027
Xylenes (total)	100	100		1	101	3.4	70-130	20	06/11/2009 1027
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		97	70-130						
1,2-Dichloroethane-d4		84	70-130						
Toluene-d8		87	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 $\geq$ 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

TCLP Volatiles - MB

Sample ID: KQ12825-001

Matrix: Aqueous

Batch: 12825

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/11/2009 0000

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		10	0.050		mg/L	06/19/2009 1107
2-Butanone (MEK)	ND		10	0.10		mg/L	06/19/2009 1107
Carbon tetrachloride	ND		10	0.050		mg/L	06/19/2009 1107
Chlorobenzene	ND		10	0.050		mg/L	06/19/2009 1107
Chloroform	ND		10	0.050		mg/L	06/19/2009 1107
1,2-Dichloroethane	ND		10	0.050		mg/L	06/19/2009 1107
1,1-Dichloroethene	ND		10	0.050		mg/L	06/19/2009 1107
Tetrachloroethene	ND		10	0.050		mg/L	06/19/2009 1107
Trichloroethene	ND		10	0.050		mg/L	06/19/2009 1107
Vinyl chloride	ND		10	0.010		mg/L	06/19/2009 1107
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		99	70-130				
1,2-Dichloroethane-d4		87	70-130				
Toluene-d8		94	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 $\geq$ 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

TCLP Volatiles - LCS

Sample ID: KQ12825-002

Matrix: Aqueous

Batch: 12825

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/11/2009 0000

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	0.50	0.50		10	99	72-127	06/19/2009 1003
2-Butanone (MEK)	1.0	0.85		10	85	60-140	06/19/2009 1003
Carbon tetrachloride	0.50	0.53		10	106	37-166	06/19/2009 1003
Chlorobenzene	0.50	0.48		10	96	78-129	06/19/2009 1003
Chloroform	0.50	0.44		10	87	63-123	06/19/2009 1003
1,2-Dichloroethane	0.50	0.49		10	98	59-143	06/19/2009 1003
1,1-Dichloroethene	0.50	0.55		10	111	50-132	06/19/2009 1003
Tetrachloroethene	0.50	0.51		10	102	70-130	06/19/2009 1003
Trichloroethene	0.50	0.50		10	101	73-124	06/19/2009 1003
Vinyl chloride	0.50	0.49		10	99	29-159	06/19/2009 1003
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		100	70-130				
1,2-Dichloroethane-d4		87	70-130				
Toluene-d8		96	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 $\geq$ 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

TCLP Volatiles - MS

Sample ID: KF09013-004MS

Matrix: Aqueous

Batch: 12825

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/11/2009 0000

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	0.50	0.51		10	101	70-127	06/19/2009 1421
2-Butanone (MEK)	ND	1.0	1.0		10	102	60-140	06/19/2009 1421
Carbon tetrachloride	ND	0.50	0.54		10	108	37-166	06/19/2009 1421
Chlorobenzene	ND	0.50	0.46		10	92	78-129	06/19/2009 1421
Chloroform	ND	0.50	0.43		10	86	63-123	06/19/2009 1421
1,2-Dichloroethane	ND	0.50	0.48		10	95	59-143	06/19/2009 1421
1,1-Dichloroethene	ND	0.50	0.58		10	115	50-132	06/19/2009 1421
Tetrachloroethene	ND	0.50	0.50		10	101	70-130	06/19/2009 1421
Trichloroethene	ND	0.50	0.51		10	101	73-124	06/19/2009 1421
Vinyl chloride	ND	0.50	0.51		10	102	29-159	06/19/2009 1421
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		101	70-130					
1,2-Dichloroethane-d4		90	70-130					
Toluene-d8		94	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 $\geq$ 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

TCLP Semivolatiles - MB

Sample ID: KQ12257-001

Matrix: Aqueous

Batch: 12257

Prep Method: 1311/3520C

Analytical Method: 8270D

Prep Date: 06/11/2009 1723 Leachate Date: 06/11/2009 0000

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,4-Dichlorobenzene	ND		1	0.050		mg/L	06/14/2009 0558
2,4,5-Trichlorophenol	ND		1	0.050		mg/L	06/14/2009 0558
2,4,6-Trichlorophenol	ND		1	0.050		mg/L	06/14/2009 0558
2,4-Dinitrotoluene	ND		1	0.10		mg/L	06/14/2009 0558
2-Methylphenol	ND		1	0.050		mg/L	06/14/2009 0558
3 & 4-Methylphenol	ND		1	0.10		mg/L	06/14/2009 0558
Hexachlorobenzene	ND		1	0.050		mg/L	06/14/2009 0558
Hexachlorobutadiene	ND		1	0.050		mg/L	06/14/2009 0558
Hexachloroethane	ND		1	0.050		mg/L	06/14/2009 0558
Nitrobenzene	ND		1	0.050		mg/L	06/14/2009 0558
Pentachlorophenol	ND		1	0.25		mg/L	06/14/2009 0558
Pyridine	ND		1	0.050		mg/L	06/14/2009 0558
Surrogate	Q	% Rec	Acceptance Limit				
2,4,6-Tribromophenol		93	41-144				
2-Fluorobiphenyl		108	37-129				
2-Fluorophenol		84	24-127				
Nitrobenzene-d5		98	38-127				
Phenol-d5		99	28-128				
Terphenyl-d14		106	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 $\geq$ 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

TCLP Semivolatiles - LCS

Sample ID: KQ12257-002

Matrix: Aqueous

Batch: 12257

Prep Method: 1311/3520C

Analytical Method: 8270D

Prep Date: 06/11/2009 1723 Leachate Date: 06/11/2009 0000

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dichlorobenzene	1.0	0.98		1	98	30-130	06/15/2009 1817
2,4,5-Trichlorophenol	1.0	1.0		1	106	30-130	06/15/2009 1817
2,4,6-Trichlorophenol	1.0	1.0		1	100	30-130	06/15/2009 1817
2,4-Dinitrotoluene	1.0	0.95		1	95	30-130	06/15/2009 1817
2-Methylphenol	1.0	0.88		1	88	30-130	06/15/2009 1817
3 & 4-Methylphenol	2.0	2.0		1	101	30-130	06/15/2009 1817
Hexachlorobenzene	1.0	1.1		1	110	30-130	06/15/2009 1817
Hexachlorobutadiene	1.0	1.0		1	104	30-130	06/15/2009 1817
Hexachloroethane	1.0	1.0		1	100	30-130	06/15/2009 1817
Nitrobenzene	1.0	1.0		1	103	30-130	06/15/2009 1817
Pentachlorophenol	1.0	0.96		1	96	30-130	06/15/2009 1817
Pyridine	1.0	ND	N	1	0.0	30-130	06/15/2009 1817
Surrogate	Q	% Rec	Acceptance Limit				
2,4,6-Tribromophenol		128	41-144				
2-Fluorobiphenyl		124	37-129				
2-Fluorophenol		108	24-127				
Nitrobenzene-d5		114	38-127				
Phenol-d5		111	28-128				
Terphenyl-d14		120	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 $\geq$ 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

TCLP Semivolatiles - MS

Sample ID: KF09013-004MS

Matrix: Aqueous

Batch: 12257

Prep Method: 1311/3520C

Analytical Method: 8270D

Prep Date: 06/11/2009 1723 Leachate Date: 06/11/2009 0000

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,4-Dichlorobenzene	ND	1.0	0.94		1	94	30-130	06/14/2009 0702
2,4-Dinitrotoluene	ND	1.0	0.89		1	89	30-130	06/14/2009 0702
Hexachlorobenzene	ND	1.0	1.1		1	110	30-130	06/14/2009 0702
Hexachlorobutadiene	ND	1.0	1.0		1	101	30-130	06/14/2009 0702
Hexachloroethane	ND	1.0	0.99		1	99	30-130	06/14/2009 0702
2-Methylphenol	ND	1.0	0.93		1	93	30-130	06/14/2009 0702
3 & 4-Methylphenol	ND	2.0	2.2		1	109	30-130	06/14/2009 0702
Nitrobenzene	ND	1.0	1.1		1	110	30-130	06/14/2009 0702
Pentachlorophenol	ND	1.0	0.90		1	90	30-130	06/14/2009 0702
Pyridine	ND	1.0	0.52		1	52	30-130	06/14/2009 0702
2,4,5-Trichlorophenol	ND	1.0	1.0		1	102	30-130	06/14/2009 0702
2,4,6-Trichlorophenol	ND	1.0	0.96		1	96	30-130	06/14/2009 0702
Surrogate	Q	% Rec	Acceptance Limit					
2,4,6-Tribromophenol		115	41-144					
2-Fluorobiphenyl		117	37-129					
2-Fluorophenol		97	24-127					
Nitrobenzene-d5	N	150	38-127					
Phenol-d5		116	28-128					
Terphenyl-d14		109	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 $\geq$ 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

TPH - DRO - MB

Sample ID: KQ12123-001

Batch: 12123

Analytical Method: 8015C

Matrix: Aqueous

Prep Method: 3520C

Prep Date: 06/09/2009 2234

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TPH-DRO	57	J	1	200	23	ug/L	06/13/2009 0909
Surrogate	Q	% Rec	Acceptance Limit				
o - Terphenyl		88	53-118				

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

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

P = The RPD between two GC columns exceeds 40%

J = Estimated result < PQL and $\geq$ MDL

N - Recovery is out of criteria

+ - RPD is out of criteria

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

TPH - DRO - LCS

Sample ID: KQ12123-002

Matrix: Aqueous

Batch: 12123

Prep Method: 3520C

Analytical Method: 8015C

Prep Date: 06/09/2009 2234

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-DRO	2500	2200		1	90	70-130	06/13/2009 0928
Surrogate	Q	% Rec	Acceptance Limit				
o - Terphenyl		87	53-118				

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 $\geq$ 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

TPH - GRO - MB

Sample ID: KQ12765-001

Matrix: Aqueous

Batch: 12765

Prep Method: 5030B

Analytical Method: 8015B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
TPH-GRO	ND		1	100	20	ug/L	06/18/2009 1510
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		122	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 $\geq$ 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, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

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Level 1 Report v2.1

TPH - GRO - LCS

Sample ID: KQ12765-002

Matrix: Aqueous

Batch: 12765

Prep Method: 5030B

Analytical Method: 8015B

Parameter	Spike Amount (ug/L)		Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
TPH-GRO	1000		960		1	96	70-130	06/18/2009 1420
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		117	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 $\geq$ 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

TPH - GRO - LCSD

Sample ID: KQ12765-003

Matrix: Aqueous

Batch: 12765

Prep Method: 5030B

Analytical Method: 8015B

Parameter	Spike Amount (ug/L)		Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
TPH-GRO	1000		940		1	94	1.6	70-130	20	06/18/2009 1445
Surrogate	Q	% Rec	Acceptance Limit							
Bromofluorobenzene		115	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 $\geq$ 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

ICP-AES - MB

Sample ID: KQ12463-001

Batch: 12463

Analytical Method: 6010B

Matrix: Aqueous

Prep Method: 3005A

Prep Date: 06/15/2009 1800

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Iron	ND		1	0.10	0.023	mg/L	06/16/2009 2112
Lead	ND		1	0.010	0.0019	mg/L	06/16/2009 2112

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 $\geq$ 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

ICP-AES - LCS

Sample ID: KQ12463-002

Matrix: Aqueous

Batch: 12463

Prep Method: 3005A

Analytical Method: 6010B

Prep Date: 06/15/2009 1800

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Iron	20	20		1	99	80-120	06/16/2009 2117
Lead	0.40	0.38		1	95	80-120	06/16/2009 2117

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 $\geq$ 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

ICP-AES - LCSD

Sample ID: KQ12463-003

Matrix: Aqueous

Batch: 12463

Prep Method: 3005A

Analytical Method: 6010B

Prep Date: 06/15/2009 1800

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Iron	20	20		1	98	0.90	80-120	20	06/16/2009 2123
Lead	0.40	0.38		1	94	0.94	80-120	20	06/16/2009 2123

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 $\geq$ 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

ICP-AES - MB

Sample ID: KQ12463-001

Batch: 12463

Analytical Method: 6010B

Matrix: Aqueous

Prep Method: 3005A

Prep Date: 06/15/2009 1800

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Dissolved Iron	ND		1	0.10	0.023	mg/L	06/16/2009 2112
Dissolved Lead	ND		1	0.010	0.0019	mg/L	06/16/2009 2112

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 $\geq$ 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

ICP-AES - LCS

Sample ID: KQ12463-002

Matrix: Aqueous

Batch: 12463

Prep Method: 3005A

Analytical Method: 6010B

Prep Date: 06/15/2009 1800

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Dissolved Iron	20	20		1	99	80-120	06/16/2009 2117
Dissolved Lead	0.40	0.38		1	95	80-120	06/16/2009 2117

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 $\geq$ 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

ICP-AES - LCSD

Sample ID: KQ12463-003

Matrix: Aqueous

Batch: 12463

Prep Method: 3005A

Analytical Method: 6010B

Prep Date: 06/15/2009 1800

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Dissolved Iron	20	20		1	98	0.90	80-120	20	06/16/2009 2123
Dissolved Lead	0.40	0.38		1	94	0.94	80-120	20	06/16/2009 2123

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 $\geq$ 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

- West Columbia, South Carolina 29172

Telephone No. (803) 791-9700 Fax No. (803) 791-9111

Number 102134

Client ARCADIS		Request to Contact: Scott Boston		Telephone No. / Fax No. / E-mail 770-431-8666 / 770-435-2666		Quote No.		
Address 2849 Paces Ferry Rd Atlanta GA 30339		Sampler's Signature <i>[Signature]</i>		Waybill No.		Page 1 of 1		
Project Name HAA-13 Pomphouse Release		Printed Name Erica Maddox		Analysis (Attach label if more space is needed.)				
Project No. GPOBHAFS.H3A.NAIRL		P.O. No.		Lot No. KF09013				
Sample ID / Description (Containers for each sample may be combined on one line.)		Date		No. of Containers by Preservative Type		Remarks / Container LD		
Matrix	Acid Wash	Rinse	Soak	Agitate	MCSA	CH	HCON	PH SODS
D-MW37 (060809)	X			2	151			
D-MW11 (060809)	X			2	151			
IB-01 (060809)	X			2				
HA13R1-IOW-1(060809)	X			3				

[Signature: Erica Maddox]

Possible Hazard Identification		Sample Disposal		OC Requirements (Specify)	
Non-Hazard	Flammable	Corrosive	Toxic	Return to Client	Disposal by Lab
☐ Non-Hazard	☐ Flammable	☐ Corrosive	☐ Toxic	☐ Return to Client	☐ Disposal by Lab
Time Around Time Required (Prior lab approval required for expedited TAT.)					
1 Standard 1 Rush (Specify)					

1. Returned by <i>[Signature: Erica Maddox]</i>		Date 6/8/09	Time 1500
2. Retrieved by <i>[Signature: Erica Maddox]</i>		Date	Time
3. Retrieved by <i>[Signature: Erica Maddox]</i>		Date 6/9/09	Time 0915

Comments: Failer

LAB USE ONLY
Received on file (Circle) Yes No Koz Pack Heat Temp. 3.5 °C

DISTRIBUTION: WHITE & YELLOW-HATUM: In laboratory with *Symptetrus*; PINK-Field/Client Copy

Document Number: F-AD-C12 Effective Date: 08-04-02

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 6

Page 1 of 1
Replaces Date: 09/22/06
Effective Date: 05/29/07

Sample Receipt Checklist (SRC)

Client: Arcadis Cooler Inspected by/date: nmw / 6/9/08 Lot #: KF09013

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☒ FedEx ☐ Airborne Exp ☐ Other		
Yes ☐	No ☒	NA ☐
1. Were custody seals present on the cooler?		
Yes ☐	No ☐	NA ☒
2. If custody seals were present, were they intact and unbroken?		
Cooler ID/temperature upon receipt <u>3.5</u> / °C / °C / °C / °C		
Method: ☐ Temperature Blank ☒ Against Bottles		
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 ☒	NA ☐
5. Were proper custody procedures (relinquished/received) followed?		
Yes ☒	No ☐	NA ☐
6. Were sample IDs listed?		
Yes ☒	No ☐	NA ☐
7. Was collection date & time listed?		
Yes ☒	No ☐	NA ☐
8. Were tests to be performed listed on the COC or was quote # provided?		
Yes ☒	No ☐	NA ☐
9. Did all samples arrive in the proper containers for each test?		
Yes ☒	No ☐	NA ☐
10. Did all container label information (ID, date, time) agree with COC?		
Yes ☒	No ☐	NA ☐
11. Did all containers arrive in good condition (unbroken, lids on, etc.)?		
Yes ☒	No ☐	NA ☐
12. Was adequate sample volume available?		
Yes ☒	No ☐	NA ☐
13. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?		
Yes ☐	No ☒	NA ☐
14. Were any samples containers missing?		
Yes ☐	No ☒	NA ☐
15. Were there any excess samples not listed on COC?		
Yes ☐	No ☒	NA ☐
16. Were bubbles present >"pea-size" (1/4" 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/BNA/pest/PCB/herb (<0.2mg/L) and toxicity (<0.1mg/L) samples free of residual chlorine?		
Yes ☐	No ☐	NA ☒
20. Were collection temperatures documented on the COC for NC samples?		
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 _____ (H2SO4, HNO3, 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/BNA/pest/PCB/herb.		
Toxicity sample(s) _____ were received with TRC >0.1 mg/L and were analyzed by method 330.5.		

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐

Did client respond: Yes ☐ No ☐

SESI employee: _____

Date of response: _____

Comments: _____

Report of Analysis

ARCADIS U.S., Inc.
30 Patewood Drive
Suite 155
Greenville, SC 29615
Attention: Janet Christy

Project Name: FST-26 GW Samples

Project Number: GP08HAFS.F26A.NALTM

Lot Number: KF12018

Date Completed: 06/24/2009



Nisreen Saikaly
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

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

*** K F 1 2 0 1 8 ***

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DEHNR No: 329

Case Narrative ARCADIS U.S., Inc. Lot Number: KF12018

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.

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.

pH

As per method the holding time for pH analysis is 15 minutes from collection.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary ARCADIS U.S., Inc. Lot Number: KF12018

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	26-MW-52 (060909)	Aqueous	06/09/2009 0945	06/12/2009
002	26-MW-51 (060909)	Aqueous	06/09/2009 0850	06/12/2009
003	26-MW-32 (060909)	Aqueous	06/09/2009 1145	06/12/2009
004	26-MW-42 (060909)	Aqueous	06/09/2009 1055	06/12/2009
005	26-MW-50 (060909)	Aqueous	06/09/2009 1345	06/12/2009
006	26-MW-49 (060909)	Aqueous	06/09/2009 1510	06/12/2009
007	Trip Blank-01 (060909)	Aqueous	06/09/2009 0800	06/12/2009
008	26-MW-25 (061009)	Aqueous	06/10/2009 1200	06/12/2009
009	26-MW-24 (061009)	Aqueous	06/10/2009 1040	06/12/2009
010	26-MW-28 (061009)	Aqueous	06/10/2009 0840	06/12/2009
011	26-MW-27 (061009)	Aqueous	06/10/2009 1315	06/12/2009
012	26-MW-36 (061009)	Aqueous	06/10/2009 1405	06/12/2009
013	26-MW-53 (061009)	Aqueous	06/10/2009 1500	06/12/2009
014	26-MW-6 (061109)	Aqueous	06/11/2009 0855	06/12/2009
015	26-MW-15 (061109)	Aqueous	06/11/2009 0950	06/12/2009
016	DUP-FST26-1 (061109)	Aqueous	06/11/2009 1200	06/12/2009
017	FST26-IDW-1 (061109)	Aqueous	06/11/2009 1100	06/12/2009

(17 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary

ARCADIS U.S., Inc.

Lot Number: KF12018

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	26-MW-52 (060909)	Aqueous	Benzene	8260B	0.16	J	ug/L	5
002	26-MW-51 (060909)	Aqueous	Benzene	8260B	0.58		ug/L	6
002	26-MW-51 (060909)	Aqueous	Ethylbenzene	8260B	0.28	J	ug/L	6
004	26-MW-42 (060909)	Aqueous	Benzene	8260B	0.90		ug/L	8
004	26-MW-42 (060909)	Aqueous	Ethylbenzene	8260B	0.23	J	ug/L	8
004	26-MW-42 (060909)	Aqueous	Xylenes (total)	8260B	0.37	J	ug/L	8
005	26-MW-50 (060909)	Aqueous	Benzene	8260B	64		ug/L	9
008	26-MW-25 (061009)	Aqueous	Benzene	8260B	120		ug/L	12
008	26-MW-25 (061009)	Aqueous	Ethylbenzene	8260B	140		ug/L	12
008	26-MW-25 (061009)	Aqueous	Toluene	8260B	4.2		ug/L	12
008	26-MW-25 (061009)	Aqueous	Xylenes (total)	8260B	58		ug/L	12
010	26-MW-28 (061009)	Aqueous	Benzene	8260B	0.27	J	ug/L	14
010	26-MW-28 (061009)	Aqueous	Ethylbenzene	8260B	0.18	J	ug/L	14
010	26-MW-28 (061009)	Aqueous	Toluene	8260B	0.51		ug/L	14
010	26-MW-28 (061009)	Aqueous	Xylenes (total)	8260B	0.58		ug/L	14
011	26-MW-27 (061009)	Aqueous	Benzene	8260B	5.3		ug/L	15
011	26-MW-27 (061009)	Aqueous	Ethylbenzene	8260B	0.74		ug/L	15
011	26-MW-27 (061009)	Aqueous	Xylenes (total)	8260B	0.60		ug/L	15
013	26-MW-53 (061009)	Aqueous	Benzene	8260B	0.34	J	ug/L	17
013	26-MW-53 (061009)	Aqueous	Ethylbenzene	8260B	0.24	J	ug/L	17
014	26-MW-6 (061109)	Aqueous	Benzene	8260B	120		ug/L	18
014	26-MW-6 (061109)	Aqueous	Ethylbenzene	8260B	100		ug/L	18
014	26-MW-6 (061109)	Aqueous	Toluene	8260B	11		ug/L	18
014	26-MW-6 (061109)	Aqueous	Xylenes (total)	8260B	70		ug/L	18
016	DUP-FST26-1 (061109)	Aqueous	Benzene	8260B	100		ug/L	20
016	DUP-FST26-1 (061109)	Aqueous	Ethylbenzene	8260B	84		ug/L	20
016	DUP-FST26-1 (061109)	Aqueous	Toluene	8260B	9.2		ug/L	20
016	DUP-FST26-1 (061109)	Aqueous	Xylenes (total)	8260B	52		ug/L	20
017	FST26-IDW-1 (061109)	Aqueous	Ignitability (Pensky-Martens Closed-	1010A	>140		° F	21

(29 detections)

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-001			
Description: 26-MW-52 (060909)				Matrix: Aqueous			
Date Sampled: 06/09/2009 0945							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/16/2009 1510	Analyst DLB	Prep Date	Batch 12591
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.16	J	0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	52-138
Bromofluorobenzene		102	70-147
Toluene-d8		105	76-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-002			
Description: 26-MW-51 (060909)				Matrix: Aqueous			
Date Sampled: 06/09/2009 0850							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/16/2009 1532	Analyst DLB	Prep Date	Batch 12591
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.58		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	0.28	J	0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	52-138
Bromofluorobenzene		101	70-147
Toluene-d8		105	76-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-003			
Description: 26-MW-32 (060909)				Matrix: Aqueous			
Date Sampled: 06/09/2009 1145							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 1940	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		82	70-138
Bromofluorobenzene		76	70-147
Toluene-d8		84	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-004			
Description: 26-MW-42 (060909)				Matrix: Aqueous			
Date Sampled: 06/09/2009 1055							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2001	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.90		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	0.23	J	0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.37	J	0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-138
Bromofluorobenzene		80	70-147
Toluene-d8		84	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-005			
Description: 26-MW-50 (060909)				Matrix: Aqueous			
Date Sampled: 06/09/2009 1345							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2023	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	64		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-138
Bromofluorobenzene		84	70-147
Toluene-d8		85	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-006			
Description: 26-MW-49 (060909)				Matrix: Aqueous			
Date Sampled: 06/09/2009 1510							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2045	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-138
Bromofluorobenzene		82	70-147
Toluene-d8		83	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-007			
Description: Trip Blank-01 (060909)				Matrix: Aqueous			
Date Sampled: 06/09/2009 0800							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2106	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-138
Bromofluorobenzene		83	70-147
Toluene-d8		85	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-008			
Description: 26-MW-25 (061009)				Matrix: Aqueous			
Date Sampled: 06/10/2009 1200							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2337	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	120		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	140		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	4.2		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	58		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-138
Bromofluorobenzene		85	70-147
Toluene-d8		88	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-009			
Description: 26-MW-24 (061009)				Matrix: Aqueous			
Date Sampled: 06/10/2009 1040							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2128	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-138
Bromofluorobenzene		83	70-147
Toluene-d8		86	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-010			
Description: 26-MW-28 (061009)				Matrix: Aqueous			
Date Sampled: 06/10/2009 0840							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2149	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.27	J	0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	0.18	J	0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	0.51		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.58		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-138
Bromofluorobenzene		81	70-147
Toluene-d8		83	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-011			
Description: 26-MW-27 (061009)				Matrix: Aqueous			
Date Sampled: 06/10/2009 1315							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2211	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	5.3		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	0.74		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.60		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-138
Bromofluorobenzene		86	70-147
Toluene-d8		82	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-012			
Description: 26-MW-36 (061009)				Matrix: Aqueous			
Date Sampled: 06/10/2009 1405							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2233	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-138
Bromofluorobenzene		83	70-147
Toluene-d8		85	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

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Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-013			
Description: 26-MW-53 (061009)				Matrix: Aqueous			
Date Sampled: 06/10/2009 1500							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2254	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	0.34	J	0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	0.24	J	0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-138
Bromofluorobenzene		86	70-147
Toluene-d8		86	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-014			
Description: 26-MW-6 (061109)				Matrix: Aqueous			
Date Sampled: 06/11/2009 0855							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2359	Analyst IVC	Prep Date	Batch 12778
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Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	120		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	100		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	11		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	70		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-138
Bromofluorobenzene		83	70-147
Toluene-d8		87	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-015			
Description: 26-MW-15 (061109)				Matrix: Aqueous			
Date Sampled: 06/11/2009 0950							
Date Received: 06/12/2009							

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date 06/18/2009 2316	Analyst IVC	Prep Date	Batch 12778
----------	----------------------	----------------------------	---------------	----------------------------------	----------------	-----------	----------------

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-138
Bromofluorobenzene		80	70-147
Toluene-d8		83	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Volatile Organic Compounds by GC/MS

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-016			
Description: DUP-FST26-1 (061109)				Matrix: Aqueous			
Date Sampled: 06/11/2009 1200							
Date Received: 06/12/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	06/19/2009 0020	IVC		12778		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	100		0.50	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	84		0.50	0.17	ug/L	1
Toluene	108-88-3	8260B	9.2		0.50	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	52		0.50	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		80	70-138
Bromofluorobenzene		81	70-147
Toluene-d8		86	70-125

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

Inorganic non-metals

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-017			
Description: FST26-IDW-1 (061109)				Matrix: Aqueous			
Date Sampled: 06/11/2009 1100							
Date Received: 06/12/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Ignitability) 1010A	1	06/23/2009 1538	PMM		
1		(pH) SM 4500-H B	1	06/13/2009 1235	RLM		12535

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Ignitability (Pensky-Martens Closed-Cup)		1010A	>140				° F	1
pH		SM 4500-H B	6.80	H			su	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

TCLP Volatiles

Client: ARCADIS U.S., Inc.				Laboratory ID: KF12018-017			
Description: FST26-IDW-1 (061109)				Matrix: Aqueous			
Date Sampled: 06/11/2009 1100							
Date Received: 06/12/2009							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260B	10	06/23/2009 1355	DLB		13071	06/15/2009 0000

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		0.050		mg/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		0.10		mg/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.050		mg/L	1
Chlorobenzene	108-90-7	8260B	ND		0.050		mg/L	1
Chloroform	67-66-3	8260B	ND		0.050		mg/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.050		mg/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.050		mg/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.050		mg/L	1
Trichloroethene	79-01-6	8260B	ND		0.050		mg/L	1
Vinyl chloride	75-01-4	8260B	ND		0.010		mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		120	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		113	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the MDL

J = Estimated result < PQL and $\geq$ MDL

P = The RPD between two GC columns exceeds 40%

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

N = Recovery is out of criteria

H = Out of holding time

QC Summary

Inorganic non-metals - MB

Sample ID: KQ12535-001

Matrix: Aqueous

Batch: 12535

Analytical Method: SM 4500-H B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
pH	ND		1	0.0		su	06/13/2009 1235

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 $\geq$ 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: KQ12591-001

Matrix: Aqueous

Batch: 12591

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	06/16/2009 1010
Ethylbenzene	ND		1	0.50	0.17	ug/L	06/16/2009 1010
Toluene	ND		1	0.50	0.17	ug/L	06/16/2009 1010
Xylenes (total)	ND		1	0.50	0.17	ug/L	06/16/2009 1010
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		103	70-130				
1,2-Dichloroethane-d4		104	70-130				
Toluene-d8		105	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 $\geq$ 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: KQ12591-002

Matrix: Aqueous

Batch: 12591

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	45		1	90	70-130	06/16/2009 0845
Ethylbenzene	50	44		1	88	70-130	06/16/2009 0845
Toluene	50	44		1	88	70-130	06/16/2009 0845
Xylenes (total)	100	87		1	87	70-130	06/16/2009 0845
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		105	70-130				
1,2-Dichloroethane-d4		104	70-130				
Toluene-d8		103	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 $\geq$ 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: KQ12591-003

Matrix: Aqueous

Batch: 12591

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	46		1	92	2.4	70-130	20	06/16/2009 0906
Ethylbenzene	50	45		1	90	3.4	70-130	20	06/16/2009 0906
Toluene	50	45		1	89	1.0	70-130	20	06/16/2009 0906
Xylenes (total)	100	88		1	88	2.0	70-130	20	06/16/2009 0906
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		105	70-130						
1,2-Dichloroethane-d4		108	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 $\geq$ 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: KQ12778-001

Matrix: Aqueous

Batch: 12778

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	0.50	0.027	ug/L	06/18/2009 1833
Ethylbenzene	ND		1	0.50	0.17	ug/L	06/18/2009 1833
Toluene	ND		1	0.50	0.17	ug/L	06/18/2009 1833
Xylenes (total)	ND		1	0.50	0.17	ug/L	06/18/2009 1833
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		78	70-130				
1,2-Dichloroethane-d4		78	70-130				
Toluene-d8		85	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 $\geq$ 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: KQ12778-002

Matrix: Aqueous

Batch: 12778

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	51		1	102	70-130	06/18/2009 1727
Ethylbenzene	50	46		1	93	70-130	06/18/2009 1727
Toluene	50	46		1	92	70-130	06/18/2009 1727
Xylenes (total)	100	90		1	90	70-130	06/18/2009 1727
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		79	70-130				
1,2-Dichloroethane-d4		75	70-130				
Toluene-d8		88	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 $\geq$ 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: KQ12778-003

Matrix: Aqueous

Batch: 12778

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	52		1	105	2.6	70-130	20	06/18/2009 1749
Ethylbenzene	50	49		1	97	4.6	70-130	20	06/18/2009 1749
Toluene	50	47		1	95	3.3	70-130	20	06/18/2009 1749
Xylenes (total)	100	94		1	94	3.9	70-130	20	06/18/2009 1749
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		80	70-130						
1,2-Dichloroethane-d4		79	70-130						
Toluene-d8		88	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 $\geq$ 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

TCLP Volatiles - MB

Sample ID: KQ13071-001

Matrix: Aqueous

Batch: 13071

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/15/2009 0000

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		10	0.050		mg/L	06/23/2009 1234
2-Butanone (MEK)	ND		10	0.10		mg/L	06/23/2009 1234
Carbon tetrachloride	ND		10	0.050		mg/L	06/23/2009 1234
Chlorobenzene	ND		10	0.050		mg/L	06/23/2009 1234
Chloroform	ND		10	0.050		mg/L	06/23/2009 1234
1,2-Dichloroethane	ND		10	0.050		mg/L	06/23/2009 1234
1,1-Dichloroethene	ND		10	0.050		mg/L	06/23/2009 1234
Tetrachloroethene	ND		10	0.050		mg/L	06/23/2009 1234
Trichloroethene	ND		10	0.050		mg/L	06/23/2009 1234
Vinyl chloride	ND		10	0.010		mg/L	06/23/2009 1234
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		107	70-130				
1,2-Dichloroethane-d4		109	70-130				
Toluene-d8		113	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 $\geq$ 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

TCLP Volatiles - LCS

Sample ID: KQ13071-002

Matrix: Aqueous

Batch: 13071

Prep Method: 1311/5030B

Analytical Method: 8260B

Leachate Date: 06/15/2009 0000

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	0.50	0.53		10	106	72-127	06/23/2009 1212
2-Butanone (MEK)	1.0	1.0		10	105	60-140	06/23/2009 1212
Carbon tetrachloride	0.50	0.52		10	105	37-166	06/23/2009 1212
Chlorobenzene	0.50	0.51		10	102	78-129	06/23/2009 1212
Chloroform	0.50	0.44		10	88	63-123	06/23/2009 1212
1,2-Dichloroethane	0.50	0.48		10	96	59-143	06/23/2009 1212
1,1-Dichloroethene	0.50	0.58		10	116	50-132	06/23/2009 1212
Tetrachloroethene	0.50	0.54		10	108	70-130	06/23/2009 1212
Trichloroethene	0.50	0.53		10	106	73-124	06/23/2009 1212
Vinyl chloride	0.50	0.54		10	108	29-159	06/23/2009 1212
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		111	70-130				
1,2-Dichloroethane-d4		104	70-130				
Toluene-d8		115	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 $\geq$ 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



Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive

West Columbia, South Carolina 29172

Telephone No. (803) 791-9700 Fax No. (803) 791-9111

Number 102269

Client ARCADIS		Report to Contact Andy Davis		Telephone No. / Fax No. / E-mail 770-431-8666 / 770-435-2666		Quote No.	
Address 2849 Paces Ferry Rd		Signature <i>[Signature]</i>		Waybill No.		Page 1 of 2	
City Atlanta		Printed Name Erica Maddox		Analysis (Attach list if more space is needed.)			
State GA		Zip Code 30339					
Project Name EST-26 GW Samples		Project No. GPDB HAFS-F26A-NALTM		Lot No. 1512018		Remarks / Cooler I.D.	
Sample ID / Description (Containers for each sample may be combined on one line.)		Date		Time			
26-MW-52 (060909)		6/9/09		0945			
26-MW-51 (060909)				0850			
26-MW-32 (060909)				1145			
26-MW-42 (060909)				1055			
26-MW-50 (060909)				1345			
26-MW-49 (060909)				1510			
Trip Blank-01 (060909)				0800			
26-MW-25 (061009)		4/0/09		1200			
26-MW-24 (061009)				1040			
26-MW-28 (061009)				0840			
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown		Sample Disposal ☐ Return to Client ☐ Deposit by Lab		QC Requirements (Specify)			
Turn Around Time Required (Prior lab approval required for expedited TAT.) ☒ Standard ☐ Rush (Specify)		1. Received by <i>[Signature]</i>		Date 6/11/09		Time	
2. Retinquished by		2. Received by		Date		Time	
3. Retinquished by		3. Laboratory received by <i>[Signature]</i>		Date 6/20/09		Time 0910	
Comments		LAB USE ONLY Received on ice (Circle) Yes ☒ No ☐ Ice Pack		Receipt Temp. 3.7 °C			

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Samples; PINK-Field/Client Copy

Document Number: F-AD-012 Effective Date: 08-04-02

SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage Point Drive

West Columbia, South Carolina 29172

Telephone No. (803) 791-9700 Fax No. (803) 791-9111

Number 102268

DISTRIBUTION: WHITE & YEL LOW-RETURN to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-4D-012 Effective Date: 08-04-02

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: F-AD-016
Revision Number: 6

Page 1 of 1
Replaces Date: 09/22/06
Effective Date: 05/29/07

Sample Receipt Checklist (SRC)

Client: Arcaadis Cooler Inspected by/date: AMD 16/12/09 Lot #: RF/2018

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☒ FedEx ☐ Airborne Exp ☐ Other		
Yes ☒ No ☐ NA ☐	1. Were custody seals present on the cooler?	
Yes ☒ No ☐ NA ☐	2. If custody seals were present, were they intact and unbroken?	
Cooler ID/temperature upon receipt: <u>3.7</u> °C / °C / °C / °C		
Method: ☐ Temperature Blank ☒ Against Bottles		
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 ☒ NA ☐	5. Were proper custody procedures (relinquished/received) followed?	
Yes ☒ No ☐ NA ☐	6. Were sample IDs listed?	
Yes ☒ No ☐ NA ☐	7. Was collection date & time listed?	
Yes ☒ No ☐ NA ☐	8. Were tests to be performed listed on the COC or was quote # provided?	
Yes ☒ No ☐ NA ☐	9. Did all samples arrive in the proper containers for each test?	
Yes ☒ No ☐ NA ☐	10. Did all container label information (ID, date, time) agree with COC?	
Yes ☒ No ☐ NA ☐	11. Did all containers arrive in good condition (unbroken, lids on, etc.)?	
Yes ☒ No ☐ NA ☐	12. Was adequate sample volume available?	
Yes ☐ No ☐ NA ☒	13. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?	
Yes ☐ No ☒ NA ☐	14. Were any samples containers missing?	
Yes ☐ No ☒ NA ☐	15. Were there any excess samples not listed on COC?	
Yes ☐ No ☒ NA ☐	16. Were bubbles present >"pea-size" (1/4" 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/BNA/pest/PCB/herb (<0.2mg/L) and toxicity (<0.1mg/L) samples free of residual chlorine?	
Yes ☐ No ☐ NA ☒	20. Were collection temperatures documented on the COC for NC samples?	
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 _____ (H2SO4, HNO3, 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/BNA/pest/PCB/herb.		
Toxicity sample(s) _____ were received with TRC >0.1 mg/L and were analyzed by method 330.5.		

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐

SESI employee: _____

Comments: _____

Did client respond: Yes ☐ No ☐

Date of response: _____

Appendix F

Alternate Concentration Limit and
Alternate Threshold Level
Calculations

HAA-09 CAP-Part B Addendum #1

ATL & ACL Calculation

Point of Compliance: Storm Drain approximately 100 ft from source area

Maximum Soil Concentrations:

<u>COPC</u>	<u>Cs</u>		<u>STL</u>
Benzene	94 mg/kg	value from SB-35	0.005 mg/kg
Toluene	23 mg/kg	value from SB-48	0.4 mg/kg
Ethylbenzene	380 mg/kg	value from SB-35	0.37 mg/kg
Xylenes	790 mg/kg	value from SB-35	20 mg/kg
DBA			1.5 mg/kg

Soil Parameters

		<u>Analytical Results from DPT Samples</u>			<u>Average</u>
		<u>SB-28</u>	<u>SB-29</u>	<u>SB-40</u>	
TOC		4800	550	5400	3583 mg/kg
		<u>SB-15</u>	<u>SB-26</u>	<u>SB-36</u>	
TPH	GRO	1500	1200	200	
	DRO	<u>2500</u>	<u>220</u>	<u>220</u>	
	Total TPH	4000	1420	420	1947 mg/kg

Soil Bulk Density 1.32 kg/l 1.32 g/cm3 from CAP-A UST 117 (sample predominantly clay)
1.7 kg/l 1.7 g/cm3 typical value for silty sand (used for bioscreen model)

<u>COPC</u>	<u>Partition Coefficient - Koc</u>	
Benzene	81 ml/g	GA EPD Guidance
Toluene	133 ml/g	GA EPD Guidance
Ethylbenzene	176 ml/g	GA EPD Guidance
Xylenes	639 ml/g	GA EPD Guidance
DBA	1668800 ml/g	

Fraction of Organic Carbon

$F_{cs} = (TOC + TPH/1.724) \times (1 \times 10^{-6})$ UST CAP-Part A Guidance Equation Set I, Step 1
Fcs= 0.00471249

Maximum Groundwater Concentrations

$C_w = C_s / (K_{oc} \times F_{cs})$		UST CAP-Part A Guidance Equation Set I, Step 2		C_w = pore water concentration in equilibrium with source soil	
<u>COPC</u>	<u>Cw</u>	<u>Highest in DPT GW</u>		<u>IWQS</u>	
Benzene	246.3 mg/l	0.66	mg/l	0.051	
Toluene	36.7 mg/l	0.37	mg/l	5.98	
Ethylbenzene	458.2 mg/l	0.17	mg/l	2.1	
Xylenes	262.3 mg/l	1.8	mg/l	10 (MCL)	
Naphthalene	not calculated	0.25	mg/l	0.0065 (EPA R3 RBC)	
PAHs	not calculated	0.00059	mg/l	0.000018	
			DiBenzo(a,h)anthracene	0.000018	
			Indeno(1,2,3-c,d)pyrene	0.000018	

Alternate Threshold Level

$ATL = K_{oc}(ml/g) \times F_{cs} \times C_{std}(mg/l) \times DAF_w$

<u>COPC</u>	<u>ATL</u>	<u>DAFw</u> (from bioscreen)	<u>Soil Saturation Limits</u>
Benzene	0.3 mg/kg	14.5	
Toluene	54.3 mg/kg	14.5	479 mg/kg
Ethylbenzene	25.3 mg/kg	14.5	187 mg/kg
Xylenes	436.6 mg/kg	14.5	893 mg/kg

Alternate Concentration Level

$ACL = IWQS \times DAF_w$

<u>COPC</u>	<u>ACL</u>	<u>DAFw</u> (from bioscreen)	
Benzene	0.7 mg/l	14.5	
Toluene	86.7 mg/l	14.5	
Ethylbenzene	30.5 mg/l	14.5	
Xylenes	145.0 mg/l	14.5	
Naphthalene	0.9425 mg/l	145.0	DAF = 10 x benzene DAF
PAHs*	0.0026 mg/l	145.0	*DiBenzo(a,h)anthracene
			*Indeno(1,2,3-c,d)pyrene
			DAF = 10 x benzene DAF

MODEL INPUTS

COPC	Concentrations (ug/l) in GW from DPT				Maximum concentrations in GW (mg/l) (equilibrium with maximum soil concentration)
	downgrad1	source1	source2	downgrad2	
	GW1	GW2	GW3	GW4	
Benzene	0.76	330	660	2.2	246.3
Toluene	< 0.5	8.0	170	0.40 J	36.7
Ethylbenzene	2.8	100	370	0.63	458.2
Xylenes	9.5	420	1800	2.2	262.3
Hydraulic Conductivity	K	0.0029	cm/sec	from slug tests in CAP-Part B for UST 117	
Hydraulic Gradient	i	0.0035	ft/ft	from CAP-Part A for UST 117	
Porosity	n	0.18		used in previous model for site; midrange of values for fine sand	
Longitudinal Dispersivity	alpha x	10	ft	based on commonly used relationship to plume length (USTMP Guidance)	
Transverse Dispersivity	alpha y	3.3	ft	based on commonly used relationship to plume length	
Vertical Dispersivity	alpha z	0.5	ft	based on commonly used relationship to plume length	
Plume length	Lp	100	ft	distance to receptor	
Solute Half - Life		t-half			
Benzene		2	years	conservative value per GA EPD Guidance	
Toluene		0.17	years	conservative value	
Ethylbenzene		0.62	years	conservative value	
Xylene		1	years	conservative value	
Plume Width		100	ft		
Simulation time		20	years	since release reaches steady state simulation	unknown - tanks demolished in 1999
Source thickness		10	ft		
Source mass		1000000	kg	constant source (conservative assumption)	

DAF Calculation from Modeling Results

	DPT Samples Results	Source Equilibrium Concentration	Conservative DAFw
Source Benzene Concentration =	0.66 mg/l	246.3 mg/l	
Model Results at Receptor =	0.026 mg/l	17.029 mg/l	
DAFw for Benzene =	25.4	14.5	14.5
Source Toluene Concentration =	0.17 mg/l	36.7 mg/l	
Model Results at Receptor =	0 mg/l	0 mg/l	
DAFw for Toluene =	N/A	N/A	14.5
Source Ethylbenzene Concentration =	0.37 mg/l	458.2 mg/l	
Model Results at Receptor =	0 mg/l	0.039 mg/l	
DAFw for Ethylbenzene =	N/A	11747.8	14.5
Source Xylene Concentration =	1.8 mg/l	262.3 mg/l	
Model Results at Receptor =	0 mg/l	0 mg/l	
DAFw for Xylene =	N/A	N/A	14.5
DAFw for PAHs =	(10 x Benzene DAF)		145

Appendix G

Summary of Fate and Transport
Model

File Edit View Insert Format Tools Data Window Help

W = 100

BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence Version 1.4

Hunter AAF
HAA-09 - Benzene
Run Name

1. HYDROGEOLOGY

Seepage Velocity* Vs 58.3 (ft/yr)
or
Hydraulic Conductivity K 2.9E-03 (cm/sec)
Hydraulic Gradient i 0.0035 (ft/ft)
Porosity n 0.18 (-)

2. DISPERSION

Longitudinal Dispersivity* α_{Lx} 10.0 (ft)
Transverse Dispersivity* α_{Ly} 3.3 (ft)
Vertical Dispersivity* α_{Lz} 0.5 (ft)
or
Estimated Plume Length L_p 100 (ft)

3. ADSORPTION

Retardation Factor* R 4.6 (-)
or
Soil Bulk Density ρ 1.7 (kg/l)
Partition Coefficient K_{oc} 81 (L/kg)
Fraction Organic Carbon f_{oc} 4.7E-3 (-)

4. BIODEGRADATION

1st Order Decay Coeff* λ 3.5E-1 (per yr)
or
Solute Half-Life t_{half} 2.00 (year)
or **Instantaneous Reaction Model**

Delta Oxygen* DO 1.65 (mg/L)
Delta Nitrate* NO3 0.7 (mg/L)
Observed Ferrous Iron* Fe2+ 16.6 (mg/L)
Delta Sulfate* SO4 22.4 (mg/L)
Observed Methane* CH4 6.6 (mg/L)

5. GENERAL

Modeled Area Length* 100 (ft)
Modeled Area Width* 100 (ft)
Simulation Time* 20 (yr)

6. SOURCE DATA

Source Thickness in Sat.Zone* 10 (ft)
Source Zones:

Width* (ft)	Conc. (mg/L)*
100	0.66
0	0
0	0

Source Halflife (see Help):
 >1000 1st Order
 Inst. React. 1st Order
 Soluble Mass 1000000 (Kg)
 In Source NAPL, Soil

Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3

View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	0.66					.002					
Dist. from Source (ft)	0	10	20	30	40	50	60	70	80	90	100

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE **RUN ARRAY**

View Output View Output

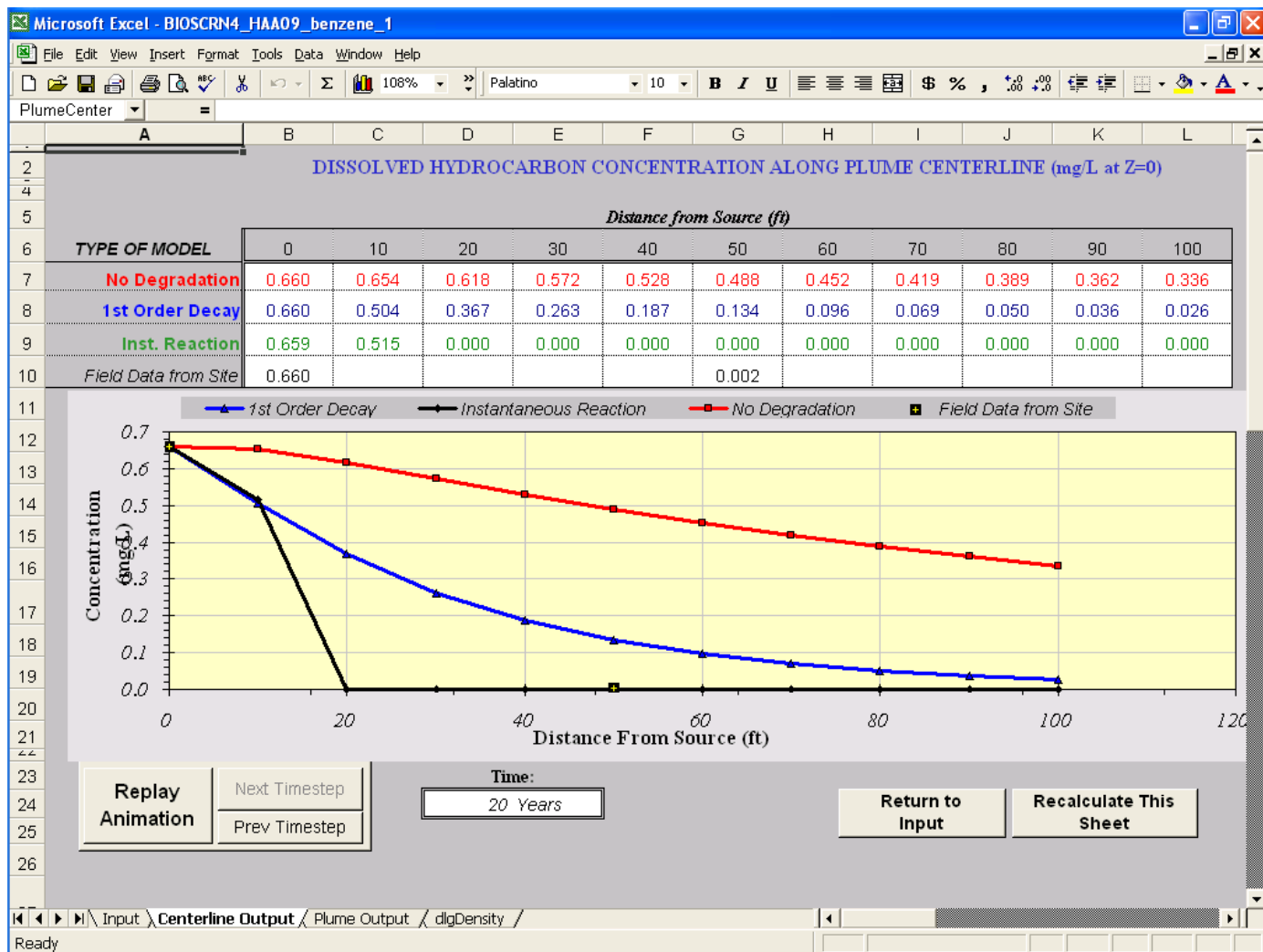
Help Recalculate This Sheet

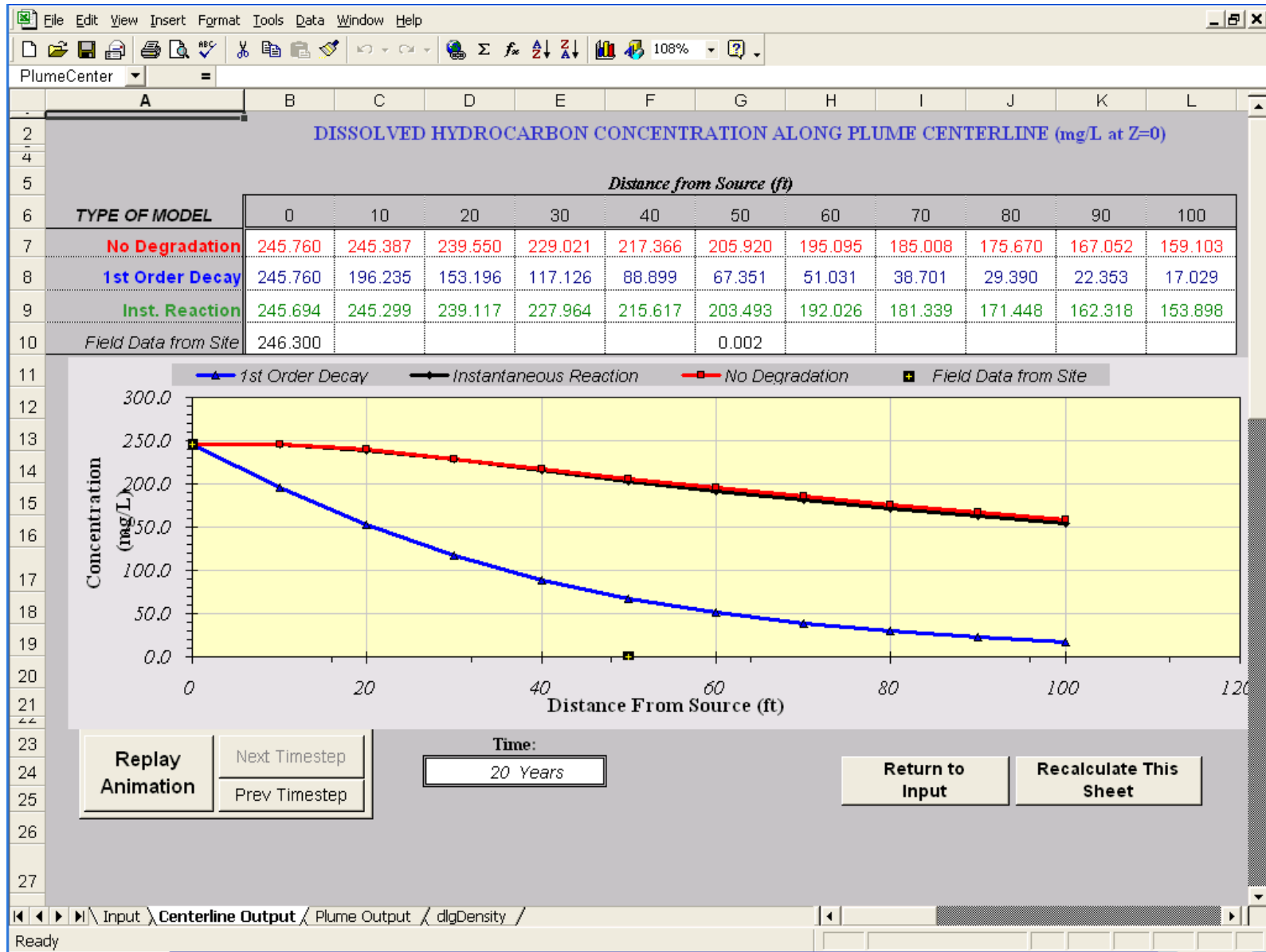
Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

Input / Centerline Output / Plume Output / dlqDensity /

Ready





BIOSCREEN Natural Attenuation Decision Support System
Air Force Center for Environmental Excellence Version 1.4

Hunter AAF
HAA-09 - Toluene
Run Name

1. HYDROGEOLOGY

Seepage Velocity* Vs 58.3 (ft/yr)
or
Hydraulic Conductivity K 2.9E-03 (cm/sec)
Hydraulic Gradient i 0.0035 (ft/ft)
Porosity n 0.18 (-)

2. DISPERSION

Longitudinal Dispersivity* alpha x 10.0 (ft)
Transverse Dispersivity* alpha y 3.3 (ft)
Vertical Dispersivity* alpha z 0.5 (ft)
or
Estimated Plume Length Lp 100 (ft)

3. ADSORPTION

Retardation Factor* R 6.9 (-)
or
Soil Bulk Density rho 1.7 (kg/l)
Partition Coefficient Koc 133 (L/kg)
Fraction Organic Carbon foc 4.7E-3 (-)

4. BIODEGRADATION

1st Order Decay Coeff* lambda 4.1E+0 (per yr)
or
Solute Half-Life t-half 0.17 (year)
or **Instantaneous Reaction Model**

Delta Oxygen* DO 1.65 (mg/L)
Delta Nitrate* NO3 0.7 (mg/L)
Observed Ferrous Iron* Fe2+ 16.6 (mg/L)
Delta Sulfate* SO4 22.4 (mg/L)
Observed Methane* CH4 6.6 (mg/L)

5. GENERAL

Modeled Area Length* 100 (ft)
Modeled Area Width* 100 (ft)
Simulation Time* 20 (yr)

6. SOURCE DATA

Source Thickness in Sat.Zone* 10 (ft)
Source Zones:

Width* (ft)	Conc. (mg/L)*
100	0.17
0	0
0	0

Source Half-life (see Help):
>1000 >1000 (yr)
Inst. React. 1st Order
Soluble Mass 1000000 (Kg)
In Source NAPL, Soil

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	0	10	20	30	40	50	60	70	80	90	100
Dist. from Source (ft)	0	10	20	30	40	50	60	70	80	90	100

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE **RUN ARRAY**

View Output **View Output**

Help Recalculate This Sheet
Paste Example Dataset
Restore Formulas for Vs, Dispersivities, R, lambda, other

Data Input Instructions:

115 1. Enter value directly....or
or 2. Calculate by filling in grey
0.02 cells below. (To restore
formulas, hit button below).
Variable* Data used directly in model.
20 Value calculated by model.
(Don't enter any data).

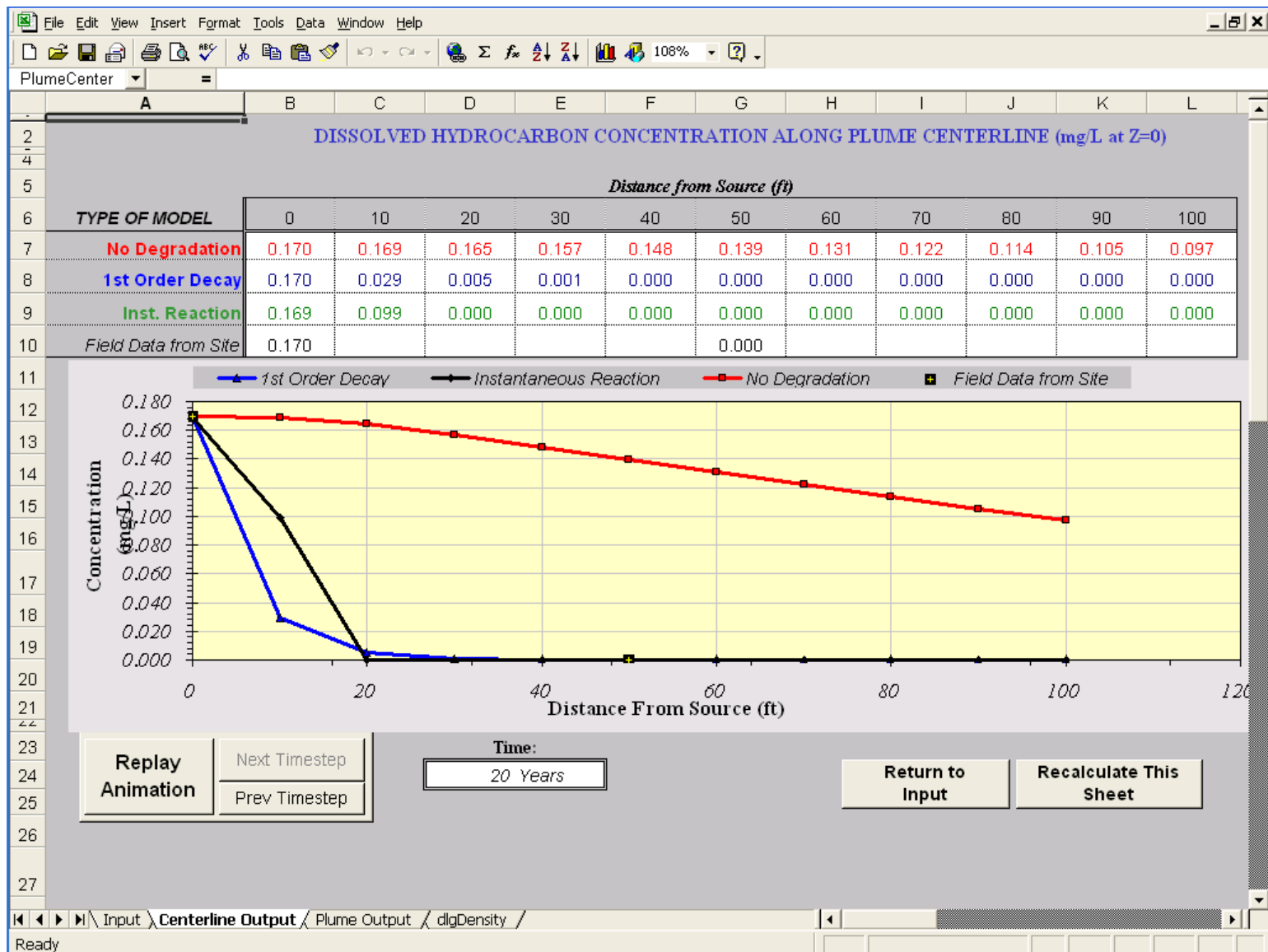
Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3

View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

Input / Centerline Output / Plume Output / dlgDensity /

Ready



File Edit View Insert Format Tools Data Window Help

W = 100

BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence Version 1.4

Hunter AAF
HAA-09 - Toluene
Run Name

1. HYDROGEOLOGY

Seepage Velocity* Vs 58.3 (ft/yr)
or
Hydraulic Conductivity K 2.9E-03 (cm/sec)
Hydraulic Gradient i 0.0035 (ft/ft)
Porosity n 0.18 (-)

2. DISPERSION

Longitudinal Dispersivity* alpha x 10.0 (ft)
Transverse Dispersivity* alpha y 3.3 (ft)
Vertical Dispersivity* alpha z 0.5 (ft)
or
Estimated Plume Length Lp 100 (ft)

3. ADSORPTION

Retardation Factor* R 6.9 (-)
or
Soil Bulk Density rho 1.7 (kg/l)
Partition Coefficient Koc 133 (L/kg)
Fraction Organic Carbon foc 4.7E-3 (-)

4. BIODEGRADATION

1st Order Decay Coeff* lambda 4.1E+0 (per yr)
or
Solute Half-Life t-half 0.17 (year)
or **Instantaneous Reaction Model**
Delta Oxygen* DO 1.65 (mg/L)
Delta Nitrate* NO3 0.7 (mg/L)
Observed Ferrous Iron* Fe2+ 16.6 (mg/L)
Delta Sulfate* SO4 22.4 (mg/L)
Observed Methane* CH4 6.6 (mg/L)

5. GENERAL

Modeled Area Length* 100 (ft)
Modeled Area Width* 100 (ft)
Simulation Time* 20 (yr)

6. SOURCE DATA

Source Thickness in Sat.Zone* 10 (ft)
Source Zones:
Width* (ft) Conc. (mg/L)*

1	100	36.7
2	0	0
3	0	0
4		
5		

Source Half-life (see Help):
>1000 >1000 (yr)
Inst. React. 1st Order
Soluble Mass 1000000 (Kg)
In Source NAPL, Soil

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	36.7					.0								
Dist. from Source (ft)	0	10	20	30	40	50	60	70	80	90	100			

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE **RUN ARRAY**

View Output **View Output**

Help Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3

View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

Input / Centerline Output / Plume Output / dlgDensity /

Ready



File Edit View Insert Format Tools Data Window Help

W = 100

BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence Version 1.4

Hunter AAF
HAA-09 - Ethylbenzene
Run Name

1. HYDROGEOLOGY

Seepage Velocity* Vs 58.3 (ft/yr)
or
Hydraulic Conductivity K 2.9E-03 (cm/sec)
Hydraulic Gradient i 0.0035 (ft/ft)
Porosity n 0.18 (-)

2. DISPERSION

Longitudinal Dispersivity* alpha x 10.0 (ft)
Transverse Dispersivity* alpha y 3.3 (ft)
Vertical Dispersivity* alpha z 0.5 (ft)
or
Estimated Plume Length Lp 100 (ft)

3. ADSORPTION

Retardation Factor* R 8.8 (-)
or
Soil Bulk Density rho 1.7 (kg/l)
Partition Coefficient Koc 176 (L/kg)
Fraction Organic Carbon foc 4.7E-3 (-)

4. BIODEGRADATION

1st Order Decay Coeff* lambda 1.1E+0 (per yr)
or
Solute Half-Life t-half 0.62 (year)
or **Instantaneous Reaction Model**
Delta Oxygen* DO 1.65 (mg/L)
Delta Nitrate* NO3 0.7 (mg/L)
Observed Ferrous Iron* Fe2+ 16.6 (mg/L)
Delta Sulfate* SO4 22.4 (mg/L)
Observed Methane* CH4 6.6 (mg/L)

5. GENERAL

Modeled Area Length* 100 (ft)
Modeled Area Width* 100 (ft)
Simulation Time* 20 (yr)

6. SOURCE DATA

Source Thickness in Sat.Zone* 10 (ft)
Source Zones:
Width* (ft) Conc. (mg/L)*

1	100	0.37
2	0	0
3	0	0
4		
5		

Source Half-life (see Help):
>1000 >1000 (yr)
Inst. React. 1st Order
Soluble Mass 1000000 (Kg)
In Source NAPL, Soil

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	.37					.001								
Dist. from Source (ft)	0	10	20	30	40	50	60	70	80	90	100			

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE **RUN ARRAY**

View Output **View Output**

Help Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

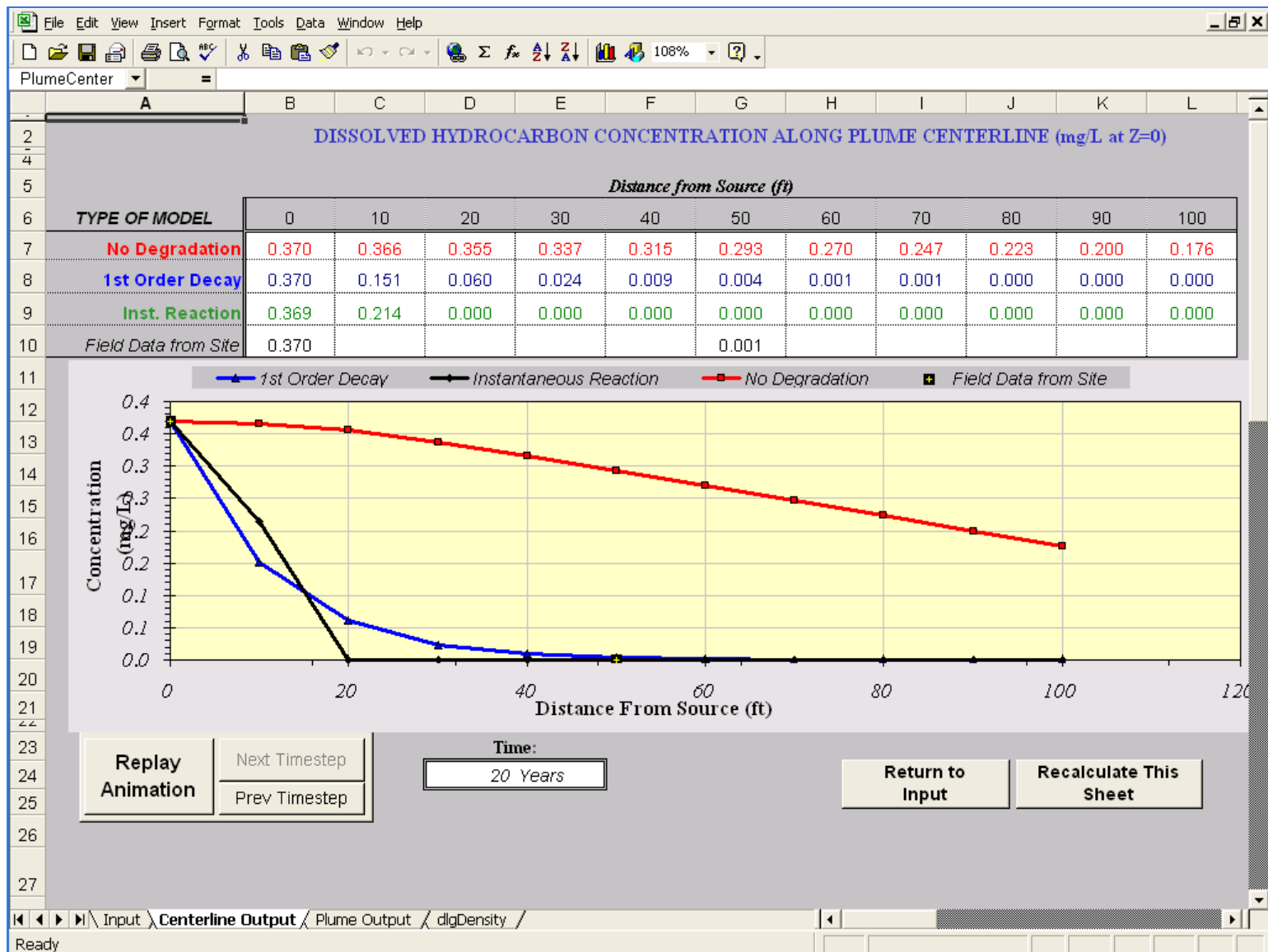
Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3

View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

Input / Centerline Output / Plume Output / dlgDensity /

Ready



File

Edit

View

Insert

Format

Tools

Data

Window

Help

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BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence

Version 1.4

Hunter AAF

HAA-09 - Ethylbenzene

Run Name

115

↑ or

0.02

1. Enter value directly....or

2. Calculate by filling in grey cells below. (To restore formulas, hit button below).

Variable*

→ Data used directly in model.

→ Value calculated by model.

(Don't enter any data).

1. HYDROGEOLOGY

Seepage Velocity* Vs 58.3 (ft/yr)

or

Hydraulic Conductivity K 2.9E-03 (cm/sec)

Hydraulic Gradient i 0.0035 (ft/ft)

Porosity n 0.18 (-)

2. DISPERSION

Longitudinal Dispersivity* alpha x 10.0 (ft)

Transverse Dispersivity* alpha y 3.3 (ft)

Vertical Dispersivity* alpha z 0.5 (ft)

or

Estimated Plume Length Lp 100 (ft)

3. ADSORPTION

Retardation Factor* R 8.8 (-)

or

Soil Bulk Density rho 1.7 (kg/l)

Partition Coefficient Koc 176 (L/kg)

Fraction Organic Carbon foc 4.7E-3 (-)

4. BIODEGRADATION

1st Order Decay Coeff* lambda 1.1E+0 (per yr)

or

Solute Half-Life t-half 0.62 (year)

or Instantaneous Reaction Model

Delta Oxygen* DO 1.65 (mg/L)

Delta Nitrate* NO3 0.7 (mg/L)

Observed Ferrous Iron* Fe2+ 16.6 (mg/L)

Delta Sulfate* SO4 22.4 (mg/L)

Observed Methane* CH4 6.6 (mg/L)

5. GENERAL

Modeled Area Length* 100 (ft)

Modeled Area Width* 100 (ft)

Simulation Time* 20 (yr)

6. SOURCE DATA

Source Thickness in Sat.Zone* 10 (ft)

Source Zones:

Width* (ft)	Conc. (mg/L)*
100	458.2
0	0
0	0

Source Halflife (see Help):

>1000 >1000 (yr)

Inst. React. 1st Order

Soluble Mass 1000000 (Kg)

In Source NAPL, Soil

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	458.2					.001					
Dist. from Source (ft)	0	10	20	30	40	50	60	70	80	90	100

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE

View Output

RUN ARRAY

View Output

Help

Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

Input

Centerline Output

Plume Output

dlgDensity

Ready

5. GENERAL

Modeled Area Length* 100 (ft)
 Modeled Area Width* 100 (ft)
 Simulation Time* 20 (yr)

6. SOURCE DATA

Source Thickness in Sat.Zone* 10 (ft)

Source Zones:

Width* (ft)	Conc. (mg/L)*
100	458.2
0	0
0	0

Source Halflife (see Help):

>1000 >1000 (yr)

Inst. React. 1st Order

Soluble Mass 1000000 (Kg)

In Source NAPL, Soil

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	458.2					.001					
Dist. from Source (ft)	0	10	20	30	40	50	60	70	80	90	100

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE

View Output

RUN ARRAY

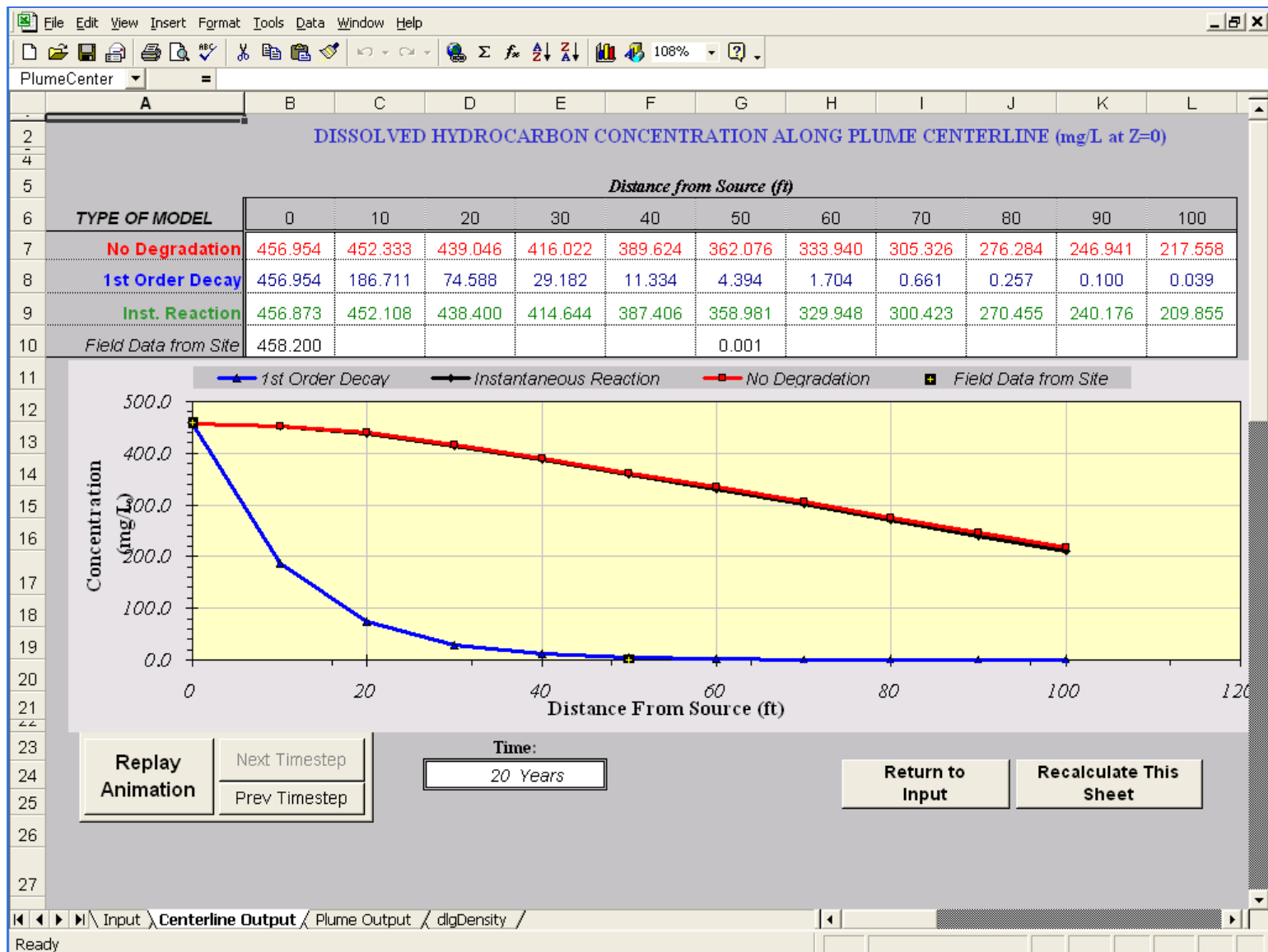
View Output

Help

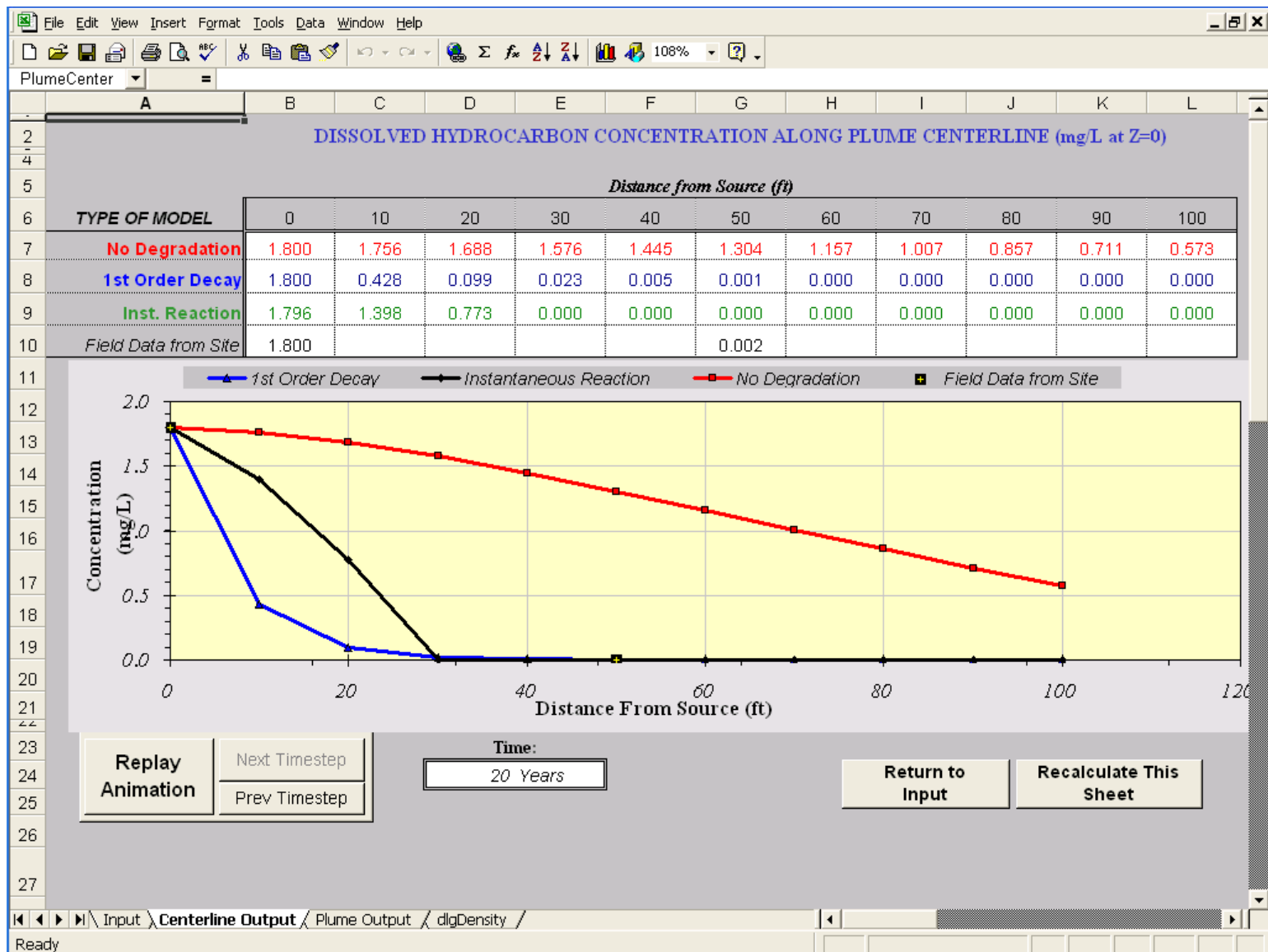
Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other



Ready



File Edit View Insert Format Tools Data Window Help

J8 = 104%

BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence Version 1.4

Hunter AAF
HAA-09 - Xylenes
Run Name

1. HYDROGEOLOGY

Seepage Velocity* Vs 58.3 (ft/yr)
or
Hydraulic Conductivity K 2.9E-03 (cm/sec)
Hydraulic Gradient i 0.0035 (ft/ft)
Porosity n 0.18 (-)

2. DISPERSION

Longitudinal Dispersivity* alpha x 10.0 (ft)
Transverse Dispersivity* alpha y 3.3 (ft)
Vertical Dispersivity* alpha z 0.5 (ft)
or
Estimated Plume Length Lp 100 (ft)

3. ADSORPTION

Retardation Factor* R 29.4 (-)
or
Soil Bulk Density rho 1.7 (kg/l)
Partition Coefficient Koc 639 (L/kg)
Fraction Organic Carbon foc 4.7E-3 (-)

4. BIODEGRADATION

1st Order Decay Coeff* lambda 6.9E-1 (per yr)
or
Solute Half-Life t-half 1.00 (year)
or **Instantaneous Reaction Model**
Delta Oxygen* DO 1.65 (mg/L)
Delta Nitrate* NO3 0.7 (mg/L)
Observed Ferrous Iron* Fe2+ 16.6 (mg/L)
Delta Sulfate* SO4 22.4 (mg/L)
Observed Methane* CH4 6.6 (mg/L)

5. GENERAL

Modeled Area Length* 100 (ft)
Modeled Area Width* 100 (ft)
Simulation Time* 20 (yr)

6. SOURCE DATA

Source Thickness in Sat.Zone* 10 (ft)
Source Zones:
Width* (ft) Conc. (mg/L)*
1 100 262.3
2 0 0
3 0 0
4 0 0
5 0 0

Source Half-life (see Help):
>1000 >1000 (yr)
Inst. React. 1st Order
Soluble Mass 1000000 (Kg)
In Source NAPL, Soil

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	262.3					.002					
Dist. from Source (ft)	0	10	20	30	40	50	60	70	80	90	100

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE **RUN ARRAY**

View Output **View Output**

Help Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

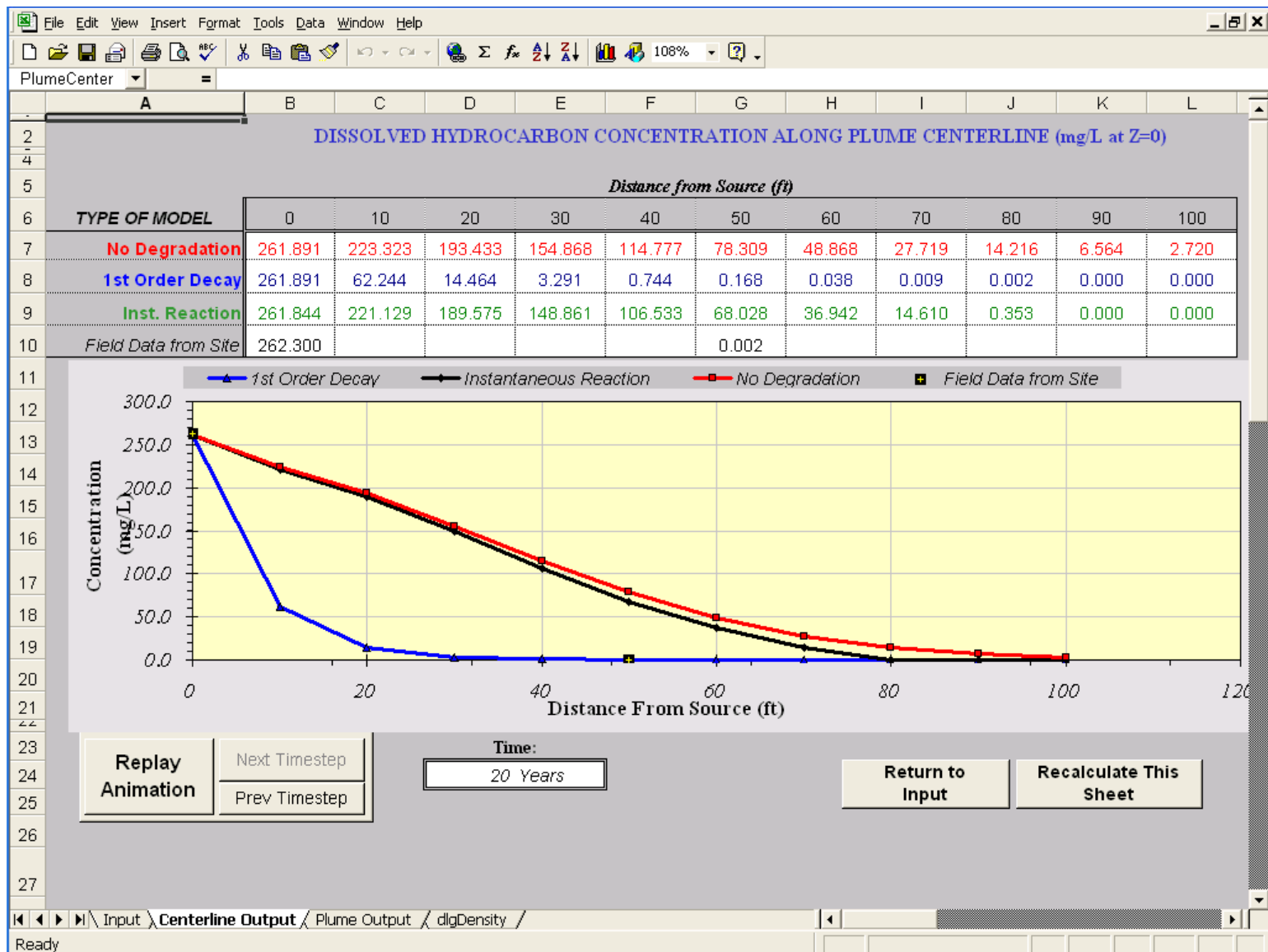
Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3

View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

Input Centerline Output Plume Output dlgDensity

Ready



Appendix H

Site Ranking Form

SITE RANKING FORM (WILL BE COMPLETED AFTER SITE INVESTIGATION)

Facility Name: Former AST 7001/7003 (HAA-9) Ranked by: SB

Facility ID: 9-025113*3 County: Chatham Date Ranked: 8/31/09

SOIL CONTAMINATION

A. Total Regulated PAHs – Maximum concentration at the site (Assume < 0.660 mg/kg if only gasoline was stored on site)

X $\leq 0.0660 = 0$
 $.066-0.99 \text{ mg/kg} = 10$
 $1-10 \text{ mg/kg} = 25$
 $>10 \text{ mg/kg} = 50$

B. Total Benzene – Maximum Concentration found on the site

 $\leq 0.005 \text{ mg/kg} = 0$
 $>0.005 - .05 \text{ mg/kg} = 1$
 $.05 - .99 = 10$
 $1 - 9.9 = 25$
 $10 - 49.9 \text{ mg/kg} = 40$
X $\geq 50 \text{ mg/kg} = 50$

C. DEPTH TO GROUNDWATER – (Shallowest)

(bls = below land surface)

 $> 50' \text{ bls} = 1$
 $> 25' \text{ bls} = 2$
 $> 10' \text{ bls} = 5$
X $\leq 10' \text{ bls} = 10$

Fill in the blanks: (A. + B.) x C. = D.

(0 + 50) x 10 = 500

GROUNDWATER CONTAMINATION

E. Free Product (Nonaqueous-phase liquid hydrocarbons: See Guidelines for definition of "sheen").

 No free product = 0
 Sheen – 1/8" = 250
 $> 1/8" - 6" = 500$
 $> 6" - 1\text{ft.} = 1,000$
X For every additional inch above a foot, add 100 more points = 1,000+
(1.35 max in June 2009)

F. Dissolved Benzene – Maximum Concentration at the site (One well must be located at the source of the release.)

 $\leq \text{ug/L} = 0$
 $>5 - 100 \text{ ug/L} = 5$
X
 $>100 - 1,000 \text{ ug/L} = 50$
 $>1,000 - 5,000 \text{ ug/L} = 250$
 $>5,000 - 10,000 \text{ ug/L} = 500$
 $> 10,000 \text{ ug/L} = 1,500$

Fill in the blanks: (E. + F.) = G.

(1000 + 50) = 1050

POTENTIAL RECEPTORS

Distance from nearest contaminant plume boundary to the nearest hydraulically connected Point of Withdrawal for water supply. This distance must be field-verified. **If the point of withdrawal is not hydraulically connected, evidence as outlined in the CAP-A guidance document MUST be presented to substantiate this claim.**

H. Public Water Supply

_____ Impacted = 2,000
_____ $\leq 500'$ = 500
_____ $> 500' - 1/4$ mi = 25
_____ $> 1/4$ mi – 1 mi = 10
☒ > 1 mi – 2 mi = 2
_____ > 2 mi = 0

For lower susceptibility areas only:

_____ > 1 mi = 0

I. Non-Public Water Supply

_____ Impacted = 1,000
_____ $\leq 100'$ = 500
_____ $> 100' - 500'$ = 25
_____ $> 500' - 1/4$ mi = 5
_____ $> 1/4$ mi – $1/2$ mi = 2
☒ $> 1/2$ mi = 0

For lower susceptibility areas only:

_____ $> 1/4$ mi = 0

Note: If site is in lower susceptibility area do not use the shaded areas.

J. Distance from nearest contaminant Plume boundary to downgradient Surface Waters **OR UTILITY TRENCHES & VAULTS** (a utility trench may be omitted from ranking if its invert elevation is more than 5 feet above the water table)

_____ Impacted = 500
☒ $\leq 500'$ = 50
_____ $> 500' - 1,000'$ = 5
_____ $> 1,000'$ = 2

K. Distance from any Free Product to basements and crawl spaces

_____ Impacted = 500
_____ $\leq 500'$ = 50
_____ $> 500' - 1,000'$ = 5
☒ $> 1,000'$ = 2

Fill in the blanks:

$$(H + I + J + K) = L. \quad (G \times L) = M. \quad (M + D) = N$$

$$(2 + 0 + 50 + 2) = 54 \quad (1050 \times 54) = 56700 \quad (56700 + 500) = 57200$$

P. SUSCEPTIBILITY AREA MULTIPLIER

_____ If site is located in a Low Ground – Water Pollution Susceptibility Area = 0.5
☒ All other sites = 1

Q. EXPLOSION HAZARD

Have any explosive petroleum vapors, possibly originating from this release, been detected in any subsurface structure (e.g., utility trenches, basements, vaults, crawl space, etc.)

_____ Yes = 200,000
☒ No = 0

Fill in the blanks:

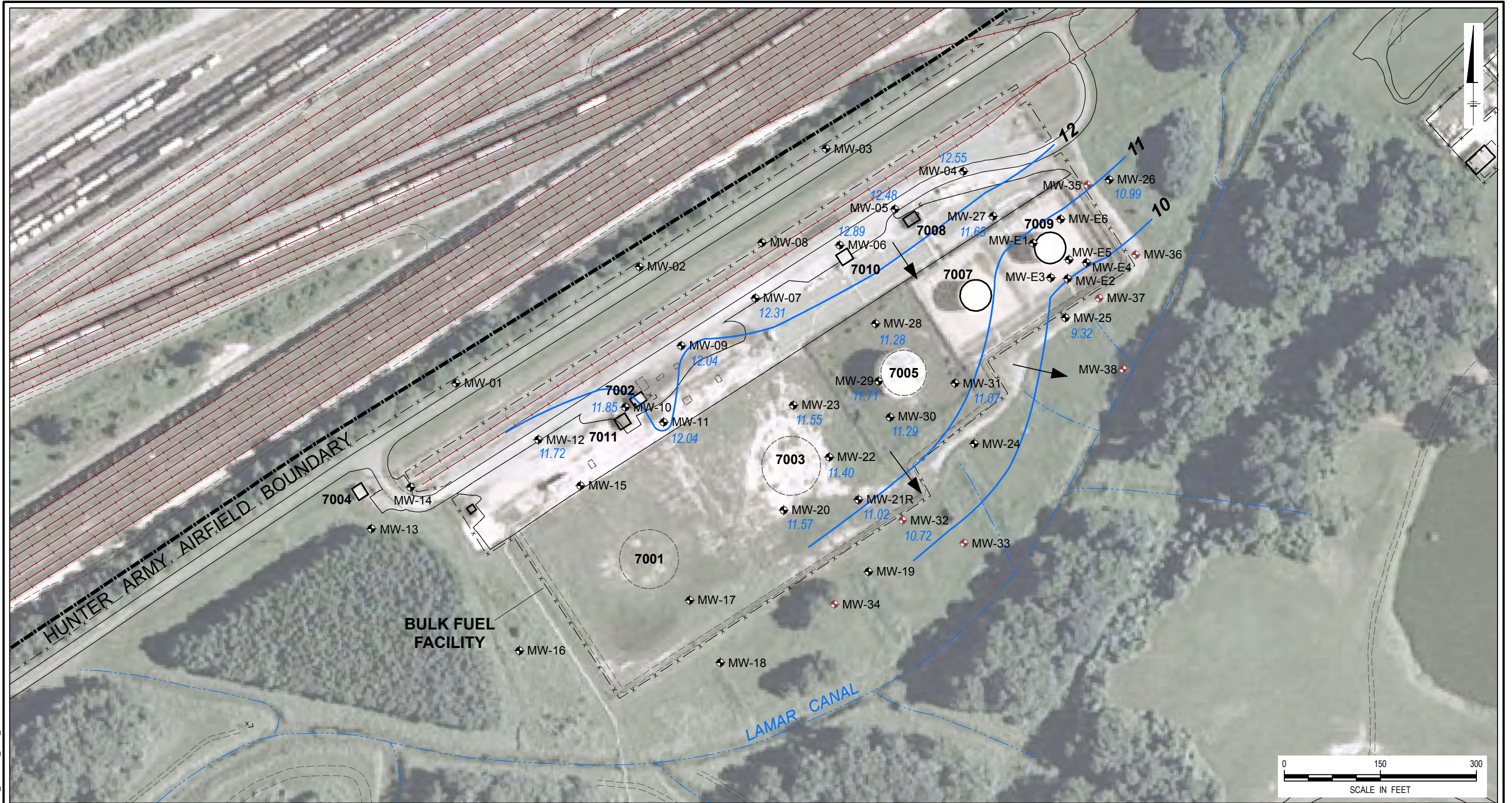
$$(N. \quad) \times (P. \quad) = M. \quad (M. \quad) + (Q. \quad)$$

$$= 57200$$

ENVIRONMENTAL SENSITIVITY SCORE

Appendix I

Groundwater Potentiometric Surface
Maps from CAP Part-B



AERIAL REFERENCE: NRCS, CHATHAM COUNTY, GEORGIA, NAIP 2007.
REFERENCE: Third Annual Monitoring and Free-Product Removal Report (SAIC 2007).

LEGEND:

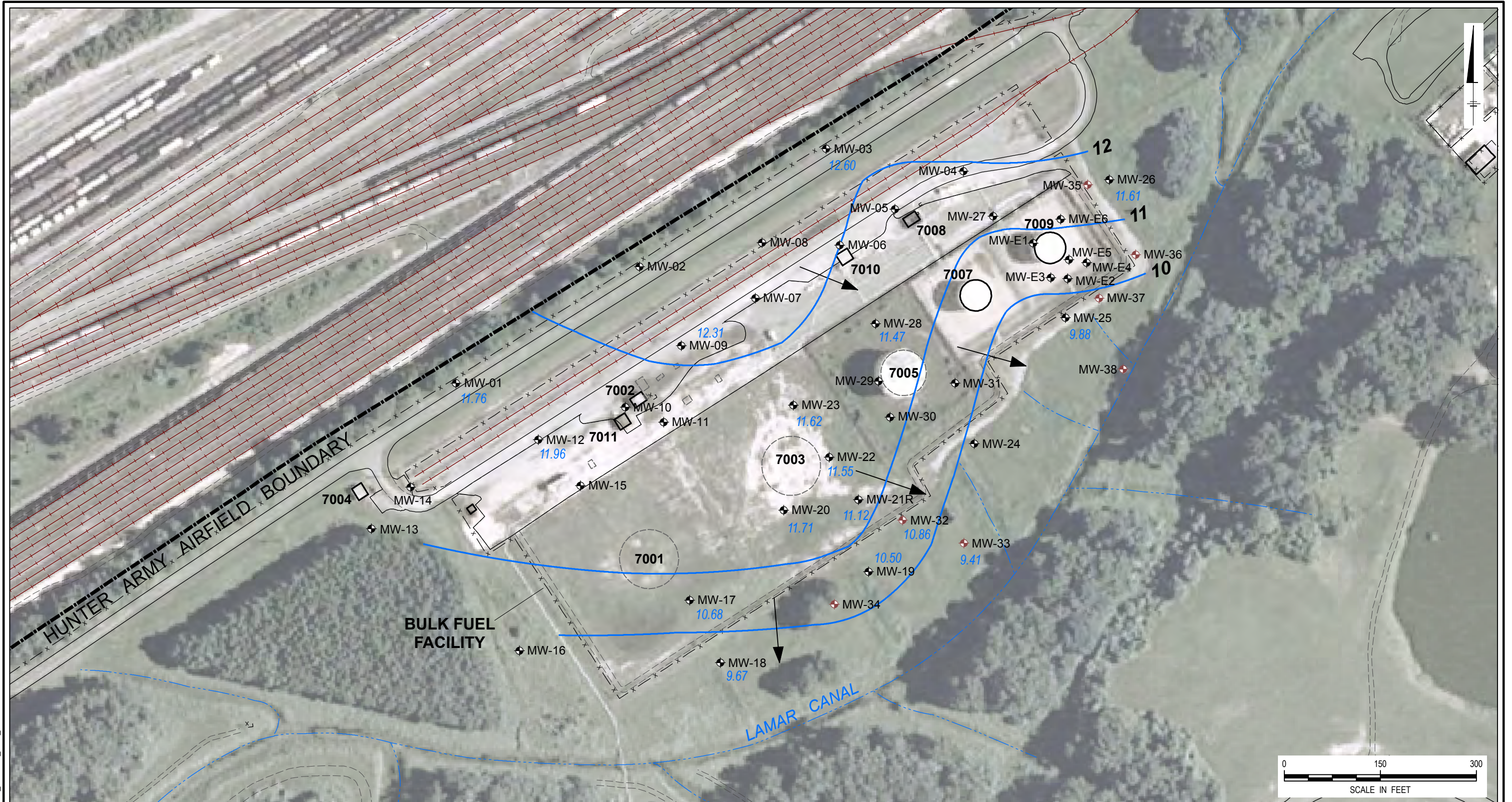
- ◆ Monitor Well (CAP - Part A)
- ◆ Monitor Well (CAP - Part B)
- Potentiometric Contour Line (ft, amsl)
- ➔ Direction of Groundwater Flow
- 11.72 Water-Level Elevation, (ft, amsl)
Measured January 12, 2005

HUNTER ARMY AIRFIELD, GEORGIA
FORMER ASTS 7001 AND 7003
BULK FUEL FACILITY (HAA-09 – RELEASE #3)
CORRECTIVE ACTION PLAN – PART B

Groundwater Potentionmetric Surface Map
January 2005



FIGURE
4a



AERIAL REFERENCE: NRCS, CHATHAM COUNTY, GEORGIA, NAIP 2007.
REFERENCE: Third Annual Monitoring and Free-Product Removal Report (SAIC 2007).

LEGEND:

- ◆ Monitor Well (CAP - Part A)
- ◆ Monitor Well (CAP - Part B)
- Potentiometric Contour Line (ft, amsl)
- ➔ Direction of Groundwater Flow
- 9.67 Water-Level Elevation, (ft, amsl)
Measured January 12, 2005

HUNTER ARMY AIRFIELD, GEORGIA
FORMER ASTS 7001 AND 7003
BULK FUEL FACILITY (HAA-09 – RELEASE #3)
CORRECTIVE ACTION PLAN – PART B

Groundwater Potentionmetric Surface Map
January 2003



FIGURE
4b