

(JAM)

RAS ORGANIC
Method 8082

PES SAMPLE NUMBER: TT01358
EPA SAMPLE NUMBER: NA

Lab Name: QUANTERRA
Lab Code: QUANT Case No: NA
Lab Sample ID: G9F260183019
Lab File ID: NA

Contract: NA
DAS No: NA SDG No: HAO3
Date Received: 06/26/99
Date Analyzed: 07/14/99

TCL HITS

AROCLOR-1254

WITHIN WARNING LIMITS

75000.000

TCL MISSES

None

TCL CONTAMINANTS

None

TIC HITS

None

TIC MISSES

None

TIC CONTAMINANTS

None

SPIKED INTERFERENTS (concentrations not evaluated)

None

Par

DIOXINS/FURANS
Method 8280

PES SAMPLE NUMBER: SWS4U2
EPA SAMPLE NUMBER: NA

Lab Name: QUANTERRA
Lab Code: QUANT Case No: NA
Lab Sample ID: G9F300224001
Lab File ID: NA

Contract: NA
DAS No: NA SDG No: HAO4
Date Received: 06/30/99
Date Analyzed: 07/15/99

TCL HITS

2,3,7,8-TCDD

WITHIN WARNING LIMITS

0.430

J

TCL MISSES

None

TCL CONTAMINANTS

None

TIC HITS

None

TIC MISSES

None

TIC CONTAMINANTS

None

SPIKED INTERFERENTS (concentrations not evaluated)

None

442

DIOXINS/FURANS
Method 8280

PES SAMPLE NUMBER: SHM625
EPA SAMPLE NUMBER: NA

Lab Name: QUANTERRA
Lab Code: QUANT Case No: NA
Lab Sample ID: G9G080237-08
Lab File ID: NA

Contract: NA
DAS No: NA SDG No: HA05
Date Received: 07/08/99
Date Analyzed: 07/22/99

TCL HITS
2,3,7,8-TCDD

WITHIN WARNING LIMITS 0.550

TCL MISSES
None

TCL CONTAMINANTS
None

TIC HITS
None

TIC MISSES
None

TIC CONTAMINANTS
None

SPIKED INTERFERENTS (concentrations not evaluated)
None

MB

DIOXINS/FURANS
Method 8280

PES SAMPLE NUMBER: SUD912
EPA SAMPLE NUMBER: NA

Lab Name: QUANTERRA
Lab Code: QUANT Case No: NA
Lab Sample ID: G9G100160017
Lab File ID: NA

Contract:
DAS No: NA SDG No: HAO6
Date Received: 07/09/99
Date Analyzed: 07/23/99

TCL HITS

2,3,7,8-TCDD

WITHIN WARNING LIMITS

0.940

TCL MISSES

None

TCL CONTAMINANTS

None

TIC HITS

None

TIC MISSES

None

TIC CONTAMINANTS

None

SPIKED INTERFERENTS (concentrations not evaluated)

None

DIOXINS/FURANS
Method 8280

PES SAMPLE NUMBER: VTD514
EPA SAMPLE NUMBER: NA

Lab Name: QUANTERRA
Lab Code: QUANT Case No: NA
Lab Sample ID: G9G140228018
Lab File ID: NA

Contract: NA
DAS No: NA SDG No: HAO7
Date Received: 07/14/99
Date Analyzed: 07/31/99

TCL HITS

2,3,7,8-TCDD

WITHIN WARNING LIMITS

0.910

TCL MISSES

None

TCL CONTAMINANTS

None

TIC HITS

None

TIC MISSES

None

TIC CONTAMINANTS

None

SPIKED INTERFERENTS (concentrations not evaluated)

None

DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00270

EPA/CLP No.

NA

Report date: 08/31/1999

Method: NA

Lab name: Paradigm Analytical Laboratories

Labcode: PARADIG Case: NA DAS No. NA

Matrix: SOIL QC Report No.:NA

Sample wt/vol: 10.0 (g/ml) G

Water Sample Prep.:

Concentrated Extract Volume: NA (uL)

Injection Volume: NA (uL) %Solids

GC Column: NA ID: NA (mm)

Contract: NA

SDG: NA *HA13*

Lab Sample ID: 69849

Lab File ID: NA

Date sample received: 08/05/1999

Date Extracted: 08/05/1999

Date analyzed: 08/11/1999

Dilution Factor: NA

Comments:

Concentration Units: ng/Kg (ppt)

PES Compounds Reported

CAS No.	Compound Name	Concentration	Evaluation	Q
51207-31-9	2,3,7,8-TCDF	2.85	Within Warning Limits	
85722-27-5	TOTAL-TCDF	161	Within Warning Limits	
1746-01-6	2,3,7,8-TCDD	7.2	Within Warning Limits	
3-57-5	TOTAL-TCDD	14.9	Within Warning Limits	
57117-41-6	1,2,3,7,8-PeCDF	71.2	Warning High	
57117-31-4	2,3,4,7,8-PeCDF	22.3	Warning High	
30402-15-4	TOTAL-PeCDF	97	Within Warning Limits	
40321-76-4	1,2,3,7,8-PeCDD	10.9	Within Warning Limits	
36088-22-9	TOTAL-PeCDD	10.9	Within Warning Limits	
70648-26-9	1,2,3,4,7,8-HxCDF	22.9	Within Warning Limits	
72918-21-9	1,2,3,7,8,9-HxCDF	56.4	Within Warning Limits	
60851-34-5	2,3,4,6,7,8-HxCDF	56.6	Within Warning Limits	
55684-94-1	TOTAL-HxCDF	143	Within Warning Limits	
39227-28-6	1,2,3,4,7,8-HxCDD	6.43	Within Warning Limits	
57653-85-7	1,2,3,6,7,8-HxCDD	12.3	Within Warning Limits	
34465-46-8	TOTAL-HxCDD	28.8	Within Warning Limits	
55673-89-7	1,2,3,4,7,8,9-HpCDF	58.2	Warning High	
38998-75-3	TOTAL-HpCDF	68.9	Warning High	
35822-46-9	1,2,3,4,6,7,8-HpCDD	90.9	Warning High	
37871-00-4	TOTAL-HpCDD	131	Action high	
39001-02-0	OCDF	28	Warning High	
3268-87-9	OCDD	475	Action high	

DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00270

NA

Report date: 08/31/1999

Method: NA

Lab name: Paradigm Analytical Laboratories

Labcode: PARADIG Case: NA DAS No. NA

Matrix: SOIL QC Report No.: NA

Sample wt/vol: 10.0 (g/ml) G

Water Sample Prep.:

Concentrated Extract Volume: NA (uL)

Injection Volume: NA (uL) %Solids

GC Column: NA ID: NA (mm)

Contract: NA

SDG: NA HAI3

Lab Sample ID: 69849

Lab File ID: NA

Date sample received: 08/05/1999

Date Extracted: 08/05/1999

Date analyzed: 08/11/1999

Dilution Factor: NA

Comments:

Concentration Units: ng/Kg (ppt)

Continued from page 1

PES Compounds Not Evaluated

CAS No	Compound Name	Concentration	Evaluation	Q
57117-44-9	1,2,3,6,7,8-HxCDF	1.06	Not Evaluated	
19408-74-3	1,2,3,7,8,9-HxCDD	2.41	Not Evaluated	
67562-39-4	1,2,3,4,6,7,8-HpCDF	4.8	Not Evaluated	

DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00983

EPA/CLP No.

NA

Report date: 08/31/1999

Method: na

Lab name: Paradigm analytical laboratories

Labcode: PARADIG Case: NA DAS No. NA

Matrix: SOIL QC Report No.: NA

Sample wt/vol: 10.0 (g/ml) G

Water Sample Prep.:

Concentrated Extract Volume: NA (uL)

Injection Volume: NA (uL) %Solids

GC Column: na ID: na (mm)

Contract: NA

SDG: NA 413

Lab Sample ID: 69850

Lab File ID: NA

Date sample received: 08/05/1999

Date Extracted: 08/05/1999

Date analyzed: 08/11/1999

Dilution Factor: NA

Comments:

Concentration Units: ng/Kg (ppt)

PES Compounds Reported

CAS No.	Compound Name	Concentration	Evaluation	Q
1746-01-6	2,3,7,8-TCDD	0.335	Within Limits	
41903-57-5	TOTAL-TCDD	0.322	Within Limits	
30402-15-4	TOTAL-PeCDF	0.11	Within Limits	
14-94-1	TOTAL-HxCDF	0.114	Within Limits	
61562-39-4	1,2,3,4,6,7,8-HpCDF	0.142	Within Limits	
38998-75-3	TOTAL-HpCDF	0.142	Within Limits	
35822-46-9	1,2,3,4,6,7,8-HpCDD	0.564	Within Limits	
37871-00-4	TOTAL-HpCDD	0.902	Within Limits	
39001-02-0	OCDF	0.172	Within Limits	
3268-87-9	OCDD	2.11	Within Limits	

DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00992

EPA/CLP No.

NA

Report date: 08/31/1999

Method: NA

Lab name: Paradigm Analytical Laboratories

Labcode: PARADIG Case: NA DAS No. NA

Matrix: SOIL QC Report No.:NA

Sample wt/vol: 10.2 (g/ml) G

Water Sample Prep.:

Concentrated Extract Volume: NA (uL)

Injection Volume: NA (uL) %Solids

GC Column: NA ID: NA (mm)

Contract: NA

SDG: NA

Lab Sample ID: 69816

Lab File ID: NA

Date sample received: 08/05/1999

Date Extracted: 08/06/1999

Date analyzed: 08/16/1999

Dilution Factor: NA

Comments:

[Empty comment box]

HA-14

C

mg (ppb)

PES Compounds Reported

CAS No.	Compound Name	Concentration	Evaluation	Q
51207-31-9	2,3,7,8-TCDF	0.214	Within Limits	
55722-27-5	TOTAL-TCDF	0.214	Within Limits	
1746-01-6	2,3,7,8-TCDD	1.26	Action High	
3-57-5	TOTAL-TCDD	1.26	Action High	
57117-41-6	1,2,3,7,8-PeCDF	0.499	Within Limits	
57117-31-4	2,3,4,7,8-PeCDF	0.558	Within Limits	
30402-15-4	TOTAL-PeCDF	1.12	Action High	
40321-76-4	1,2,3,7,8-PeCDD	0.538	Within Limits	
36088-22-9	TOTAL-PeCDD	0.538	Within Limits	
70648-26-9	1,2,3,4,7,8-HxCDF	0.507	Within Limits	
57117-44-9	1,2,3,6,7,8-HxCDF	0.552	Within Limits	
72918-21-9	1,2,3,7,8,9-HxCDF	0.432	Within Limits	
60851-34-5	2,3,4,6,7,8-HxCDF	0.589	Within Limits	
55684-94-1	TOTAL-HxCDF	2.08	Within Limits	
39227-28-6	1,2,3,4,7,8-HxCDD	0.515	Within Limits	
57653-85-7	1,2,3,6,7,8-HxCDD	0.648	Within Limits	
19408-74-3	1,2,3,7,8,9-HxCDD	0.576	Within Limits	
34465-46-8	TOTAL-HxCDD	1.74	Within Limits	
67562-39-4	1,2,3,4,6,7,8-HpCDF	0.711	Within Limits	
55673-89-7	1,2,3,4,7,8,9-HpCDF	0.495	Within Limits	
38998-75-3	TOTAL-HpCDF	1.21	Within Limits	
35822-46-9	1,2,3,4,6,7,8-HpCDD	0.78	Within Limits	
37871-00-4	TOTAL-HpCDD	0.78	Within Limits	
39001-02-0	OCDF	1.14	Within Limits	
3268-87-9	OCDD	2.17	Within Limits	

PeacTOOLS 2.1
ACCEPTANCE LIMITS FOR
PC00992

Concentration units: ng/Kg (ppt)

<i>i</i> No.	Compound	Nominal	<i>n</i>	Action Low	Warning Low	Warning High	Action High
51207-31-9	2,3,7,8-TCDF		6	N.L.	N.L.	N.L.	0.60
55722-27-5	TOTAL-TCDF		6	N.L.	N.L.	N.L.	3.6
1746-01-6	2,3,7,8-TCDD		6	N.L.	N.L.	N.L.	0.60
41903-57-5	TOTAL-TCDD		6	N.L.	N.L.	N.L.	0.50
57117-41-6	1,2,3,7,8-PeCDF		6	N.L.	N.L.	N.L.	0.70
57117-31-4	2,3,4,7,8-PeCDF		6	N.L.	N.L.	N.L.	1.4
30402-15-4	TOTAL-PeCDF		6	N.L.	N.L.	N.L.	0.80
40321-76-4	1,2,3,7,8-PeCDD		6	N.L.	N.L.	N.L.	1.3
36088-22-9	TOTAL-PeCDD		5	N.L.	N.L.	N.L.	1.8
70648-26-9	1,2,3,4,7,8-HxCDF		6	N.L.	N.L.	N.L.	1.0
57117-44-9	1,2,3,6,7,8-HxCDF		6	N.L.	N.L.	N.L.	1.0
72918-21-9	1,2,3,7,8,9-HxCDF		6	N.L.	N.L.	N.L.	2.2
60851-34-5	2,3,4,6,7,8-HxCDF		6	N.L.	N.L.	N.L.	1.5
55684-94-1	TOTAL-HxCDF		6	N.L.	N.L.	N.L.	3.2
39227-28-6	1,2,3,4,7,8-HxCDD		6	N.L.	N.L.	N.L.	1.7
57653-85-7	1,2,3,6,7,8-HxCDD		6	N.L.	N.L.	N.L.	2.0
19408-74-3	1,2,3,7,8,9-HxCDD		6	N.L.	N.L.	N.L.	3.5
34465-46-8	TOTAL-HxCDD		6	N.L.	N.L.	N.L.	1.9
67562-39-4	1,2,3,4,6,7,8-HpCDF		6	N.L.	N.L.	N.L.	1.5
55673-89-7	1,2,3,4,7,8,9-HpCDF		6	N.L.	N.L.	N.L.	2.8
38998-75-3	TOTAL-HpCDF		6	N.L.	N.L.	N.L.	3.7
12-46-9	1,2,3,4,6,7,8-HpCDD		6	N.L.	N.L.	N.L.	6.2
11-71-00-4	TOTAL-HpCDD		6	N.L.	N.L.	N.L.	3.5
39001-02-0	OCDF		6	N.L.	N.L.	N.L.	5.2
3268-87-9	OCDD		6	N.L.	N.L.	N.L.	22

DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00530

EPA/CLP No.

NA

Report date: 08/31/1999

Method: NA

Lab name: Paradigm Analytical Laboratories

Labcode: PARADIG Case: NA DAS No. NA

Matrix: SOIL QC Report No.: NA

Sample wt/vol: 10.1 (g/ml) G

Water Sample Prep.:

Concentrated Extract Volume: NA (uL)

Injection Volume: NA (uL) %Solids

GC Column: NA ID: NA (mm)

Contract: NA

SDG: NA HAI4

Lab Sample ID: 69815

Lab File ID: NA

Date sample received: 08/05/1999

Date Extracted: 08/06/1999

Date analyzed: 08/12/1999

Dilution Factor: NA

Comments:

Concentration Units: ng/Kg (ppt)

PES Compounds Reported

CAS No.	Compound Name	Concentration	Evaluation	Q
51207-31-9	2,3,7,8-TCDF	4.64	Within Warning Limits	
55722-27-5	TOTAL-TCDF	118	Within Warning Limits	
1746-01-6	2,3,7,8-TCDD	33.4	Within Warning Limits	
157-5	TOTAL-TCDD	77	Within Warning Limits	
117-41-6	1,2,3,7,8-PeCDF	24	Within Warning Limits	
30402-15-4	TOTAL-PeCDF	28.3	Within Warning Limits	
40321-76-4	1,2,3,7,8-PeCDD	24.1	Within Warning Limits	
36088-22-9	TOTAL-PeCDD	43.9	Within Warning Limits	
70648-26-9	1,2,3,4,7,8-HxCDF	27.3	Within Warning Limits	
60851-34-5	2,3,4,6,7,8-HxCDF	21.8	Within Warning Limits	
55684-94-1	TOTAL-HxCDF	63	Within Warning Limits	
39227-28-6	1,2,3,4,7,8-HxCDD	22.3	Within Warning Limits	
57653-85-7	1,2,3,6,7,8-HxCDD	2.9	Within Warning Limits	
19408-74-3	1,2,3,7,8,9-HxCDD	46.6	Within Warning Limits	
34465-46-8	TOTAL-HxCDD	79.4	Within Warning Limits	
67562-39-4	1,2,3,4,6,7,8-HpCDF	36.4	Within Warning Limits	
55673-89-7	1,2,3,4,7,8,9-HpCDF	19.7	Within Warning Limits	
38998-75-3	TOTAL-HpCDF	63.7	Within Warning Limits	
35822-46-9	1,2,3,4,6,7,8-HpCDD	45.8	Warning High	
37871-00-4	TOTAL-HpCDD	141	Within Warning Limits	
39001-02-0	OCDF	132	Warning High	
3268-87-9	OCDD	448	Action high	

DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00530

EPA/CLP NO.

NA

Report date: 08/31/1999

Method: NA

Lab name: Paradigm Analytical Laboratories

Labcode: PARADIG Case: NA DAS No. NA

Matrix: SOIL QC Report No.:NA

Sample wt/vol: 10.1 (g/ml) G

Water Sample Prep.:

Concentrated Extract Volume: NA (uL)

Injection Volume: NA (uL) %Solids

GC Column: NA ID: NA (mm)

Contract: NA

SDG: NA

Lab Sample ID: 69815

Lab File ID: NA

Date sample received: 08/05/1999

Date Extracted: 08/06/1999

Date analyzed: 08/12/1999

Dilution Factor: NA

Comments:

Continued from page 1

Concentration Units: ng/Kg (ppt)

PES Compounds Not Evaluated

CAS No	Compound Name	Concentration	Evaluation	Q
57117-31-4	2,3,4,7,8-PeCDF	0.609	Not Evaluated	
57117-44-9	1,2,3,6,7,8-HxCDF	1.69	Not Evaluated	
72918-21-9	1,2,3,7,8,9-HxCDF	5.73	Not Evaluated	

**DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00994**

EPA/CLP No.

na

Report date: 08/30/1999

Method: 8290

Lab name: paradigm analytical laboratories

Labcode: PARADIG Case: na DAS No. na

Matrix: SOIL QC Report No. na

Sample wt/vol: 10.0 (g/ml) g.

Water Sample Prep.:

Concentrated Extract Volume: (uL)

Injection Volume: na (uL) %Solids

GC Column: na ID: na (mm)

Contract: na

SDG: HA15

Lab Sample ID: 69830

Lab File ID: na

Date sample received: 08/05/1999

Date Extracted: 08/09/1999

Date analyzed: 08/16/1999

Dilution Factor: na

Comments:

Concentration Units: ng/Kg (ppt)

PES Compounds Reported

CAS No.	Compound Name	Concentration	Evaluation	Q
81207-31-9	2,3,7,8-TCDF	0.391	Within Limits	EMPC
55722-27-5	TOTAL-TCDF	0.884	Within Limits	
1746-01-6	2,3,7,8-TCDD	0.309	Within Limits	
41903-57-5	TOTAL-TCDD	0.363	Within Limits	
57117-41-6	1,2,3,7,8-PeCDF	0.263	Within Limits	
57117-31-4	2,3,4,7,8-PeCDF	0.399	Within Limits	
30402-15-4	TOTAL-PeCDF	2.57	Action High	
40321-76-4	1,2,3,7,8-PeCDD	0.0818	Within Limits	
36068-22-9	TOTAL-PeCDD	0.15	Within Limits	
70645-26-9	1,2,3,4,7,8-HxCDF	0.271	Within Limits	
57117-44-9	1,2,3,6,7,8-HxCDF	0.166	Within Limits	
60851-34-5	2,3,4,6,7,8-HxCDF	0.158	Within Limits	
55684-94-1	TOTAL-HxCDF	2.01	Within Limits	
57663-85-7	1,2,3,6,7,8-HxCDD	0.12	Within Limits	
19406-74-3	1,2,3,7,8,9-HxCDD	0.14	Within Limits	
34465-46-8	TOTAL-HxCDD	0.874	Within Limits	
67562-39-4	1,2,3,4,6,7,8-HpCDF	1.14	Within Limits	
55673-89-7	1,2,3,4,7,8,9-HpCDF	0.0978	Within Limits	
38898-75-3	TOTAL-HpCDF	2.25	Within Limits	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1.31	Within Limits	
37871-00-4	TOTAL-HpCDD	2.6	Within Limits	
39001-02-0	OCDF	1.19	Within Limits	
3268-87-9	OCDD	11.3	Within Limits	

**DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00531**

EPA/CLP No.

na

Report date: 08/30/1999

Method: 8290

Lab name: paradigm analytical laboratories

Labcode: PARADIG Case: na DAS No. na

Matrix: SOIL QC Report No. na

Sample wt/vol: 10.4 (g/ml) G

Water Sample Prep.:

Concentrated Extract Volume: na (uL)

Injection Volume: na (uL) %Solids

GC Column: na ID: na (mm)

Contract: na

SDG: HA15

Lab Sample ID: 69829

Lab File ID: na

Date sample received: 08/05/1999

Date Extracted: 08/09/1999

Date analyzed: 08/16/1999

Dilution Factor: na

Comments:

Concentration Units: ng/Kg (ppt)

PES Compounds Reported

CAS No.	Compound Name	Concentration	Evaluation	Q
51207-31-9	2,3,7,8-TCDF	5.18	Within Warning Limits	
65722-27-5	TOTAL-TCDF	129	Within Warning Limits	
1746-01-6	2,3,7,8-TCDD	31.8	Within Warning Limits	
1903-67-6	TOTAL-TCDD	77	Within Warning Limits	
57117-41-6	1,2,3,7,8-PeCDF	27	Within Warning Limits	
30402-16-4	TOTAL-PeCDF	32.6	Within Warning Limits	
40321-76-4	1,2,3,7,8-PeCDD	24.1	Within Warning Limits	
36088-22-9	TOTAL-PeCDD	44.8	Within Warning Limits	
70648-26-9	1,2,3,4,7,8-HxCDF	29.9	Within Warning Limits	
60851-34-6	2,3,4,6,7,8-HxCDF	24.5	Within Warning Limits	
55684-94-1	TOTAL-HxCDF	69.3	Within Warning Limits	
39227-26-6	1,2,3,4,7,8-HxCDD	24.2	Within Warning Limits	
67653-65-7	1,2,3,6,7,8-HxCDD	3.22	Within Warning Limits	
19408-74-3	1,2,3,7,8,9-HxCDD	62.1	Within Warning Limits	
34465-46-8	TOTAL-HxCDD	87.9	Within Warning Limits	
67662-39-4	1,2,3,4,6,7,8-HpCDF	46.7	Within Warning Limits	
55673-89-7	1,2,3,4,7,8,9-HpCDF	21.9	Within Warning Limits	
38998-76-3	TOTAL-HpCDF	75.6	Within Warning Limits	
35822-48-9	1,2,3,4,6,7,8-HpCDD	33.9	Within Warning Limits	
37871-00-4	TOTAL-HpCDD	119	Within Warning Limits	
39001-02-0	OCDF	119	Within Warning Limits	
3268-87-9	OCDD	239	Within Warning Limits	