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February 2014

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NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 016	**Work Order #....:**	LLF3L1AQ	**Matrix....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.98
Prep Date....:	10/13/09	**Analysis Date....:**	11/03/09	**Percent Moisture:**	21
Prep Batch # ....:	9286433	**Instrument ID....:**	1D5		
Initial Wgt/Vol :	10.16 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.2	0.40	pg/g
Total TCDD	ND		1.2	0.40	pg/g
1,2,3,7,8-PeCDD	ND		6.2	0.77	pg/g
Total PeCDD	**1.7**		**6.2**	**0.77**	**pg/g**
1,2,3,4,7,8-HxCDD	ND		6.2	0.65	pg/g
1,2,3,6,7,8-HxCDD	ND		6.2	0.56	pg/g
1,2,3,7,8,9-HxCDD	ND		6.2	0.56	pg/g
Total HxCDD	ND		6.2	0.65	pg/g
1,2,3,4,6,7,8-HpCDD	ND		6.2	0.65	pg/g
Total HpCDD	**1.2**		**6.2**	**0.65**	**pg/g**
OCDD	**16**		**12**	**1.4**	**pg/g**
Total TCDF	**2.9**		**1.2**	**0.39**	**pg/g**
1,2,3,7,8-PeCDF	**0.83**	**J B**	**6.2**	**0.53**	**pg/g**
2,3,4,7,8-PeCDF	**0.67**	**J**	**6.2**	**0.54**	**pg/g**
Total PeCDF	**4.0**		**6.2**	**0.53**	**pg/g**
1,2,3,4,7,8-HxCDF	ND		6.2	0.64	pg/g
1,2,3,6,7,8-HxCDF	ND		6.2	0.57	pg/g
2,3,4,6,7,8-HxCDF	ND		6.2	0.63	pg/g
1,2,3,7,8,9-HxCDF	ND		6.2	0.69	pg/g
Total HxCDF	ND		6.2	0.69	pg/g
1,2,3,4,6,7,8-HpCDF	ND		6.2	0.56	pg/g
1,2,3,4,7,8,9-HpCDF	ND		6.2	0.69	pg/g
Total HpCDF	ND		6.2	0.69	pg/g
OCDF	ND		12	1.2	pg/g

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	77	40 - 135
13C-1,2,3,7,8-PeCDD	69	40 - 135
13C-1,2,3,6,7,8-HxCDD	81	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	89	40 - 135
13C-OCDD	83	40 - 135
13C-2,3,7,8-TCDF	78	40 - 135
13C-1,2,3,7,8-PeCDF	78	40 - 135
13C-1,2,3,4,7,8-HxCDF	77	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	89	40 - 135

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NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 016	**Work Order #....:**	LLF3L1AQ	**Matrix.....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.98
Prep Date....:	10/13/09	**Analysis Date....:**	11/03/09	**Percent Moisture:**	21
Prep Batch # ....:	9286433	**Instrument ID....:**	1D5		
Initial Wgt/Vol :	10.16 g	**Analyst ID....:**	Sonia Ouni		

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated Result

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NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 016	**Work Order #....:**	LLF3L2AQ	**Matrix....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.98
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	21
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.17 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.2	0.036	pg/g
Total TCDD	ND		1.2	0.036	pg/g
1,2,3,7,8-PeCDD	ND		6.2	0.065	pg/g
Total PeCDD	ND		6.2	0.065	pg/g
1,2,3,4,7,8-HxCDD	ND		6.2	0.039	pg/g
1,2,3,6,7,8-HxCDD	ND		6.2	0.032	pg/g
1,2,3,7,8,9-HxCDD	ND		6.2	0.033	pg/g
Total HxCDD	ND		6.2	0.039	pg/g
1,2,3,4,6,7,8-HpCDD	**0.33**	**J B**	**6.2**	**0.061**	**pg/g**
Total HpCDD	**0.91**		**6.2**	**0.061**	**pg/g**
OCDD	**10**	**J B**	**12**	**0.075**	**pg/g**
2,3,7,8-TCDF	**0.13**	**J Q B**	**1.2**	**0.033**	**pg/g**
Total TCDF	**0.29**		**1.2**	**0.033**	**pg/g**
1,2,3,7,8-PeCDF	ND		6.2	0.029	pg/g
2,3,4,7,8-PeCDF	ND		6.2	0.031	pg/g
Total PeCDF	ND		6.2	0.033	pg/g
1,2,3,4,7,8-HxCDF	ND		6.2	0.023	pg/g
1,2,3,6,7,8-HxCDF	ND		6.2	0.021	pg/g
2,3,4,6,7,8-HxCDF	**0.023**	**J Q**	**6.2**	**0.022**	**pg/g**
1,2,3,7,8,9-HxCDF	ND		6.2	0.025	pg/g
Total HxCDF	**0.023**		**6.2**	**0.023**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.061**	**J Q**	**6.2**	**0.025**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		6.2	0.030	pg/g
Total HpCDF	**0.10**		**6.2**	**0.028**	**pg/g**
OCDF	**0.13**	**J Q B**	**12**	**0.031**	**pg/g**

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NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 016	**Work Order #....:**	LLF3L2AQ	**Matrix....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.98
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	21
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.17 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	93	40 - 135
13C-1,2,3,7,8-PeCDD	89	40 - 135
13C-1,2,3,6,7,8-HxCDD	98	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	91	40 - 135
13C-OCDD	77	40 - 135
13C-2,3,7,8-TCDF	79	40 - 135
13C-1,2,3,7,8-PeCDF	84	40 - 135
13C-1,2,3,4,7,8-HxCDF	89	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	83	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination The associated method blank contains the target analyte at a reportable level

J Estimated Result

Q Estimated maximum possible concentration (EMPC).

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NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 016	**Work Order #....:**	LLF3L3AQ	**Matrix....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.98
Prep Date....:	10/13/09	**Analysis Date....:**	11/03/09	**Percent Moisture:**	21
Prep Batch # ....:	9286433	**Instrument ID....:**	5D2		
Initial Wgt/Vol :	10.16 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDF	1.4	B	1.2	0.30	pg/g

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDF	78	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination. The associated method blank contains the target analyte at a reportable level

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NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 017	**Work Order #....:**	LLF3M1AF	**Matrix....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	1
Prep Date....:	10/13/09	**Analysis Date....:**	11/03/09	**Percent Moisture:**	8.3
Prep Batch # ....:	9286433	**Instrument ID....:**	1D5		
Initial Wgt/Vol :	10.03 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.35	pg/g
Total TCDD	ND		1.1	0.35	pg/g
1,2,3,7,8-PeCDD	ND		5.4	0.78	pg/g
Total PeCDD	ND		5.4	0.78	pg/g
1,2,3,4,7,8-HxCDD	ND		5.4	0.69	pg/g
1,2,3,6,7,8-HxCDD	ND		5.4	0.59	pg/g
1,2,3,7,8,9-HxCDD	ND		5.4	0.59	pg/g
Total HxCDD	ND		5.4	0.69	pg/g
1,2,3,4,6,7,8-HpCDD	ND		5.4	0.77	pg/g
Total HpCDD	**1.7**		**5.4**	**0.77**	**pg/g**
OCDD	**35**		**11**	**1.0**	**pg/g**
Total TCDF	**2.6**		**1.1**	**0.30**	**pg/g**
1,2,3,7,8-PeCDF	**1.1**	**J Q B**	**5.4**	**0.45**	**pg/g**
2,3,4,7,8-PeCDF	**0.52**	**J**	**5.4**	**0.46**	**pg/g**
Total PeCDF	**4.4**		**5.4**	**0.45**	**pg/g**
1,2,3,4,7,8-HxCDF	ND		5.4	0.55	pg/g
1,2,3,6,7,8-HxCDF	ND		5.4	0.49	pg/g
2,3,4,6,7,8-HxCDF	ND		5.4	0.54	pg/g
1,2,3,7,8,9-HxCDF	ND		5.4	0.59	pg/g
Total HxCDF	ND		5.4	0.59	pg/g
1,2,3,4,6,7,8-HpCDF	**0.61**	**J**	**5.4**	**0.56**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.4	0.69	pg/g
Total HpCDF	ND		5.4	0.69	pg/g
OCDF	ND		11	0.94	pg/g

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	80	40 - 135
13C-1,2,3,7,8-PeCDD	71	40 - 135
13C-1,2,3,6,7,8-HxCDD	88	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	87	40 - 135
13C-OCDD	78	40 - 135
13C-1,2,3,7,8-PeCDF	81	40 - 135
13C-1,2,3,4,7,8-HxCDF	86	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	93	40 - 135

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NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 017	**Work Order #....:**	LLF3M1AF	**Matrix.....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	1
Prep Date.....:	10/13/09	**Analysis Date....:**	11/03/09	**Percent Moisture:**	8.3
Prep Batch # ....:	9286433	**Instrument ID....:**	1D5		
Initial Wgt/Vol :	10.03 g	**Analyst ID....:**	Sonia Ouni		

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination The associated method blank contains the target analyte at a reportable level

J Estimated Result

Q Estimated maximum possible concentration (EMPC)

NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 017	**Work Order #....:**	LLF3M2AF	**Matrix....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.98
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	8.3
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.21 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.034	pg/g
Total TCDD	ND		1.1	0.034	pg/g
1,2,3,7,8-PeCDD	ND		5.3	0.050	pg/g
Total PeCDD	ND		5.3	0.050	pg/g
1,2,3,4,7,8-HxCDD	ND		5.3	0.033	pg/g
1,2,3,6,7,8-HxCDD	ND		5.3	0.027	pg/g
1,2,3,7,8,9-HxCDD	ND		5.3	0.028	pg/g
Total HxCDD	**0.15**		**5.3**	**0.029**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.76**	**J B**	**5.3**	**0.041**	**pg/g**
Total HpCDD	**2.2**		**5.3**	**0.041**	**pg/g**
OCDD	**38**	**B**	**11**	**0.16**	**pg/g**
2,3,7,8-TCDF	**0.15**	**J B**	**1.1**	**0.034**	**pg/g**
Total TCDF	**0.63**		**1.1**	**0.034**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.3	0.029	pg/g
2,3,4,7,8-PeCDF	ND		5.3	0.030	pg/g
Total PeCDF	ND		5.3	0.040	pg/g
1,2,3,4,7,8-HxCDF	ND		5.3	0.028	pg/g
1,2,3,6,7,8-HxCDF	ND		5.3	0.025	pg/g
2,3,4,6,7,8-HxCDF	ND		5.3	0.026	pg/g
1,2,3,7,8,9-HxCDF	ND		5.3	0.029	pg/g
Total HxCDF	**0.029**		**5.3**	**0.027**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.094**	**J Q**	**5.3**	**0.017**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.3	0.020	pg/g
Total HpCDF	**0.15**		**5.3**	**0.018**	**pg/g**
OCDF	**0.12**	**J Q B**	**11**	**0.029**	**pg/g**

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NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 017	**Work Order #....:**	LLF3M2AF	**Matrix....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.98
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	8.3
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.21 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	95	40 - 135
13C-1,2,3,7,8-PeCDD	91	40 - 135
13C-1,2,3,6,7,8-HxCDD	112	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	95	40 - 135
13C-OCDD	86	40 - 135
13C-2,3,7,8-TCDF	81	40 - 135
13C-1,2,3,7,8-PeCDF	84	40 - 135
13C-1,2,3,4,7,8-HxCDF	98	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	93	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated Result.

Q Estimated maximum possible concentration (EMPC).

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NCA Labs Korea Co, Ltd.

Sample ID: B09-199-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 017	**Work Order #....:**	LLF3M3AF	**Matrix....:**	SOLID
Date Sampled....:	09/21/09	**Date Received....:**	09/25/09	**Dilution Factor:**	1
Prep Date....:	10/13/09	**Analysis Date....:**	11/03/09	**Percent Moisture:**	8.3
Prep Batch # ....:	9286433	**Instrument ID....:**	5D2		
Initial Wgt/Vol :	10.03 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDF	1.2	B	1.1	0.26	pg/g

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDF	78	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

1310 [redacted] b6 11/20/2009

NCA Labs Korea Co, Ltd.

Sample ID: B09-198-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 020	**Work Order #....:**	LLF3Q2AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.95
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	8.1
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.5 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	**0.030**	**J Q B**	**1.0**	**0.026**	**pg/g**
Total TCDD	**0.030**		**1.0**	**0.026**	**pg/g**
1,2,3,7,8-PeCDD	ND		5.2	0.057	pg/g
Total PeCDD	ND		5.2	0.057	pg/g
1,2,3,4,7,8-HxCDD	ND		5.2	0.027	pg/g
1,2,3,6,7,8-HxCDD	**0.036**	**J Q**	**5.2**	**0.022**	**pg/g**
1,2,3,7,8,9-HxCDD	**0.079**	**J Q**	**5.2**	**0.023**	**pg/g**
Total HxCDD	**0.17**		**5.2**	**0.024**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.56**	**J B**	**5.2**	**0.043**	**pg/g**
Total HpCDD	**1.6**		**5.2**	**0.043**	**pg/g**
OCDD	**26**	**B**	**10**	**0.12**	**pg/g**
2,3,7,8-TCDF	**0.14**	**J B**	**1.0**	**0.023**	**pg/g**
Total TCDF	**0.22**		**1.0**	**0.023**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.2	0.031	pg/g
2,3,4,7,8-PeCDF	ND		5.2	0.032	pg/g
Total PeCDF	ND		5.2	0.033	pg/g
1,2,3,4,7,8-HxCDF	**0.067**	**J Q**	**5.2**	**0.015**	**pg/g**
1,2,3,6,7,8-HxCDF	**0.048**	**J Q**	**5.2**	**0.014**	**pg/g**
2,3,4,6,7,8-HxCDF	**0.036**	**J Q**	**5.2**	**0.014**	**pg/g**
1,2,3,7,8,9-HxCDF	**0.044**	**J**	**5.2**	**0.016**	**pg/g**
Total HxCDF	**0.22**		**5.2**	**0.015**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.14**	**J Q**	**5.2**	**0.026**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.2	0.030	pg/g
Total HpCDF	**0.14**		**5.2**	**0.028**	**pg/g**
OCDF	**0.14**	**J Q B**	**10**	**0.040**	**pg/g**

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NCA Labs Korea Co, Ltd.

Sample ID: B09-198-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 020	**Work Order #....:**	LLF3Q2AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.95
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	8.1
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.5 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	40 - 135
13C-1,2,3,7,8-PeCDD	83	40 - 135
13C-1,2,3,6,7,8-HxCDD	93	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	84	40 - 135
13C-OCDD	70	40 - 135
13C-2,3,7,8-TCDF	74	40 - 135
13C-1,2,3,7,8-PeCDF	76	40 - 135
13C-1,2,3,4,7,8-HxCDF	85	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	73	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination The associated method blank contains the target analyte at a reportable level.

J Estimated Result

Q Estimated maximum possible concentration (EMPC).

[redacted] 11/20/2009

1312

NCA Labs Korea Co, Ltd.

Sample ID: B09-198-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 021	**Work Order #....:**	LLF3R2AF	**Matrix.....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.94
Prep Date.....:	10/21/09	**Analysis Date.....:**	10/29/09	**Percent Moisture:**	11
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.63 g	**Analyst ID.....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.036	pg/g
Total TCDD	ND		1.1	0.036	pg/g
1,2,3,7,8-PeCDD	ND		5.3	0.054	pg/g
Total PeCDD	ND		5.3	0.054	pg/g
1,2,3,4,7,8-HxCDD	ND		5.3	0.039	pg/g
1,2,3,6,7,8-HxCDD	ND		5.3	0.032	pg/g
1,2,3,7,8,9-HxCDD	ND		5.3	0.033	pg/g
Total HxCDD	**0.15**		**5.3**	**0.034**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.75**	**J Q B**	**5.3**	**0.048**	**pg/g**
Total HpCDD	**2.2**		**5.3**	**0.048**	**pg/g**
OCDD	**34**	**B**	**11**	**0.22**	**pg/g**
2,3,7,8-TCDF	**0.087**	**J B**	**1.1**	**0.036**	**pg/g**
Total TCDF	**0.14**		**1.1**	**0.036**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.3	0.030	pg/g
2,3,4,7,8-PeCDF	ND		5.3	0.032	pg/g
Total PeCDF	ND		5.3	0.048	pg/g
1,2,3,4,7,8-HxCDF	**0.025**	**J**	**5.3**	**0.017**	**pg/g**
1,2,3,6,7,8-HxCDF	ND		5.3	0.016	pg/g
2,3,4,6,7,8-HxCDF	ND		5.3	0.016	pg/g
1,2,3,7,8,9-HxCDF	ND		5.3	0.019	pg/g
Total HxCDF	**0.13**		**5.3**	**0.017**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.11**	**J**	**5.3**	**0.024**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.3	0.028	pg/g
Total HpCDF	**0.29**		**5.3**	**0.026**	**pg/g**
OCDF	**0.28**	**J B**	**11**	**0.042**	**pg/g**

NCA Labs Korea Co, Ltd.

Sample ID: B09-198-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 021	**Work Order #....:**	LLF3R2AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.94
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	11
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.63 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	90	40 - 135
13C-1,2,3,7,8-PeCDD	82	40 - 135
13C-1,2,3,6,7,8-HxCDD	91	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	79	40 - 135
13C-OCDD	69	40 - 135
13C-2,3,7,8-TCDF	77	40 - 135
13C-1,2,3,7,8-PeCDF	77	40 - 135
13C-1,2,3,4,7,8-HxCDF	80	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	78	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination The associated method blank contains the target analyte at a reportable level.

J Estimated Result.

Q Estimated maximum possible concentration (EMPC)

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NCA Labs Korea Co, Ltd.

Sample ID: B09-198-S4

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 023	**Work Order #....:**	LLF3V2AQ	**Matrix.....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	1
Prep Date....:	10/21/09	**Analysis Date....:**	10/30/09	**Percent Moisture:**	7.9
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.035	pg/g
Total TCDD	ND		1.1	0.035	pg/g
1,2,3,7,8-PeCDD	ND		5.4	0.074	pg/g
Total PeCDD	ND		5.4	0.074	pg/g
1,2,3,4,7,8-HxCDD	**0.072**	**J**	**5.4**	**0.040**	**pg/g**
1,2,3,6,7,8-HxCDD	**0.076**	**J**	**5.4**	**0.033**	**pg/g**
1,2,3,7,8,9-HxCDD	**0.094**	**J**	**5.4**	**0.034**	**pg/g**
Total HxCDD	**0.38**		**5.4**	**0.035**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**1.0**	**J B**	**5.4**	**0.044**	**pg/g**
Total HpCDD	**2.3**		**5.4**	**0.044**	**pg/g**
OCDD	**35**	**B**	**11**	**0.11**	**pg/g**
2,3,7,8-TCDF	**0.18**	**J B**	**1.1**	**0.030**	**pg/g**
Total TCDF	**0.28**		**1.1**	**0.030**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.4	0.044	pg/g
2,3,4,7,8-PeCDF	**0.065**	**J Q**	**5.4**	**0.046**	**pg/g**
Total PeCDF	**0.066**		**5.4**	**0.045**	**pg/g**
1,2,3,4,7,8-HxCDF	**0.17**	**J**	**5.4**	**0.030**	**pg/g**
1,2,3,6,7,8-HxCDF	**0.14**	**J Q**	**5.4**	**0.027**	**pg/g**
2,3,4,6,7,8-HxCDF	**0.092**	**J Q**	**5.4**	**0.029**	**pg/g**
1,2,3,7,8,9-HxCDF	ND		5.4	0.032	pg/g
Total HxCDF	**0.61**		**5.4**	**0.030**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.30**	**J Q**	**5.4**	**0.039**	**pg/g**
1,2,3,4,7,8,9-HpCDF	**0.20**	**J**	**5.4**	**0.046**	**pg/g**
Total HpCDF	**0.71**		**5.4**	**0.042**	**pg/g**
OCDF	**0.48**	**J B**	**11**	**0.041**	**pg/g**

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NCA Labs Korea Co, Ltd.

Sample ID: B09-198-S4

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 023	**Work Order #....:**	LLF3V2AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	1
Prep Date....:	10/21/09	**Analysis Date....:**	10/30/09	**Percent Moisture:**	7.9
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	87	40 - 135
13C-1,2,3,7,8-PeCDD	83	40 - 135
13C-1,2,3,6,7,8-HxCDD	93	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	85	40 - 135
13C-OCDD	85	40 - 135
13C-2,3,7,8-TCDF	79	40 - 135
13C-1,2,3,7,8-PeCDF	80	40 - 135
13C-1,2,3,4,7,8-HxCDF	83	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	78	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination The associated method blank contains the target analyte at a reportable level.

J Estimated Result.

Q Estimated maximum possible concentration (EMPC)

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NCA Labs Korea Co, Ltd.

Sample ID: B09-197-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 024	**Work Order #....:**	LLF3W2AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.95
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	5.2
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.5 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.0	0.049	pg/g
Total TCDD	ND		1.0	0.049	pg/g
1,2,3,7,8-PeCDD	ND		5.0	0.10	pg/g
Total PeCDD	ND		5.0	0.10	pg/g
1,2,3,4,7,8-HxCDD	ND		5.0	0.040	pg/g
1,2,3,6,7,8-HxCDD	ND		5.0	0.033	pg/g
1,2,3,7,8,9-HxCDD	ND		5.0	0.034	pg/g
Total HxCDD	**0.13**		**5.0**	**0.035**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.71**	**J B**	**5.0**	**0.058**	**pg/g**
Total HpCDD	**2.1**		**5.0**	**0.058**	**pg/g**
OCDD	**37**	**B**	**10**	**0.25**	**pg/g**
2,3,7,8-TCDF	**0.15**	**J Q B**	**1.0**	**0.046**	**pg/g**
Total TCDF	**0.20**		**1.0**	**0.046**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.0	0.042	pg/g
2,3,4,7,8-PeCDF	ND		5.0	0.044	pg/g
Total PeCDF	ND		5.0	0.057	pg/g
1,2,3,4,7,8-HxCDF	ND		5.0	0.031	pg/g
1,2,3,6,7,8-HxCDF	ND		5.0	0.028	pg/g
2,3,4,6,7,8-HxCDF	ND		5.0	0.029	pg/g
1,2,3,7,8,9-HxCDF	ND		5.0	0.033	pg/g
Total HxCDF	ND		5.0	0.033	pg/g
1,2,3,4,6,7,8-HpCDF	**0.10**	**J Q**	**5.0**	**0.036**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.042	pg/g
Total HpCDF	**0.10**		**5.0**	**0.039**	**pg/g**
OCDF	**0.23**	**J Q B**	**10**	**0.057**	**pg/g**

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NCA Labs Korea Co, Ltd.

Sample ID: B09-197-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 024	**Work Order #....:**	LLF3W2AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.95
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	5.2
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.5 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	52	40 - 135
13C-1,2,3,7,8-PeCDD	47	40 - 135
13C-1,2,3,6,7,8-HxCDD	54	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	50	40 - 135
13C-OCDD	44	40 - 135
13C-2,3,7,8-TCDF	45	40 - 135
13C-1,2,3,7,8-PeCDF	44	40 - 135
13C-1,2,3,4,7,8-HxCDF	50	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	47	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination The associated method blank contains the target analyte at a reportable level

J Estimated Result

Q Estimated maximum possible concentration (EMPC)

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1318

NCA Labs Korea Co, Ltd.

Sample ID: B09-197-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G91240378 - 025	**Work Order #....:**	LLF3X2AF	**Matrix.....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.98
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	13
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.23 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.040	pg/g
Total TCDD	ND		1.1	0.040	pg/g
1,2,3,7,8-PeCDD	ND		5.6	0.074	pg/g
Total PeCDD	ND		5.6	0.074	pg/g
1,2,3,4,7,8-HxCDD	**0.046**	**J**	**5.6**	**0.042**	**pg/g**
1,2,3,6,7,8-HxCDD	ND		5.6	0.034	pg/g
1,2,3,7,8,9-HxCDD	**0.040**	**J Q**	**5.6**	**0.035**	**pg/g**
Total HxCDD	**0.28**		**5.6**	**0.037**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.74**	**J Q B**	**5.6**	**0.060**	**pg/g**
Total HpCDD	**2.2**		**5.6**	**0.060**	**pg/g**
OCDD	**40**	**B**	**11**	**0.18**	**pg/g**
2,3,7,8-TCDF	**0.087**	**J Q B**	**1.1**	**0.041**	**pg/g**
Total TCDF	**0.14**		**1.1**	**0.041**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.6	0.043	pg/g
2,3,4,7,8-PeCDF	ND		5.6	0.045	pg/g
Total PeCDF	ND		5.6	0.046	pg/g
1,2,3,4,7,8-HxCDF	ND		5.6	0.024	pg/g
1,2,3,6,7,8-HxCDF	**0.029**	**J**	**5.6**	**0.022**	**pg/g**
2,3,4,6,7,8-HxCDF	ND		5.6	0.023	pg/g
1,2,3,7,8,9-HxCDF	ND		5.6	0.026	pg/g
Total HxCDF	**0.060**		**5.6**	**0.024**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.090**	**J Q**	**5.6**	**0.025**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.6	0.029	pg/g
Total HpCDF	**0.13**		**5.6**	**0.027**	**pg/g**
OCDF	**0.18**	**J B**	**11**	**0.039**	**pg/g**

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1319

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NCA Labs Korea Co, Ltd.

Sample ID: B09-197-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 025	**Work Order #....:**	LLF3X2AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.98
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	13
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.23 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	66	40 - 135
13C-1,2,3,7,8-PeCDD	64	40 - 135
13C-1,2,3,6,7,8-HxCDD	66	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	62	40 - 135
13C-OCDD	56	40 - 135
13C-2,3,7,8-TCDF	57	40 - 135
13C-1,2,3,7,8-PeCDF	59	40 - 135
13C-1,2,3,4,7,8-HxCDF	63	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	61	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination The associated method blank contains the target analyte at a reportable level

J Estimated Result.

Q Estimated maximum possible concentration (EMPC).

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1320

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NCA Labs Korea Co, Ltd.

Sample ID: B09-196-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 027	**Work Order #....:**	LLF312AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	4.78
Prep Date....:	10/21/09	**Analysis Date....:**	11/09/09	**Percent Moisture:**	9.0
Prep Batch # ....:	9294334	**Instrument ID....:**	ID5		
Initial Wgt/Vol :	10.45 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		5.4	1.1	pg/g
Total TCDD	ND		5.3	1.1	pg/g
1,2,3,7,8-PeCDD	ND		26	1.6	pg/g
Total PeCDD	ND		26	1.6	pg/g
1,2,3,4,7,8-HxCDD	ND		26	1.1	pg/g
1,2,3,6,7,8-HxCDD	ND		26	0.94	pg/g
1,2,3,7,8,9-HxCDD	ND		26	0.95	pg/g
Total HxCDD	ND		26	1.1	pg/g
1,2,3,4,6,7,8-HpCDD	**4.1**	**Q J B**	**26**	**1.6**	**pg/g**
Total HpCDD	**7.8**		**26**	**1.6**	**pg/g**
OCDD	**68**	**B**	**53**	**2.9**	**pg/g**
Total TCDF	**1.5**		**5.3**	**0.55**	**pg/g**
1,2,3,7,8-PeCDF	ND		26	1.0	pg/g
2,3,4,7,8-PeCDF	ND		26	1.0	pg/g
Total PeCDF	**13**		**26**	**1.0**	**pg/g**
1,2,3,4,7,8-HxCDF	ND		26	1.1	pg/g
1,2,3,6,7,8-HxCDF	ND		26	0.96	pg/g
2,3,4,6,7,8-HxCDF	ND		26	1.1	pg/g
1,2,3,7,8,9-HxCDF	ND		26	1.2	pg/g
Total HxCDF	**1.7**		**26**	**1.1**	**pg/g**
1,2,3,4,6,7,8-HpCDF	ND		26	1.5	pg/g
1,2,3,4,7,8,9-HpCDF	ND		26	1.8	pg/g
Total HpCDF	**3.9**		**26**	**1.6**	**pg/g**
OCDF	**5.2**	**J Q B**	**53**	**3.5**	**pg/g**

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	88	40 - 135
13C-1,2,3,7,8-PeCDD	77	40 - 135
13C-1,2,3,6,7,8-HxCDD	95	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	89	40 - 135
13C-OCDD	64	40 - 135
13C-2,3,7,8-TCDF	104	40 - 135
13C-1,2,3,7,8-PeCDF	90	40 - 135
13C-1,2,3,4,7,8-HxCDF	103	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	86	40 - 135

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1321

NCA Labs Korea Co, Ltd.

Sample ID: B09-196-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 027	**Work Order #....:**	LLF312AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	4.78
Prep Date....:	10/21/09	**Analysis Date....:**	11/09/09	**Percent Moisture:**	9.0
Prep Batch # ....:	9294334	**Instrument ID....:**	1D5		
Initial Wgt/Vol :	10.45 g	**Analyst ID....:**	Sonia Ouni		

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination The associated method blank contains the target analyte at a reportable level.

J Estimated Result

Q Estimated maximum possible concentration (EMPC)

[redacted] 11/20/2009

NCA Labs Korea Co, Ltd.

Sample ID: B09-196-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 027	**Work Order #....:**	LLF313AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.95
Prep Date....:	10/21/09	**Analysis Date....:**	10/31/09	**Percent Moisture:**	9.0
Prep Batch # ....:	9294334	**Instrument ID....:**	8D2		
Initial Wgt/Vol :	10.45 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDF	1.3	B	1.1	0.23	pg/g

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDF	93	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

1323 [redacted] 11/20/2009

[redacted]

NCA Labs Korea Co, Ltd.

Sample ID: B09-196-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 028	**Work Order #....:**	LLF322AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.97
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	8.4
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.27 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.026	pg/g
Total TCDD	ND		1.1	0.026	pg/g
1,2,3,7,8-PeCDD	ND		5.3	0.042	pg/g
Total PeCDD	ND		5.3	0.042	pg/g
1,2,3,4,7,8-HxCDD	ND		5.3	0.020	pg/g
1,2,3,6,7,8-HxCDD	ND		5.3	0.016	pg/g
1,2,3,7,8,9-HxCDD	**0.032**	**J Q**	**5.3**	**0.017**	**pg/g**
Total HxCDD	**0.095**		**5.3**	**0.018**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.36**	**J Q B**	**5.3**	**0.039**	**pg/g**
Total HpCDD	**1.2**		**5.3**	**0.039**	**pg/g**
OCDD	**27**	**B**	**11**	**0.12**	**pg/g**
2,3,7,8-TCDF	**0.080**	**J B**	**1.1**	**0.041**	**pg/g**
Total TCDF	**1.0**		**1.1**	**0.041**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.3	0.027	pg/g
2,3,4,7,8-PeCDF	ND		5.3	0.028	pg/g
Total PeCDF	ND		5.3	0.042	pg/g
1,2,3,4,7,8-HxCDF	ND		5.3	0.011	pg/g
1,2,3,6,7,8-HxCDF	**0.012**	**J Q**	**5.3**	**0.010**	**pg/g**
2,3,4,6,7,8-HxCDF	ND		5.3	0.011	pg/g
1,2,3,7,8,9-HxCDF	ND		5.3	0.012	pg/g
Total HxCDF	**0.012**		**5.3**	**0.011**	**pg/g**
1,2,3,4,6,7,8-HpCDF	ND		5.3	0.027	pg/g
1,2,3,4,7,8,9-HpCDF	ND		5.3	0.032	pg/g
Total HpCDF	**0.054**		**5.3**	**0.030**	**pg/g**
OCDF	**0.035**	**J Q B**	**11**	**0.032**	**pg/g**

[redacted] 11/20/2009

1324

NCA Labs Korea Co, Ltd.

Sample ID: B09-196-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 028	**Work Order #....:**	LLF322AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.97
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	8.4
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.27 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	90	40 - 135
13C-1,2,3,7,8-PeCDD	88	40 - 135
13C-1,2,3,6,7,8-HxCDD	82	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	75	40 - 135
13C-OCDD	57	40 - 135
13C-2,3,7,8-TCDF	83	40 - 135
13C-1,2,3,7,8-PeCDF	83	40 - 135
13C-1,2,3,4,7,8-HxCDF	83	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	68	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination The associated method blank contains the target analyte at a reportable level

J Estimated Result.

Q Estimated maximum possible concentration (EMPC).

[redacted] 11/20/2009

1325

b6

b6

NCA Labs Korea Co, Ltd.

Sample ID: B09-192-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 031	**Work Order #....:**	LLH9T2AF	**Matrix.....:**	SOLID
Date Sampled.....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	1
Prep Date.....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	6.9
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.01 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.031	pg/g
Total TCDD	ND		1.1	0.031	pg/g
1,2,3,7,8-PeCDD	ND		5.4	0.051	pg/g
Total PeCDD	ND		5.4	0.051	pg/g
1,2,3,4,7,8-HxCDD	ND		5.4	0.032	pg/g
1,2,3,6,7,8-HxCDD	ND		5.4	0.026	pg/g
1,2,3,7,8,9-HxCDD	**0.083**	**J**	**5.4**	**0.027**	**pg/g**
Total HxCDD	**0.083**		**5.4**	**0.029**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.66**	**J B**	**5.4**	**0.025**	**pg/g**
Total HpCDD	**1.8**		**5.4**	**0.025**	**pg/g**
OCDD	**25**	**B**	**11**	**0.078**	**pg/g**
2,3,7,8-TCDF	**0.070**	**J Q B**	**1.1**	**0.033**	**pg/g**
Total TCDF	**0.070**		**1.1**	**0.033**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.4	0.027	pg/g
2,3,4,7,8-PeCDF	ND		5.4	0.028	pg/g
Total PeCDF	ND		5.4	0.055	pg/g
1,2,3,4,7,8-HxCDF	ND		5.4	0.014	pg/g
1,2,3,6,7,8-HxCDF	ND		5.4	0.012	pg/g
2,3,4,6,7,8-HxCDF	ND		5.4	0.013	pg/g
1,2,3,7,8,9-HxCDF	ND		5.4	0.015	pg/g
Total HxCDF	**0.047**		**5.4**	**0.013**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.071**	**J**	**5.4**	**0.018**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.4	0.021	pg/g
Total HpCDF	**0.17**		**5.4**	**0.019**	**pg/g**
OCDF	**0.13**	**J Q B**	**11**	**0.026**	**pg/g**

1326 [redacted] 11/20/2009

b6

b6

NCA Labs Korea Co, Ltd.

Sample ID: B09-192-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 031	**Work Order #....:**	LLH9T2AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	1
Prep Date....:	10/21/09	**Analysis Date....:**	10/29/09	**Percent Moisture:**	6.9
Prep Batch # ....:	9294334	**Instrument ID....:**	3D5		
Initial Wgt/Vol :	10.01 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	95	40 - 135
13C-1,2,3,7,8-PeCDD	90	40 - 135
13C-1,2,3,6,7,8-HxCDD	96	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	100	40 - 135
13C-OCDD	81	40 - 135
13C-2,3,7,8-TCDF	82	40 - 135
13C-1,2,3,7,8-PeCDF	84	40 - 135
13C-1,2,3,4,7,8-HxCDF	96	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	88	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination The associated method blank contains the target analyte at a reportable level

J Estimated Result

Q Estimated maximum possible concentration (EMPC)

[redacted] 11/20/2009

1327

NCA Labs Korea Co, Ltd.

Sample ID: B09-192-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 032	**Work Order #....:**	LLJAA1AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.95
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	14
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.56 g	**Analyst ID....:**	Susan X. Yan		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.035	pg/g
Total TCDD	ND		1.1	0.035	pg/g
1,2,3,7,8-PeCDD	ND		5.5	0.072	pg/g
Total PeCDD	ND		5.5	0.072	pg/g
1,2,3,4,7,8-HxCDD	ND		5.5	0.073	pg/g
1,2,3,6,7,8-HxCDD	**0.071**	**J Q**	**5.5**	**0.062**	**pg/g**
1,2,3,7,8,9-HxCDD	ND		5.5	0.062	pg/g
Total HxCDD	**0.28**		**5.5**	**0.065**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.78**	**J B**	**5.5**	**0.094**	**pg/g**
Total HpCDD	**1.7**		**5.5**	**0.094**	**pg/g**
OCDD	**14**	**B**	**11**	**0.14**	**pg/g**
2,3,7,8-TCDF	**0.18**	**J Q**	**1.1**	**0.051**	**pg/g**
Total TCDF	**0.31**		**1.1**	**0.051**	**pg/g**
1,2,3,7,8-PeCDF	**0.18**	**J Q**	**5.5**	**0.073**	**pg/g**
2,3,4,7,8-PeCDF	**0.089**	**J**	**5.5**	**0.076**	**pg/g**
Total PeCDF	**0.27**		**5.5**	**0.075**	**pg/g**
1,2,3,4,7,8-HxCDF	**0.23**	**J Q B**	**5.5**	**0.11**	**pg/g**
1,2,3,6,7,8-HxCDF	ND		5.5	0.10	pg/g
2,3,4,6,7,8-HxCDF	ND		5.5	0.11	pg/g
1,2,3,7,8,9-HxCDF	ND		5.5	0.12	pg/g
Total HxCDF	**0.23**		**5.5**	**0.11**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.15**	**J Q B**	**5.5**	**0.15**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.5	0.18	pg/g
Total HpCDF	**0.41**		**5.5**	**0.17**	**pg/g**
OCDF	**0.48**	**J Q B**	**11**	**0.10**	**pg/g**

[redacted] 11/20/2009

1328

NCA Labs Korea Co, Ltd.

Sample ID: B09-192-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 032	**Work Order #....:**	LLJAA1AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.95
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	14
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.56 g	**Analyst ID....:**	Susan X. Yan		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	69	40 - 135
13C-1,2,3,7,8-PeCDD	61	40 - 135
13C-1,2,3,6,7,8-HxCDD	66	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	60	40 - 135
13C-OCDD	61	40 - 135
13C-2,3,7,8-TCDF	65	40 - 135
13C-1,2,3,7,8-PeCDF	58	40 - 135
13C-1,2,3,4,7,8-HxCDF	58	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	56	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated Result

Q Estimated maximum possible concentration (EMPC).

1329 [redacted] 11/20/2009

b6

NCA Labs Korea Co, Ltd.

Sample ID: B09-193-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 034	**Work Order #....:**	LLJA21AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.99
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	7.7
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.06 g	**Analyst ID....:**	Susan X. Yan		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.021	pg/g
Total TCDD	ND		1.1	0.039	pg/g
1,2,3,7,8-PeCDD	ND		5.4	0.043	pg/g
Total PeCDD	ND		5.4	0.043	pg/g
1,2,3,4,7,8-HxCDD	ND		5.4	0.088	pg/g
1,2,3,6,7,8-HxCDD	**0.12**	**J**	**5.4**	**0.074**	**pg/g**
1,2,3,7,8,9-HxCDD	ND		5.4	0.074	pg/g
Total HxCDD	**0.56**		**5.4**	**0.078**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**1.3**	**J Q B**	**5.4**	**0.13**	**pg/g**
Total HpCDD	**3.2**		**5.4**	**0.13**	**pg/g**
OCDD	**33**	**B**	**11**	**0.18**	**pg/g**
2,3,7,8-TCDF	**0.19**	**J**	**1.1**	**0.062**	**pg/g**
Total TCDF	**0.33**		**1.1**	**0.062**	**pg/g**
1,2,3,7,8-PeCDF	**0.15**	**J**	**5.4**	**0.065**	**pg/g**
2,3,4,7,8-PeCDF	ND		5.4	0.068	pg/g
Total PeCDF	**0.15**		**5.4**	**0.066**	**pg/g**
1,2,3,4,7,8-HxCDF	**0.23**	**J B**	**5.4**	**0.085**	**pg/g**
1,2,3,6,7,8-HxCDF	ND		5.4	0.079	pg/g
2,3,4,6,7,8-HxCDF	ND		5.4	0.083	pg/g
1,2,3,7,8,9-HxCDF	ND		5.4	0.093	pg/g
Total HxCDF	**0.76**		**5.4**	**0.085**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.63**	**J Q B**	**5.4**	**0.16**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.4	0.19	pg/g
Total HpCDF	**1.8**		**5.4**	**0.17**	**pg/g**
OCDF	**1.0**	**J B**	**11**	**0.13**	**pg/g**

1330 [redacted] 11/20/2009

b6

b6

NCA Labs Korea Co, Ltd.

Sample ID: B09-193-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 034	**Work Order #....:**	LLJA21AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.99
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	7.7
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.06 g	**Analyst ID....:**	Susan X. Yan		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	77	40 - 135
13C-1,2,3,7,8-PeCDD	73	40 - 135
13C-1,2,3,6,7,8-HxCDD	74	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	67	40 - 135
13C-OCDD	65	40 - 135
13C-2,3,7,8-TCDF	74	40 - 135
13C-1,2,3,7,8-PeCDF	67	40 - 135
13C-1,2,3,4,7,8-HxCDF	67	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	57	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination The associated method blank contains the target analyte at a reportable level.

J Estimated Result.

Q Estimated maximum possible concentration (EMPC).

1331

[redacted] 11/20/2009

66

NCA Labs Korea Co, Ltd.

Sample ID: B09-193-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 035	**Work Order #....:**	LLJCF1AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.96
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	12
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.4 g	**Analyst ID....:**	Susan X. Yan		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.097	pg/g
Total TCDD	ND		1.1	0.097	pg/g
1,2,3,7,8-PeCDD	ND		5.4	0.12	pg/g
Total PeCDD	ND		5.4	0.12	pg/g
1,2,3,4,7,8-HxCDD	ND		5.4	0.25	pg/g
1,2,3,6,7,8-HxCDD	ND		5.4	0.21	pg/g
1,2,3,7,8,9-HxCDD	ND		5.4	0.21	pg/g
Total HxCDD	ND		5.4	0.25	pg/g
1,2,3,4,6,7,8-HpCDD	**0.75**	**J Q B**	**5.4**	**0.49**	**pg/g**
Total HpCDD	**2.6**		**5.4**	**0.49**	**pg/g**
OCDD	**25**	**B**	**11**	**0.91**	**pg/g**
2,3,7,8-TCDF	**0.34**	**J**	**1.1**	**0.069**	**pg/g**
Total TCDF	**0.57**		**1.1**	**0.069**	**pg/g**
1,2,3,7,8-PeCDF	**0.33**	**J Q**	**5.4**	**0.083**	**pg/g**
2,3,4,7,8-PeCDF	ND		5.4	0.086	pg/g
Total PeCDF	**0.46**		**5.4**	**0.085**	**pg/g**
1,2,3,4,7,8-HxCDF	**0.43**	**J Q B**	**5.4**	**0.25**	**pg/g**
1,2,3,6,7,8-HxCDF	ND		5.4	0.23	pg/g
2,3,4,6,7,8-HxCDF	ND		5.4	0.25	pg/g
1,2,3,7,8,9-HxCDF	ND		5.4	0.28	pg/g
Total HxCDF	**0.43**		**5.4**	**0.25**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.45**	**J Q B**	**5.4**	**0.42**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.4	0.51	pg/g
Total HpCDF	**0.45**		**5.4**	**0.44**	**pg/g**
OCDF	**0.91**	**J Q B**	**11**	**0.56**	**pg/g**

1332 [redacted] 11/20/2009

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NCA Labs Korea Co, Ltd.

Sample ID: B09-193-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 035	**Work Order #....:**	LLJCF1AF	**Matrix.....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.96
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	12
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.4 g	**Analyst ID....:**	Susan X. Yan		

INTERNAL STANDARDS	PERCENT RECOVERY		RECOVERY LIMITS
13C-2,3,7,8-TCDD	50		40 - 135
13C-1,2,3,7,8-PeCDD	38	*	40 - 135
13C-1,2,3,6,7,8-HxCDD	37	*	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	27	*	40 - 135
13C-OCDD	22	*	40 - 135
13C-2,3,7,8-TCDF	50		40 - 135
13C-1,2,3,7,8-PeCDF	38	*	40 - 135
13C-1,2,3,4,7,8-HxCDF	32	*	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	24	*	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

- * Surrogate recovery is outside stated control limits
- B Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- J Estimated Result.
- Q Estimated maximum possible concentration (EMPC)

1333

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NCA Labs Korea Co, Ltd.

Sample ID: B09-193-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 035	**Work Order #....:**	LLJCF2AF	**Matrix.....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.94
Prep Date....:	11/10/09	**Analysis Date....:**	11/16/09	**Percent Moisture:**	12
Prep Batch # ....:	9314490	**Instrument ID....:**	1D5		
Initial Wgt/Vol :	10.6 g	**Analyst ID....:**	Sonia Ouni		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.15	pg/g
Total TCDD	ND		1.1	0.15	pg/g
1,2,3,7,8-PeCDD	ND		5.3	0.30	pg/g
Total PeCDD	ND		5.3	0.30	pg/g
1,2,3,4,7,8-HxCDD	ND		5.3	0.30	pg/g
1,2,3,6,7,8-HxCDD	ND		5.3	0.26	pg/g
1,2,3,7,8,9-HxCDD	**0.26**	**J Q**	**5.3**	**0.26**	**pg/g**
Total HxCDD	**0.26**		**5.3**	**0.26**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.95**	**J B**	**5.3**	**0.32**	**pg/g**
Total HpCDD	**2.1**		**5.3**	**0.32**	**pg/g**
OCDD	**36**	**B**	**11**	**0.66**	**pg/g**
2,3,7,8-TCDF	**0.15**	**J Q B**	**1.1**	**0.085**	**pg/g**
Total TCDF	**0.15**		**1.1**	**0.085**	**pg/g**
1,2,3,7,8-PeCDF	**0.29**	**J B**	**5.3**	**0.16**	**pg/g**
2,3,4,7,8-PeCDF	**0.20**	**J Q B**	**5.3**	**0.17**	**pg/g**
Total PeCDF	**0.49**		**5.3**	**0.16**	**pg/g**
1,2,3,4,7,8-HxCDF	ND		5.3	0.23	pg/g
1,2,3,6,7,8-HxCDF	**0.22**	**J Q**	**5.3**	**0.20**	**pg/g**
2,3,4,6,7,8-HxCDF	ND		5.3	0.22	pg/g
1,2,3,7,8,9-HxCDF	**0.26**	**J Q**	**5.3**	**0.25**	**pg/g**
Total HxCDF	**0.49**		**5.3**	**0.22**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.37**	**J B**	**5.3**	**0.19**	**pg/g**
1,2,3,4,7,8,9-HpCDF	**0.29**	**J Q B**	**5.3**	**0.23**	**pg/g**
Total HpCDF	**0.66**		**5.3**	**0.21**	**pg/g**
OCDF	**0.75**	**J B**	**11**	**0.36**	**pg/g**

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NCA Labs Korea Co, Ltd.

Sample ID: B09-193-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 035	**Work Order #....:**	LLJCF2AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.94
Prep Date....:	11/10/09	**Analysis Date....:**	11/16/09	**Percent Moisture:**	12
Prep Batch # ....:	9314490	**Instrument ID....:**	1D5		
Initial Wgt/Vol :	10.6 g	**Analyst ID....:**	Sonia Ouni		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	85	40 - 135
13C-1,2,3,7,8-PeCDD	77	40 - 135
13C-1,2,3,6,7,8-HxCDD	95	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	87	40 - 135
13C-OCDD	80	40 - 135
13C-2,3,7,8-TCDF	92	40 - 135
13C-1,2,3,7,8-PeCDF	86	40 - 135
13C-1,2,3,4,7,8-HxCDF	91	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	96	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated Result.

Q Estimated maximum possible concentration (EMPC).

1335 [redacted] 11/20/2009

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NCA Labs Korea Co, Ltd.

Sample ID: B09-194-SI

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 038	**Work Order #....:**	LLJCN1AQ	**Matrix.....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.93
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	8.8
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.73 g	**Analyst ID....:**	Susan X. Yan		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.0	0.0041	pg/g
Total TCDD	ND		1.0	0.0041	pg/g
1,2,3,7,8-PeCDD	ND		5.1	0.0098	pg/g
Total PeCDD	**0.13**		**5.1**	**0.0098**	**pg/g**
1,2,3,4,7,8-HxCDD	**0.065**	**J Q**	**5.1**	**0.034**	**pg/g**
1,2,3,6,7,8-HxCDD	**0.049**	**J**	**5.1**	**0.028**	**pg/g**
1,2,3,7,8,9-HxCDD	**0.041**	**J Q B**	**5.1**	**0.028**	**pg/g**
Total HxCDD	**0.51**		**5.1**	**0.030**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.93**	**J B**	**5.1**	**0.16**	**pg/g**
Total HpCDD	**2.2**		**5.1**	**0.16**	**pg/g**
OCDD	**36**	**B**	**10**	**0.25**	**pg/g**
2,3,7,8-TCDF	**0.17**	**J Q**	**1.0**	**0.029**	**pg/g**
Total TCDF	**0.30**		**1.0**	**0.029**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.1	0.053	pg/g
2,3,4,7,8-PeCDF	ND		5.1	0.056	pg/g
Total PeCDF	ND		5.1	0.056	pg/g
1,2,3,4,7,8-HxCDF	**0.17**	**J Q B**	**5.1**	**0.068**	**pg/g**
1,2,3,6,7,8-HxCDF	ND		5.1	0.063	pg/g
2,3,4,6,7,8-HxCDF	ND		5.1	0.067	pg/g
1,2,3,7,8,9-HxCDF	ND		5.1	0.074	pg/g
Total HxCDF	**0.17**		**5.1**	**0.068**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.13**	**J Q B**	**5.1**	**0.11**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.1	0.14	pg/g
Total HpCDF	**0.13**		**5.1**	**0.12**	**pg/g**
OCDF	**0.40**	**J B**	**10**	**0.16**	**pg/g**

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NCA Labs Korea Co, Ltd.

Sample ID: B09-194-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 038	**Work Order #....:**	LLJCN1AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.93
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	8.8
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.73 g	**Analyst ID....:**	Susan X. Yan		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	80	40 - 135
13C-1,2,3,7,8-PeCDD	70	40 - 135
13C-1,2,3,6,7,8-HxCDD	77	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	68	40 - 135
13C-OCDD	61	40 - 135
13C-2,3,7,8-TCDF	72	40 - 135
13C-1,2,3,7,8-PeCDF	65	40 - 135
13C-1,2,3,4,7,8-HxCDF	67	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	61	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level

J Estimated Result

Q Estimated maximum possible concentration (EMPC)

1337 [redacted] 11/20/2009 b6

NCA Labs Korea Co, Ltd.

Sample ID: B09-194-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 039	Work Order #....:	LLJCR1AF	Matrix....:	SOLID
Date Sampled....:	09/22/09	Date Received....:	09/25/09	Dilution Factor:	0.97
Prep Date....:	10/19/09	Analysis Date....:	10/28/09	Percent Moisture:	9.4
Prep Batch # ....:	9292309	Instrument ID....:	4D5		
Initial Wgt/Vol :	10.27 g	Analyst ID....:	Susan X. Yan		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	0.074	J Q	1.1	0.0039	pg/g
Total TCDD	0.074		1.1	0.0039	pg/g
1,2,3,7,8-PeCDD	0.089	J	5.4	0.014	pg/g
Total PeCDD	0.45		5.4	0.014	pg/g
1,2,3,4,7,8-HxCDD	0.29	J Q	5.4	0.038	pg/g
1,2,3,6,7,8-HxCDD	1.1	J	5.4	0.032	pg/g
1,2,3,7,8,9-HxCDD	0.86	J B	5.4	0.032	pg/g
Total HxCDD	6.5		5.4	0.034	pg/g
1,2,3,4,6,7,8-HpCDD	38	B	5.4	0.26	pg/g
Total HpCDD	74		5.4	0.26	pg/g
OCDD	440	B	11	0.40	pg/g
2,3,7,8-TCDF	0.12	J Q	1.1	0.031	pg/g
Total TCDF	0.35		1.1	0.031	pg/g
1,2,3,7,8-PeCDF	0.12	J Q	5.4	0.068	pg/g
2,3,4,7,8-PeCDF	0.12	J	5.4	0.071	pg/g
Total PeCDF	1.5		5.4	0.069	pg/g
1,2,3,4,7,8-HxCDF	1.3	J B	5.4	0.11	pg/g
1,2,3,6,7,8-HxCDF	0.57	J B	5.4	0.11	pg/g
2,3,4,6,7,8-HxCDF	0.22	J Q	5.4	0.11	pg/g
1,2,3,7,8,9-HxCDF	ND		5.4	0.13	pg/g
Total HxCDF	25		5.4	0.11	pg/g
1,2,3,4,6,7,8-HpCDF	19	B	5.4	0.24	pg/g
1,2,3,4,7,8,9-HpCDF	1.3	J	5.4	0.28	pg/g
Total HpCDF	80		5.4	0.26	pg/g
OCDF	57	B	11	0.23	pg/g

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NCA Labs Korea Co, Ltd.

Sample ID: B09-194-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 039	**Work Order #....:**	LLJCR1AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.97
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	9.4
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.27 g	**Analyst ID....:**	Susan X. Yan		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	81	40 - 135
13C-1,2,3,7,8-PeCDD	73	40 - 135
13C-1,2,3,6,7,8-HxCDD	83	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	78	40 - 135
13C-OCDD	74	40 - 135
13C-2,3,7,8-TCDF	75	40 - 135
13C-1,2,3,7,8-PeCDF	69	40 - 135
13C-1,2,3,4,7,8-HxCDF	69	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	70	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination The associated method blank contains the target analyte at a reportable level

J Estimated Result

Q Estimated maximum possible concentration (EMPC)

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NCA Labs Korea Co, Ltd.

Sample ID: B09-195-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 042	**Work Order #....:**	LLJDG1AQ	**Matrix.....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	1
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	8.0
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10 g	**Analyst ID....:**	Susan X. Yan		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.036	pg/g
Total TCDD	ND		1.1	0.036	pg/g
1,2,3,7,8-PeCDD	ND		5.4	0.0083	pg/g
Total PeCDD	ND		5.4	0.0081	pg/g
1,2,3,4,7,8-HxCDD	**0.015**	**J Q**	**5.4**	**0.0053**	**pg/g**
1,2,3,6,7,8-HxCDD	**0.011**	**J Q**	**5.4**	**0.0045**	**pg/g**
1,2,3,7,8,9-HxCDD	**0.037**	**J Q B**	**5.4**	**0.0046**	**pg/g**
Total HxCDD	**0.36**		**5.4**	**0.0048**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.63**	**J B**	**5.4**	**0.14**	**pg/g**
Total HpCDD	**1.7**		**5.4**	**0.14**	**pg/g**
OCDD	**25**	**B**	**11**	**0.17**	**pg/g**
2,3,7,8-TCDF	**0.13**	**J Q**	**1.1**	**0.0028**	**pg/g**
Total TCDF	**0.13**		**1.1**	**0.0028**	**pg/g**
1,2,3,7,8-PeCDF	**0.066**	**J Q**	**5.4**	**0.044**	**pg/g**
2,3,4,7,8-PeCDF	ND		5.4	0.046	pg/g
Total PeCDF	**0.11**		**5.4**	**0.045**	**pg/g**
1,2,3,4,7,8-HxCDF	**0.10**	**J Q B**	**5.4**	**0.072**	**pg/g**
1,2,3,6,7,8-HxCDF	ND		5.4	0.067	pg/g
2,3,4,6,7,8-HxCDF	ND		5.4	0.071	pg/g
1,2,3,7,8,9-HxCDF	ND		5.4	0.079	pg/g
Total HxCDF	**0.10**		**5.4**	**0.072**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.15**	**J Q B**	**5.4**	**0.12**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.4	0.14	pg/g
Total HpCDF	**0.29**		**5.4**	**0.13**	**pg/g**
OCDF	**0.23**	**J Q B**	**11**	**0.099**	**pg/g**

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NCA Labs Korea Co, Ltd.

Sample ID: B09-195-S1

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 042	**Work Order #....:**	LLJDG1AQ	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	1
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	8.0
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10 g	**Analyst ID....:**	Susan X. Yan		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	80	40 - 135
13C-1,2,3,7,8-PeCDD	71	40 - 135
13C-1,2,3,6,7,8-HxCDD	68	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	67	40 - 135
13C-OCDD	64	40 - 135
13C-2,3,7,8-TCDF	75	40 - 135
13C-1,2,3,7,8-PeCDF	69	40 - 135
13C-1,2,3,4,7,8-HxCDF	70	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	60	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination The associated method blank contains the target analyte at a reportable level.

J Estimated Result.

Q Estimated maximum possible concentration (EMPC).

1341 [redacted] 11/20/2009

b6

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NCA Labs Korea Co, Ltd.

Sample ID: B09-195-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 043	**Work Order #....:**	LLJDH1AF	**Matrix....:**	SOLID
Date Sampled....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.94
Prep Date....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	12
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.6 g	**Analyst ID....:**	Susan X. Yan		

PARAMETER	RESULT		REPORTING LIMIT	ESTIMATED DETECTION LIMIT	UNITS
2,3,7,8-TCDD	ND		1.1	0.023	pg/g
Total TCDD	ND		1.1	0.023	pg/g
1,2,3,7,8-PeCDD	**0.018**	**J Q**	**5.3**	**0.0080**	**pg/g**
Total PeCDD	**0.078**		**5.3**	**0.0080**	**pg/g**
1,2,3,4,7,8-HxCDD	ND		5.3	0.035	pg/g
1,2,3,6,7,8-HxCDD	ND		5.3	0.029	pg/g
1,2,3,7,8,9-HxCDD	ND		5.3	0.034	pg/g
Total HxCDD	**0.16**		**5.3**	**0.035**	**pg/g**
1,2,3,4,6,7,8-HpCDD	**0.76**	**J B**	**5.3**	**0.11**	**pg/g**
Total HpCDD	**1.5**		**5.3**	**0.11**	**pg/g**
OCDD	**14**	**B**	**11**	**0.16**	**pg/g**
2,3,7,8-TCDF	**0.090**	**J Q**	**1.1**	**0.0031**	**pg/g**
Total TCDF	**0.16**		**1.1**	**0.0031**	**pg/g**
1,2,3,7,8-PeCDF	ND		5.3	0.051	pg/g
2,3,4,7,8-PeCDF	ND		5.3	0.053	pg/g
Total PeCDF	ND		5.3	0.053	pg/g
1,2,3,4,7,8-HxCDF	**0.089**	**J Q B**	**5.3**	**0.056**	**pg/g**
1,2,3,6,7,8-HxCDF	ND		5.3	0.052	pg/g
2,3,4,6,7,8-HxCDF	ND		5.3	0.054	pg/g
1,2,3,7,8,9-HxCDF	ND		5.3	0.061	pg/g
Total HxCDF	**0.35**		**5.3**	**0.055**	**pg/g**
1,2,3,4,6,7,8-HpCDF	**0.25**	**J Q B**	**5.3**	**0.11**	**pg/g**
1,2,3,4,7,8,9-HpCDF	ND		5.3	0.13	pg/g
Total HpCDF	**1.1**		**5.3**	**0.12**	**pg/g**
OCDF	**1.1**	**J B**	**11**	**0.065**	**pg/g**

1342 [redacted] 11/20/2009

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NCA Labs Korea Co, Ltd.

Sample ID: B09-195-S2

Trace Level Organic Compounds

SW846 8290

Lot - Sample #....:	G9I240378 - 043	**Work Order #....:**	LLJDH1AF	**Matrix.....:**	SOLID
Date Sampled.....:	09/22/09	**Date Received....:**	09/25/09	**Dilution Factor:**	0.94
Prep Date.....:	10/19/09	**Analysis Date....:**	10/28/09	**Percent Moisture:**	12
Prep Batch # ....:	9292309	**Instrument ID....:**	4D5		
Initial Wgt/Vol :	10.6 g	**Analyst ID....:**	Susan X. Yan		

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	75	40 - 135
13C-1,2,3,7,8-PeCDD	68	40 - 135
13C-1,2,3,6,7,8-HxCDD	76	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	67	40 - 135
13C-OCDD	65	40 - 135
13C-2,3,7,8-TCDF	72	40 - 135
13C-1,2,3,7,8-PeCDF	64	40 - 135
13C-1,2,3,4,7,8-HxCDF	66	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	61	40 - 135

QUALIFIERS

Results and reporting limits have been adjusted for dry weight

B Method blank contamination The associated method blank contains the target analyte at a reportable level.

J Estimated Result

Q Estimated maximum possible concentration (EMPC)

1343 [redacted] 11/20/2009

2004 PED Report

EXECUTIVE SUMMARY
SITE ASSESSMENTS OF HM/POL SITES
BEQ HILL, LAND FARM, BUILDINGS 565 AND BUILDING 326
CAMP CARROLL, KOREA

1. PURPOSE. The purpose of the Environmental Site Assessment (ESA) was to determine if chemicals have been released at the sites of concern that could pose a threat to human health. The scope of this ESA does not include precise determination of the extent of contamination, should it exist. The soil pathway was the focus of the ESAs at the BEQ Hill, the Land Farm, Building 565, and Building 326 of Camp Carroll.

2. SUMMARY OF FINDINGS.

BEQ Hill: Based on the result of geophysical survey and subsurface investigation, the size of the waste burial cell is approximately 25 meters long, 14 meters wide and 6 meters deep. Soil boring and geophysical survey work conducted at the site indicate that the waste cell consists of a mixture of soil backfill and waste material, with an estimated volume of 2,100 cubic meters, of which approximately 1,000 cubic meters consists of waste material and contaminated soil. Laboratory analysis detected several volatile organic compounds (VOCs) in site soils. The predominant VOC detected was tetrachloroethane, a solvent-related chemical. The detected VOC concentrations do not exceed U.S. Environmental Protection Agency (EPA) comprehensive environmental response, compensation, and liability act (CERCLA) preliminary remediation goals (PRGs) for residential soil. A few pesticide, metal, and dioxin/furan compounds also were detected in site soils. None of the detected concentrations exceeds EPA PRGs for residential soil. Several of the solvent-related VOCs do exceed the EPA guidance values for threat of soil contamination to ground water. These solvent-related VOCs were detected in a site ground-water monitoring well. Preliminary findings indicate that contamination from the waste buried at the site has been released to the underlying ground water. Site ground-water contamination could pose a threat to human health, because ground-water supply wells are used for Camp Carroll's potable water supply.

Land Farm Site: Laboratory analysis detected VOCs in site soils. Most of the detected VOCs were solvent-related chemicals. The detected VOC concentrations did not exceed EPA PRGs for residential soil. VOC contamination was detected as deep as 6 to 8 meters below ground surface. A few pesticide, metal, and dioxin/furan compounds also were detected in site soils. Of the detected chemicals, arsenic was detected in one soil sample at a concentration greater than its PRG for residential soil. Solvent-related VOCs were detected in several soil samples at levels that exceed EPA PRGs for soil concentrations threatening ground-water contamination. Arsenic was also detected in one soil sample at a concentration greater than the EPA guidance level for protection of ground water.

Building 565 Site: VOCs were the only chemicals detected by analyses of the site soils. Six petroleum-related compounds and one solvent-related compound were detected in site soil samples. One solvent-related compound, PCE, was detected in a site soil sample at a

concentration greater than the EPA guidance level for protection of ground water.

Building 326 Site: The Building 326 site was assessed for the presence of fuel-related contamination. Field and laboratory analyses identified high levels of fuel contamination behind Building 326 in the subsurface. Fuel contamination is primarily diesel and gasoline, and to a lesser extent JP-8. Total petroleum hydrocarbon concentrations were detected as high as 16,000 mg/kg for diesel-range and 4,400 mg/kg for gasoline-range hydrocarbons. Elevated levels of benzene, toluene, ethylbenzene, and xylenes (BTEX) were also detected in subsurface soils. Benzene was detected in several soil samples at concentrations greater than its EPA residential PRG. Site conditions indicate high levels of fuel-related contamination of which the extent appears to be substantial, but has not been fully characterized.

3. RECOMMENDATIONS.

BEQ Hill site: Construct five ground-water monitoring wells in the vicinity of the BEQ Hill site, analyze water samples for VOCs and pesticides, and evaluate if the concentrations in the ground water pose a threat to human health. After ground-water assessment determine if corrective actions are required for site soils based on the need to be more protective than the EPA residential PRGs or to remove source contamination to the underlying ground water. For future planning, the estimated volume of contaminated material that would be excavated and disposed of off site is estimated to be 1,000 cubic meters.

Land Farm: Drill at least 25 additional borings at the site and analyze soil-boring samples for VOCs, pesticides and arsenic. Construct five ground-water monitoring wells in the vicinity of the Land Farm site, analyze water samples for VOCs, pesticides, and arsenic and evaluate if concentrations in the ground water pose a threat to human health. After ground-water assessment and additional soil sampling, determine if corrective actions are required for site soils based on the need to be more protective than the EPA residential PRGs or to remove source contamination to the underlying ground water.

Building 565: Construct four ground-water monitoring wells in the vicinity of the Building 565 site and analyze water samples for VOCs. Evaluate if contaminants present in site soil have actually leached into the ground water, and if so whether the levels pose a threat to human health. After ground-water assessment determine if corrective actions are required for site soils based on the need to be more protective than the EPA residential PRGs or to remove source contamination to the underlying ground water. For future planning, the estimated volume of soil that may require excavation for offsite disposal is 1,800 cubic meters.

Building 326: Drill at least 25 additional soil borings at the site and analyze soil-boring samples for petroleum hydrocarbon contamination to determine extent of subsurface contamination. Construct four ground-water monitoring wells around Building 326 and analyze water samples for BTEX. Volume of contaminated soil that will require removal cannot be determined at this time due to insufficient information regarding the extent of contamination.

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Table 15. I-TEQs for Dioxins/Furans Detected in Soils Collected at the Land Farm

Borehole ID	Sample ID	Sample Interval (m)		Date Sampled	Analytical Method	International-89 Toxicity Equivalent Quantity†	PRG‡ (ng/kg)
		from	to				
B04-186	B04-186-1	0.0	2.4	5/17/2004	SW8290	0.506	3.89
	B04-186-2	3.0	4.8	5/17/2004	SW8290	0.628	3.89
	B04-186-3	6.0	8.4	5/17/2004	SW8290	0.512	3.89
	B04-186-4	3.0	4.8	5/17/2004	SW8290	0.504	3.89
B04-187	B04-187-1	0.0	2.4	5/17/2004	SW8290	0.596	3.89
	B04-187-2	3.0	4.8	5/17/2004	SW8290	0.608	3.89
	B04-187-3	6.0	8.4	5/17/2004	SW8290	0.572	3.89
B04-188	B04-188-1	0.0	2.4	5/17/2004	SW8290	0.523	3.89
	B04-188-2	3.0	4.8	5/17/2004	SW8290	0.625	3.89
	B04-188-3	6.0	7.8	5/17/2004	SW8290	0.527	3.89
B04-189	B04-189-1	0.0	2.4	5/18/2004	SW8290	0.502	3.89
	B04-189-2	3.0	4.8	5/18/2004	SW8290	0.962	3.89
	B04-189-3	6.0	7.2	5/18/2004	SW8290	0.489	3.89
	B04-189-4	3.0	4.8	5/18/2004	SW8290	0.687	3.89
B04-190	B04-190-1	0.0	2.4	5/18/2004	SW8290	0.541	3.89
	B04-190-2	3.0	4.8	5/18/2004	SW8290	0.536	3.89
	B04-190-3	6.0	7.8	5/18/2004	SW8290	0.651	3.89
B04-191	B04-191-1	0.0	2.4	5/18/2004	SW8290	0.605	3.89
	B04-191-2	3.0	4.8	5/18/2004	SW8290	0.535	3.89
	B04-191-3	6.0	7.8	5/18/2004	SW8290	0.482	3.89

PRG – US EPA Preliminary Remediation Goal, Residential Soil (Superfund Program)
† I-TEQ value calculated using International-89 Toxicity Equivalent Factors based on 2,3,7,8-TCDD
‡ PRG value for 2,3,7,8-TCDD

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was detected in 5 soil samples at concentrations ranging from 0.00947 mg/kg to 0.0146 mg/kg.

The USEPA Region 9 PRG for arsenic (calculated for a cancer endpoint) of 1.6 mg/kg was exceeded in 64 soil samples, The non-cancer endpoint arsenic PRG of 260 mg/kg was not exceeded in the samples analyzed. Other detected metals in Area D soil samples did not exceed USEPA Region 9 PRGs.

4.1.2.1.9 Dioxins

Six surface soil sample and twenty-one subsurface soil samples were analyzed for dioxins in accordance with Method 8290. The method analytical results are summarized in Table 4-2. Dioxin detections are summarized on Table 4-8.

A review of the laboratory results indicates that dioxins were detected in five surface soil samples and eighteen subsurface soil samples. The greatest measured dioxin constituent concentration was 388 pg/g OCDD (Sample CC040SS01). The approximate locations of detected dioxins within Area D are depicted on Figure 4-13.

The USEPA has established a PRG of 1.6E-05 mg/kg (0.016 pg/g) for the dioxin 2,3,7,8-TCDD. A total TCDD concentration of 0.461 pg/g was reported for sample CC027BS02, however the 2,3,7,8-TCDD concentration was less than the laboratory method detection limit. Total TCDD concentrations were less than the laboratory method detection limit in the remaining soil samples analyzed.

4.1.2.2 Groundwater Sample Results

Area D groundwater sample results for each laboratory analytical method are presented in this section.

4.1.2.2.1 Total Petroleum Hydrocarbons (TPH)

Selected groundwater samples obtained from Area 41 were analyzed for TPH-G and TPH-D&O in accordance with EPA Methods 8015 and 8020B. Nine groundwater samples were analyzed for TPH-G and TPH-D&O. The TPH method analytical results are summarized in Table 4-2. TPH detections are summarized on Table 4-9.

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2011 FED Report

Executive Summary

The US Army Corps of Engineers, Far East District (FED) conducted a Remedial Investigation/Feasibility Study (RI/FS) at the Land Farm and Area D (LF-Area D) of Camp Carroll during February 2009 to March 2010. The RI at the site was conducted to better delineate the lateral extent of subsurface soil and groundwater contamination and the levels of chemicals of potential concern of the LF-Area D. The FS was also conducted to evaluate potential remedial alternatives for the site investigated.

All soil samples submitted to the analytical laboratory were analyzed for Total Petroleum Hydrocarbon (TPH), volatile organic compounds (VOCs), polyaromatic hydrocarbons (PAHs), metals, polychlorinated biphenyl (PCB), organochlorinated pesticides (OC-Pesticides) and Dioxin-Furan. Groundwater samples were collected from groundwater monitoring wells as well as the supply wells, and analyzed for VOCs and/or OC-Pesticides.

The analytical data collected during this RI was used to prepare an environmental hazard evaluation (EHE) for the site sampled, which determined whether the contamination present at the site poses a significant long-term or "chronic" threat to human health and the environment. The hazard analysis utilized an Environmental Screening Levels (ESLs) that were based upon published United States Environmental Protection Agency (US EPA) toxicity factors (Guam EPA, 2008).

A total of four chemicals from the subsurface soil exceeded the Tier 1 ESLs for future unrestricted land use: tetrachloroethlyene (PCE), toluene, dichlorodiphenyldichloroethane (DDD) and dichlorodiphenyltrichloroethane (DDT). The toluene concentration exceeded the Tier II screening level too. A total of ten groundwater samples were identified "exceeding" Tier I ESLs and nine of those exceeded the Tier II screening level for "drinking water for human toxicity". There are exposure pathways to the known receptors (potentially all installation personnel) whoever uses the groundwater within the installation. Assuming that the site is going to be under construction such as trenching and foundation excavation, the site worker could be directly exposed to the subsurface soil contamination.

It is recommended that the suspected waste buried at the site be removed to prevent further leaching chemicals to the groundwater system. And groundwater should be adequately treated prior to uptaking from the supply wells or before distributing to the buildings. After removal of buried waste and contaminated soil, a periodic monitoring of groundwater quality and subsurface is recommended to evaluate the environmental condition of the site whether change of the concentration level, natural attenuation and contaminant degradation are occurring.

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Table 4-7. Dioxin-Furan Chemical Test Results for Soil of LF-Area D.

Borehole ID	Sample ID	Sample interval (m)	Method	International-89 Toxicity Equivalent Quantity*
B09-192	S1	0~2	SW8290	0.050972
	S2	2~4	SW8290	0.10939
B09-193	S1	0~2	SW8290	0.088955
	S2	2~4	SW8290	0.32696
B09-194	S1	0~2	SW8290	0.053555
	S2	2~4	SW8290	0.074065
B09-195	S1	0~2	SW8290	0.0600195
	S2	2~4	SW8290	0.0575675
B09-196	S1	0~2	SW8290	1.9045
	S2	2~4	SW8290	0.044716
B09-197	S1	0~2	SW8290	0.0855335
	S2	2~4	SW8290	0.0735295
B09-198	S1	0~2	SW8290	0.051275
	S2	2~4	SW8290	0.058031
B09-199	S1	0~2	SW8290	0.061283
	S2	2~4	SW8290	0.0562345
B09-200	S1	0~2	SW8290	0.077417
	S2	2~4	SW8290	0.057267
B09-201	S1	0~2	SW8290	0.0575452
	S2	2~4	SW8290	0.051621
B09-220	S1	0~2	SW8290	0.052821
	S2	2~4	SW8290	0.04320945
B09-221	S1	0~2	SW8290	0.132052
	S2	2~4	SW8290	0.0236826
B09-222	S1	0~2	SW8290	0.0745945
	S2	2~4	SW8290	0.052043

* I-TEQ value calculated using International-89 Toxicity Equivalent Factors based on 2,3,7,8-TCDD

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Coversheet for Dioxin Raw Data

CEPOF-DD
24 May 11

1. Purpose. Data related to dioxin levels on Camp Carroll taken from U.S. Army Corps of Engineers studies is provided for dissemination.

2. Measurements.
   a. Amounts specified in picograms per gram or $1x10^{-12}$ g / g.
   b. Estimated detection limit (EDL) is the minimum level detectable.
   c. Estimated maximum possible concentration (EMPC) is the same as
   d. Reporting limit is the minimum level considered by the testing laboratory to be reportable data.
   e. The presence of 2,3,7,8-TCDD does not necessarily indicate the presence of Agent Orange, as 2,3,7,8-TCDD was used in other legal herbicides in the 1970s.

3. The enclosed pages contain the following data related to dioxin:

   a. Enclosure 1. Raw data from Site Assessments of HM/POL Sites BEQ Hill, Land Farm, Buildings 565 and Building 326, Camp Carroll, Korea, 13 December 2004.
      i. Agent Orange 2,3,7,8-TCDD not detected in any sample.

   b. Enclosure 2. Raw data from Camp Carroll Area D and Area 41 Site Investigation, Camp Carroll, Korea, July 2004.
      i. Herbicide dioxin 2,3,7,8-TCDD was detected at low levels in one sample in Area 41. More information is required from Paradigm Analytical Laboratories, Inc to determine basis for reporting limit.

   c. Enclosure 3. Raw data from Remedial Investigation/Feasibility Study at Land Farm and Area D of Camp Carroll, Korea, March 2011.
      i. Herbicide dioxin 2,3,7,8-TCDD was detected at low levels in three samples in Area D. Concentration was higher than estimated detection limit but lower than reporting limit. More information is required from TestAmerica West Sacramento ([redacted] to determine the basis for the reporting limit. b6

3. Far East District will follow up with testing laboratories to determine basis for reportable limit.

4. The U.S. Army Corps of Engineers has no other information related to dioxin levels on Camp Carroll.

[redacted] b6
DSN [redacted] b6
[redacted]@usace.army.mil
b6

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Table 4-1
Summary of Samples Collected

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
15	CC054BS01	6/5/2003	C	1033224										1	41	BS
5	CC054BS01 (CC007BS01)	4/10/2003	B	113100	1	1	1	1	1	1	1		1		41	BS
11	CC060BS01	4/4/2003	B	1031902	1	1	1	1	1	1	1		1		41	BS
7	CC060BS01	6/5/2003	C	1033224										1	41	BS
5	CC061BS01	4/4/2003	B	1031902	1	1	1	1	1	1	1	1	1		41	BS
9	CC061BS01	6/4/2003	C	1033197										1	41	BS
9	CC065BS01	4/4/2003	B	1031902	1	1	1	1	1	1	1		1		41	BS
13	CC065BS01	6/5/2003	C	1033224										1	41	BS
2	CC066BS01	4/12/2003	B	1032224		1	1	1	1		1	1			41	BS
11	CC066BS01	6/5/2003	C	1033224	1					1			1	1	41	BS
3	CC066BS02	4/12/2003	B	1032224		1	1	1	1		1				41	BS
12	CC066BS02	6/5/2003	C	1033224	1					1			1	1	41	BS
6	CC161BS01	4/4/2003	B	1031902	1	1	1	1	1	1	1	1	1		41	BSD
2	CC261BS01	4/4/2003	E	112974	1	1	1	1	1	1	1	1	1		41	BSQ
4	CC261BS01	6/4/2003	F	114073										1	41	BSQ
	Total BS Area 41				8	8	8	8	8	8	8	4	8	7	41	13
	Primary				6	6	6	6	6	6	6	2	6	6		
	Dupes				1	1	1	1	1	1	1	1	1	0		
	QA Dupes				1	1	1	1	1	1	1	1	1	1		
3	CC051SS01	6/5/2003	D	1033224	1	1	1	1	1	1	1	1		1	41	SS
3	CC052SS01	4/4/2003	B	1031902	1	1	1	1	1	1	1				41	SS
10	CC052SS01	6/4/2003	C	1033197										1	41	SS
14	CC054SS01	6/5/2003	C	1033224										1	41	SS
4	CC054SS01 (CC007SS01)	4/10/2003	B	113100		1	1	1	1	1	1				41	SS
4	CC055SS01	6/5/2003	D	1033224	1	1	1	1	1	1	1	1		1	41	SS
12	CC056SS01	6/4/2003	D	1033197	1	1	1	1	1		1			1	41	SS
1	CC057SS01	6/5/2003	D	1033224	1	1	1	1	1	1	1			1	41	SS
11	CC059SS01	6/4/2003	D	1033197	1	1	1	1	1		1			1	41	SS
10	CC060SS01	4/4/2003	B	1031902	1	1	1	1	1	1	1				41	SS
6	CC060SS01	6/5/2003	C	1033224										1	41	SS
4	CC061SS01	4/4/2003	B	1031902	1	1	1	1	1	1	1				41	SS
8	CC061SS01	6/4/2003	C	1033197										1	41	SS
7	CC062SS01	4/4/2003	B	1031902	1	1	1	1	1	1	1				41	SS
9	CC062SS01	6/5/2003	C	1033224										1	41	SS
8	CC065SS01	4/4/2003	B	1031902		1	1	1			1				41	SS
8	CC065SS01	6/5/2003	C	1033224										1	41	SS
1	CC066SS01	4/12/2003	B	1032224		1	1	1	1		1	1			41	SS
10	CC066SS01	6/5/2003	C	1033224	1					1			1	1	41	SS

13 SI

Table 4-1
Summary of Samples Collected

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
5	CC067SS01	6/5/2003	D	1033224	1	1	1	1	1	1	1	1		1	41	SS
2	CC157SS01	6/5/2003	D	1033224	1	1	1	1	1	1	1			1	41	SSD
1	CC256SS01	4/5/2003	E	112983	1	1	1	1	1	1	1				41	SSQ
5	CC256SS01	6/4/2003	F	114073										1	41	SSQ
2	CC259SS01	4/5/2003	E	112983	1	1	1	1	1	1	1				41	SSQ
3	CC259SS01	6/4/2003	F	114073										1	41	SSQ
	Total SS Area 41				14	16	16	16	15	13	16	4	1	16	41	21
	Primary				11	13	13	13	12	10	13	4	1	13		
	Dupes				1	1	1	1	1	1	1	0	0	1		
	QA Dupes				2	2	2	2	2	2	2	0	0	2		
1	CC053WS01	6/5/2003	A	1033211	1	1	1	1	1	1	1	1	1	1	41	WS
1	CC054WS01	6/4/2003	A	1033200	1	1	1	1	1	1	1		1	1	41	WS
3	CC066WS01	6/5/2003	A	1033211	1	1	1	1	1	1	1	1	1	1	41	WS
2	CCM14WS01	6/5/2003	A	1033211	1	1	1	1	1	1	1		1	1	41	WS
	Total WS Area 41				4	4	4	4	4	4	4	2	4	4	41	4
	Primary				4	4	4	4	4	4	4	2	4	4		
	Dupes				0	0	0	0	0	0	0	0	0	0		
	QA Dupes				0	0	0	0	0	0	0	0	0	0		
	Total Soil Samples Area 41				22	24	24	24	23	21	24	8	9	23	41	34
	Primary				17	19	19	19	18	16	19	6	7	19		
	Dupes				2	2	2	2	2	2	2	1	1	1		
	QA Dupes				3	3	3	3	3	3	3	1	1	3		
	Total Water Samples Area 41				4	4	4	4	4	4	4	2	4	4	41	4
	Primary				4	4	4	4	4	4	4	2	4	4		
	Dupes				0	0	0	0	0	0	0	0	0	0		
	QA Dupes				0	0	0	0	0	0	0	0	0	0		
	Total All Samples Area 41				26	28	28	28	27	25	28	10	13	27	41	38
	Primary				21	23	23	23	22	20	23	8	11	23		
	Dupes				2	2	2	2	2	2	2	1	1	1		
	QA Dupes				3	3	3	3	3	3	3	1	1	3		
1	CC001BS01	4/10/2003	B	113100	1	1	1	1	1	1	1	1	1		D	BS
2	CC001BS01	5/27/2003	C	1033073										1	D	BS
16	CC006BS01	4/2/2003	B	1031820	1	1	1	1	1	1	1		1		D	BS
14	CC006BS01	5/27/2003	C	1033073										1	D	BS
17	CC006BS02	4/2/2003	B	1031820	1	1	1	1	1	1	1	1	1		D	BS
15	CC006BS02	5/27/2003	C	1033073										1	D	BS
5	CC010BS01	4/2/2003	B	1031820	1	1	1	1	1	1	1	1	1		D	BS
6	CC010BS01	5/27/2003	C	1033073										1	D	BS

Table 4-1
Summary of Samples Collected

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
10	CC010BS02	4/2/2003	B	1031820	1	1	1	1	1	1	1	1			D	BS
7	CC010BS02	5/27/2003	C	1033073										1	D	BS
6	CC017BS01	4/3/2003	B	1031851	1	1	1	1	1	1	1		1		D	BS
11	CC017BS01	6/3/2003	C	1033164									1	1	D	BS
10	CC017BS02	4/3/2003	B	1031851	1	1	1	1	1	1	1		1		D	BS
12	CC017BS02	6/3/2003	C	1033164									1	1	D	BS
11	CC017BS03	4/3/2003	B	1031851	1	1	1	1	1	1	1	1	1		D	BS
13	CC017BS03	6/3/2003	C	1033164									1	1	D	BS
14	CC018BS01	4/3/2003	B	1031851	1	1	1	1	1	1	1		1		D	BS
15	CC018BS01	6/3/2003	C	1033164									1	1	D	BS
15	CC018BS02	4/3/2003	B	1031851	1	1	1	1	1	1	1	1	1		D	BS
16	CC018BS02	6/3/2003	C	1033164									1	1	D	BS
21	CC022BS0	4/3/2003	B	1031851	1	1	1	1	1	1	1	1	1		D	BS
2	CC022BS0	6/4/2003	C	1033197									1	1	D	BS
1	CC024BS0	4/9/2003	B	1031972	1	1	1	1	1	1	1	1	1		D	BS
18	CC024BS0	6/3/2003	C	1033164									1	1	D	BS
2	CC024BS02	4/9/2003	B	1031972	1	1	1	1	1	1	1	1	1		D	BS
19	CC024BS02	6/3/2003	C	1033164									1	1	D	BS
3	CC024BS03	4/9/2003	B	1031972	1	1	1	1	1	1	1	1	1		D	BS
20	CC024BS03	6/3/2003	C	1033164									1	1	D	BS
23	CC026BS01	4/2/2003	B	1031820	1	1	1	1	1	1	1		1		D	BS
6	CC026BS01	5/30/2003	C	1033105										1	D	BS
24	CC026BS02	4/2/2003	B	1031820	1	1	1	1	1	1	1	1	1		D	BS
8	CC026BS02-1	5/30/2003	C	1033105										1	D	BS
9	CC026BS02-2	5/30/2003	C	1033105										1	D	BS
1	CC027BS01	4/4/2003	B	1031902	1	1	1	1	1	1	1		1		D	BS
3	CC027BS01	6/4/2003	C	1033197										1	D	BS
2	CC027BS02	4/4/2003	B	1031902	1	1	1	1	1	1	1	1	1		D	BS
5	CC027BS02	6/4/2003	C	1033197										1	D	BS
22	CC028BS01	4/3/2003	B	1031851	1	1	1	1	1	1	1		1		D	BS
4	CC028BS01	6/3/2003	C	1033164									1	1	D	BS
24	CC028BS02	4/3/2003	B	1031851	1	1	1	1	1	1	1	1	1		D	BS
6	CC028BS02	6/3/2003	C	1033164									1	1	D	BS
1	CC037BS01	4/13/2003	B	1032133	1	1	1	1	1	1	1	1	1		D	BS
18	CC037BS01	5/30/2003	C	1033105										1	D	BS
2	CC037BS02	4/13/2003	B	1032133	1	1	1	1	1	1	1	1	1		D	BS
19	CC037BS02	5/30/2003	C	1033105										1	D	BS
13	CC037BS03	6/4/2003	D	1033197	1	1	1	1	1		1	1	1	1	D	BS
14	CC037BS04	6/4/2003	D	1033197	1	1	1	1	1		1		1	1	D	BS
15	CC037BS05	6/4/2003	D	1033197	1	1	1	1	1		1		1	1	D	BS
16	CC037BS06	6/4/2003	D	1033197	1	1	1	1	1		1		1	1	D	BS

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Table 4-1
Summary of Samples Collected

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
18	CC037BS07	6/4/2003	D	1033197	1	1	1	1	1		1		1	1	D	BS
1	CC038BS01	4/15/2003	B	1032164	1	1	1	1	1	1	1	1	1		D	BS
17	CC038BS01	5/30/2003	C	1033105										1	D	BS
2	CC040BS01	4/16/2003	B	1032180	1	1	1	1	1	1	1	1	1		D	BS
12	CC040BS01	5/30/2003	C	1033105										1	D	BS
2	CC080BS01	4/10/2003	B	113100	1	1	1	1	1	1	1	1	1		D	BS
6	CC080BS01	6/4/2003	C	1033197										1	D	BS
16	CC118BS02	4/3/2003	B	1031851	1	1	1	1	1	1	1	1	1		D	BSD
17	CC118BS02	6/3/2003	C	1033164									1	1	D	BSD
4	CC127BS01	6/4/2003	C	1033197										1	D	BSD
23	CC128BS01	4/3/2003	B	1031851	1	1	1	1	1	1	1		1		D	BSD
5	CC128BS01	6/3/2003	C	1033164									1	1	D	BSD
17	CC137BS06	6/4/2003	D	1033197	1	1	1	1	1		1		1	1	D	BSD
3	CC180BS01	4/10/2003	B	113100	1	1	1	1	1	1	1		1		D	BSD
7	CC180BS01	6/4/2003	C	1033197										1	D	BSD
2	CC222BS01	4/3/2003	E	112915	1	1	1	1	1	1	1	1	1		D	BSQ
1	CC222BS01	6/4/2003	F	114073										1	D	BSQ
1	CC227BS01	4/4/2003	E	112974	1	1	1	1	1	1	1		1		D	BSQ
2	CC227BS01	6/4/2003	F	114073										1	D	BSQ
4	CC228BS01	6/3/2003	F	114050										1	D	BSQ
3	CC228BS02	4/3/2003	E	112915	1	1	1	1	1	1	1		1		D	BSQ
	Total BS Area D				37	37	37	37	37	31	37	21	49	39	D	64
	Primary				30	30	30	30	30	25	30	19	40	31		
	Dupes				4	4	4	4	4	3	4	1	6	5		
	QA Dupes				3	3	3	3	3	3	3	1	3	3		
3	CC001SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1	1			D	SS
1	CC001SS01	4/2/2003	B	1031851				1							D	SS
1	CC001SS01	5/27/2003	C	1033073										1	D	SS
12	CC003SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
1	CC003SS01	6/3/2003	C	1033164										1	D	SS
2	CC004SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1	1			D	SS
3	CC004SS01	5/27/2003	C	1033073										1	D	SS
14	CC006SS01	4/2/2003	B	1031820	1		1	1	1	1	1				D	SS
2	CC006SS01	4/2/2003	B	1031851		1									D	SS
13	CC006SS01	5/27/2003	C	1033073										1	D	SS
4	CC007SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1	1			D	SS
2	CC007SS01	6/3/2003	C	1033164										1	D	SS
6	CC008SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
11	CC008SS01	5/27/2003	C	1033073										1	D	SS
7	CC009SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS

Table 4-1
Summary of Samples Collected

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
12	CC009SS01	5/27/2003	C	1033073										1	D	SS
1	CC010SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
4	CC010SS01	5/27/2003	C	1033073										1	D	SS
8	CC013SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
5	CC013SS01	5/27/2003	C	1033073										1	D	SS
17	CC014SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SS
3	CC014SS01	6/3/2003	C	1033164										1	D	SS
11	CC015SS01	4/2/2003	B	1031820		1	1	1	1	1	1				D	SS
4	CC015SS01	4/2/2003	B	1031851	1										D	SS
10	CC015SS01	5/27/2003	C	1033073										1	D	SS
5	CC017SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SS
10	CC017SS01	6/3/2003	C	1033164										1	D	SS
13	CC018SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SS
14	CC018SS01	6/3/2003	C	1033164										1	D	SS
15	CC019SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
9	CC019SS01	5/27/2003	C	1033073										1	D	SS
19	CC020SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
15	CC020SS01	5/30/2003	C	1033105										1	D	SS
22	CC021SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
14	CC021SS01	5/30/2003	C	1033105										1	D	SS
19	CC022SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SS
1	CC022SS01	6/4/2003	C	1033197										1	D	SS
21	CC023SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
8	CC023SS01	5/27/2003	C	1033073										1	D	SS
20	CC025SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
16	CC025SS01	5/30/2003	C	1033105										1	D	SS
18	CC026SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SS
4	CC026SS01	5/30/2003	C	1033105										1	D	SS
7	CC029SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SS
13	CC029SS01	5/30/2003	C	1033105										1	D	SS
8	CC030SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SS
7	CC030SS01	5/30/2003	C	1033105										1	D	SS
9	CC031SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SS
16	CC031SS01	5/27/2003	C	1033073										1	D	SS
12	CC032SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SS
5	CC032SS01	5/30/2003	C	1033105										1	D	SS
20	CC035SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SS
10	CC035SS01	5/30/2003	C	1033105										1	D	SS
1	CC040SS01	4/16/2003	B	1032180	1	1	1	1	1	1	1	1			D	SS
11	CC040SS01	5/30/2003	C	1033105										1	D	SS
13	CC103SS01	4/2/2003	B	1031820	1	1	1	1	1	1	1				D	SSD

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Table 4-1
Summary of Samples Collected

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
7	CC103SS01	6/3/2003	C	1033164										1	D	SSD
9	CC107SS01	4/2/2003	B	1031820	1	1	1	1	1		1	1			D	SSD
3	CC107SS01	4/2/2003	B	1031851						1					D	SSD
8	CC107SS01	6/3/2003	C	1033164										1	D	SSD
18	CC114SS01	4/3/2003	B	1031851	1	1	1	1	1	1	1				D	SSD
9	CC114SS01	6/3/2003	C	1033164										1	D	SSD
2	CC203SS01	4/2/2003	E	112899	1	1	1	1	1	1	1				D	SSQ
1	CC203SS01	6/3/2003	F	114050										1	D	SSQ
1	CC207SS01	4/2/2003	E	112899	1	1	1	1	1	1	1	1			D	SSQ
2	CC207SS01	6/3/2003	F	114050										1	D	SSQ
1	CC214SS01	4/3/2003	E	112915	1	1	1	1	1	1	1				D	SSQ
3	CC214SS01	6/3/2003	F	114050										1	D	SSQ
	Total SS Area D				32	32	32	33	32	32	32	6	0	32	D	62
	Primary				26	26	26	27	26	26	26	4	0	26		
	Dupes				3	3	3	3	3	3	3	1	0	3		
	QA Dupes				3	3	3	3	3	3	3	1	0	3		
1	CC001WS01	5/29/2003	A	1033071	1	1	1	1	1	1	1		1	1	D	WS
2	CC012WS01	5/30/2003	A	1033105	1	1	1	1	1	1	1		1	1	D	WS
3	CC024WS01	5/29/2003	A	1033071	1	1	1	1	1	1	1	1	1	1	D	WS
1	CC037WS01	6/3/2003	A	1033166	1	1	1	1	1	1	1	1	1	1	D	WS
4	CC038WS01	5/29/2003	A	1033071	1	1	1	1	1	1	1		1	1	D	WS
1	CC039WS01	5/30/2003	A	1033105	1	1	1	1	1	1	1		1	1	D	WS
3	CCM23WS01	6/3/2003	A	1033166	1	1	1	1	1	1	1		1	1	D	WS
2	CC137WS01	6/3/2003	A	1033166	1	1	1	1	1	1	1	1	1	1	D	WSD
5	CC237WS01	6/3/2003	A	114050	1	1	1	1	1	1	1	1	1	1	D	WSQ
	Total WS Area D				9	9	9	9	9	9	9	4	9	9	D	8
	Primary				7	7	7	7	7	7	7	2	7	7		
	Dupes				1	1	1	1	1	1	1	1	1	1		
	QA Dupes				1	1	1	1	1	1	1	1	1	1		
	Total Soil Samples Area D				69	69	69	70	69	63	69	27	49	71	D	126
	Primary				56	56	56	57	56	51	56	23	40	57		
	Dupes				7	7	7	7	7	6	7	2	6	8		
	QA Dupes				6	6	6	6	6	6	6	2	3	6		
	Total Water Samples Area D				9	9	9	9	9	9	9	4	9	9	D	8
	Primary				7	7	7	7	7	7	7	2	7	7		
	Dupes				1	1	1	1	1	1	1	1	1	1		
	QA Dupes				1	1	1	1	1	1	1	1	1	1		
	Total All Samples Area D				78	78	78	79	78	72	78	31	58	80	D	134
	Primary				63	63	63	64	63	58	63	25	47	64		

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Table 4-1
Summary of Samples Collected

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
	Dupes				8	8	8	8	8	7	8	3	7	9		
	QA Dupes				7	7	7	7	7	7	7	3	4	7		
	Total BS Area 41 and Area D				45	45	45	45	45	39	45	25	57	46	41&D	77
	Primary				36	36	36	36	36	31	36	21	46	37		
	Dupes				5	5	5	5	5	4	5	2	7	5		
	QA Dupes				4	4	4	4	4	4	4	2	4	4		
	Total SS Area 41 and Area D				46	48	48	49	47	45	48	10	1	48	41&D	83
	Primary				37	39	39	40	38	36	39	8	1	39		
	Dupes				4	4	4	4	4	4	4	1	0	4		
	QA Dupes				5	5	5	5	5	5	5	1	0	5		
	Total Soil Samples Area 41 and Area D				91	93	93	94	92	84	93	35	58	94	41&D	160
	Primary				73	75	75	76	74	67	75	29	47	76		
	Dupes				9	9	9	9	9	8	9	3	7	9		
	QA Dupes				9	9	9	9	9	9	9	3	4	9		
	Total Water Samples Area 41 and Area D				13	13	13	13	13	13	13	6	13	13	41&D	12
	Primary				11	11	11	11	11	11	11	4	11	11		
	Dupes				1	1	1	1	1	1	1	1	1	1		
	QA Dupes				1	1	1	1	1	1	1	1	1	1		
	Total All Samples Area 41 and Area D				104	106	106	107	105	97	106	41	71	107	41&D	172
	Primary				84	86	86	87	85	78	86	33	58	87		
	Dupes				10	10	10	10	10	9	10	4	8	10		
	QA Dupes				10	10	10	10	10	10	10	4	5	10		

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Table 4-2
Summary of Laboratory Results: All Samples

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
15	CC054BS01	6/5/2003	C	1033224	na	na	na	na	na	na	na	na	na	ND	41	BS
5	CC054BS01 (CC007BS01)	4/10/2003	B	113100	ND	ND	ND	**DET**	ND	ND	**DET**	na	**DET**	na	41	BS
11	CC060BS01	4/4/2003	B	1031902	ND	ND	ND	**DET**	ND	ND	**DET**	na	**DET**	na	41	BS
7	CC060BS01	6/5/2003	C	1033224	na	na	na	na	na	na	na	na	na	ND	41	BS
5	CC061BS01	4/4/2003	B	1031902	ND	ND	ND	**DET**	ND	ND	**DET**	ND	ND	na	41	BS
9	CC061BS01	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	na	ND	41	BS
9	CC065BS01	4/4/2003	B	1031902	ND	**DET**	ND	**DET**	ND	ND	**DET**	na	**DET**	na	41	BS
13	CC065BS01	6/5/2003	C	1033224	na	na	na	na	na	na	na	na	na	ND	41	BS
2	CC066BS01	4/12/2003	B	1032224	na	**DET**	ND	**DET**	ND	na	**DET**	**DET**	na	na	41	BS
11	CC066BS01	6/5/2003	C	1033224	ND	na	na	na	na	ND	na	na	ND	ND	41	BS
3	CC066BS02	4/12/2003	B	1032224	na	ND	ND	ND	ND	na	**DET**	na	na	na	41	BS
12	CC066BS02	6/5/2003	C	1033224	ND	na	na	na	na	ND	na	na	**DET**	ND	41	BS
6	CC161BS01	4/4/2003	B	1031902	ND	ND	ND	**DET**	ND	ND	**DET**	**DET**	ND	na	41	BSD
2	CC261BS01	4/4/2003	E	112974	ND	ND	ND	**DET**	ND	ND	**DET**	ND	**DET**	na	41	BSQ
4	CC261BS01	6/4/2003	F	114073	na	na	na	na	na	na	na	na	na	ND	41	BSQ
	Total BS Area 41			Detects	0	2	0	7	0	0	8	2	5	0	41	13
	Primary			Detects	0	2	0	5	0	0	6	1	4	0		
	Dupes			Detects	0	0	0	1	0	0	1	1	0	0		
	QA Dupes			Detects	0	0	0	1	0	0	1	0	1	0		
3	CC051SS01	6/5/2003	D	1033224	ND	ND	ND	**DET**	ND	ND	**DET**	**DET**	na	ND	41	SS
3	CC052SS01	4/4/2003	B	1031902	ND	ND	ND	ND	ND	ND	**DET**	na	na	na	41	SS
10	CC052SS01	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	na	ND	41	SS
14	CC054SS01	6/5/2003	C	1033224	na	na	na	na	na	na	na	na	na	ND	41	SS
4	CC054SS01 (CC007SS01)	4/10/2003	B	113100	na	**DET**	ND	**DET**	ND	ND	**DET**	na	na	na	41	SS
4	CC055SS01	6/5/2003	D	1033224	ND	**DET**	ND	**DET**	ND	ND	**DET**	**DET**	na	ND	41	SS
12	CC056SS01	6/4/2003	D	1033197	ND	**DET**	ND	**DET**	ND	na	**DET**	na	na	ND	41	SS
1	CC057SS01	6/5/2003	D	1033224	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	ND	41	SS
11	CC059SS01	6/4/2003	D	1033197	ND	ND	ND	**DET**	ND	na	**DET**	na	na	ND	41	SS
10	CC060SS01	4/4/2003	B	1031902	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	41	SS
6	CC060SS01	6/5/2003	C	1033224	na	na	na	na	na	na	na	na	na	ND	41	SS
4	CC061SS01	4/4/2003	B	1031902	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	41	SS
8	CC061SS01	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	na	ND	41	SS
7	CC062SS01	4/4/2003	B	1031902	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	41	SS
9	CC062SS01	6/5/2003	C	1033224	na	na	na	na	na	na	na	na	na	ND	41	SS
8	CC065SS01	4/4/2003	B	1031902	na	**DET**	**DET**	**DET**	na	na	**DET**	na	na	na	41	SS
8	CC065SS01	6/5/2003	C	1033224	na	na	na	na	na	na	na	na	na	ND	41	SS
1	CC066SS01	4/12/2003	B	1032224	na	**DET**	**DET**	**DET**	ND	na	**DET**	**DET**	na	na	41	SS
10	CC066SS01	6/5/2003	C	1033224	ND	na	na	na	na	ND	na	na	ND	ND	41	SS

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Table 4-2
Summary of Laboratory Results: All Samples

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
5	CC067SS01	6/5/2003	D	1033224	ND	ND	ND	**DET**	ND	ND	**DET**	**DET**	na	ND	41	SS
2	CC157SS01	6/5/2003	D	1033224	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	ND	41	SSD
1	CC256SS01	4/5/2003	E	112983	**DET**	**DET**	**DET**	**DET**	ND	ND	**DET**	na	na	ND	41	SSQ
5	CC256SS01	6/4/2003	F	114073	na	na	na	na	na	na	na	na	na	na	41	SSQ
2	CC259SS01	4/5/2003	E	112983	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	ND	41	SSQ
3	CC259SS01	6/4/2003	F	114073	na	na	na	na	na	na	na	na	na	na	41	SSQ
	Total SS Area 41			Detects	1	6	3	15	0	0	16	4	0	0	41	21
	Primary			Detects	0	5	2	12	0	0	13	4	0	0		
	Dupes			Detects	0	0	0	1	0	0	1	0	0	0		
	QA Dupes			Detects	1	1	1	2	0	0	2	0	0	0		
1	CC053WS01	6/5/2003	A	1033211	ND	ND	ND	ND	ND	ND	**DET**	**DET**	**DET**	ND	41	WS
1	CC054WS01	6/4/2003	A	1033200	**DET**	**DET**	ND	ND	ND	ND	**DET**	na	**DET**	ND	41	WS
3	CC066WS01	6/5/2003	A	1033211	**DET**	ND	ND	ND	ND	ND	**DET**	**DET**	**DET**	ND	41	WS
2	CCM14WS01	6/5/2003	A	1033211	ND	ND	ND	ND	ND	ND	**DET**	na	**DET**	ND	41	WS
	Total WS Area 41			Detects	2	1	0	0	0	0	4	2	4	0	41	4
	Primary			Detects	2	1	0	0	0	0	4	2	4	0		
	Dupes			Detects	0	0	0	0	0	0	0	0	0	0		
	QA Dupes			Detects	0	0	0	0	0	0	0	0	0	0		
	Total Soil Samples Area 41			Detects	1	8	3	22	0	0	24	6	5	0	41	34
	Primary			Detects	0	7	2	17	0	0	19	5	4	0		
	Dupes			Detects	0	0	0	2	0	0	2	1	0	0		
	QA Dupes			Detects	1	1	1	3	0	0	3	0	1	0		
	Total Water Samples Area 41			Detects	2	1	0	0	0	0	4	2	4	0	41	4
	Primary			Detects	2	1	0	0	0	0	4	2	4	0		
	Dupes			Detects	0	0	0	0	0	0	0	0	0	0		
	QA Dupes			Detects	0	0	0	0	0	0	0	0	0	0		
	Total All Samples Area 41			Detects	3	9	3	22	0	0	28	8	9	0	41	38
	Primary			Detects	2	8	2	17	0	0	23	7	8	0		
	Dupes			Detects	0	0	0	2	0	0	2	1	0	0		
	QA Dupes			Detects	1	1	1	3	0	0	3	0	1	0		
1	CC001BS01	4/10/2003	B	113100	ND	ND	ND	**DET**	ND	ND	**DET**	ND	**DET**	na	D	BS
2	CC001BS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	BS
16	CC006BS01	4/2/2003	B	1031820	ND	ND	**DET**	ND	ND	ND	**DET**	na	ND	na	D	BS
14	CC006BS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	BS
17	CC006BS02	4/2/2003	B	1031820	ND	ND	ND	ND	ND	ND	**DET**	**DET**	**DET**	na	D	BS
15	CC006BS02	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	BS
5	CC010BS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	**DET**	ND	na	D	BS
6	CC010BS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	BS

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Table 4-2
Summary of Laboratory Results: All Samples

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
10	CC010BS02	4/2/2003	B	1031820	ND	ND	ND	ND	ND	ND	**DET**	**DET**	na	na	D	BS
7	CC010BS02	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	BS
6	CC017BS01	4/3/2003	B	1031851	ND	ND	ND	ND	ND	ND	**DET**	na	**DET**	na	D	BS
11	CC017BS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	**DET**	ND	D	BS
10	CC017BS02	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	ND	na	D	BS
12	CC017BS02	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	ND	ND	D	BS
11	CC017BS03	4/3/2003	B	1031851	ND	ND	ND	ND	ND	ND	**DET**	**DET**	**DET**	na	D	BS
13	CC017BS03	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	ND	ND	D	BS
14	CC018BS01	4/3/2003	B	1031851	ND	**DET**	ND	**DET**	ND	ND	**DET**	na	ND	na	D	BS
15	CC018BS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	ND	ND	D	BS
15	CC018BS02	4/3/2003	B	1031851	ND	**DET**	ND	**DET**	ND	ND	**DET**	**DET**	ND	na	D	BS
16	CC018BS02	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	ND	ND	D	BS
21	CC022BS01	4/3/2003	B	1031851	ND	ND	ND	ND	ND	ND	**DET**	**DET**	ND	na	D	BS
2	CC022BS01	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	ND	ND	D	BS
1	CC024BS01	4/9/2003	B	1031972	ND	**DET**	ND	ND	ND	ND	**DET**	**DET**	ND	na	D	BS
18	CC024BS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	ND	ND	D	BS
2	CC024BS02	4/9/2003	B	1031972	ND	ND	ND	ND	ND	ND	**DET**	**DET**	**DET**	na	D	BS
19	CC024BS02	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	**DET**	ND	D	BS
3	CC024BS03	4/9/2003	B	1031972	ND	ND	ND	ND	ND	ND	**DET**	**DET**	**DET**	na	D	BS
20	CC024BS03	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	**DET**	ND	D	BS
23	CC026BS01	4/2/2003	B	1031820	ND	ND	ND	ND	ND	ND	**DET**	na	ND	na	D	BS
6	CC026BS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	ND	ND	D	BS
24	CC026BS02	4/2/2003	B	1031820	ND	ND	ND	ND	ND	ND	**DET**	**DET**	ND	na	D	BS
8	CC026BS02-1	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	BS
9	CC026BS02-2	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	BS
1	CC027BS01	4/4/2003	B	1031902	ND	ND	ND	ND	ND	ND	**DET**	na	ND	na	D	BS
3	CC027BS01	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	na	ND	D	BS
2	CC027BS02	4/4/2003	B	1031902	ND	ND	ND	ND	ND	ND	**DET**	**DET**	ND	na	D	BS
5	CC027BS02	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	na	ND	D	BS
22	CC028BS01	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	ND	na	D	BS
4	CC028BS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	ND	ND	D	BS
24	CC028BS02	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	**DET**	ND	na	D	BS
6	CC028BS02	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	ND	ND	D	BS
1	CC037BS01	4/13/2003	B	1032133	ND	ND	ND	**DET**	ND	ND	**DET**	**DET**	**DET**	na	D	BS
18	CC037BS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	BS
2	CC037BS02	4/13/2003	B	1032133	ND	ND	ND	ND	ND	ND	**DET**	**DET**	ND	na	D	BS
19	CC037BS02	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	BS
13	CC037BS03	6/4/2003	D	1033197	**DET**	ND	**DET**	**DET**	ND	na	**DET**	**DET**	**DET**	ND	D	BS
14	CC037BS04	6/4/2003	D	1033197	ND	ND	ND	**DET**	ND	na	**DET**	na	**DET**	ND	D	BS
15	CC037BS05	6/4/2003	D	1033197	**DET**	ND	ND	ND	ND	na	**DET**	na	**DET**	ND	D	BS
16	CC037BS06	6/4/2003	D	1033197	ND	ND	ND	ND	ND	na	**DET**	na	**DET**	ND	D	BS

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Table 4-2
Summary of Laboratory Results: All Samples

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
18	CC037BS07	6/4/2003	D	1033197	ND	ND	ND	ND	ND	na	**DET**	na	ND	ND	D	BS
1	CC038BS01	4/15/2003	B	1032164	ND	ND	ND	**DET**	ND	ND	**DET**	**DET**	ND	na	D	BS
17	CC038BS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	BS
2	CC040BS01	4/16/2003	B	1032180	ND	ND	ND	ND	ND	ND	**DET**	**DET**	ND	na	D	BS
12	CC040BS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	BS
2	CC080BS01	4/10/2003	B	113100	ND	ND	ND	**DET**	ND	ND	**DET**	ND	**DET**	na	D	BS
6	CC080BS01	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	na	ND	D	BS
16	CC118BS02	4/3/2003	B	1031851	ND	**DET**	ND	**DET**	ND	ND	**DET**	**DET**	ND	na	D	BSD
17	CC118BS02	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	ND	ND	D	BSD
4	CC127BS01	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	na	ND	D	BSD
23	CC128BS01	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	ND	na	D	BSD
5	CC128BS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	ND	ND	D	BSD
17	CC137BS06	6/4/2003	D	1033197	ND	ND	ND	**DET**	ND	na	**DET**	na	**DET**	ND	D	BSD
3	CC180BS01	4/10/2003	B	113100	ND	ND	ND	**DET**	ND	ND	**DET**	na	**DET**	na	D	BSD
7	CC180BS01	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	na	ND	D	BSD
2	CC222BS01	4/3/2003	E	112915	ND	ND	ND	**DET**	ND	ND	**DET**	ND	ND	na	D	BSQ
1	CC222BS01	6/4/2003	F	114073	na	na	na	na	na	na	na	na	na	ND	D	BSQ
1	CC227BS01	4/4/2003	E	112974	ND	ND	ND	ND	ND	ND	**DET**	na	ND	na	D	BSQ
2	CC227BS01	6/4/2003	F	114073	na	na	na	na	na	na	na	na	na	ND	D	BSQ
4	CC228BS01	6/3/2003	F	114050	na	na	na	na	na	na	na	na	na	ND	D	BSQ
3	CC228BS02	4/3/2003	E	112915	ND	ND	ND	**DET**	ND	ND	**DET**	na	ND	na	D	BSQ
	Total BS Area D			Detects	2	4	2	18	0	0	37	18	17	0	D	64
	Primary			Detects	2	3	2	12	0	0	30	17	15	0		
	Dupes			Detects	0	1	0	4	0	0	4	1	2	0		
	QA Dupes			Detects	0	0	0	2	0	0	3	0	0	0		
3	CC001SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	**DET**	na	na	D	SS
1	CC001SS01	4/2/2003	B	1031851	na	na	na	**DET**	na	na	na	na	na	na	D	SS
1	CC001SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
12	CC003SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
1	CC003SS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	na	ND	D	SS
2	CC004SS01	4/2/2003	B	1031820	ND	ND	ND	ND	ND	ND	**DET**	**DET**	na	na	D	SS
3	CC004SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
14	CC006SS01	4/2/2003	B	1031820	ND	na	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
2	CC006SS01	4/2/2003	B	1031851	na	ND	na	na	na	na	na	na	na	na	D	SS
13	CC006SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
4	CC007SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	**DET**	na	na	D	SS
2	CC007SS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	na	ND	D	SS
6	CC008SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
11	CC008SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
7	CC009SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS

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Table 4-2
Summary of Laboratory Results: All Samples

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
12	CC009SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
1	CC010SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
4	CC010SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
8	CC013SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
5	CC013SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
17	CC014SS01	4/3/2003	B	1031851	ND	**DET**	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
3	CC014SS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	na	ND	D	SS
11	CC015SS01	4/2/2003	B	1031820	na	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
4	CC015SS01	4/2/2003	B	1031851	ND	na	na	na	na	na	na	na	na	na	D	SS
10	CC015SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
5	CC017SS01	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
10	CC017SS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	na	ND	D	SS
13	CC018SS01	4/3/2003	B	1031851	ND	**DET**	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
14	CC018SS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	na	ND	D	SS
15	CC019SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
9	CC019SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
19	CC020SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
15	CC020SS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	SS
22	CC021SS01	4/2/2003	B	1031820	ND	ND	ND	ND	ND	ND	**DET**	na	na	na	D	SS
14	CC021SS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	SS
19	CC022SS01	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
1	CC022SS01	6/4/2003	C	1033197	na	na	na	na	na	na	na	na	na	ND	D	SS
21	CC023SS01	4/2/2003	B	1031820	ND	ND	ND	ND	ND	ND	**DET**	na	na	na	D	SS
8	CC023SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
20	CC025SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
16	CC025SS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	SS
18	CC026SS01	4/2/2003	B	1031820	ND	ND	ND	ND	ND	ND	**DET**	na	na	na	D	SS
4	CC026SS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	SS
7	CC029SS01	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
13	CC029SS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	SS
8	CC030SS01	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
7	CC030SS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	SS
9	CC031SS01	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
16	CC031SS01	5/27/2003	C	1033073	na	na	na	na	na	na	na	na	na	ND	D	SS
12	CC032SS01	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
5	CC032SS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	SS
20	CC035SS01	4/3/2003	B	1031851	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SS
10	CC035SS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	SS
1	CC040SS01	4/16/2003	B	1032180	ND	**DET**	ND	**DET**	ND	ND	**DET**	**DET**	na	na	D	SS
11	CC040SS01	5/30/2003	C	1033105	na	na	na	na	na	na	na	na	na	ND	D	SS
13	CC103SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SSD

Table 4-2
Summary of Laboratory Results: All Samples

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
7	CC103SS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	na	ND	D	SSD
9	CC107SS01	4/2/2003	B	1031820	ND	ND	ND	**DET**	ND	na	**DET**	**DET**	na	na	D	SSD
3	CC107SS01	4/2/2003	B	1031851	na	na	na	na	na	ND	na	na	na	na	D	SSD
8	CC107SS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	na	ND	D	SSD
18	CC114SS01	4/3/2003	B	1031851	ND	**DET**	ND	**DET**	ND	ND	**DET**	na	na	na	D	SSD
9	CC114SS01	6/3/2003	C	1033164	na	na	na	na	na	na	na	na	na	ND	D	SSD
2	CC203SS01	4/2/2003	E	112899	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SSQ
1	CC203SS01	6/3/2003	F	114050	na	na	na	na	na	na	na	na	na	ND	D	SSQ
1	CC207SS01	4/2/2003	E	112899	ND	ND	ND	**DET**	ND	ND	**DET**	ND	na	na	D	SSQ
2	CC207SS01	6/3/2003	F	114050	na	na	na	na	na	na	na	na	na	ND	D	SSQ
1	CC214SS01	4/3/2003	E	112915	ND	ND	ND	**DET**	ND	ND	**DET**	na	na	na	D	SSQ
3	CC214SS01	6/3/2003	F	114050	na	na	na	na	na	na	na	na	na	ND	D	SSQ
	Tota SS Area D			Detects	0	4	0	29	0	0	32	5	0	0	D	62
	Primary			Detects	0	3	0	23	0	0	26	4	0	0		
	Dupes			Detects	0	1	0	3	0	0	3	1	0	0		
	QA Dupes			Detects	0	0	0	3	0	0	3	0	0	0		
1	CC001WS01	5/29/2003	A	1033071	ND	ND	ND	ND	ND	ND	**DET**	na	**DET**	ND	D	WS
2	CC012WS01	5/30/2003	A	1033105	ND	ND	ND	**DET**	ND	ND	**DET**	na	**DET**	ND	D	WS
3	CC024WS01	5/29/2003	A	1033071	**DET**	**DET**	ND	**DET**	ND	ND	**DET**	**DET**	**DET**	ND	D	WS
1	CC037WS01	6/3/2003	A	1033166	**DET**	**DET**	ND	ND	ND	ND	**DET**	**DET**	**DET**	ND	D	WS
4	CC038WS01	5/29/2003	A	1033071	ND	**DET**	ND	ND	ND	ND	**DET**	na	**DET**	ND	D	WS
1	CC039WS01	5/30/2003	A	1033105	**DET**	**DET**	**DET**	**DET**	ND	ND	**DET**	na	**DET**	ND	D	WS
3	CCM23WS01	6/3/2003	A	1033166	ND	ND	ND	ND	ND	ND	**DET**	na	**DET**	ND	D	WS
2	CC137WS01	6/3/2003	A	1033166	**DET**	**DET**	ND	ND	ND	ND	**DET**	ND	**DET**	ND	D	WSD
5	CC237WS01	6/3/2003	A	114050	**DET**	**DET**	**DET**	**DET**	ND	ND	**DET**	ND	**DET**	ND	D	WSQ
	Total WS Area D			Detects	5	6	2	4	0	0	9	2	9	0	D	8
	Primary			Detects	3	4	1	3	0	0	7	2	7	0		
	Dupes			Detects	1	1	0	0	0	0	1	0	1	0		
	QA Dupes			Detects	1	1	1	1	0	0	1	0	1	0		
	Total Soil Samples Area D			Detects	2	8	2	47	0	0	69	23	17	0	D	126
	Primary			Detects	2	6	2	35	0	0	56	21	15	0		
	Dupes			Detects	0	2	0	7	0	0	7	2	2	0		
	QA Dupes			Detects	0	0	0	5	0	0	6	0	0	0		
	Total Water Samples Area D			Detects	5	6	2	4	0	0	9	2	9	0	D	8
	Primary			Detects	3	4	1	3	0	0	7	2	7	0		
	Dupes			Detects	1	1	0	0	0	0	1	0	1	0		
	QA Dupes			Detects	1	1	1	1	0	0	1	0	1	0		
	Total All Samples Area D			Detects	7	14	4	51	0	0	78	25	26	0	D	134
	Primary			Detects	5	10	3	38	0	0	63	23	22	0		

1363

Table 4-2
Summary of Laboratory Results: All Samples

Lab seq.	Sample ID	Date Collected	COC List	Laboratory Batch ID	TPH-G 8015/ 8020B	TPH-D & O 8015B	SVOC 8270	Pesticides 8081A	PCBs 8082	Herbicides 8151	RCRA 8 Metals 6020 & 7471	Dioxin 8290	VOC 8260B	Malathion 8141	Area D or Area 41	Matrix Type
	Dupes			Detects	1	3	0	7	0	0	8	2	3	0		
	QA Dupes			Detects	1	1	1	6	0	0	7	0	1	0		
Total BS Areas 41 and D				Detects	2	6	2	25	0	0	45	20	22	0	41&D	77
	Primary			Detects	2	5	2	17	0	0	36	18	19	0		
	Dupes			Detects	0	1	0	5	0	0	5	2	2	0		
	QA Dupes			Detects	0	0	0	3	0	0	4	0	1	0		
Total SS Areas 41 and D				Detects	1	10	3	44	0	0	48	9	0	0	41&D	83
	Primary			Detects	0	8	2	35	0	0	39	8	0	0		
	Dupes			Detects	0	1	0	4	0	0	4	1	0	0		
	QA Dupes			Detects	1	1	1	5	0	0	5	0	0	0		
Total Soil Samples Areas 41 and D				Detects	3	16	5	69	0	0	93	29	22	0	41&D	160
	Primary			Detects	2	13	4	52	0	0	75	26	19	0		
	Dupes			Detects	0	2	0	9	0	0	9	3	2	0		
	QA Dupes			Detects	1	1	1	8	0	0	9	0	1	0		
Total Water Samples Areas 41 and D				Detects	7	7	2	4	0	0	13	4	13	0	41&D	12
	Primary			Detects	5	5	1	3	0	0	11	4	11	0		
	Dupes			Detects	1	1	0	0	0	0	1	0	1	0		
	QA Dupes			Detects	1	1	1	1	0	0	1	0	1	0		
Total All Samples Areas 41 and D				Detects	10	23	7	73	0	0	106	33	35	0	41&D	172
	Primary			Detects	7	18	5	55	0	0	86	30	30	0		
	Dupes			Detects	1	3	0	9	0	0	10	3	3	0		
	QA Dupes			Detects	2	2	2	9	0	0	10	0	2	0		

4961

Table 4-3
Summary of TPH Detections: Soil

Sample ID	Area	Gasoline Range (mg/kg)	Diesel Range (mg/kg)	Residual Range (mg/kg)
CC054SS01	Area 41	ND	41.4	78.8
CC055SS01	Area 41	ND	51.9	ND
CC056SS01	Area 41	ND	185	ND
CC065BS01	Area 41	ND	69.5	24.5
CC065SS01	Area 41	na	420	126
CC066BS01	Area 41	ND	50.9	ND
CC066SS01	Area 41	ND	1840	ND
CC256SS01	Area 41	34.5	421	37.5
CC014SS01	Area D	ND	ND	28
CC018BS01	Area D	ND	45.7	49.3
CC018BS02	Area D	ND	25.1	33.8
CC018SS01	Area D	ND	62.6	45.9
CC024BS01	Area D	ND	ND	23.8
CC037BS03	Area D	121	ND	ND
CC037BS05	Area D	5.51	ND	ND
CC040SS01	Area D	ND	36.7	ND
CC114SS01	Area D	ND	ND	199
CC118BS02	Area D	ND	ND	29.7

Notes:
mg/kg = milligrams per kilogram
ND = not detected
na = not analyzed

Table 4-4
Summary of VOC Detections: Soil

Sample ID	CC054BS01	CC060BS01	CC065BS01	CC066BS02	CC261BS01	CC001BS01	CC006BS02
Laboratory ID	11310001	1031902011	1031902009	1033224012	11297402	11310001	1031820017
	Area 41	Area 41	Area 41	Area 41	Area 41	Area D	Area D
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	0.0347
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	0.0476
Tetrachloroethene	0.012	0.327	0.502	0.123	0.0207	ND	0.0175
Toluene	0.0875	ND	ND	ND	ND	0.0146	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	0.0252
Notes:							
mg/kg = milligrams per kilogram							
ND = not detected							
na = not analyzed							

1391

Table 4-4
Summary of VOC Detections: Soil

Sample ID	CC017BS01		CC017BS03	CC024BS02		CC024BS03		CC037BS01
Laboratory ID	1031851006	1033164011	1031851011	1031972002	1033164019	1031972003	1033164020	1032133001
	Area D	Area D	Area D	Area D	Area D	Area D	Area D	Area D
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	0.061	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	0.204	0.14	ND	0.0565	0.0297
Tetrachloroethene	0.0644	0.0328	ND	ND	ND	ND	ND	0.076
Toluene	ND	ND	ND	ND	ND	ND	ND	0.473
Trichloroethene	0.0656	ND	ND	ND	0.0606	0.0491	0.0448	ND
Notes:								
mg/kg = milligrams per kil								
ND = not detected								
na = not analyzed								

13617

Table 4-4
Summary of VOC Detections: Soil

Sample ID	CC037BS03	CC037BS04	CC037BS05	CC037BS06	CC080BS01	CC137BS06	CC180BS01
Laboratory ID	1033197013	1033197014	1033197015	1033197016	11310001	1033197017	11310001
	Area D	Area D	Area D	Area D	Area D	Area D	Area D
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	0.528	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	1.93	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	0.0504	0.128	ND	ND	ND	ND
Tetrachloroethene	2	ND	0.0925	0.345	ND	0.228	ND
Toluene	245	0.16	3.02	0.0854	0.0129	0.0582	0.00501
Trichloroethene	ND	0.047	0.165	0.0513	ND	0.0344	ND
Notes:							
mg/kg = milligrams per kil							
ND = not detected							
na = not analyzed							

8/31/98

Table 4-5
Summary ov SVOC Detections: Soil

Analyte	CC065SS01 Area 41 (mg/kg)	CC066SS01 Area 41 (mg/kg)	CC256SS01 Area 41 (mg/kg)	CC006BS01 Area D (mg/kg)	CC037BS03 Area D (mg/kg)
2-Methylnaphthalene	ND	0.779	0.174	ND	ND
2-Methylphenol (o-Cresol)	ND	ND	ND	ND	0.974
3&4-Methylphenol (p&m-Cresol)	ND	ND	ND	ND	1.19
Benzo(a)Anthracene	0.406	ND	ND	ND	ND
Benzo[a]pyrene	0.64	ND	ND	ND	ND
Benzo[b]Fluoranthene	2.08	ND	ND	ND	ND
Benzo[g,h,i]perylene	0.516	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	0.281	ND
Chrysene	0.848	ND	ND	ND	ND
Fluoranthene	0.965	ND	ND	ND	ND
Indeno[1,2,3-c,d] pyrene	0.502	ND	ND	ND	ND
Phenanthrene	0.509	ND	0.172	ND	ND
Pyrene	1.28	ND	ND	ND	ND

Notes:
mg/kg = milligrams per kilogram
ND = not detected
na = not analyzed

Table 4-6
Summary of Pesticide Detections: Soil

Sample ID	CC051SS01	CC054BS01	CC054SS01	CC055SS01	CC056SS01	CC057SS01	CC059SS01	CC060BS01	CC060SS01
Laboratory ID	1033224003	11310005	11310004	1033224004	1033197012	1033224001	1033197011	1031902011	1031902010
	Area 41	Area 41	Area 41	Area 41	Area 41	Area 41	Area 41	Area 41	Area 41
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4,4'-DDD	0.352	ND	5.57	0.29	0.0289	0.00553	ND	ND	3.51
4,4'-DDE	ND	ND	2.65	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.328	0.00801	20.4	ND	0.12	0.00286	2.9	0.621	9.16
Aldrin	ND	ND	0.0154	ND	ND	ND	ND	ND	ND
alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	0.00479	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	0.000572	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	0.501	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	0.0844	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	0.146	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	0.0369	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	ND	ND	0.121	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	ND	ND	0.0023	ND	ND	ND	ND	ND	ND
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
mg/kg = milligrams per kilogram
ND = not detected
na = not analyzed

Table 4-6
Summary of Pesticide Detections: Soil

Sample ID	CC061BS01	CC061SS01	CC062SS01	CC065BS01	CC065SS01	CC066BS01	CC066SS01	CC067SS01	CC157SS01
Laboratory ID	1031902005	1031902004	1031902007	1031902009	1031902008	1032224002	1032224001	1033224005	1033224002
	Area 41	Area 41	Area 41	Area 41	Area 41	Area 41	Area 41	Area 41	Area 41
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4,4'-DDD	ND	ND	21.7	0.00402	21.6	0.00286	0.633	ND	0.00779
4,4'-DDE	0.0122	0.015	ND	0.00754	ND	ND	ND	ND	0.00277
4,4'-DDT	0.0122	0.014	43	0.0356	218	0.0111	1.35	0.0112	0.0136
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
mg/kg = milligrams
ND = not detected
na = not analyzed

Table 4-6
Summary of Pesticide Detections: Soil

Sample ID	CC161BS01	CC256SS01	CC259SS01	CC261BS01	CC001BS01	CC001SS01		CC003SS01	CC006SS01
Laboratory ID	1031902006	11298301	11298302	11297402	11310001	1031820003	1031851001	1031820012	1031820014
	Area 41	Area 41	Area 41	Area 41	Area D	Area D	Area D	Area D	Area D
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4,4'-DDD	ND	0.265	0.3	0.0133	0.00358	ND	ND	ND	ND
4,4'-DDE	0.00773	0.096	0.219	0.0187	0.00207	0.00295	0.00347	ND	ND
4,4'-DDT	0.00685	0.718	3.54	ND	0.00546	0.0155	0.0221	1.4	0.827
Aldrin	ND	0.000729	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	ND	0.000804	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	0.00372	0.00318	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	0.000856	ND	ND	ND	ND	ND	ND
Dieldrin	ND	0.016	0.0228	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	0.00578	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	0.00152	0.00207	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	0.00288	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	ND	ND	0.00293	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	ND	0.000895	0.0039	0.000939	0.000744	ND	ND	ND	ND
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	0.00348	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	0.0105	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	0.00663	ND	ND	ND	ND	ND	ND	ND

Notes:
mg/kg = milligrams
ND = not detected
na = not analyzed

Table 4-6
Summary of Pesticide Detections: Soil

Sample ID	CC007SS01	CC008SS01	CC009SS01	CC010BS01	CC010SS01	CC013SS01	CC014SS01	CC015SS01	CC017BS02
Laboratory ID	1031820004	1031820006	1031820007	1031820005	1031820001	1031820008	1031851017	1031820011	1031851010
	Area D	Area D	Area D	Area D	Area D	Area D	Area D	Area D	Area D
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4,4'-DDD	ND	ND	ND	0.258	ND	ND	ND	ND	ND
4,4'-DDE	0.00401	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.019	0.0166	0.0206	0.502	0.0116	0.0268	0.0465	0.193	0.0144
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
mg/kg = milligrams
ND = not detected
na = not analyzed

Table 4-6
Summary of Pesticide Detections: Soil

Sample ID	CC017SS01	CC018BS01	CC018BS02	CC018SS01	CC019SS01	CC020SS01	CC022SS01	CC024BS01	CC025SS01
Laboratory ID	1031851005	1031851014	1031851015	1031851013	1031820015	1031820019	1031851019	1031972001	1031820020
	Area D	Area D	Area D	Area D	Area D	Area D	Area D	Area D	Area D
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	0.00338	ND
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.163	0.778	0.00324	0.0404	0.0301	0.0392	0.00761	ND	0.0539
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	ND	ND	0.00206	ND	ND	ND	ND	ND	ND
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND	0.00333	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
mg/kg = milligrams
ND = not detected
na = not analyzed

Table 4-6
Summary of Pesticide Detections: Soil

Sample ID	CC028BS01	CC028BS02	CC029SS01	CC030SS01	CC031SS01	CC032SS01	CC035SS01	CC037BS01	CC037BS03
Laboratory ID	1031851022	1031851024	1031851007	1031851008	1031851009	1031851012	1031851020	1032133001	1033197013
	Area D	Area D	Area D	Area D	Area D	Area D	Area D	Area D	Area D
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4,4'-DDD	ND	0.0108	ND	ND	ND	ND	0.028	0.0248	0.516
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.445	0.00411	0.159	14.5	5.52	0.145	0.122	0.0289	0.0557
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	ND	0.00896	ND	ND	ND	ND	0.0391	ND	ND
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
mg/kg = milligrams
ND = not detected
na = not analyzed

Table 4-6
Summary of Pesticide Detections: Soil

Sample ID	CC037BS04	CC038BS01	CC040SS01	CC080BS01	CC103SS01	CC107SS01	CC114SS01	CC118BS02	CC128BS01
Laboratory ID	1033197014	1032164001	1032180001	11310002	1031820013	1031820009	1031851018	1031851016	1031851023
	Area D	Area D	Area D	Area D	Area D	Area D	Area D	Area D	Area D
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4,4'-DDD	ND	ND	ND	0.0086	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	0.00681	ND	ND	ND	ND	ND
4,4'-DDT	0.0174	0.00272	29.3	0.0349	1.4	0.0286	0.0127	0.00465	0.773
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	ND	ND	ND	ND	ND	ND	ND	0.0024	ND
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Notes:
mg/kg = milligrams
ND = not detected
na = not analyzed

Table 4-6
Summary of Pesticide Detections: Soil

Sample ID	CC137BS06	CC180BS01	CC203SS01	CC207SS01	CC214SS01	CC222BS01	CC228BS02
Laboratory ID	1033197017	11310003	11289902	11289901	11291501	11291502	11291503
	Area D	Area D	Area D	Area D	Area D	Area D	Area D
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4,4'-DDD	ND	0.00749	0.0679	ND	ND	ND	0.0129
4,4'-DDE	ND	0.00459	0.0482	0.00357	ND	ND	0.00129
4,4'-DDT	0.00806	0.0228	1.25	0.0205	0.00401	ND	0.00698
Aldrin	ND	ND	ND	ND	ND	ND	0.000882
alpha-BHC	ND	ND	0.000687	ND	ND	0.00165	ND
beta-BHC	ND	ND	0.00252	ND	ND	0.00159	ND
delta-BHC	ND	ND	0.00193	ND	ND	ND	ND
Dieldrin	ND	ND	0.00511	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	0.00146	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	ND	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	ND	0.000681	0.0359	ND	ND	0.00322	0.00562
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND

Notes:
mg/kg = milligrams
ND = not detected
na = not analyzed

1371

Table 4-7
Summary of Metals Detections: Soil

Sample ID	Area	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Mercury (mg/kg)
CC051SS01	Area 41	8.24	79.4	ND	21.7	31.7	ND	ND	ND
CC052SS01	Area 41	ND	54.3	ND	5.19	8.67	ND	ND	ND
CC054BS01	Area 41	1.04	72.8	ND	5.53	6.31	ND	0.014	ND
CC054SS01	Area 41	2.86	83.7	0.586	11.7	23.9	0.388	0.056	0.0105
CC055SS01	Area 41	2.46	80.7	ND	10.2	13.8	ND	ND	ND
CC056SS01	Area 41	2.34	91.7	ND	13.3	8.52	ND	ND	ND
CC057SS01	Area 41	ND	61.3	ND	5.41	8.87	ND	ND	ND
CC059SS01	Area 41	2.77	81.2	ND	8.05	11	ND	ND	ND
CC060BS01	Area 41	ND	235	ND	66.7	6.85	ND	ND	ND
CC060SS01	Area 41	1.43	67.3	ND	8.82	13.5	ND	ND	ND
CC061BS01	Area 41	ND	37.4	ND	2.97	5.55	ND	ND	ND
CC061SS01	Area 41	ND	89.4	ND	6.99	8.97	ND	ND	ND
CC062SS01	Area 41	ND	64.5	ND	4.64	6.56	ND	ND	ND
CC065BS01	Area 41	ND	61.9	ND	4.63	8.27	ND	ND	ND
CC065SS01	Area 41	4.28	62.8	ND	24.5	38	ND	ND	ND
CC066BS01	Area 41	ND	190	ND	79.9	3.56	ND	ND	ND
CC066BS02	Area 41	ND	112	ND	12.1	8.93	ND	ND	ND
CC066SS01	Area 41	2.15	69.4	ND	6.37	13.8	ND	ND	ND
CC067SS01	Area 41	3.38	58.6	ND	13.1	14.8	ND	ND	ND
CC157SS01	Area 41	ND	62.2	ND	6.37	10.7	ND	ND	ND
CC161BS01	Area 41	ND	40	ND	4.21	6.93	ND	ND	ND
CC256SS01	Area 41	1.64	85.8	ND	15.2	9.24	0.444	0.0302	0.00617
CC259SS01	Area 41	2.63	64.5	0.0328	5.66	12.4	ND	0.0317	0.00835
CC261BS01	Area 41	0.756	38.5	ND	2.21	5.89	ND	0.00866	0.0128
CC001BS01	Area D	0.916	107	ND	3.07	3.57	0.385	0.0335	0.00954
CC001SS01	Area D	12.9	134	1.08	2.52	25.2	ND	0.183	ND
CC003SS01	Area D	4.65	90.4	0.292	3.46	13.9	ND	ND	ND
CC004SS01	Area D	8.28	161	1.08	1.65	20.9	ND	0.144	ND
CC006BS01	Area D	2.96	76.7	0.396	4.08	9.86	ND	ND	ND
CC006BS02	Area D	9.46	91.1	0.386	5.15	17.1	ND	ND	ND
CC006SS01	Area D	6.4	102	0.673	3.34	23.7	ND	ND	ND
CC007SS01	Area D	9.62	101	0.875	2.27	24.5	ND	0.133	ND
CC008SS01	Area D	5.37	111	0.5	3.47	12.6	ND	ND	ND
CC009SS01	Area D	5.06	108	0.418	3.96	14.5	ND	ND	ND
CC010BS01	Area D	9.46	76.3	0.331	5.45	24.4	ND	ND	ND
CC010BS02	Area D	3.31	151	ND	ND	23.1	ND	ND	ND
CC010SS01	Area D	11.6	108	0.601	2.91	20.9	ND	0.12	ND
CC013SS01	Area D	4.99	103	0.36	3.09	14.6	ND	ND	ND
CC014SS01	Area D	3.99	106	ND	4.99	16.9	ND	ND	ND
CC015SS01	Area D	6.07	124	0.633	3.04	16.9	ND	ND	ND
CC017BS01	Area D	1.25	71	ND	5.22	11.6	ND	ND	ND
CC017BS02	Area D	6.25	99.4	0.622	3.09	20.6	ND	ND	ND
CC017BS03	Area D	5.72	83.5	ND	9.48	23	ND	ND	ND
CC017SS01	Area D	8.21	126	0.647	2.7	21.1	ND	ND	ND
CC018BS01	Area D	7.41	96.7	0.454	5.72	28.2	ND	ND	ND
CC018BS02	Area D	5.81	80.2	ND	5.39	10.2	ND	ND	ND
CC018SS01	Area D	9.97	95.1	1.07	3.73	29.5	ND	0.472	ND
CC019SS01	Area D	5.36	111	0.276	4.16	11.1	ND	ND	ND
CC020SS01	Area D	7.5	108	0.369	3.87	23.2	ND	ND	ND

Table 4-7
Summary of Metals Detections: Soil

Sample ID	Area	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Mercury (mg/kg)
CC021SS01	Area D	4.64	147	0.627	2.75	9.62	ND	ND	ND
CC022BS01	Area D	4.88	61	ND	5.48	20.4	ND	ND	ND
CC022SS01	Area D	5.36	133	0.748	3.29	15.4	ND	0.109	ND
CC023SS01	Area D	14.2	184	2.87	1.4	28.7	ND	0.312	ND
CC024BS01	Area D	13.8	91.8	0.473	6.45	39	ND	ND	ND
CC024BS02	Area D	5.33	98.1	ND	13.4	20.1	ND	ND	ND
CC024BS03	Area D	ND	70.1	ND	4.89	8.62	ND	ND	ND
CC025SS01	Area D	6	91.7	0.297	3.77	13.1	ND	ND	ND
CC026BS01	Area D	4.64	112	0.627	3.74	15.2	ND	ND	ND
CC026BS02	Area D	11.6	78	0.569	2.82	28.6	ND	ND	ND
CC026SS01	Area D	20.7	114	1.54	1.91	52	ND	0.252	ND
CC027BS01	Area D	2.3	67.4	ND	5.72	8.71	ND	ND	ND
CC027BS02	Area D	ND	58.3	ND	5.39	12.4	ND	ND	ND
CC028BS01	Area D	19.9	129	0.431	5.65	15.2	ND	ND	ND
CC028BS02	Area D	3.74	95.4	ND	3.6	12.3	ND	ND	ND
CC029SS01	Area D	2.5	146	ND	4.39	13.2	ND	ND	ND
CC030SS01	Area D	6.44	106	0.523	5.09	19.2	ND	ND	ND
CC031SS01	Area D	6.69	120	0.549	4.11	32.8	ND	ND	ND
CC032SS01	Area D	4.09	143	0.537	3.55	18.7	ND	ND	ND
CC035SS01	Area D	5.32	99.7	0.388	4.24	13.5	ND	ND	ND
CC037BS01	Area D	2.88	75.4	ND	4.37	9.31	ND	ND	ND
CC037BS02	Area D	2.7	94.2	ND	4.61	14.6	ND	ND	ND
CC037BS03	Area D	ND	119	ND	4.68	7.47	ND	ND	ND
CC037BS04	Area D	5.06	211	ND	4.73	8.51	ND	ND	ND
CC037BS05	Area D	2.09	123	ND	3.92	7.34	ND	ND	ND
CC037BS06	Area D	8.7	84.9	0.556	10	30.3	ND	ND	ND
CC037BS07	Area D	2.84	102	ND	4.93	8.91	ND	ND	ND
CC038BS01	Area D	2.91	85.2	ND	5.45	11.6	ND	ND	ND
CC040BS01	Area D	6	63.5	ND	15.6	20.8	ND	ND	ND
CC040SS01	Area D	4.31	82.3	0.282	4.42	14.7	ND	ND	ND
CC080BS01	Area D	4.08	81.8	0.298	2.77	13.5	ND	0.0569	ND
CC103SS01	Area D	5.37	106	0.423	4.26	21.6	ND	ND	ND
CC107SS01	Area D	7.2	95.9	0.784	2.1	20	ND	ND	ND
CC114SS01	Area D	4.73	110	0.22	5.27	18.7	ND	ND	ND
CC118BS02	Area D	1.43	90.4	ND	5.57	10.6	ND	ND	ND
CC128BS01	Area D	5	133	0.351	6.48	16.1	ND	ND	ND
CC137BS06	Area D	9.63	85.8	0.927	9.44	47.6	ND	ND	ND
CC180BS01	Area D	12.1	107	0.403	7.05	48.3	ND	0.0686	ND
CC203SS01	Area D	6.21	94.4	0.48	3.05	18.5	ND	0.0569	0.012
CC207SS01	Area D	7.52	112	0.836	2.34	20.5	ND	0.0959	ND
CC214SS01	Area D	4.15	108	0.347	3.13	13.2	ND	0.0498	ND
CC222BS01	Area D	3.91	84.6	0.188	4.35	13.6	ND	0.0285	0.0137
CC227BS01	Area D	4.23	87.2	ND	7.92	13	ND	0.0463	0.00947
CC228BS02	Area D	5.42	98.4	0.318	2.79	16.1	ND	0.0389	0.0146

Notes:
mg/kg = milligrams per kilogram
ND = not detected
na = not analyzed

Table 4-8
Summary of Dioxin Detections: Soil

Sample ID	CC051SS01	CC055SS01	CC066BS01	CC066SS01	CC067SS01	CC161BS01	CC001SS01	CC004SS01	CC006BS02
Lab ID	1033224003	1033224004	1032224002	1032224001	1033224005	1031902006	103182003	103182002	103182017
Location	Area 41	Area 41	Area 41	Area 41	Area 41	Area 41	Area D	Area D	Area D
Unit	(pg/g)	(pg/g)	(pg/g)	(pg/g)	(pg/g)	(pg/g)	(pg/g)	(pg/g)	(pg/g)
2,3,7,8-TCDD	ND	ND	ND	EMPC=0.244	ND	ND	ND	ND	ND
1,2,3,7,8-PeCDD	EMPC=0.268	ND	ND	EMPC=0.253	ND	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	EMPC=0.559	ND	ND	EMPC=0.278	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDD	1.74	ND	ND	0.594	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDD	1.1	ND	ND	EMPC=0.467	ND	ND	ND	ND	ND
1,2,3,4,6,7,8-HpCDD	54.5	1.14	0.378	11.6	0.865	0.926	0.607	0.394	0.627
OCDD	793	40	4.15	111	30.2	51.7	26.1	18.7	38.5
2,3,7,8-TCDF	EMPC=0.318	ND	ND	0.235	ND	0.107	ND	ND	ND
1,2,3,7,8-PeCDF	0.493	ND	ND	0.131	EMPC=0.119	ND	ND	ND	ND
2,3,4,7,8-PeCDF	0.25	ND	ND	0.278	0.0956	ND	ND	ND	ND
1,2,3,4,7,8-HxCDF	0.766	ND	ND	0.393	EMPC=0.110	ND	ND	ND	ND
1,2,3,6,7,8-HxCDF	EMPC=0.555	ND	ND	EMPC=0.341	0.119	ND	ND	0.0522	ND
2,3,4,5,6,7-HxCDF	0.584	ND	ND	0.414	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDF	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8-HpCDF	10.5	0.312	ND	4.53	0.336	EMPC=0.118	EMPC=0.0883	0.106	0.0988
1,2,3,4,7,8,9-HpCDF	0.859	ND	ND	0.382	ND	ND	ND	ND	ND
OCDF	23.1	1.08	ND	11.3	EMPC=0.559	ND	EMPC=0.136	ND	ND
Total TCDDs	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PeCDDs	0.557	ND	ND	0.223	ND	ND	ND	ND	ND
Total HxCDDs	7.62	ND	ND	0.594	ND	ND	ND	ND	ND
Total HpCDDs	97.7	2.52	0.737	21.1	2	3.01	1.44	1.14	0.627
Total TCDFs	2.6	ND	ND	0.64	ND	0.186	ND	ND	ND
Total PeCDFs	4.55	ND	ND	2.4	0.0956	ND	ND	ND	ND
Total HxCDFs	11.8	ND	ND	7.14	0.224	ND	ND	0.0522	ND
Total HpCDFs	28.2	0.312	ND	13	0.732	ND	ND	0.106	0.186
ITEF TEQ (ND = 0)	2.04	0.0556	0.00793	0.596	0.102	0.0717	0.0322	0.0289	0.0458
ITEF TEQ (ND = 1/2)	2.34	0.584	0.436	0.825	0.492	0.362	0.331	0.293	0.323

Notes:
pg/g = picograms per gram
ND = not detected
na = not analyzed

Table 4-8
Summary of Dioxin Detections: Soil

Sample ID Lab ID Location Unit	CC007SS01 103182004 Area D (pg/g)	CC010BS01 103182005 Area D (pg/g)	CC010BS02 103182010 Area D (pg/g)	CC017BS03 1031851011 Area D (pg/g)	CC018BS02 1031851015 Area D (pg/g)	CC022BS01 1031851021 Area D (pg/g)	CC024BS01 1031972001 Area D (pg/g)	CC024BS02 1031972002 Area D (pg/g)	CC024BS03 1031972003 Area D (pg/g)
2,3,7,8-TCDD	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,7,8-PeCDD	ND	EMPC=0.0761	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDD	EMPC=0.145	EMPC=0.142	ND	ND	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDD	EMPC=0.137	0.0921	ND	EMPC=0.137	ND	EMPC=0.144	ND	ND	ND
1,2,3,4,6,7,8-HpCDD	1.54	2.45	0.199	0.69	0.432	1.16	0.596	EMPC=0.506	ND
OCDD	35.5	47.4	10.8	21.8	27.8	59.9	31.3	12.3	2.26
2,3,7,8-TCDF	ND	0.108	EMPC=0.0728	EMPC=0.208	0.125	0.112	ND	ND	ND
1,2,3,7,8-PeCDF	ND	ND	ND	0.0903	0.089	EMPC=0.0919	ND	ND	ND
2,3,4,7,8-PeCDF	EMPC=0.0767	0.0741	ND	EMPC=0.109	EMPC=0.100	0.0671	ND	ND	ND
1,2,3,4,7,8-HxCDF	0.0808	EMPC=0.0721	ND	0.0718	EMPC=0.0801	ND	ND	ND	ND
1,2,3,6,7,8-HxCDF	EMPC=0.0828	EMPC=0.0621	ND	0.0811	0.1	0.107	ND	ND	ND
2,3,4,5,6,7-HxCDF	EMPC=0.0929	EMPC=0.0721	ND	ND	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDF	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8-HpCDF	0.519	0.897	ND	0.162	0.118	ND	0.14	ND	ND
1,2,3,4,7,8,9-HpCDF	ND	ND	ND	ND	ND	ND	ND	ND	ND
OCDF	0.62	1.44	ND	0.236	ND	ND	ND	ND	ND
Total TCDDs	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PeCDDs	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total HxCDDs	0.343	0.0921	ND	0.308	ND	ND	ND	ND	ND
Total HpCDDs	1.54	5.11	0.199	1.75	1.08	3.23	1.54	0.736	ND
Total TCDFs	0.0747	0.108	ND	1.66	0.125	0.112	ND	1.49	ND
Total PeCDFs	0.331	0.0741	ND	0.366	0.089	0.0671	ND	ND	ND
Total HxCDFs	0.685	0.451	ND	0.153	0.1	0.107	ND	ND	ND
Total HpCDFs	0.519	2.04	ND	0.162	0.118	ND	0.14	ND	ND
ITEF TEQ (ND = 0)	0.0648	0.139	0.0128	0.0504	0.0602	0.127	0.0387	0.0123	0.00226
ITEF TEQ (ND = 1/2)	0.331	0.335	0.309	0.333	0.34	0.371	0.319	0.336	0.346

Notes:
pg/g = picograms per gra
ND = not detected
na = not analyzed

Table 4-8
Summary of Dioxin Detections: Soil

Sample ID Lab ID Location Unit	CC026BS02 103182023 Area D (pg/g)	CC027BS02 1031902002 Area D (pg/g)	CC028BS02 1031851024 Area D (pg/g)	CC037BS01 1032133001 Area D (pg/g)	CC037BS02 1032133002 Area D (pg/g)	CC037BS03 1033197013 Area D (pg/g)	CC038BS01 103216401 Area D (pg/g)	CC107SS01 103182009 Area D (pg/g)	CC118BS02 1031851016 Area D (pg/g)
2,3,7,8-TCDD	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,7,8-PeCDD	0.13	ND	EMPC=0.0997	ND	ND	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	0.174	ND	EMPC=0.104	ND	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDD	0.186	0.126	ND	ND	ND	EMPC=0.396	ND	ND	ND
1,2,3,7,8,9-HxCDD	0.18	0.309	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8-HpCDD	0.792	3.69	0.935	0.38	0.257	7.27	2.23	0.978	0.438
OCDD	39.4	82.5	32.3	15.1	6.69	110	85.9	34.3	26.3
2,3,7,8-TCDF	0.0871	0.16	EMPC=0.121	0.0665	ND	EMPC=0.218	ND	ND	ND
1,2,3,7,8-PeCDF	EMPC=0.178	EMPC=0.0790	ND	ND	ND	ND	EMC=0.0540	ND	EMPC=0.0997
2,3,4,7,8-PeCDF	0.162	0.07	ND	ND	ND	0.192	EMPC=0.0620	EMPC=0.0870	ND
1,2,3,4,7,8-HxCDF	0.152	ND	ND	ND	ND	EMPC=0.242	ND	ND	ND
1,2,3,6,7,8-HxCDF	0.154	ND	ND	EMPC=0.0475	ND	0.175	EMPC=0.0760	EMPC=0.141	EMPC=0.0788
2,3,4,5,6,7-HxCDF	0.154	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDF	0.14	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8-HpCDF	EMPC=0.221	0.169	0.223	0.0931	ND	1.89	0.24	EMPC=0.298	0.123
1,2,3,4,7,8,9-HpCDF	EMPC=0.134	ND	ND	ND	ND	ND	ND	ND	ND
OCDF	EMPC=0.296	0.318	EMPC=0.469	0.173	ND	14.1	0.646	EMPC=0.777	ND
Total TCDDs	ND	0.461	ND	ND	ND	ND	ND	ND	ND
Total PeCDDs	0.13	ND	ND	ND	ND	ND	ND	ND	ND
Total HxCDDs	0.541	3.08	ND	ND	ND	0.308	0.082	ND	ND
Total HpCDDs	0.792	9.45	2.08	0.883	0.537	13.4	6.79	2.34	1.08
Total TCDFs	0.227	0.912	ND	0.0665	ND	ND	ND	ND	ND
Total PeCDFs	0.162	0.151	0.106	0.0418	ND	0.477	0.386	ND	ND
Total HxCDFs	0.6	0.149	0.384	0.0589	ND	2.94	0.162	0.468	ND
Total HpCDFs	ND	0.395	0.223	0.0931	ND	7.86	0.24	ND	0.123
ITEF TEQ (ND = 0)	0.316	0.216	0.0439	-	-	0.329	0.111	0.0441	0.0319
ITEF TEQ (ND = 1/2)	0.376	0.422	0.337	-	-	0.706	0.388	0.343	0.351

Notes:
pg/g = picograms per gra
ND = not detected
na = not analyzed

Table 4-9
Summary of TPH Detections: Groundwater

Sample ID	Area	Gasoline Range (mg/L)	Diesel Range (mg/L)
CC054WS01	Area 41	2.39	1.8
CC066WS01	Area 41	0.308	ND
CC024WS01	Area D	0.559	0.309
CC037WS01	Area D	1.35	0.397
CC038WS01	Area D	ND	0.365
CC039WS01	Area D	1.63	0.666
CC137WS01	Area D	1.34	0.424
CC237WS01	Area D	1.19	0.229

Notes:
mg/L = milligrams per liter
ND = not detected
na = not analyzed

Table 4-10
Summary of VOC Detections: Groundwater

Analyte / Sample ID / Location / Unit	CC053WS01 Area 41 (mg/L)	CC054WS01 Area 41 (mg/L)	CC066WS01 Area 41 (mg/L)	CCM14WS01 Area 41 (mg/L)	CC001WS01 Area D (mg/L)	CC012WS01 Area D (mg/L)	CC024WS01 Area D (mg/L)	CC037WS01 Area D (mg/L)
1,1,1,2-Tetrachloroethane	ND	0.00468	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	0.00831	0.00602	ND	0.00138	ND	ND	ND
1,1,2-Trichloroethane	ND	0.00104	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	0.0161	0.00721	0.01
1,1-Dichloroethene	ND	ND	ND	ND	ND	0.00362	ND	0.0117
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.00135	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	0.00711
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	0.00177
Acetone	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	0.00137	ND	ND	ND	0.00162	0.00486	0.00691
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	0.0121	0.00275
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	0.01	0.00166	ND	ND	ND	0.00616	0.00109
cis-1,2-Dichloroethene	ND	0.0305	ND	0.00444	ND	0.00966	0.386	1.32
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND
P & M -Xylene	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.192	11.1	0.504	0.0926	0.00888	0.0044	0.423	0.35
Toluene	ND	0.00692	0.00192	ND	ND	0.00292	ND	0.357
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	0.00106	ND
Trichlorethene	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	0.0247	0.171	0.325	0.0126	0.00283	ND	0.361	0.949
Vinyl chloride	ND	ND	ND	ND	ND	0.00163	0.00409	0.043

Notes:
mg/L = milligrams per liter
ND = not detected

Table 4-10
Summary of VOC Detections: Groundwater

Sample ID	CC053WS01	CC054WS01	CC066WS01	CCM14WS01	CC001WS01	CC012WS01	CC024WS01	CC037WS01
Location	Area 41	Area 41	Area 41	Area 41	Area D	Area D	Area D	Area D
Unit	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)

na = not analyzed

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Table 4-10
Summary of VOC Detections: Groundwater

Sample ID Location Unit Analyte	CC038WS01 Area D (mg/L)	CC039WS01 Area D (mg/L)	CC137WS01 Area D (mg/L)	CC237WS01 Area D (mg/L)	CCM23WS01 Area D (mg/L)
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	0.00278	0.0108	0.0131	ND
1,1-Dichloroethene	ND	ND	0.0116	0.0124	ND
1,2,4-Trimethylbenzene	ND	0.0174	ND	ND	ND
1,3,5-Trimethylbenzene	ND	0.00546	ND	ND	ND
1,4-Dichlorobenzene	ND	0.00145	ND	ND	ND
2-Chlorotoluene	ND	0.0028	0.00742	0.00967	ND
4-Chlorotoluene	ND	0.00191	0.00175	0.00207	ND
Acetone	ND	ND	ND	0.00285	ND
Benzene	ND	0.014	0.00692	0.00693	ND
Carbon disulfide	ND	ND	ND	0.000873	ND
Chlorobenzene	ND	0.0418	0.00269	0.00294	ND
Chloroethane	ND	ND	ND	0.000571	ND
Chloroform	ND	0.0015	0.00103	0.000898	ND
cis-1,2-Dichloroethene	ND	0.122	1.21	1.67	0.0105
Ethylbenzene	ND	0.0028	ND	ND	ND
Isopropylbenzene (Cumene)	ND	0.00134	ND	ND	ND
Methylene chloride	ND	ND	ND	0.00115	ND
Naphthalene	ND	0.0169	ND	ND	ND
n-Propylbenzene	ND	0.00251	ND	ND	ND
o-Xylene	ND	0.0022	ND	ND	ND
P & M -Xylene	ND	0.00301	ND	ND	ND
Tetrachloroethene	0.0247	0.203	0.343	0.427	0.00107
Toluene	ND	0.686	0.43	0.408	0.00374
trans-1,2-Dichloroethene	ND	ND	0.0398	0.0376	0.00344
Trichlorethene	ND	ND	ND	1.4	ND
Trichloroethene	0.00107	0.0754	0.941	ND	0.00186
Vinyl chloride	ND	0.0153	0.0453	0.0379	ND

Notes:
mg/L = milligrams per liter
ND = not detected

Table 4-10
Summary of VOC Detections: Groundwater

Sample ID	CC038WS01	CC039WS01	CC137WS01	CC237WS01	CCM23WS01
Location	Area D	Area D	Area D	Area D	Area D
Unit	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)

na = not analyzed

Table 4-13
Summary of Metals Detections: Groundwater

Sample ID	Area	Arsenic (mg/L)	Barium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)
CC053WS01	Area 41	ND	16.7	ND	ND	ND	ND	ND
CC054WS01	Area 41	ND	204	10.5	ND	ND	ND	ND
CC066WS01	Area 41	ND	124	80.6	ND	ND	ND	ND
CCM14WS01	Area 41	ND	94.5	9.58	ND	ND	ND	ND
CC001WS01	Area D	ND	106	ND	ND	ND	ND	ND
CC012WS01	Area D	ND	90.2	7.32	ND	ND	ND	0.808
CC024WS01	Area D	ND	153	7.3	ND	ND	ND	ND
CC037WS01	Area D	ND	100	11.6	ND	ND	ND	ND
CC038WS01	Area D	ND	12.3	ND	ND	ND	ND	ND
CC039WS01	Area D	24.2	126	ND	ND	ND	ND	ND
CC137WS01	Area D	ND	100	11.2	ND	ND	ND	ND
CC237WS01	Area D	0.000379	0.101	0.00434	0.000176	0.00224	0.000356	0.000243
CCM23WS01	Area D	ND	161	ND	ND	ND	ND	0.536

Notes:
mg/L = milligrams per liter
ND = not detected
na = not analyzed

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Table 4-14
Summary of Dioxin Detections: Groundwater

Sample ID	CC053WS01	CC066WS01	CC024WS01	CC037WS01
Lab ID	1033211001	1033211003	1033071003	1033166001
Location	Area 41	Area 41	Area D	Area D
Unit	(ng/L)	(ng/L)	(ng/L)	(ng/L)
2,3,7,8-TCDD	ND	ND	ND	ND
1,2,3,7,8-PeCDD	EMPC=0.00212	0.00276	0.00181	ND
1,2,3,4,7,8-HxCDD	ND	EMPC=0.00235	ND	ND
1,2,3,6,7,8-HxCDD	ND	0.00259	ND	ND
1,2,3,7,8,9-HxCDD	ND	EMPC=0.00298	ND	ND
1,2,3,4,6,7,8-HpCDD	ND	ND	ND	ND
OCDD	ND	ND	EMPC=0.00715	0.0119
2,3,7,8-TCDF	ND	ND	ND	ND
1,2,3,7,8-PeCDF	0.00349	0.00333	EMPC=0.00124	ND
2,3,4,7,8-PeCDF	ND	0.00306	ND	EMPC=0.00354
1,2,3,4,7,8-HxCDF	ND	ND	0.00065	ND
1,2,3,6,7,8-HxCDF	EMPC=0.00226	EMPC=0.00253	EMPC=0.000827	ND
2,3,4,5,6,7-HxCDF	ND	ND	ND	ND
1,2,3,7,8,9-HxCDF	ND	EMPC=0.00324	ND	ND
1,2,3,4,6,7,8-HpCDF	EMPC=0.00228	0.00282	ND	ND
1,2,3,4,7,8,9-HpCDF	ND	ND	ND	ND
OCDF	ND	ND	ND	ND
Total TCDDs	ND	ND	ND	ND
Total PeCDDs	ND	0.00276	0.00181	ND
Total HxCDDs	ND	0.00259	ND	ND
Total HpCDDs	ND	ND	ND	ND
Total TCDFs	ND	ND	ND	ND
Total PeCDFs	0.011	0.00639	ND	ND
Total HxCDFs	ND	ND	0.00065	ND
Total HpCDFs	ND	0.00282	ND	ND
ITEF TEQ (ND = 0)	0.000174	0.00336	0.00097	0.0000119
ITEF TEQ (ND = 1/2)	0.00648	0.00742	0.0039	0.00538

Notes:
ng/L = nanograms per liter
ND = not detected
na = not analyzed

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DEPARTMENT OF THE ARMY
FAR EAST DISTRICT, CORPS OF ENGINEERS
UNIT #15546
APO AP 96205-5546

CEPOF-ED-GE

FEB 11 2008

MEMORANDUM FOR Environmental Division, DPW, Camp Carroll, USA Garrison Daegu
IMKO-ADP-PWE (Mr. [redacted] b6 UNIT #15748, APO AP 96260-5748

SUBJECT: Environmental Site Assessment in Support of Land Farm Construction, Camp Carroll, Korea (G&E 07-053E/E08-11).

1. Enclosed is the report for the subject project. The Geotechnical and Environmental Engineering Branch of the U.S Army Corps of Engineers, Far East District (FED) conducted the Environmental Site Assessment (ESA) at the subject site during 8 ~ 12 October 2007. The project tasks included soil borings, soil sampling for laboratory analyses, and volume estimation of the contaminated soil that exceeds the Environmental Protection Agency (EPA) Preliminary Remedial Goals (PRG) Region IX criteria for residential area.

2. This ESA collected soil samples and analyzed for metals, volatile organic compounds (VOCs), and organochlorinated (OC) pesticides. Chemicals that exceed the EPA PRG criteria mostly appear at the northern half of the land farm bed #1 and the monitoring well M07-221. Following chemicals are exceeding the EPA PRG Region IX criteria for residential area: chromium, arsenic, trichloroethylene (TCE), 1,2,4- Trichlorobenzene and tetrachloroethylene (PCE), DDD, DDT, DDE, Endrin and gamma-chlorodane.

3. Applying the EPA PRG Region IX criteria for residential to the project site, the total volume of soil that appears above the EPA PRG criteria was estimated as 2820 cubic meters. Technical questions regarding this ESA may be addressed to Dr. [redacted] b6 or Mr. [redacted] b6 at [redacted] b6 [redacted] b6

Encls

[redacted] b6
Chief, Engineering Division

CF:
Environmental Office, DPW-Daegu, IMKOM-KOREA, Unit #15746,
APO AP 96218-5746 (Attn: Mr. [redacted] b6

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DEPARTMENT OF THE ARMY
FAR EAST DISTRICT, CORPS OF ENGINEERS
UNIT #15546
APO AP 96205-5546

CEPOF-ED-GE

FEB 11 2008

MEMORANDUM FOR Environmental Division, DPW, Camp Carroll, USA Garrison Daegu
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[redacted] b6

Encls

[redacted] b6
Chief, Engineering Division

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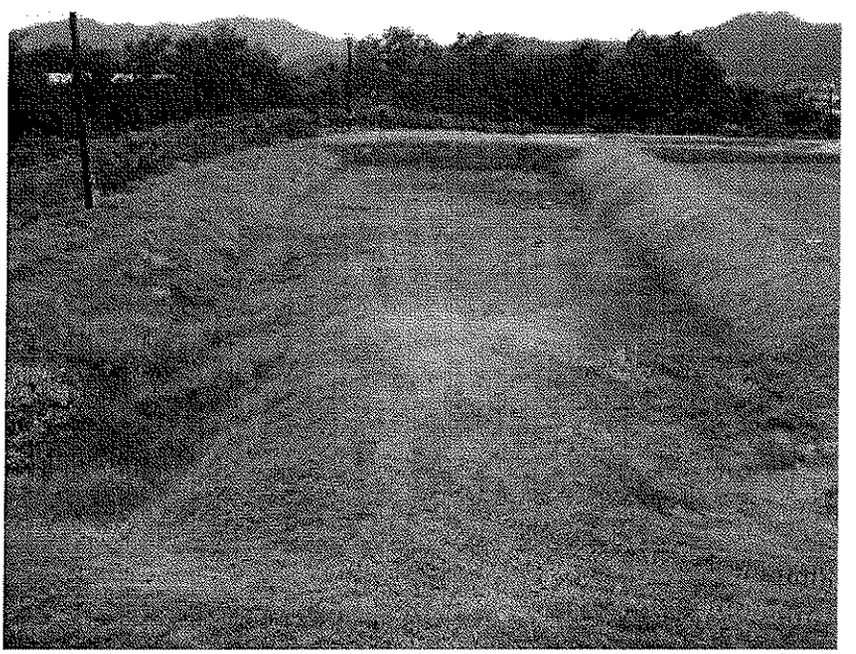
Dr. [redacted] b6 1/30/08
CEPOF-ED-GE
Mr. [redacted] b6 1/30/08
CEPOF-ED-GE
Mr. [redacted] b6 1/31/08
CEPOF-ED-GE
Mr. [redacted] b6
CEPOF-ED-G
Mr. [redacted] b6
CEPOF-ED
FILE: Ms [redacted] b6
CEPOF-ED-GE

US Army Corps of Engineers
Far East District

Draft Report
For
Environmental Site Assessment In Support of Land Farm Construction
Camp Carroll, Korea (G&E 07-053E/E08-11)



January 2008

Environmental Section
Geotechnical & Environmental Engineering Branch
Engineering Division, FED

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Table 4-11
Summary of SVOC Detections: Groundwater

Analyte / Sample ID / Location / Unit	CC039WS01 Area D (mg/L)	CC237WS01a Area D (mg/L)	CC237WS01b Area D (mg/L)
1,4-Dichlorobenzene	ND	0.118	ND
2-Methylnaphthalene	0.02	0.222	0.204
2-Methylphenol (o-Cresol)	ND	0.85	1.53
3&4-Methylphenol (p&m-Cresol)	ND	ND	0.251
Acenaphthene	ND	0.0631	ND
Benzyl alcohol	ND	0.166	0.43
Butylbenzylphthalate	ND	0.21	ND
Diethylphthalate	ND	1.59	1.7
Fluoranthene	ND	0.539	0.163
Napthalene	ND	0.526	0.525
Phenol	ND	0.291	ND

Notes:
mg/L = milligrams per liter
ND = not detected
na = not analyzed

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Table 4-12
Summary of Pesticide Detections: Groundwater

Analyte / Sample ID / Location / Unit	CC012WS01 Area D (mg/L)	CC024WS01 Area D (mg/L)	CC039WS01 Area D (mg/L)	CC237WS01 Area D (mg/L)
alpha-BHC	ND	0.453	0.0693	0.000111
alpha-Chlordane	ND	0.05	ND	ND
beta-BHC	ND	0.85	0.414	ND
delta-BHC	0.0663	1.63	0.92	ND
Dieldrin	ND	ND	ND	0.0000145
gamma-BHC (Lindane)	0.114	8.76	0.362	ND
Heptachlor	ND	ND	ND	0.0000537

Notes:
mg/L = milligrams per liter
ND = not detected
na = not analyzed

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Executive summary

Environmental Site Assessment In Support of Land Farm Construction
Camp Carroll, Korea (G&E 07-053E/E08-11)

1. Purpose.

The purpose of this environmental site assessment (ESA) is to determine the horizontal and vertical extent of the suspected contamination within the land farm bed #1 of Camp Carroll. The scope of work for this ESA included subsurface soil sampling, chemical analysis and a volume estimation of contaminated soil within the area of concern in order to excavate the contaminated soil prior to constructing the full designed treatment bed.

2. Summary of Findings.

Chemicals that exceeded the Environmental Protection Agency (EPA) Primarily Remediation Goal (PRG) Region IX criteria for residential areas were identified from soil samples collected at the land farm bed 1 and around the holding pond during this ESA. The summary of findings that exceeds the EPA PRG Region IX criteria is illustrated in the figure 8 in this document.

Among the target metals analyzed, the concentrations of chromium and arsenic were the only ones to exceed the EPA criteria. Chromium concentration above the EPA criteria appears limited at the top soil layer. Arsenic concentration above the EPA criteria appeared close to the surface of the soil sample and again at 6 to 8.4 m bgs.

Among the volatile organic compounds (VOCs) analyzed, the concentrations of trichloroethylene (TCE), 1,2,4- Trichlorobenzene and tetrachloroethylene (PCE) exceeded the EPA criteria. The VOCs exceeding the EPA criteria mostly appeared in the northern half of the bed and around the holding pond.

Pesticides such as DDD, DDT, DDE, Endrin and gamma-chlorodane exceeding the EPA criteria were identified in the northern half of the land farm bed #1.

3. Conclusion.

The volume of contaminated soil in the land farm bed #1 of Camp Carroll that exceeds the EPA PRG Region IX criteria was estimated. The areas above the PRG criteria mostly appear the northern half of the land farm bed #1 and around the monitoring well M07-221.

1) For the northern half of the land farm bed #1:
   30 meter X 17 meter X 4 meter (deep) = 2,040 cubic meter

2) For the holding pond area:
   10 meter X 13 meter X 6 meter (deep) = 780 cubic meter

3) Total volume of soil that appear above the EPA PRG criteria = **2,820 cubic meters**.

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Environmental Site Assessment
In Support of
Land Farm Construction at Camp Carroll, Korea

1. AUTHORITY

The US Army Corps of Engineers, Far East District (FED) has been tasked by the United States Army Garrison (USAG) Taegu, Directorate of Public Works (DPW), US Forces Korea (USFK) to perform an Environmental Site Assessment (ESA) at the land farm of Camp Carroll, Republic of Korea.

2. BACKGROUND OF THE ESA

2.1. Purpose and Scope of Work

The purpose of the ESA is to determine the horizontal and vertical extent of the suspected contamination within the land farm bed #1 of Camp Carroll (Figure 1). The scope of work for this ESA includes subsurface soil sampling, chemical analysis and a volume estimation of contaminated soil within the area of concern in order to excavate the contaminated soil prior to constructing the full designed treatment bed.

2.2. Location of Land Farm

The land farm at Camp Carroll is located south of the Small Arms Firing Range and along the lower half of the eastern boundary of the Camp. The land farm consists of three engineered units. Two of the units are treatment beds, referred to as Bed #1 (East Bed) and Bed #2 (West Bed) and the third is a water retention pond. Bed #2 is the existing treatment bed and currently treating contaminated soil. The dimensions of each treatment bed, which are bounded by berms, are approximately 70 meters by 30 meters. The dimensions of the water retention pond are approximately 30 meters by 20 meters. The total land farm site is approximately 9,100 square meters.

2.3. Investigation History

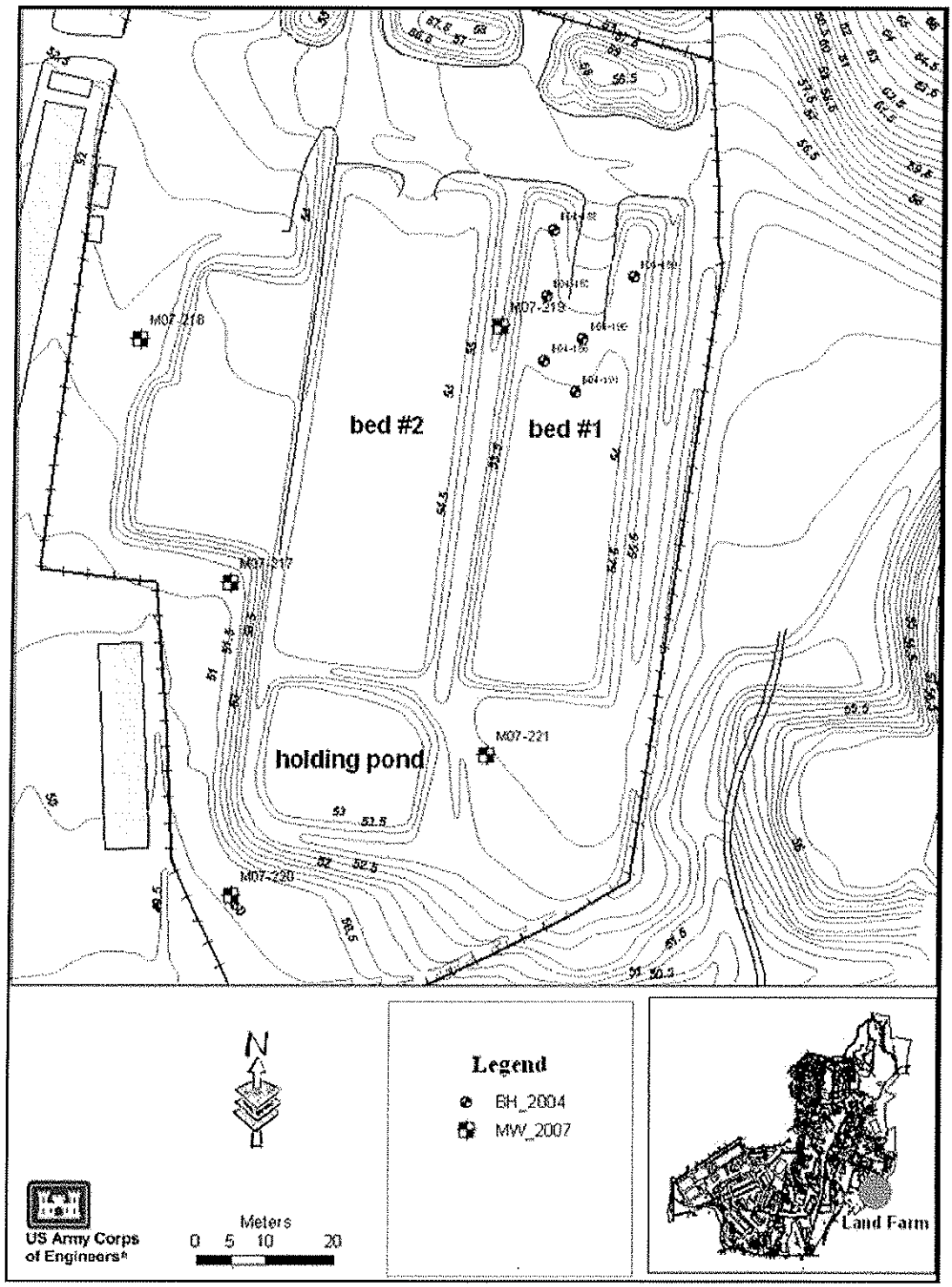
DPW environmental personnel of Camp Carroll suspect that contaminated soils and materials from Area #41 were disposed of in the area now occupied by the land farm. Their suspicions are based on the fact that contaminated soil and waste materials, such as 1-gallon cans were uncovered during excavation and construction of Bed #1 in 1995. The land farm is also located very close to Area D which is identified as a landfill where hazardous waste from Area #41 was disposed of between the years of 1977 and 1982, but reportedly removed between 1982 and 1983.

In 2004 FED conducted an Environmental Assessment (EA) for 4 sites at Camp Carroll including the land farm area. The EA identified solvent-related VOCs, a few pesticides, metal and dioxin/furan compounds from the subsurface soils of the land farm.

In 2007 FED conducted soil/groundwater sampling and analyses from the land farm, and installed five monitoring wells at the land farm facility. Laboratory analyses identified the

subsurface contamination as having solvent-related VOCs exceeding EPA Region IX Preliminary Remediation Goals (PRGs), organochlorinated pesticides and some metals.

Figure 1. Layout of the Camp Carroll Land Farm and the Existing Borehole/Monitoring Locations.



3. SUBSURFACE INVESTIGATION

3.1. Rationale of Subsurface Investigation

A total of 21 soil borings were drilled for this ESA during 8~12 October 2007. Fifteen borings were placed on the Bed #1 and six borings were placed around the groundwater monitoring well M07-221 where high levels (exceeding PRG) of subsurface contamination such as VOCs and pesticides were reported from the previous investigation in 2007.

Rationale for borehole locations at Bed #1 was based on the results from the investigations in 2004 and 2007 that identified chemicals of concern above EPA Region IX PRG levels. To provide an areal coverage, the proposed boreholes were designed as a grid net of approximately 8 m by 6 m within the bed. Boreholes were located to provide as much spatial distribution information as possible within the scope of the project, while maintaining a sufficient density for assessment purposes. Figure 2 shows the borehole locations together with the existing boreholes and monitoring wells.

3.2. Subsurface Soil Sampling

Subsurface soil samples were collected utilizing a BEC GeoProbe Model 6600 Modified Direct Push & Air Percussion track-mounted drill rig. The GeoProbe minimized cuttings and created a smaller diameter borehole that was easily grouted/filled after all subsurface soil samples were collected. Using the soil-probing machine, continuous soil cores were collected from the surface to the target depth. Subsurface soil sample cores were collected by advancing an open barrel sampler with a plastic sample liner (3.7 cm inner diameter) through the sample interval equivalent to the barrel length or less (normally about 0.9 m). After the barrel sampler was pushed to the desired depth interval, the sampler was extracted from the hole and the plastic liner, containing the soil sample, was removed from the barrel sampler.

The discrete soil sample required for chemical analyses (e.g., metals and pesticides) was collected from the desired depth by retrieving it from the appropriate interval of the removed plastic liner. Retrieved soil samples from an approximate 2 meter horizon were put into a ziplock bag and thoroughly mixed. After mixing, composite soil samples were collected in a laboratory provided, clean glass jar for chemical analyses such as pesticide and metal. The VOC soil sample was not a composite sample. VOC samples were collected using a 5-gram Terra Core sampler from one or two spots in the soil column before mixing, and before putting samples into the 4-oz jar with methanol. A Soil column sample from 0 to 0.5 meter was not taken for VOC analysis since it was considered to be surface soils for this project. All samples were immediately preserved in the ice-packed sample cooler.

Table 1 summarizes the soil sampling results of each investigation and parameters analyzed. All the investigation was conducted down to 4 m below ground surface (bgs) at the bed #1, and the investigation depth around M07-221 was approximately 2 meter deeper to cover the elevation difference between the bed #1 and the monitoring well M07-221.