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Rocketdyne

Analysis/Method: EPA Method 8270

No. of Samples: 12

Date Reviewed: 02/19/99

Reviewer: M. Pokorny

Reference: USEPA Contract Laboratory Program National Functional Guidelines For Organic Data Review (Feb. 1994), and Ogden Data Validation Procedure for Semivolatile Organics by GC/MS (DVP-3, Rev. 2).

SDG: NEW YARD

Samples Reviewed: ESADA 1 1.5'-2.0', ESADA 1 4.0'-4.5', ESADA 2 1.0'-1.5', ESADA 2 4.5'-5.0', ESADA 3 1.0'-1.5', ESADA 3 3.5'-4.0', NEWCONS 1 1.5'-2.0', NEWCONS 1 3.5'-4.0', NEWCONS 2 1.0'-1.5', NEWCONS 2 3.5'-4.0', NEWCONS 3 1.0'-1.5', NEWCONS 3 3.3'-3.8'

Matrix: Soil

EPA Level V- Semivolatiles Assessment Form

	Problems	Qualifications
1. <u>Sample Management</u>	The COC was signed by field and laboratory personnel. The conditions of the samples or the temperatures at which they were received were not recorded on the COC; no evaluation of the samples could be made in regards to sample receipt conditions.	No qualifications were required.
4. <u>Method Blanks</u>	The laboratory analyzed two method blanks with the sample of this SDG. No target compounds or TICs were detected in the method blanks.	No qualifications were required.
5. <u>LCS/BS</u>	The data package did not contain blank spike information; no evaluation of the samples could be made in regards to laboratory accuracy.	No qualifications were required.
6. <u>Surrogates</u>	Samples ESADA 1 4.0'-4.5', ESADA 2 1.0'-1.5', ESADA 3 1.0'-1.5', ESADA 3 3.5'-4.0', and NEWCONS 3 1.0'-1.5' had recoveries of 2-fluorobiphenyl	No qualifications were required since none of the samples with surrogate outliers had any target compound detects.

	Problems	Qualifications
	above QC limits. Sample NEWCONS 3 1.0'-1.5' also had a recovery of terphenyl-d14 above QC limits. All other sample surrogate recoveries were within the EPA Method 8270 QC limits.	
7. <u>MS/MSDs</u> NEWCONS 3 1.0'-1.5'	The laboratory MS/MSD summary did not have QC limits listed. All of the spiked compounds were recovered within 67% to 130% for both the MS and MSD and all RPDs were 23% or less. In the professional judgement of the reviewer, the MS and MSD % recoveries and RPDs were acceptable.	No qualifications were required.
8. <u>Field QC Samples</u> ER: none FB: none Field duplicates: None	The data package did not contain field QC sample information; no evaluation of the samples could be made in regards to field QC samples.	No qualifications were required.
10. <u>Other</u>	TICs were reported in several of the samples of this SDG. Nominal reporting limits for the samples of this SDG were one half the normal reporting limits for Method 8270.	TICs were qualified "NJ," estimated, tentatively identified.
11. Comments	None	None



ATI I.D. : 80831701

TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
PROJECT # : 8640-4
PROJECT NAME : SSFL-AREA IV
CLIENT I.D. : ESADA 1 1.5'-2.0'
SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/23/88
DATE RECEIVED : 08/27/88
DATE EXTRACTED : 09/01/88
DATE ANALYZED : 10/02/88
UNITS : MG/KG
DILUTION FACTOR : 1

Table with columns: COMPOUNDS, RESULTS, REV QUAL, QUAL CODE. Lists various chemical compounds and their corresponding results, mostly <0.17. Includes a vertical line and a 'U' mark in the REV QUAL column.

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LEVEL V

OGDEN VALIDATED

LEVEL V



T : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHTHALATE	<0.17	U	
4-CHLOROPHENYL-PHENYLEETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLEETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHTHALATE	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHTHALATE	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO (a) ANTHRACENE	<0.17		
BIS (2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
i N-OCTYLPHTHALATE	<0.17		
BENZO (b) FLUORANTHENE	<0.17		
BENZO (k) FLUORANTHENE	<0.17		
BENZO (a) PYRENE	<0.17		
INDENO (1,2,3-cd) PYRENE	<0.17		
DIBENZO (a,h) ANTHRACENE	<0.17		
BENZO (g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	66
2-FLUOROBIPHENYL (%)	66
TERPHENYL (%)	56
PHENOL-D5 (%)	37
2-FLUOROPHENOL (%)	51
2,4,6-TRIBROMOPHENOL (%)	57



ADDITIONAL MAJOR COMPOUNDS

RESULTS

NONE DETECTED

N/A

OGDEN VALIDATED

LEVEL V



ATI I.D. : 80831702

TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
 PROJECT # : 8640-4
 PROJECT NAME : SSFL-AREA IV
 CLIENT I.D. : ESADA 1 4.0'-4.5'
 SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/23/88
 DATE RECEIVED : 08/27/88
 DATE EXTRACTED : 09/01/88
 DATE ANALYZED : 10/03/88
 UNITS : MG/KG
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
N-NITROSODIMETHYLAMINE	<0.17	U	
PHENOL	<0.17		
ANILINE	<0.17		
BIS(2-CHLOROETHYL) ETHER	<0.17		
2-CHLOROPHENOL	<0.17		
1,3-DICHLOROBENZENE	<0.17		
1,4-DICHLOROBENZENE	<0.17		
BENZYL ALCOHOL	<0.17		
1,2-DICHLOROBENZENE	<0.17		
2-METHYLPHENOL	<0.17		
BIS(2-CHLOROISOPROPYL) ETHER	<0.17		
4-METHYLPHENOL	<0.17		
N-NITROSO-DI-N-PROPYLAMINE	<0.17		
1,1-DICHLOROETHANE	<0.17		
NITROBENZENE	<0.17		
ISOPHORONE	<0.17		
2-NITROPHENOL	<0.17		
2,4-DIMETHYLPHENOL	<0.17		
BENZOIC ACID	<0.85		
BIS(2-CHLOROETHOXY) METHANE	<0.17		
2,4-DICHLOROPHENOL	<0.17		
1,2,4-TRICHLOROBENZENE	<0.17		
NAPHTHALENE	<0.17		
4-CHLOROANILINE	<0.17		
HEXACHLOROBUTADIENE	<0.17		
4-CHLORO-3-METHYLPHENOL	<0.17		
2-METHYLNAPHTHALENE	<0.17		
HEXACHLOROCYCLOPENTADIENE	<0.17		
2,4,6-TRICHLOROPHENOL	<0.17		
2,4,5-TRICHLOROPHENOL	<0.85		
2-CHLORONAPHTHALENE	<0.17		
2-NITROANILINE	<0.85		
DIMETHYL PHTHALATE	<0.17		
ACENAPHTHYLENE	<0.17		
3-NITROANILINE	<0.85		
ACENAPHTHENE	<0.17		
2,4-DINITROPHENOL	<0.85		
4-NITROPHENOL	<0.85		
1,2,3,4-TETRAHYDRO-2H-PYRIDIN-2-ONE	<0.17		
2,4-DINITROTOLUENE	<0.17		
2,6-DINITROTOLUENE	<0.17		

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OGDEN VALIDATED**LEVEL V**



TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHTHALATE	<0.17	U	
4-CHLOROPHENYL-PHENYLEETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLEETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHTHALATE	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHTHALATE	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO (a) ANTHRACENE	<0.17		
BIS (2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
DIN-N-OCTYLPHTHALATE	<0.17		
BENZO (b) FLUORANTHENE	<0.17		
BENZO (k) FLUORANTHENE	<0.17		
BENZO (a) PYRENE	<0.17		
INDENO (1,2,3-cd) PYRENE	<0.17		
DIBENZO (a,h) ANTHRACENE	<0.17		
BENZO (g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	98
2-FLUOROBIPHENYL (%)	129
TERPHENYL (%)	122
PHENOL-D5 (%)	79
2-FLUOROPHENOL (%)	102
2,4,6-TRIBROMOPHENOL (%)	102

OGDEN VALIDATED**LEVEL V**



ADDITIONAL MAJOR COMPOUNDS

RESULTS

NONE DETECTED

N/A

OGDEN VALIDATED

LEVEL V



ATI I.D. : 80831703

TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
PROJECT # : 8640-4
PROJECT NAME : SSFL-AREA IV
CLIENT I.D. : ESADA 2 1.0'-1.5'
SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/23/88
DATE RECEIVED : 08/27/88
DATE EXTRACTED : 09/01/88
DATE ANALYZED : 10/03/88
UNITS : MG/KG
DILUTION FACTOR : 1

Table with columns: COMPOUNDS, RESULTS, REV QUAL, and QUAL CODE. Lists various organic compounds and their detection levels, mostly <0.17. Includes handwritten '0' and a vertical arrow pointing down.

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OGDEN VALIDATED

LEVEL V

T : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHTHALATE	<0.17	0	
4-CHLOROPHENYL-PHENYLEETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLEETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHTHALATE	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHTHALATE	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO (a) ANTHRACENE	<0.17		
BIS (2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
1-OCTYLPHTHALATE	<0.17		
BENZO (b) FLUORANTHENE	<0.17		
BENZO (k) FLUORANTHENE	<0.17		
BENZO (a) PYRENE	<0.17		
INDENO (1,2,3-cd) PYRENE	<0.17		
DIBENZO (a,h) ANTHRACENE	<0.17		
BENZO (g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	100
2-FLUOROBIPHENYL (%)	143
TERPHENYL (%)	137
PHENOL-D5 (%)	50
2-FLUOROPHENOL (%)	104
2,4,6-TRIBROMOPHENOL (%)	100



ADDITIONAL MAJOR COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
906 BRANCHED HYDROCARBON C6	0.9	NJ	



ATI I.D. : 80831704

TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
 PROJECT # : 8640-4
 PROJECT NAME : SSFL-AREA IV
 CLIENT I.D. : ESADA 2 4.5'-5.0'
 SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/23/88
 DATE RECEIVED : 08/27/88
 DATE EXTRACTED : 09/01/88
 DATE ANALYZED : 10/04/88
 UNITS : MG/KG
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
N-NITROSODIMETHYLAMINE	<0.17	U	
PHENOL	<0.17		
ANILINE	<0.17		
BIS(2-CHLOROETHYL) ETHER	<0.17		
2-CHLOROPHENOL	<0.17		
1,3-DICHLOROBENZENE	<0.17		
1,4-DICHLOROBENZENE	<0.17		
BENZYL ALCOHOL	<0.17		
1,2-DICHLOROBENZENE	<0.17		
2-METHYLPHENOL	<0.17		
BIS(2-CHLOROISOPROPYL) ETHER	<0.17		
4-METHYLPHENOL	<0.17		
N-NITROSO-DI-N-PROPYLAMINE	<0.17		
1,1-DICHLOROETHANE	<0.17		
NITROBENZENE	<0.17		
ISOPHORONE	<0.17		
2-NITROPHENOL	<0.17		
2,4-DIMETHYLPHENOL	<0.17		
BENZOIC ACID	<0.85		
BIS(2-CHLOROETHOXY) METHANE	<0.17		
2,4-DICHLOROPHENOL	<0.17		
1,2,4-TRICHLOROBENZENE	<0.17		
NAPHTHALENE	<0.17		
4-CHLOROANILINE	<0.17		
HEXACHLOROBUTADIENE	<0.17		
4-CHLORO-3-METHYLPHENOL	<0.17		
2-METHYLNAPHTHALENE	<0.17		
HEXACHLOROCYCLOPENTADIENE	<0.17		
2,4,6-TRICHLOROPHENOL	<0.17		
2,4,5-TRICHLOROPHENOL	<0.85		
2-CHLORONAPHTHALENE	<0.17		
2-NITROANILINE	<0.85		
DIMETHYL PHTHALATE	<0.17		
ACENAPHTHYLENE	<0.17		
3-NITROANILINE	<0.85		
ACENAPHTHENE	<0.17		
2,4-DINITROPHENOL	<0.85		
4-NITROPHENOL	<0.85		
1,2,3,4-TETRAHYDRO-2H-PYRIDIN-2-ONE	<0.17		
2,4-DINITROTOLUENE	<0.17		
2,6-DINITROTOLUENE	<0.17		

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OGDEN VALIDATED**LEVEL V**



T : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHTHALATE	<0.17	U	
4-CHLOROPHENYL-PHENYLEETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLEETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHTHALATE	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHTHALATE	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO(a) ANTHRACENE	<0.17		
BIS(2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
D-OCTYLPHTHALATE	<0.17		
BENZO(b) FLUORANTHENE	<0.17		
BENZO(k) FLUORANTHENE	<0.17		
BENZO(a) PYRENE	<0.17		
INDENO(1,2,3-cd) PYRENE	<0.17		
DIBENZO(a,h) ANTHRACENE	<0.17		
BENZO(g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	83
2-FLUOROBIPHENYL (%)	88
TERPHENYL (%)	92
PHENOL-D5 (%)	64
2-FLUOROPHENOL (%)	66
2,4,6-TRIBROMOPHENOL (%)	82

OGDEN VALIDATED

LEVEL V



Analytical **Technologies, Inc.**

ADDITIONAL MAJOR COMPOUNDS

ATI I.D. : 80831704

ADDITIONAL MAJOR COMPOUNDS

RESULTS

NONE DETECTED

N/A

OGDEN VALIDATED

LEVEL V

ATI I.D. : 80831705

TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
 PROJECT # : 8640-4
 PROJECT NAME : SSFL-AREA IV
 CLIENT I.D. : ESADA 3 1.0'-1.5'
 SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/24/88
 DATE RECEIVED : 08/27/88
 DATE EXTRACTED : 09/01/88
 DATE ANALYZED : 10/03/88
 UNITS : MG/KG
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
N-NITROSODIMETHYLAMINE	<0.17	U	
PHENOL	<0.17		
ANILINE	<0.17		
BIS(2-CHLOROETHYL) ETHER	<0.17		
2-CHLOROPHENOL	<0.17		
1,3-DICHLOROBENZENE	<0.17		
1,4-DICHLOROBENZENE	<0.17		
BENZYL ALCOHOL	<0.17		
1,2-DICHLOROBENZENE	<0.17		
2-METHYLPHENOL	<0.17		
BIS(2-CHLOROISOPROPYL) ETHER	<0.17		
4-METHYLPHENOL	<0.17		
N-NITROSO-DI-N-PROPYLAMINE	<0.17		
1,1-DICHLOROETHANE	<0.17		
NITROBENZENE	<0.17		
ISOPHORONE	<0.17		
2-NITROPHENOL	<0.17		
2,4-DIMETHYLPHENOL	<0.17		
BENZOIC ACID	<0.85		
BIS(2-CHLOROETHOXY) METHANE	<0.17		
2,4-DICHLOROPHENOL	<0.17		
1,2,4-TRICHLOROBENZENE	<0.17		
NAPHTHALENE	<0.17		
4-CHLOROANILINE	<0.17		
HEXACHLOROBUTADIENE	<0.17		
4-CHLORO-3-METHYLPHENOL	<0.17		
2-METHYLNAPHTHALENE	<0.17		
HEXACHLOROCYCLOPENTADIENE	<0.17		
2,4,6-TRICHLOROPHENOL	<0.17		
2,4,5-TRICHLOROPHENOL	<0.85		
2-CHLORONAPHTHALENE	<0.17		
2-NITROANILINE	<0.85		
DIMETHYL PHTHALATE	<0.17		
ACENAPHTHYLENE	<0.17		
3-NITROANILINE	<0.85		
ACENAPHTHENE	<0.17		
2,4-DINITROPHENOL	<0.85		
1-NITROPHENOL	<0.85		
BENZOFURAN	<0.17		
2,4-DINITROTOLUENE	<0.17		
2,6-DINITROTOLUENE	<0.17		

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OGDEN VALIDATED

LEVEL V

T T : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHTHALATE	<0.17	U	
4-CHLOROPHENYL-PHENYLEETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLEETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHTHALATE	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHTHALATE	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO (a) ANTHRACENE	<0.17		
BIS (2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
Γ N-OCTYLPHTHALATE	<0.17		
BENZO (b) FLUORANTHENE	<0.17		
BENZO (k) FLUORANTHENE	<0.17		
BENZO (a) PYRENE	<0.17		
INDENO (1,2,3-cd) PYRENE	<0.17		
DIBENZO (a,h) ANTHRACENE	<0.17		
BENZO (g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	102
2-FLUOROBIPHENYL (%)	129
TERPHENYL (%)	126
PHENOL-D5 (%)	83
2-FLUOROPHENOL (%)	101
2,4,6-TRIBROMOPHENOL (%)	89



ADDITIONAL MAJOR COMPOUNDS

RESULTS

NONE DETECTED

N/A

OGDEN VALIDATED

LEVEL V



ATI I.D. : 80831706

TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
PROJECT # : 8640-4
PROJECT NAME : SSFL-AREA IV
CLIENT I.D. : ESADA 3 3.5'-4.0'
SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/24/88
DATE RECEIVED : 08/27/88
DATE EXTRACTED : 09/01/88
DATE ANALYZED : 10/03/88
UNITS : MG/KG
DILUTION FACTOR : 1

Table with columns: COMPOUNDS, RESULTS, REV QUAL, QUAL CODE. Lists various chemical compounds and their corresponding results, mostly <0.17. Includes a vertical line and a 'U' symbol in the REV QUAL column.

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OGDEN VALIDATED

LEVEL V



TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHTHALATE	<0.17	U	
4-CHLOROPHENYL-PHENYLETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHTHALATE	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHTHALATE	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO (a) ANTHRACENE	<0.17		
BIS (2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
DI-N-OCTYLPHTHALATE	<0.17		
BENZO (b) FLUORANTHENE	<0.17		
BENZO (k) FLUORANTHENE	<0.17		
BENZO (a) PYRENE	<0.17		
INDENO (1,2,3-cd) PYRENE	<0.17		
DIBENZO (a,h) ANTHRACENE	<0.17		
BENZO (g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	107
2-FLUOROBIPHENYL (%)	130
TERPHENYL (%)	122
PHENOL-D5 (%)	79
2-FLUOROPHENOL (%)	102
2,4,6-TRIBROMOPHENOL (%)	81



ADDITIONAL MAJOR COMPOUNDS

RESULTS

NONE DETECTED

N/A

OGDEN VALIDATED

LEVEL V



ATI I.D. : 80831707

T : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
 PROJECT # : 8640-4
 PROJECT NAME : SSFL-AREA IV
 CLIENT I.D. : NEWCONS 1 1.5'-2.0'
 SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/24/88
 DATE RECEIVED : 08/27/88
 DATE EXTRACTED : 09/01/88
 DATE ANALYZED : 10/03/88
 UNITS : MG/KG
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
N-NITROSODIMETHYLAMINE	<0.17	U	
PHENOL	<0.17		
ANILINE	<0.17		
BIS(2-CHLOROETHYL) ETHER	<0.17		
2-CHLOROPHENOL	<0.17		
1,3-DICHLOROBENZENE	<0.17		
1,4-DICHLOROBENZENE	<0.17		
BENZYL ALCOHOL	<0.17		
1,2-DICHLOROBENZENE	<0.17		
2-METHYLPHENOL	<0.17		
BIS(2-CHLOROISOPROPYL) ETHER	<0.17		
4-METHYLPHENOL	<0.17		
N-NITROSO-DI-N-PROPYLAMINE	<0.17		
HEXACHLOROETHANE	<0.17		
1,2-DICHLOROBENZENE	<0.17		
ISOPHORONE	<0.17		
2-NITROPHENOL	<0.17		
2,4-DIMETHYLPHENOL	<0.17		
BENZOIC ACID	<0.85		
BIS(2-CHLOROETHOXY) METHANE	<0.17		
2,4-DICHLOROPHENOL	<0.17		
1,2,4-TRICHLOROBENZENE	<0.17		
NAPHTHALENE	<0.17		
4-CHLOROANILINE	<0.17		
HEXACHLOROBUTADIENE	<0.17		
4-CHLORO-3-METHYLPHENOL	<0.17		
2-METHYLNAPHTHALENE	<0.17		
HEXACHLOROCYCLOPENTADIENE	<0.17		
2,4,6-TRICHLOROPHENOL	<0.17		
2,4,5-TRICHLOROPHENOL	<0.85		
2-CHLORONAPHTHALENE	<0.17		
2-NITROANILINE	<0.85		
DIMETHYL PHTHALATE	<0.17		
ACENAPHTHYLENE	<0.17		
3-NITROANILINE	<0.85		
ACENAPHTHENE	<0.17		
2,4-DINITROPHENOL	<0.85		
4-NITROPHENOL	<0.85		
BENZOFURAN	<0.17		
2,4-DINITROTOLUENE	<0.17		
2,6-DINITROTOLUENE	<0.17		

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OGDEN VALIDATED

LEVEL V



TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHthalate	<0.17	U	
4-CHLOROPHENYL-PHENYLETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHthalate	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHthalate	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO (a) ANTHRACENE	<0.17		
BIS (2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
DI-N-OCTYLPHthalate	<0.17		
BENZO (b) FLUORANTHENE	<0.17		
BENZO (k) FLUORANTHENE	<0.17		
BENZO (a) PYRENE	<0.17		
INDENO (1,2,3-cd) PYRENE	<0.17		
DIBENZO (a,h) ANTHRACENE	<0.17		
BENZO (g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	86
2-FLUOROBIPHENYL (%)	79
TERPHENYL (%)	69
PHENOL-D5 (%)	49
2-FLUOROPHENOL (%)	52
2,4,6-TRIBROMOPHENOL (%)	91

OGDEN VALIDATED

LEVEL V



ADDITIONAL MAJOR COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
1188 CYCLIC HYDROCARBON C16	0.2	NJ	

ATI I.D. : 80831708

T T : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
 PROJECT # : 8640-4
 PROJECT NAME : SSFL-AREA IV
 CLIENT I.D. : NEWCONS 1 3.5'-4.0'
 SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/24/88
 DATE RECEIVED : 08/27/88
 DATE EXTRACTED : 09/01/88
 DATE ANALYZED : 10/03/88
 UNITS : MG/KG
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
N-NITROSODIMETHYLAMINE	<0.17	U	
PHENOL	<0.17		
ANILINE	<0.17		
BIS(2-CHLOROETHYL) ETHER	<0.17		
2-CHLOROPHENOL	<0.17		
1,3-DICHLOROBENZENE	<0.17		
1,4-DICHLOROBENZENE	<0.17		
BENZYL ALCOHOL	<0.17		
1,2-DICHLOROBENZENE	<0.17		
2-METHYLPHENOL	<0.17		
BIS(2-CHLOROISOPROPYL) ETHER	<0.17		
4-METHYLPHENOL	<0.17		
N-NITROSO-DI-N-PROPYLAMINE	<0.17		
HEXACHLOROETHANE	<0.17		
1 ROBENZENE	<0.17		
ISOPHORONE	<0.17		
2-NITROPHENOL	<0.17		
2,4-DIMETHYLPHENOL	<0.17		
BENZOIC ACID	<0.85		
BIS(2-CHLOROETHOXY) METHANE	<0.17		
2,4-DICHLOROPHENOL	<0.17		
1,2,4-TRICHLOROBENZENE	<0.17		
NAPHTHALENE	<0.17		
4-CHLOROANILINE	<0.17		
HEXACHLOROBUTADIENE	<0.17		
4-CHLORO-3-METHYLPHENOL	<0.17		
2-METHYLNAPHTHALENE	<0.17		
HEXACHLOROCYCLOPENTADIENE	<0.17		
2,4,6-TRICHLOROPHENOL	<0.17		
2,4,5-TRICHLOROPHENOL	<0.85		
2-CHLORONAPHTHALENE	<0.17		
2-NITROANILINE	<0.85		
DIMETHYL PHTHALATE	<0.17		
ACENAPHTHYLENE	<0.17		
3-NITROANINLINE	<0.85		
ACENAPHTHENE	<0.17		
2,4-DINITROPHENOL	<0.85		
4-NITROPHENOL	<0.85		
FURAN	<0.17		
2,4-DINITROTOLUENE	<0.17		
2,6-DINITROTOLUENE	<0.17		

(CONTINUED NEXT PAGE)



TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHthalate	<0.17	U	
4-CHLOROPHENYL-PHENYLETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLETHER	<0.17		
HEXACHLORO BENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHthalate	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHthalate	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO (a) ANTHRACENE	<0.17		
BIS (2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
DI-N-OCTYLPHthalate	<0.17		
BENZO (b) FLUORANTHENE	<0.17		
BENZO (k) FLUORANTHENE	<0.17		
BENZO (a) PYRENE	<0.17		
INDENO (1,2,3-cd) PYRENE	<0.17		
DIBENZO (a,h) ANTHRACENE	<0.17		
BENZO (g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	82
2-FLUOROBIPHENYL (%)	87
TERPHENYL (%)	82
PHENOL-D5 (%)	49
2-FLUOROPHENOL (%)	59
2,4,6-TRIBROMOPHENOL (%)	99

OGDEN VALIDATED

LEVEL V



ADDITIONAL MAJOR COMPOUNDS	RESULTS
NONE DETECTED	N/A



ATI I.D. : 80831709

T : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
 PROJECT # : 8640-4
 PROJECT NAME : SSFL-AREA IV
 CLIENT I.D. : NEWCONS 2 1'-1.5'
 SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/24/88
 DATE RECEIVED : 08/27/88
 DATE EXTRACTED : 09/01/88
 DATE ANALYZED : 10/03/88
 UNITS : MG/KG
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
N-NITROSODIMETHYLAMINE	<0.17	U	
PHENOL	<0.17		
ANILINE	<0.17		
BIS(2-CHLOROETHYL) ETHER	<0.17		
2-CHLOROPHENOL	<0.17		
1,3-DICHLOROBENZENE	<0.17		
1,4-DICHLOROBENZENE	<0.17		
BENZYL ALCOHOL	<0.17		
1,2-DICHLOROBENZENE	<0.17		
2-METHYLPHENOL	<0.17		
BIS(2-CHLOROISOPROPYL) ETHER	<0.17		
4-METHYLPHENOL	<0.17		
N-NITROSO-DI-N-PROPYLAMINE	<0.17		
HEXACHLOROETHANE	<0.17		
1,2-DICHLOROBENZENE	<0.17		
ISOPHORONE	<0.17		
2-NITROPHENOL	<0.17		
2,4-DIMETHYLPHENOL	<0.17		
BENZOIC ACID	<0.85		
BIS(2-CHLOROETHOXY) METHANE	<0.17		
2,4-DICHLOROPHENOL	<0.17		
1,2,4-TRICHLOROBENZENE	<0.17		
NAPHTHALENE	<0.17		
4-CHLOROANILINE	<0.17		
HEXACHLOROBUTADIENE	<0.17		
4-CHLORO-3-METHYLPHENOL	<0.17		
2-METHYLNAPHTHALENE	<0.17		
HEXACHLOROCYCLOPENTADIENE	<0.17		
2,4,6-TRICHLOROPHENOL	<0.17		
2,4,5-TRICHLOROPHENOL	<0.85		
2-CHLORONAPHTHALENE	<0.17		
2-NITROANILINE	<0.85		
DIMETHYL PHTHALATE	<0.17		
ACENAPHTHYLENE	<0.17		
3-NITROANILINE	<0.85		
ACENAPHTHENE	<0.17		
2,4-DINITROPHENOL	<0.85		
4-NITROPHENOL	<0.85		
BENZOFURAN	<0.17		
2,4-DINITROTOLUENE	<0.17		
2,6-DINITROTOLUENE	<0.17		

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OGDEN VALIDATED

LEVEL V



TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHTHALATE	<0.17	U	
4-CHLOROPHENYL-PHENYLEETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLEETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHTHALATE	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHTHALATE	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO (a) ANTHRACENE	<0.17		
BIS (2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
DI-N-OCTYLPHTHALATE	<0.17		
BENZO (b) FLUORANTHENE	<0.17		
BENZO (k) FLUORANTHENE	<0.17		
BENZO (a) PYRENE	<0.17		
INDENO (1,2,3-cd) PYRENE	<0.17		
DIBENZO (a,h) ANTHRACENE	<0.17		
BENZO (g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	92
2-FLUOROBIPHENYL (%)	89
TERPHENYL (%)	74
PHENOL-D5 (%)	53
2-FLUOROPHENOL (%)	57
2,4,6-TRIBROMOPHENOL (%)	92



ADDITIONAL MAJOR COMPOUNDS	RESULTS
NONE DETECTED	N/A



ATI I.D. : 80831710

T : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
 PROJECT # : 8640-4
 PROJECT NAME : SSFL-AREA IV
 CLIENT I.D. : NEWCONS 2 3.5'-4.0'
 SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/24/88
 DATE RECEIVED : 08/27/88
 DATE EXTRACTED : 09/01/88
 DATE ANALYZED : 10/03/88
 UNITS : MG/KG
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
N-NITROSODIMETHYLAMINE	<0.17	U	
PHENOL	<0.17		
ANILINE	<0.17		
BIS(2-CHLOROETHYL) ETHER	<0.17		
2-CHLOROPHENOL	<0.17		
1,3-DICHLOROBENZENE	<0.17		
1,4-DICHLOROBENZENE	<0.17		
BENZYL ALCOHOL	<0.17		
1,2-DICHLOROBENZENE	<0.17		
2-METHYLPHENOL	<0.17		
BIS(2-CHLOROISOPROPYL) ETHER	<0.17		
4-METHYLPHENOL	<0.17		
N-NITROSO-DI-N-PROPYLAMINE	<0.17		
HEXACHLOROETHANE	<0.17		
1,2,4-TRICHLOROBENZENE	<0.17		
ISOPHORONE	<0.17		
2-NITROPHENOL	<0.17		
2,4-DIMETHYLPHENOL	<0.17		
BENZOIC ACID	<0.85		
BIS(2-CHLOROETHOXY) METHANE	<0.17		
2,4-DICHLOROPHENOL	<0.17		
1,2,4-TRICHLOROBENZENE	<0.17		
NAPHTHALENE	<0.17		
4-CHLOROANILINE	<0.17		
HEXACHLOROBUTADIENE	<0.17		
4-CHLORO-3-METHYLPHENOL	<0.17		
2-METHYLNAPHTHALENE	<0.17		
HEXACHLOROCYCLOPENTADIENE	<0.17		
2,4,6-TRICHLOROPHENOL	<0.17		
2,4,5-TRICHLOROPHENOL	<0.85		
2-CHLORONAPHTHALENE	<0.17		
2-NITROANILINE	<0.85		
DIMETHYL PHTHALATE	<0.17		
ACENAPHTHYLENE	<0.17		
3-NITROANILINE	<0.85		
ACENAPHTHENE	<0.17		
2,4-DINITROPHENOL	<0.85		
4-NITROPHENOL	<0.85		
BENZOFURAN	<0.17		
2,4-DINITROTOLUENE	<0.17		
2,6-DINITROTOLUENE	<0.17		

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OGDEN VALIDATED

LEVEL V



TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHthalate	<0.17	U	
4-CHLOROPHENYL-PHENYLETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHthalate	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHthalate	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO(a) ANTHRACENE	<0.17		
BIS(2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
DI-N-OCTYLPHthalate	<0.17		
BENZO(b) FLUORANTHENE	<0.17		
BENZO(k) FLUORANTHENE	<0.17		
BENZO(a) PYRENE	<0.17		
INDENO(1,2,3-cd) PYRENE	<0.17		
DIBENZO(a,h) ANTHRACENE	<0.17		
BENZO(g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	85
2-FLUOROBIPHENYL (%)	86
TERPHENYL (%)	73
PHENOL-D5 (%)	59
2-FLUOROPHENOL (%)	54
2,4,6-TRIBROMOPHENOL (%)	81

OGDEN VALIDATED

LEVEL V



ADDITIONAL MAJOR COMPOUNDS

RESULTS

NONE DETECTED

N/A

OGDEN VALIDATED

LEVEL V



ATI I.D. : 80831711

TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
PROJECT # : 8640-4
PROJECT NAME : SSFL-AREA IV
CLIENT I.D. : NEWCONS 3 1.0'-1.5'
SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/24/88
DATE RECEIVED : 08/27/88
DATE EXTRACTED : 09/01/88
DATE ANALYZED : 10/03/88
UNITS : MG/KG
DILUTION FACTOR : 1

Table with columns: COMPOUNDS, RESULTS, REV QUAL, and QUAL CODE. Lists various chemical compounds and their corresponding results, mostly <0.17. Includes handwritten '0' and a vertical arrow pointing down.

(CONTINUED NEXT PAGE)

OGDEN VALIDATED

LEVEL V



TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHTHALATE	<0.17	U	
4-CHLOROPHENYL-PHENYLEETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLEETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHTHALATE	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHTHALATE	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO (a) ANTHRACENE	<0.17		
BIS (2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
DI-N-OCTYLPHTHALATE	<0.17		
BENZO (b) FLUORANTHENE	<0.17		
BENZO (k) FLUORANTHENE	<0.17		
BENZO (a) PYRENE	<0.17		
INDENO (1,2,3-cd) PYRENE	<0.17		
DIBENZO (a,h) ANTHRACENE	<0.17		
BENZO (g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	98
2-FLUOROBIPHENYL (%)	128-
TERPHENYL (%)	140-
PHENOL-D5 (%)	90
2-FLUOROPHENOL (%)	102
2,4,6-TRIBROMOPHENOL (%)	97



ADDITIONAL MAJOR COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
2220 BRANCHED ALKANE C22	0.7	NJ	



ATI I.D. : 80831712

TEST : SEMI-VOLATILE ORGANICS (EPA 8270)

CLIENT : GROUNDWATER RESOURCES
PROJECT # : 8640-4
PROJECT NAME : SSFL-AREA IV
CLIENT I.D. : NEWCONS 3 3.3'-3.8'
SAMPLE MATRIX : SOIL

DATE SAMPLED : 08/24/88
DATE RECEIVED : 08/27/88
DATE EXTRACTED : 09/01/88
DATE ANALYZED : 10/03/88
UNITS : MG/KG
DILUTION FACTOR : 1

Table with columns: COMPOUNDS, RESULTS, REV QUAL, QUAL CODE. Lists various chemical compounds and their corresponding results, mostly <0.17. Includes a vertical line and a 'U' symbol in the REV QUAL column.

(CONTINUED NEXT PAGE)



T : SEMI-VOLATILE ORGANICS (EPA 8270)

COMPOUNDS	RESULTS	REV QUAL	QUAL CODE
DIETHYLPHTHALATE	<0.17	U	
4-CHLOROPHENYL-PHENYLEETHER	<0.17		
FLUORENE	<0.17		
4-NITROANILINE	<0.85		
4,6-DINITRO-2-METHYLPHENOL	<0.85		
N-NITROSODIPHENYLAMINE	<0.17		
4-BROMOPHENYL-PHENYLEETHER	<0.17		
HEXACHLOROBENZENE	<0.17		
PENTACHLOROPHENOL	<0.85		
PHENANTHRENE	<0.17		
ANTHRACENE	<0.17		
DI-N-BUTYLPHTHALATE	<0.17		
FLUORANTHENE	<0.17		
BENZIDINE	<1.7		
PYRENE	<0.17		
BUTYLBENZYLPHTHALATE	<0.17		
3,3-DICHLOROBENZIDINE	<0.34		
BENZO(a) ANTHRACENE	<0.17		
BIS(2-ETHYLHEXYL) PHTHALATE	<0.17		
CHRYSENE	<0.17		
1-N-OCTYLPHTHALATE	<0.17		
BENZO(b) FLUORANTHENE	<0.17		
BENZO(k) FLUORANTHENE	<0.17		
BENZO(a) PYRENE	<0.17		
INDENO(1,2,3-cd) PYRENE	<0.17		
DIBENZO(a,h) ANTHRACENE	<0.17		
BENZO(g,h,i) PERYLENE	<0.17		

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	88
2-FLUOROBIPHENYL (%)	89
TERPHENYL (%)	75
PHENOL-D5 (%)	53
2-FLUOROPHENOL (%)	52
2,4,6-TRIBROMOPHENOL (%)	91



ADDITIONAL MAJOR COMPOUNDS

RESULTS

NONE DETECTED

N/A



ENVIRONMENTAL AND ENERGY SERVICES



0

550 South Wadsworth Blvd. Ste. 500
Denver, CO 80226
(303) 935-6505

Rocketdyne

Analysis/Method: 6010/9045/7470 (with 1312 prep method)

No. of Samples: 12

Date Completed: March 8, 1999

Reviewer: K. Chapman

Ref: USEPA Contract Laboratory Program National Functional Guidelines For Inorganic Data Review (Feb. 1994)

Samples Reviewed: ESADA 1 1.5'-2.0', ESADA 1 4.0'-4.5', ESADA 2 1.0'-1.5', ESADA 2 4.5'-5.0',
ESADA 3 1.0'-1.5', ESADA 3 3.5'-4.0', NEWCONS 1 1.5'-2.0', NEWCONS 1 3.5'-4.0',
NEWCONS 2 1.0'-1.5', NEWCONS 2 3.5'-4.0', NEWCONS 3 1.0'-1.5', NEWCONS 3 3.3'-3.8'

EPA Level V- Metals Assessment Form

	Problems	Qualifications
1. Sample Management	The COCs were signed by field and laboratory personnel. Sample conditions and cooler temperatures were not recorded on the COCs; therefore, no evaluation of the sample data could be made based on sample conditions upon receipt. The holding times for pH were exceeded prior to arrival at the laboratory.	All pH analysis results were qualified as estimated, "J."
2. Method Blanks	No information was provided on the blank analysis; no assessment was made with respect to this criteria.	None
3. LCS/BS	No information was provided on the blank spike analysis; no assessment was made with respect to this criteria.	None
4. Duplicates	Acceptable as reviewed.	None
5. MS/MSDs		

	Problems	Qualifications
	K: diluted out of matrix spike Na: acceptable recovery Not applicable to the pH analysis.	None
6. ICP Serial Dilution	No information was provided on the serial dilution; no assessment was made with respect to this criteria.	None
7. Field QC Samples	The data package did not contain field QC sample information; no evaluation of sample data was made based on field QC.	None
8. <u>Other</u>	None	None
9. <u>Comments</u>		None



ATI I.D. : 808317

CONT : GROUNDWATER RESOURCES
 PROJECT # : 8640-4
 PROJECT NAME : SSFL-AREA IV

DATE RECEIVED : 08/27/88

REPORT DATE : 09/21/88

PARAMETER	UNITS	IS								
		01	02	03	04	05				
		Per Quil Code								
POTASSIUM	MG/KG	2550	1670	1940	1750	1900				
SODIUM	MG/KG	664	645	732	452	590				

LEVEL V

QDEN VALIDATED



ATI I.D. : 808317

WELL IDENT : GROUNDWATER RESOURCES
PROJECT # : 8640-4
PROJECT NAME : SSFL-AREA IV

DATE RECEIVED : 08/27/88

REPORT DATE : 09/21/88

PARAMETER	UNITS	06	Res Qual	Qual Code
POTASSIUM	MG/KG	1750		
SODIUM	MG/KG	629		

LEVEL V

OGDEN VALIDATED



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: IQD0373

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.002
 Sample Delivery Group: IQD0373
 Project Manager: Dixie Hambrick
 Matrix: soil
 QC Level: V
 No. of Samples: 2
 No. of Reanalyses/Dilutions: 0
 Laboratory: Test America

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample Name	Matrix	Collection	Method
ESBS0010S03	IQD0373-02	N/A	Soil	2/21/2007 9:42:00 AM	6010B
ESBS0011S03	IQD0373-01	N/A	Soil	2/21/2007 9:02:00 AM	6010B

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the samples were couriered directly from the field to the laboratory, custody seals were not required. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

II. Method Analyses

A. EPA METHODS 6010B—Aluminum

Reviewed By: P. Meeks

Date Reviewed: April 24, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Method 6010B*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, six months for ICP metals, was met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Method blanks and CCBs had no detects.
- Interference Check Samples: Review is not applicable at a Level V validation.
- Blank Spikes and Laboratory Control Samples: The recovery was within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed.
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: Not applicable to this analysis.
- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Aluminum was not detected in field blank FSQW0003F01 (183627). The samples in this SDG had no identified equipment rinsate sample.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

MWH-San Diego/Boeing
9444 Farnham Street, Suite 300
San Diego, CA 92123
Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
1891263
Report Number: IQD0373

Sampled: 02/21/07
Received: 04/04/07

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQD0373-01 (ESBS0011S03 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7D05093	6.1	12	23000	0.995	04/05/07	04/06/07	
Sample ID: IQD0373-02 (ESBS0010S03 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7D05093	5.8	12	17000	1	04/05/07	04/06/07	

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

LEVEL V

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

IQD0373 <Page 2 of 7>



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: IQC2079

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.002
 Sample Delivery Group: IQC2079
 Project Manager: Dixie Hambrick
 Matrix: soil
 QC Level: V
 No. of Samples: 7
 No. of Reanalyses/Dilutions: 0
 Laboratory: Test America

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample Name	Matrix	Collection	Method
ESBS0011S02	IQC2079-01	N/A	Soil	2/21/2007	6010B
ESBS0010S02	IQC2079-02	N/A	Soil	2/21/2007	6010B
ESBS0005S02	IQC2079-03	N/A	Soil	2/21/2007	6010B
ESBS0008S02	IQC2079-04	N/A	Soil	2/21/2007	6010B
ESBS0012S02	IQC2079-05	N/A	Soil	2/21/2007	6010B, 6020, 7471A
EBBS0009S02	IQC2079-06	N/A	Soil	2/21/2007	6010B
ESBS0019S02	IQC2079-07	N/A	Soil	2/21/2007	6010B, 6020, 7471A

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the samples were couriered directly from the field to the laboratory, custody seals were not required. If necessary, the client IDs were added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

II. Method Analyses

A. EPA METHODS 6010B, 6020, and 7471A—Metals

Reviewed By: P. Meeks

Date Reviewed: April 25, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Methods 6010B 6020, and 7471A*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding times, six months for ICP and ICP-MS metals and 28 days for mercury, were met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Thallium was detected in the method blank at 0.102 mg/kg; therefore, thallium detected in the samples was qualified as an estimated nondetect, "UJ."
- Interference Check Samples: Boron was detected in the ICSA at 51.8 µg/L; therefore, boron detected in the samples was qualified as estimated, "J."
- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on ESBS0019S02. Antimony, cobalt, copper, nickel, zinc, and zirconium were recovered below the control limit on both the MS and the MSD; therefore, the aforementioned analytes were qualified as estimated, "J," in the site samples. Molybdenum was recovered above the control limit in the MSD and the molybdenum RPD exceeded the control limit; therefore, molybdenum detected in the site samples was qualified as estimated, "J."
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.

- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Field blank ESQW0002F01 (183796) was analyzed for aluminum, antimony, arsenic, lead, and sodium only. Sodium was detected in the field blank, but not at sufficient concentration to qualify the site samples. The samples in this SDG had no identified equipment rinsate sample.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQC2079

Sampled: 02/14/07-02/21/07
 Received: 03/20/07

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQC2079-01 (ESBS0011S02 - Soil)					Sampled: 02/21/07				
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7C20122	5.9	12	24000	1	03/20/07	03/21/07	
Sodium	EPA 6010B	7C20122	28	59	150	1	03/20/07	03/21/07	
Sample ID: IQC2079-02 (ESBS0010S02 - Soil)					Sampled: 02/21/07				
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7C20122	5.7	11	23000	1	03/20/07	03/21/07	
Sodium	EPA 6010B	7C20122	27	57	130	1	03/20/07	03/21/07	
Sample ID: IQC2079-03 (ESBS0005S02 - Soil)					Sampled: 02/21/07				
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7C20122	5.3	11	9800	1	03/20/07	03/21/07	
Sodium	EPA 6010B	7C20122	26	53	220	1	03/20/07	03/21/07	
Sample ID: IQC2079-04 (ESBS0008S02 - Soil)					Sampled: 02/21/07				
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7C20122	5.7	11	19000	1	03/20/07	03/21/07	
Sodium	EPA 6010B	7C20122	27	57	540	1	03/20/07	03/21/07	
Sample ID: IQC2079-05 (ESBS0012S02 - Soil)					Sampled: 02/14/07				
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7C20122	5.8	12	20000	1	03/20/07	03/21/07	
Antimony W/B J/Q	EPA 6020	7C20121	0.035	1.2	22	1	03/20/07	03/21/07	
Arsenic	EPA 6020	7C20121	0.29	0.58	11	1	03/20/07	03/21/07	
Barium	EPA 6020	7C20121	0.092	0.58	94	1	03/20/07	03/21/07	
Beryllium	EPA 6020	7C20121	0.046	0.35	0.64	1	03/20/07	03/21/07	
Boron J/I	EPA 6010B	7C20122	1.2	5.8	6.7	1	03/20/07	03/21/07	
Cadmium	EPA 6020	7C20121	0.029	0.58	0.32	1	03/20/07	03/21/07	J
Chromium	EPA 6020	7C20121	0.40	1.2	22	1	03/20/07	03/21/07	
Cobalt J/Q	EPA 6020	7C20121	0.092	0.58	7.1	1	03/20/07	03/21/07	
Copper ↓	EPA 6020	7C20121	0.23	1.2	9.7	1	03/20/07	03/21/07	
Lead	EPA 6020	7C20121	0.58	5.8	1900	10	03/20/07	03/21/07	
Lithium	EPA 6010B	7C20122	4.4	7.3	24	1	03/20/07	03/21/07	
Molybdenum J/Q.*III	EPA 6020	7C20121	0.12	1.2	0.48	1	03/20/07	03/21/07	J
Nickel J/Q	EPA 6020	7C20121	0.52	1.2	13	1	03/20/07	03/21/07	
Potassium	EPA 6010B	7C20122	22	58	2300	1	03/20/07	03/21/07	
Selenium	EPA 6020	7C20121	0.23	1.2	0.30	1	03/20/07	03/21/07	J
Silver	EPA 6020	7C20121	0.058	0.58	0.094	1	03/20/07	03/21/07	J
Sodium	EPA 6010B	7C20122	28	58	130	1	03/20/07	03/21/07	
Thallium W/B	EPA 6020	7C20121	0.12	0.58	0.38	1	03/20/07	03/21/07	B, J
Vanadium	EPA 6020	7C20121	0.46	1.2	42	1	03/20/07	03/21/07	
Zinc J/Q	EPA 6020	7C20121	1.5	12	38	1	03/20/07	03/21/07	
Zirconium ↓	EPA 6010B	7C20122	1.7	29	5.2	1	03/20/07	03/28/07	J

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

LEVEL V

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQC2079

Sampled: 02/14/07-02/21/07
 Received: 03/20/07

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQC2079-06 (ESBS0009S02 - Soil)					Sampled: 02/14/07				
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7C20122	5.7	11	20000	1	03/20/07	03/21/07	
Sodium	EPA 6010B	7C20122	28	57	540	1	03/20/07	03/21/07	
Sample ID: IQC2079-07 (ESBS0019S02 - Soil)					Sampled: 02/16/07				
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7C20122	5.9	12	20000	1	03/20/07	03/21/07	MHA
Antimony J/Q	EPA 6020	7C20121	0.035	1.2	3.3	0.995	03/20/07	03/21/07	M2
Arsenic	EPA 6020	7C20121	0.29	0.59	4.2	0.995	03/20/07	03/21/07	
Barium	EPA 6020	7C20121	0.094	0.59	100	0.995	03/20/07	03/21/07	
Beryllium	EPA 6020	7C20121	0.047	0.35	0.64	0.995	03/20/07	03/21/07	M2
Boron J/I	EPA 6010B	7C20122	1.2	5.9	14	1	03/20/07	03/21/07	
Cadmium	EPA 6020	7C20121	0.029	0.59	0.30	0.995	03/20/07	03/21/07	J
Chromium	EPA 6020	7C20121	0.41	1.2	27	0.995	03/20/07	03/21/07	
Cobalt J/Q	EPA 6020	7C20121	0.094	0.59	7.9	0.995	03/20/07	03/21/07	M2
Copper ↓	EPA 6020	7C20121	0.23	1.2	12	0.995	03/20/07	03/21/07	M2
Lead	EPA 6020	7C20121	0.059	0.59	210	0.995	03/20/07	03/21/07	M1
Lithium	EPA 6010B	7C20122	4.5	7.4	23	1	03/20/07	03/21/07	
Molybdenum J/Q, *111	EPA 6020	7C20121	0.12	1.2	0.51	0.995	03/20/07	03/21/07	J
Nickel J/Q	EPA 6020	7C20121	0.53	1.2	14	0.995	03/20/07	03/21/07	M2
Potassium	EPA 6010B	7C20122	22	59	4800	1	03/20/07	03/21/07	MHA
Selenium	EPA 6020	7C20121	0.23	1.2	0.43	0.995	03/20/07	03/21/07	M2, J
Silver	EPA 6020	7C20121	0.059	0.59	0.079	0.995	03/20/07	03/21/07	J
Sodium	EPA 6010B	7C20122	28	59	75	1	03/20/07	03/21/07	
Thallium UJ/B	EPA 6020	7C20121	0.12	0.59	0.39	0.995	03/20/07	03/21/07	B, J
Vanadium	EPA 6020	7C20121	0.47	1.2	45	0.995	03/20/07	03/21/07	
Zinc J/Q	EPA 6020	7C20121	1.5	12	47	0.995	03/20/07	03/21/07	M2
Zirconium ↓	EPA 6010B	7C20122	1.8	29	4.0	1	03/20/07	03/28/07	M2, J

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager

LEVEL V



Weck Laboratories, Inc.
 14859 E. Clark Ave.
 Industry, CA 91745
 Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614	Report ID: 7032011 Project ID: IQC2079	Date Received: 03/20/07 10:15 Date Reported: 04/05/07 09:44
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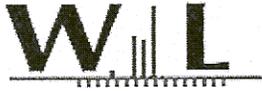
ESBS001950Z
 IQC2079-07 7032011-02 (Solid)

O-09

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total	0.011	0.00076	mg/kg dry	0.012	1	EPA 7471A	W7C1010	03/23/07	03/30/07	tl J

LEVEL V



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Report ID: 7032011
 Project ID: IQC2079

Date Received: 03/20/07 10:15
 Date Reported: 04/05/07 09:44

ESBS0012S02
 IQC2079-05 7032011-01 (Solid)

O-09

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total U	ND	0.00075	mg/kg dry	0.012	1	EPA 7471A	W7C0962	03/22/07	03/30/07	tl

LEVEL V



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: IQB2451

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.001
 Sample Delivery Group: IQB2451
 Project Manager: Dixie Hambrick
 Matrix: Soil
 QC Level: V
 No. of Samples: 18
 No. of Reanalyses/Dilutions: 0
 Laboratory: Test America

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample name	Matrix Type	Collection Date	Method
ESBS0015S70	IQB2451-01	N/A	Soil	21-Feb-07	6020, 8082, 9045C
ESBS0011S01	IQB2451-02	N/A	Soil	21-Feb-07	6010B, 6020, 7471A, 8015B, 8082, 8270C SIM, 9045C
ESBS0011S02	IQB2451-03	N/A	Soil	21-Feb-07	9045C
ESBS0011S03	IQB2451-04	N/A	Soil	21-Feb-07	9045C
ESBS0010S01	IQB2451-05	N/A	Soil	21-Feb-07	6010B, 6020, 7471A, 8015B, 8082, 8270C SIM, 9045C
ESBS0010S02	IQB2451-06	N/A	Soil	21-Feb-07	9045C
ESBS0010S03	IQB2451-07	N/A	Soil	21-Feb-07	9045C
ESBS0005S01	IQB2451-08	N/A	Soil	21-Feb-07	6010B, 6020, 7471A, 8015B, 8082, 8270C SIM, 9045C
ESBS0005S02	IQB2451-09	N/A	Soil	21-Feb-07	9045C
ESBS0008S01	IQB2451-10	N/A	Soil	21-Feb-07	6010B, 6020, 7471A, 8015B, 8082, 8270C SIM, 9045C
ESBS0008S02	IQB2451-11	N/A	Soil	21-Feb-07	9045C
ESBS0008S03	IQB2451-12	N/A	Soil	21-Feb-07	9045C
ESBS0015S02	IQB2451-13	N/A	Soil	21-Feb-07	9045C
ESBS0015S01	IQB2451-14	N/A	Soil	21-Feb-07	9045C
ESBS0015S03	IQB2451-15	N/A	Soil	21-Feb-07	9045C
ESBS0015S04	IQB2451-16	N/A	Soil	21-Feb-07	9045C
ESBS0015S05	IQB2451-17	N/A	Soil	21-Feb-07	9045C
ESBS0015S06	IQB2451-18	N/A	Soil	21-Feb-07	9045C

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the samples were couriered directly from the field to the laboratory, custody seals were not required. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present. Not applicable.	
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHODS 6010B, 6020, 7470A/7471A—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: 3/30/07

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Methods 6010B, 6020, 7470A/7471A*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: Analytical holding times, six months for ICP and ICP-MS metals and 28 days for mercury, were met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Boron was detected in the method blank at 1.43 mg/kg and lithium was detected in a CCB at 40.5 µg/L; therefore, boron detected in ESBS0010S01, ESBS0005S01, and ESBS0008S01, and lithium detected in all samples was qualified as estimated, "UJ."
- Interference Check Samples: Not applicable.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Boron was reported in the ICSA at -26.8 µg/L; therefore, nondetected boron was qualified as estimated, "UJ." Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples.

Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) had no detects. Molybdenum was detected in equipment rinsate ESQW0001E01 (IQB1859) at 0.16 µg/L; therefore, molybdenum detected in all samples was qualified as estimated, "J."
- Field Duplicates: There were no field duplicate samples identified for this SDG.

B. EPA METHOD 8270C SIM—Polynuclear Aromatic Hydrocarbons (PAHs)

Reviewed By: L. Calvin

Date Reviewed: March 28, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 8270C*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.
- GC/MS Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the samples of this SDG.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) had a detect between the MDL and the reporting limit for naphthalene at 0.13 µg/L. Naphthalene detected in associated site sample ESBS0005S01 exceeded five times the field blank concentration. Equipment rinsate ESQW0001E01 (IQB1859) had no target compounds detected above the MDL.

- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: Review is not applicable at a Level V validation.
- Compound Identification: Review is not applicable at a Level V validation. The laboratory analyzed for PAH compounds and added phthalates.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a Level V validation. Any results reported between the MDL and the reporting limit were qualified as estimated, "J." Reported nondetects are valid to the reporting limit.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review is not applicable at a Level V validation.

C. EPA METHOD 8082—PCBs

Reviewed By: L. Calvin

Date Reviewed: March 28, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Organochlorine Pesticides/PCBs by GC (DVP-4, Rev. 0)*, *EPA Method 8082*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: The method blanks had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the samples of this SDG.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) and equipment rinseate ESQW0001E01 (IQB1859) had no reported target compound detects above the MDL.
- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Review is not applicable at a Level V validation.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a Level V validation. The laboratory flagged results for Aroclors 1254 and 1260 in samples ESBS0011S01 and ESBS0008S01 to indicate a possible high bias due to coelution of Aroclors 1254 and 1260. Those results were qualified as estimated, “J,” in both samples. Any results reported between the MDL and the reporting limit were qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

D. EPA METHOD 8015B—Extractable Total Fuel Hydrocarbons (EFHs)

Reviewed By: K. Shadowlight

Date Reviewed: March 26, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Total Fuel Hydrocarbons (DVP-8, Rev. 0)*, *EPA Method 8015B*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.
- Calibration: Review is not applicable at a level V validation.
- Blanks: Method blanks had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on a sample from this SDG.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: There were no target compound detects in the field blank, BSQW0018F01 (IQB1202), or the equipment rinsate ESQW0001E01 (IQB1859).
- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Review is not applicable at a level V validation. Four EFH hydrocarbon ranges were reported: C8-C11, C12-C14, C15-C20, and C21-C30.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a level V validation. Any results reported between the MDL and the reporting limit were qualified as estimated, "J." Reported nondetects are valid to the reporting limit.

E. EPA METHOD 9045C—General Minerals

Reviewed By: P. Meeks

Date Reviewed: 3/30/07

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 9045C*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, 24 hours from preparation for pH, was met.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Not applicable to this analysis.
- Blank Spikes and Laboratory Control Samples: Not applicable to this analysis.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on ESBS0015S70 and ESBS0008S01. Both RPDs were within the laboratory-established control limit of ≤5%.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to this analysis.
- Sample Result Verification: Review is not applicable at a Level V validation.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Not applicable to this analysis.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
 1891264
 Report Number: IQB2451

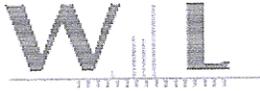
Sampled: 02/21/07
 Received: 02/22/07

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-01 (ESBS0015S70 - Soil)									
Reporting Units: mg/kg dry									
Lead	EPA 6020	7B23087	0.054	0.54	1.4	1	02/23/07	02/23/07	
Sample ID: IQB2451-02 (ESBS0011S01 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7B23097	5.8	12	21000	1	02/23/07	02/24/07	
Antimony	EPA 6020	7B23087	0.035	1.2	0.19	1	02/23/07	02/23/07	J
Arsenic	EPA 6020	7B23087	0.29	0.58	4.0	1	02/23/07	02/23/07	
Barium	EPA 6020	7B23087	0.093	0.58	96	1	02/23/07	02/23/07	
Beryllium	EPA 6020	7B23087	0.046	0.35	0.69	1	02/23/07	02/23/07	
Boron	EPA 6010B	7B23097	1.2	5.8	8.1	1	02/23/07	02/24/07	B
Cadmium	EPA 6020	7B23087	0.029	0.58	0.27	1	02/23/07	02/23/07	J
Chromium	EPA 6020	7B23087	0.41	1.2	27	1	02/23/07	02/23/07	
Cobalt	EPA 6020	7B23087	0.093	0.58	8.6	1	02/23/07	02/23/07	
Copper	EPA 6020	7B23087	0.23	1.2	14	1	02/23/07	02/23/07	
Lead	EPA 6020	7B23087	0.058	0.58	9.8	1	02/23/07	02/23/07	
Lithium <i>UJ/B</i>	EPA 6010B	7B23097	4.4	7.3	28	1	02/23/07	03/05/07	
Molybdenum <i>J/F</i>	EPA 6020	7B23087	0.12	1.2	0.43	1	02/23/07	02/23/07	J
Nickel	EPA 6020	7B23087	0.52	1.2	17	1	02/23/07	02/23/07	
Potassium	EPA 6010B	7B23097	22	58	5600	1	02/23/07	02/24/07	
Selenium	EPA 6020	7B23087	0.23	1.2	0.36	1	02/23/07	02/23/07	J
Silver <i>U</i>	EPA 6020	7B23087	0.058	0.58	ND	1	02/23/07	02/23/07	
Sodium	EPA 6010B	7B23097	28	58	200	1	02/23/07	02/24/07	B
Thallium	EPA 6020	7B23087	0.12	0.58	0.28	1	02/23/07	02/23/07	J
Vanadium	EPA 6020	7B23087	0.46	1.2	46	1	02/23/07	02/23/07	
Zinc	EPA 6020	7B23087	1.5	12	56	1	02/23/07	02/23/07	
Zirconium	EPA 6010B	7B23097	1.7	29	3.9	1	02/23/07	02/27/07	J

LEVEL V

TestAmerica - Irvine, CA
 Nicholas Marz For Michele Chamberlin
 Project Manager



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TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614	Report ID: 7022337 Project ID: IQB2451	Date Received: 02/23/07 08:15 Date Reported: 03/12/07 12:08
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ESBS6011501

IQB2451-02 7022337-01 (Solid)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
% Solids*	84.3	% by Weight	0.100	1	Gravimetric	W7C0195	03/06/07	03/08/07	cl

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total	0.045	0.00077	mg/kg dry	0.012	1	EPA 7471A	W7B1093	03/10/07	03/10/07	jl

* Analysis not validated

LEVEL V

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
 1891264
 Report Number: IQB2451

Sampled: 02/21/07
 Received: 02/22/07

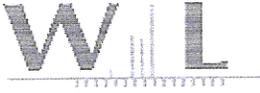
METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-05 (ESBS0010S01 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7B23097	6.2	12	21000	1	02/23/07	02/24/07	
Antimony	EPA 6020	7B23087	0.037	1.2	0.20	1	02/23/07	02/23/07	J
Arsenic	EPA 6020	7B23087	0.31	0.62	4.0	1	02/23/07	02/23/07	
Barium	EPA 6020	7B23087	0.099	0.62	92	1	02/23/07	02/23/07	
Beryllium	EPA 6020	7B23087	0.050	0.37	0.71	1	02/23/07	02/23/07	
Boron UJ/B,I	EPA 6010B	7B23097	1.2	6.2	7.4	1	02/23/07	02/24/07	B
Cadmium	EPA 6020	7B23087	0.031	0.62	0.28	1	02/23/07	02/23/07	J
Chromium	EPA 6020	7B23087	0.43	1.2	28	1	02/23/07	02/23/07	
Cobalt	EPA 6020	7B23087	0.099	0.62	9.0	1	02/23/07	02/23/07	
Copper	EPA 6020	7B23087	0.25	1.2	14	1	02/23/07	02/23/07	
Lead	EPA 6020	7B23087	0.062	0.62	10	1	02/23/07	02/23/07	
Lithium UJ/B	EPA 6010B	7B23097	4.7	7.8	30	1	02/23/07	03/05/07	
Molybdenum J/F	EPA 6020	7B23087	0.12	1.2	0.43	1	02/23/07	02/23/07	J
Nickel	EPA 6020	7B23087	0.56	1.2	16	1	02/23/07	02/23/07	
Potassium	EPA 6010B	7B23097	24	62	5500	1	02/23/07	02/24/07	
Selenium	EPA 6020	7B23087	0.25	1.2	0.40	1	02/23/07	02/23/07	J
Silver U	EPA 6020	7B23087	0.062	0.62	ND	1	02/23/07	02/23/07	
Sodium	EPA 6010B	7B23097	30	62	200	1	02/23/07	02/24/07	B
Thallium	EPA 6020	7B23087	0.12	0.62	0.29	1	02/23/07	02/23/07	J
Vanadium	EPA 6020	7B23087	0.50	1.2	48	1	02/23/07	02/23/07	
Zinc	EPA 6020	7B23087	1.6	12	63	1	02/23/07	02/23/07	
Zirconium	EPA 6010B	7B23097	1.9	31	4.7	1	02/23/07	02/27/07	J

LEVEL V

TestAmerica - Irvine, CA
 Nicholas Marz For Michele Chamberlin
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.



Weck Laboratories, Inc.
 14859 E. Clark Ave.
 Industry, CA 91745
 Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine
 17461 Derian Ave, Suite 100
 Irvine CA, 92614

Report ID: 7022337
 Project ID: IQB2451

Date Received: 02/23/07 08:15
 Date Reported: 03/12/07 12:08

ESBS0010501

IQB2451-05 7022337-02 (Solid)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
% Solids *	82.0	% by Weight	0.100	1	Gravimetric	W7C0195	03/06/07	03/08/07	cl

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total	0.27	0.00079	mg/kg dry	0.012	1	EPA 7471A	W7B1093	03/10/07	03/10/07	jl

* Analysis not validated

LEVEL V

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
 1891264
 Report Number: IQB2451

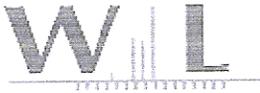
Sampled: 02/21/07
 Received: 02/22/07

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-08 (ESBS0005S01 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7B23097	6.0	12	28000	1	02/23/07	02/24/07	
Antimony	EPA 6020	7B23087	0.036	1.2	0.19	1	02/23/07	02/23/07	J
Arsenic	EPA 6020	7B23087	0.30	0.60	4.9	1	02/23/07	02/23/07	
Barium	EPA 6020	7B23087	0.096	0.60	110	1	02/23/07	02/23/07	
Beryllium	EPA 6020	7B23087	0.048	0.36	0.90	1	02/23/07	02/23/07	
Boron <i>UJ/B, I</i>	EPA 6010B	7B23097	1.2	6.0	5.9	1	02/23/07	02/24/07	B, J
Cadmium	EPA 6020	7B23087	0.030	0.60	0.17	1	02/23/07	02/23/07	J
Chromium	EPA 6020	7B23087	0.42	1.2	31	1	02/23/07	02/23/07	
Cobalt	EPA 6020	7B23087	0.096	0.60	11	1	02/23/07	02/23/07	
Copper	EPA 6020	7B23087	0.24	1.2	12	1	02/23/07	02/23/07	
Lead	EPA 6020	7B23087	0.060	0.60	11	1	02/23/07	02/23/07	
Lithium <i>UJ/B</i>	EPA 6010B	7B23097	4.6	7.6	33	1	02/23/07	03/05/07	
Molybdenum <i>J/F</i>	EPA 6020	7B23087	0.12	1.2	0.37	1	02/23/07	02/23/07	J
Nickel	EPA 6020	7B23087	0.54	1.2	18	1	02/23/07	02/23/07	
Potassium	EPA 6010B	7B23097	23	60	2900	1	02/23/07	02/24/07	
Selenium	EPA 6020	7B23087	0.24	1.2	0.33	1	02/23/07	02/23/07	J
Silver	EPA 6020	7B23087	0.060	0.60	0.089	1	02/23/07	02/23/07	J
Sodium	EPA 6010B	7B23097	29	60	340	1	02/23/07	02/24/07	
Thallium	EPA 6020	7B23087	0.12	0.60	0.31	1	02/23/07	02/23/07	J
Vanadium	EPA 6020	7B23087	0.48	1.2	53	1	02/23/07	02/23/07	
Zinc	EPA 6020	7B23087	1.6	12	56	1	02/23/07	02/23/07	
Zirconium	EPA 6010B	7B23097	1.8	30	5.8	1	02/23/07	02/27/07	J

LEVEL V

TestAmerica - Irvine, CA
 Nicholas Marz For Michele Chamberlin
 Project Manager



Weck Laboratories, Inc.
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TestAmerica, Inc. - Irvine
 17461 Derian Ave, Suite 100
 Irvine CA, 92614

Report ID: 7022337
 Project ID: IQB2451

Date Received: 02/23/07 08:15
 Date Reported: 03/12/07 12:08

ESBS000550/
 IQB2451-08 7022337-03 (Solid)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
% Solids *	86.8	% by Weight	0.100	1	Gravimetric	W7C0195	03/06/07	03/08/07	cl

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total	0.029	0.00075	mg/kg dry	0.012	1	EPA 7471A	W7B1093	03/10/07	03/10/07	jl

* Analysis not validated

LEVEL V

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
 1891264
 Report Number: IQB2451

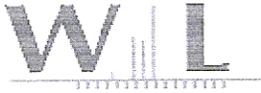
Sampled: 02/21/07
 Received: 02/22/07

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-10 (ESBS0008S01 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7B23097	5.9	12	24000	1	02/23/07	02/24/07	
Antimony	EPA 6020	7B23087	0.036	1.2	0.29	1	02/23/07	02/23/07	J
Arsenic	EPA 6020	7B23087	0.30	0.59	4.5	1	02/23/07	02/23/07	
Barium	EPA 6020	7B23087	0.095	0.59	100	1	02/23/07	02/23/07	
Beryllium	EPA 6020	7B23087	0.048	0.36	0.80	1	02/23/07	02/23/07	
Boron <i>UJ/B, I</i>	EPA 6010B	7B23097	1.2	5.9	5.1	1	02/23/07	02/24/07	B, J
Cadmium	EPA 6020	7B23087	0.030	0.59	0.27	1	02/23/07	02/23/07	J
Chromium	EPA 6020	7B23087	0.42	1.2	29	1	02/23/07	02/23/07	
Cobalt	EPA 6020	7B23087	0.095	0.59	9.4	1	02/23/07	02/23/07	
Copper	EPA 6020	7B23087	0.24	1.2	13	1	02/23/07	02/23/07	
Lead	EPA 6020	7B23087	0.059	0.59	15	1	02/23/07	02/23/07	
Lithium <i>UJ/B</i>	EPA 6010B	7B23097	4.5	7.5	33	1	02/23/07	03/05/07	
Molybdenum <i>J/F</i>	EPA 6020	7B23087	0.12	1.2	0.40	1	02/23/07	02/23/07	J
Nickel	EPA 6020	7B23087	0.53	1.2	17	1	02/23/07	02/23/07	
Potassium	EPA 6010B	7B23097	23	59	3700	1	02/23/07	02/24/07	
Selenium	EPA 6020	7B23087	0.24	1.2	0.36	1	02/23/07	02/23/07	J
Silver	EPA 6020	7B23087	0.059	0.59	0.075	1	02/23/07	02/23/07	J
Sodium	EPA 6010B	7B23097	29	59	220	1	02/23/07	02/24/07	B
Thallium	EPA 6020	7B23087	0.12	0.59	0.31	1	02/23/07	02/23/07	J
Vanadium	EPA 6020	7B23087	0.48	1.2	51	1	02/23/07	02/23/07	
Zinc	EPA 6020	7B23087	1.5	12	60	1	02/23/07	02/23/07	
Zirconium	EPA 6010B	7B23097	1.8	30	5.6	1	02/23/07	02/27/07	J

LEVEL V

TestAmerica - Irvine, CA
 Nicholas Marz For Michele Chamberlin
 Project Manager



Weck Laboratories, Inc.
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TestAmerica, Inc. - Irvine
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Report ID: 7022337
 Project ID: IQB2451

Date Received: 02/23/07 08:15
 Date Reported: 03/12/07 12:08

ESBS0008501
 IQB2451-10 7022337-04 (Solid)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

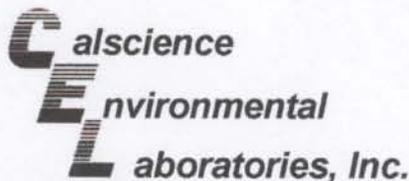
Analyte	Result	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
% Solids *	86.0	% by Weight	0.100	1	Gravimetric	W7C0195	03/06/07	03/08/07	clc

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total	0.059	0.00076	mg/kg dry	0.012	1	EPA 7471A	W7B1093	03/10/07	03/10/07	jl

* Analysis not validated

LEVEL V



Analytical Report



TestAmerica
17461 Derian Avenue, Suite 100
Irvine, CA 92614-5845

Date Received: 02/23/07
Work Order No: 07-02-1498
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: mg/kg

Project: IQB2451

Page 1 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
IQB2451-02	07-02-1498-1	02/21/07	Solid	GC/MS N	02/23/07	02/27/07	070223L07

BSB50011501

Comment(s): -Results are reported on a dry weight basis.

-Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	ND	0.024	0.0022	1.2		Chrysene	0.056	0.024	0.0025	1.2	
2-Methylnaphthalene	ND	0.024	0.0021	1.2		Di-n-Butyl Phthalate	0.013	0.024	0.0025	1.2	J
Acenaphthene	ND	0.024	0.0022	1.2		Dibenz (a,h) Anthracene	ND	0.024	0.0023	1.2	
Acenaphthylene	ND	0.024	0.0020	1.2		Diethyl Phthalate	ND	0.024	0.0024	1.2	
Anthracene	ND	0.024	0.0022	1.2		Fluoranthene	0.096	0.024	0.0023	1.2	
Benzo (a) Anthracene	0.044	0.024	0.0026	1.2		Fluorene	ND	0.024	0.0021	1.2	
Benzo (a) Pyrene	0.032	0.024	0.0021	1.2		Indeno (1,2,3-c,d) Pyrene	0.017	0.024	0.0022	1.2	J
Benzo (b) Fluoranthene	0.045	0.024	0.0022	1.2		N-Nitrosodimethylamine	ND	0.024	0.0023	1.2	
Benzo (g,h,i) Perylene	0.017	0.024	0.0022	1.2	J	Naphthalene	ND	0.024	0.0022	1.2	
Benzo (k) Fluoranthene	0.019	0.024	0.0030	1.2	J	Phenanthrene	0.054	0.024	0.0023	1.2	
Bis(2-Ethylhexyl) Phthalate	0.023	0.024	0.0037	1.2	J	Pyrene	0.13	0.024	0.0030	1.2	
Surrogates:	REC (%)	Control Limits			Qual	Surrogates:	REC (%)	Control Limits			Qual
2,4,6-Tribromophenol	84	32-143				2-Fluorobiphenyl	82	14-146			
2-Fluorophenol	38	15-138				Nitrobenzene-d5	94	18-162			
p-Terphenyl-d14	123	34-148				Phenol-d6	41	17-141			

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
IQB2451-05	07-02-1498-4	02/21/07	Solid	GC/MS N	02/23/07	02/27/07	070223L07

BSB50010501

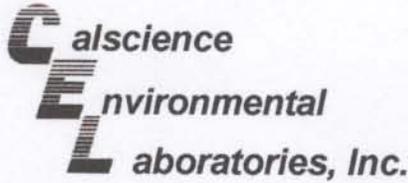
Comment(s): -Results are reported on a dry weight basis.

-Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	ND	0.026	0.0023	1.28		Chrysene	ND	0.026	0.0026	1.28	
2-Methylnaphthalene	ND	0.026	0.0022	1.28		Di-n-Butyl Phthalate	0.014	0.026	0.0027	1.28	J
Acenaphthene	ND	0.026	0.0024	1.28		Dibenz (a,h) Anthracene	ND	0.026	0.0025	1.28	
Acenaphthylene	ND	0.026	0.0021	1.28		Diethyl Phthalate	ND	0.026	0.0026	1.28	
Anthracene	ND	0.026	0.0023	1.28		Fluoranthene	ND	0.026	0.0024	1.28	
Benzo (a) Anthracene	ND	0.026	0.0028	1.28		Fluorene	ND	0.026	0.0022	1.28	
Benzo (a) Pyrene	ND	0.026	0.0022	1.28		Indeno (1,2,3-c,d) Pyrene	ND	0.026	0.0023	1.28	
Benzo (b) Fluoranthene	ND	0.026	0.0023	1.28		N-Nitrosodimethylamine	ND	0.026	0.0025	1.28	
Benzo (g,h,i) Perylene	ND	0.026	0.0024	1.28		Naphthalene	ND	0.026	0.0024	1.28	
Benzo (k) Fluoranthene	ND	0.026	0.0032	1.28		Phenanthrene	ND	0.026	0.0024	1.28	
Bis(2-Ethylhexyl) Phthalate	0.034	0.026	0.0040	1.28		Pyrene	ND	0.026	0.0032	1.28	
Surrogates:	REC (%)	Control Limits			Qual	Surrogates:	REC (%)	Control Limits			Qual
2,4,6-Tribromophenol	91	32-143				2-Fluorobiphenyl	105	14-146			
2-Fluorophenol	71	15-138				Nitrobenzene-d5	118	18-162			
p-Terphenyl-d14	108	34-148				Phenol-d6	72	17-141			

Level II

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



TestAmerica
17461 Derian Avenue, Suite 100
Irvine, CA 92614-5845

Date Received: 02/23/07
Work Order No: 07-02-1498
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: mg/kg

Project: IQB2451

Page 2 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
IQB2451-08	07-02-1498-7	02/21/07	Solid	GC/MS N	02/23/07	02/26/07	070223L07

55850005501

Comment(s): -Results are reported on a dry weight basis.

-Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	u	ND	0.024	0.0022	1.22	Chrysene	u	ND	0.024	0.0025	1.22
2-Methylnaphthalene	0.14	0.024	0.0021	1.22		Di-n-Butyl Phthalate	J	0.017	0.024	0.0026	1.22 J
Acenaphthene	u	ND	0.024	0.0023	1.22	Dibenz (a,h) Anthracene	u	ND	0.024	0.0024	1.22
Acenaphthylene	ND	0.024	0.0020	1.22		Diethyl Phthalate	u	ND	0.024	0.0024	1.22
Anthracene	ND	0.024	0.0022	1.22		Fluoranthene	u	ND	0.024	0.0023	1.22
Benzo (a) Anthracene	ND	0.024	0.0026	1.22		Fluorene	u	ND	0.024	0.0021	1.22
Benzo (a) Pyrene	ND	0.024	0.0021	1.22		Indeno (1,2,3-c,d) Pyrene	u	ND	0.024	0.0022	1.22
Benzo (b) Fluoranthene	ND	0.024	0.0022	1.22		N-Nitrosodimethylamine	J/F	ND	0.024	0.0024	1.22
Benzo (g,h,i) Perylene	ND	0.024	0.0023	1.22		Naphthalene	J	0.12	0.024	0.0023	1.22
Benzo (k) Fluoranthene	ND	0.024	0.0030	1.22		Phenanthrene	J	ND	0.024	0.0023	1.22
Bis(2-Ethylhexyl) Phthalate	J	0.011	0.024	0.0038	1.22 J	Pyrene	J	0.011	0.024	0.0030	1.22 J
Surrogates:	REC (%)	Control Limits			Qual	Surrogates:	REC (%)	Control Limits			Qual
2,4,6-Tribromophenol	83	32-143				2-Fluorobiphenyl	74	14-146			
2-Fluorophenol	73	15-138				Nitrobenzene-d5	96	18-162			
p-Terphenyl-d14	111	34-148				Phenol-d6	77	17-141			

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
IQB2451-10	07-02-1498-9	02/21/07	Solid	GC/MS N	02/23/07	02/26/07	070223L07

55850008501

Comment(s): -Results are reported on a dry weight basis.

-Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	u	ND	0.024	0.0022	1.2	Chrysene	u	ND	0.024	0.0025	1.2
2-Methylnaphthalene	ND	0.024	0.0021	1.2		Di-n-Butyl Phthalate	J	0.019	0.024	0.0025	1.2 J
Acenaphthene	ND	0.024	0.0022	1.2		Dibenz (a,h) Anthracene	u	ND	0.024	0.0023	1.2
Acenaphthylene	ND	0.024	0.0020	1.2		Diethyl Phthalate	J	ND	0.024	0.0024	1.2
Anthracene	ND	0.024	0.0022	1.2		Fluoranthene	J	0.0061	0.024	0.0023	1.2 J
Benzo (a) Anthracene	ND	0.024	0.0026	1.2		Fluorene	u	ND	0.024	0.0021	1.2
Benzo (a) Pyrene	ND	0.024	0.0021	1.2		Indeno (1,2,3-c,d) Pyrene	J	0.0091	0.024	0.0022	1.2 J
Benzo (b) Fluoranthene	ND	0.024	0.0022	1.2		N-Nitrosodimethylamine	J	ND	0.024	0.0023	1.2
Benzo (g,h,i) Perylene	J	0.012	0.024	0.0022	1.2 J	Naphthalene	J	ND	0.024	0.0022	1.2
Benzo (k) Fluoranthene	J	ND	0.024	0.0030	1.2	Phenanthrene	J	ND	0.024	0.0023	1.2
Bis(2-Ethylhexyl) Phthalate	J	0.013	0.024	0.0037	1.2 J	Pyrene	J	0.0077	0.024	0.0030	1.2 J
Surrogates:	REC (%)	Control Limits			Qual	Surrogates:	REC (%)	Control Limits			Qual
2,4,6-Tribromophenol	89	32-143				2-Fluorobiphenyl	80	14-146			
2-Fluorophenol	68	15-138				Nitrobenzene-d5	97	18-162			
p-Terphenyl-d14	132	34-148				Phenol-d6	76	17-141			

MAC
02.28.07

Level II

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

TestAmerica

ANALYTICAL TESTING CORPORATION

17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax: (949) 260-3297

MWH-San Diego/Boeing
9444 Farnham Street, Suite 300
San Diego, CA 92123
Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
1891264
Report Number: IQB2451

Sampled: 02/21/07
Received: 02/22/07

POLYCHLORINATED BIPHENYLS (EPA 3545/8082)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-01 (ESBS0015S70 - Soil)									
Reporting Units: ug/kg dry									
Aroclor 1016	EPA 8082	7B26083	16	54	ND	1	02/26/07	02/27/07	
Aroclor 1221	EPA 8082	7B26083	16	54	ND	1	02/26/07	02/27/07	
Aroclor 1232	EPA 8082	7B26083	11	54	ND	1	02/26/07	02/27/07	
Aroclor 1242	EPA 8082	7B26083	11	54	ND	1	02/26/07	02/27/07	
Aroclor 1248	EPA 8082	7B26083	11	54	ND	1	02/26/07	02/27/07	
Aroclor 1254	EPA 8082	7B26083	11	54	ND	1	02/26/07	02/27/07	
Aroclor 1260	EPA 8082	7B26083	11	54	ND	1	02/26/07	02/27/07	
Surrogate: Decachlorobiphenyl (45-120%)					78 %				
Sample ID: IQB2451-02 (ESBS0011S01 - Soil)									
Reporting Units: ug/kg dry									
Aroclor 1016	EPA 8082	7B26083	17	58	ND	1	02/26/07	02/27/07	
Aroclor 1221	EPA 8082	7B26083	17	58	ND	1	02/26/07	02/27/07	
Aroclor 1232	EPA 8082	7B26083	12	58	ND	1	02/26/07	02/27/07	
Aroclor 1242	EPA 8082	7B26083	12	58	ND	1	02/26/07	02/27/07	
Aroclor 1248	EPA 8082	7B26083	12	58	ND	1	02/26/07	02/27/07	
Aroclor 1254	EPA 8082	7B26083	12	58	28	1	02/26/07	02/27/07	A-01, J
Aroclor 1260	EPA 8082	7B26083	12	58	18	1	02/26/07	02/27/07	A-01, J
Surrogate: Decachlorobiphenyl (45-120%)					63 %				
Sample ID: IQB2451-05 (ESBS0010S01 - Soil)									
Reporting Units: ug/kg dry									
Aroclor 1016	EPA 8082	7B26083	19	62	ND	1	02/26/07	02/27/07	
Aroclor 1221	EPA 8082	7B26083	19	62	ND	1	02/26/07	02/27/07	
Aroclor 1232	EPA 8082	7B26083	12	62	ND	1	02/26/07	02/27/07	
Aroclor 1242	EPA 8082	7B26083	12	62	ND	1	02/26/07	02/27/07	
Aroclor 1248	EPA 8082	7B26083	12	62	ND	1	02/26/07	02/27/07	
Aroclor 1254	EPA 8082	7B26083	12	62	30	1	02/26/07	02/27/07	J
Aroclor 1260	EPA 8082	7B26083	12	62	ND	1	02/26/07	02/27/07	
Surrogate: Decachlorobiphenyl (45-120%)					78 %				

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

Level II

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IQB2451 <Page 4 of 23>

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
 1891264
 Report Number: IQB2451

Sampled: 02/21/07
 Received: 02/22/07

POLYCHLORINATED BIPHENYLS (EPA 3545/8082)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-08 (ESBS0005S01 - Soil)									
Reporting Units: ug/kg dry									
Aroclor 1016	EPA 8082	7B27094	18	60	ND	1	02/27/07	03/01/07	
Aroclor 1221	EPA 8082	7B27094	18	60	ND	1	02/27/07	03/01/07	
Aroclor 1232	EPA 8082	7B27094	12	60	ND	1	02/27/07	03/01/07	
Aroclor 1242	EPA 8082	7B27094	12	60	ND	1	02/27/07	03/01/07	
Aroclor 1248	EPA 8082	7B27094	12	60	ND	1	02/27/07	03/01/07	
Aroclor 1254	EPA 8082	7B27094	12	60	ND	1	02/27/07	03/01/07	
Aroclor 1260	EPA 8082	7B27094	12	60	ND	1	02/27/07	03/01/07	
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					81 %				

Sample ID: IQB2451-10 (ESBS0008S01 - Soil)									
Reporting Units: ug/kg dry									
Aroclor 1016	EPA 8082	7B27094	18	59	ND	1	02/27/07	03/01/07	
Aroclor 1221	EPA 8082	7B27094	18	59	ND	1	02/27/07	03/01/07	
Aroclor 1232	EPA 8082	7B27094	12	59	ND	1	02/27/07	03/01/07	
Aroclor 1242	EPA 8082	7B27094	12	59	ND	1	02/27/07	03/01/07	
Aroclor 1248	EPA 8082	7B27094	12	59	ND	1	02/27/07	03/01/07	
Aroclor 1254	EPA 8082	7B27094	12	59	20	1	02/27/07	03/01/07	A-01, J
Aroclor 1260	EPA 8082	7B27094	12	59	21	1	02/27/07	03/01/07	A-01, J
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					62 %				

TestAmerica - Irvine, CA
 Nicholas Marz For Michele Chamberlin
 Project Manager

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Level II

IQB2451 <Page 5 of 23>

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
 1891264
 Report Number: IQB2451

Sampled: 02/21/07
 Received: 02/22/07

EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-02 (ESBS0011S01 - Soil)									
Reporting Units: mg/kg dry									
EFH (C8 - C11)	u	EPA 8015B	7C02064	8.1	12	ND	2	03/02/07	03/02/07
EFH (C12 - C14)	↓	EPA 8015B	7C02064	8.1	12	ND	2	03/02/07	03/02/07
EFH (C15 - C20)	↓	EPA 8015B	7C02064	8.1	12	ND	2	03/02/07	03/02/07
EFH (C21 - C30)	J	EPA 8015B	7C02064	8.1	12	11	2	03/02/07	03/02/07
Surrogate: n-Octacosane (40-125%)						97 %			
Sample ID: IQB2451-05 (ESBS0010S01 - Soil)									
Reporting Units: mg/kg dry									
EFH (C8 - C11)	u	EPA 8015B	7C02064	4.3	6.2	ND	1	03/02/07	03/02/07
EFH (C12 - C14)	↓	EPA 8015B	7C02064	4.3	6.2	ND	1	03/02/07	03/02/07
EFH (C15 - C20)	↓	EPA 8015B	7C02064	4.3	6.2	ND	1	03/02/07	03/02/07
EFH (C21 - C30)	J	EPA 8015B	7C02064	4.3	6.2	4.5	1	03/02/07	03/02/07
Surrogate: n-Octacosane (40-125%)						85 %			
Sample ID: IQB2451-08 (ESBS0005S01 - Soil)									
Reporting Units: mg/kg dry									
EFH (C8 - C11)	u	EPA 8015B	7C02118	4.2	6.0	ND	1	03/02/07	03/03/07
EFH (C12 - C14)	↓	EPA 8015B	7C02118	4.2	6.0	ND	1	03/02/07	03/03/07
EFH (C15 - C20)	↓	EPA 8015B	7C02118	4.2	6.0	ND	1	03/02/07	03/03/07
EFH (C21 - C30)	↓	EPA 8015B	7C02118	4.2	6.0	ND	1	03/02/07	03/03/07
Surrogate: n-Octacosane (40-125%)						80 %			
Sample ID: IQB2451-10 (ESBS0008S01 - Soil)									
Reporting Units: mg/kg dry									
EFH (C8 - C11)	u	EPA 8015B	7C02118	4.2	5.9	ND	1	03/02/07	03/03/07
EFH (C12 - C14)	↓	EPA 8015B	7C02118	4.2	5.9	ND	1	03/02/07	03/03/07
EFH (C15 - C20)	↓	EPA 8015B	7C02118	4.2	5.9	ND	1	03/02/07	03/03/07
EFH (C21 - C30)	J	EPA 8015B	7C02118	4.2	5.9	4.7	1	03/02/07	03/03/07
Surrogate: n-Octacosane (40-125%)						93 %			

Level V

TestAmerica - Irvine, CA
 Nicholas Marz For Michele Chamberlin
 Project Manager

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
 1891264
 Report Number: IQB2451

Sampled: 02/21/07
 Received: 02/22/07

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-01 (ESBS0015S70 - Soil)									
Reporting Units: %									
*Percent Solids	EPA 160.3 MOD	7B28143	0.10	0.10	93	1	02/28/07	03/01/07	
Sample ID: IQB2451-02 (ESBS0011S01 - Soil)									
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	7C01145	0.10	0.10	86	1	03/01/07	03/02/07	
Sample ID: IQB2451-05 (ESBS0010S01 - Soil)									
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	7C01145	0.10	0.10	81	1	03/01/07	03/02/07	
Sample ID: IQB2451-08 (ESBS0005S01 - Soil)									
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	7C01145	0.10	0.10	83	1	03/01/07	03/02/07	
Sample ID: IQB2451-10 (ESBS0008S01 - Soil)									
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	7C01145	0.10	0.10	84	1	03/01/07	03/02/07	
Sample ID: IQB2451-01 (ESBS0015S70 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	7.59	1	02/23/07	02/23/07	
Sample ID: IQB2451-02 (ESBS0011S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	7.89	1	02/23/07	02/23/07	
Sample ID: IQB2451-03 (ESBS0011S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.10	1	02/23/07	02/23/07	
Sample ID: IQB2451-04 (ESBS0011S03 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.10	1	02/23/07	02/23/07	
Sample ID: IQB2451-05 (ESBS0010S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.15	1	02/23/07	02/23/07	

↓

Analysis not validated

LEVEL V

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 Project Manager

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
 1891264
 Report Number: IQB2451

Sampled: 02/21/07
 Received: 02/22/07

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-06 (ESBS0010S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.14	1	02/23/07	02/23/07	
Sample ID: IQB2451-07 (ESBS0010S03 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.98	1	02/23/07	02/23/07	
Sample ID: IQB2451-08 (ESBS0005S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.74	1	02/23/07	02/23/07	
Sample ID: IQB2451-09 (ESBS0005S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	9.16	1	02/23/07	02/23/07	
Sample ID: IQB2451-10 (ESBS0008S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	7.91	1	02/23/07	02/23/07	
Sample ID: IQB2451-11 (ESBS0008S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.70	1	02/23/07	02/23/07	
Sample ID: IQB2451-12 (ESBS0008S03 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.87	1	02/23/07	02/23/07	
Sample ID: IQB2451-13 (ESBS0015S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.62	1	02/23/07	02/23/07	
Sample ID: IQB2451-14 (ESBS0015S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.95	1	02/23/07	02/23/07	
Sample ID: IQB2451-15 (ESBS0015S03 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.69	1	02/23/07	02/23/07	

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LEVEL V

MWH-San Diego/Boeing
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Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - DOE
1891264
Report Number: IQB2451

Sampled: 02/21/07
Received: 02/22/07

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB2451-16 (ESBS0015S04 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.38	1	02/23/07	02/23/07	
Sample ID: IQB2451-17 (ESBS0015S05 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.41	1	02/23/07	02/23/07	
Sample ID: IQB2451-18 (ESBS0015S06 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B23118	N/A	NA	8.46	1	02/23/07	02/23/07	

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

LEVEL V

SOIL VALIDATION REPORTS



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: IQB1860

Prepared by

MEC^x, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
Contract Task Order: 1261.500D.08.001
Sample Delivery Group: IQB1860
Project Manager: Dixie Hambrick
Matrix: soil
QC Level: V
No. of Samples: 2
No. of Reanalyses/Dilutions: 0
Laboratory: Test America

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample name	Matrix Type	Collection Date	Method
ESBS0013S01	IQB1860-01	n/a	Soil	2/15/07	6020, 9045C
ESBS0014S01	IQB1860-02	n/a	Soil	2/15/07	9045C

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C, at 5°C. According to the case narrative for this SDG, the sample was received intact, on ice, and properly preserved, if applicable. The COC was appropriately signed and dated by both field and laboratory personnel. As the samples were couriered directly from the field to the laboratory, custody seals were not required.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present. Not applicable.	
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
#	Unusual problems found with the data that have been described in Section 2.#, "Data Validation Findings." The number following the asterisk () will indicate the subsection where a description of the problem can be found (e.g. *1 would indicate an issue address in section 2.1).	Unusual problems found with the data that have been described in Section 2.#, "Data Validation Findings." The number following the asterisk (*) will indicate the subsection where a description of the problem can be found (e.g. *1 would indicate an issue address in section 2.1).

III. Method Analyses

A. EPA METHODS 6010B, 6020, 7470A/7471A—Metals and Mercury

Reviewed By: Patti Meeks

Date Reviewed: 3/23/07

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Methods 6020*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: Analytical holding time, six months for ICP-MS metals, was met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Method blanks and CCBs had no detects of sufficient concentration to require qualification.
- Interference Check Samples: Not applicable.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: Recoveries and RPDs were within laboratory-established QC limits.
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the reporting limit.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Lead was not detected in either the field blank, BLQW0018F01 (IQB1202), or the equipment rinsate, ESQW0001E01 (IQB1859).
- Field Duplicates: There were no field duplicate samples identified for this SDG.

B. EPA METHOD 9045C—General Minerals

Reviewed By: Patti Meeks

Date Reviewed: 3/23/07

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 9045C*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: Analytical holding times, 24 hours from preparation for pH, were met.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Not applicable to this method.
- Blank Spikes and Laboratory Control Samples: Not applicable to this method.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to this method.
- Sample Result Verification: Review is not applicable at a Level V validation.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Not applicable to this method.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

MWH-San Diego/Boeing
9444 Farnham Street, Suite 300
San Diego, CA 92123
Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
1891263
Report Number: IQB1860

Sampled: 02/15/07
Received: 02/16/07

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1860-02 (ESBS0013S01 - Soil)									
Reporting Units: mg/kg dry									
Lead	EPA 6020	7B20118	0.059	0.59	16	1	02/20/07	02/21/07	

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

LEVEL V

MWH-San Diego/Boeing
9444 Farnham Street, Suite 300
San Diego, CA 92123
Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
1891263
Report Number: IQB1860

Sampled: 02/15/07
Received: 02/16/07

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1860-02 (ESBS0013S01 - Soil) - cont.									
Reporting Units: %									
Percent Solids *	EPA 160.3 MOD	7B20135	0.10	0.10	84	1	02/20/07	02/21/07	
Sample ID: IQB1860-01 (ESBS0014S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B17034	0.00	NA	7.94	1	02/17/07	02/17/07	
Sample ID: IQB1860-02 (ESBS0013S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B17034	0.00	NA	7.93	1	02/17/07	02/17/07	

* Analysis not validated

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

LEVEL V



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: IQB1822

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.001
 Sample Delivery Group: IQB1822
 Project Manager: Dixie Hambrick
 Matrix: Soil
 QC Level: V
 No. of Samples: 6
 No. of Reanalyses/Dilutions: 0
 Laboratory: Test America

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample name	Matrix Type	Collection Date	Method
ESBS0019S02	IQB1822-01	N/A	Soil	16-Feb-07	9045C
ESBS0014S02	IQB1822-02	N/A	Soil	16-Feb-07	6020, 9045C
ESBS0007S01	IQB1822-03	7022008-01	Soil	16-Feb-07	6010B, 6020, 7471A, 8015B, 8082, 8270C SIM, 9045C
ESBS0007S02	IQB1822-04	N/A	Soil	16-Feb-07	9045C
ESBS0006S01	IQB1822-05	7022008-02	Soil	16-Feb-07	6010B, 6020, 7471A, 8015B, 8082, 8270C SIM, 9045C
ESBS0006S02	IQB1822-06	N/A	Soil	16-Feb-07	9045C

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory above the temperature limits of 4°C ±2°C, at 16°C; however, due to the nonvolatile nature of the analytes reported in this SDG, no qualifications were required. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were signed and dated by the appropriate field and/or laboratory personnel. As the samples were couriered directly from the field to the laboratory, custody seals were not required. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present. Not applicable.	
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHODS 6010B, 6020, 7470A/7471A—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: 3/30/07

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Methods 6010B, 6020, 7470A/7471A*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: Analytical holding times, six months for ICP and ICP-MS metals and 28 days for mercury, were met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Method blanks had no detects. Boron was detected in a CCB at 8.4 µg/L; therefore, boron detected in both samples was qualified as estimated, "J."
- Interference Check Samples: Not applicable.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed.
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) had no detects. Molybdenum was detected in equipment rinsate ESQW0001E01 (IQB1859) at 0.16 µg/L; therefore, molybdenum detected in both samples was qualified as estimated, “J.”.
- Field Duplicates: There were no field duplicate samples identified for this SDG.

B. EPA METHOD 8270C SIM—Polynuclear Aromatic Hydrocarbons (PAHs)

Reviewed By: L. Calvin

Date Reviewed: March 28, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 8270C*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.
- GC/MS Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the samples of this SDG.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) had a detect between the MDL and the reporting limit for naphthalene at 0.13 µg/L; however, naphthalene was not detected in the associated site samples. Equipment rinsate ESQW0001E01 (IQB1859) had no target compounds detected above the MDL.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

- Internal Standards Performance: Review is not applicable at a Level V validation.
- Compound Identification: Review is not applicable at a Level V validation. The laboratory analyzed for PAH compounds and added phthalates.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a Level V validation. Any results reported between the MDL and the reporting limit were qualified as estimated, "J." Reported nondetects are valid to the reporting limit.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review is not applicable at a Level V validation.

C. EPA METHOD 8082—PCBs

Reviewed By: L. Calvin

Date Reviewed: March 28, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Organochlorine Pesticides/PCBs by GC (DVP-4, Rev. 0)*, *EPA Method 8082*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: The method blanks had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the samples of this SDG.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) and equipment rinsate ESQW0001E01 (IQB1859) had no reported target compound detects above the MDL.

- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Review is not applicable at a Level V validation.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a Level V validation. Any results reported between the MDL and the reporting limit were qualified as estimated, "J." Reported nondetects are valid to the reporting limit.

D. EPA METHOD 8015B—Extractable Total Fuel Hydrocarbons (EFHs)

Reviewed By: K. Shadowlight

Date Reviewed: March 26, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Total Fuel Hydrocarbons (DVP-8, Rev. 0)*, *EPA Method 8015B*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.
- Calibration: Review is not applicable at a level V validation.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recovery was within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on a sample from this SDG.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: There were no target compound detects in the field blank, BLQW0018F01 (IQB1202), or the equipment rinsate, ESQW0001E01 (IQB1859).
 - Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Review is not applicable at a level V validation. Four EFH hydrocarbon ranges were reported: C8-C11, C12-C14, C15-C20, and C21-C30.

- Compound Quantification and Reported Detection Limits: Review is not applicable at a level V validation. Reported nondetects are valid to the reporting limit.

E. EPA METHOD 9045C—General Minerals

Reviewed By: P. Meeks

Date Reviewed: 3/30/07

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 9045C*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, 24 hours from preparation for pH, was met.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Not applicable to this analysis.
- Blank Spikes and Laboratory Control Samples: Not applicable to this analysis.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on ESBS0019S01 and the RPD was within the laboratory-established control limit of $\leq 5\%$.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to this analysis.
- Sample Result Verification: Review is not applicable at a Level V validation.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Not applicable to this analysis.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQB1822

Sampled: 02/16/07
 Received: 02/16/07

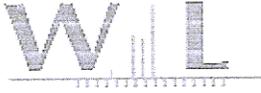
METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1822-02 (ESBS0014S02 - Soil)									
Reporting Units: mg/kg dry									
Lead	EPA 6020	7B22114	0.056	0.56	260	1	02/22/07	02/22/07	
Sample ID: IQB1822-03 (ESBS0007S01 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7B22115	5.8	12	18000	1	02/22/07	02/23/07	
Antimony	EPA 6020	7B22114	0.035	1.2	0.12	1	02/22/07	02/22/07	J
Arsenic	EPA 6020	7B22114	0.29	0.58	3.4	1	02/22/07	02/22/07	
Barium	EPA 6020	7B22114	0.093	0.58	73	1	02/22/07	02/22/07	
Beryllium	EPA 6020	7B22114	0.047	0.35	0.57	1	02/22/07	02/22/07	
Boron <i>UJ/B</i>	EPA 6010B	7B22115	1.2	5.8	1.3	1	02/22/07	02/23/07	J
Cadmium	EPA 6020	7B22114	0.029	0.58	0.20	1	02/22/07	02/22/07	J
Chromium	EPA 6020	7B22114	0.41	1.2	21	1	02/22/07	02/22/07	
Cobalt	EPA 6020	7B22114	0.093	0.58	7.1	1	02/22/07	02/22/07	
Copper	EPA 6020	7B22114	0.23	1.2	11	1	02/22/07	02/22/07	
Lead	EPA 6020	7B22114	0.058	0.58	7.4	1	02/22/07	02/22/07	
Lithium	EPA 6010B	7B22115	4.4	7.4	19	1	02/22/07	02/23/07	
Molybdenum <i>J/F</i>	EPA 6020	7B22114	0.12	1.2	0.23	1	02/22/07	02/22/07	J
Nickel	EPA 6020	7B22114	0.53	1.2	13	1	02/22/07	02/22/07	
Potassium	EPA 6010B	7B22115	22	58	3500	1	02/22/07	02/23/07	
Selenium <i>U</i>	EPA 6020	7B22114	0.23	1.2	ND	1	02/22/07	02/22/07	
Silver <i>U</i>	EPA 6020	7B22114	0.058	0.58	ND	1	02/22/07	02/22/07	
Sodium	EPA 6010B	7B22115	28	58	94	1	02/22/07	02/23/07	
Thallium	EPA 6020	7B22114	0.12	0.58	0.23	1	02/22/07	02/22/07	J
Vanadium	EPA 6020	7B22114	0.47	1.2	37	1	02/22/07	02/22/07	
Zinc	EPA 6020	7B22114	1.5	12	42	1	02/22/07	02/22/07	
Zirconium	EPA 6010B	7B22115	1.8	29	4.3	1	02/22/07	02/23/07	J

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager

LEVEL V

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.



Weck Laboratories, Inc.
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TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614	Report ID: 7022008 Project ID: IQB1822	Date Received: 02/20/07 08:45 Date Reported: 03/06/07 15:04
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ESBS0007501
 IQB1822-03 7022008-01 (Solid)

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total	0.021	0.00075	mg/kg dry	0.012	1	EPA 7471A	W7B0833	02/21/07	02/22/07	jl

LEVEL V

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQB1822

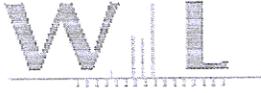
Sampled: 02/16/07
 Received: 02/16/07

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1822-05 (ESBS0006S01 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7B22115	6.0	12	20000	1	02/22/07	02/23/07	
Antimony	EPA 6020	7B22114	0.036	1.2	0.13	1	02/22/07	02/22/07	J
Arsenic	EPA 6020	7B22114	0.30	0.60	3.4	1	02/22/07	02/22/07	
Barium	EPA 6020	7B22114	0.095	0.60	88	1	02/22/07	02/22/07	
Beryllium	EPA 6020	7B22114	0.048	0.36	0.62	1	02/22/07	02/22/07	
Boron <i>U/B</i>	EPA 6010B	7B22115	1.2	6.0	<u>1.2</u>	1	02/22/07	02/23/07	J
Cadmium	EPA 6020	7B22114	0.030	0.60	0.23	1	02/22/07	02/22/07	J
Chromium	EPA 6020	7B22114	0.42	1.2	22	1	02/22/07	02/22/07	
Cobalt	EPA 6020	7B22114	0.095	0.60	7.4	1	02/22/07	02/22/07	
Copper	EPA 6020	7B22114	0.24	1.2	13	1	02/22/07	02/22/07	
Lead	EPA 6020	7B22114	0.060	0.60	9.0	1	02/22/07	02/22/07	
Lithium	EPA 6010B	7B22115	4.5	7.5	17	1	02/22/07	02/23/07	
Molybdenum <i>J/F</i>	EPA 6020	7B22114	0.12	1.2	0.32	1	02/22/07	02/22/07	J
Nickel	EPA 6020	7B22114	0.54	1.2	14	1	02/22/07	02/22/07	
Potassium	EPA 6010B	7B22115	23	60	5200	1	02/22/07	02/23/07	
Selenium	EPA 6020	7B22114	0.24	1.2	0.28	1	02/22/07	02/22/07	J
Silver	EPA 6020	7B22114	0.060	0.60	0.092	1	02/22/07	02/22/07	J
Sodium	EPA 6010B	7B22115	29	60	69	1	02/22/07	02/23/07	
Thallium	EPA 6020	7B22114	0.12	0.60	0.25	1	02/22/07	02/22/07	J
Vanadium	EPA 6020	7B22114	0.48	1.2	37	1	02/22/07	02/22/07	
Zinc	EPA 6020	7B22114	1.5	12	46	1	02/22/07	02/22/07	
Zirconium	EPA 6010B	7B22115	1.8	30	4.9	1	02/22/07	02/23/07	J

LEVEL V

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager



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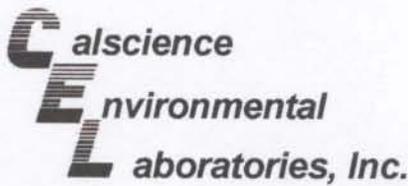
TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614	Report ID: 7022008 Project ID: IQB1822	Date Received: 02/20/07 08:45 Date Reported: 03/06/07 15:04
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ESBS0006501
 IQB1822-05 7022008-02 (Solid)

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total	0.016	0.00077	mg/kg dry	0.012	1	EPA 7471A	W7B0833	02/21/07	02/22/07	jl

LEVEL V



Analytical Report



TestAmerica
17461 Derian Avenue, Suite 100
Irvine, CA 92614-5845

Date Received: 02/19/07
Work Order No: 07-02-1178
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: mg/kg

Project: IQB1822

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
IQB1822-03	07-02-1178-1	02/16/07	Solid	GC/MS N	02/19/07	02/23/07	070219L05

ES050007501

Comment(s): -Results are reported on a dry weight basis.

-Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	ND	0.023	0.0021	1.17		Chrysene	ND	0.023	0.0024	1.17	
2-Methylnaphthalene	ND	0.023	0.0020	1.17		Di-n-Butyl Phthalate	0.069	0.023	0.0025	1.17	
Acenaphthene	ND	0.023	0.0022	1.17		Dibenz (a,h) Anthracene	ND	0.023	0.0023	1.17	
Acenaphthylene	ND	0.023	0.0019	1.17		Diethyl Phthalate	ND	0.023	0.0023	1.17	
Anthracene	ND	0.023	0.0021	1.17		Fluoranthene	ND	0.023	0.0022	1.17	
Benzo (a) Anthracene	ND	0.023	0.0025	1.17		Fluorene	ND	0.023	0.0020	1.17	
Benzo (a) Pyrene	ND	0.023	0.0020	1.17		Indeno (1,2,3-c,d) Pyrene	ND	0.023	0.0021	1.17	
Benzo (b) Fluoranthene	ND	0.023	0.0021	1.17		N-Nitrosodimethylamine	ND	0.023	0.0023	1.17	
Benzo (g,h,i) Perylene	ND	0.023	0.0022	1.17		Naphthalene	ND	0.023	0.0022	1.17	
Benzo (k) Fluoranthene	ND	0.023	0.0029	1.17		Phenanthrene	ND	0.023	0.0022	1.17	
Bis(2-Ethylhexyl) Phthalate	0.041	0.023	0.0036	1.17		Pyrene	ND	0.023	0.0029	1.17	
Surrogates:	REC (%)	Control Limits			Qual	Surrogates:	REC (%)	Control Limits			Qual
2,4,6-Tribromophenol	46	32-143				2-Fluorobiphenyl	94	14-146			
2-Fluorophenol	73	15-138				Nitrobenzene-d5	107	18-162			
p-Terphenyl-d14	107	34-148				Phenol-d6	73	17-141			

ES050006501

Comment(s): -Results are reported on a dry weight basis.

-Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	ND	0.023	0.0021	1.15		Chrysene	0.030	0.023	0.0024	1.15	
2-Methylnaphthalene	ND	0.023	0.0020	1.15		Di-n-Butyl Phthalate	0.11	0.023	0.0024	1.15	
Acenaphthene	ND	0.023	0.0021	1.15		Dibenz (a,h) Anthracene	ND	0.023	0.0022	1.15	
Acenaphthylene	ND	0.023	0.0019	1.15		Diethyl Phthalate	0.0094	0.023	0.0023	1.15	J
Anthracene	ND	0.023	0.0021	1.15		Fluoranthene	0.043	0.023	0.0022	1.15	
Benzo (a) Anthracene	0.025	0.023	0.0025	1.15		Fluorene	ND	0.023	0.0020	1.15	
Benzo (a) Pyrene	0.017	0.023	0.0020	1.15	J	Indeno (1,2,3-c,d) Pyrene	0.012	0.023	0.0021	1.15	J
Benzo (b) Fluoranthene	0.026	0.023	0.0021	1.15		N-Nitrosodimethylamine	ND	0.023	0.0022	1.15	
Benzo (g,h,i) Perylene	0.0082	0.023	0.0021	1.15	J	Naphthalene	ND	0.023	0.0021	1.15	
Benzo (k) Fluoranthene	0.010	0.023	0.0029	1.15	J	Phenanthrene	0.0092	0.023	0.0022	1.15	J
Bis(2-Ethylhexyl) Phthalate	0.20	0.023	0.0036	1.15		Pyrene	0.094	0.023	0.0029	1.15	
Surrogates:	REC (%)	Control Limits			Qual	Surrogates:	REC (%)	Control Limits			Qual
2,4,6-Tribromophenol	73	32-143				2-Fluorobiphenyl	96	14-146			
2-Fluorophenol	75	15-138				Nitrobenzene-d5	111	18-162			
p-Terphenyl-d14	120	34-148				Phenol-d6	84	17-141			

Level II

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

TestAmerica

ANALYTICAL TESTING CORPORATION

17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-San Diego/Boeing
9444 Farnham Street, Suite 300
San Diego, CA 92123
Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
1891263
Report Number: IQB1822

Sampled: 02/16/07
Received: 02/16/07

POLYCHLORINATED BIPHENYLS (EPA 3545/8082)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1822-03 (ESBS0007S01 - Soil)									
Reporting Units: ug/kg dry									
Aroclor 1016	EPA 8082	7B23106	18	58	ND	1	02/23/07	02/24/07	
Aroclor 1221	EPA 8082	7B23106	18	58	ND	1	02/23/07	02/24/07	
Aroclor 1232	EPA 8082	7B23106	12	58	ND	1	02/23/07	02/24/07	
Aroclor 1242	EPA 8082	7B23106	12	58	ND	1	02/23/07	02/24/07	
Aroclor 1248	EPA 8082	7B23106	12	58	ND	1	02/23/07	02/24/07	
Aroclor 1254	EPA 8082	7B23106	12	58	ND	1	02/23/07	02/24/07	
Aroclor 1260	EPA 8082	7B23106	12	58	ND	1	02/23/07	02/24/07	
Surrogate: Decachlorobiphenyl (45-120%)					107 %				

Sample ID: IQB1822-05RE1 (ESBS0006S01 - Soil)
Reporting Units: ug/kg dry

Aroclor 1016	EPA 8082	7B26083	18	60	ND	1	02/26/07	02/27/07	
Aroclor 1221	EPA 8082	7B26083	18	60	ND	1	02/26/07	02/27/07	
Aroclor 1232	EPA 8082	7B26083	12	60	ND	1	02/26/07	02/27/07	
Aroclor 1242	EPA 8082	7B26083	12	60	ND	1	02/26/07	02/27/07	
Aroclor 1248	EPA 8082	7B26083	12	60	ND	1	02/26/07	02/27/07	
Aroclor 1254	EPA 8082	7B26083	12	60	12	1	02/26/07	02/27/07	J
Aroclor 1260	EPA 8082	7B26083	12	60	ND	1	02/26/07	02/27/07	
Surrogate: Decachlorobiphenyl (45-120%)					93 %				

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

Level II

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

IQB1822 <Page 3 of 16>

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQB1822

Sampled: 02/16/07
 Received: 02/16/07

EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1822-03 (ESBS0007S01 - Soil)									
Reporting Units: mg/kg dry									
EFH (C8 - C11)	EPA 8015B	7B20072	4.1	5.8	ND	1	02/20/07	02/21/07	
EFH (C12 - C14)	EPA 8015B	7B20072	4.1	5.8	ND	1	02/20/07	02/21/07	
EFH (C15 - C20)	EPA 8015B	7B20072	4.1	5.8	ND	1	02/20/07	02/21/07	
EFH (C21 - C30)	EPA 8015B	7B20072	4.1	5.8	ND	1	02/20/07	02/21/07	
<i>Surrogate: n-Octacosane (40-125%)</i>					77 %				

Sample ID: IQB1822-05 (ESBS0006S01 - Soil)									
Reporting Units: mg/kg dry									
EFH (C8 - C11)	EPA 8015B	7B20072	4.2	6.0	ND	1	02/20/07	02/21/07	
EFH (C12 - C14)	EPA 8015B	7B20072	4.2	6.0	ND	1	02/20/07	02/21/07	
EFH (C15 - C20)	EPA 8015B	7B20072	4.2	6.0	ND	1	02/20/07	02/21/07	
EFH (C21 - C30)	EPA 8015B	7B20072	4.2	6.0	7.2	1	02/20/07	02/21/07	
<i>Surrogate: n-Octacosane (40-125%)</i>					87 %				

Level V

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQB1822

Sampled: 02/16/07
 Received: 02/16/07

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1822-02 (ESBS0014S02 - Soil)									
Reporting Units: %									
* Percent Solids	EPA 160.3 MOD	7B20135	0.10	0.10	90	1	02/20/07	02/21/07	
Sample ID: IQB1822-03 (ESBS0007S01 - Soil)									
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	7B20135	0.10	0.10	86	1	02/20/07	02/21/07	
Sample ID: IQB1822-05 (ESBS0006S01 - Soil)									
Reporting Units: %									
Percent Solids	EPA 160.3 MOD	7B20135	0.10	0.10	84	1	02/20/07	02/21/07	
Sample ID: IQB1822-01 (ESBS0019S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B17034	0.00	NA	7.54	1	02/17/07	02/17/07	
Sample ID: IQB1822-02 (ESBS0014S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B17034	0.00	NA	7.87	1	02/17/07	02/17/07	
Sample ID: IQB1822-03 (ESBS0007S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B17034	0.00	NA	7.91	1	02/17/07	02/17/07	
Sample ID: IQB1822-04 (ESBS0007S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B17034	0.00	NA	8.05	1	02/17/07	02/17/07	
Sample ID: IQB1822-05 (ESBS0006S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B17034	0.00	NA	7.74	1	02/17/07	02/17/07	
Sample ID: IQB1822-06 (ESBS0006S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B17034	0.00	NA	8.06	1	02/17/07	02/17/07	

* Analysis not validated

LEVEL V

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: IQB1681

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.001
 Sample Delivery Group: IQB1681
 Project Manager: Dixie Hambrick
 Matrix: Soil
 QC Level: V
 No. of Samples: 4
 No. of Reanalyses/Dilutions: 0
 Laboratory: Test America

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample Name	Matrix Type	Collection Date	Method
ESBS0009S01	IQB1681-03	7021614-03	Soil	14-Feb-07, 13:10	6010B, 6020, 7471A, 8015B, 8082, 8270C SIM, 9045C
ESBS0009S02	IQB1681-04	N/A	Soil	14-Feb-07, 13:30	9045C
ESBS0012S01	IQB1681-01	7021614-01	Soil	14-Feb-07 11:15	6010B, 6020, 7471A,8015B, 8082, 8270C SIM
ESBS0012S02	IQB1681-02	N/A	Soil	14-Feb-07 11:30	9045C
ESBS0019S01	IQB1681-05	N/A	Soil	14-Feb-07, 14:50	9045C

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the samples were couriered directly from the field to the laboratory, custody seals were not required. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present. Not applicable.	
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHODS 6010B, 6020, 7470A/7471A—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: 3/29/07

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Methods 6010B, 6020, 7470A/7471A*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: Analytical holding times, six months for ICP and ICP-MS metals and 28 days for mercury, were met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Boron and molybdenum were detected in the method blanks at 2.41 and 0.120 mg/kg; therefore, boron and molybdenum detected in both samples were qualified as estimated, "UJ."
- Interference Check Samples: Boron was reported in the ICSA solution at -17.9 µg/L; therefore, nondetected boron in the samples was qualified as estimated, "UJ."
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed.
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC

data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) had no reported detects. Molybdenum was detected in equipment rinsate EQW0001E01 (IQB1859) but was not detected in the site samples.
- Field Duplicates: There were no field duplicate samples identified for this SDG.

B. EPA METHOD 8270C SIM—Polynuclear Aromatic Hydrocarbons (PAHs)

Reviewed By: L. Calvin

Date Reviewed: March 28, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 8270C*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.
- GC/MS Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the samples of this SDG.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) had a detect between the MDL and the reporting limit for naphthalene at 0.13 µg/L; however, naphthalene was not detected in the associated site samples. Equipment rinsate ESQW0001E01 (IQB1859) had no target compounds detected above the MDL.

- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: Review is not applicable at a Level V validation.
- Compound Identification: Review is not applicable at a Level V validation. The laboratory analyzed for PAH compounds and added phthalates.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a Level V validation. Any results reported between the MDL and the reporting limit were qualified as estimated, "J." Reported nondetects are valid to the reporting limit.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review is not applicable at a Level V validation.

C. EPA METHOD 8082—PCBs

Reviewed By: L. Calvin

Date Reviewed: March 28, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Organochlorine Pesticides/PCBs by GC (DVP-4, Rev. 0)*, *EPA Method 8082*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: The method blanks had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the samples of this SDG.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) and equipment rinsate ESQW0001E01 (IQB1859) had no reported target compound detects above the MDL.
- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Review is not applicable at a Level V validation.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a Level V validation. Any results reported between the MDL and the reporting limit were qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

D. EPA METHOD 8015B—Extractable Total Fuel Hydrocarbons (EFHs)

Reviewed By: K. Shadowlight

Date Reviewed: March 26, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Total Fuel Hydrocarbons (DVP-8, Rev. 0)*, *EPA Method 8015B*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.
- Calibration: Review is not applicable at a level V validation.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recovery was within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed for the samples in this SDG.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: There were no target compound detects in the field blank, BLQW0018F01 (IQB1202), or the equipment rinsate, ESQW0001E01 (IQB1859).

- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Review is not applicable at a level V validation. Four EFH hydrocarbon ranges were reported: C8-C11, C12-C14, C15-C20, and C21-C30.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a level V validation. Any results reported between the MDL and the reporting limit were qualified as estimated, “J.” Reported nondetects are valid to the reporting limit.

E. EPA METHOD 9045C—General Minerals

Reviewed By: P. Meeks

Date Reviewed: 3/29/07

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 9045C*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding times, 24 hours from preparation for pH, was met.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Not applicable to this analysis.
- Blank Spikes and Laboratory Control Samples: Not applicable to this analysis.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on ESBS0012S01. The RPD was within the laboratory-established control limit of $\leq 5\%$.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to this analysis.
- Sample Result Verification: Review is not applicable at a Level V validation.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Not applicable to this analysis.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQB1681

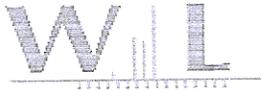
Sampled: 02/14/07
 Received: 02/15/07

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1681-01 (ESBS0012S01 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7B16104	5.9	12	16000	1	02/16/07	02/16/07	
Antimony	EPA 6020	7B16102	3.5	120	870	99.5	02/16/07	02/22/07	
Arsenic	EPA 6020	7B16102	0.29	0.58	350	0.995	02/16/07	02/17/07	
Barium	EPA 6020	7B16102	0.094	0.58	70	0.995	02/16/07	02/17/07	
Beryllium	EPA 6020	7B16102	0.047	0.35	0.50	0.995	02/16/07	02/17/07	
Boron <i>UJ/B,I</i>	EPA 6010B	7B16104	1.2	5.9	<u>7.3</u>	1	02/16/07	02/16/07	B
Cadmium	EPA 6020	7B16102	0.029	0.58	0.24	0.995	02/16/07	02/17/07	J
Chromium	EPA 6020	7B16102	0.41	1.2	20	0.995	02/16/07	02/17/07	
Cobalt	EPA 6020	7B16102	0.094	0.58	6.9	0.995	02/16/07	02/17/07	
Copper	EPA 6020	7B16102	0.23	1.2	14	0.995	02/16/07	02/17/07	
Lead	EPA 6020	7B16102	5.8	58	27000	99.5	02/16/07	02/22/07	
Lithium	EPA 6010B	7B16104	4.5	7.4	22	1	02/16/07	02/16/07	
Molybdenum <i>UJ/B</i>	EPA 6020	7B16102	0.12	1.2	<u>0.28</u>	0.995	02/16/07	02/17/07	B, J
Nickel	EPA 6020	7B16102	0.53	1.2	12	0.995	02/16/07	02/17/07	
Potassium	EPA 6010B	7B16104	22	59	3900	1	02/16/07	02/16/07	
Selenium	EPA 6020	7B16102	0.23	1.2	0.24	0.995	02/16/07	02/17/07	J
Silver	EPA 6020	7B16102	0.058	0.58	0.53	0.995	02/16/07	02/17/07	J
Sodium	EPA 6010B	7B16104	28	59	110	1	02/16/07	02/16/07	
Thallium	EPA 6020	7B16102	0.12	0.58	0.27	0.995	02/16/07	02/17/07	J
Vanadium	EPA 6020	7B16102	0.47	1.2	35	0.995	02/16/07	02/17/07	
Zinc	EPA 6020	7B16102	1.5	12	45	0.995	02/16/07	02/17/07	
Zirconium <i>U</i>	EPA 6010B	7B16119	1.8	29	ND	1	02/16/07	02/16/07	

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager

LEVEL V



Weck Laboratories, Inc.
 14859 E. Clark Ave.
 Industry, CA 91745
 Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614	Report ID: 7021614 Project ID: IQB1681	Date Received: 02/16/07 11:18 Date Reported: 03/02/07 16:56
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IQB1681-01 7021614-01 (Solid)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
% Solids ✖	85.1	% by Weight	0.100	1	Gravimetric	W7B0880	02/22/07	02/28/07	dj

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total	0.019	0.00076	mg/kg dry	0.012	1	EPA 7471A	W7B0833	02/21/07	02/22/07	jl

* Analysis not validated

LEVEL V

TestAmerica

ANALYTICAL TESTING CORPORATION

17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQB1681

Sampled: 02/14/07
 Received: 02/15/07

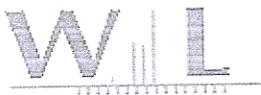
METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1681-03 (ESBS0009S01 - Soil)									
Reporting Units: mg/kg dry									
Aluminum	EPA 6010B	7B16104	5.6	11	20000	1	02/16/07	02/16/07	
Antimony	EPA 6020	7B16102	0.033	1.1	0.68	0.99	02/16/07	02/17/07	J
Arsenic	EPA 6020	7B16102	0.28	0.55	4.0	0.99	02/16/07	02/17/07	
Barium	EPA 6020	7B16102	0.089	0.55	70	0.99	02/16/07	02/17/07	
Beryllium	EPA 6020	7B16102	0.044	0.33	0.60	0.99	02/16/07	02/17/07	
Boron <i>U/B, I</i>	EPA 6010B	7B16104	1.1	5.6	2.7	1	02/16/07	02/16/07	J, B
Cadmium	EPA 6020	7B16102	0.028	0.55	0.14	0.99	02/16/07	02/17/07	J
Chromium	EPA 6020	7B16102	0.39	1.1	21	0.99	02/16/07	02/17/07	
Cobalt	EPA 6020	7B16102	0.089	0.55	6.2	0.99	02/16/07	02/17/07	
Copper	EPA 6020	7B16102	0.22	1.1	8.5	0.99	02/16/07	02/17/07	
Lead	EPA 6020	7B16102	0.055	0.55	11	0.99	02/16/07	02/17/07	
Lithium	EPA 6010B	7B16104	4.2	7.0	30	1	02/16/07	02/16/07	
Molybdenum <i>U/B</i>	EPA 6020	7B16102	0.11	1.1	0.33	0.99	02/16/07	02/17/07	B, J
Nickel	EPA 6020	7B16102	0.50	1.1	13	0.99	02/16/07	02/17/07	
Potassium	EPA 6010B	7B16104	21	56	2400	1	02/16/07	02/16/07	
Selenium <i>U</i>	EPA 6020	7B16102	0.22	1.1	ND	0.99	02/16/07	02/17/07	
Silver <i>U</i>	EPA 6020	7B16102	0.055	0.55	ND	0.99	02/16/07	02/17/07	
Sodium	EPA 6010B	7B16104	27	56	620	1	02/16/07	02/16/07	
Thallium	EPA 6020	7B16102	0.11	0.55	0.25	0.99	02/16/07	02/17/07	J
Vanadium	EPA 6020	7B16102	0.44	1.1	39	0.99	02/16/07	02/17/07	
Zinc	EPA 6020	7B16102	1.4	11	41	0.99	02/16/07	02/17/07	
Zirconium	EPA 6010B	7B16119	1.7	28	3.3	1	02/16/07	02/16/07	J

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager

LEVEL V

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.



Weck Laboratories, Inc.
 14859 E. Clark Ave.
 Industry, CA 91745
 Phone 626.336.2139 Fax 626.336.2634

TestAmerica, Inc. - Irvine 17461 Derian Ave, Suite 100 Irvine CA, 92614	Report ID: 7021614 Project ID: IQB1681	Date Received: 02/16/07 11:18 Date Reported: 03/02/07 16:56
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IQB1681-03 7021614-02 (Solid)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

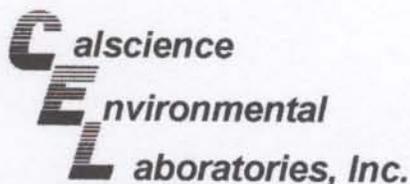
Analyte	Result	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
% Solids *	89.5	% by Weight	0.100	1	Gravimetric	W7B0880	02/22/07	02/28/07	dj

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Units	Reporting Limit	Dilution Factor	Method	Batch Number	Date Prepared	Date Analyzed	Data Qualifiers
Mercury, Total	0.013	0.00073	mg/kg dry	0.011	1	EPA 7471A	W7B0833	02/21/07	02/22/07	jl

* Analysis not validated

LEVEL V



Analytical Report



TestAmerica
17461 Derian Avenue, Suite 100
Irvine, CA 92614-5845

Date Received: 02/16/07
Work Order No: 07-02-1063
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: mg/kg

Project: IQB1681

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
IQB1681-01	07-02-1063-1	02/14/07	Solid	GC/MS N	02/19/07	02/22/07	070219L05

ESBS0012501

Comment(s): -Results are reported on a dry weight basis.

-Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	ND	0.025	0.0022	1.23		Chrysene	0.023	0.025	0.0025	1.23	J
2-Methylnaphthalene	ND	0.025	0.0022	1.23		Di-n-Butyl Phthalate	0.061	0.025	0.0026	1.23	
Acenaphthene	ND	0.025	0.0023	1.23		Dibenz (a,h) Anthracene	ND	0.025	0.0024	1.23	
Acenaphthylene	ND	0.025	0.0020	1.23		Diethyl Phthalate	0.0069	0.025	0.0025	1.23	J
Anthracene	ND	0.025	0.0022	1.23		Fluoranthene	0.035	0.025	0.0023	1.23	
Benzo (a) Anthracene	0.022	0.025	0.0026	1.23	J	Fluorene	ND	0.025	0.0022	1.23	
Benzo (a) Pyrene	0.015	0.025	0.0022	1.23	J	Indeno (1,2,3-c,d) Pyrene	0.0075	0.025	0.0022	1.23	J
Benzo (b) Fluoranthene	0.021	0.025	0.0022	1.23	J	N-Nitrosodimethylamine	ND	0.025	0.0024	1.23	
Benzo (g,h,i) Perylene	ND	0.025	0.0023	1.23		Naphthalene	ND	0.025	0.0023	1.23	
Benzo (k) Fluoranthene	0.0083	0.025	0.0031	1.23	J	Phenanthrene	0.018	0.025	0.0023	1.23	J
Bis(2-Ethylhexyl) Phthalate	0.72	0.025	0.0038	1.23		Pyrene	0.036	0.025	0.0031	1.23	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>
2,4,6-Tribromophenol	64	32-143				2-Fluorobiphenyl	97	14-146			
2-Fluorophenol	81	15-138				Nitrobenzene-d5	111	18-162			
p-Terphenyl-d14	109	34-148				Phenol-d6	78	17-141			

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
IQB1681-03	07-02-1063-3	02/14/07	Solid	GC/MS N	02/19/07	02/22/07	070219L05

ESBS0009501

Comment(s): -Results are reported on a dry weight basis.

-Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	ND	0.023	0.0020	1.13		Chrysene	ND	0.023	0.0023	1.13	
2-Methylnaphthalene	ND	0.023	0.0020	1.13		Di-n-Butyl Phthalate	0.049	0.023	0.0024	1.13	
Acenaphthene	ND	0.023	0.0021	1.13		Dibenz (a,h) Anthracene	ND	0.023	0.0022	1.13	
Acenaphthylene	ND	0.023	0.0019	1.13		Diethyl Phthalate	0.0073	0.023	0.0023	1.13	J
Anthracene	ND	0.023	0.0020	1.13		Fluoranthene	ND	0.023	0.0021	1.13	
Benzo (a) Anthracene	ND	0.023	0.0024	1.13		Fluorene	ND	0.023	0.0020	1.13	
Benzo (a) Pyrene	ND	0.023	0.0020	1.13		Indeno (1,2,3-c,d) Pyrene	ND	0.023	0.0020	1.13	
Benzo (b) Fluoranthene	ND	0.023	0.0020	1.13		N-Nitrosodimethylamine	ND	0.023	0.0022	1.13	
Benzo (g,h,i) Perylene	ND	0.023	0.0021	1.13		Naphthalene	ND	0.023	0.0021	1.13	
Benzo (k) Fluoranthene	ND	0.023	0.0028	1.13		Phenanthrene	ND	0.023	0.0021	1.13	
Bis(2-Ethylhexyl) Phthalate	0.028	0.023	0.0035	1.13		Pyrene	ND	0.023	0.0028	1.13	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>
2,4,6-Tribromophenol	61	32-143				2-Fluorobiphenyl	95	14-146			
2-Fluorophenol	79	15-138				Nitrobenzene-d5	108	18-162			
p-Terphenyl-d14	108	34-148				Phenol-d6	76	17-141			

Level II

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

TestAmerica

ANALYTICAL TESTING CORPORATION

17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-San Diego/Boeing
9444 Farnham Street, Suite 300
San Diego, CA 92123
Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
1891263
Report Number: IQB1681

Sampled: 02/14/07
Received: 02/15/07

POLYCHLORINATED BIPHENYLS (EPA 3545/8082)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1681-01 (ESBS0012S01 - Soil)									
Reporting Units: ug/kg dry									
Aroclor 1016	EPA 8082	7B22125	18	59	ND	1	02/22/07	02/23/07	
Aroclor 1221	EPA 8082	7B22125	18	59	ND	1	02/22/07	02/23/07	
Aroclor 1232	EPA 8082	7B22125	12	59	ND	1	02/22/07	02/23/07	
Aroclor 1242	EPA 8082	7B22125	12	59	ND	1	02/22/07	02/23/07	
Aroclor 1248	EPA 8082	7B22125	12	59	ND	1	02/22/07	02/23/07	
Aroclor 1254	EPA 8082	7B22125	12	59	ND	1	02/22/07	02/23/07	
Aroclor 1260	EPA 8082	7B22125	12	59	ND	1	02/22/07	02/23/07	
Surrogate: Decachlorobiphenyl (45-120%)					73 %				

Sample ID: IQB1681-03 (ESBS0009S01 - Soil)									
Reporting Units: ug/kg dry									
Aroclor 1016	EPA 8082	7B22125	17	56	ND	1	02/22/07	02/23/07	
Aroclor 1221	EPA 8082	7B22125	17	56	ND	1	02/22/07	02/23/07	
Aroclor 1232	EPA 8082	7B22125	11	56	ND	1	02/22/07	02/23/07	
Aroclor 1242	EPA 8082	7B22125	11	56	ND	1	02/22/07	02/23/07	
Aroclor 1248	EPA 8082	7B22125	11	56	ND	1	02/22/07	02/23/07	
Aroclor 1254	EPA 8082	7B22125	11	56	ND	1	02/22/07	02/23/07	
Aroclor 1260	EPA 8082	7B22125	11	56	ND	1	02/22/07	02/23/07	
Surrogate: Decachlorobiphenyl (45-120%)					93 %				

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

Level II

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQB1681

Sampled: 02/14/07
 Received: 02/15/07

EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1681-01 (ESBS0012S01 - Soil)									
Reporting Units: mg/kg dry									
EFH (C8 - C11)	EPA 8015B	7B16067	4.1	5.9	ND	1	02/16/07	02/17/07	
EFH (C12 - C14)	EPA 8015B	7B16067	4.1	5.9	ND	1	02/16/07	02/17/07	
EFH (C15 - C20)	EPA 8015B	7B16067	4.1	5.9	ND	1	02/16/07	02/17/07	
EFH (C21 - C30)	EPA 8015B	7B16067	4.1	5.9	4.3	1	02/16/07	02/17/07	J
<i>Surrogate: n-Octacosane (40-125%)</i>					85 %				
Sample ID: IQB1681-03 (ESBS0009S01 - Soil)									
Reporting Units: mg/kg dry									
EFH (C8 - C11)	EPA 8015B	7B16067	3.9	5.6	ND	1	02/16/07	02/17/07	
EFH (C12 - C14)	EPA 8015B	7B16067	3.9	5.6	ND	1	02/16/07	02/17/07	
EFH (C15 - C20)	EPA 8015B	7B16067	3.9	5.6	ND	1	02/16/07	02/17/07	
EFH (C21 - C30)	EPA 8015B	7B16067	3.9	5.6	ND	1	02/16/07	02/17/07	
<i>Surrogate: n-Octacosane (40-125%)</i>					81 %				

Level V

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager

MWH-San Diego/Boeing
 9444 Farnham Street, Suite 300
 San Diego, CA 92123
 Attention: Lisa J. Tucker

Project ID: SSFL Group 8 - SSPN
 1891263
 Report Number: IQB1681

Sampled: 02/14/07
 Received: 02/15/07

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQB1681-01 (ESBS0012S01 - Soil)									
Reporting Units: %									
* Percent Solids	EPA 160.3 MOD	7B16117	0.10	0.10	85	1	02/16/07	02/19/07	
Sample ID: IQB1681-03 (ESBS0009S01 - Soil)									
Reporting Units: %									
* Percent Solids	EPA 160.3 MOD	7B16117	0.10	0.10	90	1	02/16/07	02/19/07	
Sample ID: IQB1681-01 (ESBS0012S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B16073	0.00	NA	7.55	1	02/16/07	02/16/07	
Sample ID: IQB1681-02 (ESBS0012S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B16073	0.00	NA	8.12	1	02/16/07	02/16/07	
Sample ID: IQB1681-03 (ESBS0009S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B16073	0.00	NA	8.82	1	02/16/07	02/16/07	
Sample ID: IQB1681-04 (ESBS0009S02 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B16073	0.00	NA	8.57	1	02/16/07	02/16/07	
Sample ID: IQB1681-05 (ESBS0019S01 - Soil)									
Reporting Units: pH Units									
pH	EPA 9045C	7B16073	0.00	NA	7.98	1	02/16/07	02/16/07	

* Analysis not validated

TestAmerica - Irvine, CA
 Michele Chamberlin
 Project Manager



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: G7D060344

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.001
 Sample Delivery Group: G7D060344
 Project Manager: Dixie Hambrick
 Matrix: soil
 QC Level: V
 No. of Samples: 1
 No. of Reanalyses/Dilutions: 0
 Laboratory: STL-Sacramento

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample Name	Matrix	Collection	Method
ESBS0034S01SP	G7D060344001	N/A	Soil	4/3/2007 2:00:00 PM	6020, 9045C

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory above the temperature limits of 4°C ±2°C, at 17°C; however, due to the nonvolatile nature of the analytes, no qualifications were required. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel and custody seals were present and intact. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

II. Method Analyses

A. EPA METHOD 6020—Metals

Reviewed By: P. Meeks

Date Reviewed: May 7, 2007

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Method 6020*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, six months for ICP-MS metals, was met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Antimony was reported in a bracketing CCB at -0.055 µg/L; however, as antimony was subsequently rejected, no qualification was applied.
- Interference Check Samples: Review is not applicable at a Level V validation.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: Antimony was recovered below 30% in both the MS and the MSD; therefore, nondetected antimony in the site sample was rejected, "R." All remaining recoveries and RPDs were within laboratory-established QC limits.
- Serial Dilution: Serial dilution analyses were performed on the sample in this SDG. All results were acceptable with %Ds ≤10%.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Neither antimony, arsenic or lead were detected in field blank ESQW0002F01 (183796). This SDG had no identified equipment rinsate sample.
- Field Duplicates: There were no field duplicate samples identified for this SDG.

B. EPA METHOD 9045C—General Minerals

Reviewed By: P. Meeks

Date Reviewed: May 7, 2007

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 9045C*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, 24 hours from preparation for pH, was met.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Not applicable to this analysis.
- Blank Spikes and Laboratory Control Samples: Not applicable to this analysis.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on the sample in this SDG. The RPD was within the laboratory-established control limit of ≤5%.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to this analysis.
- Sample Result Verification: Review is not applicable at a Level V validation.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Not applicable to this analysis.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

MWH Americas, Inc.

Client Sample ID: ESBS0034S01SP

TOTAL Metals

Lot-Sample #....: G7D060344-001
Date Sampled....: 04/03/07
% Moisture.....: 16

Date Received...: 04/06/07

Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7108200						
Arsenic	5.5	0.24	mg/kg	SW846 6020	04/18/07	JTHQ71AD
		Dilution Factor: 1		MDL.....: 0.18		
Lead	8.7	0.12	mg/kg	SW846 6020	04/18/07	JTHQ71AE
		Dilution Factor: 1		MDL.....: 0.072		
Antimony R/Q	ND	0.24	mg/kg	SW846 6020	04/18/07	JTHQ71AF
		Dilution Factor: 1		MDL.....: 0.12		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LEVEL V

MWH Americas, Inc.

Client Sample ID: ESBS0034S01SP

General Chemistry

Lot-Sample #...: G7D060344-001 Work Order #...: JTHQ7 Matrix.....: SO
Date Sampled...: 04/03/07 Date Received...: 04/06/07
% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH	8.0	0.10	--	SW846 9045C	04/16/07	7108400
		Dilution Factor: 1		MDL.....: 0.10		
* Percent Moisture	16.2	0.10	%	ASTM D 2216-90	04/12-04/13/07	7102236
		Dilution Factor: 1		MDL.....: 0.10		

* Analysis not validated

LEVEL ✓



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: 1026673

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
Contract Task Order: 1261.500D.08.001
Sample Delivery Group: 1026673
Project Manager: Dixie Hambrick
Matrix: Soil
QC Level: V
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Laboratory: TestAmerica

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample name	Matrix Type	Collection Date	Method
ESBS0005S01SP	1891264	na	soil	2/21/07	6010A, 6020, 7471A, 805B, 8082, 8270CSIM, 9045C

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the samples were couriered directly from the field to the laboratory, custody seals were not required. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

A. EPA METHODS 6010B, 6020, 7470A/7471A—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: April 12, 2007

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Methods 6010B, 6020, 7470A/7471A*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: Analytical holding times, six months for ICP and ICP-MS metals and 28 days for mercury, were met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Method blanks and CCBs had no applicable detects.
- Interference Check Samples: Review is not applicable at a Level V validation.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on the sample in this SDG. All RPDs were within the control limits of $\leq 20\%$ or $\pm \text{MDL}$.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on the sample in this SDG. Antimony was recovered below 30% in both the MS and the MSD and nickel was recovered below the control limit in both the MS and the MSD. Antimony and nickel detected in the samples were qualified as estimated, "J." The remaining recoveries and all RPDs were within laboratory-established QC limits.
- Serial Dilution: Serial dilution analyses were performed and all %Ds were acceptable.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC

data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IBQ1202) had no detects. Molybdenum was detected in equipment rinsate ESQW0001E01 (IBQ1859) but not at a concentration sufficient to qualify the site sample.

Field Duplicates: There were no field duplicate samples identified for this SDG.

B. EPA METHOD 8270C SIM—Polynuclear Aromatic Hydrocarbons (PAHs)

Reviewed By: L. Calvin

Date Reviewed: April 13, 2007

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 8270C*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil sample was extracted within 14 days of collection and analyzed within 40 days of extraction.
- GC/MS Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: The method blank had no target compounds detected above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision was based on the blank spike results.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Naphthalene was detected in field blank BLQW0018F01 (IQB1202) at 0.13 µg/L; however, naphthalene was not detected in the site sample. Equipment rinsate ESQW0001E01 (IQB1859) had no target compound detects.

- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: Review is not applicable at a Level V validation.
- Compound Identification: Review is not applicable at a Level V validation. The laboratory analyzed for PAH compounds and added phthalates.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a Level V validation. Any results reported between the MDL and the reporting limit were qualified as estimated, "J." Reported nondetects are valid to the reporting limit.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review is not applicable at a Level V validation.

C. EPA METHOD 8082—PCBs

Reviewed By: L. Calvin

Date Reviewed: April 13, 2007

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Organochlorine Pesticides/PCBs by GC (DVP-4, Rev. 0)*, *EPA Method 8082*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil sample was extracted within 14 days of collection and analyzed within 40 days of extraction.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision was based on the blank spike results.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Field blank BLQW0018F01 (IQB1202) and equipment rinsate ESQW0001E01 (IQB1859) had no target compound detects.
- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Review is not applicable at a Level V validation.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a Level V validation. Any results reported between the MDL and the reporting limit were qualified as estimated, "J." Reported nondetects are valid to the reporting limit.

D. EPA METHOD 8015B—Extractable Total Fuel Hydrocarbons (EFHs)

Reviewed By: K. Shadowlight

Date Reviewed: April 11, 2007

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Total Fuel Hydrocarbons (DVP-8, Rev. 0)*, *EPA Method 8015B*, and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Extraction and analytical holding times were met. The soil sample was extracted within 14 days of collection and analyzed within 40 days of extraction.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: The recoveries and RPD were within laboratory-established QC limits for the blank spike/blank spike duplicate pair.
- Surrogate Recovery: The recoveries for both surrogates were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: A matrix spike only was performed on the sample in this SDG and the recovery was within the laboratory QC limits.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: There were no target compounds detected above the MDL in field blank BLQW0018F01 (IBQ1202) or equipment rinsate, ESQW0001E01 (IQB1859).

- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Review is not applicable at a Level V validation. Four EFH hydrocarbon ranges were reported: C8-C11, C12-C14, C15-C20, and C21-C30. The laboratory also reported a total TPH. The result for total TPH was rejected, "R," in the sample of this SDG, as duplicate data, as the total result was represented by the four separate ranges.
- Compound Quantification and Reported Detection Limits: Review is not applicable at a Level V validation. Reported nondetects are valid to the reporting limit.

E. EPA METHOD 9045C—General Minerals

Reviewed By: P. Meeks

Date Reviewed: April 12, 2007

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 9045C*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: Analytical holding times, 24 hours from preparation for pH, were met.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Not applicable to this analysis.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to this analysis.
- Sample Result Verification: Review is not applicable at a Level V validation.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Not applicable to this analysis.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.



Lancaster Laboratories Sample No. SW 4989247

ESBS0005S01SP Proficiency Soil Sample
 Project 1891264 - Inorganics
 SSFL Split Sample - Group 8

Collected: 02/21/2007 10:10 by SV

Account Number: 12189

Submitted: 02/23/2007 09:20
 Reported: 03/09/2007 at 09:59
 Discard: 10/26/2007

MECX, LLC
 12269 East Vassar Drive
 Aurora CO 80014

01SPI SDG#: BOE01-02*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Units	Dilution Factor
00159	Mercury	7439-97-6	0.0232 J	0.0124	0.118	mg/kg	1
01643	Aluminum	7429-90-5	31,100.	3.98	23.8	mg/kg	1
01662	Potassium	7440-09-7	2,940.	3.93	59.4	mg/kg	1
01667	Sodium	7440-23-5	454.	41.3	119.	mg/kg	1
06124	Antimony <i>J/Q</i>	7440-36-0	0.0468 J	0.0059	0.119	mg/kg	1
06125	Arsenic	7440-38-2	5.46	0.202	2.38	mg/kg	10
06127	Beryllium	7440-41-7	0.862	0.0033	0.0238	mg/kg	1
06128	Cadmium	7440-43-9	0.310	0.0045	0.0297	mg/kg	1
06131	Chromium	7440-47-3	32.9	0.368	2.38	mg/kg	10
06133	Copper	7440-50-8	13.6	0.416	1.19	mg/kg	10
06135	Lead	7439-92-1	8.81	0.0178	0.119	mg/kg	1
06139	Nickel <i>J/Q</i>	7440-02-0	16.9	0.594	2.38	mg/kg	10
06141	Selenium	7782-49-2	0.461 J	0.439	2.38	mg/kg	10
06145	Thallium	7440-28-0	0.274	0.0011	0.0594	mg/kg	1
06946	Barium	7440-39-3	127.	0.0273	0.594	mg/kg	1
06952	Cobalt	7440-48-4	9.58	0.154	0.594	mg/kg	1
06960	Molybdenum	7439-98-7	0.970 J	0.487	1.19	mg/kg	1
06966	Silver	7440-22-4	0.473 J	0.202	0.594	mg/kg	1
06971	Vanadium	7440-62-2	64.8	0.190	0.594	mg/kg	1
06972	Zinc	7440-66-6	75.6	0.778	2.38	mg/kg	1
07914	Boron	7440-42-8	6.29	0.677	5.94	mg/kg	1
00118	Moisture*	n.a.	15.8	0.50	0.50	%	1
00394	pH	n.a.	8.59	0.0100	0.0100	Std. Units	1

The pH was performed on a 1:1 slurry (25 gms. of sample and 25 ml. of deionized water) after being tumbled for 30 min.

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

** Analysis not validated*

LEVEL V

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00159	Mercury	SW-846 7471A	1	03/01/2007 10:13	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
 PO Box 12425
 Lancaster, PA 17605-2425
 717-656-2300 Fax: 717-656-2681

Analysis Report



Lancaster Laboratories Sample No. SW 4989246

ESBS0005S01SP Proficiency Soil Sample
 Project 1891264 - Organics
 SSFL Split Sample - Group 8

Collected: 02/21/2007 10:10 by SV

Account Number: 12189

Submitted: 02/23/2007 09:20
 Reported: 03/09/2007 at 09:59
 Discard: 10/26/2007

MECX, LLC
 12269 East Vassar Drive
 Aurora CO 80014

01SPO SDG#: ~~BOE01-01~~ 1024473

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Units	Dilution Factor
00111	Moisture *	n.a.	15.8	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							
02729	Custom TPH with Ranges (soil) *						
01958	CB-C11	n.a.	N.D.	14.	4.8	mg/kg	1
01959	C12-C14	n.a.	N.D.	14.	4.8	mg/kg	1
01960	C15-C20	n.a.	N.D.	14.	4.8	mg/kg	1
01961	C21-C30	n.a.	N.D.	14.	4.8	mg/kg	1
02730	Total TPH	n.a.	N.D.	14.	4.8	mg/kg	1
01216	PCBs in Solids						
01495	PCB-1016 U	12674-11-2	N.D.	20.	3.9	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	20.	6.2	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	20.	3.9	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	20.	3.9	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	20.	3.9	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	20.	3.9	ug/kg	1
01501	PCB-1260 J	11096-82-5	5.3	20.	3.9	ug/kg	1
02858	Selected SVQA's in soil by SIM						
02863	Naphthalene U	91-20-3	N.D.	4.	1.	ug/kg	1
02864	2-Methylnaphthalene	91-57-6	N.D.	2.	0.8	ug/kg	1
02865	1-Methylnaphthalene	90-12-0	N.D.	4.	2.	ug/kg	1
02867	Acenaphthylene	208-96-8	N.D.	2.	0.4	ug/kg	1
02868	Acenaphthene	83-32-9	N.D.	2.	0.8	ug/kg	1
02870	Fluorene	86-73-7	N.D.	2.	0.8	ug/kg	1
02871	Phenanthrene	85-01-8	1.0	2.	0.8	ug/kg	1
02872	Anthracene	120-12-7	N.D.	2.	0.4	ug/kg	1
02874	Fluoranthene	206-44-0	2.1	2.	0.8	ug/kg	1
02875	Pyrene	129-00-0	1.9	2.	0.8	ug/kg	1
02876	Benzo(a)anthracene	56-55-3	0.99	2.	0.8	ug/kg	1
02877	Chrysene	218-01-9	2.2	2.	0.4	ug/kg	1
02878	Benzo(b)fluoranthene	205-99-2	1.8	2.	2.	ug/kg	1
02879	Benzo(k)fluoranthene	207-08-9	N.D.	2.	1.	ug/kg	1

* Analysis not validated.

*-This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
 PO Box 12425
 Lancaster, PA 17605-2425
 717-656-2300 Fax: 717-656-2681

WJC
 04.13.07

Level II

Analysis Report



Lancaster Laboratories Sample No. SW 4989246

ESBS0005S01SP Proficiency Soil Sample
 Project 1891264 - Organics
 SSFL Split Sample - Group 8

Collected: 02/21/2007 10:10 by SV

Account Number: 12189

Submitted: 02/23/2007 09:20
 Reported: 03/09/2007 at 09:59
 Discard: 10/26/2007

MECX, LLC
 12269 East Vassar Drive
 Aurora CO 80014

01SPO SDG#: ~~BOE01-01~~ 1024673

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Units	Dilution Factor
02880	Benzo(a)pyrene	50-32-8	0.98 J	2.	0.8	ug/kg	1
02881	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	2.	1.	ug/kg	1
02882	Dibenz(a,h)anthracene	53-70-3	N.D.	2.	1.	ug/kg	1
02883	Benzo(g,h,i)perylene	191-24-2	N.D.	2.	1.	ug/kg	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00111	Moisture	EPA 160.3 modified	1	02/23/2007 17:47	Scott W Freisher	1
02729	Custom TPH with Ranges (soil)	SW-846 8015B modified	1	02/27/2007 04:07	Matthew E Barton	1
01216	PCBs in Solids	SW-846 8082	1	02/27/2007 12:56	Candice M Hibberd	1
02858	Selected SVOA's in soil by SIM	SW-846 8270C SIM	1	03/08/2007 04:17	Brian K Graham	1
00381	BNA Soil Extraction	SW-846 3550B	2	03/07/2007 19:40	Wanda F Oswald	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	02/26/2007 18:30	Sally L Appleyard	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	02/25/2007 08:30	Kirsten M Kahler	1

CMC
04-13-07

8818

Level II

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
 PO Box 12425
 Lancaster, PA 17605-2425
 717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. SW 4989246

ESBS0005S01SP Proficiency Soil Sample
 Project 1891264 - Organics
 SSFL Split Sample - Group 8

Collected: 02/21/2007 10:10 by SV

Account Number: 12189

Submitted: 02/23/2007 09:20
 Reported: 03/09/2007 at 09:59
 Discard: 10/26/2007

MECX, LLC
 12269 East Vassar Drive
 Aurora CO 80014

01SPO SDG#: ~~BOE01-01~~ (102-6673)

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Units	Dilution Factor
00111	Moisture "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	15.8	0.50	0.50	%	1
02729	Custom TPH with Ranges (soil)						
01958	C6-C11 u	n.a.	N.D.	14.	4.8	mg/kg	1
01959	C12-C14	n.a.	N.D.	14.	4.8	mg/kg	1
01960	C15-C20	n.a.	N.D.	14.	4.8	mg/kg	1
01961	C21-C30	n.a.	N.D.	14.	4.8	mg/kg	1
02730	Total TPH u /*III	n.a.	N.D.	14.	4.8	mg/kg	1
01216	PCBs in Solids						
01495	PCB-1016 *	12674-11-2	N.D.	20.	3.9	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	20.	6.2	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	20.	3.9	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	20.	3.9	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	20.	3.9	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	20.	3.9	ug/kg	1
01501	PCB-1260	11096-82-5	5.3 J	20.	3.9	ug/kg	1
02858	Selected SVOA's in soil by SIM						
02863	Naphthalene *	91-20-3	N.D.	4.	1.	ug/kg	1
02864	2-Methylnaphthalene	91-57-6	N.D.	2.	0.8	ug/kg	1
02865	1-Methylnaphthalene	90-12-0	N.D.	4.	2.	ug/kg	1
02867	Acenaphthylene	208-96-8	N.D.	2.	0.4	ug/kg	1
02868	Acenaphthene	83-32-9	N.D.	2.	0.8	ug/kg	1
02870	Fluorene	86-73-7	N.D.	2.	0.8	ug/kg	1
02871	Phenanthrene	85-01-8	1.0 J	2.	0.8	ug/kg	1
02872	Anthracene	120-12-7	N.D.	2.	0.4	ug/kg	1
02874	Fluoranthene	206-44-0	2.1	2.	0.8	ug/kg	1
02875	Pyrene	129-00-0	1.9 J	2.	0.8	ug/kg	1
02876	Benzo(a)anthracene	56-55-3	0.99 J	2.	0.8	ug/kg	1
02877	Chrysene	218-01-9	2.2	2.	0.4	ug/kg	1
02878	Benzo(b)fluoranthene	205-99-2	1.8 J	2.	2.	ug/kg	1
02879	Benzo(k)fluoranthene	207-08-9	N.D.	2.	1.	ug/kg	1

*=This limit was used in the evaluation of the final result
 Lancaster Laboratories, Inc.
 P.O. Box 12475
 Lancaster, PA 17602-0475
 717-656-2300 Fax: 717-656-2681

Level IV

*analysis not val'dated 10/4/11/07



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: 186314H

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.002
 Sample Delivery Group: 186314H
 Project Manager: Dixie Hambrick
 Matrix: soil
 QC Level: V
 No. of Samples: 3
 No. of Reanalyses/Dilutions: 0
 Laboratory: GEL

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample Name	Matrix	Collection	Method
ESBS0022S02	186314003	N/A	Soil	4/3/2007 12:50:00 PM	6010B
ESBS0024S02	186314001	N/A	Soil	4/3/2007 11:23:00 AM	6010B
ESBS0024S04	186314002	N/A	Soil	4/3/2007 12:01:00 PM	6010B

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Sample custody seals were intact. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHODS 6010B, 6020, 7470A/7471A—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: June 4, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Method 6010A*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, six months for ICP metals, was met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: There were no applicable detects in the method blank or CCBs.
- Interference Check Samples: Review is not applicable at a Level V validation.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on ESBS0024S02. The RPDs were within the laboratory-established control limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on ESBS0024S02. The recoveries and RPDs were within the laboratory-established control limits.
- Serial Dilution: Serial dilution analyses were performed on ESBS0024S02. The %Ds were acceptable.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples.

Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: There were no applicable detects in field blank BLQW0019F01 (186235). The samples in this SDG had no associated equipment rinsate.
- Field Duplicates: There were no field duplicate samples analyzed with this SDG.

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186314H

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 186314001

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0024S02

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13900	mg/kg		7.69	22.6	20	1	P	JWJ	05/19/07 09:02	051807-1	635588
7440-23-5	Sodium	89.6	mg/kg		5.09	17	50	1	P	JWJ	05/19/07 09:02	051807-1	635588

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
635588	635587	SW846 3050B	0.517	g	50	mL	05/18/07	SXJ1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186314H

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 186314002

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0024S04

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 93.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8130	mg/kg		7.23	21.3	20	1	P	JWJ	05/19/07 09:36	051807-1	635588
7440-23-5	Sodium	71.1	mg/kg		4.78	15.9	50	1	P	JWJ	05/19/07 09:36	051807-1	635588

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
635588	635587	SW846 3050B	0.505	g	50	mL	05/18/07	SXJ1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186314H

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 186314003

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0022S02

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	14200	mg/kg		7.57	22.3	20	1	P	JWJ	05/19/07 09:43	051807-1	635588
7440-23-5	Sodium	454	mg/kg		5.01	16.7	50	1	P	JWJ	05/19/07 09:43	051807-1	635588

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
635588	635587	SW846 3050B	0.51	g	50	mL	05/18/07	SXJ1

LEVEL V



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: 186102

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.001
 Sample Delivery Group: 186102
 Project Manager: Dixie Hambrick
 Matrix: water/soil
 QC Level: V
 No. of Samples: 11
 No. of Reanalyses/Dilutions: 0
 Laboratory: GEL

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample Name	Matrix	Collection	Method
ESBS0038S01	186102009	N/A	Soil	5/15/2007 11:34:00 AM	6010B
ESBS0038S02	186102010	N/A	Soil	5/15/2007 11:48:00 AM	6010B
ESBS0039S01	186102005	N/A	Soil	5/15/2007 8:57:00 AM	6010B
ESBS0039S02	186102006	N/A	Soil	5/15/2007 9:39:00 AM	6010B
ESBS0040S01	186102002	N/A	Soil	5/15/2007 7:53:00 AM	6010B
ESBS0040S02	186102004	N/A	Soil	5/15/2007 8:21:00 AM	6010B
ESBS0041S01	186102001	N/A	Soil	5/15/2007 7:40:00 AM	6010B
ESBS0041S02	186102003	N/A	Soil	5/15/2007 8:20:00 AM	6010B
ESBS0043S01	186102007	N/A	Soil	5/15/2007 10:09:00 AM	6010B
ESBS0043S02	186102008	N/A	Soil	5/15/2007 11:07:00 AM	6010B
ESQW0003E01	186105001	N/A	Water	5/15/2007 12:26:00 PM	6010B

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Samples custody seals were intact. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHODS 6010B, 6020, 7470A/7471A—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: June 2, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Method 6010B* and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, six months for ICP metals, was met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Sodium was detected in method blank 634657 at 0.0633 mg/L; therefore, sodium detected in ESQW0003E01 was qualified as an estimated nondetect, "UJ."
- Interference Check Samples: Review is not applicable at a Level V validation.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on ESBS0041S01 the RPDs were within the laboratory-established control limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on ESBS0041S01. Recoveries and RPDs were within laboratory-established QC limits.
- Serial Dilution: Serial dilution analyses were performed on ESBS0041S01. The serial dilution %Ds were within the laboratory-established control limits.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples.

Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Aluminum and sodium were not detected in field blank BLQW0019E01 (186235) or equipment rinsate ESBS0003E01.
- Field Duplicates: There were no field duplicate samples identified for this SDG.

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102001

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0041S01

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 93.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15100	mg/kg		7.21	21.2	20	1	P	JWJ	05/18/07 00:46	051707A-1	634656
7440-23-5	Sodium	82.5	mg/kg		4.77	15.9	50	1	P	JWJ	05/18/07 00:46	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.505	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102002

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0040S01

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	18800	mg/kg		7.25	21.3	20	1	P	JWJ	05/18/07 01:34	051707A-1	634656
7440-23-5	Sodium	74.6	mg/kg		4.8	16	50	1	P	JWJ	05/18/07 01:34	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.521	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102003

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0041S02

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	23700	mg/kg		7.56	22.2	20	1	P	JWJ	05/18/07 01:41	051707A-1	634656
7440-23-5	Sodium	145	mg/kg		5	16.7	50	1	P	JWJ	05/18/07 01:41	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.507	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102004

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0040S02

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13400	mg/kg		7.84	23.1	20	1	P	JWJ	05/18/07 01:48	051707A-1	634656
7440-23-5	Sodium	202	mg/kg		5.19	17.3	50	1	P	JWJ	05/18/07 01:48	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.508	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102005

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0039S01

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 91.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15900	mg/kg		7.35	21.6	20	1	P	JWJ	05/18/07 01:55	051707A-1	634656
7440-23-5	Sodium	80.6	mg/kg		4.86	16.2	50	1	P	JWJ	05/18/07 01:55	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.508	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102006

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0039S02

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 95.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11500	mg/kg		6.98	20.5	20	1	P	JWJ	05/18/07 02:02	051707A-1	634656
7440-23-5	Sodium	72.8	mg/kg		4.62	15.4	50	1	P	JWJ	05/18/07 02:02	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.508	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102007

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0043S01

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 95.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13500	mg/kg		6.93	20.4	20	1	P	JWJ	05/18/07 02:09	051707A-1	634656
7440-23-5	Sodium	83.7	mg/kg		4.59	15.3	50	1	P	JWJ	05/18/07 02:09	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.514	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102008

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0043S02

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 92.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15800	mg/kg		7.37	21.7	20	1	P	JWJ	05/18/07 02:17	051707A-1	634656
7440-23-5	Sodium	86.3	mg/kg		4.88	16.3	50	1	P	JWJ	05/18/07 02:17	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.501	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102009

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0038S01

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 95

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16400	mg/kg		7.11	20.9	20	1	P	JWJ	05/18/07 02:24	051707A-1	634656
7440-23-5	Sodium	64.5	mg/kg		4.71	15.7	50	1	P	JWJ	05/18/07 02:24	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.503	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102S

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186102010

BASIS: Dry Weight

DATE COLLECTED 15-MAY-07

CLIENT ID: ESBS0038S02

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: SOIL

%SOLIDS: 92

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13700	mg/kg		7.19	21.1	20	1	P	JWJ	05/18/07 02:31	051707A-1	634656
7440-23-5	Sodium	76.2	mg/kg		4.76	15.9	50	1	P	JWJ	05/18/07 02:31	051707A-1	634656

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634656	634655	SW846 3050B	0.514	g	50	mL	05/16/07	FGA

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186102W

CONTRACT: SSFL00507

METHOD TYPE: SW846

SAMPLE ID: 186105001

BASIS: As Received

DATE COLLECTED 15-MAY-07

CLIENT ID: ESQW0003E01

LEVEL: Low

DATE RECEIVED 16-MAY-07

MATRIX: WATER

%SOLIDS:

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum U	0.068	mg/L	U	0.068	.2	0.05	1	P	JWJ	05/18/07 17:21	051807-1	634658
7440-23-5	Sodium UJ/B	0.075	mg/L	J	0.045	.15	0.5	1	P	JWJ	05/18/07 17:21	051807-1	634658

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634658	634657	SW846 3005A	50	mL	50	mL	05/17/07	LXH2

LEVEL V



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: 186012

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.001
 Sample Delivery Group: 186012
 Project Manager: Dixie Hambrick
 Matrix: soil
 QC Level: V
 No. of Samples: 2
 No. of Reanalyses/Dilutions: 0
 Laboratory: GEL

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample Name	Matrix	Collection	Method
ESBS0042S01	186012001	N/A	Soil	5/14/2007 12:59:00 PM	6010B
ESBS0042S02	186012002	N/A	Soil	5/14/2007 1:32:00 PM	6010B

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Sample custody seals were intact. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHODS 6010B, 6020, 7470A/7471A—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: June 2, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Method 6010B* and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, six months for ICP metals, was met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Method blanks and CCBs had no detects.
- Interference Check Samples: Review is not applicable at a Level V validation.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on ESBS0042S01. the RPDs were within the laboratory-established control limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on ESBS0042S01. Recoveries and RPDs were within laboratory-established QC limits.
- Serial Dilution: Serial dilution analyses were performed on ESBS0042S01. The %Ds were within the laboratory-established control limits.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Aluminum and sodium were not detected in field blank BLQW0019E01 (186235) or equipment rinsate ESBS0003E01.
- Field Duplicates: There were no field duplicate samples identified for this SDG.

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186012

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 186012001 BASIS: Dry Weight DATE COLLECTED 14-MAY-07
 CLIENT ID: ESBS0042S01 LEVEL: Low DATE RECEIVED 15-MAY-07
 MATRIX: SOIL %SOLIDS: 90.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	17100	mg/kg		7.48	22	20	1	P	LS	05/15/07 14:14	051507-1	634236
7440-23-5	Sodium	61	mg/kg		4.95	16.5	50	1	P	LS	05/15/07 14:14	051507-1	634236

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634236	634235	SW846 3050B	0.5	g	50	mL	05/15/07	SXJ1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 186012

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 186012002 BASIS: Dry Weight DATE COLLECTED 14-MAY-07
 CLIENT ID: ESBS0042S02 LEVEL: Low DATE RECEIVED 15-MAY-07
 MATRIX: SOIL %SOLIDS: 90.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16900	mg/kg		7.39	21.7	20	1	P	LS	05/15/07 14:46	051507-1	634236
7440-23-5	Sodium	85.7	mg/kg		4.89	16.3	50	1	P	LS	05/15/07 14:46	051507-1	634236

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
634236	634235	SW846 3050B	0.508	g	50	mL	05/15/07	SXJ1

LEVEL ✓



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: 183796

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08
 Sample Delivery Group: 183796
 Project Manager: Dixie Hambrick
 Matrix: soil/water
 QC Level: V
 No. of Samples: 12
 No. of Reanalyses/Dilutions: 0
 Laboratory: GEL

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample name	Matrix Type	Collection Date	Method
ESBS0031S01	183796001	N/A	soil	4/3/07	6020, 9045C
ESBS0035S01	183796002	N/A	soil	4/3/07	6020, 9045C
ESBS0024S01	183796003	N/A	soil	4/3/07	6010B, 9045C
ESBS0032D01	183796005	N/A	soil	4/3/07	6020, 9045C
ESBS0032S01	183796006	N/A	soil	4/3/07	6020, 9045C
ESBS0033S01	183796009	N/A	soil	4/3/07	6020, 9045C
ESBS0023S01	183796010	N/A	soil	4/3/07	6010B, 9045C
ESBS0022S01	183796011	N/A	soil	4/3/07	6010B, 9045C
ESBS0034S01	183796013	N/A	soil	4/3/07	6020, 9045C
ESBS0036S01	183796014	N/A	soil	4/3/07	6020, 9045C
ESQW0002F01	183799001	N/A	water	4/3/07	6010B, 6020
ESBS0031AS01	183799002	N/A	soil	4/3/07	314.0

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory above the temperature limits of 4°C ±2°C, at 9°C; however, due to the nonvolatile nature of the analytes, no qualifications were required. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Custody seals were present and intact on the sample coolers. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHODS 6010B and 6020—Metals

Reviewed By: P.Meeks

Date Reviewed: April 25, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Methods 6010B, and 6020*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: Analytical holding times, six months for ICP and ICP-MS metals, were met.
- Tuning: Review is not applicable at a Level V validation.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Method blanks and CCBs had no applicable detects.
- Interference Check Samples: Review is not applicable at a Level V validation.
- Blank Spikes and Laboratory Control Samples: Recoveries were within method-established QC limits.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on ESBS0031S01 and ESBS0024S01. All RPDs were within the method-established control limit of $\leq 20\%$.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on ESBS0031S01 and ESBS0024S01. Antimony was recovered below the control limit in both the MS and the MSD; therefore, all antimony results were qualified as estimated, "UJ," for nondetects and, "J," for detects. Native concentrations of arsenic and aluminum were $\geq 4\times$ the spike concentration; therefore, these results were not assessed. All remaining recoveries and all RPDs were within method-established QC limits.
- Serial Dilution: Serial dilution analyses were performed on ESBS0031S01 and ESBS0024S01. All %Ds were within the method-established control limit of $\leq 10\%$.
- Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Review is not applicable at a Level V validation. Reported nondetects are valid to the MDL.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Sodium was detected in field blank EWQW0002F01, but not at a concentration that required qualification of the site soil samples. The samples in this SDG had no identified equipment rinsate sample.
 - Field Duplicates: ESBS0032S01 and ESBS0032D01 were identified as field duplicate samples. All detects were in common and all RPDs were $\leq 100\%$.

B. EPA METHOD 314.0—Perchlorate

Reviewed By: P. Meeks

Date Reviewed: April 25, 2007

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Metals (DVP-20, Rev. 0)*, *EPA Method 314.0*, and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, 28 days, was met.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Method blanks and CCBs had no detects.
- Blank Spikes and Laboratory Control Samples: The recovery was within the method-established QC limits of 85-115%.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample in this SDG.
- Sample Result Verification: The sample result reported on the Form I was verified against the raw data. No transcription errors or calculation errors were noted. Reported nondetects are valid to the reporting limit.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks and Equipment Rinsates: Perchlorate was not detected in field blank FSQW0003F01 (183627). This sample in this SDG had no identified equipment rinsate sample.
- Field Duplicates: There were no field duplicate samples identified for this SDG.

C. USEPA METHOD 9045C—General Minerals

Reviewed By: P. Meeks

Date Reviewed: April 25, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 9045C* and the *National Functional Guidelines for Inorganic Data Review (2/94)*.

- Holding Times: The analytical holding time, 24 hours from preparation for pH, was met.
- Calibration: Review is not applicable at a Level V validation.
- Blanks: Not applicable to this analysis.
- Blank Spikes and Laboratory Control Samples: Not applicable to this analysis.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on ESBS0031S01 and ESBS0036S01. Both RPDs were within the laboratory-established control limit of $\leq 5\%$.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to this analysis.
- Sample Result Verification: Review is not applicable at a Level V validation.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: Not applicable to this analysis.
 - Field Duplicates: ESBS0032S01 and ESBS0032D01 were identified as field duplicate samples. The RPD was $\leq 100\%$.

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S CONTRACT: SSFL00207 METHOD TYPE: SW846

SAMPLE ID: 183796001 BASIS: Dry Weight DATE COLLECTED 03-APR-07
 CLIENT ID: ESBS0031S01 LEVEL: Low DATE RECEIVED 06-APR-07
 MATRIX: SOIL %SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-36-0	Antimony <i>U/S/Q</i>	0.116	mg/kg	U	0.116	.465	1	2	MS	BAJ	04/12/07 02:10	070411-4	623651
7440-38-2	Arsenic	6.8	mg/kg		0.349	1.16	1	2	MS	BAJ	04/11/07 20:06	070411-2	623651
7439-92-1	Lead	14.4	mg/kg		0.116	.465	0.5	2	MS	BAJ	04/11/07 20:06	070411-2	623651

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623651	623648	SW846 3050B	0.504	g	50	mL	04/10/07	KXS1

LEVEL V^r

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183796002

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0035S01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-36-0	Antimony <i>UJ/Q</i>	0.115	mg/kg	U	0.115	.46	1	2	MS	BAJ	04/12/07 02:13	070411-4	623651
7440-38-2	Arsenic	5.7	mg/kg		0.345	1.15	1	2	MS	BAJ	04/11/07 20:11	070411-2	623651
7439-92-1	Lead	9.1	mg/kg		0.115	.46	0.5	2	MS	BAJ	04/11/07 20:11	070411-2	623651

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623651	623648	SW846 3050B	0.503	g	50	mL	04/10/07	KXS1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183796003

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0024S01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 91.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	24900	mg/kg		7.1	20.9	20	1	P	HSC	04/11/07 09:27	041107-1	623664
7440-23-5	Sodium	117	mg/kg		4.7	15.7	50	1	P	HSC	04/11/07 09:27	041107-1	623664

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623664	623663	SW846 3050B	0.525	g	50	mL	04/10/07	KXS1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183796005

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0032D01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-36-0	Antimony <i>UJ/Q</i>	0.110	mg/kg	U	0.11	.441	1	2	MS	BAJ	04/12/07 02:15	070411-4	623651
7440-38-2	Arsenic	3.9	mg/kg		0.331	1.1	1	2	MS	BAJ	04/11/07 20:16	070411-2	623651
7439-92-1	Lead	7.9	mg/kg		0.11	.441	0.5	2	MS	BAJ	04/11/07 20:16	070411-2	623651

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623651	623648	SW846 3050B	0.52	g	50	mL	04/10/07	KXS1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183796006

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0032S01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-36-0	Antimony <i>UJ/Q</i>	0.109	mg/kg	U	0.109	.436	1	2	MS	BAJ	04/12/07 02:22	070411-4	623651
7440-38-2	Arsenic	5.1	mg/kg		0.327	1.09	1	2	MS	BAJ	04/11/07 20:32	070411-2	623651
7439-92-1	Lead	11.6	mg/kg		0.109	.436	0.5	2	MS	BAJ	04/11/07 20:32	070411-2	623651

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623651	623648	SW846 3050B	0.524	g	50	mL	04/10/07	KXS1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183796009

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0033S01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-36-0	Antimony <i>UJ/Q</i>	0.109	mg/kg	U	0.109	.436	1	2	MS	BAJ	04/12/07 02:24	070411-4	623651
7440-38-2	Arsenic	6.2	mg/kg		0.327	1.09	1	2	MS	BAJ	04/11/07 20:37	070411-2	623651
7439-92-1	Lead	12.8	mg/kg		0.109	.436	0.5	2	MS	BAJ	04/11/07 20:37	070411-2	623651

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623651	623648	SW846 3050B	0.522	g	50	mL	04/10/07	KXS1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183796010

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0023S01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 92.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	25200	mg/kg		7.24	21.3	20	1	P	HSC	04/11/07 09:15	041107-1	623664
7440-23-5	Sodium	118	mg/kg		4.79	16	50	1	P	HSC	04/11/07 09:15	041107-1	623664

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623664	623663	SW846 3050B	0.509	g	50	mL	04/10/07	KXS1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183796011

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0022S01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	30100	mg/kg		7.77	22.9	20	1	P	HSC	04/11/07 09:21	041107-1	623664
7440-23-5	Sodium	116	mg/kg		5.14	17.1	50	1	P	HSC	04/11/07 09:21	041107-1	623664

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623664	623663	SW846 3050B	0.5	g	50	mL	04/10/07	KXS1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183796013

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0034S01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-36-0	Antimony <i>UJ/Q</i>	0.113	mg/kg	U	0.113	.45	1	2	MS	BAJ	04/12/07 02:27	070411-4	623651
7440-38-2	Arsenic	5.4	mg/kg		0.338	1.13	1	2	MS	BAJ	04/11/07 20:42	070411-2	623651
7439-92-1	Lead	11	mg/kg		0.113	.45	0.5	2	MS	BAJ	04/11/07 20:42	070411-2	623651

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623651	623648	SW846 3050B	0.521	g	50	mL	04/10/07	KXS1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796S

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183796014

BASIS: Dry Weight

DATE COLLECTED 03-APR-07

CLIENT ID: ESBS0036S01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: SOIL

%SOLIDS: 91.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440-36-0	Antimony <i>J/Q</i>	0.120	mg/kg	J	0.105	.422	1	2	MS	BAJ	04/12/07 02:29	070411-4	623651
7440-38-2	Arsenic	2.4	mg/kg		0.316	1.05	1	2	MS	BAJ	04/11/07 20:47	070411-2	623651
7439-92-1	Lead	18.5	mg/kg		0.105	.422	0.5	2	MS	BAJ	04/11/07 20:47	070411-2	623651

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623651	623648	SW846 3050B	0.519	g	50	mL	04/10/07	KXS1

LEVEL V

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 183796W

CONTRACT: SSFL00207

METHOD TYPE: SW846

SAMPLE ID: 183799001

BASIS: As Received

DATE COLLECTED 03-APR-07

CLIENT ID: ESQW0002F01

LEVEL: Low

DATE RECEIVED 06-APR-07

MATRIX: WATER

%SOLIDS:

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum U	0.068	mg/L	U	0.068	.2	0.05	1	P	HSC	04/12/07 12:58	041207-1	623674
7440-36-0	Antimony ↓	0.50	ug/L	U	0.5	2	2	1	MS	RMJ	04/10/07 09:25	070409-2	623636
7440-38-2	Arsenic ↓	1.5	ug/L	U	1.5	5	1	1	MS	RMJ	04/10/07 09:25	070409-2	623636
7439-92-1	Lead ↓	0.50	ug/L	U	0.5	2	1	1	MS	RMJ	04/10/07 09:25	070409-2	623636
7440-23-5	Sodium	0.070	mg/L	J	0.045	.15	0.5	1	P	HSC	04/12/07 12:58	041207-1	623674

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
623636	623632	SW846 3005A	50	mL	50	mL	04/09/07	KXS1
623674	623673	SW846 3005A	50	mL	50	mL	04/09/07	KXS1

LEVEL V

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : MECX
Address : 12269 East Vassar Drive
Aurora, Colorado 80014

Report Date: April 13, 2007

Contact: Ms. Elizabeth Wessling
Project: Task Order 002 - SSFL Group 8 Sampling

Client Sample ID: FSBS0031AS01
Sample ID: 183799002
Matrix: WATER
Collect Date: 03-APR-07 09:08
Receive Date: 06-APR-07
Collector: Client

Project: SSFL00207
Client ID: SSFL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Ion Chromatography Federal										
<i>EPA 314.0 Perchlorate by IC (W/Leaching Procedure)</i>										
Perchlorate	U	4.00	1.38	4.00	ug/L	1	MAR104/11/07	1517	623347	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 314.0	

LEVEL V
607

Certificate of Analysis

Company : MECX
 Address : 12269 East Vassar Drive
 Aurora, Colorado 80014

Report Date: April 16, 2007

Contact: Ms. Elizabeth Wessling
 Project: Task Order 002 - SSFL Group 8 Sampling

Client Sample ID: ESBS0031S01
 Sample ID: 183796001
 Matrix: SOIL
 Collect Date: 03-APR-07 09:30
 Receive Date: 06-APR-07
 Collector: Client
 Moisture: 14.7%

Project: SSFL00207
 Client ID: SSFL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
<i>SW9045C pH Federal</i>										
pH at Temp 20.2C	H	7.96	0.010	0.100	SU	1	LXW104/09/07	1833	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

LEVEL V

Certificate of Analysis

Company : MECX
 Address : 12269 East Vassar Drive
 Aurora, Colorado 80014

Report Date: April 16, 2007

Contact: Ms. Elizabeth Wessling
 Project: **Task Order 002 - SSFL Group 8 Sampling**

Client Sample ID: ESBS0035S01 Project: SSFL00207
 Sample ID: 183796002 Client ID: SSFL001
 Matrix: SOIL
 Collect Date: 03-APR-07 10:30
 Receive Date: 06-APR-07
 Collector: Client
 Moisture: 13.6%

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
SW9045C pH Federal pH at Temp 20.8C	H	8.03	0.010	0.100	SU	1	LXW104/09/07	1836	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

LEVEL V

Certificate of Analysis

Company : MECX
 Address : 12269 East Vassar Drive
 Aurora, Colorado 80014

Report Date: April 16, 2007

Contact: Ms. Elizabeth Wessling
 Project: **Task Order 002 - SSFL Group 8 Sampling**

Client Sample ID: ESBS0024S01
 Sample ID: 183796003
 Matrix: SOIL
 Collect Date: 03-APR-07 11:06
 Receive Date: 06-APR-07
 Collector: Client
 Moisture: 8.8%

Project: SSFL00207
 Client ID: SSFL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
<i>SW9045C pH Federal</i>										
pH at Temp 20.0C	H	7.85	0.010	0.100	SU	1	LXW104/09/07	1838	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

Certificate of Analysis

Company : MECX
 Address : 12269 East Vassar Drive
 Aurora, Colorado 80014

Report Date: April 16, 2007

Contact: Ms. Elizabeth Wessling
 Project: **Task Order 002 - SSFL Group 8 Sampling**

Client Sample ID: ESBS0032D01
 Sample ID: 183796005
 Matrix: SOIL
 Collect Date: 03-APR-07 11:30
 Receive Date: 06-APR-07
 Collector: Client
 Moisture: 12.9%

Project: SSFL00207
 Client ID: SSFL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
<i>SW9045C pH Federal</i>										
pH at Temp 19.9C	H	8.04	0.010	0.100	SU	1	LXW104/09/07	1839	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

Certificate of Analysis

Company : MECX
 Address : 12269 East Vassar Drive
 Aurora, Colorado 80014

Report Date: April 16, 2007

Contact: Ms. Elizabeth Wessling
 Project: **Task Order 002 - SSFL Group 8 Sampling**

Client Sample ID: ESBS0032S01
 Sample ID: 183796006
 Matrix: SOIL
 Collect Date: 03-APR-07 11:30
 Receive Date: 06-APR-07
 Collector: Client
 Moisture: 12.5%

Project: SSFL00207
 Client ID: SSFL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
<i>SW9045C pH Federal</i>										
pH at Temp 20.0C	H	7.84	0.010	0.100	SU	1	LXW104/09/07	1844	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

Certificate of Analysis

Company : MECX
 Address : 12269 East Vassar Drive
 Aurora, Colorado 80014

Report Date: April 16, 2007

Contact: Ms. Elizabeth Wessling
 Project: **Task Order 002 - SSFL Group 8 Sampling**

Client Sample ID: ESBS0033S01 Project: SSFL00207
 Sample ID: 183796009 Client ID: SSFL001
 Matrix: SOIL
 Collect Date: 03-APR-07 12:15
 Receive Date: 06-APR-07
 Collector: Client
 Moisture: 12%

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis Federal											
<i>SW9045C pH Federal</i>											
pH at Temp 19.5C	H	8.10	0.010	0.100	SU	1	LXW	104/09/07	1847	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : MECX
Address : 12269 East Vassar Drive
Aurora, Colorado 80014

Contact: Ms. Elizabeth Wessling
Project: **Task Order 002 - SSFL Group 8 Sampling**

Report Date: April 16, 2007

Client Sample ID: ESBS0023S01
Sample ID: 183796010
Matrix: SOIL
Collect Date: 03-APR-07 12:17
Receive Date: 06-APR-07
Collector: Client
Moisture: 7.7%

Project: SSFL00207
Client ID: SSFL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
<i>SW9045C pH Federal</i>										
pH at Temp 19.6C	H	7.66	0.010	0.100	SU	1	LXW104/09/07	1848	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

Level 4

Certificate of Analysis

Company : MECX
 Address : 12269 East Vassar Drive
 Aurora, Colorado 80014

Report Date: April 16, 2007

Contact: Ms. Elizabeth Wessling
 Project: **Task Order 002 - SSFL Group 8 Sampling**

Client Sample ID:	ESBS0022S01	Project:	SSFL00207
Sample ID:	183796011	Client ID:	SSFL001
Matrix:	SOIL		
Collect Date:	03-APR-07 12:28		
Receive Date:	06-APR-07		
Collector:	Client		
Moisture:	12.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
<i>SW9045C pH Federal</i>										
pH at Temp 19.3C	H	7.48	0.010	0.100	SU	1	LXW104/09/07	1850	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

Certificate of Analysis

Company : MECX
 Address : 12269 East Vassar Drive
 Aurora, Colorado 80014

Report Date: April 16, 2007

Contact: Ms. Elizabeth Wessling
 Project: **Task Order 002 - SSFL Group 8 Sampling**

Client Sample ID: ESBS0034S01
 Sample ID: 183796013
 Matrix: SOIL
 Collect Date: 03-APR-07 14:00
 Receive Date: 06-APR-07
 Collector: Client
 Moisture: 14.7%

Project: SSFL00207
 Client ID: SSFL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
<i>SW9045C pH Federal</i>										
pH at Temp 18.9C	H	7.88	0.010	0.100	SU	1	LXW104/09/07	1852	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

LEVEL V

Certificate of Analysis

Company : MECX
 Address : 12269 East Vassar Drive
 Aurora, Colorado 80014

Report Date: April 16, 2007

Contact: Ms. Elizabeth Wessling
 Project: **Task Order 002 - SSFL Group 8 Sampling**

Client Sample ID: ESBS0036S01
 Sample ID: 183796014
 Matrix: SOIL
 Collect Date: 03-APR-07 14:45
 Receive Date: 06-APR-07
 Collector: Client
 Moisture: 8.59%

Project: SSFL00207
 Client ID: SSFL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis Federal										
<i>SW9045C pH Federal</i>										
pH at Temp 19.7C	H	8.14	0.010	0.100	SU	1	LXW104/09/07	1855	623572	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C	

SOIL VAPOR

SOIL VAPOR CASE NARRATIVES AND COCS



**Centrum
Analytical
Laboratories, Inc.**

CERTIFIED HAZARDOUS WASTE TESTING MOBILE & IN HOUSE LABORATORIES

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

LABORATORY REPORT FORM (COVER PAGE 1)

Laboratory Name: Centrum Analytical Laboratories, Inc.

Address: 1401 Research Park Drive, Suite 100, Riverside, CA 92507

Telephone/Fax: (951) 779-0310/(951) 779-0344

ELAP Certification No./
Expiration Date: 2373 / June 31, 2007

Authorized Signature
Name, Title: (print) Mark Horan, Mobile Laboratories Supervisor

Signature, Date: _____

Client Name: Montgomery Watson Harza

Project Name/No: Boeing SSFL / 1891263.011181 / 1891264.0111811

Date(s) Sampled: (from - to) 03/06/07

Date(s) Received: (from - to) 03/06/07

Date(s) Reported: (from - to) 03/06/07

Chain of Custody received: Yes X No _____

Comments _____

(RWQCB Lab Form: Ver 6/00)

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

LABORATORY REPORT FORM (COVER PAGE 2)

<u>Organic Analyses</u>	# of Samples	# of Samples Subcontracted
VOC's by GCMS	9	0

Sample Condition: Intact

<u>Inorganic Analyses</u>	# of Samples	# of Samples Subcontracted
---------------------------	--------------	----------------------------

Sample Condition:

<u>Microbiological Analyses</u>	# of Samples	# of Samples Subcontracted
---------------------------------	--------------	----------------------------

Sample Condition:

<u>Other Types of Analyses</u>	# of Samples	# of Samples Subcontracted
--------------------------------	--------------	----------------------------

Sample Condition:

Project No: Boeing SSFL / 1891263.011181 / 1891264.0111811

(RWQCB labForm 10A; Ver6/00)

QA/QC REPORT (Continued)

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 03/06/07

ANALYTICAL METHOD: GCMS

BATCH #: 030607M4V1555

LAB SAMPLE I.D.: Laboratory Control Sample

REPORTING UNITS: µg/L

ANALYTE	SAMPLE RESULT	SPK CONC	MS	% MS	SPIKE CONC (DUP)	MSD	% MSD	RPD	MS/MSD LIMIT	RPD Limit
1,1-Dichloroethene	0.0	50	48.26	97%	50	50.63	101%	4.8%	70-130	25
Benzene	0.0	50	48.19	96%	50	51.03	102%	5.7%	70-130	25
Trichloroethene	0.0	50	46.99	94%	50	50.49	101%	7.2%	70-130	25
Toluene	0.0	50	48.75	98%	50	51.95	104%	6.4%	70-130	25
Chlorobenzene	0.0	50	46.67	93%	50	49.07	98%	5.0%	70-130	25

III. Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 03/06/07

ANALYTICAL METHOD: GCMS

STANDARD SUPPLY SOURCE: Centrum Analytical Laboratories

DATE OF SOURCE: 02/06/07

INSTRUMENT I.D.: M4GCMS

LOT NUMBER: VC-70-01

LAB LCS I.D.: Laboratory Control Sample

REPORTING UNITS: µg/L

ANALYTE	SPIKE CONC	RESULT	% RECOVERY	ACP % REC LIMIT
1,1-Dichloroethene	50	48.26	97%	70-130
Benzene	50	48.19	96%	70-130
Trichloroethene	50	46.99	94%	70-130
Toluene	50	48.75	98%	70-130
Chlorobenzene	50	46.67	93%	70-130



1401 Research Park Drive, Suite 100
Riverside, CA 92507
Voice: 909.779.0310 • 800.798.9336
Fax: 909.779.0344

Chain of Custody Record

3299 Hill Street, Suite 305
Signal Hill, CA 90755
Voice: 562.498.7005
Fax: 562.498.8617

Centrum Job # **M4-959a**

Page 1 of 1

Project No: 1891263.01181 1881565.048101 / 1891264.01181		Project Name: Boeing SSFL Group 8		Project Manager: Travis Peterson		Client Name: (Report and Billing) Montgomery Watson Harza		Address: (Report and Billing) 1340 Treat Blvd, Suite 300 Walnut Creek, CA 94597		Phone: 925-975-3449		Fax: 				
Project No: 1891263.01181 1881565.048101 / 1891264.01181		Project Name: Boeing SSFL Group 8		Project Manager: Travis Peterson		Client Name: (Report and Billing) Montgomery Watson Harza		Address: (Report and Billing) 1340 Treat Blvd, Suite 300 Walnut Creek, CA 94597		Phone: 925-975-3449		Fax: 				
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Depth (ft)	EPA ID	BULB ID	Time Sampled start stop	Flow (ml/min)	Date sampled	Sample matrix	Containers: # and type	Turn-Around Time <input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
1	ESSV0004S01	5		M4-5	0730 0741	180	3/6/07	SV	125cc Glass Bulb	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
2	ESSV0004S02	10		M4-6	0730 0745	170	3/6/07	"	"	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
3	ESSV0009S01	5		M4-8	0742 0753	180	"	"	"	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
4	ESSV0009S02	10		M4-9	0746 0759	180	"	"	"	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
5	ESQV0001F01	-		M4-4	0805 0825	160	"	"	"	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
6	ESSV0006S01	4.5		M4-1	0810 0821	200	"	"	"	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
7	ESSV0007S01	3.5		M4-12	0922 0933	150	"	"	"	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
8	ESSV0007D01	"		M4-3	" "	"	"	"	"	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
9	ESSV0007S02	7.5		M4-13	0924 0936	150	"	"	"	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT						
1) Relinquished by: (Sampler's Signature) <i>Chris Herrera</i> Date: 3/6/07 Time: 1400										To be completed by Laboratory personnel: Samples chilled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No All sample containers intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input checked="" type="checkbox"/> Hand carried			Sample Disposal <input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal			
2) Received by: <i>John Tany</i> Date: 3/6/07 Time: 1400										Turn-Around Time <input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT			Remarks/Special Instructions RESAMPLED			
3) Relinquished by: Date: Time:										Requested due date:			*Requires PRIOR approval, additional charges apply			
4) Received by: Date: Time:										Analyzes Requested			GMS: 8260B mod. LARWCB 23 soil gas <input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X		Sample Locator No.	
5) Relinquished by: Date: Time:										The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.			Laboratory Notes:			
6) Received for Laboratory: <i>John Tany</i> Date: 3/6/07 Time: 1400										Laboratory Notes:			Sample Locator No.			



**Centrum
Analytical
Laboratories, Inc.**

CERTIFIED HAZARDOUS WASTE TESTING MOBILE & IN HOUSE LABORATORIES

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

LABORATORY REPORT FORM (COVER PAGE 1)

Laboratory Name: Centrum Analytical Laboratories, Inc.

Address: 1401 Research Park Drive, Suite 100, Riverside, CA 92507

Telephone/Fax: (951) 779-0310/(951) 779-0344

ELAP Certification No./
Expiration Date: 2373 / June 31, 2007

Authorized Signature
Name, Title: (print) Mark Horan, Mobile Laboratories Supervisor

Signature, Date: _____

Client Name: Montgomery Watson Harza

Project Name/No: Boeing SSFL / 1891263.011181 / 1891264.0111811

Date(s) Sampled: (from - to) 03/05/07

Date(s) Received: (from - to) 03/05/07

Date(s) Reported: (from - to) 03/05/07

Chain of Custody received: Yes X No _____

Comments _____

(RWQCB Lab Form: Ver 6/00)

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

LABORATORY REPORT FORM (COVER PAGE 2)

<u>Organic Analyses</u>	# of Samples	# of Samples Subcontracted
VOC's by GCMS	4	0

Sample Condition: Intact

<u>Inorganic Analyses</u>	# of Samples	# of Samples Subcontracted
---------------------------	--------------	----------------------------

Sample Condition:

<u>Microbiological Analyses</u>	# of Samples	# of Samples Subcontracted
---------------------------------	--------------	----------------------------

Sample Condition:

<u>Other Types of Analyses</u>	# of Samples	# of Samples Subcontracted
--------------------------------	--------------	----------------------------

Sample Condition:

Project No: Boeing SSFL / 1891263.011181 / 1891264.0111811

(RWQCB labForm 10A; Ver6/00)

QA/QC REPORT (Continued)

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 03/05/07

ANALYTICAL METHOD: GCMS

BATCH #: 030507M4V1554

LAB SAMPLE I.D.: Laboratory Control Sample

REPORTING UNITS: µg/L

ANALYTE	SAMPLE RESULT	SPK CONC	MS	% MS	SPIKE CONC (DUP)	MSD	% MSD	RPD	MS/MSD LIMIT	RPD Limit
1,1-Dichloroethene	0.0	50	47.40	95%	50	42.37	85%	11.2%	70-130	25
Benzene	0.0	50	48.42	97%	50	47.57	95%	1.8%	70-130	25
Trichloroethene	0.0	50	47.69	95%	50	46.90	94%	1.7%	70-130	25
Toluene	0.0	50	48.85	98%	50	47.95	96%	1.9%	70-130	25
Chlorobenzene	0.0	50	46.43	93%	50	46.48	93%	0.1%	70-130	25

III. Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 03/05/07

ANALYTICAL METHOD: GCMS

STANDARD SUPPLY SOURCE: Centrum Analytical Laboratories

DATE OF SOURCE: 02/06/07

INSTRUMENT I.D.: M4GCMS

LOT NUMBER: VC-70-01

LAB LCS I.D.: Laboratory Control Sample

REPORTING UNITS: µg/L

ANALYTE	SPIKE CONC	RESULT	% RECOVERY	ACP % REC LIMIT
1,1-Dichloroethene	50	47.40	95%	70-130
Benzene	50	48.42	97%	70-130
Trichloroethene	50	47.69	95%	70-130
Toluene	50	48.85	98%	70-130
Chlorobenzene	50	46.43	93%	70-130

SOIL VAPOR VALIDATION REPORTS



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: M4-959a

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
 Contract Task Order: 1261.500D.08.001
 Sample Delivery Group: M4-959a
 Project Manager: Dixie Hambrick
 Matrix: soil vapor
 QC Level: V
 No. of Samples: 9
 No. of Reanalyses/Dilutions: 0
 Laboratory: Centrum

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample name	Matrix Type	Collection Date	Method
ESSV0004S01	M4-959a-01	na	soil vapor	3/6/07	8260B
ESSV0004S02	M4-959a-02	na	soil vapor	3/6/07	8260B
ESSV0009S01	M4-959a-03	na	soil vapor	3/6/07	8260B
ESSV0009S02	M4-959a-04	na	soil vapor	3/6/07	8260B
ESQV0001F01	M4-959a-05	na	soil vapor	3/6/07	8260B
ESSV0006S01	M4-959a-06	na	soil vapor	3/6/07	8260B
ESSV0007S01	M4-959a-07	na	soil vapor	3/6/07	8260B
ESSV0007D01	M4-959a-08	na	soil vapor	3/6/07	8260B
ESSV0007S02	M4-959a-09	na	soil vapor	3/6/07	8260B

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory intact. The COCs were appropriately signed and dated by field and laboratory personnel. As the samples were couriered directly from the field to the mobile laboratory, custody seals were not required.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present. Not applicable.	
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs) in Soil Vapor

Reviewed By: P. Meeks

Date Reviewed: April 2, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the MEC^X *Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0)*, *EPA Method 8260B, Interim Guidance for Active Soil Gas Investigations*, State of California Regional Water Quality Control Board - Los Angeles Region (LARWQCB, 1997), *Advisory – Active Soil Gas Investigations*, LARWQCB and Department of Toxic Substance Control (2003), and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Analytical holding times were met. The samples bulbs were analyzed within 4 hours of collection.
- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.
- Calibration: Calibration criteria were met. Initial calibration %RSDs were $\leq 20\%$ and $\leq 30\%$ for trichlorofluoromethane, dichlorodifluoromethane, trichlorotrifluoromethane, chloroethane, and vinyl chloride. The continuing calibration %Ds were $\leq 15\%$ and $\leq 25\%$ for trichlorofluoromethane, dichlorodifluoromethane, trichlorotrifluoromethane, chloroethane, and vinyl chloride.
- Blanks: The ambient air method blank had no target compound detects above the CRDL. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.
- Surrogate Recovery: All recoveries were within LARWQCB method-established control limits of 75-125%.
- Blank Spikes and Laboratory Control Samples: The mobile laboratory analyzed two LCS samples for this SDG. For the reporting limit level LCS, all recoveries were at least 50%. For the 50 ug/L LCS, the %Ds were within the control limits of $\leq 20\%$ and $\leq 30\%$ for trichlorofluoromethane, dichlorodifluoromethane, trichlorotrifluoromethane, chloroethane, and vinyl chloride.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks: One field blank, ESQV0001F01, was analyzed in this SDG. No target compounds were reported in the field blank.

- Field Duplicates: Samples ESSV0007S01 and ESSV0007D01 were identified as field duplicates. There were no reportable target compounds in either of the field duplicate samples.
- Compound Identification: Compound identification was verified based on retention times only. Per previous conversations with the analyst, compounds crossed out in the mass spectrometer raw data and annotated with, "ID," refer to compounds reported by the instrument but which lacked a spectral match.
- Compound Quantification and Reported Detection Limits: The leak detection compound, isopropanol, was reported in the original analysis of ESSV0004S02; therefore, this sample was recollected and only this analysis was reported. Compound quantification was verified from the raw data. Reported nondetects are valid to the reporting limit.



Project No: Boeing SSFL / 1891263.011181 / 1891264.0111811

(RWQCB labFrom 10A; Ver6/00)

ANALYTICAL RESULT FOR ORGANICS

METHOD: GCMS

REPORTING UNIT: µg/L of Air

DATE ANALYZED		03/06/07	03/06/07	03/06/07	03/06/07	03/06/07	
ANALYTICAL BATCH		030607M4V1555	030607M4V1555	030607M4V1555	030607M4V1555	030607M4V1555	
LAB SAMPLE I.D.		Amb. Blank	M4-959a-01	M4-959a-02	M4-959a-03	M4-959a-04	
CLIENT SAMPLE I.D.		NA	ESSV0004S01	ESSV0004S02	ESSV0009S01	ESSV0009S02	
DEPTH		NA	5'	10'	5'	10'	
EPA ID		NA	NA	NA	NA	NA	
DILUTION FACTOR		1	1	1	1	1	
COMPOUND	CRDL						
Benzene	1.0	ND *	ND U	ND U	ND U	ND U	
Carbon tetrachloride	1.0	ND	ND	ND	ND	ND	
Chloroethane	1.0	ND	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	ND	
Dichlorodifluoromethane	1.0	ND	ND	ND	ND	ND	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.0	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	ND	
Methylene chloride	50	ND	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	2.0	ND	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	ND	
Toluene	1.0	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	ND	
Trichloroethene	1.0	ND	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	ND	
Trichlorotrifluoroethane	5.0	ND	ND	ND	ND	ND	
Vinyl chloride	2.0	ND	ND	ND	ND	ND	
Xylenes, m-,p-	2.0	ND	ND	ND	ND	ND	
Xylene, o-	1.0	ND	ND	ND	ND	ND	
TRACER COMPOUND							
Isopropanol		10	ND	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC	
d-Methylene Chloride	50	70-130	114	102	93	122	117
d-Chloroform	50	70-130	116	102	94	120	117
d-Benzene	50	70-130	125	108	97	125	120
Dibromofluoromethane	50	70-130	96	98	99	99	97
Toluene-d8	50	70-130	97	100	99	97	98
Bromofluorobenzene	50	70-130	102	99	100	98	101

* Analysis not validated

LEVEL V

ANALYTICAL RESULT FOR ORGANICS

METHOD: GCMS

REPORTING UNIT: µg/L of Air

DATE ANALYZED		03/06/07	03/06/07	03/06/07	03/06/07	03/06/07
ANALYTICAL BATCH		030607M4V1555	030607M4V1555	030607M4V1555	030607M4V1555	030607M4V1555
LAB SAMPLE I.D.		M4-959a-05	M4-959a-06	M4-959a-07	M4-959a-08	M4-959a-09
CLIENT SAMPLE I.D.		ESQV0001F01	ESSV0006S01	ESSV0007S01	ESSV0007D01	ESSV0007S02
DEPTH		NA	4.5'	3.5'	3.5'	7.5'
EPA ID		NA	NA	NA	NA	NA
DILUTION FACTOR		1	1	1	1	1
COMPOUND	CRDL					
Benzene	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	1.0	ND	ND	ND	ND	ND
Chloroethane	1.0	ND	ND	ND	ND	ND
Chloroform	1.0	ND	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	ND
Ethylbenzene	1.0	ND	ND	ND	ND	ND
Methylene chloride	50	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	2.0	ND	ND	ND	ND	ND
Tetrachloroethene	1.0	ND	ND	ND	ND	ND
Toluene	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	ND
Trichloroethene	1.0	ND	ND	ND	ND	ND
Trichlorofluoromethane	1.0	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	5.0	ND	ND	ND	ND	ND
Vinyl chloride	2.0	ND	ND	ND	ND	ND
Xylenes, m-,p-	2.0	ND	ND	ND	ND	ND
Xylene, o-	1.0	ND	ND	ND	ND	ND
TRACER COMPOUND						
Isopropanol		10	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC
d-Methylene Chloride	50	70-130	114	121	106	111
d-Chloroform	50	70-130	112	120	107	110
d-Benzene	50	70-130	117	124	110	114
Dibromofluoromethane	50	70-130	99	99	98	99
Toluene-d8	50	70-130	98	99	98	98
Bromofluorobenzene	50	70-130	99	99	100	99

LEVEL V



DATA VALIDATION REPORT

Boeing SSFL RFI Group 8 Data Gap

SAMPLE DELIVERY GROUP: M4-958c

Prepared by

MEC^X, LLC
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL RFI Group 8 Data Gap
Contract Task Order: 1261.500D.08.001
Sample Delivery Group: M4-958c
Project Manager: Dixie Hambrick
Matrix: soil vapor
QC Level: V
No. of Samples: 4
No. of Reanalyses/Dilutions: 0
Laboratory: Centrum

Table 1. Sample Identification

Sample Name	Lab Sample Name	Sub-Lab Sample name	Matrix Type	Collection Date	Method
ESSV0003S01	M4-958c-01	na	soil vapor	3/5/07	8260B
ESSV0003S02	M4-958c-02	na	soil vapor	3/5/07	8260B
ESSV0005S01	M4-958c-03	na	soil vapor	3/5/07	8260B
ESSV0005S02	M4-958c-04	na	soil vapor	3/5/07	8260B

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratory intact. The COCs were appropriately signed and dated by field and laboratory personnel. As the samples were couriered directly from the field to the mobile laboratory, custody seals were not required.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present. Not applicable.	
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

A. EPA METHOD 8260B—Volatile Organic Compounds (VOCs) in Soil Vapor

Reviewed By: P. Meeks

Date Reviewed: April 2, 2007

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the MEC^X *Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0)*, *EPA Method 8260B, Interim Guidance for Active Soil Gas Investigations*, State of California Regional Water Quality Control Board - Los Angeles Region (LARWQCB, 1997), *Advisory – Active Soil Gas Investigations*, LARWQCB and Department of Toxic Substance Control (2003), and the *National Functional Guidelines for Organic Data Review (2/94)*.

- Holding Times: Analytical holding times were met. The samples bulbs were analyzed within 4 hours of collection.
- GC/MS Tuning: The BFB tunes met the method abundance criteria. Samples were analyzed within 12 hours of the BFB injection time.
- Calibration: Calibration criteria were met. Initial calibration %RSDs were $\leq 20\%$ and $\leq 30\%$ for trichlorofluoromethane, dichlorodifluoromethane, trichlorotrifluoromethane, chloroethane, and vinyl chloride. The chloroethane %D exceeded the control limit at 15.2%; therefore, nondetected chloroethane in the site samples was qualified as estimated, "UJ." The remaining continuing calibration %Ds were $\leq 15\%$ and $\leq 25\%$ for trichlorofluoromethane, dichlorodifluoromethane, trichlorotrifluoromethane, chloroethane, and vinyl chloride.
- Blanks: The ambient air method blank had no target compound detects above the CRDL. This blank is best associated with the site and date of collection but is also a measure of bulb contamination and was, therefore, associated with all samples in this SDG.
- Surrogate Recovery: All recoveries were within LARWQCB method-established control limits of 75-125%.
- Blank Spikes and Laboratory Control Samples: The mobile laboratory analyzed two LCS samples for this SDG. For the reporting limit level LCS, all recoveries were at least 50%. For the 50 ug/L LCS, the 1,1-dichloroethene %D exceeded the control limit at 15.2%; therefore, nondetected chloroethane in the site samples was qualified as estimated, "UJ." All remaining %Ds were within the control limits of $\leq 20\%$ and $\leq 30\%$ for trichlorofluoromethane, dichlorodifluoromethane, trichlorotrifluoromethane, chloroethane, and vinyl chloride.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- Field Blanks: There were no field blanks analyzed in this SDG.
- Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Compound identification was verified based on retention times only. Per previous conversations with the analyst, compounds crossed out in the mass spectrometer raw data and annotated with, "ID," refer to compounds reported by the instrument but which lacked a spectral match.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. Reported nondetects are valid to the reporting limit.

Project No: Boeing SSFL / 1891263.011181 / 1891264.011181

(RWQCB labFrom 10A; Ver6/00)

ANALYTICAL RESULT FOR ORGANICS

METHOD: GCMS

REPORTING UNIT: µg/L of Air

DATE ANALYZED	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07		
ANALYTICAL BATCH	030507M4V1554	030507M4V1554	030507M4V1554	030507M4V1554	030507M4V1554		
LAB SAMPLE I.D.	Amb. Blank	M4-958c-01	M4-958c-02	M4-958c-03	M4-958c-04		
CLIENT SAMPLE I.D.	NA	ESSV0003S01	ESSV0003S02	ESSV0005S01	ESSV0005S02		
DEPTH	NA	3.5'	7.5'	4'	8'		
EPA ID	NA	NA	NA	NA	NA		
DILUTION FACTOR	1	1	1	1	1		
COMPOUND	CRDL						
Benzene	1.0	ND *	ND U	ND U	ND U	ND U	
Carbon tetrachloride	1.0	ND	ND U	ND U	ND U	ND U	
Chloroethane	1.0	ND	ND U/C	ND U/C	ND U/C	ND U/C	
Chloroform	1.0	ND	ND U	ND U	ND U	ND U	
Dichlorodifluoromethane	1.0	ND	ND	ND	ND	ND	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND U	ND U	ND U	ND U	
1,1-Dichloroethene	1.0	ND	ND U/C	ND U/C	ND U/C	ND U/C	
cis-1,2-Dichloroethene	1.0	ND	ND U	ND U	ND U	ND U	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	ND	
Methylene chloride	50	ND	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	2.0	ND	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	ND	
Toluene	1.0	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	ND	
Trichloroethene	1.0	ND	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	ND	
Trichlorotrifluoroethane	5.0	ND	ND	ND	ND	ND	
Vinyl chloride	2.0	ND	ND	ND	ND	ND	
Xylenes, m-p-	2.0	ND	ND	ND	ND	ND	
Xylene, o-	1.0	ND	ND	ND	ND	ND	
TRACER COMPOUND							
Isopropanol		10	ND	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC	%RC
d-Methylene Chloride	50	70-130	107	102	101	108	104
d-Chloroform	50	70-130	108	102	104	110	105
d-Benzene	50	70-130	116	105	109	114	109
Dibromofluoromethane	50	70-130	98	99	97	98	97
Toluene-d8	50	70-130	99	99	97	98	98
Bromofluorobenzene	50	70-130	101	100	100	99	98

* Analysis not validated

LEVEL U



550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026
303.935.6505, Fax 303.935.6575

DATA ASSESSMENT FORM

Project Title: Rocketdyne SSFL RFI
Project Manager: D. Hambrick
Analysis/Method: Volatiles by 8260B
QC Level: V¹
SDGs: 10
Matrix: Soil Vapor
No. of Samples: 50
Date Reviewed: November 23, 2001
Reviewer: E. Wessling
Reference: *USEPA Contract Laboratory Program National Functional Guidelines For Organic Data Review, (Feb. 1994), and Interim Guidance For Active Soil Gas Investigation, State of California Regional Water Quality Control Board (LA Region).*
Samples Reviewed: RV711, RV712, RV713, RV714, RV715, RV716, RV717, RV718, RV719, RV720, RV721, RV722, RV723, RV724, RV725, RV726, RV727, RV728, RV729, RV730, RV731, RV732, RV733, RV734, RV735, RV736, RV737, RV738, RV739, RV740, RV741, RV742, RV743, RV744, RV745, RV746, RV747, RV748, RV749, RV750, RV751, RV752, RV753, RV754, RV755, RV756, RV757, RV758, RV759

Data Validation Findings

	Findings	Qualifications
1. <u>Sample Management</u>	<p>There were instances on the COC of uninitialed corrections to the information. field logs were reviewed to verify the accuracy of the undocumented corrections. Field personnel reviewing the accuracy of the field logs initialed and dated the COCs.</p> <p>The EPA IDs for the samples originally reported as RV574-RV579, were changed after analysis to RV754-RV759. No original change request form was included in the SDG; however, the ID changes were confirmed by J. Toledo of AMEC-San Deigo. Additionally, per a memo from MWH personnel dated 1/07/04, the client IDs for samples RV732 and RV734 were changed.</p> <p>Holding times were met for all samples.</p>	No qualifications were required.

	Findings	Qualifications
<p>3. <u>Method Blanks</u></p>	<p>Forty-five method blanks were analyzed with this SDG; however, the laboratory only provided data for nine blanks. Methylene chloride was detected in almost all method blanks reported and in at least one method blank bracketing site samples.</p> <p>The methylene chloride detects in the blanks associated with samples RV754-RV759 were removed by the analyst. In each case, the undated and unintialed notation in the raw data was "ID." Previous telephone conversations with the analyst indicated that the notation "ID," refers to the lack of a spectral match.</p> <p>No additional target compounds were detected in the method blanks above the applicable reporting limit.</p>	<p>The reporting limits for methylene chloride were raised to 5.0 ppb in all samples, except RV754-RV759. No further qualifications were required.</p>
<p>6. <u>Surrogates</u></p>	<p>All samples analyzed in this SDG had surrogate recoveries within the control limits of 75-125%.</p>	<p>No qualifications were required.</p>
<p>7. <u>Calibration</u></p>	<p>The %RSDs for the initial calibration analyzed on 09/27/01 were all less than the control limit of 20%, or 30% where applicable.</p> <p>The %Ds for the calibration verification standard analyzed on 01/25/01 were all less than the control limit of 15%, or 25% where applicable.</p> <p>The %Ds for the calibration verification standard analyzed on 10/04/99 were all less than the control limit of 15%, or 25% where applicable.</p>	<p>No qualifications were required.</p> <p>No qualifications were required.</p>

	Findings	Qualifications
<p>10. <u>Other</u></p>	<p>Methylene chloride detects in most samples in this SDG were removed by the analyst (see section 3). Detects for 1,1-dichloroethane, chloroform, trichloroethene, 1,1,2-trichloroethane, and 1,1,2,2-tetrachloroethane in sample RV56 were removed by the analyst (see section 3).</p> <p>Samples RV732 and RV734 were identified as field duplicate samples. No target compounds were detected in either sample.</p> <p>Samples RV574 and RV757 were identified as field duplicate samples. Tetrachloroethene was detected in both samples with an RPD of 19.2%.</p> <p>Sample RV738 was identified as a field blank. RV738 was associated with all the samples in this SDG except RV754-RV759. There were no target compound detects in the field blank.</p> <p>Trichloroethene in samples RV714, RV735, and RV737 was reported above the calibration range of the instrument. Cis-1,2-dichloroethene in samples RV735 and RV737 were reported above the calibration range of the instrument. Benzene in sample RV753 was reported above the linear range of the instrument.</p> <p>Trichloroethene in samples RV742 and RV743 were potentially due to instrument carryover based upon the order in which the samples were analyzed.</p>	<p>No qualifications were required.</p> <p>No qualifications were required.</p> <p>No qualifications were required.</p> <p>Detects for these compounds were qualified as estimated detects, "J."</p> <p>Trichloroethene detects in these samples were qualified as estimated detects, "J."</p>
<p><u>Comments</u></p>	<p>None</p>	<p>None</p>

¹ Level V validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

ANALYTICAL TEST RESULTS

Reporting Unit: ug/L



DATE ANALYZED		09/28/99	09/28/99	09/28/99	09/28/99	
ANALYTICAL BATCH		990928M4V038	990928M4V038	990928M4V038	990928M4V038	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		NA	LXSV03S01	LXSV04S02	LXSV04S01	
EPA I.D. & DEPTH		NA	RV711 7'	RV712 10'	RV713 5'	
LAB SAMPLE I.D.		Blank	M4-052-01	M4-052-02	M4-052-03	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND	ND	ND	ND	
Vinyl Chloride	1.0	ND	ND	ND	ND	
Chloroethane	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	1.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	ND	
Trichloroethene	1.0	ND	ND	ND	ND	
Toluene	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	ND	
o-Xylene	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	107	93	99	100
d-Chloroform	25	75-125	102	93	99	105
d-Benzene	25	75-125	106	99	104	108
Dibromofluoromethane	50	75-125	109	108	108	109
Toluene-d8	50	75-125	101	97	98	96
Bromofluorobenzene	50	75-125	98	100	98	97

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery

RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED
LEVEL V

ANALYTICAL TEST RESULTS

(800) 798-9336

Reporting Unit: ug/L

DATE ANALYZED		09/28/99	09/28/99	09/28/99	09/28/99	
ANALYTICAL BATCH		990928M4V038	990928M4V038	990928M4V038	990928M4V038	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		LXSV02S02	LXSV02S01	LXSV01S03	LXSV01S02	
EPA I.D. & DEPTH		RV714 9'	RV715 5'	RV716 16'	RV717 10'	
LAB SAMPLE I.D.		M4-052-04	M4-052-05	M4-052-06	M4-052-07	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND	ND	ND	ND	
Vinyl Chloride	1.0	ND	ND	ND	ND	
Chloroethane	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	50 10	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	ND	
Trichloroethene	1.0	ND	ND	ND	ND	
Toluene	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	ND	
o-Xylene	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	94	95	97	97
d-Chloroform	25	75-125	97	98	99	99
d-Benzene	25	75-125	98	100	101	101
Dibromofluoromethane	50	75-125	109	106	114	107
Toluene-d8	50	75-125	95	99	100	101
Bromofluorobenzene	50	75-125	101	101	101	100

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery

RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED
LEVEL V

ANALYTICAL TEST RESULTS

Reporting Unit: ug/L

(800) 798-9336

DATE ANALYZED		09/28/99	09/28/99	09/28/99	09/28/99	
ANALYTICAL BATCH		990928M4V038	990928M4V038	990928M4V038	990928M4V038	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		LXSV01S01	ESSV01S02	ESSV01S01	ESSV02S02	
EPA I.D. & DEPTH		RV718 5'	RV719 10'	RV720 5'	RV721 9'	
LAB SAMPLE I.D.		M4-052-08	M4-052-09	M4-052-10	M4-052-11	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND	ND	ND	ND	
Vinyl Chloride	1.0	ND	ND	ND	ND	
Chloroethane	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	3.0 1.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	ND	
Trichloroethene	1.0	ND	ND	ND	ND	
Toluene	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	ND	
o-Xylene	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	103	88	95	90
d-Chloroform	25	75-125	105	82	88	87
d-Benzene	25	75-125	105	86	90	89
Dibromofluoromethane	50	75-125	113	110	112	111
Toluene-d8	50	75-125	97	96	99	99
Bromofluorobenzene	50	75-125	100	101	101	101

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery

RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED
LEVEL V

ANALYTICAL TEST RESULTS
Reporting Unit: ug/L

(800) 798-9336

DATE ANALYZED		09/28/99			
ANALYTICAL BATCH		990928M4V038			
DILUTION FACTOR		1			
CLIENT SAMPLE I.D.		ESSV02S01			
EPA I.D. & DEPTH		RV722 5'			
LAB SAMPLE I.D.		M4-052-12			
COMPOUND	RL				
Dichlorodifluoromethane	1.0	ND	y		
Vinyl Chloride	1.0	ND			
Chloroethane	1.0	ND			
Trichlorofluoromethane	1.0	ND			
1,1-Dichloroethene	1.0	ND			
Methylene Chloride	5.0 1.0	ND	4		
cis-1,2-Dichloroethene	1.0	ND			
1,1-Dichloroethane	1.0	ND			
trans-1,2-Dichloroethene	1.0	ND			
Chloroform	1.0	ND			
1,1,1-Trichloroethane	1.0	ND			
Carbon Tetrachloride	1.0	ND			
1,2-Dichloroethane	1.0	ND			
Benzene	1.0	ND			
Trichloroethene	1.0	ND			
Toluene	1.0	ND			
1,1,2-Trichloroethane	1.0	ND			
Tetrachloroethene	1.0	ND			
Ethylbenzene	1.0	ND			
1,1,1,2-Tetrachloroethane	1.0	ND			
m,p-Xylenes	2.0	ND			
o-Xylene	1.0	ND			
1,1,2,2-Tetrachloroethane	1.0	ND			
1,1,2-Trichloro-trifluoroethane	1.0	ND	y		
SURROGATE	SPK CONC	ACP%	%REC		
d-Methylene Chloride	25	75-125	94		
d-Chloroform	25	75-125	96		
d-Benzene	25	75-125	98		
Dibromofluoromethane	50	75-125	109		
Toluene-d8	50	75-125	99		
Bromofluorobenzene	50	75-125	96		

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery

RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED
LEVEL V

ANALYTICAL TEST RESULTS
Reporting Unit: ug/L

DATE ANALYZED		09/29/99	09/29/99	09/29/99	09/29/99	
ANALYTICAL BATCH		990929M4V039	990929M4V039	990929M4V039	990929M4V039	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		NA	CDSV01S02	CDSV01S01	CDSV02S01	
EPA I.D. & DEPTH		NA	RV723 10'	RV724 5'	RV725 7'	
LAB SAMPLE I.D.		Blank	M4-053-01	M4-053-02	M4-053-03	
COMPOUND	RL		Res Qual	Res Qual	Res Qual	
Dichlorodifluoromethane	1.0	ND	ND u	ND u	ND u	
Vinyl Chloride	1.0	ND	ND	ND	ND	
Chloroethane	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	50 1.0	ND	ND H	ND H	ND H	
cis-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	ND	
Trichloroethene	1.0	ND	ND	ND	ND	
Toluene	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	ND	
o-Xylene	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	103	90	90	93
d-Chloroform	25	75-125	105	93	93	97
d-Benzene	25	75-125	107	94	93	99
Dibromofluoromethane	50	75-125	110	110	109	107
Toluene-d8	50	75-125	103	97	97	96
Bromofluorobenzene	50	75-125	101	99	100	99

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery
 RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED
LEVEL V

ANALYTICAL TEST RESULTS

Reporting Unit: ug/L



DATE ANALYZED		09/29/99	09/29/99	09/29/99	09/29/99	
ANALYTICAL BATCH		990929M4V039	990929M4V039	990929M4V039	990929M4V039	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		BHSV01S01	BHSV02S01	B1SV01S01	B1SV01S02	
EPA I.D. & DEPTH		RV726 4.5'	RV727 6.5'	RV728 5'	RV729 10'	
LAB SAMPLE I.D.		M4-053-04	M4-053-05	M4-053-06	M4-053-07	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND u	ND u	ND u	ND u	
Vinyl Chloride	1.0	ND	ND	ND	ND	
Chloroethane	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	5.0 10	ND \$	ND \$	ND \$	ND \$	
cis-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	ND	
Trichloroethene	1.0	ND	ND	ND	ND	
Toluene	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	ND	
o-Xylene	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	87	82	89	90
d-Chloroform	25	75-125	86	81	90	93
d-Benzene	25	75-125	86	82	89	95
Dibromofluoromethane	50	75-125	114	113	112	110
Toluene-d8	50	75-125	101	101	102	98
Bromofluorobenzene	50	75-125	101	99	101	98

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery

RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED

LEVEL V

ANALYTICAL TEST RESULTS
Reporting Unit: ug/L

DATE ANALYZED		09/29/99	09/29/99	09/29/99	09/29/99	
ANALYTICAL BATCH		990929M4V039	990929M4V039	990929M4V039	990929M4V039	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		B1SV01S03	B1SV01S04	ELSV07S04	ELSV08S01	
EPA I.D. & DEPTH		RV730 15'	RV731 19'	RV732 4'	RV733 5'	
LAB SAMPLE I.D.		M4-053-08	M4-053-09	M4-053-10	M4-053-11	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND U	ND U	ND U	ND U	
Vinyl Chloride	1.0	ND	ND	ND	ND	
Chloroethane	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	5.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	ND	
Trichloroethene	1.0	ND	ND	ND	ND	
Toluene	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	ND	
o-Xylene	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	1.0	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	89	89	96	92
d-Chloroform	25	75-125	89	88	92	94
d-Benzene	25	75-125	89	83	90	95
Dibromofluoromethane	50	75-125	109	119	105	107
Toluene-d8	50	75-125	104	99	103	100
Bromofluorobenzene	50	75-125	101	100	99	98

PM
02/06/01
Rev 3

Qual code

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery
RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED
LEVEL V

pm 02/06/09
rw 3

ANALYTICAL TEST RESULTS

Reporting Unit: ug/L



DATE ANALYZED		09/29/99			
ANALYTICAL BATCH		990929M4V039			
DILUTION FACTOR		1			
CLIENT SAMPLE I.D.		ELSV07D01		V05V 33D01	
EPA I.D. & DEPTH		RV734 4'			
LAB SAMPLE I.D.		M4-053-12			
COMPOUND	RL				
Dichlorodifluoromethane	1.0	ND	U		
Vinyl Chloride	1.0	ND			
Chloroethane	1.0	ND			
Trichlorofluoromethane	1.0	ND			
1,1-Dichloroethene	1.0	ND			
Methylene Chloride	5.0	1.0	ND	U	
cis-1,2-Dichloroethene	1.0	ND			
1,1-Dichloroethane	1.0	ND			
trans-1,2-Dichloroethene	1.0	ND			
Chloroform	1.0	ND			
1,1,1-Trichloroethane	1.0	ND			
Carbon Tetrachloride	1.0	ND			
1,2-Dichloroethane	1.0	ND			
Benzene	1.0	ND			
Trichloroethene	1.0	ND			
Toluene	1.0	ND			
1,1,2-Trichloroethane	1.0	ND			
Tetrachloroethene	1.0	ND			
Ethylbenzene	1.0	ND			
1,1,1,2-Tetrachloroethane	1.0	ND			
m,p-Xylenes	2.0	ND			
o-Xylene	1.0	ND			
1,1,2,2-Tetrachloroethane	1.0	ND			
1,1,2-Trichloro-trifluoroethane	1.0	ND			
SURROGATE	SPK CONC	ACP%	%REC		
d-Methylene Chloride	25	75-125	99		
d-Chloroform	25	75-125	99		
d-Benzene	25	75-125	98		
Dibromofluoromethane	50	75-125	108		
Toluene-d8	50	75-125	98		
Bromofluorobenzene	50	75-125	100		

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery

RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED

LEVEL V



ANALYTICAL TEST RESULTS

Reporting Unit: ug/L

(800) 798-9336

DATE ANALYZED		09/30/99	09/30/99	09/30/99	09/30/99	
ANALYTICAL BATCH		990930M4V040	990930M4V040	990930M4V040	990930M4V040	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		NA	CASV03S01	CASV03S02	CASV03S03	
EPA I.D. & DEPTH		NA	RV735 5'	RV736 10'	RV737 14'	
LAB SAMPLE I.D.		Blank	M4-054-05	M4-054-01	M4-054-06	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND	ND U	ND U	ND U	
Vinyl Chloride	1.0	ND	110	2,400	1,800	
Chloroethane	1.0	ND	ND U	ND U	ND U	
Trichlorofluoromethane	1.0	ND	ND U	ND U	ND U	
1,1-Dichloroethene	1.0	ND	9.3	42	33	
Methylene Chloride	1.0 S.D.	ND	ND U	ND U	ND U	
cis-1,2-Dichloroethene	1.0	ND	560(a) J	*10 7,500	5,600(a) J *10	
1,1-Dichloroethane	1.0	ND	ND U	ND U	ND U	
trans-1,2-Dichloroethene	1.0	ND	29	240	270(a)	
Chloroform	1.0	ND	ND U	ND U	ND U	
1,1,1-Trichloroethane	1.0	ND	ND ↓	ND ↓	ND ↓	
Carbon Tetrachloride	1.0	ND	ND ↓	ND ↓	ND ↓	
1,2-Dichloroethane	1.0	ND	ND ↓	ND ↓	ND ↓	
Benzene	1.0	ND	ND ↓	ND ↓	ND ↓	
Trichloroethene	1.0	ND	7,100(a) J	*10 2,200	2,200(a) J *10	
Toluene	1.0	ND	ND U	ND U	ND U	
1,1,2-Trichloroethane	1.0	ND	ND ↓	ND ↓	ND ↓	
Tetrachloroethene	1.0	ND	ND ↓	ND ↓	ND ↓	
Ethylbenzene	1.0	ND	ND ↓	ND ↓	ND ↓	
1,1,1,2-Tetrachloroethane	1.0	ND	ND ↓	ND ↓	ND ↓	
m,p-Xylenes	2.0	ND	ND ↓	ND ↓	ND ↓	
o-Xylene	1.0	ND	ND ↓	ND ↓	ND ↓	
1,1,2,2-Tetrachloroethane	1.0	ND	ND ↓	ND ↓	ND ↓	
1,1,2-Trichloro-trifluoroethane	1.0	ND	1.8	1.3	1.5	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	106	91	107	90
d-Chloroform	25	75-125	106	84	107	88
d-Benzene	25	75-125	106	90	108	88
Dibromofluoromethane	50	75-125	113	104	93	102
Toluene-d8	50	75-125	98	98	107	102
Bromofluorobenzene	50	75-125	100	96	110	113

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery
 RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

(a) - The concentration for this analyte exceeded the calibration range. Since re-analysis at a dilution yielded a value less than 50% of the original, the original result has been reported as an estimated value.

AMEC VALIDATED
LEVEL V

ANALYTICAL TEST RESULTS

Reporting Unit: ug/L



DATE ANALYZED		09/30/99	09/30/99	09/30/99	09/30/99	
ANALYTICAL BATCH		990930M4V040	990930M4V040	990930M4V040	990930M4V040	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		CASV03F01	SESV02S01	SESV01S01	CASV04S01	
EPA I.D. & DEPTH		RV738	RV739 4'	RV740 4'	RV741 1'	
LAB SAMPLE I.D.		M4-054-02	M4-054-04	M4-054-03	M4-054-07	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND	ND	ND	ND	
Vinyl Chloride	1.0	ND	ND	ND	6.5	
Chloroethane	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	5.0	ND	# ND	# ND	# ND	
cis-1,2-Dichloroethene	1.0	ND	ND	ND	65	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	ND	
Trichloroethene	1.0	ND	ND	ND	460(a)	
Toluene	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	ND	
o-Xylene	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	ND	ND	23	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	83	108	94	104
d-Chloroform	25	75-125	78	106	88	103
d-Benzene	25	75-125	75	109	87	102
Dibromofluoromethane	50	75-125	111	107	105	106
Toluene-d8	50	75-125	98	96	97	100
Bromofluorobenzene	50	75-125	94	97	98	105

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery
 RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

(a) - The concentration for this analyte exceeded the calibration range. Since re-analysis at a dilution yielded a value less than 50% of the original, the original result has been reported as an estimated value.

AMEC VALIDATED
 LEVEL V

ANALYTICAL TEST RESULTS

Reporting Unit: ug/L

(800) 798-9336

DATE ANALYZED		09/30/99	09/30/99	09/30/99	09/30/99	
ANALYTICAL BATCH		990930M4V040	990930M4V040	990930M4V040	990930M4V040	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		CASV05S01	CASV06S01	DASV09S01	DASV09S02	
EPA I.D. & DEPTH		RV742 3'	RV743 4'	RV744 4'	RV745 8.5'	
LAB SAMPLE I.D.		M4-054-08	M4-054-09	M4-054-11	M4-054-12	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND U	ND U	ND U	ND U	
Vinyl Chloride	1.0	ND	ND	ND	ND	
Chloroethane	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	5.0 1.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.0	ND	1.0	ND	ND	
1,1-Dichloroethane	1.0	ND	ND U	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	ND	
Trichloroethene	1.0	4.6	1.4	1.7	2.4	
Toluene	1.0	ND U	ND U	ND U	ND U	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	ND	
o-Xylene	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	110	124	111	118
d-Chloroform	25	75-125	105	121	112	116
d-Benzene	25	75-125	100	116	109	117
Dibromofluoromethane	50	75-125	119	112	111	109
Toluene-d8	50	75-125	102	101	97	96
Bromofluorobenzene	50	75-125	96	97	99	97

Qual Code

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery
 RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED

LEVEL V

ANALYTICAL TEST RESULTS
 Reporting Unit: ug/L

DATE ANALYZED		09/30/99			
ANALYTICAL BATCH		990930M4V040			
DILUTION FACTOR		1			
CLIENT SAMPLE I.D.		DASV08S01			
EPA I.D. & DEPTH		RV746 6'			
LAB SAMPLE I.D.		M4-054-10			
COMPOUND	RL				
Dichlorodifluoromethane	1.0	ND	u		
Vinyl Chloride	1.0	ND			
Chloroethane	1.0	ND			
Trichlorofluoromethane	1.0	ND			
1,1-Dichloroethene	1.0	ND			
Methylene Chloride	5.0 1.0	ND		\$	
cis-1,2-Dichloroethene	1.0	ND			
1,1-Dichloroethane	1.0	ND			
trans-1,2-Dichloroethene	1.0	ND			
Chloroform	1.0	ND			
1,1,1-Trichloroethane	1.0	ND			
Carbon Tetrachloride	1.0	ND			
1,2-Dichloroethane	1.0	ND			
Benzene	1.0	ND			
Trichloroethene	1.0	ND			
Toluene	1.0	ND			
1,1,2-Trichloroethane	1.0	ND			
Tetrachloroethene	1.0	ND			
Ethylbenzene	1.0	ND			
1,1,1,2-Tetrachloroethane	1.0	ND			
m,p-Xylenes	2.0	ND			
o-Xylene	1.0	ND			
1,1,2,2-Tetrachloroethane	1.0	ND			
1,1,2-Trichloro-trifluoroethane	1.0	ND			
SURROGATE	SPK CONC	ACP%	%REC		
d-Methylene Chloride	25	75-125	89		
d-Chloroform	25	75-125	86		
d-Benzene	25	75-125	87		
Dibromofluoromethane	50	75-125	111		
Toluene-d8	50	75-125	97		
Bromofluorobenzene	50	75-125	96		

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery
 RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED

LEVEL V

ANALYTICAL TEST RESULTS
Reporting Unit: ug/L

DATE ANALYZED		10/01/99	10/01/99	10/01/99	10/01/99	
ANALYTICAL BATCH		991001M4V041	991001M4V041	991001M4V041	991001M4V041	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		NA	DASV06S01	CASV08S01	CASV07S01	
EPA I.D. & DEPTH		NA	RV747 2'	RV748 2'	RV749 5'	
LAB SAMPLE I.D.		Blank	M4-055-01	M4-055-02	M4-055-03	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND	ND U	ND U	ND U	
Vinyl Chloride	1.0	ND	ND	6.9	ND	
Chloroethane	1.0	ND	ND	ND U	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	5.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.0	ND	ND	3.8	ND	
1,1-Dichloroethane	1.0	ND	ND	ND U	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	ND	
Trichloroethene	1.0	ND	2.8	16	ND	
Toluene	1.0	ND	ND U	ND U	ND	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	ND	ND	ND	
Ethylbenzene	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	ND	
o-Xylene	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	ND	15	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	100	85	89	90
d-Chloroform	25	75-125	96	88	86	85
d-Benzene	25	75-125	101	86	83	90
Dibromofluoromethane	50	75-125	117	116	112	119
Toluene-d8	50	75-125	100	101	100	99
Bromofluorobenzene	50	75-125	98	97	104	96

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery
 RL = Reporting Limit, MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

AMEC VALIDATED

LEVEL V

ANALYTICAL TEST RESULTS
Reporting Unit: ug/L

DATE ANALYZED		10/01/99	10/01/99	10/01/99	10/01/99				
ANALYTICAL BATCH		991001M4V041	991001M4V041	991001M4V041	991001M4V041				
DILUTION FACTOR		1	1	1	1				
CLIENT SAMPLE I.D.		ECSV18S01	ECSV19S01	B1SV02S01	B1SV03S01				
EPA I.D. & DEPTH		RV750 4'	RV751 5'	RV752 5'	RV753 6.5'				
LAB SAMPLE I.D.		M4-055-04	M4-055-05	M4-055-06	M4-055-07				
COMPOUND	RL	Rev Qual	Qual Code	Rev Qual	Qual Code	Rev Qual	Qual Code	Rev Qual	Qual Code
Dichlorodifluoromethane	1.0	ND U		ND U		ND U		ND U	
Vinyl Chloride	1.0	ND		ND		ND		ND	
Chloroethane	1.0	ND		ND		ND		ND	
Trichlorofluoromethane	1.0	ND		ND		ND		ND	
1,1-Dichloroethene	1.0	ND		ND		ND		ND	
Methylene Chloride	5.0 1.0	ND	\$	ND	\$1	ND	\$2	ND	\$
cis-1,2-Dichloroethene	1.0	ND		ND		ND		ND	
1,1-Dichloroethane	1.0	ND		ND		ND		ND	
trans-1,2-Dichloroethene	1.0	ND		ND		ND		ND	
Chloroform	1.0	ND		ND		ND		ND	
1,1,1-Trichloroethane	1.0	ND		ND		ND		ND	
Carbon Tetrachloride	1.0	ND		ND		ND		ND	
1,2-Dichloroethane	1.0	ND		ND		ND		ND	
Benzene	1.0	ND		ND		ND	510(a) J	ND	*10
Trichloroethene	1.0	ND		ND		ND		ND U	
Toluene	1.0	ND		ND		ND		ND	
1,1,2-Trichloroethane	1.0	ND		ND		ND		ND	
Tetrachloroethene	1.0	ND		ND		ND		ND	
Ethylbenzene	1.0	ND		ND		ND	140	ND	
1,1,1,2-Tetrachloroethane	1.0	ND		ND		ND		ND U	
m,p-Xylenes	2.0	ND		ND		ND		110	
o-Xylene	1.0	ND		ND		ND		7.0	
1,1,2,2-Tetrachloroethane	1.0	ND		ND		ND		ND U	
1,1,2-Trichloro-trifluoroethane	1.0	ND		1.0		ND		ND U	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	91	94	93	85			
d-Chloroform	25	75-125	90	95	93	90			
d-Benzene	25	75-125	93	94	94	114			
Dibromofluoromethane	50	75-125	118	121	121	89			
Toluene-d8	50	75-125	100	98	94	106			
Bromofluorobenzene	50	75-125	102	97	97	85			

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery

RL = Reporting Limit, MB = Method Blank, ND = Not Detected (Below RL); NA = Not Applicable

(a) - The concentration for this analyte exceeded the calibration range. Since re-analysis at a dilution yielded a value less than 50% of the original, the original result has been reported as an estimated value.

AMEC VALIDATED

LEVEL V

ANALYTICAL TEST RESULTS

Reporting Unit: ug/L



DATE ANALYZED		10/04/99	10/04/99	10/04/99	10/04/99	
ANALYTICAL BATCH		991004M4V042	991004M4V042	991004M4V042	991004M4V042	
DILUTION FACTOR		1	1	1	1	
CLIENT SAMPLE I.D.		NA	B1SV02S02	B1SV02S03	B1SV03S02	
EPA I.D. & DEPTH		NA	RV574 10'	RV575 14'	RV576 10'	
LAB SAMPLE I.D.		Blank	M4-056-01	M4-056-02	M4-056-03	
COMPOUND	RL					
Dichlorodifluoromethane	1.0	ND	ND	ND	ND	
Vinyl Chloride	1.0	ND	ND	ND	ND	
Chloroethane	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	1.0	ND	ND	ND	ND	
Methylene Chloride	1.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
1,1-Dichloroethane	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.0	ND	ND	ND	ND	
Chloroform	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	
Carbon Tetrachloride	1.0	ND	ND	ND	ND	
1,2-Dichloroethane	1.0	ND	ND	ND	ND	
Benzene	1.0	ND	ND	ND	230	
Trichloroethene	1.0	ND	ND	ND	ND	
Toluene	1.0	ND	ND	ND	2.6	
1,1,2-Trichloroethane	1.0	ND	ND	ND	ND	
Tetrachloroethene	1.0	ND	4.0	21	ND	
Ethylbenzene	1.0	ND	ND	ND	41	
1,1,1,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	ND	ND	ND	38	
o-Xylene	1.0	ND	ND	ND	19	
1,1,2,2-Tetrachloroethane	1.0	ND	ND	ND	ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	108	88	88	106
d-Chloroform	25	75-125	108	88	88	99
d-Benzene	25	75-125	110	91	88	119
Dibromofluoromethane	50	75-125	113	114	117	96
Toluene-d8	50	75-125	99	97	100	97
Bromofluorobenzene	50	75-125	98	99	95	97

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery

RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

PM 02/02/02
PM 10/29/02

*Analysis Not Validated

AMEC VALIDATED

LEVEL V
LEVEL V

ANALYTICAL TEST RESULTS

Reporting Unit: ug/L



DATE ANALYZED		10/04/99	10/04/99	10/04/99	
ANALYTICAL BATCH		991004M4V042	991004M4V042	991004M4V042	
DILUTION FACTOR		1	1	1	
CLIENT SAMPLE I.D.		B1SV02D02	ELSV09S02	DASP03S02	
EPA I.D. & DEPTH		^{RV751} RV577 10'	^{RV758} RV578. 6'	^{RV751} RV579 10'	
LAB SAMPLE I.D.		M4-056-04	M4-056-05	M4-056-06	
COMPOUND	RL	^{Rev} Qual	^{Qual} Code	^{Rev} Qual	^{Qual} Code
Dichlorodifluoromethane	1.0	ND	U	ND	U
Vinyl Chloride	1.0	ND		ND	
Chloroethane	1.0	ND		ND	
Trichlorofluoromethane	1.0	ND		ND	
1,1-Dichloroethene	1.0	ND		ND	
Methylene Chloride	1.0	ND		ND	
cis-1,2-Dichloroethene	1.0	ND		ND	
1,1-Dichloroethane	1.0	ND		ND	
trans-1,2-Dichloroethene	1.0	ND		ND	
Chloroform	1.0	ND		ND	
1,1,1-Trichloroethane	1.0	ND		ND	
Carbon Tetrachloride	1.0	ND		ND	
1,2-Dichloroethane	1.0	ND		ND	
Benzene	1.0	ND		ND	
Trichloroethene	1.0	ND		ND	
Toluene	1.0	ND		ND	
1,1,2-Trichloroethane	1.0	ND	↓	ND	
Tetrachloroethene	1.0	3.3		ND	
Ethylbenzene	1.0	ND	U	ND	
1,1,1,2-Tetrachloroethane	1.0	ND		ND	
m,p-Xylenes	2.0	ND		ND	
o-Xylene	1.0	ND		ND	
1,1,2,2-Tetrachloroethane	1.0	ND		ND	
1,1,2-Trichloro-trifluoroethane	1.0	ND	↓	ND	↓
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC
d-Methylene Chloride	25	75-125	100	101	94
d-Chloroform	25	75-125	96	94	92
d-Benzene	25	75-125	99	100	96
Dibromofluoromethane	50	75-125	113	109	113
Toluene-d8	50	75-125	99	98	97
Bromofluorobenzene	50	75-125	97	95	94

SPK CONC = Spiking Concentration; ACP % = Acceptable Range of Percent; %REC = % Recovery
 RL = Reporting Limit; MB = Method Blank; ND = Not Detected (Below RL); NA = Not Applicable

PM 02/01/02

AMEC VALIDATED
LEVEL V

ESADA RFI SITE DATA TABLE

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	8015M	Kerosene Range Organics (C11-C14)	11	mg/kg	Yes	U	11	11	L9904022	No	Columbia	T500TF17	265925.813	1783110.5	Yes	
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	8015M	Lubricant Oil Range Organics (C20-C30)	11	mg/kg	Yes	U	11	11	L9904022	No	Columbia	T500TF17	265925.813	1783110.5	Yes	
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	8082	Aroclor 1016	110	µg/kg	Yes	U	110	110	L9904022	No	Columbia	T500PP8	265925.813	1783110.5	Yes	
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	8082	Aroclor 1221	110	µg/kg	Yes	U	110	110	L9904022	No	Columbia	T500PP8	265925.813	1783110.5	Yes	
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	8082	Aroclor 1232	110	µg/kg	Yes	U	110	110	L9904022	No	Columbia	T500PP8	265925.813	1783110.5	Yes	
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	8082	Aroclor 1242	110	µg/kg	Yes	U	110	110	L9904022	No	Columbia	T500PP8	265925.813	1783110.5	Yes	
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	8082	Aroclor 1248	110	µg/kg	Yes	U	110	110	L9904022	No	Columbia	T500PP8	265925.813	1783110.5	Yes	
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	8082	Aroclor 1254	110	µg/kg	Yes	U	110	110	L9904022	No	Columbia	T500PP8	265925.813	1783110.5	Yes	
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	8082	Aroclor 1260	110	µg/kg	Yes	U	110	110	L9904022	No	Columbia	T500PP8	265925.813	1783110.5	Yes	
ESSS01	RS330	ESSS01S01	9/24/1999	Soil	Primary Sample	Primary Result	9045	pH	9.6	pH Units	Yes	J	0.1		L9904022	No	Columbia	T500WC22	265925.813	1783110.5	No	pH, %Moisture, %Total solids
ESSS02	RJ040	ESSS02S01	9/21/2000	Soil	Primary Sample	Primary Result	7471A	Mercury	0.01	mg/kg	Yes	UJ			RJ601	No	Ceimic	T700MT11	265969.844	1782939.75	Yes	
ESSS03	RJ041	ESSS03S01	9/21/2000	Soil	Primary Sample	Primary Result	7471A	Mercury	0.01	mg/kg	Yes	J			RJ601	No	Ceimic	T700MT11	265959.25	1782971.5	Yes	
ESSS04	RJ042	ESSS04S01	9/21/2000	Soil	Primary Sample	Primary Result	7471A	Mercury	0.01	mg/kg	Yes	UJ			RJ601	No	Ceimic	T700MT11	265932.75	1783028.25	Yes	
ESSS05	RJ043	ESSS05S01	9/21/2000	Soil	Primary Sample	Primary Result	7471A	Mercury	0.01	mg/kg	Yes	J			RJ601	No	Ceimic	T700MT11	265933.75	1783068.75	Yes	
ESSS06	RJ044	ESSS06S01	9/21/2000	Soil	Primary Sample	Primary Result	7471A	Mercury	0.02	mg/kg	Yes	J			RJ601	No	Ceimic	T700MT11	265917.906	1783149	Yes	
ESSS07	RJ045	ESSS07S01	9/21/2000	Soil	Primary Sample	Primary Result	7471A	Mercury	0.01	mg/kg	Yes	UJ	0		RJ601	No	Ceimic	T700MT11	265918.844	1783167.25	Yes	
ESSS08	RJ046	ESSS08S01	9/21/2000	Soil	Primary Sample	Primary Result	7471A	Mercury	0.02	mg/kg	Yes	J	0		RJ601	No	Ceimic	T700MT11	265882.313	1782994.13	Yes	
ESSS09	RJ047	ESSS09S01	9/21/2000	Soil	Primary Sample	Primary Result	7471A	Mercury	0.01	mg/kg	Yes	J	0		RJ601	No	Ceimic	T700MT11	265846.688	1782992.25	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Aluminum	11800	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Antimony	0.87	mg/kg	Yes	R			RJ313	No	Ceimic	T700MT41	265763.344	1783191	No	Data Rejected
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Arsenic	5.2	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Barium	76.5	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Beryllium	0.7	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Boron	6.1	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Cadmium	0.02	mg/kg	Yes	UJ			RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Calcium	14800	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Chromium	18	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Cobalt	8.1	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Copper	9.3	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Iron	19500	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Lead	7.4	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Magnesium	4760	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Manganese	357	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Molybdenum	0.62	mg/kg	Yes	UJ			RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Nickel	13.8	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Potassium	1700	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Selenium	0.86	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Silver	0.43	mg/kg	Yes	U		0.43	RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Sodium	100	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Thallium	1.7	mg/kg	Yes	R			RJ313	No	Ceimic	T700MT41	265763.344	1783191	No	Data Rejected
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Vanadium	37.6	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Zinc	47	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS01	RJ313	ESBS01S01	4/27/2001	Soil	Primary Sample	Primary Result	7471A	Mercury	0.07	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265763.344	1783191	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Aluminum	15700	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Antimony	0.66	mg/kg	Yes	R			RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	No	Data Rejected
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Arsenic	4.9	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Barium	95.4	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Beryllium	0.8	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Boron	7.2	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Cadmium	0.02	mg/kg	Yes	UJ			RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Calcium	9130	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Chromium	22.8	mg/kg	Yes	J			RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Cobalt	8.8	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Copper	10.7	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Iron	22800	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Lead	17.2	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Magnesium	5410	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Manganese	268	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Molybdenum	0.58	mg/kg	Yes	UJ			RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Nickel	13.6	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Potassium	1640	mg/kg	Yes				RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Selenium	0.74	mg/kg	Yes	J			RJ313	No	Ceimic					

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS02	RJ314	ESBS02S01	4/27/2001	Soil	Primary Sample	Primary Result	7471A	Mercury	0.01	mg/kg	Yes	UJ	0		RJ313	No	Ceimic	T700MT41	265768.219	1783229.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Aluminum	8570	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Antimony	30.2	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Arsenic	30.9	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Barium	58.7	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Beryllium	0.47	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Boron	6.8	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Cadmium	0.02	mg/kg	Yes	UJ	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Calcium	38300	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Chromium	13.5	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Cobalt	5.8	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Copper	8.3	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Iron	13700	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Lead	2360	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Magnesium	12300	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Manganese	248	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Molybdenum	0.51	mg/kg	Yes	UJ	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Nickel	9.3	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Potassium	3310	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Selenium	0.6	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Silver	0.35	mg/kg	Yes	U	0	0.35	RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Sodium	78.9	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Thallium	1.4	mg/kg	Yes	R	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	No	Data Rejected
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Vanadium	26.9	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	6010B	Zinc	42.2	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS03	RJ315	ESBS03S01	4/27/2001	Soil	Primary Sample	Primary Result	7471A	Mercury	0.02	mg/kg	Yes	UJ	0		RJ313	No	Ceimic	T700MT41	265749.281	1783261.88	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Aluminum	12000	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Antimony	0.81	mg/kg	Yes	R	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	No	Data Rejected
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Arsenic	4.6	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Barium	92.7	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Beryllium	0.77	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Boron	8.1	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Cadmium	0.03	mg/kg	Yes	UJ	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Calcium	13700	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Chromium	20.5	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Cobalt	9.2	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Copper	13.8	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Iron	21800	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Lead	12	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Magnesium	5700	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Manganese	394	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Molybdenum	0.7	mg/kg	Yes	UJ	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Nickel	14.8	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Potassium	3870	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Selenium	1.2	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Silver	0.49	mg/kg	Yes	U	0	0.49	RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Sodium	103	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Thallium	1.9	mg/kg	Yes	R	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	No	Data Rejected
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Vanadium	43.1	mg/kg	Yes		0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	6010B	Zinc	61.4	mg/kg	Yes	J	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS04	RJ316	ESBS04S01	5/1/2001	Soil	Primary Sample	Primary Result	7471A	Mercury	0.02	mg/kg	Yes	UJ	0		RJ313	No	Ceimic	T700MT41	265809.344	1783241.25	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	20000	mg/kg	Yes		11	5.6	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Boron	5.6	mg/kg	Yes	UJ	5.6	5.6	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Lithium	30	mg/kg	Yes		7	4.2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Potassium	2400	mg/kg	Yes		56	21	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	620	mg/kg	Yes		56	27	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Zirconium	3.3	mg/kg	Yes		28	1.7	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.68	mg/kg	Yes		1.1	0.033	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	4	mg/kg	Yes		0.55	0.28	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Barium	70	mg/kg	Yes		0.55	0.089	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Beryllium	0.6	mg/kg	Yes		0.33	0.044	IQB1681	No	Del Mar	IQB1681				

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Nickel	13	mg/kg	Yes		1.1	0.5	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Selenium	0.22	mg/kg	Yes	U	1.1	0.22	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Silver	0.055	mg/kg	Yes	U	0.55	0.055	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Thallium	0.25	mg/kg	Yes		0.55	0.11	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Vanadium	39	mg/kg	Yes		1.1	0.44	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Zinc	41	mg/kg	Yes		11	1.4	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	7471A	Mercury	0.013	mg/kg	Yes		0.011	0.00073	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8015B	Diesel Range Organics (C15-C20)	5.6	mg/kg	Yes	U	5.6	3.9	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8015B	Gasoline Range Organics (C8-C11)	5.6	mg/kg	Yes	U	5.6	3.9	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8015B	Kerosene Range Organics (C12-C14)	5.6	mg/kg	Yes	U	5.6	3.9	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8015B	Lubricant Oil Range Organics (C21-C30)	5.6	mg/kg	Yes	U	5.6	3.9	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1016	56	µg/kg	Yes	U	56	17	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1221	56	µg/kg	Yes	U	56	17	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1232	56	µg/kg	Yes	U	56	11	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1242	56	µg/kg	Yes	U	56	11	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1248	56	µg/kg	Yes	U	56	11	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1254	56	µg/kg	Yes	U	56	11	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1260	56	µg/kg	Yes	U	56	11	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	1-Methyl naphthalene	23	µg/kg	Yes	U	23	2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	2-Methylnaphthalene	23	µg/kg	Yes	U	23	2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthene	23	µg/kg	Yes	U	23	2.1	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthylene	23	µg/kg	Yes	U	23	1.9	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Anthracene	23	µg/kg	Yes	U	23	2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)anthracene	23	µg/kg	Yes	U	23	2.4	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)pyrene	23	µg/kg	Yes	U	23	2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(b)fluoranthene	23	µg/kg	Yes	U	23	2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(ghi)perylene	23	µg/kg	Yes	U	23	2.1	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(k)fluoranthene	23	µg/kg	Yes	U	23	2.8	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	bis(2-Ethylhexyl) phthalate	28	µg/kg	Yes		23	3.5	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Chrysene	23	µg/kg	Yes	U	23	2.3	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Dibenzo(a,h)anthracene	23	µg/kg	Yes	U	23	2.2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Diethyl phthalate	7.3	µg/kg	Yes	J	23	2.3	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Di-n-butyl phthalate	49	µg/kg	Yes		23	2.4	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluoranthene	23	µg/kg	Yes	U	23	2.1	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluorene	23	µg/kg	Yes	U	23	2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Indeno(1,2,3-cd)pyrene	23	µg/kg	Yes	U	23	2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Naphthalene	23	µg/kg	Yes	U	23	2.1	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	n-Nitrosodimethylamine	23	µg/kg	Yes	U	23	2.2	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Phenanthrene	23	µg/kg	Yes	U	23	2.1	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Pyrene	23	µg/kg	Yes	U	23	2.8	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	Extrapolated Result
ESBS0009	ESBS0009S01	ESBS0009S01	2/14/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.82	pH Units	Yes		0	0	IQB1681	No	Del Mar	IQB1681	265846.162	1783072.98	No	pH, %Moisture, %Total solids
ESBS0009	ESBS0009S02	ESBS0009S02	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	20000	mg/kg	Yes		11	5.7	IQC2079	No	Test America	IQC2079	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S02	ESBS0009S02	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	540	mg/kg	Yes		57	28	IQC2079	No	Test America	IQC2079	265846.162	1783072.98	Yes	
ESBS0009	ESBS0009S02	ESBS0009S02	2/14/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.57	pH Units	Yes		0	0	IQB1681	No	Test America	IQB1681	265846.162	1783072.98	No	pH, %Moisture, %Total solids
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	16000	mg/kg	Yes		12	5.9	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Boron	7.3	mg/kg	Yes	UJ	7.3	7.3	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Lithium	22	mg/kg	Yes		7.4	4.5	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Potassium	3900	mg/kg	Yes		59	22	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	110	mg/kg	Yes		59	28	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Zirconium	1.8	mg/kg	Yes	U	29	1.8	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Antimony	870	mg/kg	Yes		120	3.5	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	350	mg/kg	Yes		0.58	0.29	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Barium	70	mg/kg	Yes		0.58	0.094	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Beryllium	0.5	mg/kg	Yes		0.35	0.047	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Cadmium	0.24	mg/kg	Yes		0.58	0.029	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	6020	Chromium	20	mg/kg	Yes		1.2	0.41	IQB1681	No	Del Mar	IQB1681				

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8015B	Diesel Range Organics (C15-C20)	5.9	mg/kg	Yes	U	5.9	4.1	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8015B	Gasoline Range Organics (C8-C11)	5.9	mg/kg	Yes	U	5.9	4.1	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8015B	Kerosene Range Organics (C12-C14)	5.9	mg/kg	Yes	U	5.9	4.1	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8015B	Lubricant Oil Range Organics (C21-C30)	4.3	mg/kg	Yes	J	5.9	4.1	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1016	59	µg/kg	Yes	U	59	18	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1221	59	µg/kg	Yes	U	59	18	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1232	59	µg/kg	Yes	U	59	12	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1242	59	µg/kg	Yes	U	59	12	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1248	59	µg/kg	Yes	U	59	12	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1254	59	µg/kg	Yes	U	59	12	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1260	59	µg/kg	Yes	U	59	12	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	1-Methyl naphthalene	25	µg/kg	Yes	U	25	2.2	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	2-Methylnaphthalene	25	µg/kg	Yes	U	25	2.2	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthene	25	µg/kg	Yes	U	25	2.3	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	No	Extrapolated Result
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthylene	25	µg/kg	Yes	U	25	2	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	No	Extrapolated Result
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Anthracene	25	µg/kg	Yes	U	25	2.2	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	No	Extrapolated Result
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)anthracene	22	µg/kg	Yes	J	25	2.6	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)pyrene	15	µg/kg	Yes	J	25	2.2	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(b)fluoranthene	21	µg/kg	Yes	J	25	2.2	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(ghi)perylene	25	µg/kg	Yes	U	25	2.3	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	No	Extrapolated Result
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(k)fluoranthene	8.3	µg/kg	Yes	J	25	3.1	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	bis(2-Ethylhexyl) phthalate	720	µg/kg	Yes	U	25	3.8	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Chrysene	23	µg/kg	Yes	J	25	2.5	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Dibenzo(a,h)anthracene	25	µg/kg	Yes	U	25	2.4	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	No	Extrapolated Result
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Diethyl phthalate	6.9	µg/kg	Yes	J	25	2.5	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	No	Extrapolated Result
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Di-n-butyl phthalate	61	µg/kg	Yes	U	25	2.6	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluoranthene	35	µg/kg	Yes	U	25	2.3	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluorene	25	µg/kg	Yes	U	25	2.2	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	No	Extrapolated Result
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Indeno(1,2,3-cd)pyrene	7.5	µg/kg	Yes	J	25	2.2	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Naphthalene	25	µg/kg	Yes	U	25	2.3	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	n-Nitrosodimethylamine	25	µg/kg	Yes	U	25	2.4	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Phenanthrene	18	µg/kg	Yes	J	25	2.3	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	8270C SIM	Pyrene	36	µg/kg	Yes	U	25	3.1	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S01	ESBS0012S01	2/14/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.55	pH Units	Yes	U	0	0	IQB1681	No	Del Mar	IQB1681	265742.085	1783258.17	No	pH, %Moisture, %Total solids
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	20000	mg/kg	Yes	U	12	5.8	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Boron	6.7	mg/kg	Yes	J	5.8	1.2	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Lithium	24	mg/kg	Yes	U	7.3	4.4	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Potassium	2300	mg/kg	Yes	U	58	22	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	130	mg/kg	Yes	U	58	28	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6010B	Zirconium	5.2	mg/kg	Yes	J	29	1.7	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Antimony	22	mg/kg	Yes	J	1.2	0.035	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	11	mg/kg	Yes	U	0.58	0.29	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Barium	94	mg/kg	Yes	U	0.58	0.092	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Beryllium	0.64	mg/kg	Yes	U	0.35	0.046	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Cadmium	0.32	mg/kg	Yes	U	0.58	0.029	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Chromium	22	mg/kg	Yes	U	1.2	0.4	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Cobalt	7.1	mg/kg	Yes	J	0.58	0.092	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Copper	9.7	mg/kg	Yes	J	1.2	0.23	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Lead	1900	mg/kg	Yes	U	5.8	0.58	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Molybdenum	0.48	mg/kg	Yes	J	1.2	0.12	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Nickel	13	mg/kg	Yes	J	1.2	0.52	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Selenium	0.3	mg/kg	Yes	U	1.2	0.23	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Silver	0.094	mg/kg	Yes	U	0.58	0.058	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Thallium	0.58	mg/kg	Yes	UJ	0.58	0.58	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Vanadium	42	mg/kg	Yes	U	1.2	0.46	IQC2079	No	Test America	IQC2079	265742.085	1783258.17	Yes	
ESBS0012	ESBS0012S02	ESBS0012S02	2/14/2007	Soil	Primary Sample	Primary Result	6020	Zinc	38	mg/kg	Yes	J	12	1.5	IQC2079	No	Test America	IQC2079	2657			

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Zirconium	4.9	mg/kg	Yes		30	1.8	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.13	mg/kg	Yes		1.2	0.036	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	3.4	mg/kg	Yes		0.6	0.3	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Barium	88	mg/kg	Yes		0.6	0.095	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Beryllium	0.62	mg/kg	Yes		0.36	0.048	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Cadmium	0.23	mg/kg	Yes		0.6	0.03	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Chromium	22	mg/kg	Yes		1.2	0.42	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Cobalt	7.4	mg/kg	Yes		0.6	0.095	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Copper	13	mg/kg	Yes		1.2	0.24	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Lead	9	mg/kg	Yes		0.6	0.06	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Molybdenum	0.32	mg/kg	Yes	J	1.2	0.12	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Nickel	14	mg/kg	Yes		1.2	0.54	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Selenium	0.28	mg/kg	Yes		1.2	0.24	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Silver	0.092	mg/kg	Yes		0.6	0.06	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Thallium	0.25	mg/kg	Yes		0.6	0.12	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Vanadium	37	mg/kg	Yes		1.2	0.48	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Zinc	46	mg/kg	Yes		12	1.5	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	7471A	Mercury	0.016	mg/kg	Yes		0.012	0.00077	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8015B	Diesel Range Organics (C15-C20)	6	mg/kg	Yes	U	6	4.2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8015B	Gasoline Range Organics (C8-C11)	6	mg/kg	Yes	U	6	4.2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8015B	Kerosene Range Organics (C12-C14)	6	mg/kg	Yes	U	6	4.2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8015B	Lubricant Oil Range Organics (C21-C30)	7.2	mg/kg	Yes		6	4.2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Lab Repeat Analysis	8082	Aroclor 1016	60	µg/kg	Yes	U	60	18	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Lab Repeat Analysis	8082	Aroclor 1221	60	µg/kg	Yes	U	60	18	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Lab Repeat Analysis	8082	Aroclor 1232	60	µg/kg	Yes	U	60	12	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Lab Repeat Analysis	8082	Aroclor 1242	60	µg/kg	Yes	U	60	12	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Lab Repeat Analysis	8082	Aroclor 1248	60	µg/kg	Yes	U	60	12	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Lab Repeat Analysis	8082	Aroclor 1254	12	µg/kg	Yes	J	60	12	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Lab Repeat Analysis	8082	Aroclor 1260	60	µg/kg	Yes	U	60	12	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	1-Methyl naphthalene	23	µg/kg	Yes	U	23	2.1	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	2-Methylnaphthalene	23	µg/kg	Yes	U	23	2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthene	23	µg/kg	Yes	U	23	2.1	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	No	Extrapolated Result
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthylene	23	µg/kg	Yes	U	23	1.9	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	No	Extrapolated Result
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Anthracene	23	µg/kg	Yes	U	23	2.1	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	No	Extrapolated Result
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)anthracene	25	µg/kg	Yes		23	2.5	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)pyrene	17	µg/kg	Yes	J	23	2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(b)fluoranthene	26	µg/kg	Yes		23	2.1	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(ghi)perylene	8.2	µg/kg	Yes	J	23	2.1	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	No	Extrapolated Result
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(k)fluoranthene	10	µg/kg	Yes	J	23	2.9	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	bis(2-Ethylhexyl) phthalate	200	µg/kg	Yes		23	3.6	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Chrysene	30	µg/kg	Yes		23	2.4	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Dibenzo(a,h)anthracene	23	µg/kg	Yes	U	23	2.2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	No	Extrapolated Result
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Diethyl phthalate	9.4	µg/kg	Yes	J	23	2.3	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Di-n-butyl phthalate	110	µg/kg	Yes		23	2.4	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluoranthene	43	µg/kg	Yes		23	2.2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluorene	23	µg/kg	Yes	U	23	2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	No	Extrapolated Result
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Indeno(1,2,3-cd)pyrene	12	µg/kg	Yes	J	23	2.1	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Naphthalene	23	µg/kg	Yes	U	23	2.1	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	n-Nitrosodimethylamine	23	µg/kg	Yes	U	23	2.2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Phenanthrene	9.2	µg/kg	Yes	J	23	2.2	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	No	Extrapolated Result
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Pyrene	94	µg/kg	Yes		23	2.9	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	Yes	
ESBS0006	ESBS0006S01	ESBS0006S01	2/16/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.74	pH Units	Yes		0	0	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	No	pH, %Moisture, %Total solids
ESBS0006	ESBS0006S02	ESBS0006S02	2/16/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.06	pH Units	Yes		0	0	IQB1822	No	Test America	IQB1822	265925.045	1783165.87	No	pH, %Moisture, %Total solids
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	18000	mg/kg	Yes		12	5.8	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Boron	5.8	mg/kg	Yes	UJ	5.8	5.8	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Lithium	19	mg/kg	Yes		7.4	4.4	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007																						

Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Lead	7.4	mg/kg	Yes		0.58	0.058	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Molybdenum	0.23	mg/kg	Yes	J	1.2	0.12	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Nickel	13	mg/kg	Yes		1.2	0.53	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Selenium	0.23	mg/kg	Yes	U	1.2	0.23	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Silver	0.058	mg/kg	Yes	U	0.58	0.058	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Thallium	0.23	mg/kg	Yes		0.58	0.12	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Vanadium	37	mg/kg	Yes		1.2	0.47	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	6020	Zinc	42	mg/kg	Yes		12	1.5	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	7471A	Mercury	0.021	mg/kg	Yes		0.012	0.00075	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8015B	Diesel Range Organics (C15-C20)	5.8	mg/kg	Yes	U	5.8	4.1	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8015B	Gasoline Range Organics (C8-C11)	5.8	mg/kg	Yes	U	5.8	4.1	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8015B	Kerosene Range Organics (C12-C14)	5.8	mg/kg	Yes	U	5.8	4.1	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8015B	Lubricant Oil Range Organics (C21-C30)	5.8	mg/kg	Yes	U	5.8	4.1	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1016	58	µg/kg	Yes	U	58	18	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1221	58	µg/kg	Yes	U	58	18	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1232	58	µg/kg	Yes	U	58	12	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1242	58	µg/kg	Yes	U	58	12	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1248	58	µg/kg	Yes	U	58	12	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1254	58	µg/kg	Yes	U	58	12	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1260	58	µg/kg	Yes	U	58	12	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	1-Methyl naphthalene	23	µg/kg	Yes	U	23	2.1	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	2-Methylnaphthalene	23	µg/kg	Yes	U	23	2	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthene	23	µg/kg	Yes	U	23	2.2	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthylene	23	µg/kg	Yes	U	23	1.9	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Anthracene	23	µg/kg	Yes	U	23	2.1	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)anthracene	23	µg/kg	Yes	U	23	2.5	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)pyrene	23	µg/kg	Yes	U	23	2	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(b)fluoranthene	23	µg/kg	Yes	U	23	2.1	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(ghi)perylene	23	µg/kg	Yes	U	23	2.2	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(k)fluoranthene	23	µg/kg	Yes	U	23	2.9	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	bis(2-Ethylhexyl) phthalate	41	µg/kg	Yes		23	3.6	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Chrysene	23	µg/kg	Yes	U	23	2.4	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Dibenzo(a,h)anthracene	23	µg/kg	Yes	U	23	2.3	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Diethyl phthalate	23	µg/kg	Yes	U	23	2.3	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Di-n-butyl phthalate	69	µg/kg	Yes		23	2.5	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluoranthene	23	µg/kg	Yes	U	23	2.2	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluorene	23	µg/kg	Yes	U	23	2	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Indeno(1,2,3-cd)pyrene	23	µg/kg	Yes	U	23	2.1	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Naphthalene	23	µg/kg	Yes	U	23	2.2	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	n-Nitrosodimethylamine	23	µg/kg	Yes	U	23	2.3	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	Yes	
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Phenanthrene	23	µg/kg	Yes	U	23	2.2	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	8270C SIM	Pyrene	23	µg/kg	Yes	U	23	2.9	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	Extrapolated Result
ESBS0007	ESBS0007S01	ESBS0007S01	2/16/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.91	pH Units	Yes		0	0	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	pH, %Moisture, %Total solids
ESBS0007	ESBS0007S02	ESBS0007S02	2/16/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.05	pH Units	Yes		0	0	IQB1822	No	Test America	IQB1822	265893.336	1783154.48	No	pH, %Moisture, %Total solids
ESBS0014	ESBS0014S02	ESBS0014S02	2/16/2007	Soil	Primary Sample	Primary Result	6020	Lead	260	mg/kg	Yes		0.56	0.056	IQB1822	No	Test America	IQB1822	265740.507	1783235.08	Yes	
ESBS0014	ESBS0014S02	ESBS0014S02	2/16/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.87	pH Units	Yes		0	0	IQB1822	No	Test America	IQB1822	265740.507	1783235.08	No	pH, %Moisture, %Total solids
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	20000	mg/kg	Yes		12	5.9	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Boron	14	mg/kg	Yes	J	5.9	1.2	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Lithium	23	mg/kg	Yes		7.4	4.5	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Potassium	4800	mg/kg	Yes		59	22	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	75	mg/kg	Yes		59	28	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6010B	Zirconium	4	mg/kg	Yes	J	29	1.8	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6020	Antimony	3.3	mg/kg	Yes	J	1.2	0.035	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	4.2	mg/kg	Yes		0.59	0.29	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6020	Barium	100	mg/kg	Yes		0.59	0.094	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6020	Beryllium	0.64	mg/kg	Yes		0.35	0.047	IQC2079	No						

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	6020	Zinc	47	mg/kg	Yes	J	12	1.5	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	7471A	Mercury	0.011	mg/kg	Yes		0.012	0.00076	IQC2079	No	Test America	IQC2079	265755.875	1783181.85	Yes	
ESBS0019	ESBS0019S02	ESBS0019S02	2/16/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.54	pH Units	Yes		0	0	IQB1822	No	Test America	IQB1822	265755.875	1783181.85	No	pH, %Moisture, %Total solids
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	28000	mg/kg	Yes		12	6	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Boron	6	mg/kg	Yes	UJ	6	6	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Lithium	33	mg/kg	Yes	UJ	33	33	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Potassium	2900	mg/kg	Yes		60	23	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	340	mg/kg	Yes		60	29	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Zirconium	5.8	mg/kg	Yes		30	1.8	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.19	mg/kg	Yes		1.2	0.036	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	4.9	mg/kg	Yes		0.6	0.3	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Barium	110	mg/kg	Yes		0.6	0.096	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Beryllium	0.9	mg/kg	Yes		0.36	0.048	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Cadmium	0.17	mg/kg	Yes		0.6	0.03	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Chromium	31	mg/kg	Yes		1.2	0.42	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Cobalt	11	mg/kg	Yes		0.6	0.096	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Copper	12	mg/kg	Yes		1.2	0.24	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Lead	11	mg/kg	Yes		0.6	0.06	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Molybdenum	0.37	mg/kg	Yes	J	1.2	0.12	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Nickel	18	mg/kg	Yes		1.2	0.54	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Selenium	0.33	mg/kg	Yes		1.2	0.24	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Silver	0.089	mg/kg	Yes		0.6	0.06	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Thallium	0.31	mg/kg	Yes		0.6	0.12	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Vanadium	53	mg/kg	Yes		1.2	0.48	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Zinc	56	mg/kg	Yes		12	1.6	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	7471A	Mercury	0.029	mg/kg	Yes		0.012	0.00075	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Diesel Range Organics (C15-C20)	6	mg/kg	Yes	U	6	4.2	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Gasoline Range Organics (C8-C11)	6	mg/kg	Yes	U	6	4.2	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Kerosene Range Organics (C12-C14)	6	mg/kg	Yes	U	6	4.2	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Lubricant Oil Range Organics (C21-C30)	6	mg/kg	Yes	U	6	4.2	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1016	60	µg/kg	Yes	U	60	18	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1221	60	µg/kg	Yes	U	60	18	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1232	60	µg/kg	Yes	U	60	12	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1242	60	µg/kg	Yes	U	60	12	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1248	60	µg/kg	Yes	U	60	12	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1254	60	µg/kg	Yes	U	60	12	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1260	60	µg/kg	Yes	U	60	12	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	1-Methyl naphthalene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	2-Methylnaphthalene	140	µg/kg	Yes	U	24	2.1	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthene	24	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthylene	24	µg/kg	Yes	U	24	2	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Anthracene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)anthracene	24	µg/kg	Yes	U	24	2.6	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)pyrene	24	µg/kg	Yes	U	24	2.1	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(b)fluoranthene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(ghi)perylene	24	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(k)fluoranthene	24	µg/kg	Yes	U	24	3	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	bis(2-Ethylhexyl) phthalate	11	µg/kg	Yes	J	24	3.8	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Chrysene	24	µg/kg	Yes	U	24	2.5	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Dibenzo(a,h)anthracene	24	µg/kg	Yes	U	24	2.4	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Diethyl phthalate	24	µg/kg	Yes	U	24	2.4	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Di-n-butyl phthalate	17	µg/kg	Yes	J	24	2.6	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluoranthene	24	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluorene	24	µg/kg	Yes	U	24	2.1	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Indeno(1,2,3-cd)pyrene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	Extrapolated Result
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Naphthalene	120	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S01	ESBS0005S01	2/21/2																			

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6010B	Sodium	454	mg/kg	Yes		119	41.3	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6010B	Vanadium	64.8	mg/kg	Yes		0.594	0.19	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6010B	Zinc	75.6	mg/kg	Yes		2.38	0.778	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Antimony	0.0468	mg/kg	Yes	J	0.119	0.0059	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Arsenic	5.46	mg/kg	Yes		2.38	0.202	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Beryllium	0.862	mg/kg	Yes		0.0238	0.0033	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Cadmium	0.31	mg/kg	Yes		0.0297	0.0045	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Chromium	32.9	mg/kg	Yes		2.38	0.368	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Copper	13.6	mg/kg	Yes		1.19	0.416	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Lead	8.81	mg/kg	Yes		0.119	0.0178	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Nickel	16.9	mg/kg	Yes	J	2.38	0.594	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Selenium	0.461	mg/kg	Yes		2.38	0.439	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	6020	Thallium	0.274	mg/kg	Yes		0.0594	0.0011	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	7471A	Mercury	0.0232	mg/kg	Yes		0.118	0.0124	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8015B	Diesel Range Organics (C15-C20)	14	mg/kg	Yes	U	14	4.8	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8015B	Gasoline Range Organics (C8-C11)	14	mg/kg	Yes	U	14	4.8	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8015B	Kerosene Range Organics (C12-C14)	14	mg/kg	Yes	U	14	4.8	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8015B	Lubricant Oil Range Organics (C21-C30)	14	mg/kg	Yes	U	14	4.8	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8015B	Total Petroleum Hydrocarbons	14	mg/kg	Yes	R	14	4.8	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Data Rejected; Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8082	Aroclor 1016	20	µg/kg	Yes	U	20	3.9	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8082	Aroclor 1221	20	µg/kg	Yes	U	20	6.2	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8082	Aroclor 1232	20	µg/kg	Yes	U	20	3.9	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8082	Aroclor 1242	20	µg/kg	Yes	U	20	3.9	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8082	Aroclor 1248	20	µg/kg	Yes	U	20	3.9	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8082	Aroclor 1254	20	µg/kg	Yes	U	20	3.9	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8082	Aroclor 1260	5.3	µg/kg	Yes	J	20	3.9	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	1-Methyl naphthalene	4	µg/kg	Yes	U	4	2	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	2-Methylnaphthalene	2	µg/kg	Yes	U	2	0.79	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Acenaphthene	2	µg/kg	Yes	U	2	0.79	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Acenaphthylene	2	µg/kg	Yes	U	2	0.4	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Anthracene	2	µg/kg	Yes	U	2	0.4	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Benzo(a)anthracene	0.99	µg/kg	Yes	J	2	0.79	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Benzo(a)pyrene	0.98	µg/kg	Yes	J	2	0.79	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Benzo(b)fluoranthene	1.8	µg/kg	Yes	J	2	1.6	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Benzo(ghi)perylene	2	µg/kg	Yes	U	2	1.2	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Benzo(k)fluoranthene	2	µg/kg	Yes	U	2	1.2	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Chrysene	2.2	µg/kg	Yes		2	0.4	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Dibenzo(a,h)anthracene	2	µg/kg	Yes	U	2	1.2	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Fluoranthene	2.1	µg/kg	Yes		2	0.79	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Fluorene	2	µg/kg	Yes	U	2	0.79	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Indeno(1,2,3-cd)pyrene	2	µg/kg	Yes	U	2	1.2	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Naphthalene	4	µg/kg	Yes	U	4	1.2	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Phenanthrene	1	µg/kg	Yes	J	2	0.79	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	8270C SIM	Pyrene	1.9	µg/kg	Yes	J	2	0.79	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	Duplicate or Split Data
ESBS0005	ESBS0005S01SP	ESBS0005S01SP	2/21/2007	Soil	Split Sample	Primary Result	9045C	pH	8.59	pH Units	Yes		0.01	0.01	1026673	No	Lancaster Laboratories	1026673	265927.773	1782986.4	No	pH, %Moisture, %Total solids
ESBS0005	ESBS0005S02	ESBS0005S02	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	9800	mg/kg	Yes		11	5.3	IQC2079	No	Test America	IQC2079	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S02	ESBS0005S02	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	220	mg/kg	Yes		53	26	IQC2079	No	Test America	IQC2079	265927.773	1782986.4	Yes	
ESBS0005	ESBS0005S02	ESBS0005S02	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	9.16	pH Units	Yes		0	0	IQB2451	No	Test America	IQB2451	265927.773	1782986.4	No	pH, %Moisture, %Total solids
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	24000	mg/kg	Yes		12	5.9	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Boron	5.9	mg/kg	Yes	UJ	5.9	5.9	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Lithium	33	mg/kg	Yes	UJ	33	33	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Potassium	3700	mg/kg	Yes		59	23	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	220	mg/kg	Yes		59	29	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Zirconium	5.6	mg/kg	Yes		30	1.8	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6020															

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Thallium	0.31	mg/kg	Yes		0.59	0.12	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Vanadium	51	mg/kg	Yes		1.2	0.48	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Zinc	60	mg/kg	Yes		12	1.5	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	7471A	Mercury	0.059	mg/kg	Yes		0.012	0.00076	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Diesel Range Organics (C15-C20)	5.9	mg/kg	Yes	U	5.9	4.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Gasoline Range Organics (C8-C11)	5.9	mg/kg	Yes	U	5.9	4.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Kerosene Range Organics (C12-C14)	5.9	mg/kg	Yes	U	5.9	4.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Lubricant Oil Range Organics (C21-C30)	4.7	mg/kg	Yes	J	5.9	4.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1016	59	µg/kg	Yes	U	59	18	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1221	59	µg/kg	Yes	U	59	18	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1232	59	µg/kg	Yes	U	59	12	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1242	59	µg/kg	Yes	U	59	12	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1248	59	µg/kg	Yes	U	59	12	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1254	20	µg/kg	Yes	J	59	12	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1260	21	µg/kg	Yes	J	59	12	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	1-Methyl naphthalene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	2-Methylnaphthalene	24	µg/kg	Yes	U	24	2.1	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthylene	24	µg/kg	Yes	U	24	2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Anthracene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)anthracene	24	µg/kg	Yes	U	24	2.6	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)pyrene	24	µg/kg	Yes	U	24	2.1	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(b)fluoranthene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(ghi)perylene	12	µg/kg	Yes	J	24	2.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(k)fluoranthene	24	µg/kg	Yes	U	24	3	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	bis(2-Ethylhexyl) phthalate	13	µg/kg	Yes	J	24	3.7	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Chrysene	24	µg/kg	Yes	U	24	2.5	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Dibenzo(a,h)anthracene	24	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Diethyl phthalate	24	µg/kg	Yes	U	24	2.4	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Di-n-butyl phthalate	19	µg/kg	Yes	J	24	2.5	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluoranthene	6.1	µg/kg	Yes	J	24	2.3	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluorene	24	µg/kg	Yes	U	24	2.1	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	Extrapolated Result
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Indeno(1,2,3-cd)pyrene	9.1	µg/kg	Yes	J	24	2.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Naphthalene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	n-Nitrosodimethylamine	24	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Phenanthrene	24	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Pyrene	7.7	µg/kg	Yes	J	24	3	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S01	ESBS0008S01	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.91	pH Units	Yes		0	0	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	pH, %Moisture, %Total solids
ESBS0008	ESBS0008S02	ESBS0008S02	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	19000	mg/kg	Yes		11	5.7	IQC2079	No	Test America	IQC2079	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S02	ESBS0008S02	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	540	mg/kg	Yes		57	27	IQC2079	No	Test America	IQC2079	265908.335	1783085.54	Yes	
ESBS0008	ESBS0008S02	ESBS0008S02	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.7	pH Units	Yes		0	0	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	pH, %Moisture, %Total solids
ESBS0008	ESBS0008S03	ESBS0008S03	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.87	pH Units	Yes		0	0	IQB2451	No	Test America	IQB2451	265908.335	1783085.54	No	pH, %Moisture, %Total solids
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	21000	mg/kg	Yes		12	6.2	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Boron	7.4	mg/kg	Yes	UJ	7.4	7.4	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Lithium	30	mg/kg	Yes	UJ	30	30	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Potassium	5500	mg/kg	Yes		62	24	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	200	mg/kg	Yes		62	30	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Zirconium	4.7	mg/kg	Yes		31	1.9	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.2	mg/kg	Yes		1.2	0.037	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	4	mg/kg	Yes		0.62	0.31	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Barium	92	mg/kg	Yes		0.62	0.099	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Beryllium	0.71	mg/kg	Yes		0.37	0.05	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Cadmium	0.28	mg/kg	Yes		0.62	0.031	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Chromium	28	mg/kg	Yes		1.2	0.43	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Cobalt	9	mg/kg	Yes		0.62	0.099	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Copper	14	mg/kg	Yes		1.2	0.25	IQB2451	No	Test America	IQB2451	265992.384	1783		

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Kerosene Range Organics (C12-C14)	6.2	mg/kg	Yes	U	6.2	4.3	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8015B	Lubricant Oil Range Organics (C21-C30)	4.5	mg/kg	Yes	J	6.2	4.3	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1016	62	µg/kg	Yes	U	62	19	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1221	62	µg/kg	Yes	U	62	19	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1232	62	µg/kg	Yes	U	62	12	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1242	62	µg/kg	Yes	U	62	12	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1248	62	µg/kg	Yes	U	62	12	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1254	30	µg/kg	Yes	J	62	12	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1260	62	µg/kg	Yes	U	62	12	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	1-Methyl naphthalene	26	µg/kg	Yes	U	26	2.3	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	2-Methylnaphthalene	26	µg/kg	Yes	U	26	2.2	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthene	26	µg/kg	Yes	U	26	2.4	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthylene	26	µg/kg	Yes	U	26	2.1	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Anthracene	26	µg/kg	Yes	U	26	2.3	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)anthracene	26	µg/kg	Yes	U	26	2.8	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)pyrene	26	µg/kg	Yes	U	26	2.2	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(b)fluoranthene	26	µg/kg	Yes	U	26	2.3	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(ghi)perylene	26	µg/kg	Yes	U	26	2.4	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(k)fluoranthene	26	µg/kg	Yes	U	26	3.2	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	bis(2-Ethylhexyl) phthalate	34	µg/kg	Yes	U	26	4	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Chrysene	26	µg/kg	Yes	U	26	2.6	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Dibenzo(a,h)anthracene	26	µg/kg	Yes	U	26	2.5	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Diethyl phthalate	26	µg/kg	Yes	U	26	2.6	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Di-n-butyl phthalate	14	µg/kg	Yes	J	26	2.7	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluoranthene	26	µg/kg	Yes	U	26	2.4	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluorene	26	µg/kg	Yes	U	26	2.2	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Indeno(1,2,3-cd)pyrene	26	µg/kg	Yes	U	26	2.3	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Naphthalene	26	µg/kg	Yes	U	26	2.4	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	n-Nitrosodimethylamine	26	µg/kg	Yes	U	26	2.5	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Phenanthrene	26	µg/kg	Yes	U	26	2.4	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Pyrene	26	µg/kg	Yes	U	26	3.2	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	Extrapolated Result
ESBS0010	ESBS0010S01	ESBS0010S01	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.15	pH Units	Yes		0	0	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	pH, %Moisture, %Total solids
ESBS0010	ESBS0010S02	ESBS0010S02	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	23000	mg/kg	Yes		11	5.7	IQC2079	No	Test America	IQC2079	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S02	ESBS0010S02	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	130	mg/kg	Yes		57	27	IQC2079	No	Test America	IQC2079	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S02	ESBS0010S02	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.14	pH Units	Yes		0	0	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	pH, %Moisture, %Total solids
ESBS0010	ESBS0010S03	ESBS0010S03	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	17000	mg/kg	Yes		12	5.8	IQD0373	No	Test America	IQD0373	265992.384	1783155.05	Yes	
ESBS0010	ESBS0010S03	ESBS0010S03	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.98	pH Units	Yes		0	0	IQB2451	No	Test America	IQB2451	265992.384	1783155.05	No	pH, %Moisture, %Total solids
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	21000	mg/kg	Yes		12	5.8	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Boron	8.1	mg/kg	Yes		5.8	1.2	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Lithium	28	mg/kg	Yes	UJ	28	28	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Potassium	5600	mg/kg	Yes		58	22	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	200	mg/kg	Yes		58	28	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Zirconium	3.9	mg/kg	Yes		29	1.7	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.19	mg/kg	Yes		1.2	0.035	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	4	mg/kg	Yes		0.58	0.29	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Barium	96	mg/kg	Yes		0.58	0.093	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Beryllium	0.69	mg/kg	Yes		0.35	0.046	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Cadmium	0.27	mg/kg	Yes		0.58	0.029	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Chromium	27	mg/kg	Yes		1.2	0.41	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Cobalt	8.6	mg/kg	Yes		0.58	0.093	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Copper	14	mg/kg	Yes		1.2	0.23	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Lead	9.8	mg/kg	Yes		0.58	0.058	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Molybdenum	0.43	mg/kg	Yes	J	1.2	0.12	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Nickel	17	mg/kg	Yes		1.2	0.52	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Selenium	0.36	mg/kg	Yes		1.2	0.23	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	6020	Silver	0.058	mg/kg	Yes	U	0.58	0.058	IQB2451	No	Test America	IQB2451	265			

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1242	58	µg/kg	Yes	U	58	12	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1248	58	µg/kg	Yes	U	58	12	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1254	28	µg/kg	Yes	J	58	12	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8082	Aroclor 1260	18	µg/kg	Yes	J	58	12	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	1-Methyl naphthalene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	2-Methylnaphthalene	24	µg/kg	Yes	U	24	2.1	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	No	Extrapolated Result
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Acenaphthylene	24	µg/kg	Yes	U	24	2	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	No	Extrapolated Result
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Anthracene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	No	Extrapolated Result
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)anthracene	44	µg/kg	Yes	U	24	2.6	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(a)pyrene	32	µg/kg	Yes	U	24	2.1	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(b)fluoranthene	45	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(ghi)perylene	17	µg/kg	Yes	J	24	2.2	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Benzo(k)fluoranthene	19	µg/kg	Yes	J	24	3	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	bis(2-Ethylhexyl) phthalate	23	µg/kg	Yes	J	24	3.7	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Chrysene	56	µg/kg	Yes	U	24	2.5	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Dibenzo(a,h)anthracene	24	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	No	Extrapolated Result
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Diethyl phthalate	24	µg/kg	Yes	U	24	2.4	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Di-n-butyl phthalate	13	µg/kg	Yes	J	24	2.5	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluoranthene	96	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Fluorene	24	µg/kg	Yes	U	24	2.1	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Indeno(1,2,3-cd)pyrene	17	µg/kg	Yes	J	24	2.2	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Naphthalene	24	µg/kg	Yes	U	24	2.2	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	n-Nitrosodimethylamine	24	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Phenanthrene	54	µg/kg	Yes	U	24	2.3	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	8270C SIM	Pyrene	130	µg/kg	Yes	U	24	3	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S01	ESBS0011S01	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.89	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	No	pH, %Moisture, %Total solids
ESBS0011	ESBS0011S02	ESBS0011S02	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	24000	mg/kg	Yes	U	12	5.9	IQC2079	No	Test America	IQC2079	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S02	ESBS0011S02	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	150	mg/kg	Yes	U	59	28	IQC2079	No	Test America	IQC2079	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S02	ESBS0011S02	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.1	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	No	pH, %Moisture, %Total solids
ESBS0011	ESBS0011S03	ESBS0011S03	2/21/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	23000	mg/kg	Yes	U	12	6.1	IQD0373	No	Test America	IQD0373	265991.611	1783192.17	Yes	
ESBS0011	ESBS0011S03	ESBS0011S03	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.1	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265991.611	1783192.17	No	pH, %Moisture, %Total solids
ESBS0015S01	ESBS0015S01	ESBS0015S01	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.95	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265845.787	1783203.43	No	pH, %Moisture, %Total solids
ESBS0015S01	ESBS0015S04	ESBS0015S04	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.38	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265845.787	1783203.43	No	pH, %Moisture, %Total solids
ESBS0015S02	ESBS0015S02	ESBS0015S02	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.62	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265849.13	1783193.96	No	pH, %Moisture, %Total solids
ESBS0015S02	ESBS0015S05	ESBS0015S05	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.41	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265849.13	1783193.96	No	pH, %Moisture, %Total solids
ESBS0015S03	ESBS0015S03	ESBS0015S03	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.69	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265838.181	1783190.28	No	pH, %Moisture, %Total solids
ESBS0015S03	ESBS0015S06	ESBS0015S06	2/21/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.46	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265838.181	1783190.28	No	pH, %Moisture, %Total solids
ESBS0015S70	ESBS0015S70	ESBS0015S70	2/21/2007	Soil	Composite Sample	Primary Result	6020	Lead	1.4	mg/kg	Yes	U	0.54	0.054	IQB2451	No	Test America	IQB2451	265844.366	1783195.89	Yes	
ESBS0015S70	ESBS0015S70	ESBS0015S70	2/21/2007	Soil	Composite Sample	Primary Result	8082	Aroclor 1016	54	µg/kg	Yes	U	54	16	IQB2451	No	Test America	IQB2451	265844.366	1783195.89	Yes	
ESBS0015S70	ESBS0015S70	ESBS0015S70	2/21/2007	Soil	Composite Sample	Primary Result	8082	Aroclor 1221	54	µg/kg	Yes	U	54	16	IQB2451	No	Test America	IQB2451	265844.366	1783195.89	Yes	
ESBS0015S70	ESBS0015S70	ESBS0015S70	2/21/2007	Soil	Composite Sample	Primary Result	8082	Aroclor 1232	54	µg/kg	Yes	U	54	11	IQB2451	No	Test America	IQB2451	265844.366	1783195.89	Yes	
ESBS0015S70	ESBS0015S70	ESBS0015S70	2/21/2007	Soil	Composite Sample	Primary Result	8082	Aroclor 1242	54	µg/kg	Yes	U	54	11	IQB2451	No	Test America	IQB2451	265844.366	1783195.89	Yes	
ESBS0015S70	ESBS0015S70	ESBS0015S70	2/21/2007	Soil	Composite Sample	Primary Result	8082	Aroclor 1248	54	µg/kg	Yes	U	54	11	IQB2451	No	Test America	IQB2451	265844.366	1783195.89	Yes	
ESBS0015S70	ESBS0015S70	ESBS0015S70	2/21/2007	Soil	Composite Sample	Primary Result	8082	Aroclor 1254	54	µg/kg	Yes	U	54	11	IQB2451	No	Test America	IQB2451	265844.366	1783195.89	Yes	
ESBS0015S70	ESBS0015S70	ESBS0015S70	2/21/2007	Soil	Composite Sample	Primary Result	8082	Aroclor 1260	54	µg/kg	Yes	U	54	11	IQB2451	No	Test America	IQB2451	265844.366	1783195.89	Yes	
ESBS0015S70	ESBS0015S70	ESBS0015S70	2/21/2007	Soil	Composite Sample	Primary Result	9045C	pH	7.59	pH Units	Yes	U	0	0	IQB2451	No	Test America	IQB2451	265844.366	1783195.89	No	pH, %Moisture, %Total solids
ESBS0022	ESBS0022S01	ESBS0022S01	4/3/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	30100	mg/kg	Yes	U	22.9	7.77	183796	No	GEL	183796	265895.64	1782909.28	Yes	
ESBS0022	ESBS0022S01	ESBS0022S01	4/3/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	116	mg/kg	Yes	U	17.1	5.14	183796	No	GEL	183796	265895.64	1782909.28	Yes	
ESBS0022	ESBS0022S01	ESBS0022S01	4/3/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.48	pH Units	Yes	U	0.1	0.01	183796	No	GEL	183796	265895.64	1782909.28	No	pH, %Moisture, %Total solids
ESBS0022	ESBS0022S02	ESBS0022S02	4/3/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	14200	mg/kg	Yes	U	22.3	7.57	186314H	No	GEL	186314H	265895.64	1782909.28	Yes	
ESBS0022	ESBS0022S02	ESBS0022S02	4/3/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	454	mg/kg	Yes	U	16.7	5.01	186314H	No	GEL	186314H	265895.64	1782909.28	Yes	
ESBS0023	ESBS0023S01	ESBS0023S01	4/3/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	25200	mg/kg	Yes	U	21.3	7.24	183796	No	GEL	183796	265977.191	1782999.52	Yes	
ESBS0023	ESBS0023S01	ESBS0023S01	4/3/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	118	mg/kg	Yes	U	16	4.79	183796	No	GEL	183796	265977.191	1782999.52	Yes	
ESBS0023	ESBS0023S01	ESBS0023S01	4/3/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.66	pH Units	Yes	U	0.1	0.01	183796	No	GEL	183796	265977.191	1782999.52	No	pH, %Moisture, %Total solids
ESBS0024	ESBS0024S01	ESBS0024S01	4/3/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	24900	mg/kg</												

**Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table**

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESBS0032	ESBS0032D01	ESBS0032D01	4/3/2007	Soil	Field Duplicate	Primary Result	6020	Arsenic	3.9	mg/kg	Yes		1.1	0.331	183796	No	GEL	183796	265705.095	1783258.65	No	Duplicate or Split Data
ESBS0032	ESBS0032D01	ESBS0032D01	4/3/2007	Soil	Field Duplicate	Primary Result	6020	Lead	7.9	mg/kg	Yes		0.441	0.11	183796	No	GEL	183796	265705.095	1783258.65	No	Duplicate or Split Data
ESBS0032	ESBS0032D01	ESBS0032D01	4/3/2007	Soil	Field Duplicate	Primary Result	9045C	pH	8.04	pH Units	Yes		0.1	0.01	183796	No	GEL	183796	265705.095	1783258.65	No	pH, %Moisture, %Total solids
ESBS0032	ESBS0032S01	ESBS0032S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.109	mg/kg	Yes	UJ	0.436	0.109	183796	No	GEL	183796	265705.095	1783258.65	Yes	
ESBS0032	ESBS0032S01	ESBS0032S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	5.1	mg/kg	Yes		1.09	0.327	183796	No	GEL	183796	265705.095	1783258.65	Yes	
ESBS0032	ESBS0032S01	ESBS0032S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Lead	11.6	mg/kg	Yes		0.436	0.109	183796	No	GEL	183796	265705.095	1783258.65	Yes	
ESBS0032	ESBS0032S01	ESBS0032S01	4/3/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.84	pH Units	Yes		0.1	0.01	183796	No	GEL	183796	265705.095	1783258.65	No	pH, %Moisture, %Total solids
ESBS0033	ESBS0033S01	ESBS0033S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.109	mg/kg	Yes	UJ	0.436	0.109	183796	No	GEL	183796	265713.765	1783181.72	Yes	
ESBS0033	ESBS0033S01	ESBS0033S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	6.2	mg/kg	Yes		1.09	0.327	183796	No	GEL	183796	265713.765	1783181.72	Yes	
ESBS0033	ESBS0033S01	ESBS0033S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Lead	12.8	mg/kg	Yes		0.436	0.109	183796	No	GEL	183796	265713.765	1783181.72	Yes	
ESBS0033	ESBS0033S01	ESBS0033S01	4/3/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.1	pH Units	Yes		0.1	0.01	183796	No	GEL	183796	265713.765	1783181.72	No	pH, %Moisture, %Total solids
ESBS0034	ESBS0034S01	ESBS0034S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.113	mg/kg	Yes	UJ	0.45	0.113	183796	No	GEL	183796	265747.577	1783134.52	Yes	
ESBS0034	ESBS0034S01	ESBS0034S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	5.4	mg/kg	Yes		1.13	0.338	183796	No	GEL	183796	265747.577	1783134.52	Yes	
ESBS0034	ESBS0034S01	ESBS0034S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Lead	11	mg/kg	Yes		0.45	0.113	183796	No	GEL	183796	265747.577	1783134.52	Yes	
ESBS0034	ESBS0034S01	ESBS0034S01	4/3/2007	Soil	Primary Sample	Primary Result	9045C	pH	7.88	pH Units	Yes		0.1	0.01	183796	No	GEL	183796	265747.577	1783134.52	No	pH, %Moisture, %Total solids
ESBS0034	ESBS0034S01SP	ESBS0034S01SP	4/3/2007	Soil	Split Sample	Primary Result	6020	Antimony	0.24	mg/kg	Yes	R	0.24	0.12	G7D060344	No	STL-SAC	G7D060344	265747.577	1783134.52	No	Data Rejected; Duplicate or Split Data
ESBS0034	ESBS0034S01SP	ESBS0034S01SP	4/3/2007	Soil	Split Sample	Primary Result	6020	Arsenic	5.5	mg/kg	Yes		0.24	0.18	G7D060344	No	STL-SAC	G7D060344	265747.577	1783134.52	No	Duplicate or Split Data
ESBS0034	ESBS0034S01SP	ESBS0034S01SP	4/3/2007	Soil	Split Sample	Primary Result	6020	Lead	8.7	mg/kg	Yes		0.12	0.072	G7D060344	No	STL-SAC	G7D060344	265747.577	1783134.52	No	Duplicate or Split Data
ESBS0034	ESBS0034S01SP	ESBS0034S01SP	4/3/2007	Soil	Split Sample	Primary Result	9045C	pH	8	pH Units	Yes		0.1	0.1	G7D060344	No	STL-SAC	G7D060344	265747.577	1783134.52	No	pH, %Moisture, %Total solids
ESBS0035	ESBS0035S01	ESBS0035S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.115	mg/kg	Yes	UJ	0.46	0.115	183796	No	GEL	183796	265790.189	1783234.85	Yes	
ESBS0035	ESBS0035S01	ESBS0035S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	5.7	mg/kg	Yes		1.15	0.345	183796	No	GEL	183796	265790.189	1783234.85	Yes	
ESBS0035	ESBS0035S01	ESBS0035S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Lead	9.1	mg/kg	Yes		0.46	0.115	183796	No	GEL	183796	265790.189	1783234.85	Yes	
ESBS0035	ESBS0035S01	ESBS0035S01	4/3/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.03	pH Units	Yes		0.1	0.01	183796	No	GEL	183796	265790.189	1783234.85	No	pH, %Moisture, %Total solids
ESBS0036	ESBS0036S01	ESBS0036S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Antimony	0.12	mg/kg	Yes	J	0.422	0.105	183796	No	GEL	183796	265898.188	1783254.82	Yes	
ESBS0036	ESBS0036S01	ESBS0036S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Arsenic	2.4	mg/kg	Yes		1.05	0.316	183796	No	GEL	183796	265898.188	1783254.82	Yes	
ESBS0036	ESBS0036S01	ESBS0036S01	4/3/2007	Soil	Primary Sample	Primary Result	6020	Lead	18.5	mg/kg	Yes		0.422	0.105	183796	No	GEL	183796	265898.188	1783254.82	Yes	
ESBS0036	ESBS0036S01	ESBS0036S01	4/3/2007	Soil	Primary Sample	Primary Result	9045C	pH	8.14	pH Units	Yes		0.1	0.01	183796	No	GEL	183796	265898.188	1783254.82	No	pH, %Moisture, %Total solids
ESBS0042	ESBS0042S01	ESBS0042S01	5/14/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	17100	mg/kg	Yes		22	7.48	186012	No	GEL	186012	265756.751	1782896.76	Yes	
ESBS0042	ESBS0042S01	ESBS0042S01	5/14/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	61	mg/kg	Yes		16.5	4.95	186012	No	GEL	186012	265756.751	1782896.76	Yes	
ESBS0042	ESBS0042S02	ESBS0042S02	5/14/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	16900	mg/kg	Yes		21.7	7.39	186012	No	GEL	186012	265756.751	1782896.76	Yes	
ESBS0042	ESBS0042S02	ESBS0042S02	5/14/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	85.7	mg/kg	Yes		16.3	4.89	186012	No	GEL	186012	265756.751	1782896.76	Yes	
ESBS0038	ESBS0038S01	ESBS0038S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	16400	mg/kg	Yes		20.9	7.11	186102	No	GEL	186102	265991.774	1782866.83	Yes	
ESBS0038	ESBS0038S01	ESBS0038S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	64.5	mg/kg	Yes		15.7	4.71	186102	No	GEL	186102	265991.774	1782866.83	Yes	
ESBS0038	ESBS0038S02	ESBS0038S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	13700	mg/kg	Yes		21.1	7.19	186102	No	GEL	186102	265991.774	1782866.83	Yes	
ESBS0038	ESBS0038S02	ESBS0038S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	76.2	mg/kg	Yes		15.9	4.76	186102	No	GEL	186102	265991.774	1782866.83	Yes	
ESBS0039	ESBS0039S01	ESBS0039S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	15900	mg/kg	Yes		21.6	7.35	186102	No	GEL	186102	265845.408	1782834.51	Yes	
ESBS0039	ESBS0039S01	ESBS0039S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	80.6	mg/kg	Yes		16.2	4.86	186102	No	GEL	186102	265845.408	1782834.51	Yes	
ESBS0039	ESBS0039S02	ESBS0039S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	11500	mg/kg	Yes		20.5	6.98	186102	No	GEL	186102	265845.408	1782834.51	Yes	
ESBS0039	ESBS0039S02	ESBS0039S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	72.8	mg/kg	Yes		15.4	4.62	186102	No	GEL	186102	265845.408	1782834.51	Yes	
ESBS0040	ESBS0040S01	ESBS0040S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	18800	mg/kg	Yes		21.3	7.25	186102	No	GEL	186102	265804.67	1782973.37	Yes	
ESBS0040	ESBS0040S01	ESBS0040S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	74.6	mg/kg	Yes		16	4.8	186102	No	GEL	186102	265804.67	1782973.37	Yes	
ESBS0040	ESBS0040S02	ESBS0040S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	13400	mg/kg	Yes		23.1	7.84	186102	No	GEL	186102	265804.67	1782973.37	Yes	
ESBS0040	ESBS0040S02	ESBS0040S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	202	mg/kg	Yes		17.3	5.19	186102	No	GEL	186102	265804.67	1782973.37	Yes	
ESBS0041	ESBS0041S01	ESBS0041S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	15100	mg/kg	Yes		21.2	7.21	186102	No	GEL	186102	265683.92	1783036.55	Yes	
ESBS0041	ESBS0041S01	ESBS0041S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	82.5	mg/kg	Yes		15.9	4.77	186102	No	GEL	186102	265683.92	1783036.55	Yes	
ESBS0041	ESBS0041S02	ESBS0041S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	23700	mg/kg	Yes		22.2	7.56	186102	No	GEL	186102	265683.92	1783036.55	Yes	
ESBS0041	ESBS0041S02	ESBS0041S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	145	mg/kg	Yes		16.7	5	186102	No	GEL	186102	265683.92	1783036.55	Yes	
ESBS0043	ESBS0043S01	ESBS0043S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	13500	mg/kg	Yes		20.4	6.93	186102	No	GEL	186102	265939.766	1782797.26	Yes	
ESBS0043	ESBS0043S01	ESBS0043S01	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	83.7	mg/kg	Yes		15.3	4.59	186102	No	GEL	186102	265939.766	1782797.26	Yes	
ESBS0043	ESBS0043S02	ESBS0043S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Aluminum	15800	mg/kg	Yes		21.7	7.37	186102	No	GEL	186102	265939.766	1782797.26	Yes	
ESBS0043	ESBS0043S02	ESBS0043S02	5/15/2007	Soil	Primary Sample	Primary Result	6010B	Sodium	86.3	mg/kg	Yes		16.3	4.88	186102	No	GEL	186102	265939.766	1782797.26	Yes	
ESSV01	RV720	ESSV01S01	9/28/1999	Soil Vapor	Primary Sample	Primary Result	8260	1,1,1,2-Tetrachloroethane	1	µg/L	Yes	U	1		10	No	Centrum	T300V050	265845	1783090	Yes	
ESSV01	RV720	ESSV01S01	9/28/1999	Soil Vapor	Primary Sample	Primary Result	8260	1,1,1-Trichloroethane	1	µg/L	Yes	U	1		10	No	Centrum	T300V050	265845	1783090	Yes	
ESSV01	RV720	ESSV01S01	9/28/1999	Soil Vapor	Primary Sample	Primary Result	8260	1,1,2,2-Tetrachloroethane	1	µg/L	Yes	U	1		10	No	Centrum	T300V050	265845	1783090	Yes	
ESSV01	RV720	ESSV01S01	9/28/1999	Soil Vapor	Primary Sample	Primary Result	8260	1,1,2-Trichloro-1,2,2-trifluoroethane	1	µg/L	Yes	U	1		10	No	Centrum	T300V050	265845	1783090	Yes	
ESSV01	RV720	ESSV01S01	9/28/1999	Soil Vapor	Primary Sample	Primary Result	8260	1,1,2-Trichloroethane	1	µg/L	Yes	U	1		10	No	Centrum	T300V050	265845	1783090	Yes	
ESSV01	RV720	ESSV01S01	9/28/1999	Soil Vapor	Primary Sample	Primary Result	8260	1,1-Dichloroethane	1	µg/L	Yes	U	1		10	No	Centrum	T300				

Group 8 RFI Report
Attachment C-3
ESADA RFI Site Data Table

Object Name	Sample Name	Sample Identification	Collection Date	Matrix	Sample Type	Result Type	Analytical Method	Analyte	Concentration	Units	Validated	Project Qualifier	PQL	MDL	Sample Delivery Group	Excavated	Analytical Laboratory	Validation Report Number	Northings	Eastings	Included in Risk Assessment	Rationale for Risk Exclusion
ESSV0009	ESSV0009S01	ESSV0009S01	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	50	µg/L	Yes	U	50	1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S01	ESSV0009S01	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	2	µg/L	Yes	U	2	0.3	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S01	ESSV0009S01	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	o-Xylene	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S01	ESSV0009S01	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S01	ESSV0009S01	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S01	ESSV0009S01	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	1	µg/L	Yes	U	1	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S01	ESSV0009S01	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Trichloroethene	1	µg/L	Yes	U	1	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S01	ESSV0009S01	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	1	µg/L	Yes	U	1	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S01	ESSV0009S01	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Vinyl chloride	2	µg/L	Yes	U	2	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1,2-Tetrachloroethane	1	µg/L	Yes	U	1	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,1-Trichloroethane	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2,2-Tetrachloroethane	2	µg/L	Yes	U	2	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	Yes	U	5	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	1,1,2-Trichloroethane	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethane	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	1,1-Dichloroethene	1	µg/L	Yes	U	1	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	1,2-Dichloroethane	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Benzene	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Carbon Tetrachloride	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroethane	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Chloroform	1	µg/L	Yes	U	1	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	cis-1,2-Dichloroethene	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Dichlorodifluoromethane	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Ethylbenzene	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Methylene chloride	50	µg/L	Yes	U	50	1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	m-Xylene & p-Xylene	2	µg/L	Yes	U	2	0.3	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	o-Xylene	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Tetrachloroethene	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Toluene	1	µg/L	Yes	U	1	0.1	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	trans-1,2-Dichloroethene	1	µg/L	Yes	U	1	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Trichloroethene	1	µg/L	Yes	U	1	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Trichlorofluoromethane	1	µg/L	Yes	U	1	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	
ESSV0009	ESSV0009S02	ESSV0009S02	3/6/2007	Soil Vapor	Primary Sample	Primary Result	8260B	Vinyl chloride	2	µg/L	Yes	U	2	0.2	M4-959A	No	Centrum	M4-959A	265968.934	1783144.31	Yes	