

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)

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PES Compounds Not Evaluated

CAS No	Compound Name	Concentration	Evaluation	Q
57117-31-4	2,3,4,7,8-PeCDF	0.783	Not Evaluated	
57117-44-8	1,2,3,6,7,8-HxCDF	2.73	Not Evaluated	
72918-21-9	1,2,3,7,8,9-HxCDF	6.46	Not Evaluated	

**DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00282**

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: 10.2 (g/ml) g

Water Sample Prep.:

Concentrated Extract Volume: (uL)

Injection Volume: na (uL) %Solids

GC Column: na ID: na (mm)

Contract: na

SDG: HA16

Lab Sample ID: 70367

Lab File ID: na

Date sample received: 08/14/1999

Date Extracted: 08/16/1999

Date analyzed: 08/19/1999

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	2.72	Within Warning Limits	
88722-27-8	TOTAL-TCDF	143	Within Warning Limits	
1746-01-8	2,3,7,8-TCDD	6.35	Within Warning Limits	
11803-57-8	TOTAL-TCDD	14.1	Within Warning Limits	
67117-41-8	1,2,3,7,8-PeCDF	69.5	Within Warning Limits	
57117-31-4	2,3,4,7,8-PeCDF	19.9	Within Warning Limits	
30402-15-4	TOTAL-PeCDF	92.4	Within Warning Limits	
40321-76-4	1,2,3,7,8-PeCDD	9.69	Within Warning Limits	
36088-22-9	TOTAL-PeCDD	9.59	Within Warning Limits	
70648-26-8	1,2,3,4,7,8-HxCDF	18.7	Within Warning Limits	
72918-21-9	1,2,3,7,8,9-HxCDF	46.4	Within Warning Limits	
60861-34-6	2,3,4,6,7,8-HxCDF	46.6	Within Warning Limits	
55884-84-1	TOTAL-HxCDF	120	Within Warning Limits	
38227-28-8	1,2,3,4,7,8-HxCDD	5.43	Within Warning Limits	
57853-65-7	1,2,3,6,7,8-HxCDD	10.9	Within Warning Limits	
34465-48-8	TOTAL-HxCDD	20.5	Within Warning Limits	
65673-89-7	1,2,3,4,7,8,9-HpCDF	50.9	Within Warning Limits	
38998-76-3	TOTAL-HpCDF	61	Within Warning Limits	
35822-46-9	1,2,3,4,6,7,8-HpCDD	71	Within Warning Limits	
37871-00-4	TOTAL-HpCDD	89	Within Warning Limits	
39001-02-0	OCDF	21.1	Within Warning Limits	
3268-87-9	OCDD	315	Within Warning Limits	

DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00282

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: 10.2 (g/ml) g

Water Sample Prep.:

Concentrated Extract Volume: (uL)

Injection Volume: na (uL) %Solids

GC Column: na ID: na (mm)

Contract: na

SDG: HA16

Lab Sample ID: 70367

Lab File ID: na

Date sample received: 08/14/1999

Date Extracted: 08/16/1999

Date analyzed: 08/19/1999

Dilution Factor: na

Comments:

Continued from page 1

Concentration Units: ng/Kg (ppt)

PES Compounds Not Evaluated

CAS No	Compound Name	Concentration	Evaluation	Q
87117-44-8	1,2,3,6,7,8-HxCDF	1.64	Not Evaluated	
19406-74-3	1,2,3,7,8,9-HxCDD	2.07	Not Evaluated	
67662-39-4	1,2,3,4,6,7,8-HpCDF	4.97	Not Evaluated	

DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00987

EPA/CLP No.

na

Report date: 09/09/1999

Method: 8290

Lab name: Paradigm Analytical Laboratories

Labcode: PARADIG

Case: NA

DAS No. NA

Matrix: SOIL

QC Report No.:NA

Sample wt/vol: 10.2 (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: HA16

Lab Sample ID: 70368

Lab File ID: NA

Date sample received: 09/14/1999

Date Extracted: 09/16/1999

Date analyzed: 09/19/1999

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	0.0684	Within Limits	EMPC
35822-46-9	1,2,3,4,6,7,8-HpCDD	0.28	Within Limits	EMPC
37871-00-4	TOTAL-HpCDD	0.241	Within Limits	
3288-87-9	OCDD	1.71	Within Limits	

**DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00939**

EPA/CLP No.

69256

Report date: / /

Method: 8290

Lab name: Paradygm

Labcode: NA

Case: G344-13

DAS No.

Matrix: SOIL

QC Report No.:

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

Water Sample Prep.:

Concentrated Extract Volume: (uL)

Injection Volume: (uL) %Solids

GC Column: ID: (mm)

Contract:

SDG: NA HA12 #8/27/99

Lab Sample ID: 69255

Lab File ID: b31jul99a_3-

Date sample received: 07/29/1999

Date Extracted: 07/29/1999

Date analyzed: 08/01/1999

Dilution Factor: 1

Comments:

Centerdale Manor Site

Concentration Units: ng/Kg (ppt)

PES Compounds Reported

CAS No.	Compound Name	Concentration	Evaluation	Q
1746-01-8	2,3,7,8-TCDD	0.11	Within Limits	
41903-57-6	TOTAL-TCDD	0.11	Within Limits	
57117-41-8	1,2,3,7,8-PeCDF	0.0707	Within Limits	
40321-70-4	1,2,3,7,8-PeCDD	0.055	Within Limits	
36068-22-9	TOTAL-PeCDD	0.0589	Within Limits	
70648-28-9	1,2,3,4,7,8-HxCDF	0.0727	Within Limits	
72918-21-9	1,2,3,7,8,9-HxCDF	0.0806	Within Limits	
60851-34-5	2,3,4,6,7,8-HxCDF	0.0845	Within Limits	
85684-84-1	TOTAL-HxCDF	0.385	Within Limits	
57663-85-7	1,2,3,6,7,8-HxCDD	0.147	Within Limits	
34485-40-8	TOTAL-HxCDD	0.261	Within Limits	
67662-39-4	1,2,3,4,6,7,8-HpCDF	0.0904	Within Limits	
65673-89-7	1,2,3,4,7,8,9-HpCDF	0.0766	Within Limits	
38998-75-3	TOTAL-HpCDF	0.0904	Within Limits	
35822-48-9	1,2,3,4,6,7,8-HpCDD	0.0544	Within Limits	
37871-00-4	TOTAL-HpCDD	0.36	Within Limits	
39001-02-0	OCDF	0.147	Within Limits	
3268-87-8	OCDD	1.14	Within Limits	

DIOXIN/FURAN
EVALUATION REPORT FOR PES
PC00276

EPA/CLP No.

69254

Report date: / /

Method: 8290

Lab name: Paradygm

Labcode: NA

Case: G344-13

DAS No.

Matrix: SOIL

QC Report No.:

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

Water Sample Prep.: Cont

Concentrated Extract Volume: (uL)

Injection Volume: (uL) %Solids

GC Column: ID: (mm)

Contract:

SDG: NA HA 12

As / 6/27/99

Lab Sample ID:

Lab File ID: b31jul99a_3-

Date sample received: 07/29/1999

Date Extracted: 07/29/1999

Date analyzed: 08/01/1999

Dilution Factor: 1

Comments:

Concentration Units: ng/Kg (ppt)

PES Compounds Reported

CAS No.	Compound Name	Concentration	Evaluation	Q
51207-31-9	2,3,7,8-TCDF	3.03	Within Warning Limits	
65722-27-5	TOTAL-TCDF	164	Within Warning Limits	
1746-01-8	2,3,7,8-TCDD	7.47	Within Warning Limits	
41803-87-5	TOTAL-TCDD	16.6	Within Warning Limits	
57117-41-6	1,2,3,7,8-PeCDF	73.5	Warning High	
57117-31-4	2,3,4,7,8-PeCDF	22.9	Warning High	
30402-15-4	TOTAL-PeCDF	99.9	Within Warning Limits	
40321-76-4	1,2,3,7,8-PeCDD	11.4	Within Warning Limits	
36088-22-8	TOTAL-PeCDD	12.7	Within Warning Limits	
70848-28-9	1,2,3,4,7,8-HxCDF	24.2	Within Warning Limits	
72918-21-9	1,2,3,7,8,9-HxCDF	69	Within Warning Limits	
60861-34-6	2,3,4,6,7,8-HxCDF	58.6	Within Warning Limits	
65684-84-1	TOTAL-HxCDF	149	Within Warning Limits	
59227-28-6	1,2,3,4,7,8-HxCDD	7.1	Within Warning Limits	
57653-85-7	1,2,3,6,7,8-HxCDD	14.1	Warning High	
34465-46-6	TOTAL-HxCDD	34.1	Within Warning Limits	
55673-89-7	1,2,3,4,7,8,9-HpCDF	58.7	Warning High	
36998-75-3	TOTAL-HpCDF	69.5	Warning High	
35822-46-0	1,2,3,4,6,7,8-HpCDD	82.5	Within Warning Limits	
37871-00-4	TOTAL-HpCDD	112	Warning High	
39001-02-0	OCDF	29.5	Warning High	
3268-87-9	OCDD	315	Within Warning Limits	

DIOXINS/FURANS
Method 8280

PES SAMPLE NUMBER: N55UH3
EPA SAMPLE NUMBER: NA

Lab Name: QUANTERRA
Lab Code: QUANT Case No: NA
Lab Sample ID: G9G170134-08
Lab File ID: NA

Contract: NA
DAS No: NA SDG No: HA09
Date Received: 07/16/99
Date Analyzed: 08/04/99

TCL HITS
2,3,7,8-TCDD

WITHIN WARNING LIMITS 0.990

TCL MISSES
None

TCL CONTAMINANTS
None

TIC HITS
None

TIC MISSES
None

TIC CONTAMINANTS
None

SPIKED INTERFERENTS (concentrations not evaluated)
None

CMB

DIOXINS/FURANS
Method 8280

PES SAMPLE NUMBER: NKQ533
EPA SAMPLE NUMBER: NA

Lab Name: QUANTERRA
Lab Code: QUANT Case No: NA
Lab Sample ID: G9G190163016
Lab File ID: NA

Contract: NA
DAS No: NA SDG No: HA10
Date Received: 07/17/99
Date Analyzed: 08/05/99

TCL HITS
2,3,7,8-TCDD

WITHIN WARNING LIMITS 0.620

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
LQE968

EPA/CLP No.

na

Report date: 09/01/1999

Method: 8280

Lab name: quanterra

Labcode: QUANTER

Matrix: SOIL

Sample wt/vol: NA

Water Sample Prep.:

Concentrated Extract Volume:

Injection Volume: NA (uL)

GC Column:

Case: na

DAS No. na

QC Report No. NA

(g/ml) NA

NA (uL)

%Solids

na ID: na (mm)

Contract: na

SDG: HA11

Lab Sample ID: G9G310142-01

Lab File ID: NA

Date sample received: 07/31/1999

Date Extracted: 08/16/1999

Date analyzed: 08/18/1999

Dilution Factor: 1

Comments:

Concentration Units: ug/Kg

PES Compounds Reported

CAS No.	Compound Name	Concentration	Evaluation	Q
1746-01-8	2,3,7,8-TCDD	0.0020 9/2/99	Within Limits	ND

DIOXINS/FURANS
Method 8280

PES SAMPLE NUMBER: RAK679
EPA SAMPLE NUMBER: NA

Lab Name: QUANTERRA
Lab Code: QUANT Case No: NA
Lab Sample ID: G9G170130-08
Lab File ID: NA

Contract: NA
DAS No: NA SDG No: HAO8
Date Received: 07/15/99
Date Analyzed: 08/03/99

TCL HITS

2,3,7,8-TCDD

WITHIN WARNING LIMITS

0.450

J

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
PC00276**

EPA/CLP No.

69254

Report date: / /

Method: 8290

Lab name: Paradygm

Labcode: NA

Case: G344-13

DAS No.

Matrix: SOIL

QC Report No.:

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

Water Sample Prep.: Cont

Concentrated Extract Volume: (uL)

Injection Volume: (uL) %Solids

GC Column: ID: (mm)

Contract:

SDG: NA HA12 AS 8/27/99

Lab Sample ID:

Lab File ID: b31jul99a_3-

Date sample received: 07/29/1999

Date Extracted: 07/29/1999

Date analyzed: 08/01/1999

Dilution Factor: 1

Comments:

Concentration Units: ng/Kg (ppt)

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PES Compounds Not Evaluated

CAS No	Compound Name	Concentration	Evaluation	Q
57117-44-9	1,2,3,6,7,8-HxCDF	1.4	Not Evaluated	
19408-74-3	1,2,3,7,8,9-HxCDD	2.84	Not Evaluated	
67562-39-4	1,2,3,4,6,7,8-HpCDF	4.81	Not Evaluated	

MB

DIOXINS/FURANS
Method 8290

PES SAMPLE NUMBER: PC00939
EPA SAMPLE NUMBER: NA

Lab Name: PARADIGM ANALYTICAL LABORATORY Contract: NA
Lab Code: PARAD Case No: NA DAS No: NA SDG No: HAI2
Lab Sample ID: 69255 Date Received: 07/29/99
Lab File ID: NA Date Analyzed: 08/01/99

TCL HITS

1,2,3,7,8-PeCDF	WITHIN WARNING LIMITS	0.071
1,2,3,7,8-PeCDD	WITHIN WARNING LIMITS	0.055
1,2,3,4,7,8-HxCDF	WITHIN WARNING LIMITS	0.073
1,2,3,6,7,8-HxCDD	WITHIN WARNING LIMITS	0.147
2,3,4,6,7,8-HxCDF	WARNING LOW	0.085
1,2,3,7,8,9-HxCDF	ACTION LOW	0.000
1,2,3,4,6,7,8-HpCDF	ACTION LOW	0.000
1,2,3,4,6,7,8-HpCDD	WITHIN WARNING LIMITS	0.198
1,2,3,4,7,8,9-HpCDF	WITHIN WARNING LIMITS	0.077
OCDD	WITHIN WARNING LIMITS	1.140
OCDF	WITHIN WARNING LIMITS	0.147
TOTAL-HxCDD	WITHIN WARNING LIMITS	0.261
TOTAL-HpCDD	ACTION LOW	0.000
TOTAL-PeCDF	WITHIN WARNING LIMITS	0.198
TOTAL-HxCDF	WITHIN WARNING LIMITS	0.385
TOTAL-HpCDF	WITHIN WARNING LIMITS	0.090
TOTAL-PeCDD	WITHIN WARNING LIMITS	0.059

TCL MISSES

None

TCL CONTAMINANTS

None

TIC HITS

None

TIC MISSES

None

TIC CONTAMINANTS

None

SPIKED INTERFERENTS (concentrations not evaluated)

None

LB

DIOXINS/FURANS
Method 8290

PES SAMPLE NUMBER: PC00276
EPA SAMPLE NUMBER: NA

Lab Name: PARADIGM ANALYTICAL LABORATORY Contract: NA
Lab Code: PARAD Case No: NA DAS No: NA SDG No: HAI2
Lab Sample ID: 69254 Date Received: 07/29/99
Lab File ID: NA Date Analyzed: 08/01/99

TCL HITS

2,3,7,8-TCDD	WITHIN WARNING LIMITS	7.470
2,3,7,8-TCDF	WITHIN WARNING LIMITS	3.030
1,2,3,7,8-PeCDF	ACTION HIGH	73.500
1,2,3,7,8-PeCDD	WITHIN WARNING LIMITS	11.400
2,3,4,7,8-PeCDF	WITHIN WARNING LIMITS	22.900
1,2,3,4,7,8-HxCDF	WITHIN WARNING LIMITS	24.200
1,2,3,6,7,8-HxCDF	WITHIN WARNING LIMITS	1.400
1,2,3,4,7,8-HxCDD	WITHIN WARNING LIMITS	7.100
1,2,3,6,7,8-HxCDD	WITHIN WARNING LIMITS	14.100
1,2,3,7,8,9-HxCDD	WITHIN WARNING LIMITS	2.840
2,3,4,6,7,8-HxCDF	WITHIN WARNING LIMITS	58.600
1,2,3,7,8,9-HxCDF	WARNING HIGH	59.000
1,2,3,4,6,7,8-HpCDF	WITHIN WARNING LIMITS	4.810
1,2,3,4,6,7,8-HpCDD	WARNING HIGH	82.500
1,2,3,4,7,8,9-HpCDF	WARNING HIGH	58.700
OCDD	WITHIN WARNING LIMITS	315.000
OCDF	WITHIN WARNING LIMITS	29.500
TOTAL-TCDD	WITHIN WARNING LIMITS	15.600
TOTAL-HxCDD	WITHIN WARNING LIMITS	34.100
TOTAL-HpCDD	WARNING HIGH	112.000
TOTAL-TCDF	WITHIN WARNING LIMITS	164.000
TOTAL-PeCDF	WITHIN WARNING LIMITS	99.900
TOTAL-HxCDF	WITHIN WARNING LIMITS	149.000
TOTAL-HpCDF	WITHIN WARNING LIMITS	69.500
TOTAL-PeCDD	WITHIN WARNING LIMITS	12.700

TCL MISSES

None

TCL CONTAMINANTS

None

TIC HITS

None

TIC MISSES

None

TIC CONTAMINANTS

None

SPIKED INTERFERENTS (concentrations not evaluated)

None