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V. 2-040506

CUMMINGS RITER CONSULTANTS, INC.

March 3, 1997
Project No. 93145.30/55

Ms. Beverly Hudson
USEPA - Region IV
North Superfund Remedial Branch
Waste Management Division
345 Courtland Street, N.E.
Atlanta, GA 30365

RE: TRANSMITTAL OF REMEDIAL ACTION REPORT
KOPPERS COMPANY, INC. SUPERFUND SITE
MORRISVILLE, NORTH CAROLINA

Dear Ms. Hudson:

On behalf of Beazer East, Inc., Cummings/Riter Consultants, Inc. is pleased to submit five copies of the Remedial Action Report for Soil, Groundwater, and Surface Water for the Koppers Company, Inc. Superfund Site. Two copies of the report are being sent directly to Mr. David Lown of the North Carolina Department of Environment, Health, and Natural Resources.

If you have any questions or would like additional information, please contact me at (412) 373-5240.

Sincerely,
Cummings/Riter Consultants, Inc.

Bruce Geno
Sr. Project Engineer

Jamie Cole /for
William C. Smith, P.E.
Project Manager

BG/WCS/jmc
Enclosures

pc: Mr. James Cook - Beazer East, Inc. (w/o enclosures)
Mr. David Lown - NCDEHNR (w/enclosures - two copies)

10569333

141/145

339 Haymaker Road • Parkway Building • Suite 201 • Monroeville, PA 15146
(412) 373-5240 • FAX (412) 373-5242
Regional Office • 258 Chapman Road • Suite 202 • Newark, DE 19702 • (302) 731-9668 • FAX (302) 731-9609

CUMMINGS RITER CONSULTANTS, INC.

VOLUME III OF III

REMEDIAL ACTION REPORT
SURFACE WATER, SOIL, AND GROUNDWATER REMEDIATION
KOPPERS COMPANY, INC. SUPERFUND SITE
MORRISVILLE, NORTH CAROLINA

Site: Koppers
Break: 7.8
Other: vol 3

PREPARED FOR:
BEAZER EAST, INC.
436 SEVENTH AVENUE
PITTSBURGH, PA 15219

PREPARED BY:
CUMMINGS/RITER CONSULTANTS, INC.
339 HAYMAKER ROAD
PARKWAY BUILDING, SUITE 201
MONROEVILLE, PA 15146

PROJECT NO. 93145.30/55
FEBRUARY 27, 1997

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APPENDIX H

POST-EXCAVATION SAMPLE LABORATORY RESULTS (CONTINUED)

EDITED FORM 1s

SDG 900/2492

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

900

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: 900

Matrix: (soil/water) SOIL Lab Sample ID: 960380-01

Sample wt/vol: 10.3 (g/mL) G Lab File ID: AK607

Level: (low/med) LOW Date Received: 05/16/96

% Moisture: 26 decanted: (Y/N) N Date Extracted: 05/16/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/17/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1300	U

M 7/17/96

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FORM I X-1

3/90

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2-0-2-1718

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: 900

Matrix: (soil/water) SOIL Lab Sample ID: 960380-02

Sample wt/vol: 10.2 (g/mL) G Lab File ID: AK608

Level: (low/med) LOW Date Received: 05/16/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 05/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/17/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	4100	

hm 7/17/96

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1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2-6-8-1_2

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: 900

Matrix: (soil/water) SOIL Lab Sample ID: 960380-04

Sample wt/vol: 10.2 (g/mL) G Lab File ID: AK736

Level: (low/med) LOW Date Received: 05/16/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 05/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/25/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	13000	E

Not used

m 7/7/96

m 7/17/96

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1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2-6-8-1_2DL

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: 900

Matrix: (soil/water) SOIL Lab Sample ID: 960380-04DL

Sample wt/vol: 10.2 (g/mL) G Lab File ID: IH746

Level: (low/med) LOW Date Received: 05/16/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 05/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	13000	~~D~~ J

MC 7/7/96

MC 7/17/96

40

1X
ORGANICS ANALYSIS DATA SHEET

replacement pg MC

SAMPLE NO.

EX2-PX2B

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: 900

Matrix: (soil/water) SOIL Lab Sample ID: 960380-05

Sample wt/vol: 10.1 (g/mL) G Lab File ID: DK914

Level: (low/med) LOW Date Received: 05/16/96

% Moisture: 28 decanted: (Y/N) N Date Extracted: 05/16/96

Concentrated Extract Volume: 1000 ~~500~~ (uL) Date Analyzed: 05/17/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1400	U

Revised 7/5/96

FORM I X-5

3/90

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2-PX6

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: 900

Matrix: (soil/water) SOIL Lab Sample ID: 960380-03

Sample wt/vol: 10.1 (g/mL) G Lab File ID: AK605

Level: (low/med) LOW Date Received: 05/16/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/16/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/17/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	130	J

mc 7/17/96

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FORM I X-6

3/90

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-2-4-1617

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: 900

Matrix: (soil/water) SOIL Lab Sample ID: 960380-08

Sample wt/vol: 10.2 (g/mL) G Lab File ID: AK609

Level: (low/med) LOW Date Received: 05/16/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/16/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/17/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	6700	

51

Replace page no.

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX3

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: 900

Matrix: (soil/water) SOIL Lab Sample ID: 960380-06

Sample wt/vol: 10.4 (g/mL) G Lab File ID: DK915

Level: (low/med) LOW Date Received: 05/16/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 05/16/96

Concentrated Extract Volume: ~~500~~ 1000 (uL) Date Analyzed: 05/17/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1200	U

Revised 7/5/96

55

Replacing PX mc

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX8

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: 900

Matrix: (soil/water) SOIL Lab Sample ID: 960380-07

Sample wt/vol: 10.5 (g/mL) G Lab File ID: DK916

Level: (low/med) LOW Date Received: 05/16/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 05/16/96

Concentrated Extract Volume: 1000 ~~500~~ (uL) Date Analyzed: 05/17/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1200	U

Revised 7/5/96

58

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX2-0-2-5
Lab ID: 2492-0001-SA
Matrix: Soil
% Solids: 82

Date Received: 5/16/96
Date Extracted: 5/17/96
Sample Amount: 9.97 g
TEQ: 6000

ICAL ID: I1613A
QC Lot: LC0517S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	73		0.76	>10:1	
Total TCDD	250		0.76	>10:1	
1,2,3,7,8-PeCDD	960		1.56	>10:1	
Total PeCDD	2600		1.57	>10:1	
1,2,3,4,7,8-HxCDD	1800		1.23	>10:1	
1,2,3,6,7,8-HxCDD	9200		1.26	>10:1	
1,2,3,7,8,9-HxCDD	3000		1.26	>10:1	
Total HxCDD	30000		1.24	>10:1	
1,2,3,4,6,7,8-HpCDD	190000 J		1.05	>10:1	*,B
Total HpCDD	290000		1.04	>10:1	*,B
OCDD	1200000		0.89	>10:1	*,B
2,3,7,8-TCDF	20		0.76	>10:1	
Total TCDF	760 J		0.81	>10:1	D
1,2,3,7,8-PeCDF	79		1.60	>10:1	
2,3,4,7,8-PeCDF	170		1.59	>10:1	
Total PeCDF	6900 J		1.58	>10:1	D
1,2,3,4,7,8-HxCDF	1300		1.26	>10:1	
1,2,3,6,7,8-HxCDF	890 J		1.27	>10:1	D
2,3,4,6,7,8-HxCDF	940 J		1.27	>10:1	D
1,2,3,7,8,9-HxCDF	230		1.29	>10:1	
Total HxCDF	44000 J		1.27	>10:1	*,D
1,2,3,4,6,7,8-HpCDF	30000 J		1.06	>10:1	*,B,D
1,2,3,4,7,8,9-HpCDF	2200		1.05	>10:1	
Total HpCDF	170000 J		1.06	>10:1	*,B,D
OCDF	240000 J		0.90	>10:1	*,B,D

Analyst:

Reviewer:

5/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX2-PX2B
Lab ID: 2492-0002-SA
Matrix: Soil
% Solids: 78

Date Received: 5/16/96
Date Extracted: 5/17/96
Sample Amount: 10.02 g
TEQ: 51

ICAL ID: I1613A
QC Lot: LC0517S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	0.87		0.86	5:1	
Total TCDD	6.6		0.82	7:1	
1,2,3,7,8-PeCDD	5.4		1.46	>10:1	
Total PeCDD	35		1.57	>10:1	
1,2,3,4,7,8-HxCDD	11		1.28	>10:1	
1,2,3,6,7,8-HxCDD	51		1.25	>10:1	
1,2,3,7,8,9-HxCDD	20		1.25	>10:1	
Total HxCDD	200		1.27	>10:1	
1,2,3,4,6,7,8-HpCDD	1400		1.02	>10:1	B
Total HpCDD	2200		1.03	>10:1	B
OCDD	19000 J		0.91	>10:1	*,B
2,3,7,8-TCDF	ND	0.26			
Total TCDF	6.4		0.81	>10:1	
1,2,3,7,8-PeCDF	0.74 J		1.67	>10:1	A
2,3,4,7,8-PeCDF	3.2		1.39	>10:1	
Total PeCDF	62 J		1.58	>10:1	D
1,2,3,4,7,8-HxCDF	8.6		1.22	>10:1	
1,2,3,6,7,8-HxCDF	3.9 J		1.37	>10:1	D
2,3,4,6,7,8-HxCDF	8.4		1.35	>10:1	D
1,2,3,7,8,9-HxCDF	1.5		1.39	>10:1	A
Total HxCDF	370		1.21	>10:1	D
1,2,3,4,6,7,8-HpCDF	220		1.04	>10:1	B,D
1,2,3,4,7,8,9-HpCDF	12		1.01	>10:1	
Total HpCDF	1200 J		1.04	>10:1	B,D
OCDF	760		0.90	>10:1	B

Analyst: _____

Reviewer: _____

5/18/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX2-PX6
Lab ID: 2492-0003-SA
Matrix: Soil
% Solids: 80

Date Received: 5/16/96
Date Extracted: 5/17/96
Sample Amount: 10.00 g
TEQ: 1.4

ICAL ID: I1613A
QC Lot: LC0517S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.18			
Total TCDD	ND	0.18			
1,2,3,7,8-PeCDD	ND	1.2			
Total PeCDD	ND	1.2			
1,2,3,4,7,8-HxCDD	ND	1.6			
1,2,3,6,7,8-HxCDD	ND	1.8			
1,2,3,7,8,9-HxCDD	ND	1.5			
Total HxCDD	ND	1.8			
1,2,3,4,6,7,8-HpCDD	39 u		0.96	>10:1	B
Total HpCDD	65 u		1.08	>10:1	B
OCDD	980		0.91	>10:1	B
2,3,7,8-TCDF	ND	0.11			
Total TCDF	ND	0.11			
1,2,3,7,8-PeCDF	ND	0.15			
2,3,4,7,8-PeCDF	ND	0.15			
Total PeCDF	ND	0.15			
1,2,3,4,7,8-HxCDF	ND	0.35			
1,2,3,6,7,8-HxCDF	ND	0.33			
2,3,4,6,7,8-HxCDF	ND	0.53			
1,2,3,7,8,9-HxCDF	ND	0.38			
Total HxCDF	4.6		1.42	>10:1	
1,2,3,4,6,7,8-HpCDF	5.0 u		1.12	>10:1	B
1,2,3,4,7,8,9-HpCDF	ND	0.71			
Total HpCDF	20 u		1.10	>10:1	B
OCDF	24 u		0.86	>10:1	B

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/12/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: 900
Lab ID: 2492-0004-SA
Matrix: Soil
% Solids: 79

Date Received: 5/16/96
Date Extracted: 5/17/96
Sample Amount: 10.06 g
TEQ: 43

ICAL ID: I1613A
QC Lot: LC0517S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.30			
Total TCDD	0.90		0.76	6:1	
1,2,3,7,8-PeCDD	2.7		1.74	>10:1	
Total PeCDD	11		1.55	>10:1	
1,2,3,4,7,8-HxCDD	6.2		1.19	>10:1	
1,2,3,6,7,8-HxCDD	33		1.28	>10:1	
1,2,3,7,8,9-HxCDD	8.8		1.31	>10:1	
Total HxCDD	120		1.21	>10:1	
1,2,3,4,6,7,8-HpCDD	1100		0.98	>10:1	B
Total HpCDD	2100		1.00	>10:1	B
OCDD	21000		0.90	>10:1	B
2,3,7,8-TCDF	ND	0.23			
Total TCDF	3.2		0.75	>10:1	
1,2,3,7,8-PeCDF	0.32 J		1.59	3:1	A
2,3,4,7,8-PeCDF	0.70		1.52	4:1	A
Total PeCDF	23		1.59	>10:1	D
1,2,3,4,7,8-HxCDF	4.6		1.12	>10:1	
1,2,3,6,7,8-HxCDF	1.5 J		1.11	>10:1	A,D
2,3,4,6,7,8-HxCDF	4.2		1.18	>10:1	D
1,2,3,7,8,9-HxCDF	1.2		1.39	>10:1	A
Total HxCDF	190		1.35	>10:1	D
1,2,3,4,6,7,8-HpCDF	160		1.02	>10:1	B,D
1,2,3,4,7,8,9-HpCDF	9.8		0.97	>10:1	
Total HpCDF	920 J		0.96	>10:1	B,D
OCDF	1800		0.90	>10:1	B

Analyst: [illegible]

Reviewer: [illegible]

AC 7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX2-6-8-1/2
Lab ID: 2492-0005-SA
Matrix: Soil
% Solids: 79

Date Received: 5/16/96
Date Extracted: 5/17/96
Sample Amount: 10.08 g
TEQ: 36

ICAL ID: I1613A
QC Lot: LC0517S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.35			
Total TCDD	ND	0.35			
1,2,3,7,8-PeCDD	3.1		1.53	>10:1	
Total PeCDD	6.3		1.66	>10:1	
1,2,3,4,7,8-HxCDD	6.1		1.19	>10:1	
1,2,3,6,7,8-HxCDD	25		1.21	>10:1	
1,2,3,7,8,9-HxCDD	12		1.12	>10:1	
Total HxCDD	97		1.12	>10:1	
1,2,3,4,6,7,8-HpCDD	650		0.97	>10:1	~~B~~
Total HpCDD	1100		1.14	>10:1	~~B~~
OCDD	20000		0.90	>10:1	~~B~~
2,3,7,8-TCDF	ND	0.19			
Total TCDF	1.5		0.85	>10:1	
1,2,3,7,8-PeCDF	0.34 J		1.77	3:1	A
2,3,4,7,8-PeCDF	0.66		1.45	3:1	A
Total PeCDF	17		1.53	>10:1	D
1,2,3,4,7,8-HxCDF	4.2		1.11	>10:1	
1,2,3,6,7,8-HxCDF	3.9 J		1.12	>10:1	D
2,3,4,6,7,8-HxCDF	3.7		1.40	>10:1	D
1,2,3,7,8,9-HxCDF	1.2		1.08	4:1	A
Total HxCDF	130		1.25	>10:1	D
1,2,3,4,6,7,8-HpCDF	110		1.01	>10:1	~~B~~,D
1,2,3,4,7,8,9-HpCDF	8.1		1.08	>10:1	
Total HpCDF	540 J		1.01	>10:1	~~B~~,D
OCDF	400		0.90	>10:1	~~B~~

Analyst: [illegible]

Reviewer: [illegible]

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX2-0-2-17/18
Lab ID: 2492-0006-SA
Matrix: Soil
% Solids: 74

Date Received: 5/16/96
Date Extracted: 5/17/96
Sample Amount: 10.07 g
TEQ: 6100

ICAL ID: I1613A
QC Lot: LC0517S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	94		0.75	>10:1	
Total TCDD	570		0.76	>10:1	
1,2,3,7,8-PeCDD	1100		1.58	>10:1	
Total PeCDD	3800		1.60	>10:1	
1,2,3,4,7,8-HxCDD	2300		1.23	>10:1	
1,2,3,6,7,8-HxCDD	10000		1.24	>10:1	
1,2,3,7,8,9-HxCDD	3800		1.23	>10:1	
Total HxCDD	39000		1.25	>10:1	
1,2,3,4,6,7,8-HpCDD	180000 J		1.06	>10:1	*,B
Total HpCDD	260000		1.05	>10:1	*,B
OCDD	970000		0.91	>10:1	*,B
2,3,7,8-TCDF	30		0.77	>10:1	
Total TCDF	940 J		0.74	>10:1	D
1,2,3,7,8-PeCDF	110		1.60	>10:1	
2,3,4,7,8-PeCDF	190		1.60	>10:1	
Total PeCDF	6700 J		1.58	>10:1	D
1,2,3,4,7,8-HxCDF	1400		1.27	>10:1	
1,2,3,6,7,8-HxCDF	660 J		1.30	>10:1	D
2,3,4,6,7,8-HxCDF	1200		1.28	>10:1	
1,2,3,7,8,9-HxCDF	260		1.30	>10:1	
Total HxCDF	46000 J		1.27	>10:1	*,D
1,2,3,4,6,7,8-HpCDF	28000 J		1.06	>10:1	*,B,D
1,2,3,4,7,8,9-HpCDF	2100		0.99	>10:1	
Total HpCDF	150000 J		1.06	>10:1	*,B,D
OCDF	230000 J		0.91	>10:1	*,B

Analyst: [illegible]

Reviewer: [illegible]

7/18/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX3
Lab ID: 2492-0007-SA
Matrix: Soil
% Solids: 79

Date Received: 5/16/96
Date Extracted: 5/17/96
Sample Amount: 10.00 g
TEQ: 2.4

ICAL ID: I1613A
QC Lot: LC0517S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.34			
Total TCDD	ND	0.34			
1,2,3,7,8-PeCDD	ND	0.73			
Total PeCDD	ND	0.73			
1,2,3,4,7,8-HxCDD	ND	1.7			
1,2,3,6,7,8-HxCDD	ND	1.9			
1,2,3,7,8,9-HxCDD	ND	1.6			
Total HxCDD	13		1.28	6:1	
1,2,3,4,6,7,8-HpCDD	51 LL		1.04	>10:1	B
Total HpCDD	91 LL		0.96	>10:1	B
OCDD	1600		0.89	>10:1	B
2,3,7,8-TCDF	ND	0.22			
Total TCDF	ND	1.7			I
1,2,3,7,8-PeCDF	ND	0.22			
2,3,4,7,8-PeCDF	ND	0.23			
Total PeCDF	3.6 J		1.70	>10:1	D
1,2,3,4,7,8-HxCDF	0.64		1.30	4:1	A
1,2,3,6,7,8-HxCDF	0.32		1.20	3:1	A,D
2,3,4,6,7,8-HxCDF	0.70		1.16	4:1	A,D
1,2,3,7,8,9-HxCDF	ND	0.23			
Total HxCDF	19 J		1.29	>10:1	D
1,2,3,4,6,7,8-HpCDF	13 LJ		1.06	>10:1	B,D
1,2,3,4,7,8,9-HpCDF	ND	0.51			
Total HpCDF	32 LJ		1.06	>10:1	B,D
OCDF	18 LL		0.86	>10:1	B

Analyst: [illegible]

Reviewer: [illegible]

MC 7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX8 MS/MSD
Lab ID: 2492-0008-SA
Matrix: Soil
% Solids: 82

Date Received: 5/16/96
Date Extracted: 5/17/96
Sample Amount: 9.95 g
TEQ: 45

ICAL ID: I1613A
QC Lot: LC0517S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	0.69		0.66	>10:1	
Total TCDD	12		0.76	>10:1	
1,2,3,7,8-PeCDD	3.5		1.47	>10:1	
Total PeCDD	26		1.76	>10:1	
1,2,3,4,7,8-HxCDD	7.7 J		1.15	>10:1	*
1,2,3,6,7,8-HxCDD	30		1.17	>10:1	*
1,2,3,7,8,9-HxCDD	12		1.15	>10:1	*
Total HxCDD	170		1.26	>10:1	*
1,2,3,4,6,7,8-HpCDD	840		0.98	>10:1	B
Total HpCDD	1400		1.01	>10:1	B
OCDD	23000 J		0.90	>10:1	*,B
2,3,7,8-TCDF	1.0		0.87	>10:1	
Total TCDF	23		0.76	>10:1	
1,2,3,7,8-PeCDF	2.4 J		1.37	>10:1	A
2,3,4,7,8-PeCDF	3.1		1.59	>10:1	
Total PeCDF	51		1.59	>10:1	
1,2,3,4,7,8-HxCDF	7.0 J		1.23	>10:1	*
1,2,3,6,7,8-HxCDF	5.4 J		1.25	>10:1	*,D
2,3,4,6,7,8-HxCDF	5.8		1.26	>10:1	*
1,2,3,7,8,9-HxCDF	2.0		1.17	>10:1	*,A
Total HxCDF	160		1.27	>10:1	*,D
1,2,3,4,6,7,8-HpCDF	130		1.06	>10:1	*,~~B~~,D
1,2,3,4,7,8,9-HpCDF	7.8		1.07	>10:1	*
Total HpCDF	560		1.06	>10:1	*,~~B~~,D
OCDF	490		0.89	>10:1	~~B~~

Analyst: [signature]

Reviewer: [signature]

MC 7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-2-4-16/17
Lab ID: 2492-0009-SA
Matrix: Soil
% Solids: 84

Date Received: 5/16/96
Date Extracted: 5/17/96
Sample Amount: 10.04 g
TEQ: 24000

ICAL ID: I1613A
QC Lot: LC0517S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	340		0.76	>10:1	
Total TCDD	1500		0.76	>10:1	
1,2,3,7,8-PeCDD	6600		1.56	>10:1	
Total PeCDD	19000		1.55	>10:1	
1,2,3,4,7,8-HxCDD	15000		1.26	>10:1	
1,2,3,6,7,8-HxCDD	42000 J		1.24	>10:1	*
1,2,3,7,8,9-HxCDD	19000		1.24	>10:1	*
Total HxCDD	160000		1.21	>10:1	*
1,2,3,4,6,7,8-HpCDD	620000		1.04	>10:1	*,B
Total HpCDD	870000		1.05	>10:1	*,B
OCDD	2100000		0.90	>10:1	*,B
2,3,7,8-TCDF	330		0.77	>10:1	
Total TCDF	3700 J		0.73	>10:1	D
1,2,3,7,8-PeCDF	1400		1.58	>10:1	
2,3,4,7,8-PeCDF	1200		1.58	>10:1	
Total PeCDF	33000 J		1.58	>10:1	*,D
1,2,3,4,7,8-HxCDF	9300		1.25	>10:1	
1,2,3,6,7,8-HxCDF	7100 J		1.21	>10:1	D
2,3,4,6,7,8-HxCDF	5700		1.24	>10:1	
1,2,3,7,8,9-HxCDF	850		1.25	>10:1	
Total HxCDF	160000 J		1.10	>10:1	*,D
1,2,3,4,6,7,8-HpCDF	110000 J		1.05	>10:1	*,B,D
1,2,3,4,7,8,9-HpCDF	8300		1.05	>10:1	
Total HpCDF	350000 J		1.05	>10:1	*,B,D
OCDF	530000 J		0.90	>10:1	*,B

Analyst: [illegible]

Reviewer: [illegible]

MC 7/17/96

SDG EX1PX5/2488

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-4-6-4

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-15

Sample wt/vol: 10.4 (g/mL) G Lab File ID: IH537

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1100	U

MC 7/17/96

42

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-PX5

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-01

Sample wt/vol: 10.3 (g/mL) G Lab File ID: IH531

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 5 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	910	J

ML 7/17/96

45

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-PX6

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-02

Sample wt/vol: 10.1 (g/mL) G Lab File ID: IH532

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	700	J

ML 3/13/96

49

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-PX7

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-03

Sample wt/vol: 10.2 (g/mL) G Lab File ID: IH533

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1100	U

mc 7/17/96

53

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2-PX3R

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-04

Sample wt/vol: 10.2 (g/mL) G Lab File ID: IH534

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 28 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1300	U

AL 7/17/96

56

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2-PX4R

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-05

Sample wt/vol: 10.1 (g/mL) G Lab File ID: IH535

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1300	U

AL 7/18/96

59

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2-PX5

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-06

Sample wt/vol: 10.3 (g/mL) G Lab File ID: IH536

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 26 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1300	U

AC 7/17/96

62

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-0-2-1415

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-16

Sample wt/vol: 10.3 (g/mL) G Lab File ID: JH523

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	880	J

mr 7/17/96

65

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX1

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-08

Sample wt/vol: 10.2 (g/mL) G Lab File ID: JH524

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	25000	E

Do not use
ML/7/17/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX1DL

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-08DL

Sample wt/vol: 10.2 (g/mL) G Lab File ID: IH576

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/17/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	25000	D5

7/1/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX4

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-09

Sample wt/vol: 10.1 (g/mL) G Lab File ID: JH525

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 16 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	270	J

7/17/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX5

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-10

Sample wt/vol: 10.0 (g/mL) G Lab File ID: JH526

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	350	J

hw 7/17/96

FORM I X-3 3/90

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX6

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-11

Sample wt/vol: 10.0 (g/mL) G Lab File ID: JH528

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	5300	

AL 7/12/96

85

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX7

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-12

Sample wt/vol: 10.1 (g/mL) G Lab File ID: JH522

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 20 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1200	U

AL
7/17/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-3

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-07

Sample wt/vol: 10.0 (g/mL) G Lab File ID: JH527

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	400	J

92

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-4

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-13

Sample wt/vol: 10.3 (g/mL) G Lab File ID: JH530

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	27000	E

Do not use
ML 7/17/96

96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-4DL

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-13DL

Sample wt/vol: 10.3 (g/mL) G Lab File ID: IH577

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/17/96

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	44000	~~D~~ 5

hc 7/18/96

FORM I X-1 3/90

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-5

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX1PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960378-14

Sample wt/vol: 10.0 (g/mL) G Lab File ID: JH529

Level: (low/med) LOW Date Received: 05/15/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 05/15/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	9600	

mc 7/18/96

104

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-PX5
Lab ID: 2488-0001-SA
Matrix: Soil
% Solids: 95

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 10.06 g
TEQ: 0.46

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.092			
Total TCDD	0.22 J		0.87	4:1	A
1,2,3,7,8-PeCDD	ND	0.079			
Total PeCDD	ND	0.079			
1,2,3,4,7,8-HxCDD	ND	0.24			
1,2,3,6,7,8-HxCDD	0.46 J		1.23	4:1	A
1,2,3,7,8,9-HxCDD	ND	0.23			
Total HxCDD	1.1 J		1.31	5:1	A
1,2,3,4,6,7,8-HpCDD	17		1.07	>10:1	
Total HpCDD	26		1.06	>10:1	
OCDD	230		0.89	>10:1	B
2,3,7,8-TCDF	ND	0.098			
Total TCDF	0.17 J		0.70	4:1	A
1,2,3,7,8-PeCDF	ND	0.086			
2,3,4,7,8-PeCDF	ND	0.082			
Total PeCDF	ND	0.086			
1,2,3,4,7,8-HxCDF	ND	0.17			
1,2,3,6,7,8-HxCDF	ND	0.16			
2,3,4,6,7,8-HxCDF	ND	0.19			
1,2,3,7,8,9-HxCDF	ND	0.21			
Total HxCDF	0.46 J		1.27	4:1	A
1,2,3,4,6,7,8-HpCDF	1.3 J		1.10	>10:1	A
1,2,3,4,7,8,9-HpCDF	ND	0.10			
Total HpCDF	4.4		1.10	>10:1	
OCDF	3.5 J		0.87	>10:1	A

Analyst: [illegible]

Reviewer: [illegible]

MC 7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-PX6
Lab ID: 2488-0002-SA
Matrix: Soil
% Solids: 94

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 9.97 g
TEQ: 13

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.18			
Total TCDD	0.20 J		0.67	3:1	A
1,2,3,7,8-PeCDD	0.88		1.56	6:1	A
Total PeCDD	2.0		1.61	6:1	A
1,2,3,4,7,8-HxCDD	2.6		1.38	>10:1	
1,2,3,6,7,8-HxCDD	16		1.25	>10:1	
1,2,3,7,8,9-HxCDD	5.5		1.23	>10:1	
Total HxCDD	54		1.25	>10:1	
1,2,3,4,6,7,8-HpCDD	520		1.05	>10:1	
Total HpCDD	820		1.04	>10:1	
OCDD	3400		0.89	>10:1	~~B~~
2,3,7,8-TCDF	ND	0.090			
Total TCDF	0.99		0.71	>10:1	
1,2,3,7,8-PeCDF	ND	0.13			
2,3,4,7,8-PeCDF	ND	0.25			
Total PeCDF	8.4 J		1.43	>10:1	D
1,2,3,4,7,8-HxCDF	2.4 J		1.32	>10:1	A
1,2,3,6,7,8-HxCDF	0.92 J		1.24	>10:1	A,D
2,3,4,6,7,8-HxCDF	1.7		1.31	>10:1	A
1,2,3,7,8,9-HxCDF	0.48		1.24	3:1	A
Total HxCDF	85		1.33	>10:1	D
1,2,3,4,6,7,8-HpCDF	92 J		1.06	>10:1	D
1,2,3,4,7,8,9-HpCDF	3.9		1.00	>10:1	
Total HpCDF	330 J		1.06	>10:1	D
OCDF	290		0.89	>10:1	

Analyst: [illegible]

Reviewer: [illegible]
7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-PX7
Lab ID: 2488-0003-SA
Matrix: Soil
% Solids: 90

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 10.05 g
TEQ: 0.43

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.13			
Total TCDD	ND	0.13			
1,2,3,7,8-PeCDD	ND	0.12			
Total PeCDD	ND	0.12			
1,2,3,4,7,8-HxCDD	ND	0.31			
1,2,3,6,7,8-HxCDD	0.64 J		1.06	4:1	A
1,2,3,7,8,9-HxCDD	ND	0.29			
Total HxCDD	1.3 J		1.06	4:1	A
1,2,3,4,6,7,8-HpCDD	17		1.04	> 10:1	
Total HpCDD	28		1.19	> 10:1	
OCDD	150		0.88	> 10:1	B
2,3,7,8-TCDF	ND	0.12			
Total TCDF	ND	0.12			
1,2,3,7,8-PeCDF	ND	0.12			
2,3,4,7,8-PeCDF	ND	0.12			
Total PeCDF	ND	0.12			
1,2,3,4,7,8-HxCDF	ND	0.20			
1,2,3,6,7,8-HxCDF	ND	0.19			
2,3,4,6,7,8-HxCDF	ND	0.39			
1,2,3,7,8,9-HxCDF	ND	0.23			
Total HxCDF	2.1 J		1.27	> 10:1	A
1,2,3,4,6,7,8-HpCDF	3.2		1.04	> 10:1	D
1,2,3,4,7,8,9-HpCDF	0.24		1.17	3:1	A
Total HpCDF	13		1.04	> 10:1	D
OCDF	13		0.92	> 10:1	

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX2-PX3R
Lab ID: 2488-0004-SA
Matrix: Soil
% Solids: 78

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 9.95 g
TEQ: 37

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.35			
Total TCDD	1.7		0.75	>10:1	
1,2,3,7,8-PeCDD	3.2		1.38	>10:1	
Total PeCDD	15		1.60	>10:1	
1,2,3,4,7,8-HxCDD	10		1.24	>10:1	
1,2,3,6,7,8-HxCDD	19		1.24	>10:1	
1,2,3,7,8,9-HxCDD	11		1.32	>10:1	
Total HxCDD	130		1.22	>10:1	
1,2,3,4,6,7,8-HpCDD	840		1.05	>10:1	
Total HpCDD	1200		1.05	>10:1	
OCDD	21000 J		0.90	>10:1	*,~~B~~
2,3,7,8-TCDF	ND	0.13			
Total TCDF	2.0		0.73	>10:1	
1,2,3,7,8-PeCDF	0.30 J		1.53	4:1	A
2,3,4,7,8-PeCDF	0.41		1.46	4:1	A
Total PeCDF	15		1.52	>10:1	D
1,2,3,4,7,8-HxCDF	3.3		1.21	>10:1	
1,2,3,6,7,8-HxCDF	2.1 J		1.22	>10:1	A,D
2,3,4,6,7,8-HxCDF	3.4		1.19	>10:1	
1,2,3,7,8,9-HxCDF	0.62 J		1.10	3:1	A
Total HxCDF	94		1.30	>10:1	D
1,2,3,4,6,7,8-HpCDF	97		1.05	>10:1	D
1,2,3,4,7,8,9-HpCDF	4.3		1.14	>10:1	
Total HpCDF	330 J		1.05	>10:1	D
OCDF	170		0.89	>10:1	

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX2-PX4R
Lab ID: 2488-0005-SA
Matrix: Soil
% Solids: 75

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 9.99 g
TEQ: 98

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	0.80		0.68	>10:1	
Total TCDD	3.5		0.76	>10:1	
1,2,3,7,8-PeCDD	11		1.55	>10:1	
Total PeCDD	38		1.45	>10:1	
1,2,3,4,7,8-HxCDD	21		1.25	>10:1	
1,2,3,6,7,8-HxCDD	110		1.26	>10:1	
1,2,3,7,8,9-HxCDD	40		1.29	>10:1	
Total HxCDD	370		1.26	>10:1	
1,2,3,4,6,7,8-HpCDD	3100		1.04	>10:1	
Total HpCDD	4800		1.04	>10:1	
OCDD	26000 J		0.90	>10:1	*,B
2,3,7,8-TCDF	0.39		0.65	4:1	A
Total TCDF	12		0.83	>10:1	D
1,2,3,7,8-PeCDF	1.3		1.48	>10:1	A
2,3,4,7,8-PeCDF	2.3		1.49	>10:1	A
Total PeCDF	110		1.75	>10:1	D
1,2,3,4,7,8-HxCDF	16		1.27	>10:1	
1,2,3,6,7,8-HxCDF	9.3 J		1.19	>10:1	D
2,3,4,6,7,8-HxCDF	19		1.28	>10:1	
1,2,3,7,8,9-HxCDF	2.6		1.35	>10:1	
Total HxCDF	810 J		1.32	>10:1	D
1,2,3,4,6,7,8-HpCDF	840 J		1.05	>10:1	D
1,2,3,4,7,8,9-HpCDF	31		1.07	>10:1	
Total HpCDF	3400 J		1.05	>10:1	D
OCDF	3400		0.90	>10:1	

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX2-PX5
Lab ID: 2488-0006-SA
Matrix: Soil
% Solids: 79

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 10.07 g
TEQ: 9.8

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.15			
Total TCDD	0.20 J		0.78	4:1	A
1,2,3,7,8-PeCDD	0.45		1.71	3:1	A
Total PeCDD	0.87		1.42	3:1	A
1,2,3,4,7,8-HxCDD	0.75		1.29	3:1	A
1,2,3,6,7,8-HxCDD	1.9		1.18	8:1	A
1,2,3,7,8,9-HxCDD	1.2		1.18	4:1	A
Total HxCDD	8.9		1.08	>10:1	
1,2,3,4,6,7,8-HpCDD	64		1.05	>10:1	
Total HpCDD	110		1.02	>10:1	
OCDD	8200		0.89	>10:1	B
2,3,7,8-TCDF	ND	0.087			
Total TCDF	0.25 J		0.70	6:1	A
1,2,3,7,8-PeCDF	ND	0.11			
2,3,4,7,8-PeCDF	ND	0.12			
Total PeCDF	1.7 J		1.47	>10:1	A
1,2,3,4,7,8-HxCDF	0.53		1.28	4:1	A
1,2,3,6,7,8-HxCDF	0.28		1.38	3:1	A,D
2,3,4,6,7,8-HxCDF	1.2		1.38	6:1	A
1,2,3,7,8,9-HxCDF	ND	0.11			
Total HxCDF	13 J		1.27	>10:1	D
1,2,3,4,6,7,8-HpCDF	9.1		1.09	>10:1	D
1,2,3,4,7,8,9-HpCDF	0.53		1.08	3:1	A
Total HpCDF	33		1.09	>10:1	D
OCDF	27		0.88	>10:1	

Analyst: BM

Reviewer: [illegible]

2/12/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX1
Lab ID: 2488-0007-SA
Matrix: Soil
% Solids: 77

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 10.06 g
TEQ: 6.3

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.15			
Total TCDD	ND	0.15			
1,2,3,7,8-PeCDD	0.44 J		1.34	3:1	A
Total PeCDD	0.81		1.75	3:1	A
1,2,3,4,7,8-HxCDD	0.56		1.32	3:1	A
1,2,3,6,7,8-HxCDD	1.6		1.18	>10:1	A
1,2,3,7,8,9-HxCDD	1.1		1.42	8:1	A
Total HxCDD	7.7		1.29	>10:1	
1,2,3,4,6,7,8-HpCDD	40		1.04	>10:1	
Total HpCDD	70		0.99	>10:1	
OCDD	5100		0.89	>10:1	~~B~~
2,3,7,8-TCDF	ND	0.085			
Total TCDF	0.13 J		0.75	3:1	A
1,2,3,7,8-PeCDF	ND	0.12			
2,3,4,7,8-PeCDF	ND	0.14			
Total PeCDF	1.2 J		1.54	>10:1	A
1,2,3,4,7,8-HxCDF	0.40		1.29	3:1	A
1,2,3,6,7,8-HxCDF	0.27		1.25	3:1	A,D
2,3,4,6,7,8-HxCDF	0.67		1.25	6:1	A
1,2,3,7,8,9-HxCDF	ND	0.10			
Total HxCDF	7.3 J		1.29	>10:1	D
1,2,3,4,6,7,8-HpCDF	5.9		1.06	>10:1	D
1,2,3,4,7,8,9-HpCDF	0.35		1.04	3:1	A
Total HpCDF	19		1.06	>10:1	D
OCDF	13		0.90	>10:1	

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/18/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX4
Lab ID: 2488-0008-SA
Matrix: Soil
% Solids: 88

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 10.00 g
TEQ: 870

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	1.7		0.79	>10:1	
Total TCDD	8.7		0.66	>10:1	
1,2,3,7,8-PeCDD	34		1.76	>10:1	
Total PeCDD	100		1.56	>10:1	
1,2,3,4,7,8-HxCDD	70		1.22	>10:1	
1,2,3,6,7,8-HxCDD	1100		1.25	>10:1	
1,2,3,7,8,9-HxCDD	130		1.21	>10:1	
Total HxCDD	2400		1.24	>10:1	
1,2,3,4,6,7,8-HpCDD	32000 J		1.05	>10:1	*
Total HpCDD	47000		1.10	>10:1	*
OCDD	200000		0.91	>10:1	*,~~B~~
2,3,7,8-TCDF	0.95		0.75	>10:1	
Total TCDF	69		0.84	>10:1	
1,2,3,7,8-PeCDF	5.5		1.54	>10:1	
2,3,4,7,8-PeCDF	6.8		1.61	>10:1	
Total PeCDF	770 J		1.37	>10:1	D
1,2,3,4,7,8-HxCDF	96		1.29	>10:1	
1,2,3,6,7,8-HxCDF	140 J		1.22	>10:1	D
2,3,4,6,7,8-HxCDF	53		1.20	>10:1	
1,2,3,7,8,9-HxCDF	12		1.24	>10:1	
Total HxCDF	8500 J		1.30	>10:1	D
1,2,3,4,6,7,8-HpCDF	11000		1.06	>10:1	*,D
1,2,3,4,7,8,9-HpCDF	200		1.00	>10:1	*
Total HpCDF	50000		1.06	>10:1	*,D
OCDF	55000		0.91	>10:1	*

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 2/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX5
Lab ID: 2488-0009-SA
Matrix: Soil
% Solids: 85

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 10.01 g
TEQ: 26000

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	200		0.78	>10:1	
Total TCDD	620		0.79	>10:1	
1,2,3,7,8-PeCDD	3700		1.56	>10:1	
Total PeCDD	8200		1.56	>10:1	
1,2,3,4,7,8-HxCDD	5800		1.22	>10:1	
1,2,3,6,7,8-HxCDD	33000		1.26	>10:1	
1,2,3,7,8,9-HxCDD	11000		1.24	>10:1	
Total HxCDD	100000		1.22	>10:1	
1,2,3,4,6,7,8-HpCDD	820000		1.05	>10:1	*
Total HpCDD	1200000		1.05	>10:1	*
OCDD	6500000		0.90	>10:1	*,~~B~~
2,3,7,8-TCDF	85		0.78	>10:1	
Total TCDF	2700		0.75	>10:1	D
1,2,3,7,8-PeCDF	450		1.57	>10:1	
2,3,4,7,8-PeCDF	640		1.58	>10:1	
Total PeCDF	26000		1.58	>10:1	*,D
1,2,3,4,7,8-HxCDF	5300		1.26	>10:1	
1,2,3,6,7,8-HxCDF	2400		1.28	>10:1	D
2,3,4,6,7,8-HxCDF	3600		1.29	>10:1	D
1,2,3,7,8,9-HxCDF	830		1.27	>10:1	
Total HxCDF	190000		1.23	>10:1	*,D
1,2,3,4,6,7,8-HpCDF	170000		1.05	>10:1	*,D
1,2,3,4,7,8,9-HpCDF	8000		1.05	>10:1	
Total HpCDF	690000		1.05	>10:1	*,D
OCDF	580000		0.92	>10:1	*

Analyst: [illegible]

Reviewer: [illegible]

7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX6
Lab ID: 2488-0010-SA
Matrix: Soil
% Solids: 84

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 10.07 g
TEQ: 3100

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	12		0.76	>10:1	
Total TCDD	45		0.68	>10:1	
1,2,3,7,8-PeCDD	210		1.54	>10:1	
Total PeCDD	490		1.50	>10:1	
1,2,3,4,7,8-HxCDD	600		1.27	>10:1	
1,2,3,6,7,8-HxCDD	4000		1.25	>10:1	
1,2,3,7,8,9-HxCDD	760		1.24	>10:1	
Total HxCDD	10000		1.23	>10:1	
1,2,3,4,6,7,8-HpCDD	110000 J		1.05	>10:1	*
Total HpCDD	170000		1.05	>10:1	*
OCDD	650000		0.90	>10:1	*,B
2,3,7,8-TCDF	5.8		0.80	>10:1	
Total TCDF	300 J		0.80	>10:1	D
1,2,3,7,8-PeCDF	34		1.60	>10:1	
2,3,4,7,8-PeCDF	48		1.57	>10:1	
Total PeCDF	2600 J		1.74	>10:1	*,D
1,2,3,4,7,8-HxCDF	580		1.42	>10:1	
1,2,3,6,7,8-HxCDF	1000 J		1.29	>10:1	D
2,3,4,6,7,8-HxCDF	360		1.26	>10:1	
1,2,3,7,8,9-HxCDF	99		1.27	>10:1	
Total HxCDF	26000 J		1.27	>10:1	D
1,2,3,4,6,7,8-HpCDF	32000 J		1.05	>10:1	*,D
1,2,3,4,7,8,9-HpCDF	1100		1.05	>10:1	
Total HpCDF	150000 J		1.05	>10:1	*,D
OCDF	140000 J		0.91	>10:1	*

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX7
Lab ID: 2488-0011-SA
Matrix: Soil
% Solids: 76

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 9.95 g
TEQ: 5.4

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.27			
Total TCDD	ND	0.27			
1,2,3,7,8-PeCDD	ND	0.71			
Total PeCDD	ND	0.71			
1,2,3,4,7,8-HxCDD	ND	2.3			
1,2,3,6,7,8-HxCDD	ND	2.5			
1,2,3,7,8,9-HxCDD	ND	2.1			
Total HxCDD	ND	2.5			
1,2,3,4,6,7,8-HpCDD	44		1.02	>10:1	
Total HpCDD	82		0.98	>10:1	
OCDD	4900		0.90	>10:1	B
2,3,7,8-TCDF	ND	0.17			
Total TCDF	ND	0.17			
1,2,3,7,8-PeCDF	ND	0.63			
2,3,4,7,8-PeCDF	ND	0.58			
Total PeCDF	ND	0.63			
1,2,3,4,7,8-HxCDF	ND	0.46			
1,2,3,6,7,8-HxCDF	ND	0.43			
2,3,4,6,7,8-HxCDF	ND	0.49			
1,2,3,7,8,9-HxCDF	ND	0.52			
Total HxCDF	2.0 J		1.11	5:1	A
1,2,3,4,6,7,8-HpCDF	4.4 J		1.15	>10:1	D
1,2,3,4,7,8,9-HpCDF	ND	2.2			
Total HpCDF	14 J		1.15	>10:1	D
OCDF	11		0.88	>10:1	

Analyst: [illegible]

Reviewer: [illegible]

7/17/96
MC

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-4-6-4
Lab ID: 2488-0012-SA
Matrix: Soil
% Solids: 86

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 10.01 g
TEQ: 0.99

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.21			
Total TCDD	ND	0.21			
1,2,3,7,8-PeCDD	ND	0.70			
Total PeCDD	ND	0.70			
1,2,3,4,7,8-HxCDD	ND	1.8			
1,2,3,6,7,8-HxCDD	ND	2.0			
1,2,3,7,8,9-HxCDD	ND	1.7			
Total HxCDD	ND	2.0			
1,2,3,4,6,7,8-HpCDD	52		1.07	>10:1	
Total HpCDD	84		1.14	>10:1	
OCDD	390		0.89	>10:1	B
2,3,7,8-TCDF	ND	0.12			
Total TCDF	ND	0.12			
1,2,3,7,8-PeCDF	ND	0.20			
2,3,4,7,8-PeCDF	ND	0.20			
Total PeCDF	ND	0.20			
1,2,3,4,7,8-HxCDF	ND	0.33			
1,2,3,6,7,8-HxCDF	ND	0.31			
2,3,4,6,7,8-HxCDF	ND	0.33			
1,2,3,7,8,9-HxCDF	ND	0.34			
Total HxCDF	7.0		1.33	>10:1	
1,2,3,4,6,7,8-HpCDF	6.9		1.14	>10:1	D
1,2,3,4,7,8,9-HpCDF	ND	0.49			
Total HpCDF	22		1.14	>10:1	D
OCDF	15		0.87	>10:1	

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/17/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-0-2-14
Lab ID: 2488-0013-SA
Matrix: Soil
% Solids: 76

Date Received: 5/15/96
Date Extracted: 5/16/96
Sample Amount: 9.96 g
TEQ: 3200

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	11		0.79	>10:1	
Total TCDD	48		0.73	>10:1	
1,2,3,7,8-PeCDD	230		1.57	>10:1	
Total PeCDD	610		1.55	>10:1	
1,2,3,4,7,8-HxCDD	510		1.19	>10:1	
1,2,3,6,7,8-HxCDD	2800		1.23	>10:1	
1,2,3,7,8,9-HxCDD	1000		1.21	>10:1	
Total HxCDD	8600		1.23	>10:1	
1,2,3,4,6,7,8-HpCDD	94000 J		1.04	>10:1	*
Total HpCDD	150000		1.05	>10:1	*
OCDD	1200000		0.90	>10:1	*,B
2,3,7,8-TCDF	4.3		0.78	>10:1	
Total TCDF	260 J		0.71	>10:1	D
1,2,3,7,8-PeCDF	33		1.58	>10:1	
2,3,4,7,8-PeCDF	45		1.58	>10:1	
Total PeCDF	2000 J		1.50	>10:1	D
1,2,3,4,7,8-HxCDF	530		1.30	>10:1	
1,2,3,6,7,8-HxCDF	410 J		1.23	>10:1	D
2,3,4,6,7,8-HxCDF	360 J		1.30	>10:1	D
1,2,3,7,8,9-HxCDF	78		1.30	>10:1	
Total HxCDF	16000 J		1.29	>10:1	D
1,2,3,4,6,7,8-HpCDF	17000 J		1.05	>10:1	*,D
1,2,3,4,7,8,9-HpCDF	580		1.05	>10:1	
Total HpCDF	60000 J		1.05	>10:1	*,D
OCDF	120000 J		0.91	>10:1	*

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/17/96

SDG EX2025/248

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-4-6-1_2

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX2025

Matrix: (soil/water) SOIL Lab Sample ID: 960375-02

Sample wt/vol: 10.3 (g/mL) G Lab File ID: DK878

Level: (low/med) LOW Date Received: 05/14/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 05/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1400	

mc 7/16/96

026

FORM I X-1 3/90

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-PX2

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX2025

Matrix: (soil/water) SOIL Lab Sample ID: 960375-03

Sample wt/vol: 10.0 (g/mL) G Lab File ID: DK879

Level: (low/med) LOW Date Received: 05/14/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 05/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	530	J

MC 7/11/96

030

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-PX3

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX2025

Matrix: (soil/water) SOIL Lab Sample ID: 960375-04

Sample wt/vol: 10.2 (g/mL) G Lab File ID: DK880

Level: (low/med) LOW Date Received: 05/14/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	270	J

MV 7/14/96

034

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-PX4

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX2025

Matrix: (soil/water) SOIL Lab Sample ID: 960375-05

Sample wt/vol: 10.0 (g/mL) G Lab File ID: DK881

Level: (low/med) LOW Date Received: 05/14/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	210	J

M 11/6/96

038

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX2-0-2-5_6

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX2025

Matrix: (soil/water) SOIL Lab Sample ID: 960375-01

Sample wt/vol: 10.1 (g/mL) G Lab File ID: DK883

Level: (low/med) LOW Date Received: 05/14/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	5100	

AL 7/16/96

042

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-1

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX2025

Matrix: (soil/water) SOIL Lab Sample ID: 960375-07

Sample wt/vol: 10.0 (g/mL) G Lab File ID: DK884

Level: (low/med) LOW Date Received: 05/14/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	2500	

046

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-2

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX2025

Matrix: (soil/water) SOIL Lab Sample ID: 960375-08

Sample wt/vol: 10.1 (g/mL) G Lab File ID: DK882

Level: (low/med) LOW Date Received: 05/14/96

% Moisture: 16 decanted: (Y/N) N Date Extracted: 05/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	510	J

050

FORM I X-9 3/90

FAXED TO BRUCE
05-20-96

RECEIVED
MAY 20 1996

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-PX2
Lab ID: 2481-0001-SA
Matrix: Soil
% Solids: 94

Date Received: 5/14/96
Date Extracted: 5/14/96
Sample Amount: 10.02 g
TEQ: 8.2

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	0.36 J		0.65	>10:1	A
Total TCDD	0.36		0.65	>10:1	A
1,2,3,7,8-PeCDD	1.4		1.34	>10:1	A
Total PeCDD	3.0		1.46	>10:1	
1,2,3,4,7,8-HxCDD	2.2 J		1.22	>10:1	A
1,2,3,6,7,8-HxCDD	11		1.23	>10:1	
1,2,3,7,8,9-HxCDD	5.6		1.22	>10:1	
Total HxCDD	48		1.41	>10:1	
1,2,3,4,6,7,8-HpCDD	280		1.04	>10:1	
Total HpCDD	480		1.02	>10:1	
OCDD	1300		0.88	>10:1	
2,3,7,8-TCDF	0.66 J		0.82	>10:1	A
Total TCDF	2.4		0.87	>10:1	
1,2,3,7,8-PeCDF	ND	0.17			
2,3,4,7,8-PeCDF	ND	0.28			
Total PeCDF	6.2 J		1.47	>10:1	D
1,2,3,4,7,8-HxCDF	1.6		1.12	>10:1	A
1,2,3,6,7,8-HxCDF	1.7		1.41	>10:1	A
2,3,4,6,7,8-HxCDF	1.8		1.35	>10:1	A
1,2,3,7,8,9-HxCDF	0.53		1.35	3:1	A
Total HxCDF	49		1.28	>10:1	D
1,2,3,4,6,7,8-HpCDF	40		1.04	>10:1	D
1,2,3,4,7,8,9-HpCDF	2.8		0.99	>10:1	
Total HpCDF	160 J		1.04	>10:1	D
OCDF	110		0.89	>10:1	

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/1/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-PX3
Lab ID: 2481-0002-SA
Matrix: Soil
% Solids: 92

Date Received: 5/14/96
Date Extracted: 5/14/96
Sample Amount: 10.02 g
TEQ: 5.0

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	0.43 J		0.68	>10:1	A
Total TCDD	3.6		0.70	>10:1	
1,2,3,7,8-PeCDD	1.1 J		1.53	>10:1	A
Total PeCDD	3.9		1.58	>10:1	
1,2,3,4,7,8-HxCDD	0.80 J		1.16	>10:1	A
1,2,3,6,7,8-HxCDD	6.9		1.25	>10:1	
1,2,3,7,8,9-HxCDD	2.6		1.28	>10:1	
Total HxCDD	21		1.22	>10:1	
1,2,3,4,6,7,8-HpCDD	150		1.04	>10:1	
Total HpCDD	250		1.03	>10:1	
OCDD	800		0.88	>10:1	
2,3,7,8-TCDF	ND	0.10			
Total TCDF	4.9		0.85	>10:1	
1,2,3,7,8-PeCDF	ND	0.18			
2,3,4,7,8-PeCDF	ND	0.17			
Total PeCDF	8.2 J		1.55	>10:1	D
1,2,3,4,7,8-HxCDF	1.1		1.19	>10:1	A
1,2,3,6,7,8-HxCDF	1.3		1.31	>10:1	A
2,3,4,6,7,8-HxCDF	1.1		1.30	>10:1	A
1,2,3,7,8,9-HxCDF	0.32		1.32	3:1	A
Total HxCDF	34		1.27	>10:1	D
1,2,3,4,6,7,8-HpCDF	27		1.02	>10:1	D
1,2,3,4,7,8,9-HpCDF	1.3		1.00	>10:1	A
Total HpCDF	100 J		1.02	>10:1	D
OCDF	71		0.90	>10:1	

Analyst: [signature]

Reviewer: [signature]

[signature] 7/11/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-PX4
Lab ID: 2481-0003-SA
Matrix: Soil
% Solids: 88

Date Received: 5/14/96
Date Extracted: 5/14/96
Sample Amount: 10.03 g
TEQ: 4.7

ICAL ID: I1613A
QC Lot: LC0514S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	0.45		0.68	>10:1	A
Total TCDD	0.96		0.83	>10:1	A
1,2,3,7,8-PeCDD	0.36		1.61	5:1	A
Total PeCDD	1.2		1.73	5:1	A
1,2,3,4,7,8-HxCDD	0.53		1.16	>10:1	A
1,2,3,6,7,8-HxCDD	4.9		1.27	>10:1	
1,2,3,7,8,9-HxCDD	1.0		1.12	>10:1	A
Total HxCDD	16		1.15	>10:1	
1,2,3,4,6,7,8-HpCDD	160		1.02	>10:1	
Total HpCDD	280		1.04	>10:1	
OCDD	1100		0.89	>10:1	
2,3,7,8-TCDF	ND	0.088			
Total TCDF	0.65		0.82	>10:1	A
1,2,3,7,8-PeCDF	ND	0.10			
2,3,4,7,8-PeCDF	ND	0.17			
Total PeCDF	2.8		1.50	>10:1	D
1,2,3,4,7,8-HxCDF	0.95		1.41	>10:1	A
1,2,3,6,7,8-HxCDF	0.93		1.17	>10:1	A
2,3,4,6,7,8-HxCDF	1.2		1.31	>10:1	A
1,2,3,7,8,9-HxCDF	0.24		1.35	3:1	A
Total HxCDF	28		1.29	>10:1	D
1,2,3,4,6,7,8-HpCDF	28		1.06	>10:1	D
1,2,3,4,7,8,9-HpCDF	1.5		1.08	>10:1	A
Total HpCDF	120		1.06	>10:1	D
OCDF	110		0.89	>10:1	

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/18/96

SDG EX3PX2/2508

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX2A

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX2

Matrix: (soil/water) SOIL Lab Sample ID: 960393-01

Sample wt/vol: 10.5 (g/mL) G Lab File ID: IH657

Level: (low/med) LOW Date Received: 05/22/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/22/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	970	~~BJ~~ U

MC
7/16/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-10

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX2

Matrix: (soil/water) SOIL Lab Sample ID: 960393-02

Sample wt/vol: 10.0 (g/mL) G Lab File ID: IH658

Level: (low/med) LOW Date Received: 05/22/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/22/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/23/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	35000	BE

Do not use
AL
7/16/96

10

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-10DL

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX2

Matrix: (soil/water) SOIL Lab Sample ID: 960393-02DL

Sample wt/vol: 10.0 (g/mL) G Lab File ID: IH750

Level: (low/med) LOW Date Received: 05/22/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/22/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 06/01/96

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	16000	BD

mc 7/16/96

13

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-11

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX2

Matrix: (soil/water) SOIL Lab Sample ID: 960393-03

Sample wt/vol: 10.4 (g/mL) G Lab File ID: IH659

Level: (low/med) LOW Date Received: 05/22/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/22/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/23/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	68000	BE

Do not use
AL 7/16/96

14

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-11DL

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX2

Matrix: (soil/water) SOIL Lab Sample ID: 960393-03DL

Sample wt/vol: 10.4 (g/mL) G Lab File ID: IH751

Level: (low/med) LOW Date Received: 05/22/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/22/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	64000	~~BD~~ J

AL 7/16/96

15

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-12

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX2

Matrix: (soil/water) SOIL Lab Sample ID: 960393-04

Sample wt/vol: 10.0 (g/mL) G Lab File ID: IH660

Level: (low/med) LOW Date Received: 05/22/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 05/22/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	40000	BE

Do not use
7/16/96

16

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-12DL

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX2

Matrix: (soil/water) SOIL Lab Sample ID: 960393-04DL

Sample wt/vol: 10.0 (g/mL) G Lab File ID: IH752

Level: (low/med) LOW Date Received: 05/22/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 05/22/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 06/01/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	32000	~~BD~~ J

ML 7/16/96

17

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX2A
Lab ID: 2508-0001-SA
Matrix: Soil
% Solids: 85

Date Received: 5/22/96
Date Extracted: 5/22/96
Sample Amount: 5.07 g
TEQ: 22

ICAL ID: I1613A
QC Lot: LC0522S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.48			
Total TCDD	ND	0.48			
1,2,3,7,8-PeCDD	2.8		1.57	7:1	
Total PeCDD	6.8		1.48	7:1	
1,2,3,4,7,8-HxCDD	5.8		1.07	>10:1	
1,2,3,6,7,8-HxCDD	23		1.28	>10:1	
1,2,3,7,8,9-HxCDD	9.1		1.28	>10:1	
Total HxCDD	95		1.30	>10:1	
1,2,3,4,6,7,8-HpCDD	610		1.04	>10:1	
Total HpCDD	1000		1.04	>10:1	
OCDD	8000		0.91	>10:1	B
2,3,7,8-TCDF	0.51 J		0.68	5:1	
Total TCDF	35		0.72	>10:1	
1,2,3,7,8-PeCDF	ND	0.74			
2,3,4,7,8-PeCDF	ND	0.70			
Total PeCDF	31		1.51	>10:1	
1,2,3,4,7,8-HxCDF	4.0		1.19	>10:1	
1,2,3,6,7,8-HxCDF	2.2 J		1.13	>10:1	A
2,3,4,6,7,8-HxCDF	3.9		1.18	>10:1	
1,2,3,7,8,9-HxCDF	ND	0.72			
Total HxCDF	120		1.32	>10:1	
1,2,3,4,6,7,8-HpCDF	110		1.06	>10:1	
1,2,3,4,7,8,9-HpCDF	39		1.09	>10:1	
Total HpCDF	510		1.06	>10:1	
OCDF	620		0.91	>10:1	

Analyst: [signature]

Reviewer: [signature] 7/11/96

SDG EX3PX5/2524

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-2-4-3435

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960408-02

Sample wt/vol: 10.4 (g/mL) G Lab File ID: IH729

Level: (low/med) LOW Date Received: 05/30/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 05/30/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1200	

AC 7/16/96

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1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX5A

I Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX5

Matrix: (soil/water) SOIL Lab Sample ID: 960408-01

Sample wt/vol: 10.2 (g/mL) G Lab File ID: IH728

Level: (low/med) LOW Date Received: 05/30/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/30/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	500	J

MC 7/12/96

010

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX5A
Lab ID: 2524-0001-SA
Matrix: Soil
% Solids: 83

Date Received: 5/30/96
Date Extracted: 6/2/96
Sample Amount: 5.00 g
TEQ: 14

ICAL ID: I1613A
QC Lot: LC0602S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.92			
Total TCDD	ND	0.92			
1,2,3,7,8-PeCDD	ND	1.7			
Total PeCDD	ND	1.7			
1,2,3,4,7,8-HxCDD	ND	1.6			
1,2,3,6,7,8-HxCDD	7.2		1.16	6:1	
1,2,3,7,8,9-HxCDD	3.2 J		1.24	3:1	A
Total HxCDD	45		1.33	> 10:1	
1,2,3,4,6,7,8-HpCDD	210		1.09	> 10:1	
Total HpCDD	400		1.10	> 10:1	
OCDD	11000		0.91	> 10:1	B
2,3,7,8-TCDF	1.3		0.75	6:1	
Total TCDF	3.3		0.73	> 10:1	
1,2,3,7,8-PeCDF	ND	1.0			
2,3,4,7,8-PeCDF	ND	0.96			
Total PeCDF	ND	1.0			
1,2,3,4,7,8-HxCDF	ND	0.91			
1,2,3,6,7,8-HxCDF	ND	0.88			
2,3,4,6,7,8-HxCDF	ND	0.90			
1,2,3,7,8,9-HxCDF	ND	1.1			
Total HxCDF	25		1.33	> 10:1	
1,2,3,4,6,7,8-HpCDF	28		1.11	> 10:1	
1,2,3,4,7,8,9-HpCDF	1.2 J		1.04	3:1	A
Total HpCDF	110		1.11	> 10:1	
OCDF	130		0.94	> 10:1	

Analyst: [illegible]

Reviewer: [illegible]

mc 7/16/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-2-4-34/35
Lab ID: 2524-0002-SA
Matrix: Soil
% Solids: 82

Date Received: 5/30/96
Date Extracted: 6/2/96
Sample Amount: 4.99 g
TEQ: 230

ICAL ID: I1613A
QC Lot: LC0602S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	1.5		0.65	9:1	
Total TCDD	2.7		0.77	9:1	
1,2,3,7,8-PeCDD	20		1.52	>10:1	
Total PeCDD	51		1.44	>10:1	
1,2,3,4,7,8-HxCDD	45		1.26	>10:1	
1,2,3,6,7,8-HxCDD	280		1.23	>10:1	
1,2,3,7,8,9-HxCDD	78		1.21	>10:1	
Total HxCDD	830		1.27	>10:1	
1,2,3,4,6,7,8-HpCDD	7300		1.05	>10:1	
Total HpCDD	11000		1.05	>10:1	
OCDD	68000 J		0.88	>10:1	*,B
2,3,7,8-TCDF	1.7		0.85	>10:1	
Total TCDF	23		0.69	>10:1	
1,2,3,7,8-PeCDF	2.8 J		1.77	4:1	A
2,3,4,7,8-PeCDF	5.0		1.73	6:1	
Total PeCDF	120		1.54	>10:1	
1,2,3,4,7,8-HxCDF	37		1.19	>10:1	
1,2,3,6,7,8-HxCDF	24		1.25	>10:1	
2,3,4,6,7,8-HxCDF	39		1.28	>10:1	
1,2,3,7,8,9-HxCDF	6.5		1.19	5:1	
Total HxCDF	1400 J		1.27	>10:1	D
1,2,3,4,6,7,8-HpCDF	1600 J		1.06	>10:1	D
1,2,3,4,7,8,9-HpCDF	83		1.02	>10:1	
Total HpCDF	7300 J		1.06	>10:1	D
OCDF	8900		0.92	>10:1	

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/16/96

SDG EX3PX9/2503

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

901

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-02

Sample wt/vol: 10.2 (g/mL) G Lab File ID: JH631

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/24/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	11000	

AL 2/15/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EQB-1

Lab Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) WATER Lab Sample ID: 960390-11

Sample wt/vol: 1000 (g/mL) ML Lab File ID: JH635

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: _____ decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
87-86-5	Pentachlorophenol	10	U

2/15/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-4-6-1920

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-04

Sample wt/vol: 10.2 (g/mL) G Lab File ID: IH637

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	920	J

M 7/15/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-PX8A

L Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-05

Sample wt/vol: 10.1 (g/mL) G Lab File ID: IH643

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	2600	

AL 7/15/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX1-PX9

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-03

Sample wt/vol: 10.1 (g/mL) G Lab File ID: IH636

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 4 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	240	J

AC 7/15/96

52

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX10A

L. Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-06

Sample wt/vol: 10.0 (g/mL) G Lab File ID: IH642

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	49000	E

Do not use
AL 3/15/96

56

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX10ADL

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-06DL

Sample wt/vol: 10.0 (g/mL) G Lab File ID: JH632

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/24/96

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	75000	~~D~~ 5

M 7/15/96

60

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EX3-PX9A

I Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-01

Sample wt/vol: 10.2 (g/mL) G Lab File ID: IH638

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 12 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1100	U

NC 7/15/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-6

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-07

Sample wt/vol: 10.2 (g/mL) G Lab File ID: IH644

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	130000	E

Do not use
7/15/96 AC

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-6DL

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-07DL

Sample wt/vol: 10.2 (g/mL) G Lab File ID: IH766

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 400.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1700000	~~D~~ J

MC 7/15/96

71

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-7

I Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-08

Sample wt/vol: 10.1 (g/mL) G Lab File ID: IH645

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	400000	E

Do not use
ML. 9/15/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-7DL

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-08DL

Sample wt/vol: 10.1 (g/mL) G Lab File ID: IH748

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 400.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	2500000	D

AL 7/15/96

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-8

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-09

Sample wt/vol: 10.3 (g/mL) G Lab File ID: DK998

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	160000	E

Do not use
M 7/15/96

FORM I X-6 3/90

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-8DL

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-09DL

Sample wt/vol: 10.3 (g/mL) G Lab File ID: IH749

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 06/01/96

Injection Volume: 2.0(uL) Dilution Factor: 200.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	1800000	~~D~~ 5

AL 7/15/96

89

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

STP-9

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: _____ SDG No.: EX3PX9

Matrix: (soil/water) SOIL Lab Sample ID: 960390-10

Sample wt/vol: 10.4 (g/mL) G Lab File ID: IH641

Level: (low/med) LOW Date Received: 05/21/96

% Moisture: 12 decanted: (Y/N) N Date Extracted: 05/21/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
87-86-5	Pentachlorophenol	8300	

MC 7/15/96

93

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX9A,MS/MSD **Date Received:** 5/21/96 **ICAL ID:** 11613A
Lab ID: 2503-0001-SA **Date Extracted:** 5/22/96 **QC Lot:** LC0522S
Matrix: Soil **Sample Amount:** 4.99 g **Units:** pg/g
% Solids: 86 **TEQ:** 19

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.49			
Total TCDD	ND	0.49			
1,2,3,7,8-PeCDD	1.7 J		1.45	4:1	A
Total PeCDD	3.1		1.52	4:1	
1,2,3,4,7,8-HxCDD	3.3		1.35	>10:1	
1,2,3,6,7,8-HxCDD	14		1.31	>10:1	
1,2,3,7,8,9-HxCDD	5.9		1.14	>10:1	
Total HxCDD	53		1.31	>10:1	
1,2,3,4,6,7,8-HpCDD	390		1.01	>10:1	
Total HpCDD	670		1.01	>10:1	
OCDD	10000		0.91	>10:1	~~B~~
2,3,7,8-TCDF	ND	0.48			
Total TCDF	0.56		0.73	3:1	
1,2,3,7,8-PeCDF	ND	0.28			
2,3,4,7,8-PeCDF	ND	0.32			
Total PeCDF	7.7		1.56	>10:1	
1,2,3,4,7,8-HxCDF	1.9 J		1.19	>10:1	A
1,2,3,6,7,8-HxCDF	1.2		1.17	>10:1	A
2,3,4,6,7,8-HxCDF	2.4		1.09	>10:1	A
1,2,3,7,8,9-HxCDF	0.49		1.21	>10:1	A
Total HxCDF	57		1.30	>10:1	
1,2,3,4,6,7,8-HpCDF	58		1.03	>10:1	
1,2,3,4,7,8,9-HpCDF	3.2		1.10	>10:1	
Total HpCDF	230		1.03	>10:1	
OCDF	250		0.90	>10:1	

Analyst: [signature] Reviewer: [signature]

[signature] 7/16/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-PX8A
Lab ID: 2503-0002-SA
Matrix: Soil
% Solids: 93

Date Received: 5/21/96
Date Extracted: 5/22/96
Sample Amount: 4.98 g
TEQ: 2.8

ICAL ID: I1613A
QC Lot: LC0522S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.36			
Total TCDD	ND	0.36			
1,2,3,7,8-PeCDD	ND	0.96			
Total PeCDD	ND	0.96			
1,2,3,4,7,8-HxCDD	ND	1.4			
1,2,3,6,7,8-HxCDD	5.2		1.21	8:1	
1,2,3,7,8,9-HxCDD	ND	1.1			
Total HxCDD	11		1.25	8:1	
1,2,3,4,6,7,8-HpCDD	100		1.01	>10:1	
Total HpCDD	150		1.04	>10:1	
OCDD	550		0.90	>10:1	B
2,3,7,8-TCDF	0.33 J		0.79	2.5:1	J A
Total TCDF	2.3		0.76	>10:1	
1,2,3,7,8-PeCDF	ND	0.23			
2,3,4,7,8-PeCDF	ND	0.29			
Total PeCDF	3.6		1.60	>10:1	
1,2,3,4,7,8-HxCDF	0.75 J		1.36	7:1	J A
1,2,3,6,7,8-HxCDF	0.54		1.32	5:1	J A
2,3,4,6,7,8-HxCDF	1.4		1.22	>10:1	J A
1,2,3,7,8,9-HxCDF	0.39		1.21	3:1	J A
Total HxCDF	22		1.32	>10:1	
1,2,3,4,6,7,8-HpCDF	25		1.06	>10:1	
1,2,3,4,7,8,9-HpCDF	2.1 J		1.02	>10:1	J A
Total HpCDF	110		1.06	>10:1	
OCDF	120		0.90	>10:1	

Analyst: [illegible]

Reviewer: [illegible]

MC 7/16/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: 901
Lab ID: 2503-0003-SA
Matrix: Soil
% Solids: 80

Date Received: 5/21/96
Date Extracted: 5/22/96
Sample Amount: 4.96 g
TEQ: 140

ICAL ID: I1613A
QC Lot: LC0522S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	1.0		0.66	3:1	
Total TCDD	1.0		0.66	3:1	
1,2,3,7,8-PeCDD	8.4		1.58	6:1	
Total PeCDD	18		1.62	6:1	
1,2,3,4,7,8-HxCDD	20		1.24	>10:1	
1,2,3,6,7,8-HxCDD	170		1.29	>10:1	
1,2,3,7,8,9-HxCDD	36		1.13	>10:1	
Total HxCDD	490		1.22	>10:1	
1,2,3,4,6,7,8-HpCDD	4700		1.01	>10:1	
Total HpCDD	6900		0.99	>10:1	
OCDD	43000		0.90	>10:1	B
2,3,7,8-TCDF	0.45 J		0.84	>10:1	J A
Total TCDF	12		0.74	>10:1	
1,2,3,7,8-PeCDF	1.3 J		1.51	>10:1	J A
2,3,4,7,8-PeCDF	2.2 J		1.65	>10:1	J A
Total PeCDF	79		1.57	>10:1	
1,2,3,4,7,8-HxCDF	17		1.21	>10:1	
1,2,3,6,7,8-HxCDF	10		1.34	>10:1	
2,3,4,6,7,8-HxCDF	18		1.26	>10:1	
1,2,3,7,8,9-HxCDF	2.5		1.09	>10:1	
Total HxCDF	780 J		1.29	>10:1	J D
1,2,3,4,6,7,8-HpCDF	890 J		1.04	>10:1	J D
1,2,3,4,7,8,9-HpCDF	46		0.96	>10:1	
Total HpCDF	4400 J		1.04	>10:1	J D
OCDF	4900		0.90	>10:1	

Analyst: [signature]

Reviewer: [signature]

NL 7/16/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-PX9
Lab ID: 2503-0004-SA
Matrix: Soil
% Solids: 93

Date Received: 5/21/96
Date Extracted: 5/22/96
Sample Amount: 5.02 g
TEQ: 40

ICAL ID: I1613A
QC Lot: LC0522S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	0.65			
Total TCDD	ND	0.65			
1,2,3,7,8-PeCDD	3.0		1.59	4:1	
Total PeCDD	5.4		1.52	4:1	
1,2,3,4,7,8-HxCDD	5.8		1.16	>10:1	
1,2,3,6,7,8-HxCDD	52		1.26	>10:1	
1,2,3,7,8,9-HxCDD	10		1.26	>10:1	
Total HxCDD	150		1.24	>10:1	
1,2,3,4,6,7,8-HpCDD	1500		1.00	>10:1	
Total HpCDD	2400		1.01	>10:1	
OCDD	11000		0.89	>10:1	~~B~~
2,3,7,8-TCDF	0.30 J		0.85	7:1	J A
Total TCDF	3.8		0.76	>10:1	
1,2,3,7,8-PeCDF	0.47 J		1.38	5:1	J A
2,3,4,7,8-PeCDF	0.81 J		1.76	7:1	J A
Total PeCDF	22		1.43	>10:1	
1,2,3,4,7,8-HxCDF	5.7		1.35	>10:1	
1,2,3,6,7,8-HxCDF	2.9		1.28	>10:1	
2,3,4,6,7,8-HxCDF	5.6		1.25	>10:1	
1,2,3,7,8,9-HxCDF	1.2 J		1.25	>10:1	J A
Total HxCDF	240 J		1.29	>10:1	J D
1,2,3,4,6,7,8-HpCDF	250 J		1.04	>10:1	J D
1,2,3,4,7,8,9-HpCDF	13		1.04	>10:1	
Total HpCDF	1400 J		1.04	>10:1	J D
OCDF	1400		0.90	>10:1	

Analyst: [signature]

Reviewer: [signature]

pc 7/12/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX3-PX10A
Lab ID: 2503-0005-SA
Matrix: Soil
% Solids: 79

Date Received: 5/21/96
Date Extracted: 5/22/96
Sample Amount: 4.98 g
TEQ: 368

ICAL ID: I1613A
QC Lot: LC0522S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	1.9		0.78	9:1	
Total TCDD	7.6		0.74	9:1	
1,2,3,7,8-PeCDD	27		1.72	4:1	
Total PeCDD	90		1.65	4:1	
1,2,3,4,7,8-HxCDD	59		1.10	>10:1	
1,2,3,6,7,8-HxCDD	480		1.28	>10:1	
1,2,3,7,8,9-HxCDD	120		1.26	>10:1	
Total HxCDD	1400		1.28	>10:1	
1,2,3,4,6,7,8-HpCDD	13000		0.99	>10:1	
Total HpCDD	19000		0.99	>10:1	
OCDD	100000	J	0.88	>10:1	
2,3,7,8-TCDF	1.2		0.69	>10:1	
Total TCDF	30	J	0.88	>10:1	J D
1,2,3,7,8-PeCDF	4.1		1.52	>10:1	
2,3,4,7,8-PeCDF	6.5		1.53	>10:1	
Total PeCDF	260	J	1.62	>10:1	J D
1,2,3,4,7,8-HxCDF	51		1.24	>10:1	
1,2,3,6,7,8-HxCDF	30	J	1.17	>10:1	J D
2,3,4,6,7,8-HxCDF	53		1.23	>10:1	
1,2,3,7,8,9-HxCDF	7.6		1.13	>10:1	
Total HxCDF	2100	J	1.28	>10:1	J D
1,2,3,4,6,7,8-HpCDF	2500	J	1.04	>10:1	J D
1,2,3,4,7,8,9-HpCDF	140		1.03	>10:1	
Total HpCDF	13000	J	1.04	>10:1	J D
OCDF	13000		0.91	>10:1	

Analyst: [signature]

Reviewer: [signature]

ML 7/10/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EX1-4-6-19/20
Lab ID: 2503-0006-SA
Matrix: Soil
% Solids: 92

Date Received: 5/21/96
Date Extracted: 5/22/96
Sample Amount: 5.02 g
TEQ: 5.4

ICAL ID: I1613A
QC Lot: LC0522S
Units: pg/g

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	0.86		0.76	4:1	
Total TCDD	2.1		0.72	6:1	
1,2,3,7,8-PeCDD	ND	0.58			
Total PeCDD	ND	0.58			
1,2,3,4,7,8-HxCDD	ND	0.97			
1,2,3,6,7,8-HxCDD	5.6		1.23	>10:1	
1,2,3,7,8,9-HxCDD	ND	0.84			
Total HxCDD	14		1.13	>10:1	
1,2,3,4,6,7,8-HpCDD	130		1.03	>10:1	
Total HpCDD	220		1.03	>10:1	
OCDD	2400		0.91	>10:1	~~B~~
2,3,7,8-TCDF	ND	0.34			
Total TCDF	0.65		0.70	>10:1	
1,2,3,7,8-PeCDF	ND	0.30			
2,3,4,7,8-PeCDF	ND	0.27			
Total PeCDF	0.77 J		1.49	>10:1	J A
1,2,3,4,7,8-HxCDF	ND	0.56			
1,2,3,6,7,8-HxCDF	ND	0.53			
2,3,4,6,7,8-HxCDF	ND	0.60			
1,2,3,7,8,9-HxCDF	ND	0.68			
Total HxCDF	20		1.42	>10:1	
1,2,3,4,6,7,8-HpCDF	15		1.06	>10:1	
1,2,3,4,7,8,9-HpCDF	5.1		1.02	>10:1	
Total HpCDF	75		1.06	>10:1	
OCDF	73		0.92	>10:1	

Analyst: [signature]

Reviewer: [signature]

AC 7/10/96

ALTA

PCDD & PCDF
EPA METHOD 8290

Sample ID: EQB-1
Lab ID: 2503-0007-SA
Matrix: Aqueous

Date Received: 5/21/96
Date Extracted: 5/23/96
Sample Amount: 0.914 L

ICAL ID: I1613A
QC Lot: LC0523A
Units: pg/L

Compound	Conc.	D.L.	Ratio	S/N Ratio	Qualifier
2,3,7,8-TCDD	ND	1.9			
Total TCDD	ND	1.9			
1,2,3,7,8-PeCDD	ND	5.5			
Total PeCDD	ND	5.5			
1,2,3,4,7,8-HxCDD	ND	8.9			
1,2,3,6,7,8-HxCDD	ND	9.9			
1,2,3,7,8,9-HxCDD	ND	8.5			
Total HxCDD	ND	9.9			
1,2,3,4,6,7,8-HpCDD	ND	5.1			
Total HpCDD	ND	5.1			
OCDD	21		0.93	>10:1	A,B
2,3,7,8-TCDF	ND	1.3			
Total TCDF	ND	1.3			
1,2,3,7,8-PeCDF	ND	1.7			
2,3,4,7,8-PeCDF	ND	1.7			
Total PeCDF	ND	1.7			
1,2,3,4,7,8-HxCDF	ND	2.7			
1,2,3,6,7,8-HxCDF	ND	2.5			
2,3,4,6,7,8-HxCDF	ND	2.6			
1,2,3,7,8,9-HxCDF	ND	2.6			
Total HxCDF	ND	2.6			
1,2,3,4,6,7,8-HpCDF	ND	1.2			
1,2,3,4,7,8,9-HpCDF	ND	1.1			
Total HpCDF	ND	1.2			
OCDF	ND	4.0			

Analyst: [illegible]

Reviewer: [illegible]

[illegible] 7/11/96

SUPPORT DOCUMENTATION

SDG 900/2492

Data Review Worksheets

Site Name BEAZER SUPERFUND SITE
Reference Number 93-145.30/55

REVIEW OF ORGANIC DATA PACKAGE
TIER III VALIDATION LEVEL

The hardcopied CEIMIC CORPORATION data package received at QSEA, Inc. has been reviewed and the quality assurance and performance data summarized. The data review included:

Contract No.	93-145.30/55	SAS No.	NA	Sampling Date(s)	05/15/96
SDG. No.	900	Matrix	Soil	Shipping Date(s)	05/15/96
No. of Samples	8			Date Rec'd by Lab	05/16/96

Sample Numbers: 900, EX2-0-2-17/18, EX2-6-8-1/2, EX2-PX2B
EX2-PX6, EX3-2-4-16/17, EX3-PX3, EX3-PX8

Trip Blank No.: NONE
Equipment Blank No.: NONE
Field Duplicate Nos.: 900 AND EX2-PX2B

SW-846 Method 8270B criteria were applied in review of this package data.

Performance was based on an examination of:

- Data Completeness
- Holding Times
- GC/MS Tuning
- Calibrations
- Field and Laboratory Blanks
- Surrogate, LCS and Spike Recoveries
- Matrix Spike/Matrix Spike Dup
- Field Duplicates
- Internal Standard Performance
- Laboratory Duplicates
- Analyte Quantitation
- Detection Limit Results
- Compound Identification

Overall Comments: CALIBRATION RAW DATA FILES SUBMITTED UPON REQUEST BY QSEA. DATA UNQUALIFIED EXCEPT FOR DILUTIONS.

Data Review Worksheets

DATA COMPLETENESS

MISSING INFORMATION	DATE LAB CONTACTED	DATE RECEIVED
METHOD REFERENCE	JUNE 1996	JUNE 1996

Form 2

Data Review Worksheets

HOLDING TIMES

Complete table for all samples and enter an 'X' beside the fractions which are not within criteria

SAMPLE ID	DATE SAMPLED	BNA DATE EXTRACTED	BNA DATE ANALYZED
900	05/15/96	05/16/96	05/17/96
EX2-0-2-17/18	05/15/96	05/16/96	05/17/96
EX2-6-8-1/2	05/15/96	05/16/96	05/25/96
EX2-6-8-1/2DL	05/15/96	05/16/96	06/01/96
EX2-PX2B	05/15/96	05/16/96	05/17/96
EX2-PX6	05/15/96	05/16/96	05/17/96
EX3-2-4-16/17	05/15/96	05/16/96	05/17/96
EX3-PX3	05/15/96	05/16/96	05/17/96
EX3-PX8	05/15/96	05/16/96	05/17/96

VOA :rved: Aromatic within 7 days, non-aromatic within 14 days of sample collection.
Preserved: Both within 14 days of sample collection.
Soils: Both within 14 days of sample collection.

BNA & PE: Extract waters within 7 days, analyze within 40 days
Extract soils within 14 days, analyze within 40 days

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # 900

DFTPP Injection Date: 05/02/96 DFTPP Injection Time: 07:08

Instrument MS1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	49.2	OK
68	Less than 2.0% of 69	0.5	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	42.9	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.1	OK
275	10.0 - 30.0 % of mass 198	18.2	OK
365	Greater than 1.0% of mass 198	1.3	OK
441	Present, but, less than mass 443	6.1	OK
442	> 40.0% of mass 198	46.6	OK
443	17.0 - 23.0 % of mass 442	20.1	OK

DFTPP Injection Date: 05/17/96 DFTPP Injection Time: 09:21

Instrument MS1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	51.0	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	36.7	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.4	OK
275	10.0 - 30.0 % of mass 198	17.7	OK
365	Greater than 1.0% of mass 198	1.4	OK
441	Present, but, less than mass 443	7.0	OK
442	> 40.0% of mass 198	48.1	OK
443	17.0 - 23.0 % of mass 442	18.5	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # 900

DFTPP Injection Date: 05/25/96 DFTPP Injection Time: 14:49

Instrument MS1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	48.1	OK
68	Less than 2.0% of 69	0.9	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	42.5	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	5.9	OK
275	10.0 - 30.0 % of mass 198	20.5	OK
365	Greater than 1.0% of mass 198	1.2	OK
441	Present, but, less than mass 443	8.4	OK
442	> 40.0% of mass 198	45.4	OK
443	17.0 - 23.0 % of mass 442	20.1	OK

DFTPP Injection Date: 03/17/96 DFTPP Injection Time: 12:51

Instrument MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	41.9	OK
68	Less than 2.0% of 69	1.4	OK
69	Mass 69 relative abundance	44.9	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	31.8	OK
197	Less than 1.0% of mass 198	0.5	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	20.8	OK
365	Greater than 1.0% of mass 198	1.7	OK
441	Present, but, less than mass 443	8.1	OK
442	> 40.0% of mass 198	62.8	OK
443	17.0 - 23.0 % of mass 442	19.1	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # 900

DFTPP Injection Date: 05/17/96 DFTPP Injection Time: 08:36

Instrument MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	49.2	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	36.6	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.8	OK
275	10.0 - 30.0 % of mass 198	18.2	OK
365	Greater than 1.0% of mass 198	1 4	OK
441	Present, but, less than mass 443	6.2	OK
442	> 40.0% of mass 198	44.5	OK
443	17.0 - 23.0 % of mass 442	17.7	OK

DFTPP Injection Date: 05/03/96 DFTPP Injection Time: 13:25

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	54.3	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	46.2	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	19.7	OK
365	Greater than 1.0% of mass 198	1.5	OK
441	Present, but, less than mass 443	7.8	OK
442	> 40.0% of mass 198	48.2	OK
443	17.0 - 23.0 % of mass 442	20.0	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # 900

DFTPP Injection Date: 05/31/96 DFTPP Injection Time: 20:38

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	57.2	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.4	OK
127	40 - 60 % of mass 198	43.0	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.7	OK
275	10.0 - 30.0 % of mass 198	23.2	OK
365	Greater than 1.0% of mass 198	3.2	OK
441	Present, but, less than mass 443	11.2	OK
442	> 40.0% of mass 198	70.4	OK
443	17.0 - 23.0 % of mass 442	19.4	OK

Data Review Worksheets

SEMIVOLATILE CALIBRATION VERIFICATION

Date of Initial Calibration: 05/02/96
Dates of Continuing Calibrations: 5/17, 5/25/96
Instrument ID: MS1

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
05/02/96	RSD	5.87
	RRF	0.134-0.154
	Samples Affected:	900, EX2-PX6, EX2-0-2-1718, EX3-2-4-1617, SBLKAC, SLCS01, EX2-6-8-1 2
05/17/96	%D	-11.2
	RRF	0.159
	Samples Affected:	900, EX2-PX6, EX2-0-2-1718, EX3-2-4-1617, SBLKAC, SLCS01
05/25/96	%D	7.7
	RRF	0.132
	Samples Affected:	EX2-6-8-1 2

Date of Initial Calibration: 03/17/96
Dates of Continuing Calibrations: 05/17/96
Instrument ID: MS4

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
03/17/96	RSD	11.89
	RRF	0.174-0.232
	Samples Affected:	EX2-PX2B, EX3-PX3, EX3-PX8, EX3-PX8MS, EX3-PX8MSD
05/17/96	%D	16.3
	RRF	0.170
	Samples Affected:	EX2-PX2B, EX3-PX3, EX3-PX8, EX3-PX8MS, EX3-PX8MSD

Date of Initial Calibration: 05/03/96
Dates of Continuing Calibrations: 05/31/96
Instrument ID: MS9

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
05/03/96	RSD	6.32
	RRF	0.139-0.165
	Samples Affected:	EX2-6-8-1 2D
05/31/96	%D	18.8
	RRF	0.125
	Samples Affected:	EX2-6-8-1 2D

Q SEA, Inc.

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Calculate %RSD

MS1 Compound Name: Pentachlorophenol — %RSD Lab Value: 5.9 — Calibration Date: 03/19/96

	RRF20	RRF50	RRF80	RRF120	RRF160			
CF:	0.143	0.149	0.154	0.136	0.134	=	0.143	Mean
						=	0.0085	Std Dev
%RSD =	0.008	0.143			100	=	5.91	%RSD

Calculate RRF

Compound Name: Pentachlorophenol — Lab Value: 0.143

	Area x	Area is	CONC is	CONC x		
RRF =	4110	57379	40	20	=	0.143

Calculate %RSD

MS4 Compound Name: Pentachlorophenol — %RSD Lab Value: 11.9 — Calibration Date: 03/14/96

	RRF20	RRF50	RRF80	RRF120	RRF160			
CF:	0.232	0.220	0.207	0.184	0.174		0.203	Mean
						=	0.0242	Std Dev
%RSD =	0.024	0.203			100	=	11.91	%RSD

Calculate RRF

Compound Name: Pentachlorophenol — Lab Value: 0.22

	Area x	Area is	CONC is	CONC x		
RRF =	15713	57186	40	50	=	0.220

Calculate %RSD

MS9 Compound Name: Pentachlorophenol — %RSD Lab Value: 6.3 — Calibration Date: 03/15/96

	RRF20	RRF50	RRF80	RRF120	RRF160			
CF:	0.153	0.139	0.157	0.165	0.154	=	0.154	Mean
						=	0.0094	Std Dev
%RSD =	0.009	0.154			100	=	6.14	%RSD

Calculate RRF

Compound Name: Pentachlorophenol — Lab Value: 0.157

	Area x	Area is	CONC is	CONC x		
RRF =	17354	55348	40	80	=	0.157

Form 6

Q SEA, Inc.

SEMIVOLATILE CONTINUING CALIBRATION VERIFICATION

Calculate one %D

MS1 Compound Name: Pentachlorophenol — Calibration Date: 05/17/96 — %D Lab Value: -11.2

	Avg RRF i	RRF c	Avg RRF i			
%D =	0.143	0.159	0.143		= -11.2	%D

Calculate RRF

Compound Name: Pentachlorophenol — RRF Lab Value: 0.159

	AREA x	AREA is	CONC is	CONC x		
RRF50 =	8545	42901	40	50	= 0.159	RRF50

Calculate one %D

MS1 Compound Name: Pentachlorophenol — Calibration Date: 05/25/96 — %D Lab Value: 7.7

	Avg RRF i	RRF c	Avg RRF i			
%D =	0.143	0.132	0.143		= 7.7	%D

Calculate RRF

Compound Name: Pentachlorophenol — RRF Lab Value: 0.132

	AREA x	AREA is	CONC is	CONC x		
RRF50 =	7424	44995	40	50	= 0.132	RRF50

Calculate one %D

MS4 Compound Name: Pentachlorophenol — Calibration Date: 05/17/96 — %D Lab Value: 16.3

	Avg RRF i	RRF c	Avg RRF i			
%D =	0.203	0.170	0.203		= 16.3	%D

Calculate RRF

Compound Name: Pentachlorophenol — RRF Lab Value: 0.17

	AREA x	AREA is	CONC is	CONC x		
RRF50 =	15457	73206	40	50	= 0.169	RRF50

Calculate one %D

MS9 Compound Name: Pentachlorophenol — Calibration Date: 05/31/96 — %D Lab Value: 18.8

	Avg RRF i	RRF c	Avg RRF i			
%D =	0.154	0.125	0.154		= 18.8	%D

Calculate RRF

Compound Name: Pentachlorophenol — RRF Lab Value: 0.125

	AREA x	AREA is	CONC is	CONC x		
RRF50 =	7237	46245	40	50	= 0.125	RRF50

Data Review Worksheets

BLANK ANALYSIS RESULTS

List the contamination in the blanks below.

1. Laboratory Blanks

* Level: LOW

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
SBLKAC	S0516-B1	Semivolatile Soil	NON-DETECT	NA

2. Equipment and Trip Blanks

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
	NONE			

* A separate worksheet should be used for low and medium level blanks.

Data Review Worksheets

SURROGATE SPIKE RECOVERIES

List the percent recoveries.

MATRIX: Soil

Sample #s	VOA			B/N			A			PEST	
	TOL	BFB	DCE	NBZ	FBP	TPH	PHL	2FB	TBP	TCX	DCB
900	NA	NA	NA	84	70	57	81	73	90	NA	NA
EX2-0-2-1718	NA	NA	NA	82	70	62	81	73	83	NA	NA
EX2-6-8-1 2	NA	NA	NA	73	68	64	69	67	59	NA	NA
EX2-6-8-1 2D	NA	NA	NA	83 D	84 D	87 D	87 D	82 D	79 D	NA	NA
EX2-PX2B	NA	NA	NA	69	73	63	67	67	65	NA	NA
EX2-PX6	NA	NA	NA	84	67	50	84	73	89	NA	NA
EX3-2-4-1617	NA	NA	NA	87	69	56	82	73	88	NA	NA
EX3-PX3	NA	NA	NA	67	69	60	67	66	63	NA	NA
EX3-PX8	NA	NA	NA	71	75	61	66	67	57	NA	NA
SLCS01	NA	NA	NA	85	71	58	84	76	80	NA	NA
EX3-PX8MS	NA	NA	NA	69	70	58	65	68	57	NA	NA
EX3-PX8MSD	NA	NA	NA	62	68	56	59	61	55	NA	NA
SBLKAC	NA	NA	NA	91	74	61	89	75	84	NA	NA

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s EX3-PX8MS/MSD Level: Low Matrix: Soil

List the percent recoveries and RPDs of compounds.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD		QC LIMITS	
Semivolatile - MS	Phenol	66	8	26-90	35
	2-Chlorophenol	68	12	25-102	50
	1,4-Dichlorobenzene	69	12	28-104	27
	n-Nitroso-di-n-propylamine	64	12	41-126	38
	1,2,4-Trichlorobenzene	77	5	38-107	23
	4-Chloro-3-methylphenol	68	5	26-103	33
	Acenaphthene	74	6	31-137	19
	4-Nitrophenol	43	9	11-114	50
	2,4-Dinitrotoluene	65	6	28-89	47
	Pentachlorophenol	54	0	17-109	47
	Pyrene	65	11	35-142	36

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s: EX3-PX8MS/MSD Level: Low Matrix: Soil

List the percent recoveries and RPDs of compounds.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD	QC LIMITS
Semivolatile - MSD	Phenol	61	26-90
	2-Chlorophenol	60	25-102
	1,4-Dichlorobenzene	61	28-104
	n-Nitroso-di-n-propylamine	57	41-126
	1,2,4-Trichlorobenzene	73	38-107
	4-Chloro-3-methylphenol	65	26-103
	Acenaphthene	70	31-137
	4-Nitrophenol	47	11-114
	2,4-Dinitrotoluene	61	28-89
	Pentachlorophenol	54	17-109
	Pyrene	58	35-142

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE (Calculations)

In the space below, please show one calculation per sample:

SEMIVOLATILES

MS Sample #	Reported Lab Value															
EX3-PX8MS	P-CL-PHENOL 4923 UG/KG	Soil	20102	40	500	1	2 /	48647	0.203	2.0	10.2	0.81	=	4927.56	ug/kg

MSD Sample #	Reported Lab Value														
EX3-PX8MSD	P-CL-PHENOL 4912 UG/KG	Soil	20333	40	500	1	2 /	49322	0.203	2.0	10.2	0.81	=	4915.97	ug/kg

Data Review Worksheets

QC Check Sample - Semivolatile Fractions

Below list any compound that did not pass the LCS criteria.
CHECK SAMPLE: LCSS01

COMPOUND	% RECOVERY CHECK	RANGE % R	Pass/Fail
Phenol	26-90	81.36	PASS
2-Chlorophenol	25-102	70.79	PASS
1,4-Dichlorobenzene	28-104	74.72	PASS
n-Nitroso-di-n-propylamine	28-104	85.14	PASS
1,2,4-Trichlorobenzene	38-107	77.76	PASS
4-Chloro-3-methylphenol	26-103	82.04	PASS
Acenaphthene	31-137	79.12	PASS
4-Nitrophenol	11-114	67.29	PASS
2,4-Dinitrotoluene	28-89	76.68	PASS
Pentachlorophenol	17-109	62.16	PASS
Pyrene	35-142	60.88	PASS

Data Review Worksheets

FIELD DUPLICATE PRECISION

Sample #s 900 and EX2-PX2B Matrix: Soil

FRACTION	COMPOUND	SAMPLE CONC.	DUP SAMPLE CONC.	RPD
SVOA	Pentachlorophenol	1300 U	1400 U	NC

A separate worksheet should be filled out for each field duplicate pair.

Data Review Worksheets

INTERNAL STANDARD PERFORMANCE

List the internal standard areas of samples and QC.

SAMPLE ID	DATE	IS OUT	IS AREA/ RT.	ACCEPTABLE RANGE	ACTIONS
900	05/17/96	NO	39408	21450-85802	NONE
EX2-0-2-1718	05/17/96	NO	37782	21450-85802	NONE
EX2-PX6	05/17/96	NO	58185	21450-85802	NONE
EX3-2-4-1617	05/17/96	NO	47401	21450-85802	NONE
SLCS01	05/17/96	NO	33756	21450-85802	NONE
SBLKAC	05/17/96	NO	51941	21450-85802	NONE
EX2-6-8-1 2	05/25/96	NO	44967	22498-89990	NONE
EX2-PX2B	05/17/96	NO	46054	35876-143504	NONE
EX3-PX3	05/17/96	NO	52570	35876-143504	NONE
EX3-PX8	05/17/96	NO	49154	35876-143504	NONE
EX3-PX8MS	05/17/96	NO	48647	35876-143504	NONE
EX3-PX8MSD	05/17/96	NO	49322	35876-143504	NONE
EX2-6-8-1 2D	05/31/96	NO	46115	23122-92490	NONE

Data Review Worksheets

SAMPLE QUANTITATION - SEMIVOLATILES

In the space below, please show one calculation per sample:

	Sample #	Reported Lab Value															
MS1	5/17/96 @ 1447 EX2-0-2-1718	P-CL-PHENOL 4100 UG/KG	Soil -	8597	40	1000	1	1	/	37782	0.143	2.0	10.2	0.76	=	4105.27	ug/kg

	Sample #	Reported Lab Value															
MS9	6/1/96 @ 1209 EX2-6-8-1 2DL	P-CL-PHENOL 13000D UG/KG	Soil -	17088	40	1000	1	2	/	46115	0.154	2.0	10.2	0.76	=	12415.79	ug/kg

	Sample #	Reported Lab Value															
MS1	5/25/96 @ 1026 EX2-6-8-1 2	P-CL-PHENOL 13000 UG/KG	Soil -	30280	40	1000	1	1	/	44967	0.143	2.0	10.2	0.76	=	12149.05	ug/kg

	Sample #	Reported Lab Value															
MS1	5/17/96 @ 1241 EX2-PX6	P-CL-PHENOL 130J UG/KG	Soil -	459	40	1000	1	1	/	58185	0.143	2.0	10.1	0.85	=	128.52	ug/kg

	Sample #	Reported Lab Value															
[illegible]1	5/17/96 @ 1530 EX3-2-4-1617	P-CL-PHENOL 6700 UG/KG	Soil -	19990	40	1000	1	1	/	47401	0.143	2.0	10.2	0.86	=	6723.89	ug/kg

SDG EX1PX5/2488

Data Review Worksheets

Site Name BEAZER SUPERFUND SITE
Reference Number 93-145.30/55

REVIEW OF ORGANIC DATA PACKAGE
TIER III VALIDATION LEVEL

The hardcopied CEIMIC CORPORATION data package received at QSEA, Inc. has been reviewed and the quality assurance and performance data summarized. The data review included:

Contract No.	93-145.30/55	SAS No.	NA	Sampling Date(s)	05/14/96
SDG. No.	EX1PX5	Matrix	Soil	Shipping Date(s)	05/14/96
No. of Samples	16			Date Rec'd by Lab	05/15/96

Sample Numbers: EX1-PX5, EX1-PX6, EX1-PX7, EX2-PX3R, EX2-PX4R, EX2-PX5, STP-3, EX3-PX1, EX3-PX4, EX3-PX5, EX3-PX6, EX3-PX7, STP-4, STP-5, EX1-4-6-4, EX3-0-2-14/15

Trip Blank No.: NONE
Equipment Blank No.: NONE
Field Duplicate Nos.: NONE

SW-846 Method 8270B criteria were applied in review of this package data.

Performance was based on an examination of:

- Data Completeness
- Holding Times
- GC/MS Tuning
- Calibrations
- Field and Laboratory Blanks
- Surrogate, LCS and Spike Recoveries
- Matrix Spike/Matrix Spike Dup
- Field Duplicates
- Internal Standard Performance
- Laboratory Duplicates
- Analyte Quantitation
- Detection Limit Results
- Compound Identification

Overall Comments: INTERNAL STANDARDS WERE OUTLYING FOR SAMPLES STP-4DL, EX3-02-1415, EX3-PX1, EX3-PX7. DILUTIONS WERE REQUIRED FOR EX3-PX1 AND STP-4.

Form 1

Data Review Worksheets

DATA COMPLETENESS

MISSING INFORMATION	DATE LAB CONTACTED	DATE RECEIVED
METHOD REFERENCE	JUNE 1996	JUNE 1996

Form 2

Data Review Worksheets

HOLDING TIMES

Complete table for all samples and enter an 'X' beside the fractions which are not within criteria

SAMPLE ID	DATE SAMPLED	BNA DATE EXTRACTED	BNA DATE ANALYZED
EX1-4-6-4	05/14/96	05/15/96	05/16/96
EX1-PX5	05/14/96	05/15/96	05/16/96
EX1-PX6	05/14/96	05/15/96	05/16/96
EX1-PX7	05/14/96	05/15/96	05/16/96
EX2-PX3R	05/14/96	05/15/96	05/16/96
EX2-PX4R	05/14/96	05/15/96	05/16/96
EX2-PX5	05/14/96	05/15/96	05/16/96
EX3-0-2-14/15	05/14/96	05/15/96	05/16/96
EX3-PX1	05/14/96	05/15/96	05/16/96
EX3-PX1DL	05/14/96	05/15/96	05/17/96
EX3-PX4	05/14/96	05/15/96	05/16/96
EX3-PX5	05/14/96	05/15/96	05/16/96
EX3-PX6	05/14/96	05/15/96	05/16/96
EX3-PX7	05/14/96	05/15/96	05/16/96
STP-3	05/14/96	05/15/96	05/16/96
STP-4	05/14/96	05/15/96	05/16/96
STP-4DL	05/14/96	05/15/96	05/17/96
STP-5	05/14/96	05/15/96	05/16/96

VOA - Aromatic within 7 days, non-aromatic within 14 days of sample collection.
Preserved: Both within 14 days of sample collection.
Soils: Both within 14 days of sample collection.

BNA - Extract waters within 7 days, analyze within 40 days
Extract soils within 14 days, analyze within 40 days

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX1PX5

DFTPP Injection Date: 05/02/96 DFTPP Injection Time: 07:08

Instrument MS1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	49.2	OK
68	Less than 2.0% of 69	0.5	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	42.9	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.1	OK
275	10.0 - 30.0 % of mass 198	18.2	OK
365	Greater than 1.0% of mass 198	1.3	OK
441	Present, but, less than mass 443	6.1	OK
442	> 40.0% of mass 198	46.6	OK
443	17.0 - 23.0 % of mass 442	20.1	OK

DFTPP Injection Date: 05/17/96 DFTPP Injection Time: 09:21

Instrument MS1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	51.0	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	36.7	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.4	OK
275	10.0 - 30.0 % of mass 198	17.7	OK
365	Greater than 1.0% of mass 198	1.4	OK
441	Present, but, less than mass 443	7.0	OK
442	> 40.0% of mass 198	48.1	OK
443	17.0 - 23.0 % of mass 442	18.5	OK

Form 4

Q SEA, Inc.

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX1PX5

DFTPP Injection Date: 03/17/96 DFTPP Injection Time: 12:51

Instrument MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	41.9	OK
68	Less than 2.0% of 69	1.4	OK
69	Mass 69 relative abundance	44.9	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	31.8	OK
197	Less than 1.0% of mass 198	0.5	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	20.8	OK
365	Greater than 1.0% of mass 198	1.7	OK
441	Present, but, less than mass 443	8.1	OK
442	> 40.0% of mass 198	62.8	OK
443	17.0 - 23.0 % of mass 442	19.1	OK

DFTPP Injection Date: 05/17/96 DFTPP Injection Time: 08:36

Instrument MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	49.2	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	36.6	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.8	OK
275	10.0 - 30.0 % of mass 198	18.2	OK
365	Greater than 1.0% of mass 198	1.4	OK
441	Present, but, less than mass 443	6.2	OK
442	> 40.0% of mass 198	44.5	OK
443	17.0 - 23.0 % of mass 442	17.7	OK

Form 4

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX1PX5

DFTPP Injection Date: 05/18/96 DFTPP Injection Time: 14:46

Instrument MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	60.4	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	42.2	OK
197	Less than 1.0% of mass 198	0.7	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	7.3	OK
275	10.0 - 30.0 % of mass 198	21.8	OK
365	Greater than 1.0% of mass 198	2.1	OK
441	Present, but, less than mass 443	10.4	OK
442	> 40.0% of mass 198	61.6	OK
443	17.0 - 23.0 % of mass 442	18.0	OK

DFTPP Injection Date: 05/03/96 DFTPP Injection Time: 13:25

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	54.3	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	46.2	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	19.7	OK
365	Greater than 1.0% of mass 198	1.5	OK
441	Present, but, less than mass 443	7.8	OK
442	> 40.0% of mass 198	48.2	OK
443	17.0 - 23.0 % of mass 442	20.0	OK

Form 4

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX1PX5

DFTPP Injection Date: 05/15/96 DFTPP Injection Time: 21:51

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	64.5	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.2	OK
127	40 - 60 % of mass 198	50.5	OK
197	Less than 1.0% of mass 198	0.7	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	7.0	OK
275	10.0 - 30.0 % of mass 198	18.9	OK
365	Greater than 1.0% of mass 198	1.9	OK
441	Present, but, less than mass 443	7.8	OK
442	> 40.0% of mass 198	54.7	OK
443	17.0 - 23.0 % of mass 442	19.2	OK

DFTPP Injection Date: 05/17/96 DFTPP Injection Time: 12:33

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	55.2	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.4	OK
127	40 - 60 % of mass 198	42.2	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.6	OK
275	10.0 - 30.0 % of mass 198	20.2	OK
365	Greater than 1.0% of mass 198	2.2	OK
441	Present, but, less than mass 443	6.8	OK
442	> 40.0% of mass 198	45.2	OK
443	17.0 - 23.0 % of mass 442	18.9	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX1PX5

DFTPP Injection Date: 03/15/96 DFTPP Injection Time: 10:10

Instrument MS10

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	50.9	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	63.2	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	50.9	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	7.5	OK
275	10.0 - 30.0 % of mass 198	16.7	OK
365	Greater than 1.0% of mass 198	1.8	OK
441	Present, but, less than mass 443	7.5	OK
442	> 40.0% of mass 198	54.4	OK
443	17.0 - 23.0 % of mass 442	19.4	OK

DFTPP Injection Date: 05/15/96 DFTPP Injection Time: 19:44

Instrument MS10

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	70.7	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.2	OK
127	40 - 60 % of mass 198	49.1	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.5	OK
275	10.0 - 30.0 % of mass 198	18.1	OK
365	Greater than 1.0% of mass 198	1.8	OK
441	Present, but, less than mass 443	9.1	OK
442	> 40.0% of mass 198	56.1	OK
443	17.0 - 23.0 % of mass 442	17.4	OK

Data Review Worksheets

SEMIVOLATILE CALIBRATION VERIFICATION

Date of Initial Calibration: 05/02/96
Dates of Continuing Calibrations: 05/17/96
Instrument ID: MS1

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	RSD 5.87% 0.134-0.154 RRF
05/02/96	Samples Affected:	SBLKAC, SLCS02
	%D RRF	%D -11.2 RRF 0.159
05/17/96	Samples Affected:	SBLKAC, SLCS02

Date of Initial Calibration: 03/17/96
Dates of Continuing Calibrations: 5/17-5/18/96
Instrument ID: MS4

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	RSD 11 89% 0.174-0.232 RRF
03/17/96	Samples Affected:	EX1-PX6MS, EX1-PX6MSD
	%D RRF	%D 16.3 RRF 0.170
05/17/96	Samples Affected:	EX1-PX6MS
	%D RRF	%D 18.7 RRF 0.165
05/18/96	Samples Affected:	EX1-PX6MSD

Date of Initial Calibration: 05/03/96
Dates of Continuing Calibrations: 5/15-5/17/96
Instrument ID: MS9

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
MS9	RSD RRF	RSD 6.32 0.139-0.165 RRF
05/03/96	Samples Affected:	SBLKIQ, SLCS01, EX1-PX5, EX1-PX6, EX1-PX7, EX2-PX3R, EX2-PX4R, EX2-PX5, EX1-4-6-4, EX3-PX1DL, STP-4DL
	%D RRF	%D 9.7 RRF 0.169
05/15/96	Samples Affected:	SBLKIQ, SLCS01, EX1-PX5, EX1-PX6, EX1-PX7, EX2-PX3R, EX2-PX4R, EX2-PX5, EX1-4-6-4
	%D RRF	%D 1.9 RRF 0.151
05/17/96	Samples Affected:	EX3-PX1DL, STP-4DL

Data Review Worksheets

SEMIVOLATILE CALIBRATION VERIFICATION

Date of Initial Calibration: 03/15/96
Dates of Continuing Calibrations: 05/15/96
Instrument ID: MS10

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
MS10		
	RSD	RSD 9.19
	RRF	0.138-0.177 RRF
03/15/96	Samples Affected:	EX3-PX7, EX3-0-2-1415, EX3-PX1, EX3-PX4, EX3-PX5, STP-3, EX3-PX6, STP-5, STP-4
	%D	%D 10.8
	RRF	RRF 0.141
05/15/96	Samples Affected:	EX3-PX7, EX3-0-2-1415, EX3-PX1, EX3-PX4, EX3-PX5, STP-3, EX3-PX6, STP-5, STP-4

Data Review Worksheets

BLANK ANALYSIS RESULTS

List the contamination in the blanks below.

1. Laboratory Blanks

* Level: LOW

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
05/15/96	SBLKIQ	Semivolatile Soil	Pentachlorophenol	990 U
05/17/96	SBLKAC	Semivolatile Soil	Pentachlorophenol	990 U

2. Equipment and Trip Blanks

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
	NONE			

* A separate worksheet should be used for low and medium level blanks.

Data Review Worksheets

SURROGATE SPIKE RECOVERIES

Matrix: Soil

Sample #s	VOA			B/N			A			PEST	
	TOL	BFB	DCE	NBZ	FBP	TPH	PHL	2FB	TBP	TCX	DCB
EX1-4-6-4	NA	NA	NA	104	86	74	96	92	91	NA	NA
EX1-PX5	NA	NA	NA	100	85	77	102	85	88	NA	NA
EX1-PX6	NA	NA	NA	106	89	80	94	89	88	NA	NA
EX1-PX7	NA	NA	NA	108	85	75	101	88	87	NA	NA
EX2-PX3R	NA	NA	NA	84	73	74	79	77	78	NA	NA
EX2-PX4R	NA	NA	NA	108	86	78	97	93	94	NA	NA
EX2-PX5	NA	NA	NA	104	86	78	97	93	92	NA	NA
EX3-0-2-1415	NA	NA	NA	75	62	56	64	63	65	NA	NA
EX3-PX1	NA	NA	NA	90	70	65	75	76	70	NA	NA
EX3-PX1DL	NA	NA	NA	66D	53D	57D	55D	54D	51D	NA	NA
EX3-PX4	NA	NA	NA	82	64	59	63	63	66	NA	NA
EX3-PX5	NA	NA	NA	83	62	56	66	69	69	NA	NA
EX3-PX6	NA	NA	NA	81	65	61	66	67	72	NA	NA
EX3-PX7	NA	NA	NA	92	74	76	73	76	69	NA	NA
SLCS01	NA	NA	NA	106	85	78	100	88	99	NA	NA
SLCS02	NA	NA	NA	85	71	58	84	76	80	NA	NA
STP-03	NA	NA	NA	82	59	50	64	65	70	NA	NA
STP-4	NA	NA	NA	80	59	56	64	63	74	NA	NA
STP-4DL	NA	NA	NA	63D	48D	54D	56D	58D	57D	NA	NA
STP-5	NA	NA	NA	81	63	56	61	59	75	NA	NA
EX1-PX6MS	NA	NA	NA	67	70	62	62	67	53	NA	NA
EX1-PX6MSD	NA	NA	NA	67	70	60	55	59	54	NA	NA
SBLKIQ	NA	NA	NA	97	79	66	91	81	91	NA	NA
SBLKAC	NA	NA	NA	91	74	61	89	75	84	NA	NA

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s EX1-PX6MS/MSD Level: LOW Matrix: Soil

List the percent recoveries and RPDs of compounds.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD		QC LIMITS	
Semivolatile - MS	Phenol	66	13	26-90	35
	2-Chlorophenol	65	8	25-102	50
	1,4-Dichlorobenzene	68	0	28-104	27
	n-Nitroso-di-n-propylamine	61	12	41-126	38
	1,2,4-Trichlorobenzene	78	1	38-107	23
	4-Chloro-3-methylphenol	67	5	26-103	33
	Acenaphthene	74	0	31-137	19
	4-Nitrophenol	41	16	11-114	50
	2,4-Dinitrotoluene	64	0	28-89	47
	Pentachlorophenol	58	20	17-109	47
	Pyrene	65	5	35-142	36

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s EX1-PX6MS/MSD Level: LOW Matrix: Water

List the percent recoveries and RPDs of compounds.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD	QC LIMITS
Semivolatile - MSD	Phenol	58	26-90
	2-Chlorophenol	60	25-102
	1,4-Dichlorobenzene	68	28-104
	n-Nitroso-di-n-propylamine	54	41-126
	1,2,4-Trichlorobenzene	79	38-107
	4-Chloro-3-methylphenol	64	26-103
	Acenaphthene	74	31-137
	4-Nitrophenol	48	11-114
	2,4-Dinitrotoluene	64	28-89
	Pentachlorophenol	71	17-109
	Pyrene	62	35-142

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

QC Check Sample - Semivolatile Fractions

Below list LCS results and criteria.

COMPOUND	% RECOVERY CHECK	RANGE % R	Pass/Fail
S0516-LCS1			
Phenol	26-90	81.36	PASS
2-Chlorophenol	25-102	70.79	PASS
1,4-Dichlorobenzene	28-104	74.72	PASS
n-Nitroso-di-n-propylamine	28-104	85.14	PASS
1,2,4-Trichlorobenzene	38-107	77.76	PASS
4-Chloro-3-methylphenol	26-103	82.04	PASS
Acenaphthene	31-137	79.12	PASS
4-Nitrophenol	11-114	87.29	PASS
2,4-Dinitrotoluene	28-89	76.68	PASS
Pentachlorophenol	17-109	62.16	PASS
Pyrene	35-142	60.88	PASS
S0516-LCS2			
Phenol	26-90	98.69	PASS
2-Chlorophenol	25-102	86.16	PASS
1,4-Dichlorobenzene	28-104	86.4	PASS
n-Nitroso-di-n-propylamine	28-104	114.4	PASS
1,2,4-Trichlorobenzene	38-107	90.2	PASS
4-Chloro-3-methylphenol	26-103	107.5	PASS
Acenaphthene	31-137	90.5	PASS
4-Nitrophenol	11-114	68.77	PASS
2,4-Dinitrotoluene	28-89	94.66	PASS
Pentachlorophenol	17-109	75.6	PASS
Pyrene	35-142	71.84	PASS

Data Review Worksheets

QC Check Sample - Semivolatile Fractions

Below list LCS results and criteria.

COMPOUND	% RECOVERY CHECK	RANGE % R	Pass/Fail
S0516-LCS1			
Phenol	26-90	81.36	PASS
2-Chlorophenol	25-102	70.79	PASS
1,4-Dichlorobenzene	28-104	74.72	PASS
n-Nitroso-di-n-propylamine	28-104	85.14	PASS
1,2,4-Trichlorobenzene	38-107	77.76	PASS
4-Chloro-3-methylphenol	26-103	82.04	PASS
Acenaphthene	31-137	79.12	PASS
4-Nitrophenol	11-114	67.29	PASS
2,4-Dinitrotoluene	28-89	76.68	PASS
Pentachlorophenol	17-109	62.16	PASS
Pyrene	35-142	60.88	PASS
S0515-LCS2			
Phenol	26-90	98.69	PASS
2-Chlorophenol	25-102	86.16	PASS
1,4-Dichlorobenzene	28-104	86.4	PASS
n-Nitroso-di-n-propylamine	28-104	114.4	PASS
1,2,4-Trichlorobenzene	38-107	90.2	PASS
4-Chloro-3-methylphenol	26-103	107.5	PASS
Acenaphthene	31-137	90.5	PASS
4-Nitrophenol	11-114	68.77	PASS
2,4-Dinitrotoluene	28-89	94.66	PASS
Pentachlorophenol	17-109	75.6	PASS
Pyrene	35-142	71.84	PASS

Data Review Worksheets

INTERNAL STANDARD PERFORMANCE

List the internal standard areas of samples and QC.

SAMPLE ID	DATE	IS OUT	IS AREA/ RT	ACCEPTABLE RANGE	ACTIONS
SLCS02	05/17/96	NO			NONE
SBLKAC	05/17/96	NO			NONE
EX1-PX6MS	05/17/96	NO			NONE
EX1-PX6MSD	05/18/96	NO			NONE
EX1-4-6-4	05/15/96	NO			NONE
EX1-PX5	05/15/96	NO			NONE
EX1-PX6	05/15/96	NO			NONE
EX1-PX7	05/15/96	NO			NONE
EX2-PX3R	05/15/96	NO			NONE
EX2-PX4R	05/15/96	NO			NONE
EX2-PX5	05/15/96	NO			NONE
SLCS01	05/15/96	NO			NONE
SBLKIQ	05/15/96	NO			NONE
EX3-PX1DL	05/17/96	NO			NONE
STP-4DL	05/17/96	YES	115218	26001-104004	FLAG
		YES	138065	29372-117490	FLAG
EX3-0-2-1415	05/15/96	YES	29414	30612-122450	FLAG
		YES	20397	20968-83870	FLAG
EX3-PX1	05/15/96	YES	26190	30612-122450	FLAG
		YES	14255	14340-57360	FLAG
		YES	18987	20968-83870	FLAG
EX3-PX4	05/15/96	NO			NONE
EX3-PX5	05/15/96	NO			NONE
EX3-PX6	05/15/96	NO			NONE
EX3-PX7	05/15/96	YES	7790	7966-31862	FLAG
		YES	24408	30612-122450	FLAG
		YES	12859	14340-57360	FLAG
		YES	20658	23087-92348	FLAG
		YES	13540	15974-63894	FLAG
		YES	11788	20968-83870	FLAG
STP-3	05/15/96	NO			NONE
STP-4	05/15/96	NO			NONE
STP-5	05/15/96	NO			NONE

Form 11

Data Review Worksheets

FIELD DUPLICATE PRECISION

Sample #s NONE Matrix: Soil

FRACTION	COMPOUND	SAMPLE CONC.	DUP SAMPLE CONC.	RPD
SVOA	Pentachlorophenol			

A separate worksheet should be filled out for each field duplicate pair.

SDG EX2025/2481

Data Review Worksheets

Site Name BEAZER SUPERFUND SITE
Reference Number 93-145.30/55

REVIEW OF ORGANIC DATA PACKAGE
TIER III VALIDATION LEVEL

The hardcopied CEIMIC CORPORATION data package received at QSEA, Inc. has been reviewed and the quality assurance and performance data summarized. The data review included:

Contract No.	93-145.30/55	SAS No.	NA	Sampling Date(s)	5/9/96 & 5/13/96
SDG. No.	EX2025	Matrix	Soil	Shipping Date(s)	05/13/96
No. of Samples	7			Date Rec'd by Lab	05/14/96

Sample Numbers: EX1-4-6-1/2, EX1-PX2, EX1-PX3, EX1-PX4, EX2-0-2-5/6, STP-1, STP-2

Trip Blank No.: NA
Equipment Blank No. NA
Field Duplicate Nos.: NA

SW-846 Method 8270B criteria were applied in review of this package data.

Performance was based on an examination of:

- Data Completeness
- Holding Times
- GC/MS Tuning
- Calibrations
- Field and Laboratory Blanks
- Surrogate, LCS and Spike Recoveries
- Matrix Spike/Matrix Spike Dup
- Field Duplicates
- Internal Standard Performance
- Laboratory Duplicates
- Analyte Quantitation
- Detection Limit Results
- Compound Identification

Overall Comments: DATA IS UNQUALIFIED BASED ON VALIDATOR REVIEW.

Data Review Worksheets

DATA COMPLETENESS

MISSING INFORMATION	DATE LAB CONTACTED	DATE RECEIVED
METHOD REFERENCE	JUNE 1996	JUNE 1996

Data Review Worksheets

HOLDING TIMES

Complete table for all samples and enter an 'X' beside the fractions which are not within criteria

SAMPLE ID	DATE SAMPLED	BNA DATE EXTRACTED	BNA DATE ANALYZED
EX1-4-6-1/2	05/09/96	05/14/96	05/15/96
EX1-PX2	05/13/96	05/14/96	05/15/96
EX1-PX3	05/13/96	05/14/96	05/15/96
EX1-PX4	05/13/96	05/14/96	05/15/96
EX2-0-2-5/6	05/09/96	05/14/96	05/15/96
STP-1	05/13/96	05/14/96	05/15/96
STP-2	05/13/96	05/14/96	05/15/96

VOA rved: Aromatic within 7 days, non-aromatic within 14 days of sample collection.
Preserved: Both within 14 days of sample collection.
Soils: Both within 14 days of sample collection.

BNA & PES Extract waters within 7 days, analyze within 40 days
Extract soils within 14 days, analyze within 40 days

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX2025

DFTPP Injection Date: 05/02/96 DFTPP Injection Time: 07:08

Instrument MS1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	49.2	OK
68	Less than 2.0% of 69	0.5	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	42.9	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.1	OK
275	10.0 - 30.0 % of mass 198	18.2	OK
365	Greater than 1.0% of mass 198	1.3	OK
441	Present, but, less than mass 443	6.1	OK
442	> 40.0% of mass 198	46.6	OK
443	17.0 - 23.0 % of mass 442	20.1	OK

DFTPP Injection Date: 05/17/96 DFTPP Injection Time: 09:21

Instrument MS1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	51.0	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	36.7	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.4	OK
275	10.0 - 30.0 % of mass 198	17.7	OK
365	Greater than 1.0% of mass 198	1.4	OK
441	Present, but, less than mass 443	7.0	OK
442	> 40.0% of mass 198	48.1	OK
443	17.0 - 23.0 % of mass 442	18.5	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX2025

DFTPP Injection Date: 03/17/96 DFTPP Injection Time: 12:51

Instrument MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	41.9	OK
68	Less than 2.0% of 69	1.4	OK
69	Mass 69 relative abundance	44.9	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	31.8	OK
197	Less than 1.0% of mass 198	0.5	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	20.8	OK
365	Greater than 1.0% of mass 198	1.7	OK
441	Present, but, less than mass 443	8.1	OK
442	> 40.0% of mass 198	62.8	OK
443	17.0 - 23.0 % of mass 442	19.1	OK

DFTPP Injection Date: 05/15/96 DFTPP Injection Time: 14:56

Instrument MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	49.3	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.3	OK
127	40 - 60 % of mass 198	36.5	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.9	OK
275	10.0 - 30.0 % of mass 198	18.8	OK
365	Greater than 1.0% of mass 198	1.4	OK
441	Present, but, less than mass 443	6.6	OK
442	> 40.0% of mass 198	47.1	OK
443	17.0 - 23.0 % of mass 442	18.4	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX2025

DFTPP Injection Date: 05/17/96 DFTPP Injection Time: 08:36

Instrument MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	49.2	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	36.6	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.8	OK
275	10.0 - 30.0 % of mass 198	18.2	OK
365	Greater than 1.0% of mass 198	1.4	OK
441	Present, but, less than mass 443	6.2	OK
442	> 40.0% of mass 198	44.5	OK
443	17.0 - 23.0 % of mass 442	17.7	OK

Data Review Worksheets

SEMIVOLATILE CALIBRATION VERIFICATION

Date of Initial Calibration: 05/02/96
Dates of Continuing Calibrations: 05/17/96
Instrument ID: MS1

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	5.87RSD
05/02/96	Samples Affected:	SBLKAC, SLCS02
	%D RRF	-11.2%D
05/17/96	Samples Affected:	SBLKAC, SLCS02

Date of Initial Calibration: 03/17/96
Dates of Continuing Calibrations: 5/15/96, 5/17/96
Instrument ID: MS4

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	11.89RSD
03/17/96	Samples Affected:	SBLKDC, SLCS01, EX1-4-6-1/2, EX1-PX2, EX1-PX3, EX1-PX4, STP-2, EX2-0-2-5/6, STP-1 EX14612MS, EX14612MSD
	%D RRF	8.4%D
05/15/96	Samples Affected:	SBLKDC, SLCS01, EX1-4-6-1/2, EX1-PX2, EX1-PX3, EX1-PX4, STP-2, EX2-0-2-5/6, STP-1
	%D RRF	16.3%D
05/17/96	Samples Affected:	EX14612MS, EX14612MSD

Data Review Worksheets

BLANK ANALYSIS RESULTS

List the contamination in the blanks below.

1. Laboratory Blanks

* Level: LOW

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
05/15/96	SBLKDC	Semivolatile Soil	Pentachlorophenol	330 U
05/17/96	SBLKAC	Semivolatile Soil	Pentachlorophenol	330 U

2. Equipment and Trip Blanks

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
	None			

* A separate worksheet should be used for low and medium level blanks.

Data Review Worksheets

SURROGATE SPIKE RECOVERIES

List the percent recoveries.

Matrix: Soil

Sample #s	VOA			B/N			A			PEST	
	TOL	BFB	DCE	NBZ	FBP	TPH	PHL	2FB	TBP	TCX	DCB
EX1-4-6-1/2	NA	NA	NA	65	67	60	61	63	55	NA	NA
EX1-PX2	NA	NA	NA	65	67	57	59	61	51	NA	NA
EX1-PX3	NA	NA	NA	58	62	56	56	58	46	NA	NA
EX1-PX4	NA	NA	NA	62	65	61	60	63	46	NA	NA
EX2-0-2-5/6	NA	NA	NA	41	49	60	43	41	49	NA	NA
SLCS01	NA	NA	NA	50	53	61	0	49	43	NA	NA
SLCS02	NA	NA	NA	85	71	58	84	76	80	NA	NA
STP-1	NA	NA	NA	54	59	57	53	55	51	NA	NA
STP-2	NA	NA	NA	61	63	60	58	59	42	NA	NA
EX14612MS	NA	NA	NA	73	72	58	64	67	58	NA	NA
EX14612MSD	NA	NA	NA	71	70	60	65	68	57	NA	NA
SBLKDC	NA	NA	NA	52	55	56	50	51	45	NA	NA
SBLKAC	NA	NA	NA	91	74	61	89	75	84	NA	NA

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s EX1-4-6-1/2MS/MSD Level: LOW Matrix: Soil

List the percent recoveries and RPDs of compounds.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD		QC LIMITS	
Semivolatile - MS	Phenol	66	3	26-90	35
	2-Chlorophenol	66	0	25-102	50
	1,4-Dichlorobenzene	70	0	28-104	27
	n-Nitroso-di-n-propylamine	63	2	41-126	38
	1,2,4-Trichlorobenzene	81	1	38-107	23
	4-Chloro-3-methylphenol	72	1	26-103	33
	Acenaphthene	74	0	31-137	19
	4-Nitrophenol	45	2	11-114	50
	2,4-Dinitrotoluene	65	6	28-89	47
	Pentachlorophenol	72	5	17-109	47
	Pyrene	61	3	35-142	36

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s EX1-4-6-1/2MS/MSD Level: LOW Matrix: Soil

List the percent recoveries and RPDs of compounds which do not meet the criteria stated on Form 3.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD	QC LIMITS
Semivolatile - MSD	Phenol	68	26-90
	2-Chlorophenol	66	25-102
	1,4-Dichlorobenzene	70	28-104
	n-Nitroso-di-n-propylamine	64	41-126
	1,2,4-Trichlorobenzene	80	38-107
	4-Chloro-3-methylphenol	73	26-103
	Acenaphthene	74	31-137
	4-Nitrophenol	44	11-114
	2,4-Dinitrotoluene	61	28-89
	Pentachlorophenol	76	17-109
	Pyrene	59	35-142

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

QC Check Sample - Semivolatile Fractions

COMPOUND	% RECOVERY CHECK	RANGE % R	Pass/Fail
S0514-LCS3			
Phenol	26-90	47.33	PASS
2-Chlorophenol	25-102	48.36	PASS
1,4-Dichlorobenzene	28-104	48.4	PASS
n-Nitroso-di-n-propylamine	28-104	42.94	PASS
1,2,4-Trichlorobenzene	38-107	56.98	PASS
4-Chloro-3-methylphenol	26-103	49.64	PASS
Acenaphthene	31-137	53.34	PASS
4-Nitrophenol	11-114	33.01	PASS
2,4-Dinitrotoluene	28-89	44.02	PASS
Pentachlorophenol	17-109	44.05	PASS
Pyrene	35-142	50.7	PASS
S0516-LCS1			
Phenol	26-90	81.36	PASS
2-Chlorophenol	25-102	70.79	PASS
1,4-Dichlorobenzene	28-104	74.72	PASS
n-Nitroso-di-n-propylamine	28-104	85.14	PASS
1,2,4-Trichlorobenzene	38-107	77.76	PASS
4-Chloro-3-methylphenol	26-103	82.04	PASS
Acenaphthene	31-137	79.12	PASS
4-Nitrophenol	11-114	67.29	PASS
2,4-Dinitrotoluene	28-89	76.68	PASS
Pentachlorophenol	17-109	62.16	PASS
Pyrene	35-142	60.88	PASS

Data Review Worksheets

FIELD DUPLICATE PRECISION

Sample #s None Matrix: Soil

FRACTION	COMPOUND	SAMPLE CONC.	DUP SAMPLE CONC.	RPD
SVOA	Pentachlorophenol			

A separate worksheet should be filled out for each field duplicate pair.

Data Review Worksheets

INTERNAL STANDARD PERFORMANCE

List the internal standard areas of samples which do not meet the criteria of +100% or -50% of the internal standard area in the associated continuing calibration standard.

SAMPLE ID	DATE	IS OUT	IS AREA/ RT	ACCEPTABLE RANGE	ACTIONS
SLCS02	05/17/96	NO			NONE
SBLKAC	05/17/96	NO			NONE
EX1-4-6-1/2	05/15/96	NO			NONE
EX1-PX2	05/15/96	NO			NONE
EX1-PX3	05/15/96	NO			NONE
EX1-PX4	05/15/96	NO			NONE
EX2-0-2-5/6	05/15/96	NO			NONE
SLCS01	05/15/96	NO			NONE
STP-1	05/15/96	NO			NONE
STP-2	05/15/96	NO			NONE
SBLKDC	05/15/96	NO			NONE
EX14612MS	05/17/96	NO			NONE
EX14612MSD	05/17/96	NO			NONE

SDC EX3PX2/2508

Data Review Worksheets

Site Name BEAZER SUPERFUND SITE
Reference Number 93-145.30/55

REVIEW OF ORGANIC DATA PACKAGE
TIER III VALIDATION LEVEL

The hardcopied CEIMIC CORPORATION data package received at QSEA, Inc. has been reviewed and the quality assurance and performance data summarized. The data review included:

Contract No.	93-145.30/55	SAS No.	NA	Sampling Date(s)	05/21/96
SDG. No.	EX3PX2	Matrix	Soil	Shipping Date(s)	05/21/96
No. of Samples	4			Date Rec'd by Lab	05/22/96

Sample Numbers: EX3-PX2A, STP-10, STP-11, STP-12

Trip Blank No.: NONE
Equipment Blank No.: NONE
Field Duplicate Nos.: NONE

SW-846 Method 8270B criteria were applied in review of this package data.

Performance was based on an examination of:

- Data Completeness
- Holding Times
- GC/MS Tuning
- Calibrations
- Field and Laboratory Blanks
- Surrogate, LCS and Spike Recoveries
- Matrix Spike/Matrix Spike Dup
- Field Duplicates
- Internal Standard Performance
- Laboratory Duplicates
- Analyte Quantitation
- Detection Limit Results
- Compound Identification

Overall Comments: METHOD BLANK CONTAMINATION FOR PENTACHLOROPHENOL, DILUTIONS REQUIRED, MATRIX SPIKE RECOVERY AND PRECISION OUTLIERS, INTERNAL STANDARD OUTLIERS IN LCS, MS AND SAMPLE.

Data Review Worksheets

DATA COMPLETENESS

MISSING INFORMATION	DATE LAB CONTACTED	DATE RECEIVED
METHOD REFERENCE	JUNE 1996	JUNE 1996

Data Review Worksheets

HOLDING TIMES

Complete table for all samples and enter an 'X' beside the fractions which are not within criteria

SAMPLE ID	DATE SAMPLED	BNA DATE EXTRACTED	BNA DATE ANALYZED
EX3-PX2A	05/21/96	05/22/96	05/23/96
STP-10	05/21/96	05/22/96	05/23/96
STP-10DL	05/21/96	05/22/96	06/01/96
STP-11	05/21/96	05/22/96	05/23/96
STP-11DL	05/21/96	05/22/96	06/01/96
STP-12	05/21/96	05/22/96	05/23/96
STP-12DL	05/21/96	05/22/96	06/01/96

VOA Preserved: Aromatic within 7 days, non-aromatic within 14 days of sample collection.
Preserved: Both within 14 days of sample collection.
Soils: Both within 14 days of sample collection.

BNA & PES Extract waters within 7 days, analyze within 40 days
Extract soils within 14 days, analyze within 40 days

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX3PX2

DFTPP Injection Date: 05/02/96 DFTPP Injection Time: 07:08

Instrument MS1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	49.2	OK
68	Less than 2.0% of 69	0.5	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	42.9	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.1	OK
275	10.0 - 30.0 % of mass 198	18.2	OK
365	Greater than 1.0% of mass 198	1.3	OK
441	Present, but, less than mass 443	6.1	OK
442	> 40.0% of mass 198	46.6	OK
443	17.0 - 23.0 % of mass 442	20.1	OK

DFTPP Injection Date: 05/25/96 DFTPP Injection Time: 14:49

Instrument MS1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	48.1	OK
68	Less than 2.0% of 69	0.9	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	42.5	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	5.9	OK
275	10.0 - 30.0 % of mass 198	20.5	OK
365	Greater than 1.0% of mass 198	1.2	OK
441	Present, but, less than mass 443	8.4	OK
442	> 40.0% of mass 198	45.4	OK
443	17.0 - 23.0 % of mass 442	20.1	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX3PX2

DFTPP Injection Date: 05/03/96 DFTPP Injection Time: 13:25

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	54.3	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	46.2	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	19.7	OK
365	Greater than 1.0% of mass 198	1.5	OK
441	Present, but, less than mass 443	7.8	OK
442	> 40.0% of mass 198	48.2	OK
443	17.0 - 23.0 % of mass 442	20.0	OK

DFTPP Injection Date: 05/23/96 DFTPP Injection Time: 14:05

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	52.2	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	43.4	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	20.7	OK
365	Greater than 1.0% of mass 198	2.4	OK
441	Present, but, less than mass 443	9.8	OK
442	> 40.0% of mass 198	62.6	OK
443	17.0 - 23.0 % of mass 442	19.4	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX3PX2

DFTPP Injection Date: 06/31/96 DFTPP Injection Time: 20:38

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	57.2	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.4	OK
127	40 - 60 % of mass 198	43.0	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.7	OK
275	10.0 - 30.0 % of mass 198	23.2	OK
365	Greater than 1.0% of mass 198	3.2	OK
441	Present, but, less than mass 443	11.2	OK
442	> 40.0% of mass 198	70.4	OK
443	17.0 - 23.0 % of mass 442	19.4	OK

Data Review Worksheets

SEMIVOLATILE CALIBRATION VERIFICATION

Date of Initial Calibration: 05/02/96
Dates of Continuing Calibrations: 05/25/96
Instrument ID: MS1

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	5.87RSD RRF 0.134 OR GREATER
05/02/96	Samples Affected:	SBLKAP, SLCS02, STP-10MS, STP-10MSD
	%D RRF	7.7%D RRF 0.132
05/25/96	Samples Affected:	SBLKAP, SLCS02, STP-10MS, STP-10MSD

Date of Initial Calibration: 05/03/96
Dates of Continuing Calibrations: 5/23-5/31/96
Instrument ID: MS9

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	6.32RSD RRF 0.139 OR GREATER
05/03/96	Samples Affected:	SBLKIB, SLCS01, EX3-PX2A, STP-10, STP-11, STP-12, STP-10DL, STP-11DL, STP-12DL
	%D RRF	13.6%D RRF 0.133
05/23/96	Samples Affected:	SBLKIB, SLCS01, EX3-PX2A, STP-10, STP-11, STP-12
	%D RRF	18.8%D RRF 0.125
05/31/96	Samples Affected:	STP-10DL, STP-11DL, STP-12DL

Data Review Worksheets

BLANK ANALYSIS RESULTS

List the contamination in the blanks below.

1. Laboratory Blanks

* Level: LOW

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
05/23/96	SBLKIB	Semivolatile Soil	Pentachlorophenol	310 J
05/25/96	SBLKAP	Semivolatile Soil	Pentachlorophenol	990 U

2. Equipment and Trip Blanks

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
	None			

* A separate worksheet should be used for low and medium level blanks.

Data Review Worksheets

SURROGATE SPIKE RECOVERIES

List the percent recoveries for surrogates.

Matrix: Soil

Sample #s	VOA			B/N			A			PEST	
	TOL	BFB	DCE	NBZ	FBP	TPH	PHL	2FB	TBP	TCX	DCB
EX3-PX2A	NA	NA	NA	92	99	96	81	76	96	NA	NA
SLCS01	NA	NA	NA	86	88	90	78	72	96	NA	NA
SLCS02	NA	NA	NA	87	83	85	85	84	69	NA	NA
STP-10	NA	NA	NA	90	96	104	80	73	99	NA	NA
STP-10DL	NA	NA	NA	80D	88D	90D	81D	83D	38D	NA	NA
STP-11	NA	NA	NA	84	92	99	82	73	114	NA	NA
STP-11DL	NA	NA	NA	87D	97D	114D	97D	101D	43D	NA	NA
STP-12	NA	NA	NA	84	88	90	85	77	111	NA	NA
STP-12DL	NA	NA	NA	94D	89D	93D	95D	95D	58D	NA	NA
STP-10MS	NA	NA	NA	94	85	86	95	94	82	NA	NA
STP-10MSD	NA	NA	NA	91	85	78	90	90	76	NA	NA
SBLKIB	NA	NA	NA	95	95	96	89	80	102	NA	NA
SBLKAP	NA	NA	NA	85	79	66	96	86	62	NA	NA

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s STP-10MS/MSD Level: LOW Matrix: Soil

List the percent recoveries and RPDs of MS/MSDs.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD		QC LIMITS	
Semivolatile - MS	Phenol	98*	12	26-90	35
	2-Chlorophenol	89	7	25-102	50
	1,4-Dichlorobenzene	84	2	28-104	27
	n-Nitroso-di-n-propylamine	94	8	41-126	38
	1,2,4-Trichlorobenzene	86	6	38-107	23
	4-Chloro-3-methylphenol	98	10	26-103	33
	Acenaphthene	96	6	31-137	19
	4-Nitrophenol	81	7	11-114	50
	2,4-Dinitrotoluene	96*	0	28-89	47
	Pentachlorophenol	-113*	69*	17-109	47
	Pyrene	84	17	35-142	36

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s STP-10MS/MSD Level: LOW Matrix: Soil

List the percent recoveries and RPDs of MS/MSDs.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD	QC LIMITS
Semivolatile - MSD	Phenol	87	26-90
	2-Chlorophenol	83	25-102
	1,4-Dichlorobenzene	82	28-104
	n-Nitroso-di-n-propylamine	87	41-126
	1,2,4-Trichlorobenzene	81	38-107
	4-Chloro-3-methylphenol	89	26-103
	Acenaphthene	90	31-137
	4-Nitrophenol	87	11-114
	2,4-Dinitrotoluene	96*	28-89
	Pentachlorophenol	-231*	17-109
	Pyrene	71	35-142

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

QC Check Sample - Semivolatile Fractions

Below list LCS results and criteria.

COMPOUND	% RECOVERY CHECK	RANGE % R	Pass/Fail
S0522-LCS2			
Phenol	26-90	76.39	PASS
2-Chlorophenol	25-102	76.43	PASS
1,4-Dichlorobenzene	28-104	84.62	PASS
n-Nitroso-di-n-propylamine	28-104	75.26	PASS
1,2,4-Trichlorobenzene	38-107	96.64	PASS
4-Chloro-3-methylphenol	26-103	90.03	PASS
Acenaphthene	31-137	92.76	PASS
4-Nitrophenol	11-114	51.29	PASS
2,4-Dinitrotoluene	28-89	85.68	PASS
Pentachlorophenol	17-109	52.12	PASS
Pyrene	35-142	79.44	PASS
S0524-LCS5			
Phenol	26-90	86.48	PASS
2-Chlorophenol	25-102	80.41	PASS
1,4-Dichlorobenzene	28-104	80.8	PASS
n-Nitroso-di-n-propylamine	28-104	81.76	PASS
1,2,4-Trichlorobenzene	38-107	81.3	PASS
4-Chloro-3-methylphenol	26-103	83.51	PASS
Acenaphthene	31-137	90.16	PASS
4-Nitrophenol	11-114	58.44	PASS
2,4-Dinitrotoluene	28-89	82.52	PASS
Pentachlorophenol	17-109	34.4	PASS
Pyrene	35-142	72.78	PASS

Data Review Worksheets

FIELD DUPLICATE PRECISION

Sample #s None

Matrix: Soil

FRACTION	COMPOUND	SAMPLE CONC.	DUP SAMPLE CONC.	RPD
SVOA	Pentachlorophenol			

A separate worksheet should be filled out for each field duplicate pair.

Data Review Worksheets

INTERNAL STANDARD PERFORMANCE

List the internal standard areas of samples and QC.

SAMPLE ID	DATE	IS OUT	IS AREA/ RT	ACCEPTABLE RANGE	ACTIONS
SLCS02	05/25/96	DCB	4114	6571-26284	FLAG
		NPT	15424	26937-107748	FLAG
		ANT	9114	14784-59136	FLAG
		PHN	14997	22498-89990	FLAG
		CRY	13148	18864-75458	FLAG
		PRY	12269	15902-63608	FLAG
STP-10MS	05/25/96	DCB	5017	6571-26284	FLAG
		NPT	18888	26937-107748	FLAG
		ANT	11311	14784-59136	FLAG
		PHN	18199	22498-89990	FLAG
		CRY	14539	18864-75458	FLAG
		PRY	14274	15902-63608	FLAG
STP-10MSD	05/25/96	NO			NONE
SBLKAP	05/25/96	NO			NONE
EX3-PX2A	05/23/96	NO			NONE
SLCS01	05/23/96	NO			NONE
STP-10	05/23/96	NO			NONE
STP-11	05/23/96	NO			NONE
STP-12	05/23/96	NO			NONE
SBLKIB	05/23/96	NO			NONE
STP-10DL	05/31/96	PRY	17666	18038-72152	FLAG
STP-11DL	05/31/96	NO			NONE
STP-12DL	05/31/96	NO			NONE

SDG EX3PX5/2524

Data Review Worksheets

Site Name BEAZER SUPERFUND SITE
Reference Number 93-145.30/55

REVIEW OF ORGANIC DATA PACKAGE
TIER III VALIDATION LEVEL

The hardcopied CEIMIC CORPORATION data package received at QSEA, Inc. has been reviewed and the quality assurance and performance data summarized. The data review included:

Contract No.	93-145.30/55	SAS No.	NA	Sampling Date(s)	05/29/96
SDG. No.	EX3PX5	Matrix	Soil	Shipping Date(s)	05/29/96
No. of Samples	2			Date Rec'd by Lab	05/30/96

Sample Numbers: EX3-2-4-34/35, EX3-PX5A

Trip Blank No.: NONE
Equipment Blank No. NONE
Field Duplicate Nos.: NONE

SW-846 Method 8270B criteria were applied in review of this package data.

Performance was based on an examination of:

- Data Completeness
- Holding Times
- GC/MS Tuning
- Calibrations
- Field and Laboratory Blanks
- Surrogate, LCS and Spike Recoveries
- Matrix Spike/Matrix Spike Dup
- Field Duplicates
- Internal Standard Performance
- Laboratory Duplicates
- Analyte Quantitation
- Detection Limit Results
- Compound Identification

Overall Comments:

Data Review Worksheets

DATA COMPLETENESS

MISSING INFORMATION	DATE LAB CONTACTED	DATE RECEIVED
METHOD REFERENCE	JUNE 1996	JUNE 1996

Data Review Worksheets

HOLDING TIMES

Complete table for all samples and enter an 'X' beside the fractions which are not within criteria

SAMPLE ID	DATE SAMPLED	BNA DATE EXTRACTED	BNA DATE ANALYZED
EX3-2-4-34/35	05/29/96	05/30/96	05/30/96
EXE-PX5A	05/29/96	05/30/96	05/30/96

VOA rved: Aromatic within 7 days, non-aromatic within 14 days of sample collection.
Preserved: Both within 14 days of sample collection.
Soils: Both within 14 days of sample collection.

BNA & PE: Extract waters within 7 days, analyze within 40 days
Extract soils within 14 days, analyze within 40 days

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX3PX5

DFTPP Injection Date: 05/03/96 DFTPP Injection Time: 13:25

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	54.3	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	46.2	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	19.7	OK
365	Greater than 1.0% of mass 198	1.5	OK
441	Present, but, less than mass 443	7.8	OK
442	> 40.0% of mass 198	48.2	OK
443	17.0 - 23.0 % of mass 442	20.0	OK

DFTPP Injection Date: 05/30/96 DFTPP Injection Time: 14:21

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	41.0	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	37.7	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.6	OK
275	10.0 - 30.0 % of mass 198	22.8	OK
365	Greater than 1.0% of mass 198	2.7	OK
441	Present, but, less than mass 443	11.8	OK
442	> 40.0% of mass 198	70.8	OK
443	17.0 - 23.0 % of mass 442	20.4	OK

Data Review Worksheets

SEMIVOLATILE CALIBRATION VERIFICATION

Date of Initial Calibration: 05/03/96
Dates of Continuing Calibrations: 05/30/96
Instrument ID: MS9

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	6.32RSD RRF 0.139-0.165
05/03/96	Samples Affected:	SBLKIJ, SLCS01, EX3-PX5A, EX3-2-4-34/35
	%D RRF	12.5%D RRF 0.134
05/30/96	Samples Affected:	SBLKIJ, SLCS01, EX3-PX5A, EX3-2-4-34/35

Data Review Worksheets

BLANK ANALYSIS RESULTS

List the contamination in the blanks below.

1. Laboratory Blanks

* Level: LOW

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
05/30/96	SBLKIJ	Semivolatile Soil	Pentachlorophenol	990 U

2. Equipment and Trip Blanks

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
	NONE			

* A separate worksheet should be used for low and medium level blanks.

Data Review Worksheets

SURROGATE SPIKE RECOVERIES

List the percent recoveries for surrogates.

Matrix: Soil

Sample #s	VOA			B/N			A			PEST	
	TOL	BFB	DCE	NBZ	FBP	TPH	PHL	2FB	TBP	TCX	DCB
EX3-2-4-34/35	NA	NA	NA	100	83	78	91	30	91	NA	NA
EX3-PX5A	NA	NA	NA	100	80	72	96	36	96	NA	NA
SLCS01	NA	NA	NA	94	85	79	94	72	78	NA	NA
SBLKIJ	NA	NA	NA	91	81	79	86	77	76	NA	NA

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s NONE Level: LOW Matrix: Soil

List the percent recoveries and RPDs of MS/MSDs.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD	QC LIMITS
Semivolatile - MS			

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

QC Check Sample - Semivolatile Fractions

Below list LCS results and criteria.

COMPOUND	% RECOVERY CHECK	RANGE % R	Pass/Fail
Phenol	26-90	91.63*	FAIL
2-Chlorophenol	25-102	89.49	PASS
1,4-Dichlorobenzene	28-104	87.26	PASS
n-Nitroso-di-n-propylamine	28-104	86.4	PASS
1,2,4-Trichlorobenzene	38-107	86.14	PASS
4-Chloro-3-methylphenol	26-103	92.99	PASS
Acenaphthene	31-137	88.72	PASS
4-Nitrophenol	11-114	53.25	PASS
2,4-Dinitrotoluene	28-89	89.58*	FAIL
Pentachlorophenol	17-109	54.67	PASS
Pyrene	35-142	87.88	PASS

Data Review Worksheets

FIELD DUPLICATE PRECISION

Sample #s NONE Matrix: Soil

FRACTION	COMPOUND	SAMPLE CONC.	DUP SAMPLE CONC.	RPD
SVOA	Pentachlorophenol			

A separate worksheet should be filled out for each field duplicate pair.

Data Review Worksheets

INTERNAL STANDARD PERFORMANCE

List the internal standard areas of samples and QC.

SAMPLE ID	DATE	IS OUT	IS AREA/ RT	ACCEPTABLE RANGE	ACTIONS
EX3-2-4-34/35	05/30/96	NO			NONE
EX3-PX5A	05/30/96	CRY	85569	21360-85442	FLAG
SLCS01	05/30/96	NO			NONE
SBLKIJ	05/30/96	NO			NONE

SDG EX3PX9/2503

Data Review Worksheets

Site Name BEAZER SUPERFUND SITE
Reference Number 93-145.30/55

REVIEW OF ORGANIC DATA PACKAGE
TIER III VALIDATION LEVEL

The hardcopied CEIMIC CORPORATION data package received at QSEA, Inc. has been reviewed and the quality assurance and performance data summarized. The data review included:

Contract No.	93-145.30/55	SAS No.	NA	Sampling Date(s)	5/17/96 & 5/20/96
SDG. No.	EX3PX9	Matrix	SOIL/WATER	Shipping Date(s)	05/20/96
No. of Samples	6/1			Date Rec'd by Lab	05/21/96

Sample Numbers: 901, EQB-1, EX1-4-6-19/20, EX1-PX8A, EX1-PX9, EX3-PX10A, EX3-PX9A

Trip Blank No.:
Equipment Blank No. EQB-1
Field Duplicate Nos.: 901 and EX3-PX10A

SW-846 Method 8270B criteria were applied in review of this package data.

Performance was based on an examination of:

- Data Completeness
- Holding Times
- GC/MS Tuning
- Calibrations
- Field and Laboratory Blanks
- Surrogate, LCS and Spike Recoveries
- Matrix Spike/Matrix Spike Dup
- Field Duplicates
- Internal Standard Performance
- Laboratory Duplicates
- Analyte Quantitation
- Detection Limit Results
- Compound Identification

Overall Comments: The aqueous LCS was outlying for recovery of 1,2,4-Trichlorobenzene, internal standards were outlying for EX1-PX9, SLCS01, SBLKIZ and STP-7DL, and dilutions were required for EX3-PZ10A, STP-6, STP-7 and STP-8.

Data Review Worksheets

DATA COMPLETENESS

MISSING INFORMATION	DATE LAB CONTACTED	DATE RECEIVED
METHOD REFERENCE	JUNE 1996	JUNE 1996
SURROGATE RECOVERIES FOR SOLID SAMPLES	JULY 1996	JULY 1996

Data Review Worksheets

HOLDING TIMES

Complete table for all samples and enter an 'X' beside the fractions which are not within criteria

SAMPLE ID	DATE SAMPLED	BNA DATE EXTRACTED	BNA DATE ANALYZED
901	05/20/96	05/21/96	05/24/96
EQB-1	05/17/96	05/21/96	05/24/96
EX-1-4-6-19/20	05/20/96	05/21/96	05/24/96
EX1-PX8A	05/20/96	05/21/96	05/24/96
EX1-PX9	05/20/96	05/21/96	05/24/96
EX3-PX10A	05/20/96	05/21/96	05/24/96
EX3-PX10ADL	05/20/96	05/21/96	05/24/96
EX3-PX9A	05/20/96	05/21/96	05/24/96
STP-6	05/20/96	05/21/96	05/24/96
STP-6DL	05/20/96	05/21/96	06/01/96
STP-7	05/20/96	05/21/96	05/24/96
STP-7DL	05/20/96	05/21/96	06/01/96
STP-8	05/20/96	05/21/96	05/24/96
STP-8DL	05/20/96	05/21/96	05/24/96
STP-9	05/20/96	05/21/96	05/24/96

VOA - Aromatic within 7 days, non-aromatic within 14 days of sample collection.
Preserved: Both within 14 days of sample collection.
Soils: Both within 14 days of sample collection.

BNA - Extract waters within 7 days, analyze within 40 days
Extract soils within 14 days, analyze within 40 days

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX3PX9

DFTPP Injection Date: 03/17/96 DFTPP Injection Time: 12:51

MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	41.9	OK
68	Less than 2.0% of 69	1.4	OK
69	Mass 69 relative abundance	44.9	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	31.8	OK
197	Less than 1.0% of mass 198	0.5	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	20.8	OK
365	Greater than 1.0% of mass 198	1.7	OK
441	Present, but, less than mass 443	8.1	OK
442	> 40.0% of mass 198	62.8	OK
443	17.0 - 23.0 % of mass 442	19.1	OK

DFTPP Injection Date: 05/22/96 DFTPP Injection Time: 14:34

Instrument MS4

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	39.8	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.5	OK
127	40 - 60 % of mass 198	33.2	OK
197	Less than 1.0% of mass 198	0.7	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.3	OK
275	10.0 - 30.0 % of mass 198	21.1	OK
365	Greater than 1.0% of mass 198	2.1	OK
441	Present, but, less than mass 443	12.1	OK
442	> 40.0% of mass 198	84.9	OK
443	17.0 - 23.0 % of mass 442	19.7	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX39X9

DFTPP Injection Date: 05/03/96 DFTPP Injection Time: 13:25

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	54.3	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	46.2	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.2	OK
275	10.0 - 30.0 % of mass 198	19.7	OK
365	Greater than 1.0% of mass 198	1.5	OK
441	Present, but, less than mass 443	7.8	OK
442	> 40.0% of mass 198	48.2	OK
443	17.0 - 23.0 % of mass 442	20.0	OK

DFTPP Injection Date: 05/22/96 DFTPP Injection Time: 10:40

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	44.6	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.2	OK
127	40 - 60 % of mass 198	39.0	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.7	OK
275	10.0 - 30.0 % of mass 198	20.7	OK
365	Greater than 1.0% of mass 198	2.3	OK
441	Present, but, less than mass 443	8.6	OK
442	> 40.0% of mass 198	58.8	OK
443	17.0 - 23.0 % of mass 442	19.9	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX39X9

DFTPP Injection Date: 05/31/96 DFTPP Injection Time: 20:38

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	57.2	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.4	OK
127	40 - 60 % of mass 198	43.0	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak .100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.7	OK
275	10.0 - 30.0 % of mass 198	23.2	OK
365	Greater than 1.0% of mass 198	3.2	OK
441	Present, but, less than mass 443	11.2	OK
442	> 40.0% of mass 198	70.4	OK
443	17.0 - 23.0 % of mass 442	19.4	OK

DFTPP Injection Date: 06/01/96 DFTPP Injection Time: 14:39

Instrument MS9

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	54.2	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.3	OK
127	40 - 60 % of mass 198	43.9	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	6.6	OK
275	10.0 - 30.0 % of mass 198	21.5	OK
365	Greater than 1.0% of mass 198	1.9	OK
441	Present, but, less than mass 443	7.5	OK
442	> 40.0% of mass 198	46.9	OK
443	17.0 - 23.0 % of mass 442	19.1	OK

Data Review Worksheets

GC/MS TUNING

Semivolatile Worksheet - Sample Reference List SDG # EX3PX9

DFTPP Injection Date: 03/15/96 DFTPP Injection Time: 10:10

Instrument MS10

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	50.9	OK
68	Less than 2.0% of 69	0.0	OK
69	Mass 69 relative abundance	63.2	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	50.9	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	7.5	OK
275	10.0 - 30.0 % of mass 198	16.7	OK
365	Greater than 1.0% of mass 198	1.8	OK
441	Present, but, less than mass 443	7.5	OK
442	> 40.0% of mass 198	54.4	OK
443	17.0 - 23.0 % of mass 442	19.4	OK

DFTPP Injection Date: 05/24/96 DFTPP Injection Time: 10:42

Instrument MS10

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	STATUS
51	30.0 - 60.0 % of mass 198	57.3	OK
68	Less than 2.0% of 69	0.2	OK
69	Mass 69 relative abundance	100.0	OK
70	Less than 2.0% of mass 69	0.0	OK
127	40 - 60 % of mass 198	51.1	OK
197	Less than 1.0% of mass 198	0.0	OK
198	Base Peak 100% relative abundance	100.0	OK
199	5.0 - 9.0 % of mass 198	7.0	OK
275	10.0 - 30.0 % of mass 198	14.7	OK
365	Greater than 1.0% of mass 198	1.4	OK
441	Present, but, less than mass 443	6.7	OK
442	> 40.0% of mass 198	43.9	OK
443	17.0 - 23.0 % of mass 442	19.3	OK

Data Review Worksheets

SEMIVOLATILE CALIBRATION VERIFICATION

Date of Initial Calibration: 03/17/96
Dates of Continuing Calibrations: 05/22/96
Instrument ID: MS4

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	11.89RSD RRF 0.174-0.232
03/17/96	Samples Affected:	STP-8
	%D RRF	1.5%D RRF 0.200
05/22/96	Samples Affected:	STP-8

Date of Initial Calibration: 05/03/96
Dates of Continuing Calibrations: 5/22, 5/31, 6/1/96
Instrument ID: MS9

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	6.32RSD RRF 0.139-0.165
05/03/96	Samples Affected:	SBLKIZ, SLCS01, EX1-PX9, EX1-4-6-19/20, EX3-PX9A, EX3-PX9AMS, EX3-PX9AMSD, SRP-9, EX3-PX10A, EX1-PX8A, STP-6, STP-7, STP-7DL, STP-8DL, SBLKIK, SLCS02, STP-6DL
	%D RRF	10.4%D RRF 0.138
05/22/96	Samples Affected:	SBLKIZ, SLCS01, EX1-PX9, EX1-4-6-19/20, EX3-PX9A, EX3-PX9AMS, EX3-PX9AMSD, SRP-9, EX3-PX10A, EX1-PX8A, STP-6, STP-7
	%D RRF	18.8%D RRF 0.125
05/31/96	Samples Affected:	STP-7DL, STP-8DL
	%D RRF	14.3%D RRF 0.132
06/01/96	Samples Affected:	SBLKIK, SLCS02, STP-6DL

Date of Initial Calibration: 03/15/96
Dates of Continuing Calibrations: 05/24/96
Instrument ID: MS10

DATE	CRITERIA OUT RF, %RSD, RF, %D	COMPOUND (VALUE)
	RSD RRF	9.19RSD RRF 0.138-0.177
03/15/96	Samples Affected:	901, EX3-PX10ADL, EQB-1
	%D RRF	20.9%D RRF 0.125
05/24/96	Samples Affected:	901, EX3-PX10ADL, EQB-1

Data Review Worksheets

BLANK ANALYSIS RESULTS

List the contamination in the blanks below.

1. Laboratory Blanks

* Level: LOW

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
05/22/96	SBLKIZ	Semivolatile Soil	Pentachlorophenol	990 U
06/01/96	SBLKIK	Semivolatile Water	Pentachlorophenol	10 U

2. Equipment and Trip Blanks

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
05/24/96	EQB-1	Semivolatiles	Pentachlorophenol	10 U

* A separate worksheet should be used for low and medium level blanks.

Data Review Worksheets

SURROGATE SPIKE RECOVERIES

List the percent recoveries for surrogates.

Matrix: Soil

Sample #s	VOA			B/N			A			PEST	
	TOL	BFB	DCE	NBZ	FBP	TPH	PHL	2FB	TBP	TCX	DCB
WATERS EQB-1	NA	NA	NA	93	68	63	26	23	29	NA	NA
SLCS02	NA	NA	NA	58	54	69	26	33	58	NA	NA
SBLKIK	NA	NA	NA	63	57	63	26	35	62	NA	NA
SOILS 901	NA	NA	NA	74 D	62 D	57 D	67 D	64 D	60 D	NA	NA
EX1-4-6-19/20	NA	NA	NA	79	78	68	80	70	90	NA	NA
EX1-PX8A	NA	NA	NA	70	66	66	70	61	86	NA	NA
EX1-PX9	NA	NA	NA	71	73	65	71	63	76	NA	NA
EX3-PX10A	NA	NA	NA	80	73	66	80	71	96	NA	NA
EX3-PX10ADL	NA	NA	NA	94 D	77 D	72 D	92 D	92 D	70 D	NA	NA
EX3-PX9A	NA	NA	NA	78	75	68	75	62	82	NA	NA
SLCS01	NA	NA	NA	72	76	73	72	65	81	NA	NA
STP-6	NA	NA	NA	62	74	64	60	54	94	NA	NA
STP-6DL	NA	NA	NA	0 D	0 D	0D	0 D	0 D	0 D	NA	NA
STP-7	NA	NA	NA	76	108	65	77	68	148*	NA	NA
STP-7DL	NA	NA	NA	0 D	0 D	0D	0 D	0 D	0 D	NA	NA
STP-8	NA	NA	NA	57	69	59	53	56	115	NA	NA
STP-8DL	NA	NA	NA	0 D	0 D	0D	0 D	0 D	0 D	NA	NA
STP-9	NA	NA	NA	83	82	71	83	74	101	NA	NA
EX3-PX9AMS	NA	NA	NA	77	74	69	76	68	85	NA	NA
EX3-PX9AMSD	NA	NA	NA	82	76	68	80	72	98	NA	NA
SBLKIZ	NA	NA	NA	67	71	65	63	64	47	NA	NA

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s EX3-PX9AMS/MSD Level: LOW Matrix: Soil

List the percent recoveries and RPDs of compounds.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD		QC LIMITS	
Semivolatile - MS	Phenol	75	1	26-90	35
	2-Chlorophenol	71	7	25-102	50
	1,4-Dichlorobenzene	72	4	28-104	27
	n-Nitroso-di-n-propylamine	83	7	41-126	38
	1,2,4-Trichlorobenzene	80	5	38-107	23
	4-Chloro-3-methylphenol	79	8	26-103	33
	Acenaphthene	81	1	31-137	19
	4-Nitrophenol	58	14	11-114	50
	2,4-Dinitrotoluene	79	7	28-89	47
	Pentachlorophenol	70	21	17-109	47
	Pyrene	59	11	35-142	36

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s EX3-PX9AMS/MSD Level: LOW Matrix: Soil

List the percent recoveries and RPDs of compounds.

FRACTION / MS OR MSD	COMPOUND	%REC / RPD	QC LIMITS
Semivolatile - MSD	Phenol	76	26-90
	2-Chlorophenol	76	25-102
	1,4-Dichlorobenzene	75	28-104
	n-Nitroso-di-n-propylamine	89	41-126
	1,2,4-Trichlorobenzene	84	38-107
	4-Chloro-3-methylphenol	86	26-103
	Acenaphthene	80	31-137
	4-Nitrophenol	67	11-114
	2,4-Dinitrotoluene	85	28-89
	Pentachlorophenol	86	17-109
	Pyrene	66	35-142

* A separate worksheet should be filled out for each MS/MSD pair.

Data Review Worksheets

QC Check Sample - Semivolatile Fractions

COMPOUND	% RECOVERY CHECK	RANGE % R	Pass/Fail
S0521-LCS3			
Phenol	26-90	71.61	PASS
2-Chlorophenol	25-102	70.17	PASS
1,4-Dichlorobenzene	28-104	69.98	PASS
n-Nitroso-di-n-propylamine	28-104	72.48	PASS
1,2,4-Trichlorobenzene	38-107	79.98	PASS
4-Chloro-3-methylphenol	26-103	77.36	PASS
Acenaphthene	31-137	80.72	PASS
4-Nitrophenol	11-114	41.36	PASS
2,4-Dinitrotoluene	28-89	71.46	PASS
Pentachlorophenol	17-109	40.64	PASS
Pyrene	35-142	64.18	PASS
S0521-LCS5			
Phenol	12-110	26.15	PASS
2-Chlorophenol	27-123	51.41	PASS
1,4-Dichlorobenzene	36-97	49.60	PASS
n-Nitroso-di-n-propylamine	41-116	56.00	PASS
1,2,4-Trichlorobenzene	59-98	52.90	FAIL
4-Chloro-3-methylphenol	23-97	57.60	PASS
Acenaphthene	46-118	57.06	PASS
4-Nitrophenol	10-80	15.33	PASS
2,4-Dinitrotoluene	24-96	56.30	PASS
Pentachlorophenol	9-103	22.36	PASS
Pyrene	26-127	60.10	PASS

Data Review Worksheets

FIELD DUPLICATE PRECISION

Sample #s 901 AND EX3-PX10ADL Matrix: Soil

FRACTION	COMPOUND	SAMPLE CONC.	DUP SAMPLE CONC.	RPD
SVOA	Pentachlorophenol	11000	75000 D	149

A separate worksheet should be filled out for each field duplicate pair.

Data Review Worksheets

INTERNAL STANDARD PERFORMANCE

List the internal standard areas of samples and QC.

SAMPLE ID	DATE	IS OUT	IS AREA/ RT	ACCEPTABLE RANGE	ACTIONS
STP-8	05/22/96	NO			NONE
EX1-4-6-19/20	05/22/96	NO			NONE
EX1-PX8A	05/22/96	NO			NONE
EX1-PX9	05/22/96	DCB	7242	7586-30342	FLAG
		NPT	23129	27156-108624	FLAG
		ANT	13242	14716-58866	FLAG
		PHN	24306	26342-105370	FLAG
EX3-PX10A	05/22/96	NO			NONE
EX3-PX9A	05/22/96	NO			NONE
SLCS01	05/22/96	DCB	5241	7586-30342	FLAG
		NPT	16724	27156-108624	FLAG
		ANT	9539	14716-58866	FLAG
		PHN	17163	26342-105370	FLAG
		CRY	17093	24034-96134	FLAG
		PRY	18866	26780-107118	FLAG
STP-6	05/22/96	NO			NONE
STP-7	05/22/96	NO			NONE
STP-9	05/22/96	NO			NONE
EX3-PX9AMS	05/22/96	NO			NONE
EX3-PX9AMSD	05/22/96	NO			NONE
SBLKIZ	05/22/96	DCB	5173	7586-30342	FLAG
		NPT	15599	27156-108624	FLAG
		ANT	8677	14716-58866	FLAG
		PHN	15815	26342-105370	FLAG
		CRY	16444	24034-96134	FLAG
		PRY	19324	26780-107118	FLAG
STP-7DL	05/31/96	PHN	22535	23122-92490	FLAG
		CRY	14427	18738-74954	FLAG
		PRY	12726	18038-72152	FLAG
SLCS02	06/01/96	NO			NONE
STP-6DL	06/01/96	NO			NONE
SBLKIK	06/01/96	NO			NONE
901	05/24/96	NO			NONE
EQB-1	05/24/96	NO			NONE
EX3-PX10ADL	05/24/96	NO			NONE

Data Review Worksheets

Site Name BEAZER SUPERFUND SITE
Reference Number 93-145.30/55

REVIEW OF ORGANIC DATA PACKAGE
TIER III VALIDATION LEVEL

The hardcopied ALTA Analytical Lab Inc. data package received at QSEA, Inc. has been reviewed and the quality assurance and performance data summarized. The data review included:

Contract No.	93-145.30/55	SAS No.	NA	Sampling Date(s)	5/17/96 & 5/20/96
SDG. No.	2503	Matrix	Soil/Water	Shipping Date(s)	05/20/96
No. of Samples	6/1			Date Rec'd by Lab	05/21/96

Sample Numbers: 901, EQB-1, EX1-4-6-19/20, EX1-PX8A, EX1-PX9, EX3-PX10A, EX3-PX9A

Trip Blank No.: NONE
Equipment Blank No. EQB-1
Field Duplicate Nos.: 901 and EX3-PX10A

SW-846 Method 8290 criteria were applied in review of this package data.

Performance was based on an examination of:

- Data Completeness
- Holding Times
- GC/MS Tuning
- Calibrations
- Field and Laboratory Blanks
- Surrogate, LCS and Spike Recoveries
- Matrix Spike/Matrix Spike Dup
- Field Duplicates
- Internal Standard Performance
- Laboratory Duplicates
- Analyte Quantitation
- Detection Limit Results
- Compound Identification

Overall Comments: THE LCS FAILED FOR 2,3,7,8-TCDF PRECISION.

Data Review Worksheets

DATA COMPLETENESS

MISSING INFORMATION	DATE LAB CONTACTED	DATE RECEIVED
None		

Data Review Worksheets

HOLDING TIMES

Complete table for all samples and enter an 'X' beside the fractions which are not within criteria

SAMPLE ID	DATE SAMPLED	BNA DATE EXTRACTED	BNA DATE ANALYZED
901	05/20/96	05/21/96	05/24/96
EQB-1	05/17/96	05/21/96	05/24/96
EX-1-4-6-19/20	05/20/96	05/21/96	05/24/96
EX1-PX8A	05/20/96	05/21/96	05/24/96
EX1-PX9	05/20/96	05/21/96	05/24/96
EX3-PX10A	05/20/96	05/21/96	05/24/96
EX3-PX10ADL	05/20/96	05/21/96	05/24/96
EX3-PX9A	05/20/96	05/21/96	05/24/96
STP-6	05/20/96	05/21/96	05/24/96
STP-6DL	05/20/96	05/21/96	06/01/96
STP-7	05/20/96	05/21/96	05/24/96
STP-7DL	05/20/96	05/21/96	06/01/96
STP-8	05/20/96	05/21/96	05/24/96
STP-8DL	05/20/96	05/21/96	05/24/96
STP-9	05/20/96	05/21/96	05/24/96

Data Review Worksheets

BLANK ANALYSIS RESULTS

List the contamination in the blanks below.

1. Laboratory Blanks

* Level: LOW

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
	2503-0001-MB	Soil	OCDD	(<Cal limit) 2.6 pg/g
	2503-0007-MB	Water	OCDD	(<Cal limit) 12 pg/l

2. Equipment and Trip Blanks

DATE	LAB ID	FRACTION/ MATRIX	COMPOUND	CONCENTRATION/ UNITS
	EQB-1	Water	OCDD	21 pg/l

Data Review Worksheets

ISOTOPE RECOVERIES

List recoveries for each field sample and quality control sample.

MATRIX: Soil and Aqueous

SAMPLE	RECOVERY RANGE	CLEAN-UP STD RECOVERY
EX3-PX9A	87-120	96
EX1-PX8A	80-120	90
901	71-106	78
EX1-PX9	68-122	90
EX3-PX10A	58-116	90
EX1-4-6-19/20	75-106	84
EQB-1	76-112	91
EX3-PX9AMS	80-112	83
EX3-PX9AMSD	71-104	80
Solid MB	92-139	90
Aqueous MB	73-102	91
LCS solid	100-125 77-101	91 93
LCS Aqueous	74-107 73-101	90 91

Data Review Worksheets

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

1. Matrix Spike/Matrix Spike Duplicate Recoveries and Precision *

Sample #s EX3-PX9AMS/MSD Level: Low Matrix: Soil

List the percent recoveries and RPDs of compounds which do not meet the criteria stated on Form 3.

COMPOUND	MS %R	MSD %R	RPD	QC LIMITS
2,3,7,8-TCDD	90	89	1.1	20 RPD
Total TCDD				
1,2,3,7,8-PeCDD	103	106	2.9	
Total PeCDD				
1,2,3,4,7,8-HxCDD	101	102	0.99	
1,2,3,6,7,8-HxCDD	101	106	4.8	
1,2,3,7,8,9-HxCDD	90	92	2.2	
Total HxCDD				
1,2,3,4,6,7,8-HpCDD				
Total HpCDD				
OCDD				
2,3,7,8-TCDF	105	98	6.9	20 RPD
Total TCDF				
1,2,3,7,8-PeCDF	100	98	2.0	
2,3,4,7,8-PeCDF	105	104	0.96	
Total PeCDF				
1,2,3,4,7,8-HxCDF	105	103	1.9	
1,2,3,6,7,8-HxCDF	106	101	4.8	
2,3,4,6,7,8-HxCDF	102	100	2.0	
1,2,3,7,8,9-HxCDF	104	99	4.9	
Total HxCDF				
1,2,3,4,6,7,8-HpCDF	85	140	49	
1,2,3,4,7,8,9-HpCDF	107	103	3.8	
Total HpCDF				
OCDF				
2,3,7,8-TCDD	103	88		
1,2,3,7,8-PeCDD	87	71		
1,2,3,4,7,8-HxCDD	106	92		
1,2,3,6,7,8-HxCDD	120	109		
1,2,3,4,6,7,8-HpCDD	97	99		
OCDD	96	87		
2,3,7,8-TCDF	100	88		
1,2,3,7,8-PeCDF	117	104		
2,3,4,7,8-PeCDF	95	82		
1,2,3,4,7,8-HxCDF	97	87		
1,2,3,6,7,8-HxCDF	95	85		
2,3,4,6,7,8-HxCDF	94	85		
1,2,3,7,8,9-HxCDF	111	104		
1,2,3,4,6,7,8-HpCDF	112	101		
1,2,3,4,7,8,9-HpCDF	101	98		
Cleanup standard	83	80		

Data Review Worksheets

QC Check Sample - Dioxins/Furans

Below list any compound that did not pass the LCS criteria. **Solids**

COMPOUND	LCS1 RECOVERY	LCS2 RECOVERY	RPD	Pass/Fail
2,3,7,8-TCDD	70	86	21	PASS
1,2,3,7,8-PeCDD	90	112	22	PASS
1,2,3,4,7,8-HxCDD	80	101	23	PASS
1,2,3,6,7,8-HxCDD	83	106	24	PASS
1,2,3,7,8,9-HxCDD	80	99	21	PASS
1,2,3,4,6,7,8-HpCDD	87	109	22	PASS
OCDD	84	106	23	PASS
2,3,7,8-TCDF	80	105	27	FAIL
1,2,3,7,8-PeCDF	81	99	20	PASS
2,3,4,7,8-PeCDF	82	102	22	PASS
1,2,3,4,7,8-HxCDF	83	105	23	PASS
1,2,3,6,7,8-HxCDF	84	105	22	PASS
2,3,4,6,7,8-HxCDF	82	104	24	PASS
1,2,3,7,8,9-HxCDF	84	112	19	PASS
1,2,3,4,6,7,8-HpCDF	82	103	23	PASS
1,2,3,4,7,8,9-HpCDF	85	107	23	PASS
OCDF	87	112	25	PASS
2,3,7,8-TCDD	118	86	-	
1,2,3,7,8-PeCDD	100	77	-	
1,2,3,4,7,8-HxCDD	125	101	-	
1,2,3,6,7,8-HxCDD	120	100	-	
1,2,3,4,6,7,8-HpCDD	114	93	-	
OCDD	102	80	-	
2,3,7,8-TCDF	116	96	-	
1,2,3,7,8-PeCDF	123	101	-	
2,3,4,7,8-PeCDF	117	94	-	
1,2,3,4,7,8-HxCDF	115	94	-	
1,2,3,6,7,8-HxCDF	113	93	-	
2,3,4,6,7,8-HxCDF	111	92	-	
1,2,3,7,8,9-HxCDF	117	96	-	
1,2,3,4,6,7,8-HpCDF	119	95	-	
1,2,3,4,7,8,9-HpCDF	115	96	-	
Cleanup standard	91	93	-	

Data Review Worksheets

QC Check Sample - Dioxins/Furans

Below list any compound that did not pass the LCS criteria. **Waters**

COMPOUND	LCS1 RECOVERY	LCS2 RECOVERY	RPD	Pass/Fail
2,3,7,8-TCDD	81	82	1.2	Pass
1,2,3,7,8-PeCDD	106	110	3.7	Pass
1,2,3,4,7,8-HxCDD	105	104	0.96	Pass
1,2,3,6,7,8-HxCDD	106	106	0	Pass
1,2,3,7,8,9-HxCDD	98	99	1.0	Pass
1,2,3,4,6,7,8-HpCDD	111	108	2.7	Pass
OCDD	107	107	0	Pass
2,3,7,8-TCDF	108	108	0	Pass
1,2,3,7,8-PeCDF	103	101	2.0	Pass
2,3,4,7,8-PeCDF	104	103	0.96	Pass
1,2,3,4,7,8-HxCDF	105	105	0	Pass
1,2,3,6,7,8-HxCDF	106	105	0.94	Pass
2,3,4,6,7,8-HxCDF	104	102	1.9	Pass
1,2,3,7,8,9-HxCDF	107	105	1.9	Pass
1,2,3,4,6,7,8-HpCDF	101	100	1.0	Pass
1,2,3,4,7,8,9-HpCDF	106	105	0.94	Pass
OCDF	105	107	1.9	Pass
2,3,7,8-TCDD	96	96	-	Pass
1,2,3,7,8-PeCDD	74	74	-	Pass
1,2,3,4,7,8-HxCDD	103	100	-	Pass
1,2,3,6,7,8-HxCDD	107	101	-	Pass
1,2,3,4,6,7,8-HpCDD	88	85	-	Pass
OCDD	75	73	-	Pass
2,3,7,8-TCDF	94	96	-	Pass
1,2,3,7,8-PeCDF	96	101	-	Pass
2,3,4,7,8-PeCDF	89	93	-	Pass
1,2,3,4,7,8-HxCDF	101	94	-	Pass
1,2,3,6,7,8-HxCDF	98	93	-	Pass
2,3,4,6,7,8-HxCDF	96	93	-	Pass
1,2,3,7,8,9-HxCDF	97	98	-	Pass
1,2,3,4,6,7,8-HpCDF	97	91	-	Pass
1,2,3,4,7,8,9-HpCDF	88	89	-	Pass
Cleanup standard	90	91	-	Pass

Data Review Worksheets

FIELD DUPLICATE PRECISION

Sample #s 901 and EX3-PX10A MATRIX: Soil

FRACTION	COMPOUND	SAMPLE CONC. 901	DUP SAMPLE CONC. EX3-PX10A	RPD
PCDD/PCDF	2,3,7,8-TCDD	1.9	1.0	63
	Total TCDD	7.6	1.0	153
	1,2,3,7,8-PeCDD	27	8.4	106
	Total PeCDD	90	18	133
	1,2,3,4,7,8-HxCDD	59	20	99
	1,2,3,6,7,8-HxCDD	480	170	95
	1,2,3,7,8,9-HxCDD	120	36	108
	Total HxCDD	1400	490	96
	1,2,3,4,6,7,8-HpCDD	13000	4700	94
	Total HpCDD	19000	6900	93
	OCDD	100000	43000	80
	2,3,7,8-TCDF	1.2	0.45	91
	Total TCDF	30	12	86
	1,2,3,7,8-PeCDF	4.1	1.3	104
	2,3,4,7,8-PeCDF	6.5	2.2	99
	Total PeCDF	260	79	107
	1,2,3,4,7,8-HxCDF	51	17	100
	1,2,3,6,7,8-HxCDF	30	10	100
	2,3,4,6,7,8-HxCDF	53	18	99
	1,2,3,7,8,9-HxCDF	7.6	2.5	101
	Total HxCDF	2100	780	92
	1,2,3,4,6,7,8-HpCDF	2500	890	95
	1,2,3,4,7,8,9-HpCDF	140	46	101
	Total HpCDF	13000	4400	99
	OCDF	13000	4900	91

A separate worksheet should be filled out for each field duplicate pair.

SUPPORT DOCUMENTATION
CORRESPONDENCE

RECEIPT CONFIRMATION FORM

DATE June 17, 1996

MATERIALS RECEIVED BY:

Ina Ruth Scott of QSEA, Inc.

The Gaujot Building

113 Goff Mountain Road, Suite 2

Charleston, WV 25313

MATERIALS SENT FROM:

C/R Consultants, Inc.

DESCRIPTION OF MATERIALS:

One box was received via UPS, this date for Beazer East, Inc.

COMMENTS:

QSEA, Inc.

FACSIMILE TRANSMISSION

TO	Linda McGee/Bruce Geno
OF	CEIMIC/C/R
DATE	7/2/96
FAX NUMBER	401-782-8905/412-373-5242
FROM	Mary Lasky
FAX NUMBER	304-776-0403
PHONE NUMBER	304-776-0400

NUMBER OF PAGES TO FOLLOW: 0

COMMENTS:

QSEA is in the process of validating C/R project 93-145 data. Please provide the following information for data package 900:

- SDG 900 initial and continuing calibration responses (area counts) for pentachlorophenol and internal standard phenanthrene-d10. This information is required to confirm response factors. Files required are AK352-AK357, AKJ601SW, AK726SW for instrument MS1; DJ990-DJ996, DK910SW for instrument MS4; IH347-IH353, IH742SW for instrument MS9.

Also, please clarify the following sample preparation information:

- The use of 10-g sample aliquots;
- Concentrated extract volumes for samples EX2-PX2B, EX3-PX3, EX3-PX8, EX3-PX8MS/MSD - the Form 1s cite 0.5ml volumes while the extraction log cites 1.0ml for the batch. The same quantitation limits are reported for all samples referenced.
- The MS/MSD Form 1s cite GPC cleanup but the extraction log does not confirm this. Please clarify.

Revisions may be sent by fax to QSEA and as hardcopy to C/R (Bruce Geno, PA office). Please note, data package 900 is undergoing a thorough review as an indicator of overall project data quality. Similar resubmittals may be needed for remaining project data packages based on the outcome of this review. I will notify you either way. Thanks for your assistance. Please call with any questions.

113 Goff Mountain Rd. Suite 2 Charleston WV 25313

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

July 5, 1996

Mr. Bruce Geno
Cummings Riter Consultants
339 Haymaker Road
Parkway Building, Suite 201
Monroeville, PA 15146

RE: Beazer Superfund Site, Project # 93-145, SDG # 900

Dear Mr. Geno:

In response to comments made by QSEA regarding SDG # 900, I am providing the following information:

1) For the Beazer Superfund Site, Cummings Riter was quoted for level 3 QC and deliverables. Level 3 does not include initial and continuing calibration raw data. However, I am providing the requested raw data, which will result in level 4 deliverables, and will be billed as such.

2) The laboratory used 10 g sample aliquots with a final extract volume of 1.0 ml in order to expedite the extraction process. The 10 g sample aliquot reduced the probability of running time consuming dilutions in order to expedite the quick 48-hour turn around preliminary data reports as requested by the client. Using 10 g the reporting limit becomes 1.0 ppm (1000 ppb), which was believed to be below the regulatory action limit for the project.

3) The form 1s for samples EX2-PX2B, EX3-PX3, EX3-PX8, and EX3-PX8MS/MSD incorrectly reported that the samples went over GPC, which would have reduced the final volume to 0.5 ml. Due to the rapid turn around time, none of the samples went over GPC. The Form 1s have been corrected and are being resubmitted. The quantitation limits are correct as reported.

4) As stated in #3 above, none of the samples had GPC cleanup. The Form 1s have been corrected and are being resubmitted.

If you have any questions please contact Neil Pothier or me at (401) 782-8900.

Sincerely,

Carla J. Rodman

Carla J. Rodman
QA/QC Officer

10 Dean Knauss Drive, Narragansett, RI 02882 • Tel: (401) 782-8900 • Fax: (401) 782-8905

QSEA, Inc.

FACSIMILE TRANSMISSION

TO Bruce Geno

OF C/R

DATE 7/9/96

FAX NUMBER 412-373-5242

FROM Mary Lasky

FAX NUMBER 304-776-0403

PHONE NUMBER 304-776-0400

NUMBER OF PAGES TO FOLLOW:

COMMENTS:

QSEA has completed the CLP-type validation of C/R project 93-145 data. In this process, one data package was reviewed for dioxin/furans and another data package was reviewed to pentachlorophenol. This approach was required since the laboratories did not provide raw data for the same samples.

The data tables for the samples validated are attached for your review and show the degree of qualification necessary. Please note, all qualifications applied to dioxin data were addressed by the laboratory in the data package. The semivolatile data did not require qualification, except to estimate dilution data.

Also, in my notes I had written the field dup of 900 as "PX2-PX2B", since this sample was not located, we assumed the field dup to be "EX2-PX2B". Let us know if this is not correct.

Please check the reporting limits for the non-detects against your QAPP requirements to make sure the results are reported low enough. (You told me your reporting limit for dioxins was 7 ppb, however this is quite high and perhaps the units differ?)

Mary

113 Goff Mountain Rd. Suite 2 Charleston WV 25313

QSEA, Inc.

FACSIMILE TRANSMISSION

TO	Linda McGee/Bruce Geno
OF	CEIMIC/C/R
DATE	7/10/96
FAX NUMBER	401-782-8905/412-373-5242
FROM	Mary Lasky
FAX NUMBER	304-776-0403
PHONE NUMBER	304-776-0400
NUMBER OF PAGES TO FOLLOW:	0

COMMENTS:

QSEA is in the process of validating C/R project 93-145 data. Please provide the following information for data package EX1PX5:

- Sample EX3-PX7 analysis resulted in all internal standard responses below the lower tolerance limit and evidence of reanalysis could not be located. Please clarify.

Revisions or resubmittals may be sent by fax to QSEA and as hardcopy to C/R (Bruce Geno, PA office). Please note, calibration raw data file submittal will not be required for additional project packages. Thanks for your assistance. Please call with any questions.

Per Carla Rodman —
Reanalysis not performed
by the lab for SW-846
outlying internal std.
— M

113 Goff Mountain Rd. Suite 2 Charleston WV 25313

QSEA, Inc.

FACSIMILE TRANSMISSION

TO	Linda McGee/Bruce Geno
OF	CEIMIC/C/R
DATE	7/11/96
FAX NUMBER	401-782-8905/412-373-5242
FROM	Mary Lasky
FAX NUMBER	304-776-0403
PHONE NUMBER	304-776-0400

NUMBER OF PAGES TO FOLLOW: 0

COMMENTS:

QSEA is in the process of validating C/R project 93-145 data. Please provide the following information for data package EX3PX9:

- Our package is missing the page stamped 12 (solid sample surrogate recoveries). We would normally calculate these values ourselves, however these are reduced deliverable packages.

Please forward by fax to QSEA only.

Thank you

113 Goff Mountain Rd. Suite 2 Charleston WV 25313

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

Fax Cover Sheet

To: Mary Lasky

Fax #: (304) 776-0403

From: Carla Rodman

Date: 7/12/96

Re: C/R Project 95-145 SDG#EX3PX9

# of Pages: 2
(includes cover sheet)

Attached is the missing page 12 that you requested.

10 Dean Knauss Drive, Narragansett, RI 02882 • Tel: (401) 782-8900 • Fax: (401) 782-8905

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Name: CEIMIC CORP Contract: CRC

Lab Code: CEIMIC Case No.: 93145 SAS No.: - SDG No.: EX3PX9

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	901	74 D	62 D	57 D	67 D	64 D	60 D	62 D	58 D	0
02	EX1-4-6-1920	79	78	68	80	70	90	76	76	0
03	EX1-PX8A	70	66	66	70	61	86	64	63	0
04	EX1-PX9	71	73	65	71	63	76	68	69	0
05	EX3-PX10A	80	73	66	80	71	96	73	73	0
06	EX3-PX10ADL	94 D	77 D	72 D	92 D	92 D	70 D	86 D	79 D	0
07	EX3-PX9A	78	75	68	75	62	82	69	72	0
08	SLCS01	72	76	73	72	65	81	70	69	0
09	STP-6	62	74	64	60	54	94	60	59	0
10	STP-6DL	0 D	0 D	0 D	0 D	0 D	0 D	0 D	0 D	0
11	STP-7	76	108	65	77	68	148 *	74	72	1
12	STP-7DL	0 D	0 D	0 D	0 D	0 D	0 D	0 D	0 D	0
13	STP-8	57	69	59	53	56	115	57	57	0
14	STP-8DL	0 D	0 D	0 D	0 D	0 D	0 D	0 D	0 D	0
15	STP-9	83	82	71	83	74	101	79	77	0
16	EX3-PX9AMS	77	74	69	76	68	85	72	73	0
17	EX3-PX9AMSD	82	76	68	80	72	98	76	78	0
18	SBLKIZ	67	71	65	63	64	47	60	62	0

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(23-120)	
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S3 (TPH)	= Terphenyl-d14	(18-137)	
S4 (PHL)	= Phenol-d5	(24-113)	
S5 (2FP)	= 2-Fluorophenol	(25-121)	
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S7 (2CP)	= 2-Chlorophenol-d4	(20-130)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

APPENDIX I

GROUNDWATER TREATMENT SYSTEM STARTUP SAMPLE DATA

TRIANGLE LABS

CASE NARRATIVE

Analysis of Samples for the Presence of

Semivolatile Hydrocarbons by

High-Resolution Gas Chromatography / Low-Resolution Mass Spectrometry

METHOD 8270A Rev. 1 (7/92)

Date : December 24, 1996

Client ID : Beazer East Inc.

TLI Project Number : 40178B

This report should only be reproduced in full. Any reproduction of this report requires permission from Triangle Laboratories, Inc.

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

Objective: Analysis of three water samples for the Method 8270 semivolatile compounds phenol, 2,4-dichlorophenol, and pentachlorophenol.

Method:

Three water samples were received by Triangle Laboratories, Inc. at 16°C and in good condition on December 20, 1996. The samples were stored in a cooler at 4°C prior to extraction. Approximately one Liter (L) of each water sample was spiked with 200 micrograms (ug) of phenol-d_5, 2,4,6-tribromophenol, and 2-fluorophenol. The water samples and associated laboratory blank were BNA extracted with methylene chloride. The sample extracts were concentrated to a final volume of 1.0 milliliters (mL) for the GC/MS analysis. The extraction and GC/MS analysis are based on the guidelines of Method 8270. The results reported relate only to the items tested.

The internal standards, 1,4-dichlorobenzene-d_4, naphthalene-d_8, and acenaphthene-d_{10} were added to the extracts such that the final internal standard concentration was 40 ug/mL immediately prior to analysis by GC/MS.

The GC/MS analysis conditions are listed below:

GC Conditions:	
Column:	J&W DB5-625, 30m x .32mm x 1μm
Program:	35C, ramp at 12C/min to 285C, hold for 2 min. ramp at 8.5C/min to 315 C, hold for 6.5 min.
Carrier Gas:	Helium
MS Conditions:	
Instrument:	HP MSD, Chemsystem and Target data systems
Scan:	35-550 amu at 1.67 scan/sec
Interface:	Capillary, Injector: 250C, Detector: 275C

Report:

Enclosed with the case narrative are the sample identification index, project summary sheets, client and TLI chain of custody sheets, wet laboratory extraction information sheets, GC/MS tracking forms, and analytical run logs. The sample identification index correlates the client sample name, TLI sample number and the analytical file name for the each sample. The project summary sheets list the concentrations of analytes detected in gray and list the estimated detection limits in parentheses for analytes which were not detected.

The data are reported as quantitation reports, chromatograms, interim reports, and spectra of detected target analytes. The quantitation report header lists the TLI project number, analysis method, instrument sample file name, and client sample name. The client project number, TLI sample number, calibration file, dilution factor, sample volume, and date received, extracted, and analyzed are also listed in the quantitation report header. The response factors used for all calculations are from the continuing calibration listed in the header. All initial and continuing

calibration data are located in the back of the data package. The concentration reported for each target analyte detected in the samples is reported in ug/L. The retention time (RT) will be listed for all internal standards and analytes which are detected. If a target analyte is not detected, it will be flagged with a "U" and a detection limit will be listed. Estimated detection limits are calculated using an area of 10.000 for all analytes which were not found in the samples. The estimated detection limits reported are the average detection limits achievable over time on an instrument type. The actual detection limit for a given compound on a given day may vary from the estimate reported. The quantitation limit for all analytes is half of the low point of the initial calibration adjusted for sample volume or dilution when appropriate. Below this point the calibration cannot be considered to be linear. Any concentrations reported at a level below the quantitation limit will be flagged with a "J" and should be considered estimated. If a target analyte is found at a level exceeding the upper calibration limit, it will be flagged with an "E" and should also be considered estimated. Any analytes flagged with a "B" on the sample topsheets were detected in the associated laboratory blank. All target analytes are quantitated against the internal standard preceding them on the target analyte list. Surrogate standards are quantitated against the internal standard with the matching internal standard reference number. For example, phenol-d_5 has 1 in the IS Ref column and would be quantitated against the internal standard which has IS1 listed in the flag column. If an internal standard area is above or below the quality control limits as defined by the continuing calibration, it will be flagged with "High" or "Low" in the flag column.

Immediately following the quantitation report are two pages which comprise the total ion chromatograms. Labeled internal and surrogate standards present in the sample have their identifications and retention time printed above their peak on the chromatogram. The chromatogram is followed by the interim report. On the interim report a $ is indicative of a surrogate standard and a * represents an internal standard. The interim report from the instrument is followed by the target spectra of detected compounds. Four spectral plots are included for each compound: a raw spectrum of the peak, a background subtracted version of the same spectrum, a library spectrum of the compound, and a plot showing the percent difference between the library spectrum and the background subtracted spectrum. Extracted ion current profiles are plotted on the right-hand side of the page showing the quantitation mass and one or two other prominent ions known to be present in target compound as they appear in the sample peak.

Results:

All samples were extracted and analyzed within the Method 8270 holding times.

All internal standard areas and surrogate standard percent recoveries were within Method 8270 quality control criteria.

Only the diluted result of sample Influent has been reported. Please be aware that target analytes present at lower concentrations may have been diluted out of it.

Sample Calculations:

Response Factor, RF = $\frac{\text{Area analyte x Amt Is}}{\text{Area IS x Amt analyte}}$

$$\text{Conc ug/L} = \frac{\text{Area analyte x Amt IS x DF}}{\text{Area IS x RF x sample volume}}$$

Where:

Amt IS = amount of internal standard = 40 ug
Amt analyte in the ccal = amount of analyte in the continuing calibration = 50 ug
DF = dilution factor
sample volume = volume of sample extracted in L

The data reported has been judged to be valid and in compliance with the guidelines of Method 8270 except as noted above. Should you have any questions about this project, please feel free to contact the Project Scientist, Walter Murray, at (919) 544-5729 extension 271.

For Triangle Laboratories , Inc.,

Report Preparation:

Sarah A. Hubbard
Report Preparation Chemist

Quality Control:

Penny A. Brock
Report Preparation Chemist

The total number of pages in this data package is 48.

TRIANGLE LABORATORIES, INC.

LIST OF CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

American Association for Laboratory Accreditation. Expires July 31, 1997. Certificate Number 0226-01. Accreditation for technical competence in Environmental Testing.(Including Waste Water, Sol/Haz Waste, Pulp/Paper, and Air Matrices) Parameters are AOX/TOX, Volatiles, Pesticides, PCB's, BNA's, and Dioxin/Furan. Method 1613 for Drinking Water.

State of Alabama, Department of Environmental Management. Expires December 31, 1997. Laboratory I.D. # 40950. Dioxin in drinking water.

State of Alaska, Department of Environmental Conservation. Expires December 21, 1997. Certificate number OS-00397. Dioxin in drinking water.

State of Arizona, Department of Health Services. Expires May 26, 1997. Certificate #AZ0423. Drinking Water for Dioxin, Dioxin in WW and S/H Waste.

State of Arkansas, Department of Pollution Control and Ecology. Expires February 14, 1997. Primary No. 94-06497. Pulp/paper, soil, water, and Hazardous Waste for Dioxin/Furan; AOX/TOX.

State of California, Department of Health Services. Expires August 31, 1997. Certificate #1922. Selected Metals in Waste Water; Volatiles, Semi-volatiles, and Dioxin/furan in WW and Sol/Haz Waste. Dioxin in drinking water.

State of Connecticut, Department of Health Services. Expires September 30, 1997. Registration # PH-0117. Dioxin in drinking water.

Delaware Health and Social Services. Expires December 31, 1996. Certificate #NC 140. Dioxin in drinking water.

Florida Department of Health and Rehabilitative Services. **Expires June 30, 1997.Dioxin in** DW. Drinking Water ID HRS# 87424. Metals, Extractable Organics (GC/MS), Pesticides/PCB's (GC) and Volatiles (GC/MS) in Environmental Samples. Environmental water ID HRS# E87411.

Hawaii Department of Health. Expires March 1, 1997. Dioxin in drinking water. "Accepted" status for regulatory purposes .

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

Idaho Department of Health and Welfare. Expires November 30, 1997. Dioxin in drinking water.

State of Kansas, Department of Health and Environment. Expires January 31, 1997. Environmental Analyses/Non potable Water and Solid and Hazardous Waste. Method 1613 for drinking water. ID #'s - Drinking water and/or pollution control - E-215. Solid or Hazardous Waste - E-1209.

Commonwealth of Kentucky, Department for Environmental Protection. Expires December 31, 1996. ID#90060. Dioxin in drinking water.

Maryland Department of Health and Mental Hygiene. Expires September 30, 1997. Certification #235. Drinking water by Method 1613A.

State of Michigan, Department of Public Health. Expires March 31, 1997. Drinking water by Method 1613.

Montana Department of Health and Environmental Services. Expires December 31, 1996. Dioxin in drinking water.

State of New Jersey, Department of Environmental Protection and Energy. Extended by state. Temporary certificate until June 30, 1997 or sooner. ID #67851. BNAs and Volatiles. Dioxin in drinking water.

State of New Mexico, Environment Department. Expires July 31, 1997. Dioxin in drinking water.

New York State Department of Health. Expires March 31, 1997. ID #11026. Environmental Analyses of non-potable Water, Solid and Hazardous Waste. Method 1613 in DW.

State of North Carolina, Department of Environment Health and Natural Resources Expires December 31, 1996. Certificate # 37751. Dioxin in drinking water.

State of North Carolina, Department of Environment, Health, and Natural Resources, Division of Environmental Management. Expires December 31, 1997. Certificate # 485. Metals, pesticides & PCBs, semi-volatiles and volatiles; TCLP.

North Dakota State Department of Health and Consolidated Laboratories. Expires December 31, 1996. Certificate # R-076. Effective October 4, 1993. Dioxin in drinking water.

Oklahoma Department of Environmental Quality. Expires May 31, 1997. Laboratory #9612. Dioxin by 1613A, 8290 and 8280.

Revised December 4., 1996 apw

Printed December 4, 1996

State of South Carolina, Department of Health and Environmental Control. Expires April 1, 1997. Certificate number #99040001 (drinking water). Expires August 31, 1997. Certificate number #99040002 (other parameters). Dioxin/Furans. BNA, Volatiles, and PCBs/pesticides under Clean Water Act. 2,3,7,8-TCDD for Drinking Water, and Organic extractables for Solid and Hazardous Waste.

State of Tennessee. Department of Environment and Conservation. Expires February 5, 1999. ID #02992. Method 1613 Drinking water only.

U.S. Department of Agriculture Soil Permit. Expires September 30, 2001. Permit No. S-3790 Revised. Under the authority of the Federal Plant Pest Act, permission is granted to receive foreign soil samples for use in laboratory analysis.

U.S. Army Corps of Engineers. Expires November 30, 1997. Validated to perform methods 8280 & 8290 for Lockbourne Landfill Site Investigation, Defense Distribution Depot Projects, and assorted projects for the USACE North Pacific Division Laboratory.

U.S. EPA Region V. Expires November 14, 1999. Dioxin in drinking water.

U.S. EPA Region VIII, for the State of Wyoming. Expires November 13, 1997. Dioxin in drinking water.

State of Utah, Department of Health. Expires December 31, 1997. Certificate Number E-166. Certification for the following parameters: Semi-Volatiles and Volatiles under RCRA; Volatiles under Clean Water Act; Dioxin/furans by Method 8280; Drinking water for Dioxin by Method 1613; Metals including Mercury and Microwave Digestion.

Commonwealth of Virginia, Department of General Services, Division of Consolidated Laboratory Services. Expires June 30, 1997. ID # 00341. Dioxin in drinking water.

State of Washington, Department of Ecology. Expires September 11, 1997. Lab Accreditation Number C067. Scope of Accreditation applies to water analyses for Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans, BNA Extr (Semivolatile) Organics and Purgeable (Volatile) Organics.

State of Washington, Department of Health. Expires April 30, 1997. Dioxin in drinking water.

State of West Virginia, Department of Health. Expires December 31, 1996. Certificate No. 9923(C). Dioxin in drinking water.

State of Wisconsin, Department of Natural Resources. Expires June 30, 1997. Laboratory ID Number 999869530. Certification for the following categories of Organics: Purgeable, Base/Neutral, Acid, PCBs, and Dioxin.

Expires November 14, 1999. Laboratory ID 999869530. Dioxin in drinking water.

PHARMACEUTICAL

Drug Enforcement Agency (DEA). Expires November 30, 1997. Registration number RT01195835. Controlled substance registration for schedules 1,2,3,3N,4,5.

N.C. Department of Human Resources. Expires October 31, 1997. Registration number NC-PT 0000 0031. North Carolina controlled substances registration. Application submitted for renewal.

Food & Drug Administration (FDA) Registration. Expires July 1997. ID #s 001500 1053481. Annual registration of drug establishment. Annual registration of drug establishment.

OTHER

Clinical Laboratory Improvement Amendments (CLIA) Registration. Expires May 30, 1997. ID # 34D0705123. Department of Health & Human Services, Health Care Financing Administration.

U.S. EPA Large Quantity Hazardous Waste Generator. No expiration date. EPA ID #NCD982156879. Permit indicates that the laboratory is a large generator of hazardous waste.

North Carolina Radioactive Materials License. Expires April 30 1998. License No. 032-0954-1. License authorizes the licensee to receive, acquire, own, possess, transfer, import and use such radioactive materials as designated.

North Carolina General License for Radiation Protection. No. expiration date. License No. 032-875-OG. The general license applies only to radioactive material contained in devices which have been manufactured and labeled in accordance with specific requirements.

Triangle Laboratories of RTP

Sample Identification Index for Project: 40178B

Client Id:	TLI Id:	File Name:
CA301	152-19-2B	ZQ609
EFFLUENT	152-19-3B	ZQ608
INFLUENT	152-19-1B	ZQ614
SBLK122296	SBLK122296	ZQ613

Triangle Laboratories of RTP

Project Summary for Project 40178B

Client ID:	CA301	EFFLUENT	INFLUENT	SBLK122296
Filename :	ZQ609	ZQ608	ZQ614	ZQ613
TLI Id :	152-19-2B	152-19-3B	152-19-1B	SBLK122296
Matrix :	WATER	WATER	WATER	WATER
Units :	ug/L	ug/L	ug/L	ug/L
Phenol	(0.29)	(0.29)	(1.45)	(0.30)
2,4-Dichlorophenol	(0.40)	(0.42)	(2.01)	(0.43)
Pentachlorophenol	(0.85)	(0.81)	381.45	(0.84)

( )-Estimated Detection Limit

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax (919) 544-5491

COPY MJ 12/20/96

CLIENT CHAIN OF CUSTODY **SAMPLER'S SIGNATURE** _____ **Quote 1100002377**

From: Beazer East Inc.
436 - 7th Avenue
Pittsburgh, PA 15219

Project: water samples week of 12/16.

(BEA02 /WM)

Contact: Jim Cook
Phone: 412/227-2092
Fax: 412/373-5242
P.O.#: _____

If the data will be reported to a state agency, which one? ____

Total Number of Containers: 9

Analysis Wanted:
2,3,7,8 TCDD
PHENOL
PENTACHLOROPHENOL
2-4 DICHLOROPHENOL

STA NO.	Date	Time	Comp	Grab	Sample Id.#	Sample Amt.						Remarks
INFLUENT	12/20	15:10		X	INFLUENT	3 LITERS						7 DAY TURNAROUND
BETWEEN CARBON	12/20	15:15		X	CA 301	3 LITERS						7 DAY TURNAROUND
EFFLUENT	12/20	15:20		X	EFFLUENT	3 LITERS						7 DAY TURNAROUND

Relinquished By/Sign.	Date/Time	Received By/Sign.	Relinquished By/Sign.	Date/Time	Received By/Sign.
(Mike Taylor)	12/20 16:15				
Relinquished By/Sign.	**Date/Time**	**Received By/Sign.**	**Relinquished By/Sign.**	**Date/Time**	**Received By/Sign.**

Received for Laboratory By/Signature	Date/Time	Send Samples to:
	12/20/96 16:15	Triangle Laboratories, Inc. Attn: Sample Custodian 801 Capitola Drive Durham, NC 27713 USA Phone: (919) 544-5729 • Fax: (919) 544-5491

Custody Seal : Absent
Chain of Custody : Present
Sample Tags : Present
Sample Tag Numbers: Listed
SMO Forms : N/A

Sample Seals: Present
Accept.Cond.: YES

TLI Project Number : 40178
Client: BEA02 : Beazer East Inc.
Date Received : 12/20/96 : By J Guerth

Book : 152
Page : 19

Ice Chest ICE/ICE PACKS Temp 16.0 C : Carrier and Number : MIKE TAYLOR

TLI Number mR/H:CPM	Client ID	Matrix Location	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To ARCHIVE Date/Init	DISPOSED Date/Init
152-19-1A	INFLUENT	Water	USED							
		C01								
152-19-1B	INFLUENT	Water			12/22/96 MK	used 12/22/96				
		C01								
152-19-1C	INFLUENT	Water								
		C01								
152-19-2A	CA301	Water	USED							
		C01								
152-19-2B	CA301	Water			12/22/96 MK	used 12/22/96				
		C01								
152-19-2C	CA301	Water								
		C01								
152-19-3A	EFFLUENT	Water	USED							
		C01								
152-19-3B	EFFLUENT	Water			12/22/96 MK	used 12/22/96 MK				
		C01								
152-19-3C	EFFLUENT	Water								
		C01	12/21/96							

Receiving Remarks: There was a fresh bag of ice and ice packs in the cooler, but samples still read +16C.

Archive Remarks:

TRIANGLE LABORATORIES, INC.--LOG IN RECORD/CHAIN OF CUSTODY--REVISED 06/13/1996

TRIANGLE LABORATORIES, INC.
Wet Lab Extraction and Observations
Project: 40178-B

Sample #	crd	TLI_Number..	Customer.Sample.Id.....	Init. pH...	NaOH mL...	Adj. pH.1.	H2SO4 mL...	Adj. pH.2.	Appearance.	Color.....	Odor...	Vol.	Entered.By.....	Date....	Time....	S
000		TLI Blank	SBLK (H2O)	7.00	1.2	12.00	0.4	2.00	CLEAR	COLORLESS	NONE	1000	KABALA	12/22/96	15:49:21	F
001		152-19-1B	INFLUENT	7.00	2.0	12.00	1.0	2.00	CLEAR	COLORLESS	NONE	1000	KABALA	12/22/96	15:49:25	F
002		152-19-2B	CA301	7.00	2.0	12.00	1.0	2.00	CLEAR	COLORLESS	NONE	1000	KABALA	12/22/96	15:49:27	F
003		152-19-3B	EFFLUENT	7.00	2.0	12.00	1.0	2.00	CLEAR	COLORLESS	NONE	1000	KABALA	12/22/96	15:49:32	F
004		TLI LCS	TLI LCS	7.00	1.2	12.00	0.4	2.00	CLEAR	COLORLESS	NONE	1000	KABALA	12/22/96	15:49:36	F
005		TLI LCSD	TLI LCSD	7.00	1.2	12.00	0.4	2.00	CLEAR	COLORLESS	NONE	1000	KABALA	12/22/96	15:49:37	F

*** End of Report ***

TRIANGLE LABORATORIES, INC.

Sample Preparation Tracking & Management Form

Project: 40178B

Client: Beazer East Inc. (BEA02)

Sample Information

Method: 8270

Solvent/Acids(): MeCl2

Extraction Date: 12/22/96

Lot: 966025 MK MK MK MK

Sample # crd	TLI SAMPLE ID / CLIENT SAMPLE ID	Sample Wgt g / Vol ml	Final Volume ml	4410 Exp. 4/13/97 8270 ACID SURR 12 2296 200 ug/ml 1000 µl	4409 Exp. 5/07/97 8270 BN SURR. SPIKE 12 2296 100 ug/ml 1000 µl	4412 Exp 6/04/97 8270 ACID QC check ~~12/22/96~~ 100 ug/ml 1000 µl	4413 Exp. 3/28/97 8270 BN QC check ~~12/22/96~~ 100 ug/ml 1000 µl			
B 000	TLI Blank / SBLK (H2O)	1000	1	ES	ES					
B 001	152-19-1B / INFLUENT			ES	ES					
B 002	152-19-2B / CA301			ES	ES					
B 003	152-19-3B / EFFLUENT			ES	ES					
B 004	TLI LCS / TLI LCS			ES	ES	ES	ES			
B 005	TLI LCSD / TLI LCSD			ES	ES	ES	ES			

Comments:

REV 07/26/93 (PSTMF 7)

40178-D
O-S

OWL SAMPLE EXTRACTION AND CLEANUP TRACKING FORM
625/8270 IN A SEPARATORY FUNNEL WATER EXTRACTION

S.NO.	SOP#	STEP DESCRIPTION
All	OWL-106	Prep glassware MK 12/22/96
"	OWL-106	Measure 1 liter of sample into a separatory funnel MK 12/22/96
"	OWL-106	Check and record pH MK 12/22/96
"	DSP-128	Spike appropriate surrogates MK/ES 12/22/96
"	DSP-128	Spike appropriate QC spikes, if needed
"	OWL-106	Adjust pH to >11 with 10 N NaOH MK 12/22/96
"	OWL-106	Extract 3 X 60 mL of CH2Cl2 MK 12/22/96
"	OWL-106	Filter through Na2SO4 and collect in an appropriate container MK 12/22/96
"	OWL-106	Adjust pH to <2 with 50% H2SO4 MK 12/22/96
"	OWL-106	Extract 3 X 60 mL of CH2Cl2 MK 12/22/96
"	OWL-106	Filter through Na2SO4 and collect in an appropriate container MK 12/22/96 MK 12/22/96
"	OWL-111	K/D the BN and acid fractions separately to about 10 mL MK 12/22/
"	OWL-111	Vialize both separately and rinse 2 X 0.5 mL of CH2Cl2 MK
"	OWL-111	N2 both -> 1 mL
"	---	Relinquish both to GC/MS 12/23/96

TRIANGLE LABORATORIES, INC.
Transfer Chain-of-Custody Form
Project 40178-B

Transfer From: OWLS5 To: OMSSV

	Initials..	Date.....	Time...
Released by:	MK	12/23/96	9:30 AM
Accepted by:	DD	12/23/96	09:30

MILES.ID.....		TLI_No.....	Cust.Id.....
40178-B	-000	TLI Blank	SBLK (H2O)
40178-B	-001	152-19-1B	INFLUENT
40178-B	-002	152-19-2B	CA301
40178-B	-003	152-19-3B	EFFLUENT
40178-B	-004	TLI LCS	TLI LCS
40178-B	-005	TLI LCSD	TLI LCSD

XfrCOC (Rev 11/01/94)

Additional comments or instructions:

SEMIVOLATILE GC/MS TRACKING FORM

TL-RTP Project #: 40176B

MATRIX: MM5 PUF (Water) Soil Other _____

METHOD: (8270) 625 CLP

ANALYTE LIST: Table 2 TCLP 625 CLP CAA/PAP PAH CB/CP (Other) Phenol, PCP, 2,4-DCP

ICAL Name: ICAL ZD18

Date	Time	TLRTP ID	Sample ID	File Name	Comments
12/23/96	0731	3988	DFTPP	ZQ604	
	0749	4269	SSTD050	ZQ605	
	1023	152-19-3B	EFFLUENT	ZQ608	
	1106	152-19-2B	CA301	ZQ609	
	1233	—	LCS	ZQ611	
	1317	—	LCS DUP	ZQ612	
	1401	—	~~EFF~~ SBIK 122296	ZQ613	
	1443	152-19-1B	INFLUENT	ZQ614	

TRIANGLE LABORATORIES OF RTP, INC.

TRIANGLE LABORATORIES OF RTP, INC. RUN LOG

MS#	COLUMN TYPE	COLUMN #	ANALYSIS	ACQ METHOD	GC METHOD	FIND DB'S	OTHER
2	DB5 625	458196IJ		cclust.m		1.	
						2.	

EXTRACT / SAMPLE VOLUME 100 uL / mL

DATE	TIME	PROJECT #	SAMPLE #	CLIENT SAMPLE ID	FILENAME	OPER	BACKUP NET	BACKUP ARC	PROC	pH	COMMENTS
12/17/96	1620	40026B	150.66.1	POND DNA	20545	DD			DD		
12/17/96	1703	40026B	—	LCS	20546	DD			DD		
12/17/96	1747	40026B	—	LCS DUP	20547	DD			DD		
12/17/96	1830	91403B	XAD QC	3-4-2A	20548	DD			DD		
12/18/96	0755	—	3988	DFTPP	20549	DD			DD		passed
12/18/96	0812	—	4269	SSTD050	20550	DD			DD		failed PCP >30%
12/18/96	0905	—	4266	SSTD160	20551	DD			DD		Di-n-butylphthalate saturated
12/18/96	0941	—	4267	SSTD120	20552	DD			DD		
12/18/96	1024	—	4268	SSTD080	20553	DD			DD		
12/18/96	1155	—	3988	DFTPP	20554	DD			DD		passed

Dat 12/23/96

PAGE #	INTERNAL STANDARD	SURROGATE STANDARD	ANALYTE STANDARD
17	41126 Exp 12/20/96 [illegible]		

TRIANGLE LABORATORIES OF RTP, INC. RUN LOG

15

MS#	COLUMN TYPE	COLUMN #	ANALYSIS	ACQ METHOD	GC METHOD	FIND DB'S	OTHER
2	DB5-625	458196IJ		cclist.m		1.	
						2.	

EXTRACT / SAMPLE VOLUME 100 (uL) mL

DATE	TIME	PROJECT #	SAMPLE #	CLIENT SAMPLE ID	FILENAME	OPER	BACKUP NET	BACKUP ARC	PROC	pH	COMMENTS
12/18/96	1215 ~~1456~~	[illegible] 12/19/96	4266	SSTD160	20555	DD			DD		~~Diluted 2X~~ [illegible] 12/19/96
12/18/96	1252	-	4267	SSTD120	20556	DD			DD		
12/18/96	1335	-	4268	SSTD080	20557	DD			DD		
12/18/96	1418	-	4269	SSTD050	20558	DD			DD		
12/18/96	1502	-	4270	SSTD020	20559	DD			DD		
12/18/96	1545	-	"	SSTD010	20560	DD			DD		Curve passed A1625.
12/18/96	1629	-	-	SOLVENT BLANK	20561	DD			DD		
12/18/96	1713	36994A	-	SBLK 121896	20562	DD			DD		
12/18/96	1756	91402	-	SBLK 121496 (HPLC H2O)	20563	DD			DD		
12/18/96	1839	91402	-	LCS (HPLC WATER)	20564	DD			DD		

AL 12/23/96

INTERNAL STANDARD	SURROGATE STANDARD	ANALYTE STANDARD
4417A Exp 6/5/97		

PAGE 12

TRIANGLE LABORATORIES OF RTP, INC. RUN LOG

MS#	COLUMN TYPE	COLUMN #	ANALYSIS	ACQ METHOD	GC METHOD	FIND DB'S	OTHER
2	DB-624	4581961J		ccl4ot.m		1.	
						2.	

EXTRACT / SAMPLE VOLUME 100 (uL) mL

DATE	TIME	PROJECT #	SAMPLE #	CLIENT SAMPLE ID	FILENAME	OPER	BACKUP NET	BACKUP ARC	PROC	pH	COMMENTS
12/20/96	2017	—	—	SOLVENT BLANK	ZQ595	DD			DD		
12/20/96	2100	40097B	—	SPIK 121896	ZQ596	DD			DD		
12/20/96	2144	40097B	151.37.1A	SAMPLE 1 (SETIBA)	ZQ597	DD			DD		
12/20/96	2230	40097B	151.37.2C	SAMPLE 2 (EFFLUENT)	ZQ598	DD			DD		
12/20/96	2313	40097B	151.37.3C	SAMPLE 3B (INTERNO)	ZQ599	DD			DD		
12/20/96	2356	40097B	151.37.1A	SAMPLE 1 (SETIBA)	ZQ600	DD			DD		
12/21/96	0038	40097B	151.37.2C	SAMPLE 2 (EFFLUENT)	ZQ601	DD			DD		
12/21/96	0121	40097B	151.37.3C	SAMPLE 3B (INTERNO)	ZQ602	DD			DD		
12/23/96	0717	—	3988	DFTPP	ZQ603	DD			DD		carryover from sample reanalysis
12/23/96	0731	—	3988	DFTPP	ZQ604	DD					

12/23/96

PAGE #	22		INTERNAL STANDARD	SURROGATE STANDARD	ANALYTE STANDARD
			4417A Exp 12/6/97 Std @834 µg/ml		

SS DD 12/23/96

TRIANGLE LABORATORIES OF RTP, INC. RUN LOG

MS#	COLUMN TYPE	COLUMN #	ANALYSIS	ACQ METHOD	GC METHOD	FIND DB'S	OTHER
2	DB5626	4581961J		cclwt.m		1.	
						2.	

EXTRACT / SAMPLE VOLUME 100 uL / mL

DATE	TIME	PROJECT #	SAMPLE #	CLIENT SAMPLE ID	FILENAME	OPER	BACKUP NET	BACKUP ARC	PROC	pH	COMMENTS
12/23/96	EE 3rd 12/23/96 0849	—	7264	SS10050	ZQ605	DD			mp		passed
12/23/96	0844	—	—	SOLVENT BLANK	ZQ606	DD			Jcl		
12/23/96	3947	40178	—	SBIK 122296	ZQ607	Jcl			Jcl		Is low
12/23/96	1023	40178	152-19-3B	EFFLUENT	ZQ608	Jcl			Jcl		
12/23/96	1106	40178	152-19-2B	CA301	ZQ609	Jcl			Jcl		
12/23/96	1150	40178	152-19-1B	INFLUENT	ZQ610	Jcl			Jcl		RP outside cal range
12/23/96	1233	40178	—	LCS	ZQ611	Jcl			Jcl		
12/23/96	1317	40178	—	LCS DUP	ZQ612	Jcl			Jcl		
12/23/96	1401	40178	—	SBIK 122296	ZQ613	Jcl			Jcl		
12/23/96	1443	40178	152-19-1B	INFLUENT	ZQ614	Jcl			Jcl		

Jcl 12/23/96

			INTERNAL STANDARD	SURROGATE STANDARD	ANALYTE STANDARD
#	23		4417A Exp 6/5/97 5 µl @ 834 ng/mL		

Triangle Laboratories of RTP

LCS Summary of Results

LCS File : ZQ611	LCS DUP File: ZQ612
Date : 12/24/96	

Compound	LCS %REC	DUP %REC	RPD
Phenol	37	31	18
2,4-Dichlorophenol	85	78	9
Pentachlorophenol	102	97	5

Beazer East Inc.

Project Number: 40178B
Sample File: ZQ611

Method 8270A WATER
Sample ID: LCS

Client Project: Water Sampling	Date Received: / /	Response File: ZQ605
TLI ID: LCS	Date Extracted: 12/22/96	
	Date Analyzed : 12/23/96	
Sample Vol.: 1.0 L	Dilution Factor: 1.00	

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
1,4-Dichlorobenzene-d_4		IS 1	9.25		
Phenol	36.73		8.60		10
Naphthalene-d_8		IS 2	11.75		
2,4-Dichlorophenol	84.92		11.47		10
Acenaphthene-d_{10}		IS 3	15.35		
Phenanthrene-d_{10}		IS 4	18.42		
Pentachlorophenol	102.35		18.03		10

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
2-Fluorophenol	78.40	6.83	1	39
Phenol-d_5	55.62	8.57	1	28
2,4,6-Tribromophenol	147.25	16.99	3	74

Reviewed by Sarah A Hubbard Date 12/24/96

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
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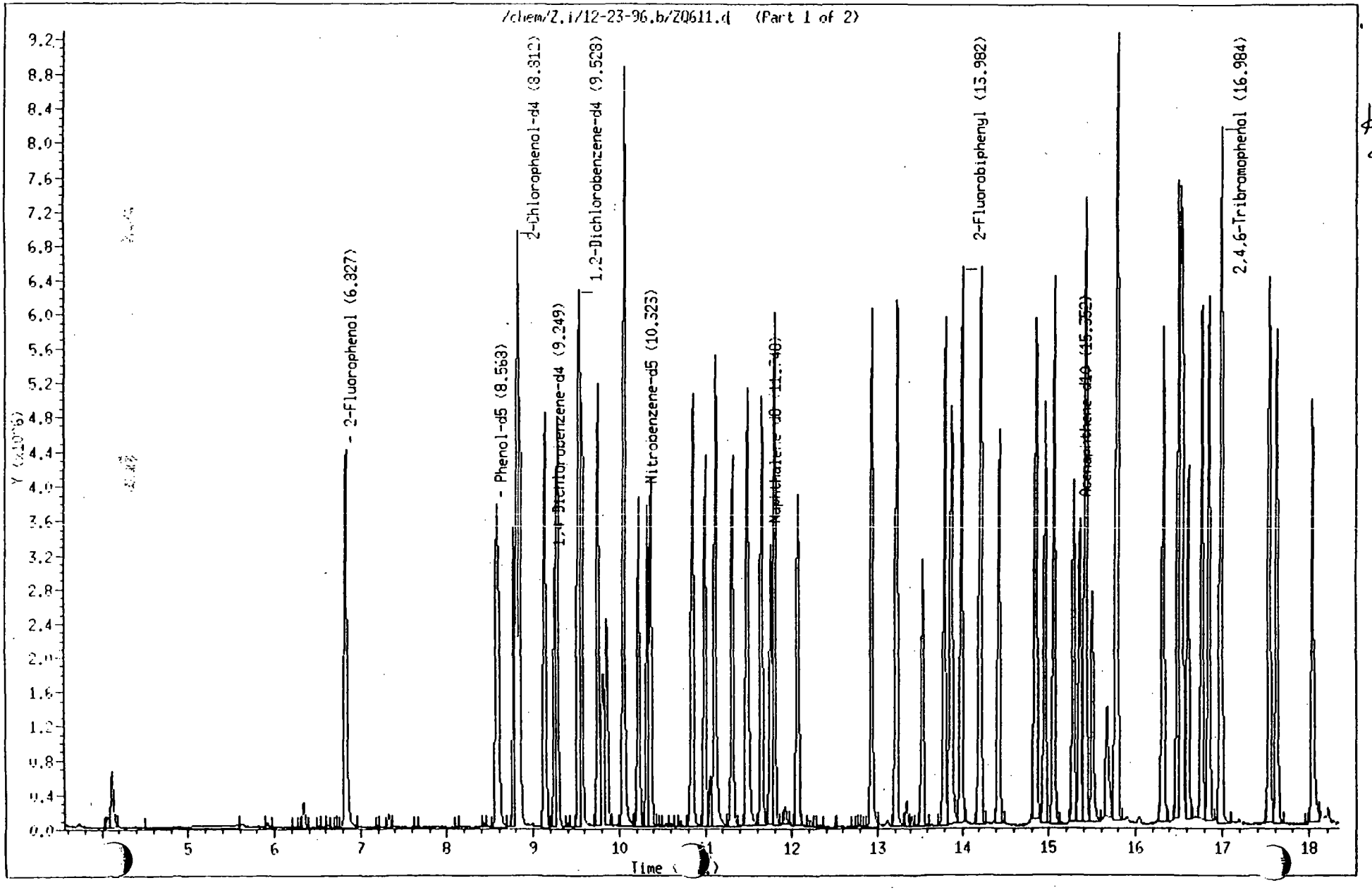
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 18:22 12/23/1996

Data File: /chem/Z.i/12-23-96.b/ZQ611.d
Date : 23-DEC-96 12:33
Instrument : Z.i
Sample ID : LCS
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32

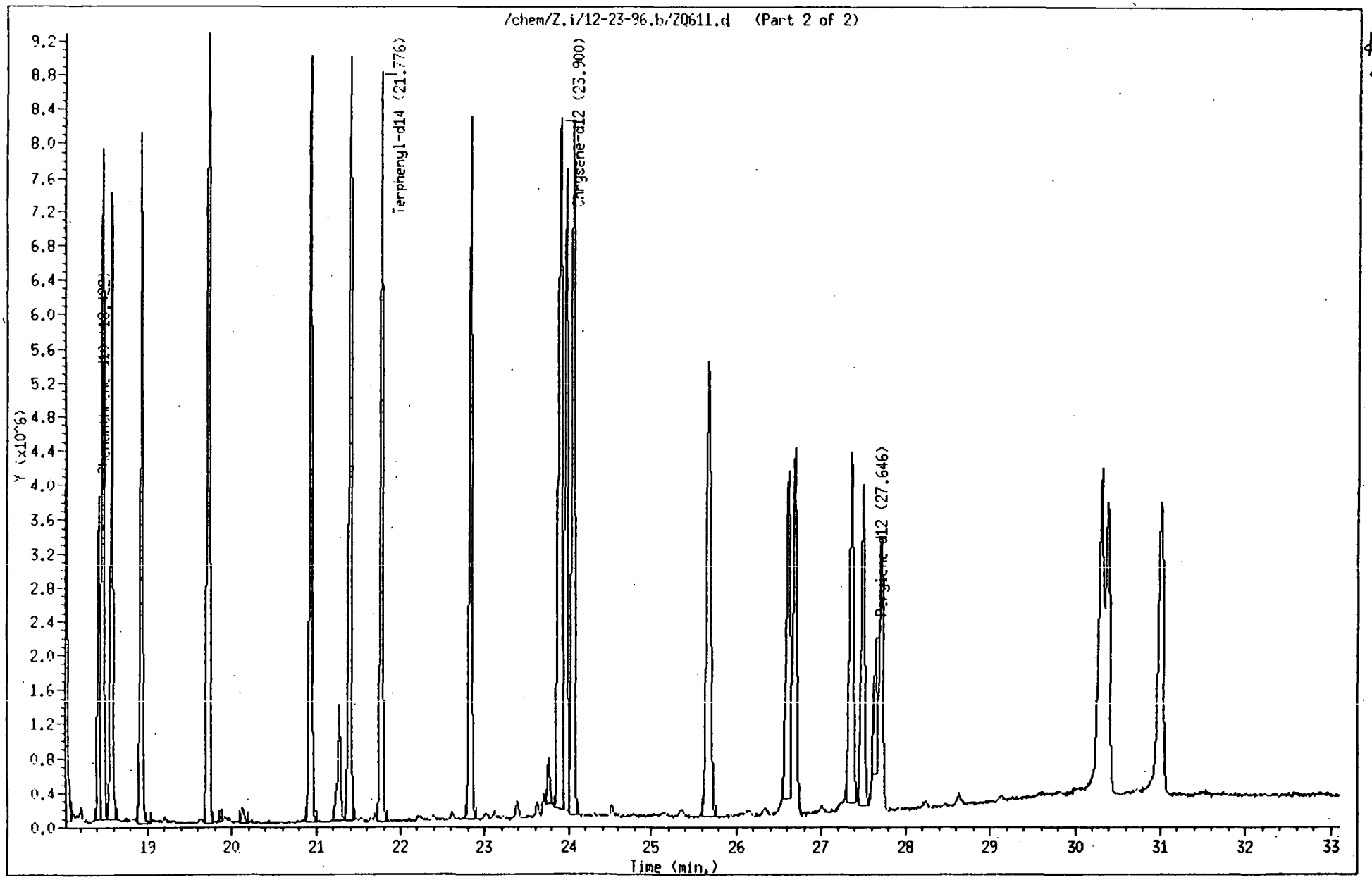


data review 23
SAH 12/23/94

Data File : /chem/Z.i/12-23-96.b/ZQ611.d
Date : 23-DEC-96 12:33
Instrument : Z.i
Sample ID : LCS
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32



dilution 2
SA# 12/23/96

Triangle Laboratories of RTP, Inc.

SEMI-VOLATILE QUANTITATION REPORT

Data file : /chem/Z.i/12-23-96.b/ZQ611.d
Lab. Id. : 40178B
Inj Date : 23-DEC-96 12:33 Autotune Date: 18-Dec-96 11:54:5
Operator : TS Inst ID: Z.i
Smp Info : LCS
Misc Info :
Comment :
Method : /chem/Z.i/12-23-96.b/cclist.m
Meth Date : 23-Dec-1996 08:39 target
Cal Date : 23-DEC-1996 07:49 Cal File: ZQ605.d
Als bottle: 5
Dil Factor: 1.000 Target Version: Target 2.20
Integrator: HP RTE Compound Sublist: phdcppcp.sub
Sample Type: WATER

					CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT (REL RT)	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
*	1 1,4-Dichlorobenzene-d4	152.00	9.249(1.000)	860263	40.00	
*	2 Naphthalene-d8	136.00	11.748(1.000)	2630788	40.00	
*	3 Acenaphthene-d10	164.00	15.352(1.000)	1656718	40.00	
*	4 Phenanthrene-d10	188.00	18.422(1.000)	3084246	40.00	
*	5 Chrysene-d12	240.00	23.914(1.000)	2329653	40.00	
*	6 Perylene-d12	264.00	27.646(1.000)	2440949	40.00	
$	7 2-Fluorophenol	112.00	6.827(0.738)	2404454	78.43	78.43
$	8 Phenol-d5	99.00	8.568(0.926)	1999903	55.63	55.63
$	9 2-Chlorophenol-d4	132.00	8.812(0.953)	3404139	119.33	119.33
$	10 1,2-Dichlorobenzene-d4	152.00	9.535(1.031)	1386281	67.35	67.35
$	11 Nitrobenzene-d5	82.00	10.323(0.879)	2133641	74.52	74.52
$	12 1,3,5-Trichlorobenzene-d3	Compound Not Detected.				
$	13 1,4-Dibromobenzene-d4	Compound Not Detected.				
$	14 2-Fluorobiphenyl	172.00	13.982(0.911)	3838751	72.35	72.35
$	15 2,4,6-Tribromophenol	329.80	16.991(1.107)	1908925	147.33	147.33
$	16 Anthracene-d10	Compound Not Detected.				
$	17 Pyrene-d10	Compound Not Detected.				
$	18 Terphenyl-d14	244.00	21.776(0.911)	5442135	95.90	95.90
	22 Phenol	94.00	8.597(0.930)	1254556	36.74	36.74
	40 2,4-Dichlorophenol	162.00	11.475(0.977)	1999461	84.90	84.90
	72 Pentachlorophenol	266.00	18.033(0.979)	1286416	102.28	102.28

data review
SAH 12/23/96

Beazer East Inc.

Project Number: 40178B
Sample File: ZQ612

Method 8270A WATER
Sample ID: LCS DUP

Client Project: Water Sampling
TLI ID: LCSDUP

Date Received: / /
Date Extracted: 12/22/96
Date Analyzed : 12/23/96

Response File: ZQ605

Sample Vol.: 1.0 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
1,4-Dichlorobenzene-d_4		IS 1	9.25		
Phenol	31.36		8.60		10
Naphthalene-d_8		IS 2	11.75		
2,4-Dichlorophenol	77.80		11.48		10
Acenaphthene-d_{10}		IS 3	15.35		
Phenanthrene-d_{10}		IS 4	18.42		
Pentachlorophenol	96.89		18.03		10

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
2-Chlorophenol	78.82	6.83	1	39
Phenol-d_5	54.15	8.57	1	27
2,4,6-Tribromophenol	157.31	16.99	3	79

Reviewed by Sarah A Hubbard Date 12/24/96

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 18:22 12/23/1996

Data File: /chem/Z.i/12-23-96.b/ZQ612.d
Date : 23-DEC-96 13:17
Instrument : Z.i
Sample ID : LCS DUP
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32

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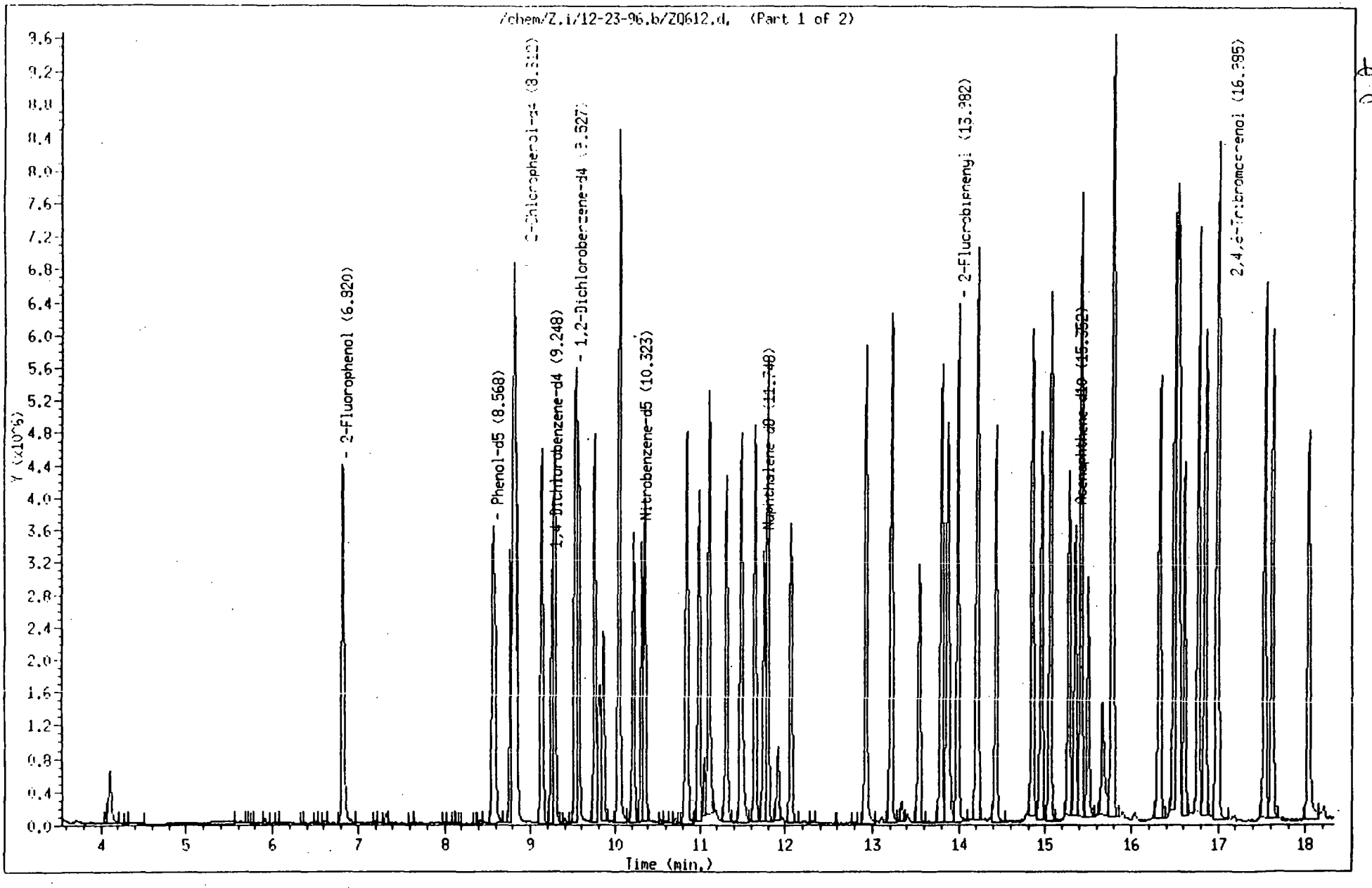
Data review
SWH 12/23/96

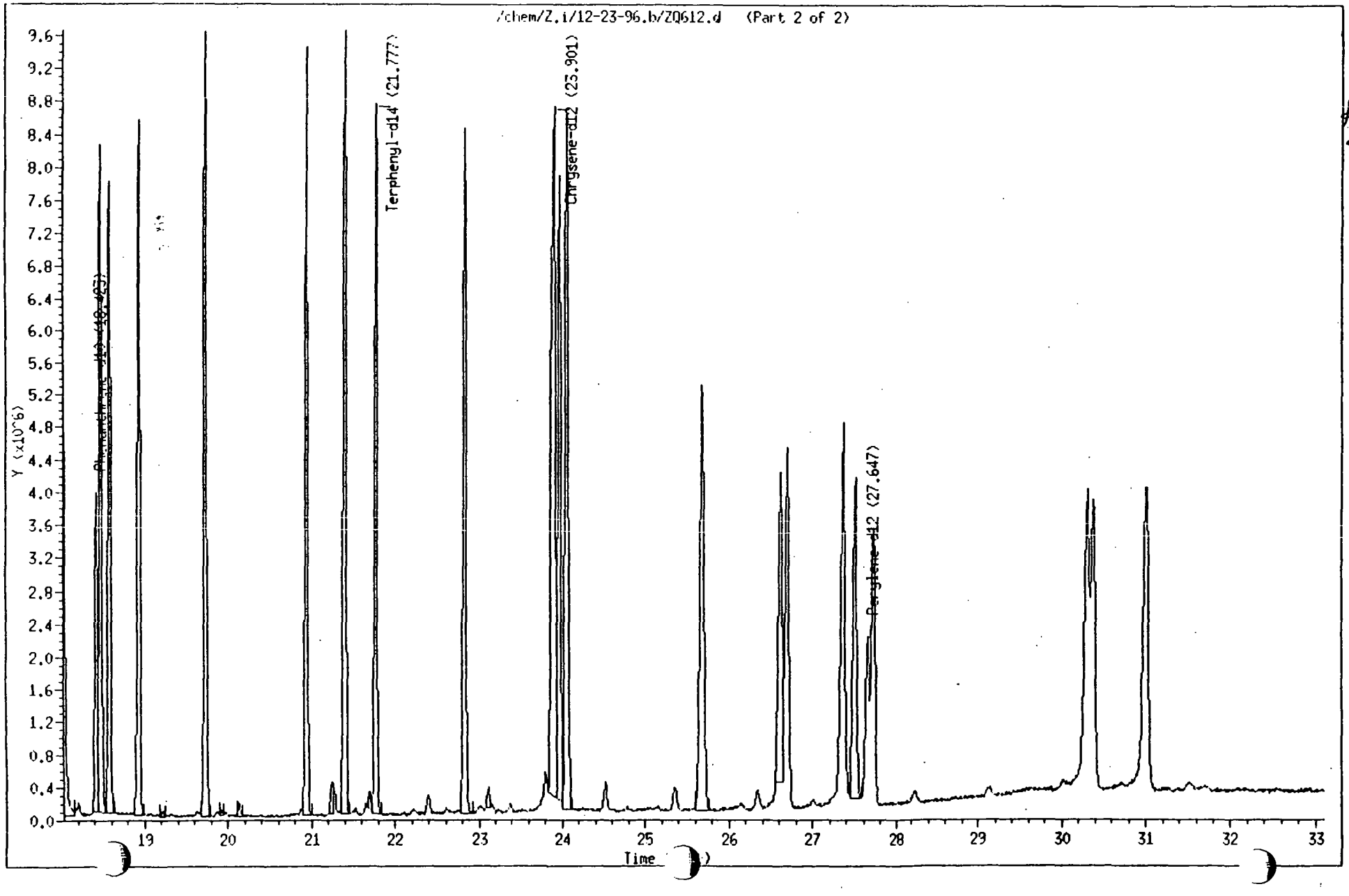


Data File: /chem/Z.i/12-23-96.b/ZQ612.d
Date : 23-DEC-96 13:17
Instrument : Z.i
Sample ID : LCS DUP
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32

25



data review
sa# 12/23/96

Triangle Laboratories of RTP, Inc.

SEMI-VOLATILE QUANTITATION REPORT

Data file : /chem/Z.i/12-23-96.b/ZQ612.d
Lab. Id. : 40178B
Inj Date : 23-DEC-96 13:17 Autotune Date: 18-Dec-96 11:54:5
Operator : DD Inst ID: Z.i
Smp Info : LCS DUP
Misc Info :
Comment :
Method : /chem/Z.i/12-23-96.b/cclist.m
Meth Date : 23-Dec-1996 08:39 target
Cal Date : 23-DEC-1996 07:49 Cal File: ZQ605.d
Als bottle: 6
Dil Factor: 1.000 Target Version: Target 2.20
Integrator: HP RTE Compound Sublist: phdcppcp.sub
Sample Type: WATER

		Compounds	QUANT SIG MASS	RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
*	1	1,4-Dichlorobenzene-d4	152.00	9.248(1.000)	855177	40.00	
*	2	Naphthalene-d8	136.00	11.748(1.000)	2721328	40.00	
*	3	Acenaphthene-d10	164.00	15.352(1.000)	1627407	40.00	
*	4	Phenanthrene-d10	188.00	18.423(1.000)	3056943	40.00	
*	5	Chrysene-d12	240.00	23.915(1.000)	2218051	40.00	
*	6	Perylene-d12	264.00	27.647(1.000)	2453207	40.00	
$	7	2-Fluorophenol	112.00	6.827(0.738)	2403027	78.85	78.85
$	8	Phenol-d5	99.00	8.568(0.926)	1935623	54.16	54.16
$	9	2-Chlorophenol-d4	132.00	8.812(0.953)	3358441	118.43	118.43
$	10	1,2-Dichlorobenzene-d4	152.00	9.535(1.031)	1216596	59.46	59.46
$	11	Nitrobenzene-d5	82.00	10.315(0.878)	1979209	66.83	66.83
$	12	1,3,5-Trichlorobenzene-d3	Compound Not Detected.				
$	13	1,4-Dibromobenzene-d4	Compound Not Detected.				
$	14	2-Fluorobiphenyl	172.00	13.982(0.911)	3924225	75.30	75.30
$	15	2,4,6-Tribromophenol	329.80	16.992(1.107)	2003287	157.40	157.40
$	16	Anthracene-d10	Compound Not Detected.				
$	17	Pyrene-d10	Compound Not Detected.				
$	18	Terphenyl-d14	244.00	21.777(0.911)	5517483	102.12	102.12
	22	Phenol	94.00	8.597(0.930)	1064721	31.37	31.37
	40	2,4-Dichlorophenol	162.00	11.475(0.977)	1894852	77.78	77.78
	72	Pentachlorophenol	266.00	18.034(0.979)	1206946	96.82	96.82

data review
sah 12/23/96

Beazer East Inc.

Project Number: 40178B
Sample File: ZQ609

Method 8270A WATER
Sample ID: CA301

Client Project: Water Sampling	Date Received: 12/20/96	Response File: ZQ605
TLI ID: 152-19-2B	Date Extracted: 12/22/96	
	Date Analyzed : 12/23/96	

Sample Vol.: 1.0 L Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
1,4-Dichlorobenzene-d_4		IS 1	9.25		
Phenol		U		0.29	10
Naphthalene-d_8		IS 2	11.74		
2,4-Dichlorophenol		U		0.40	10
Acenaphthene-d_{10}		IS 3	15.34		
Phenanthrene-d_{10}		IS 4	18.42		
Pentachlorophenol		U		0.85	10

Surrogate Summary	Amount (ng)	RT	IS Ref	%REC
2-Fluorophenol	69.54	6.82	1	35
Phenol-d_5	44.47	8.57	1	22
2,4,6-Tribromophenol	139.61	16.98	3	70

Reviewed by Sarah A Hubbard Date 12/24/96

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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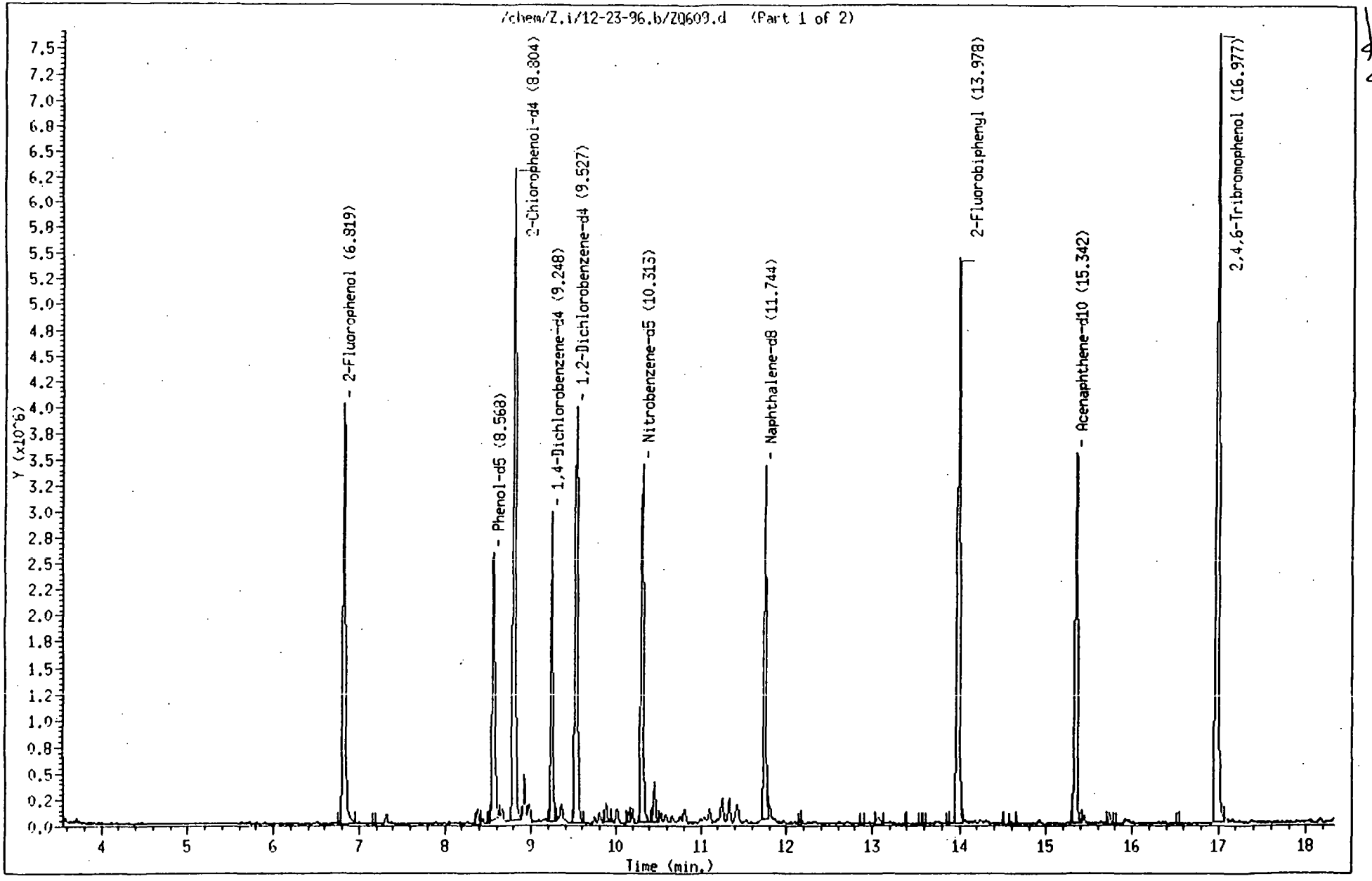
Savar v3.5
Printed: 18:22 12/23/1996

Data File: /chem/Z.i/12-23-96.b/ZQ609.d
Date : 23-DEC-96 11:06
Instrument : Z.i
Sample ID : CA301
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32

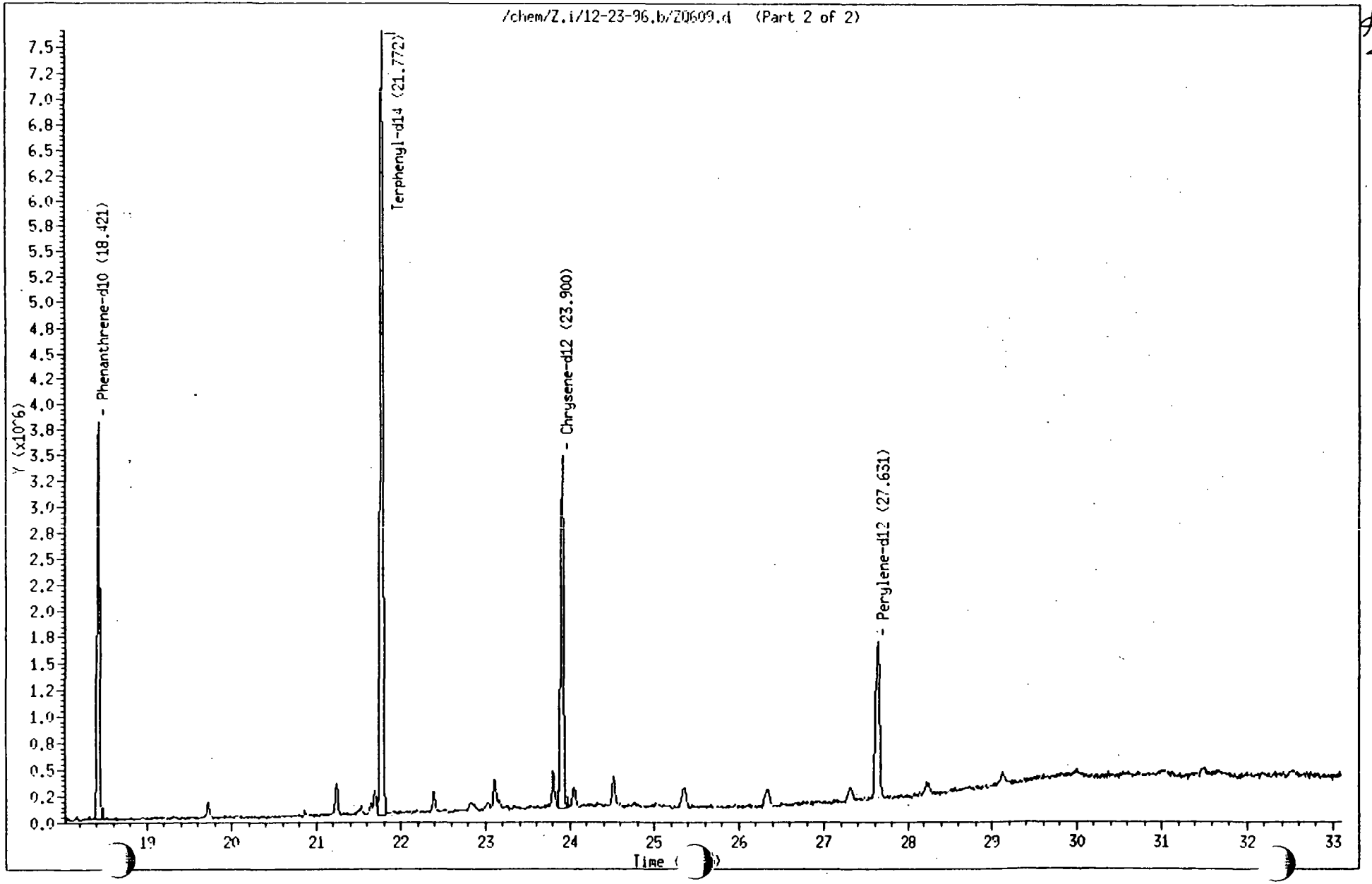


data review
SAH 12/23/96

Data File: /chem/Z.i/12-23-96.b/ZQ609.d
Date : 23-DEC-96 11:06
Instrument : Z.i
Sample ID : CA301
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32



data review 2
SCH 12/23/96

Triangle Laboratories of RTP, Inc.

SEMI-VOLATILE QUANTITATION REPORT

Data file : /chem/Z.i/12-23-96.b/ZQ609.d
Lab. Id. : 40178B
Inj Date : 23-DEC-96 11:06 Autotune Date: 18-Dec-96 11:54:5
Operator : DD Inst ID: Z.i
Smp Info : CA301
Misc Info : 152-19-2B
Comment :
Method : /chem/Z.i/12-23-96.b/cclist.m
Meth Date : 23-Dec-1996 08:39 target
Cal Date : 23-DEC-1996 07:49 Cal File: ZQ605.d
Als bottle: 3
Dil Factor: 1.000 Target Version: Target 2.20
Integrator: HP RTE Compound Sublist: phdcppcp.sub
Sample Type: WATER

			QUANT SIG MASS	RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
*	1	1,4-Dichlorobenzene-d4	152.00	9.248(1.000)	874487	40.00	
*	2	Naphthalene-d8	136.00	11.744(1.000)	2810322	40.00	
*	3	Acenaphthene-d10	164.00	15.342(1.000)	1745332	40.00	
*	4	Phenanthrene-d10	188.00	18.421(1.000)	2899399	40.00	
*	5	Chrysene-d12	240.00	23.900(1.000)	2299375	40.00	
*	6	Perylene-d12	264.00	27.631(1.000)	1804475	40.00	
$	7	2-Fluorophenol	112.00	6.819(0.737)	2167941	69.56	69.56
$	8	Phenol-d5	99.00	8.568(0.926)	1625457	44.48	44.48
$	9	2-Chlorophenol-d4	132.00	8.804(0.952)	3154806	108.79	108.79
$	10	1,2-Dichlorobenzene-d4	152.00	9.534(1.031)	1253887	59.93	59.93
$	11	Nitrobenzene-d5	82.00	10.313(0.878)	1856592	60.70	60.70
$	12	1,3,5-Trichlorobenzene-d3	Compound Not Detected.				
$	13	1,4-Dibromobenzene-d4	Compound Not Detected.				
$	14	2-Fluorobiphenyl	172.00	13.985(0.912)	3491436	62.47	62.47
$	15	2,4,6-Tribromophenol	329.80	16.977(1.107)	1906734	139.69	139.69
$	16	Anthracene-d10	Compound Not Detected.				
$	17	Pyrene-d10	Compound Not Detected.				
$	18	Terphenyl-d14	244.00	21.772(0.911)	5321608	95.01	95.01
	22	Phenol	Compound Not Detected.				
	40	2,4-Dichlorophenol	Compound Not Detected.				
	72	Pentachlorophenol	Compound Not Detected.				

data review
SAH 12/23/96

Beazer East Inc.

Project Number: 40178B
Sample File: ZQ608

Method 8270A WATER
Sample ID: EFFLUENT

Client Project: Water Sampling
TLI ID: 152-19-3B

Date Received: 12/20/96
Date Extracted: 12/22/96
Date Analyzed : 12/23/96

Response File: ZQ605

Sample Vol.: 1.0 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
1,4-Dichlorobenzene-d_4		IS 1	9.25		
Phenol		U		0.29	10
Naphthalene-d_8		IS 2	11.74		
2,4-Dichlorophenol		U		0.42	10
Acenaphthene-d_{10}		IS 3	15.34		
Phenanthrene-d_{10}		IS 4	18.41		
Pentachlorophenol		U		0.81	10

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
2-Fluorophenol	59.84	6.82	1	30
Phenol-d_5	38.42	8.57	1	19
2,4,6-Tribromophenol	129.13	16.98	3	65

Reviewed by Sarah A. Hubbard Date 12/23/96

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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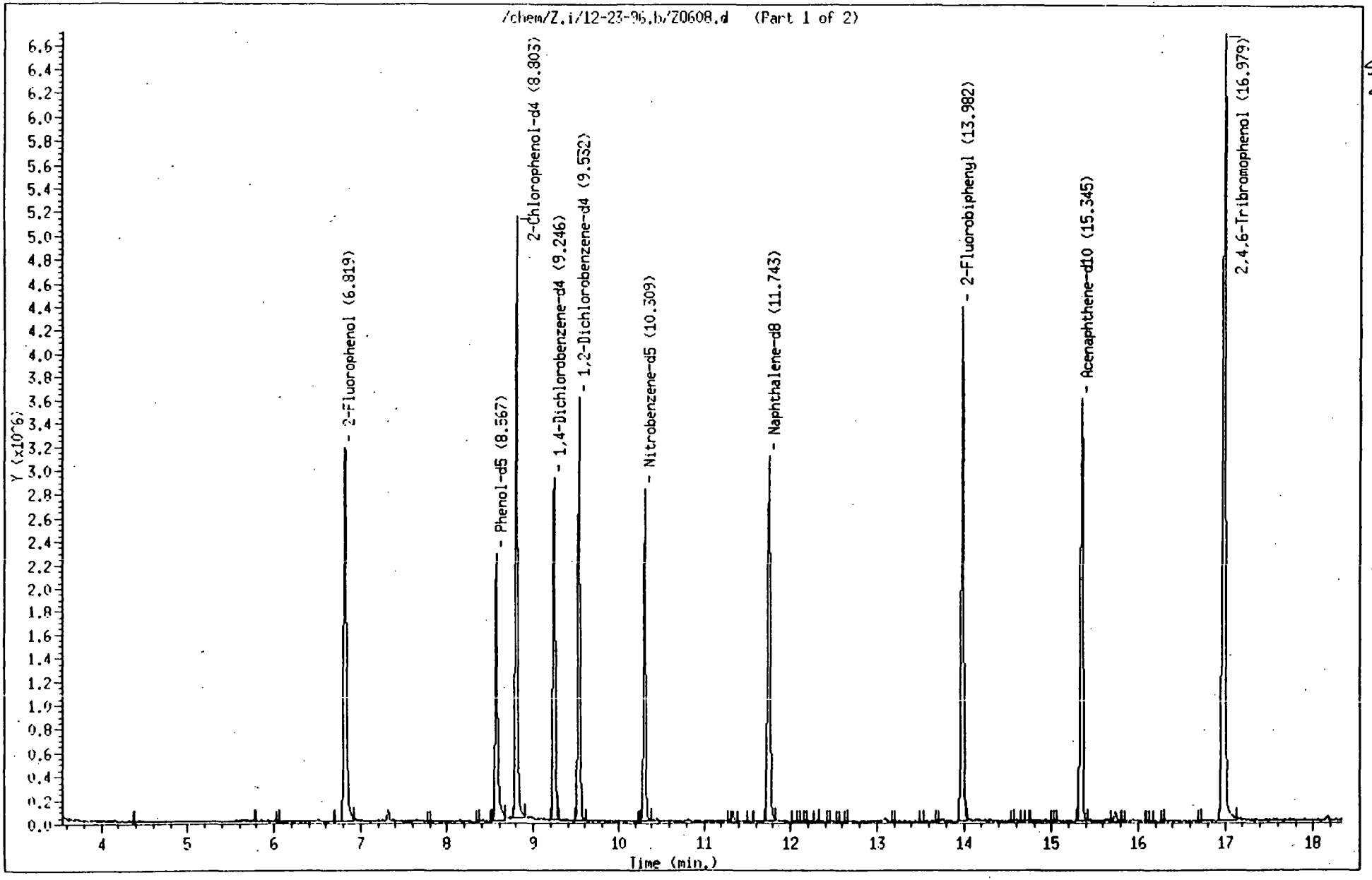
Savar v3.5
Printed: 18:20 12/23/1996

Data File: /chem/Z.i/12-23-96.b/Z0608.d
Date : 23-DEC-96 10:23
Instrument : Z.i
Sample ID : EFFLUENT
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32

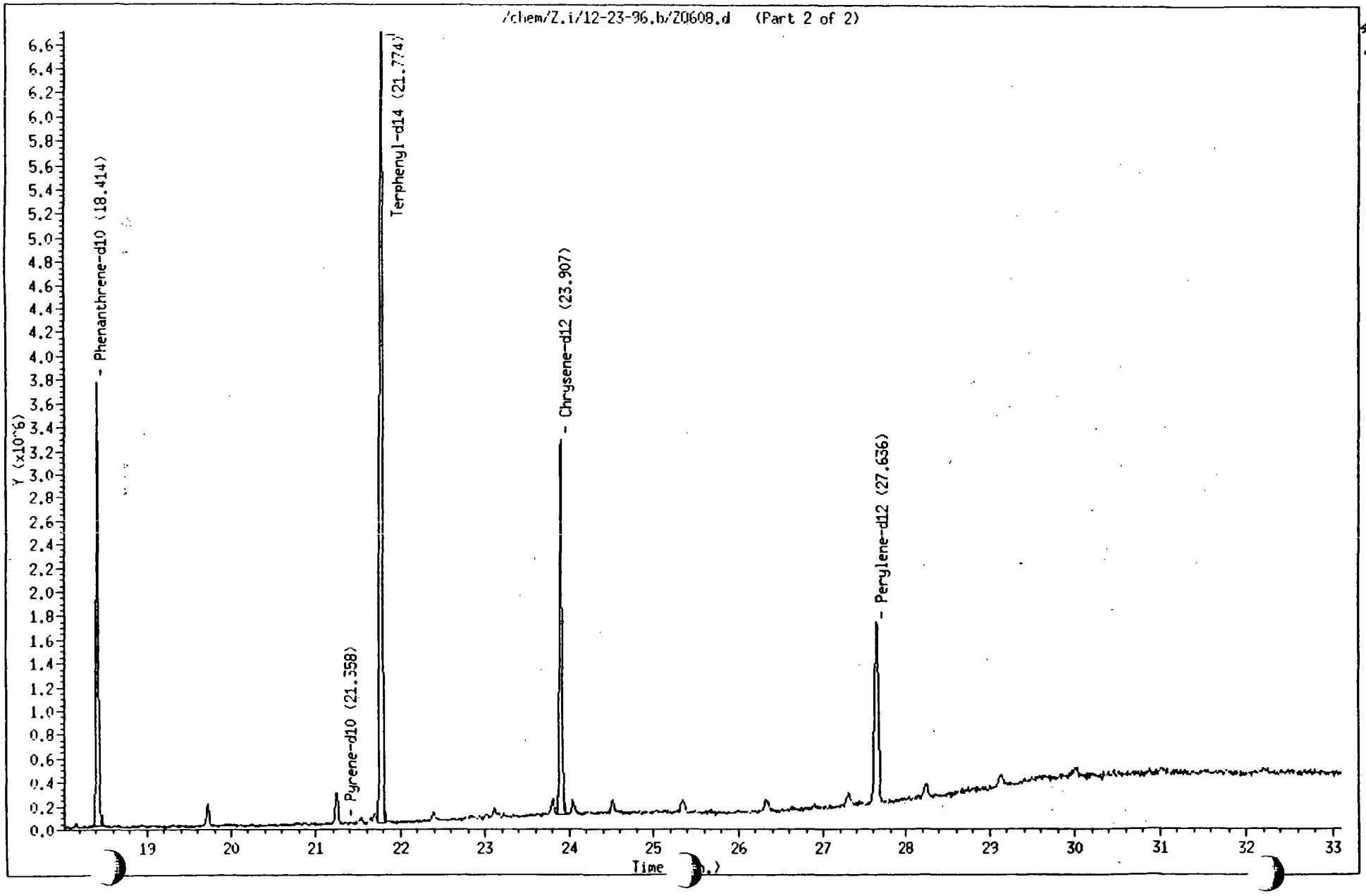


data review
SAH 12/23/96 3:5

Data File: /chem/Z.i/12-23-96.b/ZQ608.d
Date : 23-DEC-96 10:23
Instrument : Z.i
Sample ID : EFFLUENT
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32



date review 36
see # 12/23/96

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SEMI-VOLATILE QUANTITATION REPORT

Data file : /chem/Z.i/12-23-96.b/ZQ608.d
Lab. Id. : 40178B
Inj Date : 23-DEC-96 10:23 Autotune Date: 18-Dec-96 11:54:5
Operator : DD Inst ID: Z.i
Smp Info : EFFLUENT
Misc Info : 152-19-3B
Comment :
Method : /chem/Z.i/12-23-96.b/cclist.m
Meth Date : 23-Dec-1996 08:39 target
Cal Date : 23-DEC-1996 07:49 Cal File: ZQ605.d
Als bottle: 2
Dil Factor: 1.000 Target Version: Target 2.20
Integrator: HP RTE Compound Sublist: phdcppcp.sub
Sample Type: WATER

		Compounds	QUANT SIG MASS	RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
*	1	1,4-Dichlorobenzene-d4	152.00	9.246(1.000)	857952	40.00	
*	2	Naphthalene-d8	136.00	11.743(1.000)	2680014	40.00	
*	3	Acenaphthene-d10	164.00	15.345(1.000)	1647408	40.00	
*	4	Phenanthrene-d10	188.00	18.414(1.000)	3031331	40.00	
*	5	Chrysene-d12	240.00	23.907(1.000)	2257629	40.00	
*	6	Perylene-d12	264.00	27.636(1.000)	1773921	40.00	
$	7	2-Fluorophenol	112.00	6.819(0.737)	1830186	59.86	59.86
$	8	Phenol-d5	99.00	8.567(0.927)	1377750	38.42	38.42
$	9	2-Chlorophenol-d4	132.00	8.803(0.952)	2644991	92.97	92.97
$	10	1,2-Dichlorobenzene-d4	152.00	9.532(1.031)	1039190	50.62	50.62
$	11	Nitrobenzene-d5	82.00	10.309(0.878)	1518495	52.06	52.06
$	12	1,3,5-Trichlorobenzene-d3	Compound Not Detected.				
$	13	1,4-Dibromobenzene-d4	Compound Not Detected.				
$	14	2-Fluorobiphenyl	172.00	13.982(0.911)	2805534	53.18	53.18
$	15	2,4,6-Tribromophenol	329.80	16.979(1.106)	1664623	129.20	129.20
$	16	Anthracene-d10	Compound Not Detected.				
$	17	Pyrene-d10	212.00	21.358(0.893)	1037	0.01	0.01(aR)
$	18	Terphenyl-d14	244.00	21.774(0.911)	5113851	92.99	92.99
	22	Phenol	Compound Not Detected.				
	40	2,4-Dichlorophenol	Compound Not Detected.				
	72	Pentachlorophenol	Compound Not Detected.				

SAH 12/23/96

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

date review
SAH 12/23/96

Beazer East Inc.

Project Number: 40178B
Sample File: ZQ614

Method 8270A WATER
Sample ID: INFLUENT

Client Project: Water Sampling
TLI ID: 152-19-1B

Date Received: 12/20/96
Date Extracted: 12/22/96
Date Analyzed : 12/23/96

Response File: ZQ605

Sample Vol.: 1.0 L

Dilution Factor: 5.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
1,4-Dichlorobenzene-d_4		IS 1	9.24		
Phenol		U		1.45	50
Naphthalene-d_8		IS 2	11.75		
2,4-Dichlorophenol		U		2.01	50
Acenaphthene-d_{10}		IS 3	15.35		
Phenanthrene-d_{10}		IS 4	18.42		
Pentachlorophenol	381.45		18.03		50

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
2-Fluorophenol	73.35	6.83	1	37
Phenol-d_5	39.12	8.58	1	20
2,4,6-Tribromophenol	194.81	16.98	3	97

Reviewed by Sarah A Hubbard Date 12/24/96

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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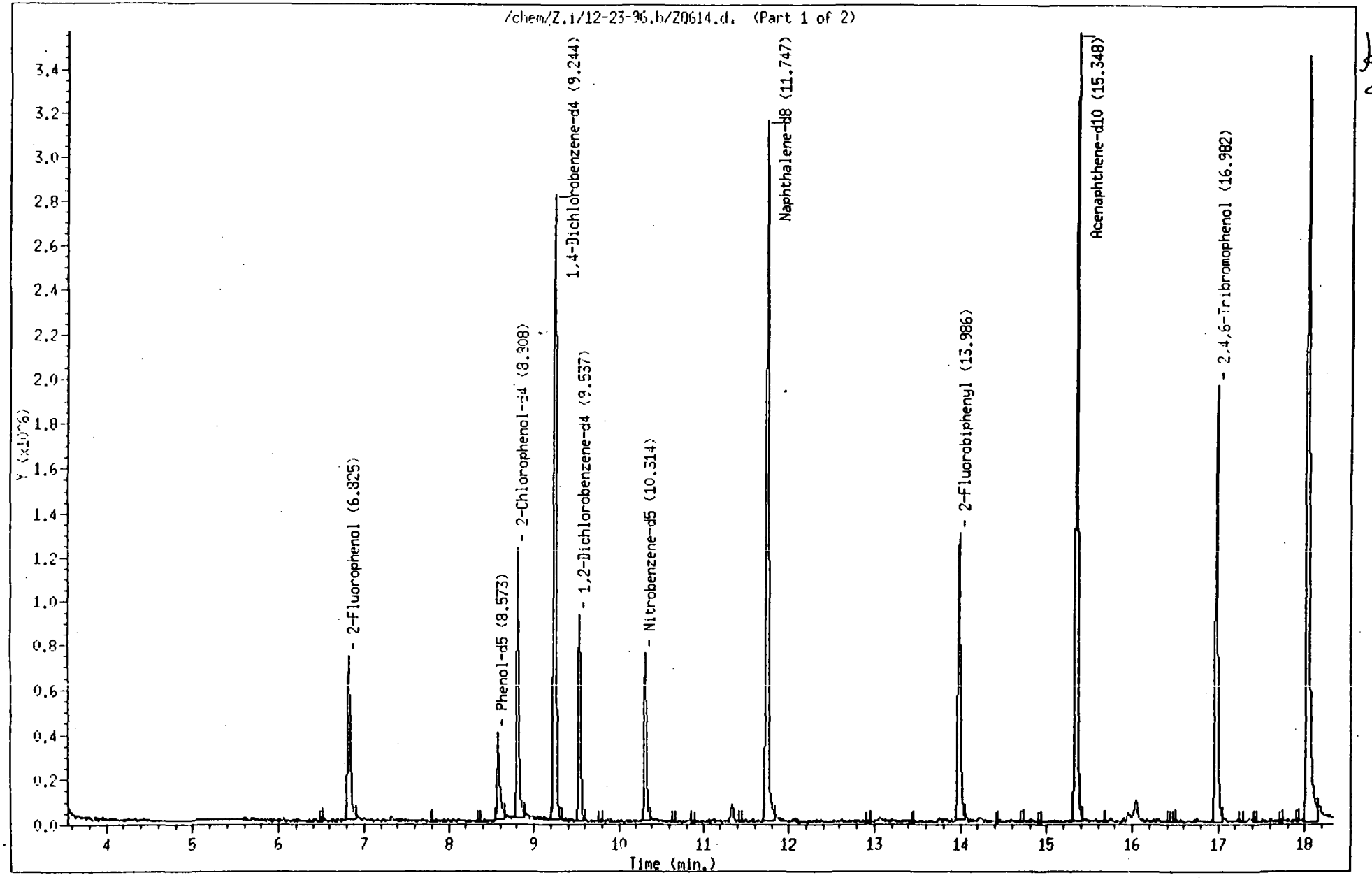
Savar v3.5
Printed: 18:23 12/23/1996

Data File: /chem/Z.i/12-23-96.b/ZQ614.d
Date : 23-DEC-96 14:43
Instrument : Z.i
Sample ID : INFLUENT
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32

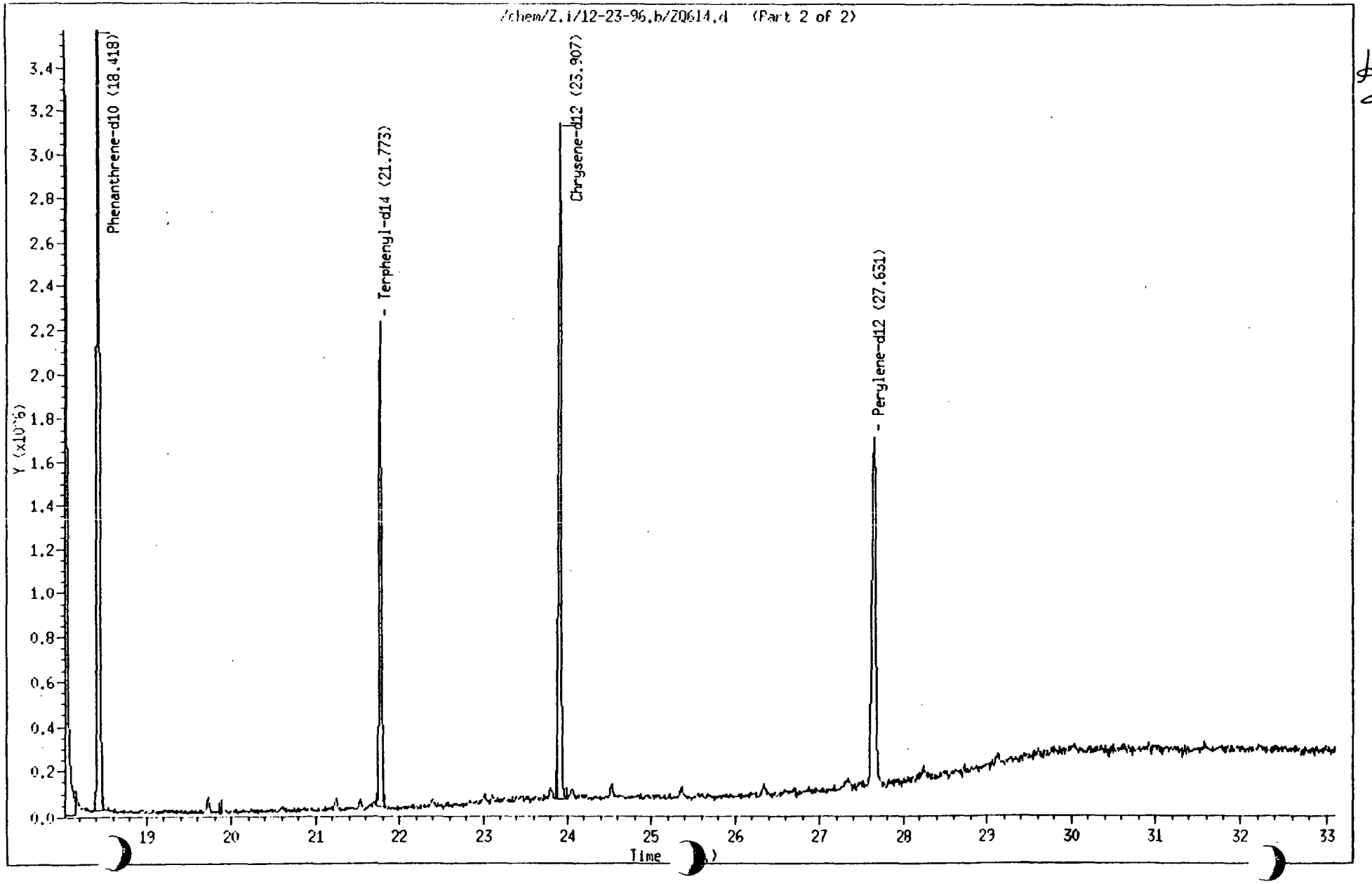


Data review 39
SAH 12/27/96

Data File: /chem/Z.i/12-23-96.b/ZQ614.d
Date : 23-DEC-96 14:43
Instrument : Z.i
Sample ID : INFLUENT
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32



40

data review
SAH 12/23/96

Triangle Laboratories of RTP, Inc.

SEMI-VOLATILE QUANTITATION REPORT

Data file : /chem/Z.i/12-23-96.b/ZQ614.d
Lab. Id. : 40178B
Inj Date : 23-DEC-96 14:43 Autotune Date: 18-Dec-96 11:54:5
Operator : TS Inst ID: Z.i
Smp Info : INFLUENT
Misc Info : 152-19-1B
Comment :
Method : /chem/Z.i/12-23-96.b/cclist.m
Meth Date : 23-Dec-1996 08:39 target
Cal Date : 23-DEC-1996 07:49 Cal File: ZQ605.d
Als bottle: 8
Dil Factor: 5.000 Target Version: Target 2.20
Integrator: HP RTE Compound Sublist: phdcppcp.sub
Sample Type: AIR

		Compounds	QUANT SIG MASS	RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
*	1	1,4-Dichlorobenzene-d4	152.00	9.244(1.000)	868791	40.00	
*	2	Naphthalene-d8	136.00	11.747(1.000)	2772957	40.00	
*	3	Acenaphthene-d10	164.00	15.348(1.000)	1688541	40.00	
*	4	Phenanthrene-d10	188.00	18.418(1.000)	3077979	40.00	
*	5	Chrysene-d12	240.00	23.899(1.000)	2117267	40.00	
*	6	Perylene-d12	264.00	27.631(1.000)	1905270	40.00	
$	7	2-Fluorophenol	112.00	6.825(0.738)	454372	14.68	73.38
$	8	Phenol-d5	99.00	8.580(0.928)	284116	7.82	39.12(aR)
$	9	2-Chlorophenol-d4	132.00	8.808(0.953)	672916	23.36	116.78
$	10	1,2-Dichlorobenzene-d4	152.00	9.537(1.032)	277966	13.37	66.86
$	11	Nitrobenzene-d5	82.00	10.314(0.878)	404896	13.42	67.09
$	12	1,3,5-Trichlorobenzene-d3	Compound Not Detected.				
$	13	1,4-Dibromobenzene-d4	Compound Not Detected.				
$	14	2-Fluorobiphenyl	172.00	13.986(0.911)	884800	16.36	81.81
$	15	2,4,6-Tribromophenol	329.80	16.982(1.106)	514793	38.98	194.92
$	16	Anthracene-d10	Compound Not Detected.				
$	17	Pyrene-d10	Compound Not Detected.				
$	18	Terphenyl-d14	244.00	21.773(0.911)	1336147	25.91	129.53
	22	Phenol	Compound Not Detected.				
	40	2,4-Dichlorophenol	Compound Not Detected.				
	72	Pentachlorophenol	266.00	18.031(0.979)	956879	76.23	381.16

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

data review
SAH 12/23/96

Data File: /chem/Z.i/12-23-96.b/ZQ614.d

Date : 23-DEC-96 14:43

Instrument : Z.i

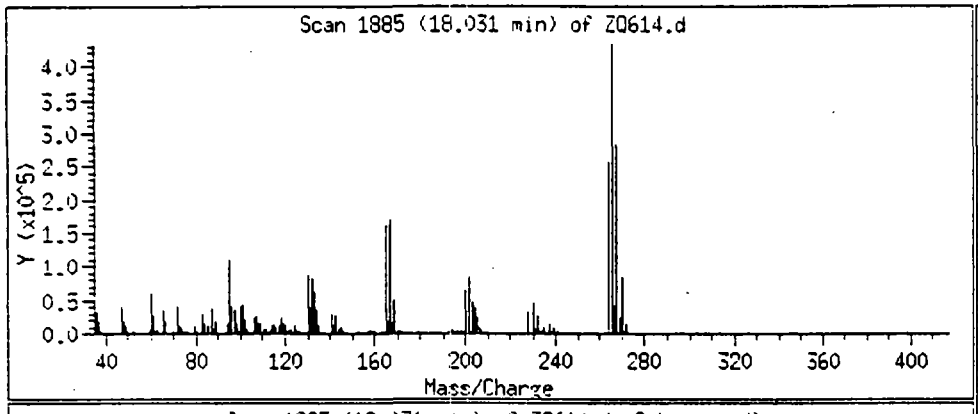
Sample ID : INFLUENT

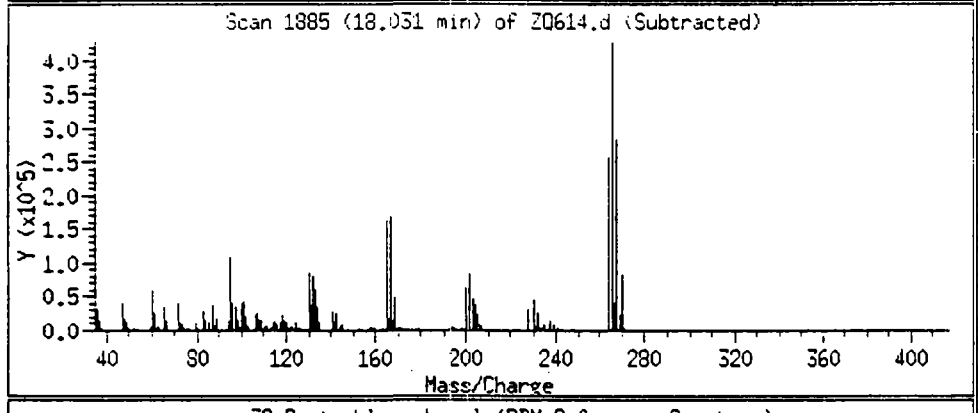
Column phase : DB-5

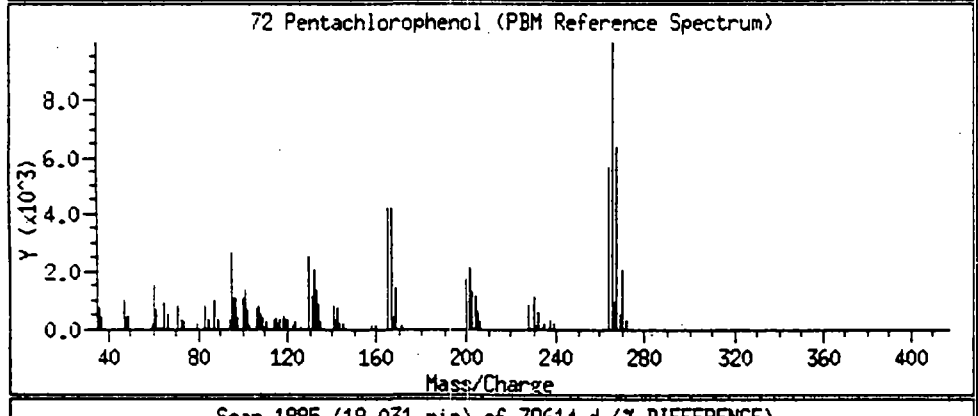
Column diameter : 0.32

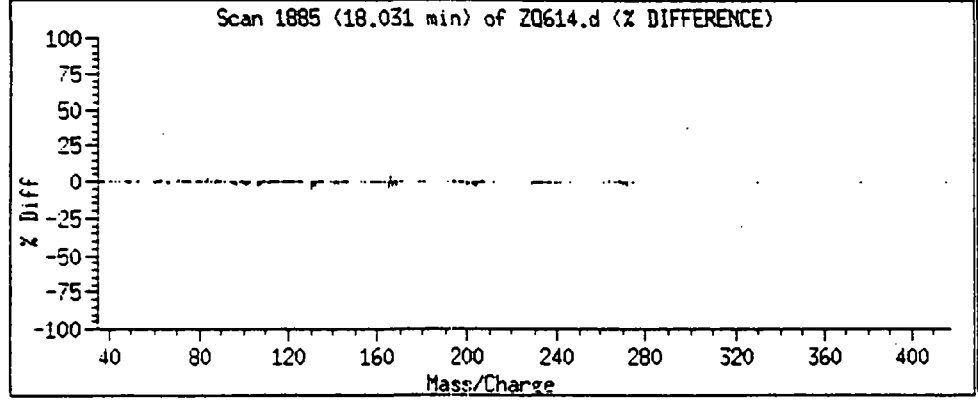
Volume Injected (uL) : 1.0

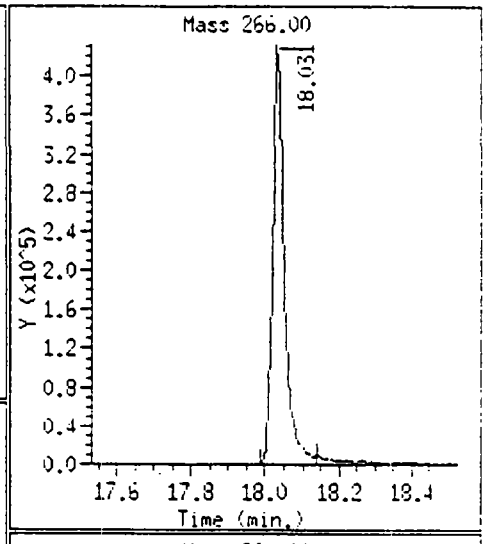
72 Pentachlorophenol

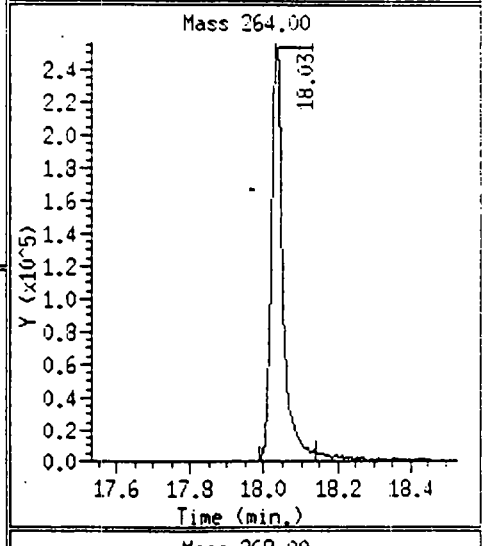


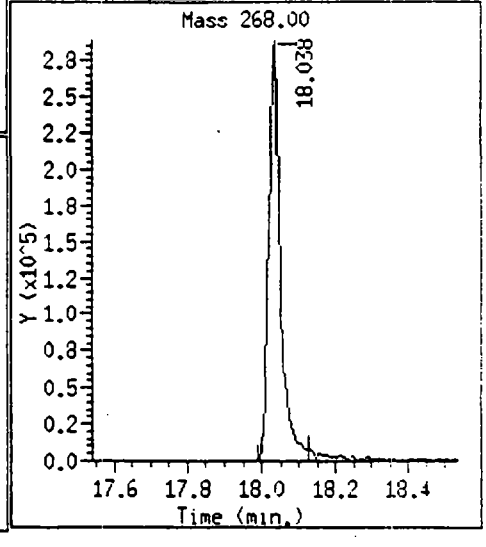












Beazer East Inc.

Project Number: 40178B
Sample File: ZQ613

Method 8270A WATER
Sample ID: SBLK122296

Client Project: Water Sampling
TLI ID: SBLK122296

Date Received: / /
Date Extracted: 12/22/96
Date Analyzed : 12/23/96

Response File: ZQ605

Sample Vol.: 1.0 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
1,4-Dichlorobenzene-d_4		IS 1	9.25		
Phenol		U		0.30	10
Naphthalene-d_8		IS 2	11.75		
2,4-Dichlorophenol		U		0.43	10
Acenaphthene-d_{10}		IS 3	15.35		
Phenanthrene-d_{10}		IS 4	18.42		
Pentachlorophenol		U		0.84	10

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
2-Fluorophenol	66.50	6.83	1	33
Phenol-d_5	43.78	8.57	1	22
2,4,6-Tribromophenol	141.70	16.99	3	71

Reviewed by Sarah A Hubbard Date 12/24/96

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Savar v3.5
Printed: 18:22 12/23/1996

Data File /chem/Z.i/12-23-96.b/Z0613.d
Date : 23-DEC-96 14:01
Instrument : Z.i
Sample ID : SBLK 122296
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32

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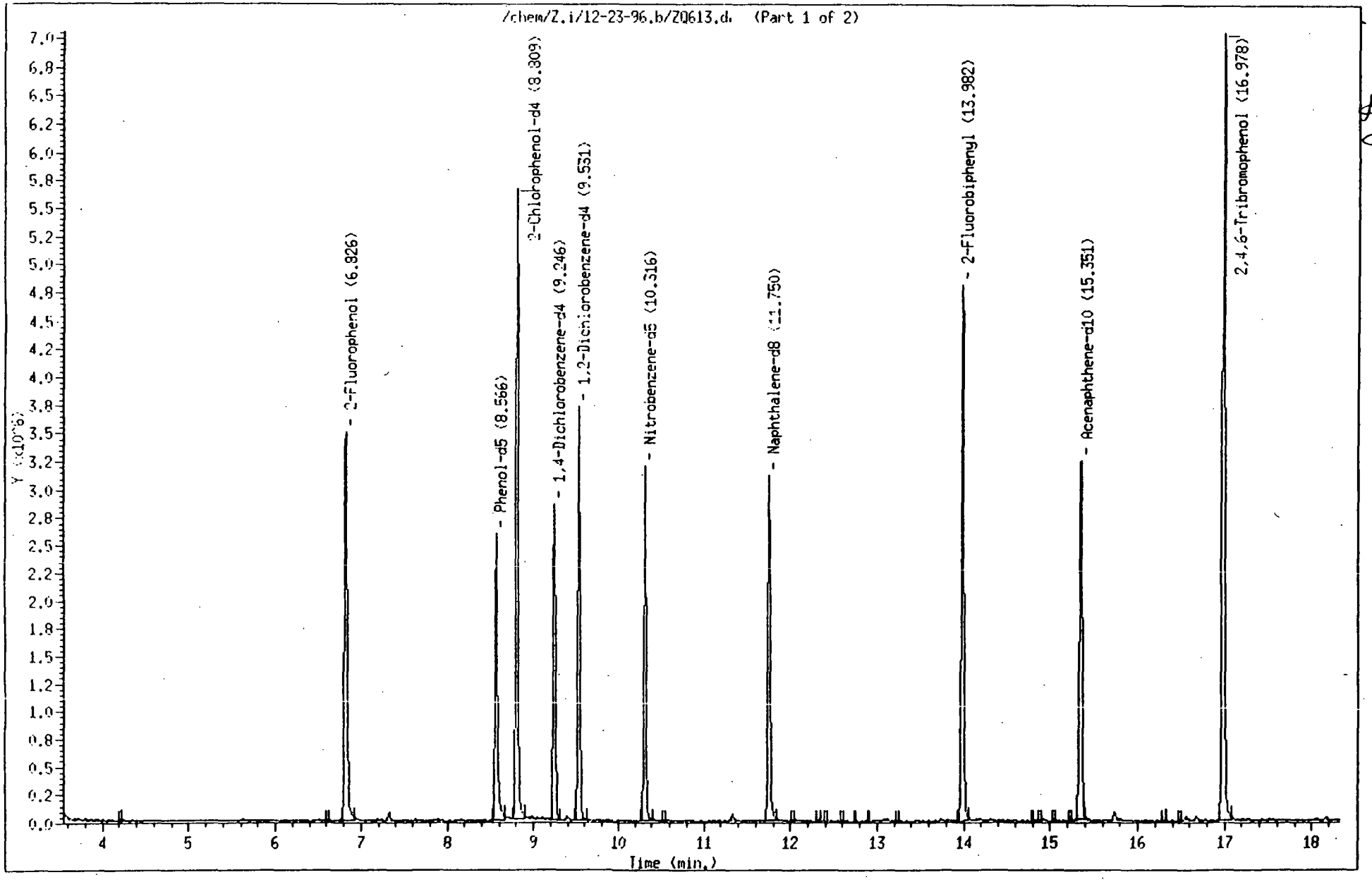
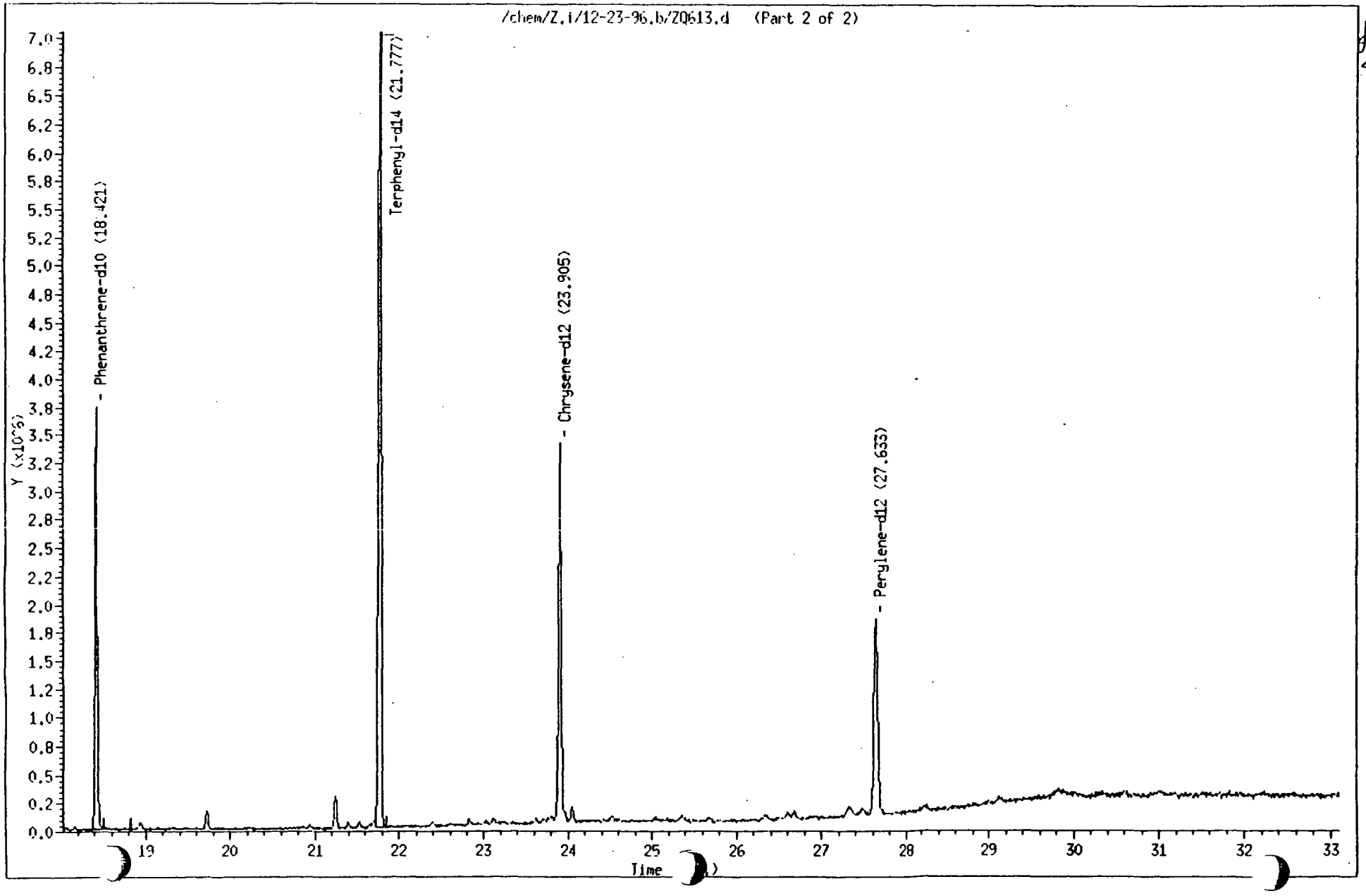
Data review BCH 12/27/96



Data File: /chem/Z.i/12-23-96.b/ZQ613.d
Date : 23-DEC-96 14:01
Instrument : Z.i
Sample ID : SBLK 122296
Column phase : DB-5
Volume Injected (uL) : 1.0

Triangle Laboratories of RTP, Inc.

Column diameter : 0.32



data reviewed
SAH 12/23/96

Triangle Laboratories of RTP, Inc.

SEMI-VOLATILE QUANTITATION REPORT

Data file : /chem/Z.i/12-23-96.b/ZQ613.d
Lab. Id. : 40178B
Inj Date : 23-DEC-96 14:01 Autotune Date: 18-Dec-96 11:54:5
Operator : TS Inst ID: Z.i
Smp Info : SBLK 122296
Misc Info :
Comment :
Method : /chem/Z.i/12-23-96.b/cclist.m
Meth Date : 23-Dec-1996 08:39 target
Cal Date : 23-DEC-1996 07:49 Cal File: ZQ605.d
Als bottle: 7
Dil Factor: 1.000 Target Version: Target 2.20
Integrator: HP RTE Compound Sublist: phdcppcp.sub
Sample Type: AIR

					CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug)
	Compounds	QUANT SIG MASS	RT (REL RT)	RESPONSE		
*	1 1,4-Dichlorobenzene-d4	152.00	9.246(1.000)	835326	40.00	
*	2 Naphthalene-d8	136.00	11.750(1.000)	2604636	40.00	
*	3 Acenaphthene-d10	164.00	15.351(1.000)	1590771	40.00	
*	4 Phenanthrene-d10	188.00	18.421(1.000)	2911378	40.00	
*	5 Chrysene-d12	240.00	23.905(1.000)	2189525	40.00	
*	6 Perylene-d12	264.00	27.633(1.000)	2042683	40.00	
$	7 2-Fluorophenol	112.00	6.826(0.738)	1980315	66.52	66.52
$	8 Phenol-d5	99.00	8.566(0.927)	1528503	43.78	43.78
$	9 2-Chlorophenol-d4	132.00	8.809(0.953)	2837658	102.44	102.44
$	10 1,2-Dichlorobenzene-d4	152.00	9.531(1.031)	1139248	57.00	57.00
$	11 Nitrobenzene-d5	82.00	10.316(0.878)	1706083	60.19	60.19
$	12 1,3,5-Trichlorobenzene-d3	Compound Not Detected.				
$	13 1,4-Dibromobenzene-d4	Compound Not Detected.				
$	14 2-Fluorobiphenyl	172.00	13.982(0.911)	3031977	59.52	59.52
$	15 2,4,6-Tribromophenol	329.80	16.985(1.106)	1763839	141.78	141.78
$	16 Anthracene-d10	Compound Not Detected.				
$	17 Pyrene-d10	Compound Not Detected.				
$	18 Terphenyl-d14	244.00	21.777(0.911)	5080990	95.26	95.26
	22 Phenol	Compound Not Detected.				
	40 2,4-Dichlorophenol	Compound Not Detected.				
	72 Pentachlorophenol	266.00	~~18.006(0.982)~~	~~1761~~	~~0.15~~	~~0.15(a)~~

FP Sa# 12/23/96

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data review
Sa# 12/23/96

Triangle Laboratories of RTP, Inc.

Continuing Calibration Curve

CCAL File: ZQ605	Date of Analysis :12/23/96	Analyte List: 8270A
ICAL File: ICALZD18		

Analyte	Flag	RF50	RFMEAN	%D
1,4-Dichlorobenzene-d4	I			
Phenol	C	1.588	1.520	-4.5
Naphthalene-d8	I			
2,4-Dichlorophenol	C	0.358	0.349	-2.6
Acenaphthene-d10	I			
Phenanthrene-d10	I			
Pentachlorophenol	C	0.163	0.198	17.7

Surrogate	Flag	RF50	RFMEAN	%D
2-Fluorophenol	S	1.426	1.323	-7.8
Phenol-d5	S	1.672	1.594	-4.9
2,4,6-Tribromophenol	S	0.313	0.305	-2.6

Approved by: Sarah A Hubbard Date 12/24/96

*- Fails QC Criteria for %D; << - Rf less than minimum QC RF; >>- RF greater than maximum QC RF

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Triangle Laboratories of RTP, Inc.
Initial Calibration Curve

ICAL File: ICALZD18	Date of Analysis :12/18/96	Analyte List: 8270A
RF20 ZQ559	RF50 ZQ558	RF80 ZQ557
RF120 ZQ556	RF160 ZQ555	

Analyte	Flag	RF20	RF50	RF80	RF120	RF160	MEAN	%RSD
1,4-Dichlorobenzene-d4	I							
Phenol	C	1.616	1.519	1.490	1.539	1.437	1.520	4.3
Naphthalene-d8	I							
2,4-Dichlorophenol	C	0.367	0.357	0.340	0.354	0.326	0.349	4.6
Acenaphthene-d10	I							
Phenanthrene-d10	I							
Pentachlorophenol	C	0.198	0.216	0.200	0.192	0.183	0.198	6.1

Surrogate	Flag	RF20	RF50	RF80	RF120	RF160	Mean	%RSD
2-Fluorophenol	S	1.363	1.366	1.310	1.346	1.229	1.323	4.3
Phenol-d5	S	1.705	1.624	1.589	1.621	1.429	1.594	6.4
2,4,6-Tribromophenol	S	0.322	0.314	0.300	0.305	0.282	0.305	5.0

Approved by: PaB Date 12/24/96

*- Fails QC Criteria for %RSD; << - Rf less than minimum QC RF; >>- RF greater than maximum QC RF

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TRIANGLE LABS

CASE NARRATIVE

Analysis of Samples for the Presence of

2,3,7,8-tetrachlorinated Dibenzo-*p*-Dioxin by

High-Resolution Chromatography / High-Resolution Mass Spectrometry

Method 8290 Rev. 0 (9/94)

Date:	December 31, 1996
Client ID:	Beazer East Inc.
P.O. Number:	
TLI Project Number:	40178Ar1

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Rev. 11/03/95

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

Overview

The samples and any associated QC samples were extracted and analyzed according to procedures described in the Triangle Laboratories' Data User's Manual (Rev. 12/92-LLW-7-AH-2/93). Any particular difficulties encountered during the sample handling by Triangle Laboratories will be discussed in the QC Remarks section below. Results reported relate only to the items tested.

Quality Control Samples

A laboratory method blank, identified as the TLI Blank, was prepared along with the samples.

Quality Control Remarks

This release of this particular set of Beazer East Inc. analytical data by Triangle Laboratories was authorized by the Quality Control Chemist who has reviewed each sample data package individually following a series of inspections/reviews. When applicable, general deviations from acceptable QC requirements are identified below and comments are made on the effect of these deviations upon the validity and reliability of the results. Please consult Triangle Laboratories' Data User's Manual for further details. Specific QC issues associated with this particular project are:

Sample receipt: Three water samples were received, in triplicate, from Beazer East Inc. at 16.0° C in good condition on December 20, 1996 and were stored in a refrigerator at 4.0° C. The client's chain-of-custody did not indicate whether or not the samples were chemically preserved prior to shipment.

Sample Preparation Laboratory: The TLI Blank prepared for this project was batched with TLI project 40089Ar1.

Mass Spectrometry: None

Data Review: All samples in this project were re-extracted and re-analyzed, along with the TLI Blank, due to very low internal standard recoveries for the samples and the TLI Blank in the initial analyses. The problem did not recur.

Other Comments: No 2,3,7,8-TCDD was detected in the TLI Blank at a level equal to or above the Target Detection Limit.

Average continuing calibration (Concal) response factors are used instead of average initial calibration (Ical) response factors for all analyte and labeled standard calculations in sample(s) with a beginning and ending calibration listed on the quantitation report. Average response factors are used when the ending Concal meets Method 8290 ending Concal requirements but not beginning Concal requirements. The average response factor is an average of the factors from the beginning and ending Concals.

Sample Calculations:

Analyte Concentration

The concentration or amount of any analyte is calculated using the following expression.

$$C_{(\sigma)} = \frac{A_\sigma * Q_\beta}{A_\beta * RRF_{(\sigma)} * W}$$

Where:

$C_{(\sigma)}$ is the concentration or amount of a given analyte,

A_σ is the integrated current for the characteristic ions of the analyte,

A_β is the integrated current of the characteristic ions of the corresponding internal standard,

Q_β represents the amount of internal standard added to the sample before extraction,

$RRF_{(\sigma)}$ is the mean analyte relative response factor from the initial calibration (ICal) and,

W is the sample weight or volume

Detection Limits

The detection limit reported for a target analyte that is not detected or presents an analyte response that is less than 2.5 times the background level is calculated by using the following expression. The area of the analyte is replaced by the noise level measured in a region of the chromatogram clear of genuine GC signals multiplied by an empirically determined factor. The detection limits represent the maximum possible concentration of a target analyte that could be present without being detected.

$$DL_{(\sigma)} = \frac{2 * 2.5 * (F * H) * Q_{\beta}}{A_{\beta} * RRF_{(\sigma)} * W}$$

Where:

$DL_{(\sigma)}$ is the estimated detection limit for a target analyte,

2.5 is the minimum response required for a GC signal,

F is an empirical number that approximates the area to height ratio for a GC signal. This number is 5 for the DB-5 GC column and 3.5 for the DB-225 GC column,

H is the height of the noise

A_{β} is the integrated current of the characteristic ions of the corresponding internal standard,

Q_{β} represents the amount of internal standard added to the sample before extraction,

$RRF_{(\sigma)}$ is the mean analyte relative response factor from the initial calibration (ICal) and,

W is the sample weight or volume

Other sample calculations may be found in the Triangle Laboratories Data User's Manual.

Data Flags

In order to assist with data interpretation, data qualifier flags are used on the final reports, as discussed in Triangle Laboratories' Method 8290 Data User's Manual. Please note that all data qualifier flags are subjective and are applied as consistently as possible. Each flag has been reviewed by two independent Chemists and the impact of the data qualifier flag on the quality of the data discussed above. The most commonly used flags are:

A **'B'** flag is used to indicate that an analyte has been detected in the laboratory method blank as well as in an associated field sample. The 'B' flag will be used only when the concentration of analyte found in the sample is less than 20 times that found in the associated blank. This flag denotes possible contribution of background laboratory contamination to the concentration or amount of that analyte detected in the field sample. Under Triangle Laboratories guidelines, a laboratory blank is acceptable if the tetra- through hepta-CDD/CDF levels are all below the target detection limits (TDLS) or if the contamination levels are less than 5% of the levels detected in the associated field samples.

If these conditions are satisfied or if the blank is unable to be reextracted, the interpretation of the contamination levels relative to the samples should be as follows: 1) analyte quantitations should be considered valid if the level of blank contamination is less than five percent of the level detected in the field sample, 2) analyte quantitations should be considered estimated if the analyte level in the sample is five to twenty times the level of the analyte in the blank, or 3) analytes whose level in a sample is the same as or less than five times the level detected in the associated blank should be considered present likely due to laboratory contamination and not native to the sample.

An **'I'** flag is used to indicate labeled standards have been interfered with on the GC column by coeluting, interferent peaks. The interference may have caused the standard's area to be overestimated. All quantitations relative to this standard, therefore, may be underestimated.

A **'PR'** flag is used to indicate that a GC peak is poorly resolved. This resolution problem may be seen as two closely eluting peaks without a reasonable valley between the peak tops, overly broad peaks, or peaks whose shapes vary greatly from a normal distribution. The concentrations or amounts reported for such peaks are most likely overestimated.

A **'Q'** flag is used to indicate the presence of QC ion instabilities caused by quantitative interferences. Affected analytes may be overestimated or underestimated as a result of this interference. A peak is flagged 'Q' only if it is affected by a QC ion deviation greater than 20% full scale as determined relative to the labeled standard against which it is quantitated. Total PCDF/PCDF quantitations will be flagged 'Q' if the interferences affect ten percent or more of the total PCDD/PCDF peak areas.

An **'RO'** flag is used to indicate that a labeled standard has an ion abundance ratio that is outside of the acceptable QC limits, most likely due to a coeluting interference. This may have caused the percent recovery of the standard to be overestimated. All quantitations versus this standard, therefore, may be underestimated.

A **'U'** flag is used to indicate that a specific (2,3,7,8-substituted) isomer cannot be resolved from a large, coeluting interferent GC peak. The specific isomer is reported as not detected as a valid concentration/amount cannot be determined. The calculated detection limit, therefore, should be considered an underestimated value.

A **'V'** flag is used to indicate that, although the percent recovery of a labeled standard may be below a specific QC limit, the signal-to-noise ratio of the peak is greater than ten-to-one. The standard is considered reliably quantifiable. All quantitations derived from the standard are considered valid as well.

By our interpretation, the analytical data in this project are valid based on the guidelines of EPA Method 8290, Rev. 0 (9/94) and Triangle Laboratories' Method 8290 Data User's Manual. Any specific QC concerns or problems have been discussed in the QC Remarks section of this case narrative with emphasis on their effect on the data. Should Beazer East Inc. have any questions or comments regarding this data package, please feel free to contact our Project Scientist, Walter Murray, at 919-544-5729, ext. 271.

For Triangle Laboratories, Inc.,

Report Preparation	Quality Control
S. A. Parikh 12/31/96	Walter Murray 12/31/96
Saroj A. Parikh	Walter Murray
Report Preparation Chemist	Project Scientist

The total number of pages in the data package is : 43 .

TRIANGLE LABORATORIES, INC.

LIST OF CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

American Association for Laboratory Accreditation. Expires July 31, 1997. Certificate Number 0226-01. Accreditation for technical competence in Environmental Testing.(Including Waste Water, Sol/Haz Waste, Pulp/Paper, and Air Matrices) Parameters are AOX/TOX, Volatiles, Pesticides, PCB's, BNA's, and Dioxin/Furan. Method 1613 for Drinking Water.

State of Alabama, Department of Environmental Management. Expires December 31, 1997. Laboratory I.D. # 40950. Dioxin in drinking water.

State of Alaska, Department of Environmental Conservation. Expires December 21, 1997. Certificate number OS-00397. Dioxin in drinking water.

State of Arizona, Department of Health Services. Expires May 26, 1997. Certificate #AZ0423. Drinking Water for Dioxin, Dioxin in WW and S/H Waste.

State of Arkansas, Department of Pollution Control and Ecology. Expires February 14, 1997. Primary No. 94-06497. Pulp/paper, soil, water, and Hazardous Waste for Dioxin/Furan; AOX/TOX.

State of California, Department of Health Services. Expires August 31, 1997. Certificate #1922. Selected Metals in Waste Water; Volatiles, Semi-volatiles, and Dioxin/furan in WW and Sol/Haz Waste. Dioxin in drinking water.

State of Connecticut, Department of Health Services. Expires September 30, 1997. Registration # PH-0117. Dioxin in drinking water.

Delaware Health and Social Services. Expires December 31, 1996. Certificate #NC 140. Dioxin in drinking water.

Florida Department of Health and Rehabilitative Services. Expires June 30, 1997.Dioxin in DW. Drinking Water ID HRS# 87424. Metals, Extractable Organics (GC/MS), Pesticides/PCB's (GC) and Volatiles (GC/MS) in Environmental Samples. Environmental water ID HRS# E87411.

Hawaii Department of Health. Expires March 1, 1997. Dioxin in drinking water. "Accepted" status for regulatory purposes .

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Idaho Department of Health and Welfare. Expires November 30, 1997. Dioxin in drinking water.

State of Kansas, Department of Health and Environment. Expires January 31, 1997. Environmental Analyses/Non potable Water and Solid and Hazardous Waste. Method 1613 for drinking water. ID #'s - Drinking water and/or pollution control - E-215. Solid or Hazardous Waste - E-1209.

Commonwealth of Kentucky, Department for Environmental Protection. Expires December 31, 1996. ID#90060. Dioxin in drinking water.

Maryland Department of Health and Mental Hygiene. Expires September 30, 1997. Certification #235. Drinking water by Method 1613A.

State of Michigan, Department of Public Health. Expires March 31, 1997. Drinking water by Method 1613.

Montana Department of Health and Environmental Services. Expires December 31, 1996. Dioxin in drinking water.

State of New Jersey, Department of Environmental Protection and Energy. Extended by state. Temporary certificate until June 30, 1997 or sooner. ID #67851. BNAs and Volatiles. Dioxin in drinking water.

State of New Mexico, Environment Department. Expires July 31, 1997. Dioxin in drinking water.

New York State Department of Health. Expires March 31, 1997. ID #11026. Environmental Analyses of non-potable Water, Solid and Hazardous Waste. Method 1613 in DW.

State of North Carolina, Department of Environment Health and Natural Resources Expires December 31, 1996. Certificate # 37751. Dioxin in drinking water.

State of North Carolina, Department of Environment, Health, and Natural Resources, Division of Environmental Management. Expires December 31, 1997. Certificate # 485. Metals, pesticides & PCBs, semi-volatiles and volatiles; TCLP.

North Dakota State Department of Health and Consolidated Laboratories. Expires December 31, 1996. Certificate # R-076. Effective October 4, 1993. Dioxin in drinking water.

Oklahoma Department of Environmental Quality. Expires May 31, 1997. Laboratory #9612. Dioxin by 1613A, 8290 and 8280.

Revised December 4., 1996 apw

Printed December 4, 1996

State of South Carolina, Department of Health and Environmental Control. Expires April 1, 1997. Certificate number #99040001 (drinking water). Expires August 31, 1997. Certificate number #99040002 (other parameters). Dioxin/Furans, BNA, Volatiles, and PCBs/pesticides under Clean Water Act, 2,3,7,8-TCDD for Drinking Water, and Organic extractables for Solid and Hazardous Waste.

State of Tennessee. Department of Environment and Conservation. Expires February 5, 1999. ID #02992. Method 1613 Drinking water only.

U.S. Department of Agriculture Soil Permit. Expires September 30, 2001. Permit No. S-3790 Revised. Under the authority of the Federal Plant Pest Act, permission is granted to receive foreign soil samples for use in laboratory analysis.

U.S. Army Corps of Engineers. Expires November 30, 1997. Validated to perform methods 8280 & 8290 for Lockbourne Landfill Site Investigation, Defense Distribution Depot Projects, and assorted projects for the USACE North Pacific Division Laboratory.

U.S. EPA Region V. Expires November 14, 1999. Dioxin in drinking water.

U.S. EPA Region VIII, for the State of Wyoming. Expires November 13, 1997. Dioxin in drinking water.

State of Utah, Department of Health. Expires December 31, 1997. Certificate Number E-166. Certification for the following parameters: Semi-Volatiles and Volatiles under RCRA; Volatiles under Clean Water Act; Dioxin/furans by Method 8280; Drinking water for Dioxin by Method 1613; Metals including Mercury and Microwave Digestion.

Commonwealth of Virginia, Department of General Services, Division of Consolidated Laboratory Services. Expires June 30, 1997. ID # 00341. Dioxin in drinking water.

State of Washington, Department of Ecology. Expires September 11, 1997. Lab Accreditation Number C067. Scope of Accreditation applies to water analyses for Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans, BNA Extr (Semivolatile) Organics and Purgeable (Volatile) Organics.

State of Washington, Department of Health. Expires April 30, 1997. Dioxin in drinking water.

State of West Virginia, Department of Health. Expires December 31, 1996. Certificate No. 9923(C). Dioxin in drinking water.

State of Wisconsin, Department of Natural Resources. Expires June 30, 1997. Laboratory ID Number 999869530. Certification for the following categories of Organics: Purgeable, Base/Neutral, Acid, PCBs, and Dioxin.

Expires November 14, 1999. Laboratory ID 999869530. Dioxin in drinking water.

PHARMACEUTICAL

Drug Enforcement Agency (DEA). Expires November 30, 1997. Registration number RT0119583S. Controlled substance registration for schedules 1,2,3,3N,4,5.

N.C. Department of Human Resources. Expires October 31, 1997. Registration number NC-PT 0000 0031. North Carolina controlled substances registration. Application submitted for renewal.

Food & Drug Administration (FDA) Registration. Expires July 1997. ID #s 001500 1053481. Annual registration of drug establishment. Annual registration of drug establishment.

OTHER

Clinical Laboratory Improvement Amendments (CLIA) Registration. Expires May 30, 1997. ID # 34D0705123. Department of Health & Human Services, Health Care Financing Administration.

U.S. EPA Large Quantity Hazardous Waste Generator. No expiration date. EPA ID #NCD982156879. Permit indicates that the laboratory is a large generator of hazardous waste.

North Carolina Radioactive Materials License. Expires April 30 1998. License No. 032-0954-1. License authorizes the licensee to receive, acquire, own, possess, transfer, import and use such radioactive materials as designated.

North Carolina General License for Radiation Protection. No. expiration date. License No. 032-875-OG. The general license applies only to radioactive material contained in devices which have been manufactured and labeled in accordance with specific requirements.

Revised December 4,, 1996 apw

Printed December 4, 1996

DOCUMENT CONTROL

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

COPY MH 12/20/96

12

CLIENT CHAIN OF CUSTODY **SAMPLER'S SIGNATURE** _____ **Quote 1100002377**

From: Beazer East Inc.
436 - 7th Avenue
Pittsburgh, PA 15219

Project: water samples week of 12/16.

Contact: Jim Cook
Phone: 412/227-2092
Fax: 412/373-5242
P.O.#: _____

(BEA02 /WM) If the data will be reported to a state agency, which one? ____

Total Number of Containers: 9

Analysis Wanted:
2,3,7,8 TCDD
PHENOL
PENTACHLORO PHENOL
2-4, DICHLORO PHENOL

STA NO.	Date	Time	Comp	Grab	Sample Id.#	Sample Amt.						Remarks
INFLUENT	12/20	15:10		X	INFLUENT	3 LITERS						7 DAY TURNAROUND
BETWEEN CARBON	12/20	15:15		X	CA 301	3 LITERS						7 DAY TURNAROUND
EFFLUENT	12/20	15:20		X	EFFLUENT	3 LITERS						7 DAY TURNAROUND

Relinquished By/Sign.	Date/Time	Received By/Sign.	Relinquished By/Sign.	Date/Time	Received By/Sign.
(Mike Taylor)	12/20 16:15				
Relinquished By/Sign.	**Date/Time**	**Received By/Sign.**	**Relinquished By/Sign.**	**Date/Time**	**Received By/Sign.**

Received for Laboratory By/Signature _____ **Date/Time** 12/20/96 16:15

Send Samples to: **Triangle Laboratories, Inc.**
Attn: Sample Custodian
801 Capitola Drive
Durham, NC 27713 USA
Phone: (919) 544-5729 • Fax: (919) 544-5491

Custody Seal : Absent
Chain of Custody : Present
Sample Tags : Present
Sample Tag Numbers: Listed
SMO Forms : N/A

Sample Seals: Present
Accept Cond: YES

TLI Project Number : 40178
Client: BEA02 : Beazer East Inc.
Date Received : 12/20/96 : By J Guerth

Cook
Page

Ice Chest ICE/ICE PACKS Temp 16.0 C Carrier and Number MIKE TAYLOR

TLI Number mR/H:CPM	Client ID	Matrix Location	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To ARCHIVE Date/Init	DISPOSED Date/Init
152-19-1A	INFLUENT	Water	USED							
		C01								
152-19-1B	INFLUENT	Water			12/22/96 MK	used 12/22/96				
		C01								
152-19-1C	INFLUENT	Water						USED		
		C01								
152-19-2A	CA301	Water	USED							
		C01								
152-19-2B	CA301	Water			12/22/96 MK	used 12/22/96				
		C01								
152-19-2C	CA301	Water						USED		
		C01								
152-19-3A	EFFLUENT	Water	USED							
		C01								
152-19-3B	EFFLUENT	Water			12/22/96 MK	used 12/22/96 MK				
		C01								
152-19-3C	EFFLUENT	Water						USED		
		C01	12/21/96							

12-26-96

Receiving Remarks: There was a fresh bag of ice and ice packs in the cooler, but samples still read +16C.

Archive Remarks:

TRIANGLE LABORATORIES, INC.--LOG IN RECORD/CHAIN OF CUSTODY--REVISED 06/13/1996

TRIANGLE LABORATORIES, INC.
SAMPLE TRACKING AND PROJECT MANAGEMENT FORM

----------ADMINISTRATIVE INFORMATION----------

TLI Proj#: 40178-Ar1	Samples: 3	TurnAround.: 8 Day(s)
Prod Code: D25001	Matrix.: Water	Hold Time..: 30 Day(s)
DetectLim: 10 ppq	Type...: B	Start Date.: 12/20/96
	Recvd..: 12/20/96	Date Due...: 12/28/96
		DWL Due Dt.: 12/25/96

Analyte List.: M8290: 2,3,7,8-TCDD only

Method.....: 8290X:2378-TCDD Only
Client Proj..: Water Sampling
Client.....: Beazer East Inc. (BEA02)
P.O. No.....:
Contact.....: Jim Cook
Proj. Mgr....: Walter Murray

Collect Dt/Tm: 12/20/96
Phone.....: 412/227-2092
Fax.....: 412/373-5242
Sample Origin:

----------SPECIAL INSTRUCTIONS / QA REQUIREMENTS----------

Prespike Standard: n/a
Extraction Exp...: 01/19/97

----------REPORTING REQUIREMENTS----------

Reporting Format: Report Option II

See MILES for Instructions/Communications.

Completed by: _____ DATE: 12/26/96

Reviewed by: _____ DATE: 12/26/96 (PMGT0395)

TRIANGLE LABORATORIES, INC.
Wet Lab Extraction and Observations
Project: 40178-Ar1

Sample #	crd	TLI_Number..	Customer.Sample.Id.....	Init. pH...	NaOH mL..	Adj. pH.1.	H2SO4 mL...	Adj. pH.2.	Appearance.	Color.....	Odor...	Vol.	Entered.By.....	Date....	Time....	S
000		TLI Blank	TLI Water Blank	7.00	n/a	n/a	n/a	n/a	HPLC WATER			1000	Hillkt	12/26/96	16:56:43	F
001		152-19-1A	INFLUENT	7.00	n/a	n/a	n/a	n/a	CLEAR	COLORLESS	NONE	1000	Hillkt	12/26/96	16:56:43	F
002		152-19-2A	CA301	7.00	n/a	n/a	n/a	n/a	CLEAR	COLORLESS	NONE	1000	Hillkt	12/26/96	16:56:44	F
003		152-19-3A	EFFLUENT	7.00	n/a	n/a	n/a	n/a	CLEAR	COLORLESS	NONE	1000	Hillkt	12/26/96	16:56:44	F

*** End of Report ***

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TRIANGLE LABORATORIES, INC. PAGE 1 OF 1

Dioxin Sample Preparation Tracking & Management Form

Project: 40178Ar1 Client: Beazer East Inc. (BEA02)

Solvent(s)/Acid(s): Hexane / [illegible] / _____ Method: 8290X:2378-TCDD Only Matrix: _____

Lot Numbers: [illegible] / [illegible] / _____ Extraction Date: 12/26/96

IS Spike: 20 µl conc: 0.1000 ng/µl

SS Spike: ____ µl conc: __.____ ng/µl

MS Spike: 0 µl conc: 0.0000 ng/µl

LCS Spike: 0 µl conc: 0.0000 ng/µl

OPR Spike: __20 µl conc: _0.01__ ng/µl

					SK	AG				Chemist
					LSF-2	4275K				Spike #
					4276GM	LSF-AG				" ID
					10/09/97	10/9/97	__/__/__	__/__/__		" Expir
					12/26/96	12/27/96	__/__/__	__/__/__		" Date
					0.1 ng/µl	0.1 ng/µl	____ng/µl	____ng/µl		" Conc.
					20 µl	20 µl	____ µl	____ µl		" Vol.

S#.crd	TLI SAMPLE ID / CLIENT SAMPLE ID	GROSS WEIGHT Before	GROSS WEIGHT After	SAMPLE SIZE g / ml					Any Left yes/no
Ar1 000	TLI Blank * TLI Water Blank	XXXXXXXXX	XXXXXXXXX	1000		LW			
Ar1 001	152-19-1A INFLUENT	XXXXXXXXX	XXXXXXXXX	1000		LW			yes/no
Ar1 002	152-19-2A CA301	XXXXXXXXX	XXXXXXXXX	1000		LW			yes/no
Ar1 003	152-19-3A EFFLUENT	XXXXXXXXX	XXXXXXXXX	1000		LW			yes/no
									yes/no
									yes/no
									yes/no
									yes/no
									yes/no
									yes/no

Gross weight of sample container + sample before/after aliquot removal.

Comments: * BATCHED W/ 40089AR:

WATERS APPEARED CLEAR COLORLESS pH=7, NO ODOR, EACH HAD FEW SPECKS OF PARTICULATE ON FILTER

Initials: [illegible] Date: 12/26/96

Initials of both SPIKER AND OBSERVER must be entered. XXXXX = Gross Weight not provided for WATER Samples.

REV 09/12/96 (PSTMP 7)

TRIANGLE LABORATORIES, INC.

DIOXIN SAMPLE EXTRACTION and CLEANUP TRACKING FORM

TLI Project No.: 40178 Ar1

Ext S#.crd and TLI Number	1	2	3	4	5	7	8	9			
Ar1 000 TLI Blank	AI 12-26-96	AG / LW 12-27-96	LW 12/27/96	LW 12/27/96	LW 12/27/96		GC 12-27-96				
Ar1 001 152-19-1A											
Ar1 002 152-19-2A						JL					
Ar1 003 152-19-3A											
						12/27/96					

Enter the procedure number below into the box at the top of each column to signify the step performed.
Initial and date each sample for each numbered procedure performed.

#.. .....PROCEDURE.....	DETAILS (circle)
1) EXTRACTION	ON__ OFF__ Soxhlet / Jar / Sep Funnel / Steam Dist / Cont LL / ASE / Waste Dilution
2) SPIKE AFTER EXTRACTION	
3) ADD TRIDECANE	
4) ROTOVAP	40mL / 10mL / Dryness
5) COMBINE	
~~6) DIVIDE / LIPID DETERMINATION~~	
7) SOLVENT EXCHANGE	
8) CLEANUP	DSP 260 / DSP 240 / DSP 225 / DSP 215 / E010401 / Other _____
9) TRANSFER	
10) ADDITIONAL CLEANUP	DSP 260 / DSP 240 / DSP 225 / DSP 215 / E010401 / Other _____
11) FINAL TRANSFER	

Comments: _____

Rev 09/12/96 (PSTMF 4)

TRIANGLE LABORATORIES, INC.
Transfer Chain-of-Custody Form
Project 40178-A

Transfer From: To: DMS5

	Initials..	Date.....	Time...
Released by:	AG	12/29/96	17:00
Accepted by:	HLM	12/30/96	7:41

MILES.ID.....	TLI_No.....	Cust.Id.....
40178-Ar1-001	152-19-1A	INFLUENT
40178-Ar1-002	152-19-2A	CA301
40178-Ar1-003	152-19-3A	EFFLUENT

XfrCOC (Rev 11/01/94)

Additional comments or instructions:

TRIANGLE LABORATORIES, INC.

HR GC/HRMS ANALYSIS

Method: 8290X:2378-TCDD Only

Required Detection Limit: 10 ppq

PROJECT: 40178Ar1

SAMPLE INFORMATION

RS Conc 20 µl @ 100.0 PG/µl

S#.crd	TLI / SAMPLE ID / CLIENT SAMPLE ID	1ST COLUMN GC/MS FILENAME COLUMN: DB5	CONFIRM	2ND COLUMN CONFIRM FILENAME COLUMN:	USF-RS VOLUME	USF-RS INIT.	ANALYSIS COMMENTS
					SOLN ID 40340	DATE 12/30/94	
Ar1 000	TLI Blank / TLI Water Blank	W1497.06					
Ar1 001	152-19-1A / INFLUENT	.04					
Ar1 002	152-19-2A / CA301	.05					
Ar1 003	152-19-3A / EFFLUENT	.06					

Comments: Batched c 40089 ~1

Type: B

Spike File: SPC2NF2S

Amt of Extract: 100%

REV 03/07/95 (PSTMF 6)

TRIANGLE LABORATORIES INC
RUN LOG

MS#	COLUMN TYPE	COLUMN #	PLOT NAME	PKD	AMOUNT INJ	ACQUISISTION	G/C
Varian	DB5 60m 0.32	6247525	[illegible]	[illegible]	2.0ul	[illegible]	[illegible]

DATE	TIME	PROJECT#	SAMPLE#	No	CLIENT SAMPLE ID	COMMENTS	332	OP INIT	P	Q	SYR #	FILE #
12/30/96	19:26	37777	145-83.1A	11	HCWRCL-C		2.0 97	VA	/	/	Auto	W1496-12
	20:05		.12A	12	HCWRCL-E		4.7 97		/	/		-13
	20:44		.12A mg	13	ms		3.0 97		/	/		-14
	21:23		.12A (10ml)	14	mg		2.9 97		/	/		-15
	22:02		Cos	15	Cos		3.4 97		/	/		-16
	22:18	—	41132	-	Phoenix Concl (5ml)	Gen f/B	3.1 97		/	/		-17
	23:41	—	42270	—	BLNK			BB	/	/	auto	W1497-01
	00:20	* 40088Ar1	TCI Blnk	0	TCI Water Blnk		2.4 ex		/	/		-02
	00:59	↓	151-24 -1A	1	SESDR1		2.5 ex		/	/		-03
	01:38	40088Ar1	152-19 -1A	1	influent		2.0 ex		/	/		-04
	02:17	↓	152-19 -2A	2	CA301		1.9 ex		/	/		-05
	02:57	↓	152-19 -3A	3	effluent		1.5 ex		/	/		-06
	03:36	40110B	151-50 -2	1	#2A TDI Quench S. Blackburn		1.8 ex		/	/		-07
	04:15	40175	152-16 -1	1	LA010-WO-126 - BAE017		1.7 ex		/	/		-08
	04:54	↓	152-16 -2	2	LA010-WO-126 - BACL218		[illegible]		/	/		-09

(*) Batched with TCI Project # 40178Ar1 - um 12/31/96
Concl Due: 22:35 / 10:48

PAGE #	50	

TRIANGLE LABORATORIES INC
RUN LOG

MS#	COLUMN TYPE	COLUMN #	PLOT NAME	PKD	AMOUNT INJ	ACQUISISTION	G/C
VG-70W	DB5 60m 0.25m	6247525	@TLI.PKD	T02	2.0ml	EPCUS	EPCUS

DATE	TIME	PROJECT#	SAMPLE#	No	CLIENT SAMPLE ID	COMMENTS	332.	OP INIT	P	Q	SYR #	FILE #
1/4/96	05:33	401315	151-71-1B	1	WW2217		1.0 ml	BB	✓		auto	W1497-10
	06:15	410185B	TLI Blank	0	TLI SPLP Leachate Blank		1.0 ml		✓			-11
	06:51		152-320-1	1	033-006-5-6026 (Leachate		1.0 ml		✓			-12
	07:30		LCS	2	LCS		1.0 ml		✓			-13
	08:09		LCSD	3	LCS		1.0 ml		✓			-14
	08:47	40089A1	LCS	2	LCS		1.0 ml		✓			-15
	09:28		LCSD	3	LCSD		1.0 ml		✓			-16
	10:07	39948	LCSD	16	LCSD		1.0 ml		✓			-17
	10:40	—	4L63C	-	Surrogates Conced (SV)	(Cont PA)	2.0 ml	VA	✓		Auto	W1497-18
	11:57	—	4L63C	—	Rptik	(Dirty surrogate)	1.0 ml	VA	✓			W1498-01
	12:37	401185	MB4llc	0	MB Ref Blank		2.0 ml		✓			-02
	13:16		151.82.1	1	GAA 4011		1.0 ml		✓			-03
	(		↓	2	DA14011				✓			-04
			LCS	3	MB LCS							-05
			LCSD	4	MB LCSD							-06

PAGE #	31

Comp Due: 2L/4R

SAMPLE DATA

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

Data File	W149702	W149704	W149705	W149706
Sample ID	TLI Water Blank	INFLUENT	CA301	EFFLUENT
Units	ppq	ppq	ppq	ppq
Analytes				
2378-TCDD	(5.0)	(4.0)	(7.8)	(7.0)
Other Standards Percent Recovery Summary (% Rec)				
37Cl-TCDD	80.8	82.2	80.5	72.6
Internal Standards Percent Recovery Summary (% Rec)				
13C12-2378-TCDD	74.2	75.8	45.0	56.4

(Detection Limit).

Beazer East Inc.

TLI Project: 40178Ar1 — Method 8290 TCDD Analysis (b)

Client Sample: TLI Water Blank — Analysis File: W149702

Client Project:	Water Sampling				
Sample Matrix:	WATER	Date Received:	/ /	Spike File:	SPX2372S
TLI ID:	TLI Blank	Date Extracted:	12/26/96	ICal:	WF55116
		Date Analyzed:	12/31/96	ConCal:	W149617
Sample Size:	1.000 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	W149702	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BB	% Solids:	n/a

Analytes	Conc. (ppq)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	ND	5.0				—

Internal Standard	Conc. (ppq)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDD	1480	74.2	40%-130%	0.80	19:56	—

Surrogate Standard (Type B)	Conc. (ppq)	% Recovery	QC Limits	Ratio	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	162	80.8	40%-130%		19:57	—

Recovery Standard	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	19:41	—

Data Reviewer: S A P 12/31/96

X237_PSR v1.14. LARS 6.08.02

Triangle Laboratories, Inc.®
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 20:34 12/31/96

Initial ....Date...

Data Review By: 8/10 12/31/96 Calculated Noise Area: 22.50

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

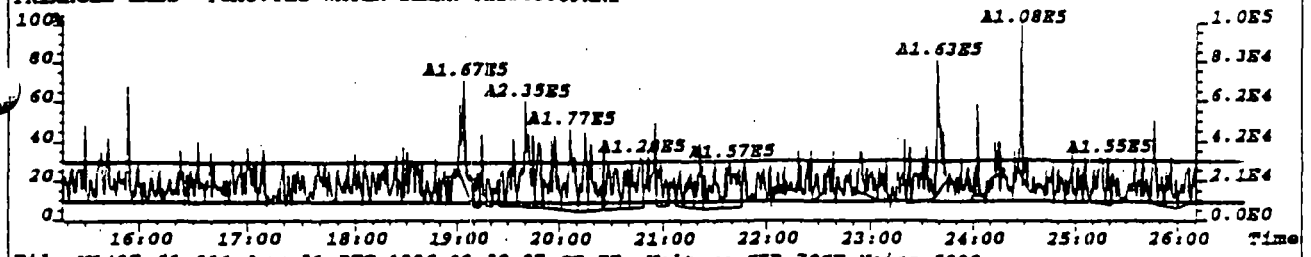
Page No. 1 Listing of W149702B.dbf
12/31/96 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..	Flags.
TCDD						0.65-0.89				0.843-1.069			
320-322		DC	NL	0:00	RO	1.17	18.05			0.000			
		DC	WH	21:21	RO	1.06	6.98			1.071			
320-322			0	Peaks			0.00						
37Cl-TCDD										0.900-1.100			
328		DC	NL	0:00			11.26			0.000			
		DC	WL	16:51			6.35			0.845			
		DC	WL	17:15			4.13			0.865			
		DC	WL	17:18			4.03			0.868			
		DC	WL	17:21			1.84			0.870			
		DC	WL	17:24			6.71			0.873			
		DC	WL	17:39			4.64			0.885			
				18:13			77.39	77.39		0.914			
		DC	SN	18:30			1.61			0.928			
		DC	SN	18:58			5.81			0.952			
				19:57			1,862.12	1,862.12		1.001	37Cl-TCDD	SUR1	
		DC	SN	20:06			20.67			1.008			
		DC	SN	20:20			9.98			1.020			
		DC	SN	20:25			18.28			1.024			
328			2	Peaks			1,939.51						
13C12-TCDD						0.65-0.89				0.900-1.100			
332-334		DC	NL	0:00	RO	2.25	26.69			0.000			
				18:28		0.78	107.11	47.10	60.01	0.926			
				19:41		0.81	23,840.00	10,700.90	13,139.10	0.987	13C12-1234-TCDD	RS1	
				19:56		0.80	18,028.86	8,027.66	10,001.20	1.000	13C12-2378-TCDD	IS1	
		DC	SN	20:10	RO	3.70	14.40			1.012			
				20:20	RO	0.64	197.59	86.29	133.97	1.020			
332-334			4	Peaks			42,173.56						

Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		E-Ether Interference

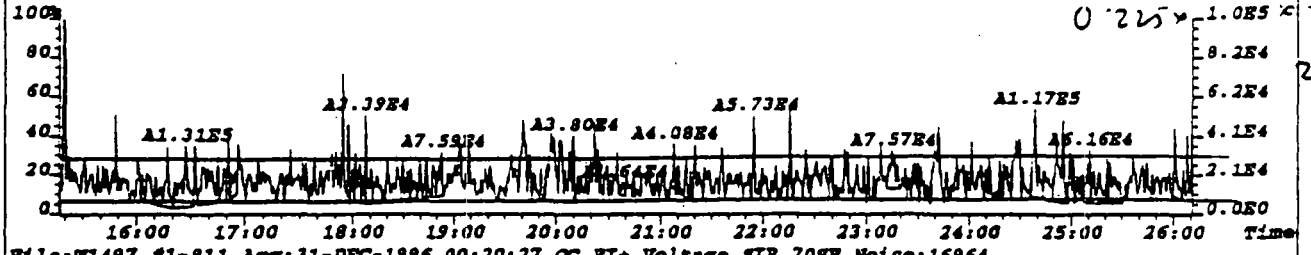
*** End of Report ***

File:W1497 #1-811 Acq:31-DEC-1996 00:20:27 GC EI+ Voltage SIR 70SE Noise:5965
319.8965 S:2 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,23860.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:TLI WATER BLANK TLI#40089AR1

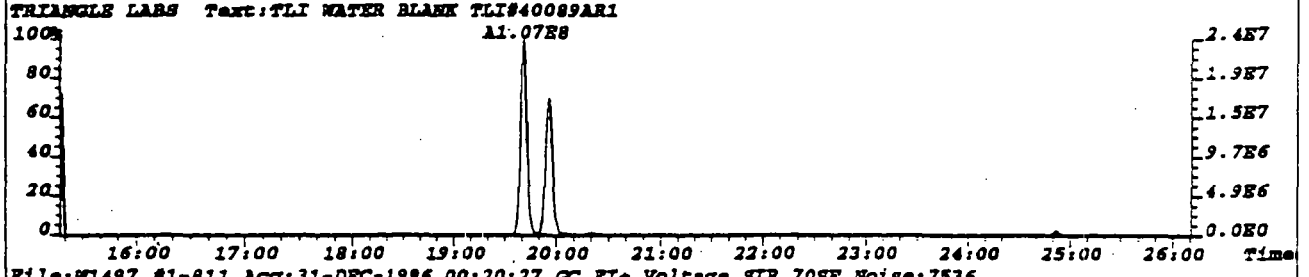


File:W1497 #1-811 Acq:31-DEC-1996 00:20:27 GC EI+ Voltage SIR 70SE Noise:5098
321.8936 S:2 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,20392.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:TLI WATER BLANK TLI#40089AR1

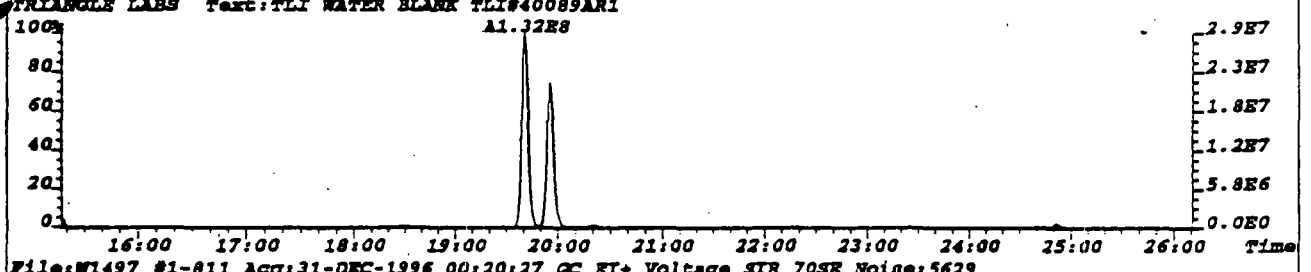
0.225 × 1.0E5 × 2 × 5 = 22.5
SAP
12/31/96



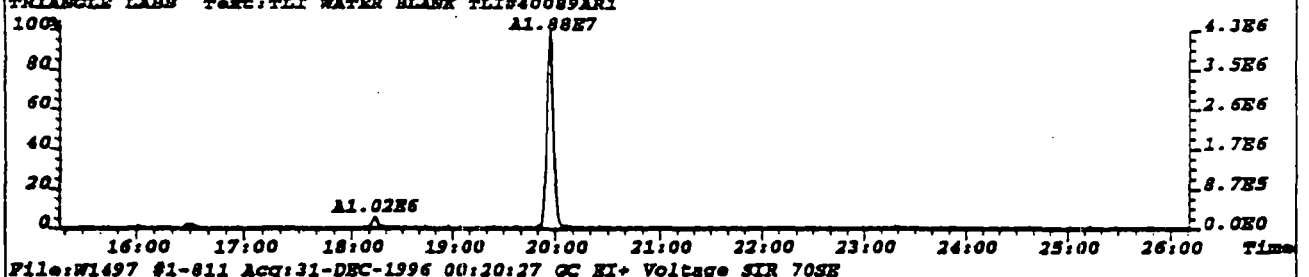
File:W1497 #1-811 Acq:31-DEC-1996 00:20:27 GC EI+ Voltage SIR 70SE Noise:16964
331.9368 S:2 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,67856.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:TLI WATER BLANK TLI#40089AR1



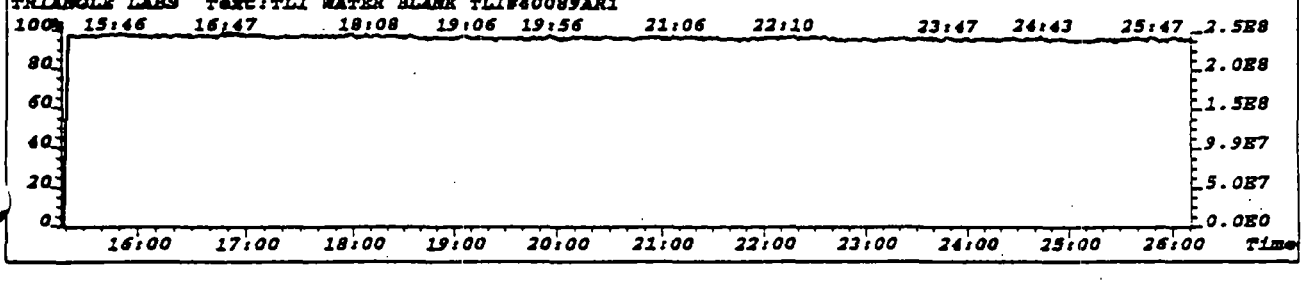
File:W1497 #1-811 Acq:31-DEC-1996 00:20:27 GC EI+ Voltage SIR 70SE Noise:7536
333.9338 S:2 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,30144.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:TLI WATER BLANK TLI#40089AR1



File:W1497 #1-811 Acq:31-DEC-1996 00:20:27 GC EI+ Voltage SIR 70SE Noise:5629
327.8847 S:2 F:2 BSUB(256,30,-3.0) PKD(7,5,3,0.05%,22516.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:TLI WATER BLANK TLI#40089AR1



File:W1497 #1-811 Acq:31-DEC-1996 00:20:27 GC EI+ Voltage SIR 70SE
330.9792 S:2 F:2 Exp:EPCUS
TRIANGLE LABS Text:TLI WATER BLANK TLI#40089AR1



Beazer East Inc.

TLI Project: 40178Ar1 — Method 8290 TCDD Analysis (b)
Client Sample: INFLUENT — Analysis File: W149704

Client Project:	Water Sampling				
Sample Matrix:	WATER	Date Received:	12/20/96	Spike File:	SPX2372S
TLI ID:	152-19-1A	Date Extracted:	12/26/96	ICal:	WF55116
		Date Analyzed:	12/31/96	ConCal:	W149617
Sample Size:	1.000 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	W149702	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BB	% Solids:	n/a

Analytes	Conc. (ppq)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	ND	4.0				—

Internal Standard	Conc. (ppq)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDD	1520	75.8	40%-130%	0.78	19:56	—

Surrogate Standard (Type B)	Conc. (ppq)	% Recovery	QC Limits	Ratio	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	164	82.2	40%-130%		19:57	—

Recovery Standard	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.80	19:41	—

Data Reviewer: S A P 12/31/96

X237_PSR v1.14, LARS 6.03.02

Triangle Laboratories, Inc.
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Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 20:35 12/31/96

Initial ....Date...

Data Review By: SM 12/31/96 Calculated Noise Area: 14.88

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of W149704B.dbf
12/31/96 Matched GC Peaks / Ratio / Ret. Time

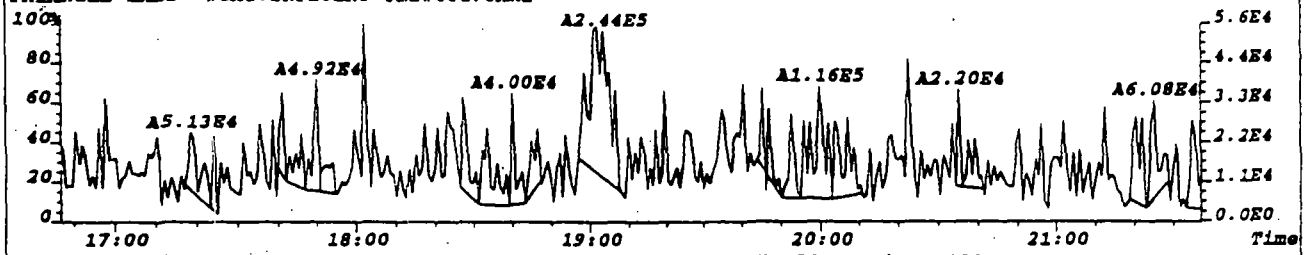
Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..	Flags.
TCDD						0.65-0.89				0.843-1.069			
320-322	DC	NL		0:00		0.84	17.92			0.000			
	DC	SN		17:46	RO	1.03	5.51			0.891			
	DC	SN		17:54		0.85	5.65			0.898			
	DC	SN		19:03	RO	4.83	8.93			0.956			
	DC	SN		19:45	RO	1.18	5.72			0.991			
	DC	SN		19:53	RO	1.14	5.74			0.997			
	DC	SN		20:00	RO	3.28	6.26			1.003			
	DC	SN		20:07	RO	0.99	13.38			1.009			
	DC	SN		20:39		0.75	7.31			1.036			
320-322			0	Peaks			0.00						
37Cl-TCDD										0.900-1.100			
328	DC	NL		0:00			9.75			0.000			
	DC	WL		17:11			4.93			0.862			
				18:13			82.95	82.95		0.914			
	DC	SN		18:44			6.71			0.940			
	DC	SN		19:08			2.28			0.960			
	DC	SN		19:11			3.44			0.962			
	DC	SN		19:24			1.19			0.973			
	DC	SN		19:28			6.63			0.977			
				19:57			1,532.47	1,532.47		1.001	37Cl-TCDD	SUR1	
	DC	SN		20:09			1.72			1.011			
	DC	SN		20:25			3.52			1.024			
	DC	SN		20:30			7.96			1.028			
	DC	SN		20:57			3.64			1.051			
	DC	SN		20:59			1.96			1.053			
	DC	SN		21:12			2.11			1.064			
	DC	SN		21:34			8.08			1.082			
328			2	Peaks			1,615.42						
13C12-TCDD						0.65-0.89				0.900-1.100			
332-334	DC	NL		0:00	RO	2.41	26.00			0.000			
				19:41		0.80	19,285.37	8,541.47	10,743.90	0.987	13C12-1234-TCDD	RS1	
				19:56		0.78	14,903.09	6,513.41	8,389.68	1.000	13C12-2378-TCDD	IS1	
332-334			2	Peaks			34,188.46						

Compound/
M_Z.... QC.Log Omit Why ..RT. OK Ratio Total.Area... Area.Peak.1.. Area.Peak.2.. Rel.RT Compound.Name.. ID.. Flags.

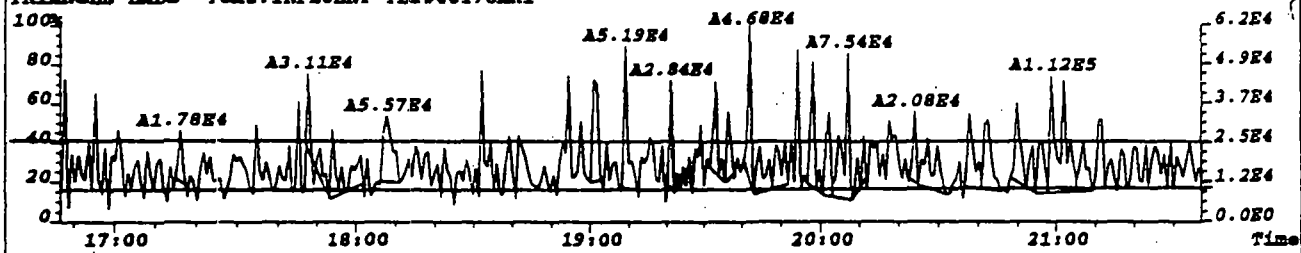
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		E-Ether Interference

*** End of Report ***

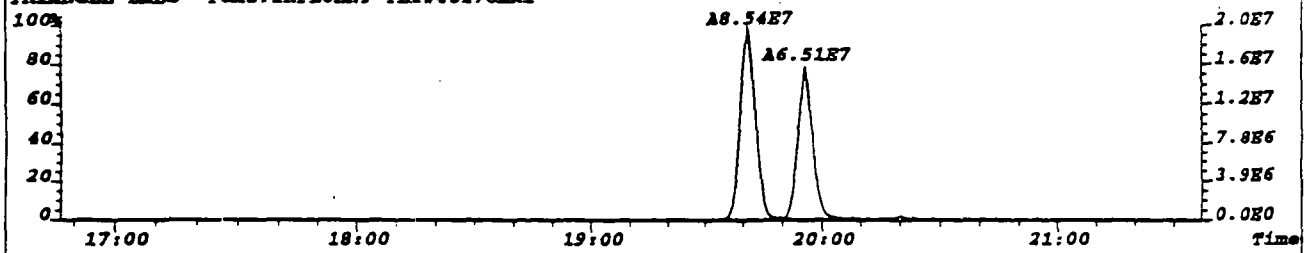
File:W1497 #1-812 Acq:31-DEC-1996 01:38:41 GC EI+ Voltage SIR 70SE Noise:4080
319.8965 S:4 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,16320.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:INFLUENT TLI#40178AR1



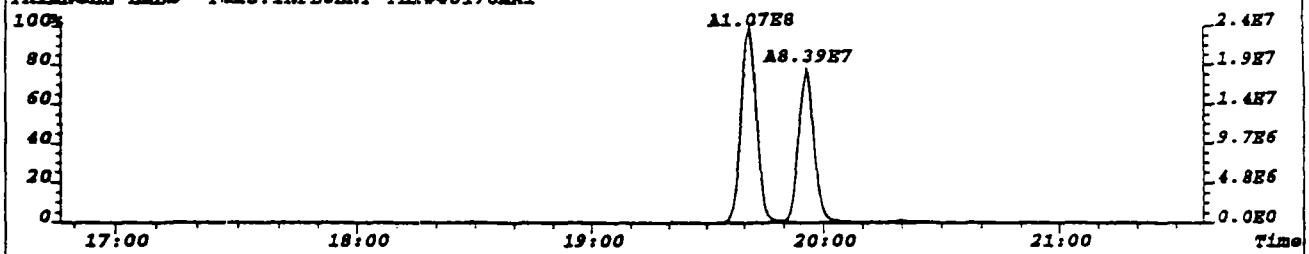
File:W1497 #1-812 Acq:31-DEC-1996 01:38:41 GC EI+ Voltage SIR 70SE Noise:4882
321.8936 S:4 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,19528.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:INFLUENT TLI#40178AR1



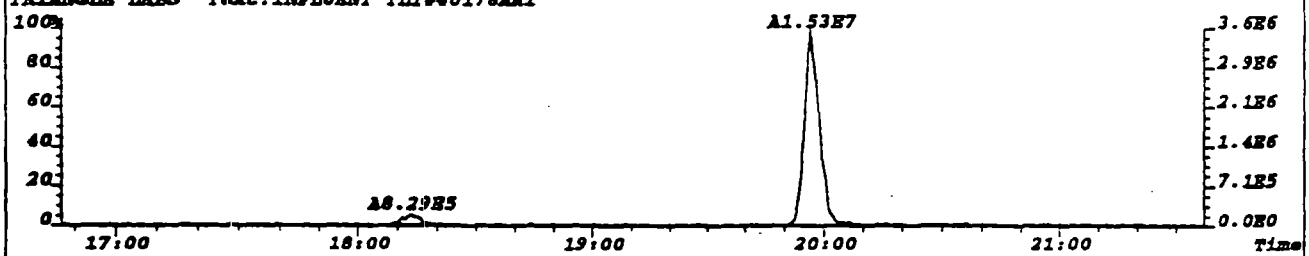
File:W1497 #1-812 Acq:31-DEC-1996 01:38:41 GC EI+ Voltage SIR 70SE Noise:17692
331.9368 S:4 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,70768.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:INFLUENT TLI#40178AR1



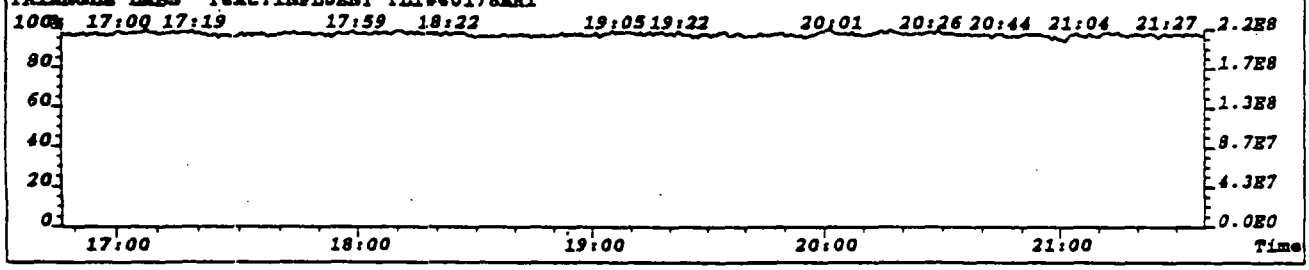
File:W1497 #1-812 Acq:31-DEC-1996 01:38:41 GC EI+ Voltage SIR 70SE Noise:7357
333.9338 S:4 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,29428.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:INFLUENT TLI#40178AR1



File:W1497 #1-812 Acq:31-DEC-1996 01:38:41 GC EI+ Voltage SIR 70SE Noise:4873
327.8847 S:4 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,19492.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:INFLUENT TLI#40178AR1



File:W1497 #1-812 Acq:31-DEC-1996 01:38:41 GC EI+ Voltage SIR 70SE
330.9792 S:4 F:2 Exp:EPCUS
TRIANGLE LABS Text:INFLUENT TLI#40178AR1



Beazer East Inc.

TLI Project: 40178Ar1 — Method 8290 TCDD Analysis (b)

Client Sample: CA301 — Analysis File: W149705

Client Project:	Water Sampling				
Sample Matrix:	WATER	Date Received:	12/20/96	Spike File:	SPX2372S
TLI ID:	152-19-2A	Date Extracted:	12/26/96	ICal:	WF55116
		Date Analyzed:	12/31/96	ConCal:	W149617
Sample Size:	1.000 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	W149702	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BB	% Solids:	n/a

Analytes	Conc. (ppq)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	ND	7.8				—

Internal Standard	Conc. (ppq)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDD	899	45.0	40%-130%	0.77	19:55	—

Surrogate Standard (Type B)	Conc. (ppq)	% Recovery	QC Limits	Ratio	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	161	80.5	40%-130%		19:57	—

Recovery Standard	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.80	19:41	—

Data Reviewer: S. A. P. 12/31/96

X237_PSR v1.14, LARS 6.08.02

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 20:35 12/31/96

Initial ...Date...

Data Review By: SH 12/31/96 Calculated Noise Area: 16.80

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

Page No. 1 Listing of W149705B.dbf
12/31/96 Matched GC Peaks / Ratio / Ret. Time

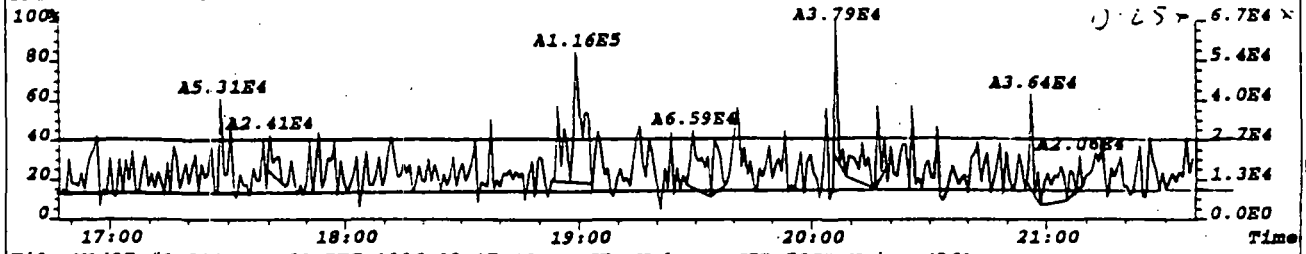
Compound/ M_Z....	QC.	Log	Omit	Why	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..	Flags.
TCDD							0.65-0.89				0.843-1.069			
320-322	DC		NL		0:00	RO	1.10	15.41			0.000			
	DC		SN		17:28	RO	1.15	8.18			0.877			
	DC		SN		18:54		0.74	11.69			0.949			
	DC		SN		18:59	RO	1.58	12.95			0.953			
320-322				0	Peaks			0.00						
37Cl-TCDD											0.900-1.100			
328	DC		NL		0:00			8.10			0.000			
	DC		WL		16:49			5.33			0.844			
	DC		WL		17:07			2.89			0.859			
	DC		WL		17:12			1.59			0.864			
	DC		WL		17:16			3.89			0.867			
	DC		WL		17:20			12.07			0.870			
	DC		WL		17:31			4.70			0.879			
	DC		WL		17:34			3.06			0.882			
	DC		WL		17:40			8.37			0.887			
	DC		WL		17:44			2.90			0.890			
	DC		WL		17:54			3.49			0.899			
					18:13			107.76	107.76		0.915			
	DC		SN		18:28			1.26			0.927			
	DC		SN		18:33			7.79			0.931			
	DC		SN		18:38			3.99			0.936			
	DC		SN		19:19			10.39			0.970			
	DC		SN		19:27			2.49			0.977			
	DC		SN		19:31			4.59			0.980			
	DC		SN		19:33			6.53			0.982			
	DC		SN		19:41			9.37			0.988			
	DC		SN		19:42			0.60			0.989			
					19:57			1,477.18	1,477.18		1.002	37Cl-TCDD	SUR1	
	DC		SN		20:10			2.41			1.013			
	DC		SN		20:29			6.82			1.028			
328				2	Peaks			1,584.94						
13C12-TCDD							0.65-0.89				0.900-1.100			
332-334	DC		NL		0:00	RO	2.36	28.23			0.000			
					18:28	RO	0.51	46.50	20.27	39.62	0.927			
	DC		SN		18:33		0.85	23.49			0.931			
					19:41		0.80	18,983.92	8,427.12	10,556.80	0.988	13C12-1234-TCDD	RS1	
					19:55		0.77	8,698.58	3,781.95	4,916.63	1.000	13C12-2378-TCDD	IS1	
	DC		SN		20:08	RO	1.13	15.98	-		1.011			
					20:20	RO	0.42	72.93	31.95	75.31	1.021			
332-334				4	Peaks			27,801.93						

Compound/
M_I.... QC.Log Omit Why ..RT. OK Ratio Total.Area... Area.Peak.1.. Area.Peak.2.. Rel.RT Compound.Name.. ID.. Flags.

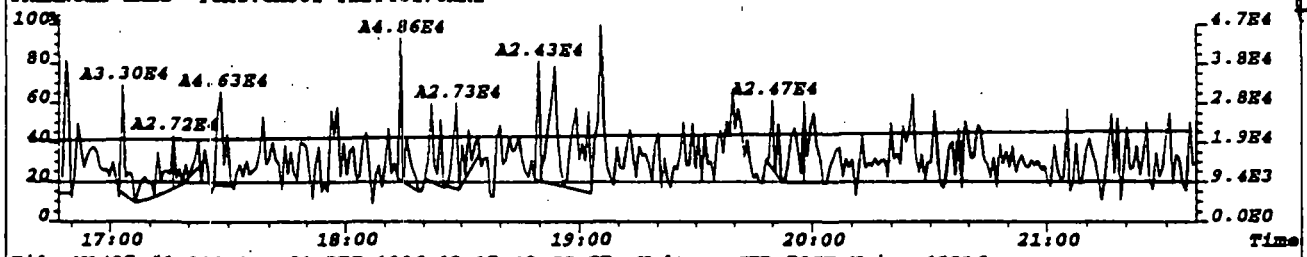
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_I -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		E-Ether Interference

*** End of Report ***

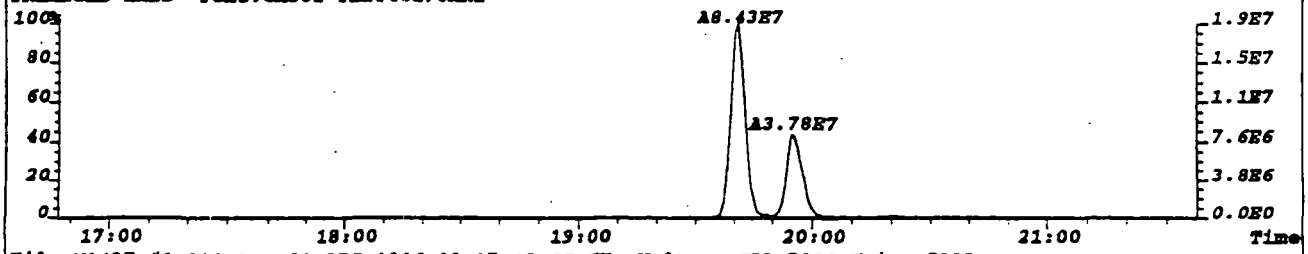
File:W1497 #1-811 Acq:31-DEC-1996 02:17:48 GC EI+ Voltage SIR 70SE Noise:4782
319.8965 S:5 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,19128.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:CA301 TLI#40178AR1



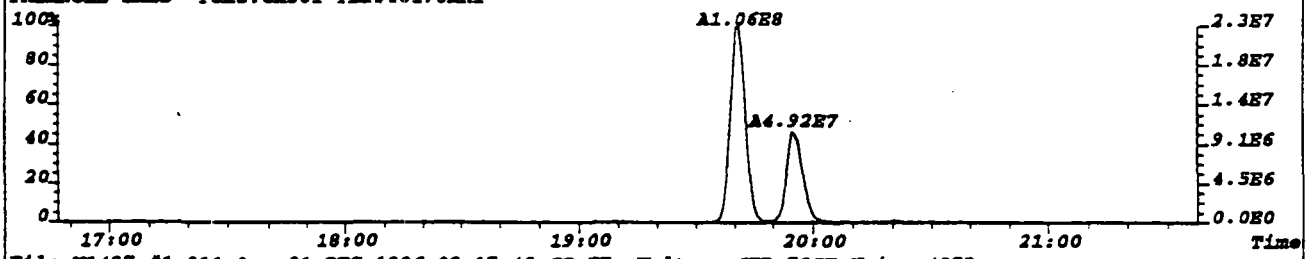
File:W1497 #1-811 Acq:31-DEC-1996 02:17:48 GC EI+ Voltage SIR 70SE Noise:4361
321.8936 S:5 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,17444.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:CA301 TLI#40178AR1



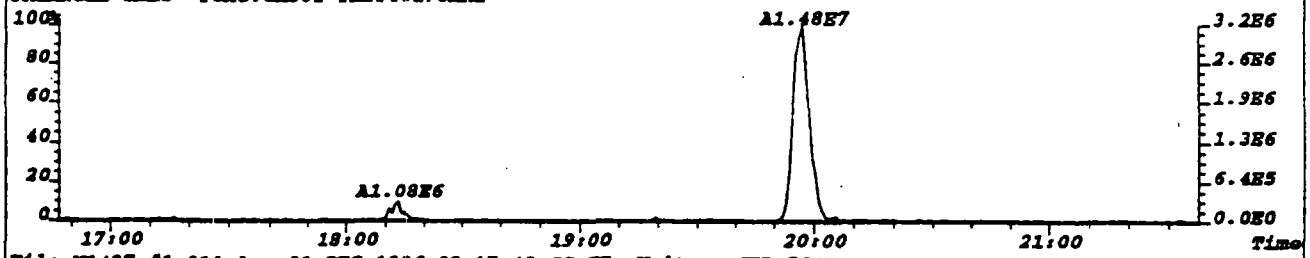
File:W1497 #1-811 Acq:31-DEC-1996 02:17:48 GC EI+ Voltage SIR 70SE Noise:18816
331.9368 S:5 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,75264.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:CA301 TLI#40178AR1



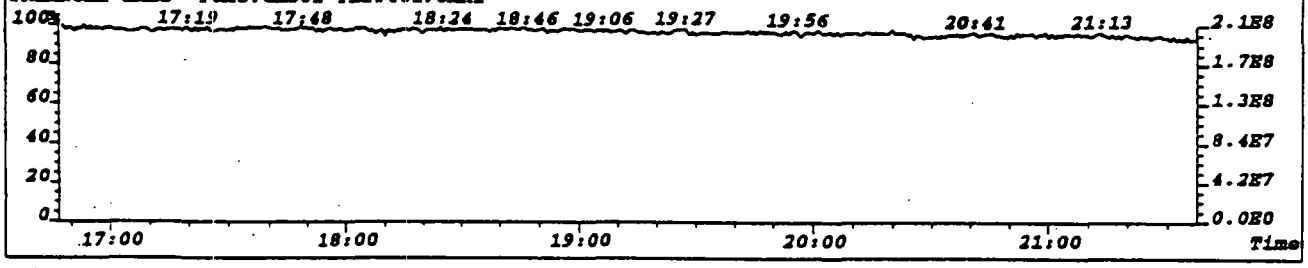
File:W1497 #1-811 Acq:31-DEC-1996 02:17:48 GC EI+ Voltage SIR 70SE Noise:7982
333.9338 S:5 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,31928.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:CA301 TLI#40178AR1



File:W1497 #1-811 Acq:31-DEC-1996 02:17:48 GC EI+ Voltage SIR 70SE Noise:4052
327.8847 S:5 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,16208.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:CA301 TLI#40178AR1



File:W1497 #1-811 Acq:31-DEC-1996 02:17:48 GC EI+ Voltage SIR 70SE
330.9792 S:5 F:2 Exp:EPCUS
TRIANGLE LABS Text:CA301 TLI#40178AR1



Beazer East Inc.

TLI Project: 40178Ar1 — Method 8290 TCDD Analysis (b)
Client Sample: EFFLUENT — Analysis File: W149706

Client Project:	Water Sampling				
Sample Matrix:	WATER	Date Received:	12/20/96	Spike File:	SPX2372S
TLI ID:	152-19-3A	Date Extracted:	12/26/96	ICal:	WF55116
		Date Analyzed:	12/31/96	ConCal:	W149617
Sample Size:	1.000 L	Dilution Factor:	n/a	% Moisture:	n/a
Dry Weight:	n/a	Blank File:	W149702	% Lipid:	n/a
GC Column:	DB-5	Analyst:	BB	% Solids:	n/a

Analytes	Conc. (ppq)	DL	EMPC	Ratio	RT	Flags
2,3,7,8-TCDD	ND	7.0				—

Internal Standard	Conc. (ppq)	% Recovery	QC Limits	Ratio	RT	Flags
$^{13}C_{12}$-2,3,7,8-TCDD	1130	56.4	40%-130%	0.79	19:55	—

Surrogate Standard (Type B)	Conc. (ppq)	% Recovery	QC Limits	Ratio	RT	Flags
$^{37}Cl_4$-2,3,7,8-TCDD	145	72.6	40%-130%		19:57	—

Recovery Standard	Ratio	RT	Flags
$^{13}C_{12}$-1,2,3,4-TCDD	0.81	19:41	—

Data Reviewer: S A P 12/31/96

X237_PSR v1.14. LARS 6.03.02

Triangle Laboratories, Inc.
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Printed: 20:35 12/31/96

Initial ....Date...

Data Review By: JHP 12/31/96 Calculated Noise Area: 15.30

The Total Area for each peak with an ion abundance ratio outside ratio limits has been recalculated according to method requirements.

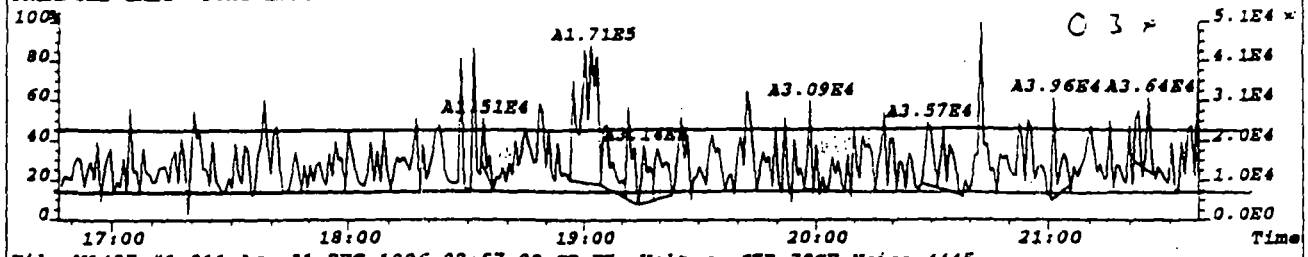
Page No. 1 Listing of W149706B.dbf
12/31/96 Matched GC Peaks / Ratio / Ret. Time

Compound/ M_Z....	QC.Log	Omit	Why	..RT.	OK	Ratio	Total.Area...	Area.Peak.1..	Area.Peak.2..	Rel.RT	Compound.Name..	ID..	Flags.
TCDD					0.65-0.89					0.843-1.069			
320-322	DC	NL		0:00	RO	0.94	15.75			0.000			
320-322			0	Peaks			0.00						
37Cl-TCDD										0.900-1.100			
328	DC	NL		0:00			10.68			0.000			
	DC	NL		16:59			6.86			0.853			
	DC	NL		17:03			3.97			0.856			
				18:12			47.69	47.69		0.914			
	DC	SN		19:30			3.16			0.979			
	DC	SN		19:34			4.48			0.982			
	DC	SN		19:38			2.23			0.986			
				19:57			1,074.99	1,074.99		1.002	37Cl-TCDD		SUR1
	DC	SN		20:09			5.23			1.012			
	DC	SN		20:19			3.67			1.020			
	DC	SN		20:24			4.32			1.024			
				20:28			12.82	12.82		1.028			
	DC	SN		20:59			4.63			1.054			
	DC	SN		21:23			7.53			1.074			
	DC	SN		21:32			1.33			1.081			
	DC	SN		21:38			2.58			1.086			
328			3	Peaks			1,135.50						
13C12-TCDD					0.65-0.89					0.900-1.100			
332-334	DC	NL		0:00	RO	2.22	26.53			0.000			
				19:41		0.81	15,311.04	6,871.12	8,439.92	0.988	13C12-1234-TCDD		RS1
				19:55		0.79	8,793.81	3,876.67	4,917.14	1.000	13C12-2378-TCDD		IS1
				20:05	RO	0.47	43.31	18.76	40.17	1.008			
				20:20	RO	0.64	142.47	61.89	96.93	1.021			
332-334			4	Peaks			24,290.63						

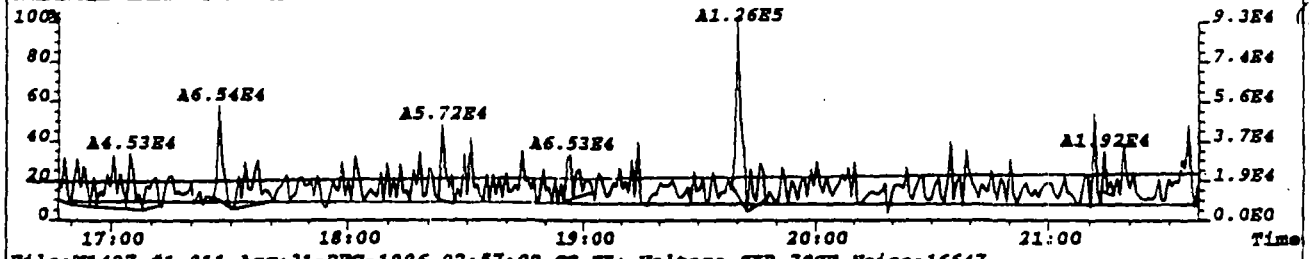
Column Description.....	"Why" Code Description.....	QC Log Desc.....
M_Z -Nominal Ion Mass(es)	WL-Below Retention Time Window	A-Peak Added
..RT. -Retention Time (mm:ss)	WH-Above Retention Time Window	K-Peak Kept
Rat.1 -Ratio of M/M+2 Ions	SN-Below Signal to Noise Level	D-Peak Deleted
OK -RO=Ratio Outside Limits	<M-Below Method Detection Limit	T-Time Changed
Rel.RT-Relative Retention Time	NL-Channel Specific Noise Level	M-Peak Area Changed
		N-Name Changed
		E-Ether Interference

*** End of Report ***

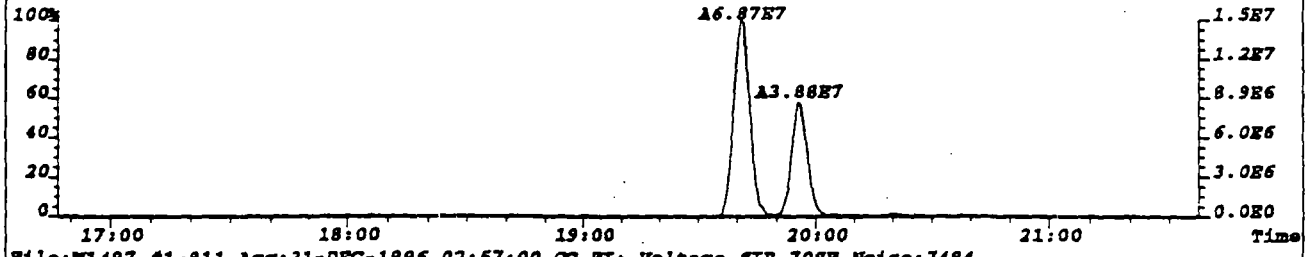
File:W1497 #1-811 Acq:31-DEC-1996 02:57:00 GC EI+ Voltage SIR 70SE Noise:4185
319.8965 S:6 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,16740.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:EFFLUENT TLI#40178AR1



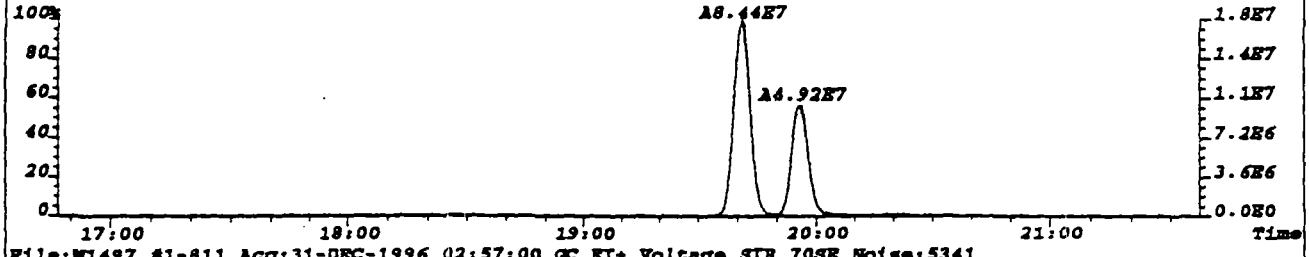
File:W1497 #1-811 Acq:31-DEC-1996 02:57:00 GC EI+ Voltage SIR 70SE Noise:4445
321.8936 S:6 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,17780.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:EFFLUENT TLI#40178AR1



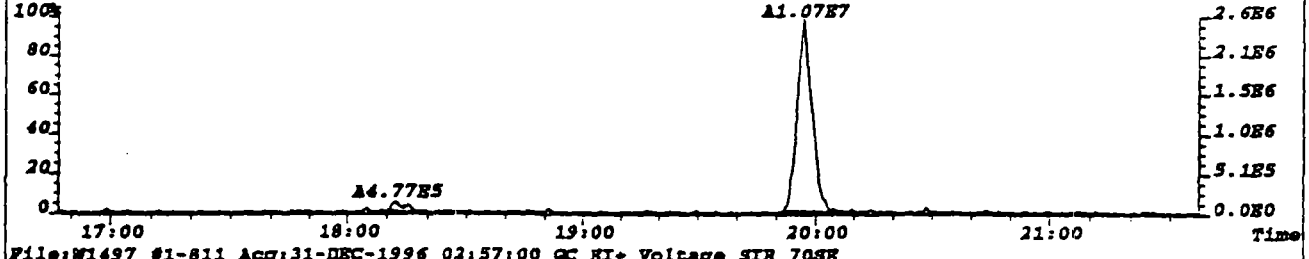
File:W1497 #1-811 Acq:31-DEC-1996 02:57:00 GC EI+ Voltage SIR 70SE Noise:16647
331.9368 S:6 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,66588.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:EFFLUENT TLI#40178AR1



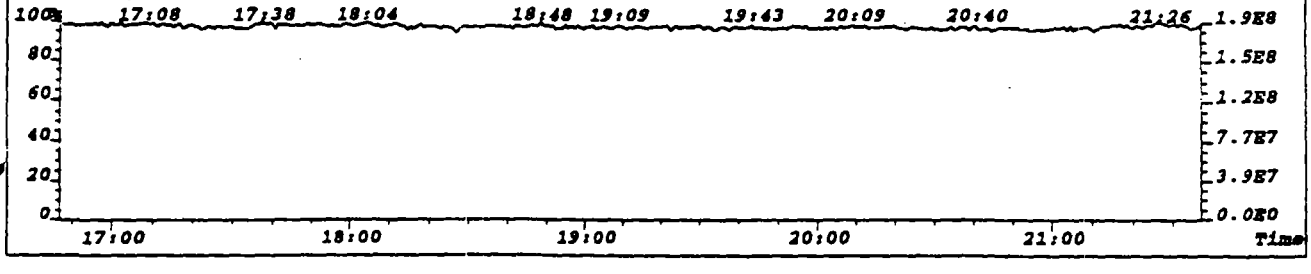
File:W1497 #1-811 Acq:31-DEC-1996 02:57:00 GC EI+ Voltage SIR 70SE Noise:7484
333.9338 S:6 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,29936.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:EFFLUENT TLI#40178AR1



File:W1497 #1-811 Acq:31-DEC-1996 02:57:00 GC EI+ Voltage SIR 70SE Noise:5341
327.8847 S:6 F:2 BSUB(256,30,-3.0) PKD(5,3,1,0.10%,21364.0,0.00%,F,F) Exp:EPCUS
TRIANGLE LABS Text:EFFLUENT TLI#40178AR1



File:W1497 #1-811 Acq:31-DEC-1996 02:57:00 GC EI+ Voltage SIR 70SE
330.9792 S:6 F:2 Exp:EPCUS
TRIANGLE LABS Text:EFFLUENT TLI#40178AR1



CALIBRATION DATA

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

TRIANGLE LABORATORIES, INC. Date: 05.13.96

Initial Calibration Summary for WF55116

Analysis Date.....: 05/10/96 Method.....: M23

Instrument.....: W

Analytes	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
Total MCDF	1.653	0.000	0%	8:10	0:01	13:18	3.265		1
Total MCDD	1.691	0.000	0%	8:36	0:11	14:11	2.991		1
Total DCDF	0.784	0.000	0%	10:28	6:18	14:18	5.916		1
Total DCDD	1.826	0.000	0%	10:58	7:11	15:11	1.481		1
Total TriCDF	1.331	0.000	0%	13:42	10:18	17:18	1.023		1
Total TriCDD	1.105	0.000	0%	13:45	12:11	18:11	1.056		1
2378-TCDF	1.186	0.066	6%	19:19	15:18	23:18	0.770		4
TOTAL TCDF	1.186	0.066	6%				0.770		4
2378-TCDD	1.239	0.151	12%	20:13	16:11	24:11	0.750		5
TOTAL TCDD	1.239	0.151	12%				0.750		5
12378-PeCDF	1.144	0.074	6%	23:53	19:52	27:52	1.467		5
23478-PeCDF	1.180	0.108	9%	24:41			1.508		5
TOTAL PeCDF	1.162	0.089	8%				1.487		5
12378-PeCDD	1.224	0.057	5%	25:04	21:03	29:03	1.562		5
TOTAL PeCDD	1.224	0.057	5%				1.562		5
123478-HxCDF	1.159	0.037	3%	27:39	23:45	31:45	1.302		5
123678-HxCDF	1.448	0.080	6%	27:45			1.265		5
234678-HxCDF	1.114	0.057	5%	28:17			1.268		5
123789-HxCDF	0.998	0.059	6%	29:00			1.321		5
TOTAL HxCDF	1.180	0.048	4%				1.285		5
123478-HxCDD	0.906	0.064	7%	28:25	24:29	32:29	1.232		5
123678-HxCDD	1.087	0.047	4%	28:30			1.273		5
123789-HxCDD	1.018	0.073	7%	28:48			1.256		5
TOTAL HxCDD	1.003	0.053	5%				1.255		5
1234678-HpCDF	1.847	0.056	3%	30:31	26:30	34:30	1.080		5
1234789-HpCDF	1.219	0.057	5%	31:43			1.033		5
TOTAL HpCDF	1.533	0.051	3%				1.061		5
1234678-HpCDD	1.072	0.062	6%	31:23	27:22	35:22	1.015		5
TOTAL HpCDD	1.072	0.062	6%				1.015		5
OCDF	1.325	0.103	8%	33:53	29:47	37:47	0.898		5
OCDD	1.028	0.057	6%	33:47	29:47	37:47	0.835		5

Other Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
37Cl-TCDD	0.949	0.029	3%	20:12	18:11	22:11			5
13C12-PeCDF 234	1.004	0.033	3%	24:40	21:52	25:52	1.485		5
13C12-HxCDF 478	0.908	0.025	3%	27:39			0.511		5
13C12-HxCDF 234	0.906	0.013	1%	28:16			0.504		5
13C12-HxCDF 789	0.727	0.032	4%	28:59			0.506		5
13C12-HxCDD 478	0.839	0.046	5%	28:25			1.212		5
13C12-HpCDF 789	0.796	0.038	5%	31:43	28:30	34:30	0.431		5

Internal Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
13C12-2378-TCDF	1.339	0.194	14%	19:18	18:18	20:18	0.760		5
13C12-2378-TCDD	1.019	0.032	3%	20:11	18:11	22:11	0.802		5
13C12-PeCDF 123	0.923	0.043	5%	23:52	19:52	27:52	1.472		5

Triangle Laboratories, Inc.® Analytical Services Division
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

TRIANGLE LABORATORIES, INC. Date: 05/13 96

Initial Calibration Summary for WF55116

13C12-PeCDD 123	0.539	0.030	6%	25:03	21:03	29:03	1.462		5
13C12-HxCDF 678	1.446	0.055	4%	27:45	23:45	31:45	0.515		5
13C12-HxCDD 678	1.001	0.029	3%	28:29	27:29	29:29	1.232		5
13C12-HpCDF 678	1.011	0.066	7%	30:30	28:30	34:30	0.432		5
13C12-HpCDD 678	0.823	0.062	8%	31:22	30:22	32:22	1.040		5
13C12-OCDD	0.626	0.069	11%	33:47	31:47	35:47	0.868		5

Recovery Standards	RF	SD	%RSD	RT	RT/LO	RT/HI	Ratio1	Ratio2	N
13C12-1234-TCDD	1.000	0.000	0%	19:58			0.804		5
13C12-HxCDD 789	1.000	0.000	0%	28:47			1.224		5

*** End of Report ***

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Date: 12/31/96 TRIANGLE LABORATORIES, INC.

Continuing Calibration for W149617

Analysis Date....: 12/30/96 Method.....: M23?
Operator.....: VA Instrument..: W
Init Calibration.: WF55116 Std.Conc....: 50.00
ICal Date.....: 05/10/96

Analyte Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
Total MCDF	0.000		0:01 13:02			1.653	-1.653	100.0%
Total MCDD	0.000		0:01 13:55			1.691	-1.691	100.0%
Total DCDF	0.000		6:02 14:02			0.784	-0.784	100.0%
Total DCDD	0.000		6:55 14:55			1.826	-1.826	100.0%
Total TriCDF	0.000		10:02 17:02			1.331	-1.331	100.0%
Total TriCDD	0.000		11:55 17:55			1.105	-1.105	100.0%
2378-TCDF	1.007	0.73	15:35 21:18	19:02	1.0000	1.186	-0.179	-15.1%
TOTAL TCDF	1.007	0.73				1.186	-0.179	-15.1%
2378-TCDD	1.110	0.78	16:47 21:17	19:56	1.0008	1.239	-0.129	-10.4%
TOTAL TCDD	1.110	0.78				1.239	-0.129	-10.4%
12378-PeCDF	1.035	1.51	21:16 25:40	23:41	1.0007	1.144	-0.109	-9.5%
23478-PeCDF	1.022	1.50		24:29	1.0345	1.180	-0.158	-13.4%
TOTAL PeCDF	1.028	1.51				1.162	-0.134	-11.5%
12378-PeCDD	1.146	1.54	22:44 25:32	24:51	1.0000	1.224	-0.078	-6.3%
TOTAL PeCDD	1.146	1.54				1.224	-0.078	-6.3%
123478-HxCDF	1.070	1.22	26:17 29:04	27:28	0.9964	1.159	-0.089	-7.7%
123678-HxCDF	1.325	1.19		27:34	1.0000	1.448	-0.123	-8.5%
234678-HxCDF	1.046	1.22		28:07	1.0200	1.114	-0.068	-6.1%
123789-HxCDF	0.969	1.22		28:49	1.0453	0.998	-0.029	-2.9%
TOTAL HxCDF	1.103	1.21				1.180	-0.077	-6.6%
123478-HxCDD	0.841	1.24	26:50 28:45	28:14	0.9971	0.906	-0.065	-7.2%
123678-HxCDD	0.931	1.23		28:19	1.0000	1.087	-0.156	-14.4%

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Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 00:32 12/31/96

123789-HxCDD	0.940	1.20		23:37	1.0106	1.018	-0.078	-7.6%
TOTAL HxCDD	0.904	1.22				1.003	-0.099	-9.9%
1234678-HpCDF	1.666	1.02	30:11 31:43	30:20	1.0000	1.847	-0.181	-9.8%
1234789-HpCDF	1.096	1.01		31:33	1.0401	1.219	-0.123	-10.1%
TOTAL HpCDF	1.381	1.02				1.533	-0.152	-9.9%
1234678-HpCDD	0.912	1.02	30:27 31:23	31:13	1.0005	1.072	-0.160	-14.9%
TOTAL HpCDD	0.912	1.02				1.072	-0.160	-14.9%
OCDF	1.155	0.88	29:36 37:36	33:42	1.0030	1.325	-0.170	-12.9%
OCDD	1.003	0.85	29:36 37:36	33:36	1.0000	1.028	-0.025	-2.5%

Other Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
37Cl-TCDD	0.944		17:55 21:55	19:56	1.0008	0.949	-0.005	-0.5%
13C12-PeCDF 234	0.960	1.50	19:40 27:40	24:28	1.0338	1.004	-0.044	-4.3%
13C12-HxCDF 478	0.988	0.50		27:28	0.9964	0.908	0.080	8.8%
13C12-HxCDF 234	0.967	0.50		28:05	1.0187	0.906	0.061	6.8%
13C12-HxCDF 789	0.807	0.51		28:49	1.0453	0.727	0.080	11.0%
13C12-HxCDD 478	0.852	1.22		28:14	0.9971	0.839	0.013	1.5%
13C12-HpCDF 789	0.829	0.44	28:20 34:20	31:32	1.0396	0.796	0.033	4.1%

Internal Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-2378-TCDF	1.342	0.76	18:02 20:02	19:02	1.0000	1.339	0.003	0.2%
13C12-2378-TCDD	1.069	0.79	17:55 21:55	19:55	1.0000	1.019	0.050	4.9%
13C12-PeCDF 123	1.097	1.48	19:40 27:40	23:40	1.0000	0.923	0.174	18.8%
13C12-PeCDD 123	0.647	1.46	20:51 28:51	24:51	1.0000	0.539	0.108	20.0%
13C12-HxCDF 678	1.150	0.51	23:34 31:34	27:34	1.0000	1.446	-0.296	-20.5%
13C12-HxCDD 678	0.982	1.23	27:19 29:19	28:19	1.0000	1.001	-0.019	-1.9%

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Phone: (919) 544-5729 • Fax: (919) 544-5491

Continuing Calibration for W149617

13C12-HpCDF 678	1.791	0.44	28:20 34:20	30:20	1.0000	1.011	-0.220	-21.8%
13C12-HpCDD 678	0.773	1.03	30:12 32:12	31:12	1.0000	0.823	-0.050	-6.0%
13C12-OCDD	0.545	0.87	33:27 33:47	33:36	1.0000	0.626	-0.081	-13.0%

Recovery Standard Summary

Name	RF	Ratio 1&2	RT Lo/High	RT	Rel. RT	ICal RF	Delta RF	%D
13C12-1234-TCDD	1.000	0.80		19:41	0.9883	1.000	0.000	0.0%
13C12-HxCDD 789	1.000	1.22		28:36	1.0100	1.000	0.000	0.0%

QC Front End Check: 1.5624

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Phone: (919) 544-5729 • Fax: (919) 544-5491

APPENDIX J

GROUNDWATER CONSTRUCTION AS-BUILT DRAWINGS

RUST Rust Environment & Infrastructure Inc.

A Rust International Company
5510 Six Forks Road, Suite 200
Raleigh, NC 27609

Phone 919.676.5100
Fax 919.676.5259

January 24, 1997

Mr. Bruce Geno
Cummings-Riter Inc.
339 Haymaker Road
Parkway Building, Suite 201
Monroeville, PA 15146

RECEIVED
JAN 2 8

Re: As-Built Drawing Transmittal for Koppers Superfund Site
Rust E & I Project No. 34321.000

Dear Bruce:

Please find enclosed one copy of the following As-Built drawings for the Groundwater Remediation System at the Koppers Superfund Site located in Morrisville, North Carolina:

34321-C-01	Partial Site Plan
34321-E-01	Electrical Distribution
34321-I-01	Process & Instrumentation Diagram
34321-M-01	General Equipment Arrangement
34321-S-01	Treatment Slab and Containment
34321-S-02	Extraction Well Valve and Meter Vault

If you have any questions please contact me at (919) 676-5137.

Sincerely,

John G. Funk

cc: Jim Cook, Beazer East

Enclosure

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10569333 Site ID: NCD0032 00383

Site Name: Koppers (Morrisville Plant)

Nature of Material:

Map:	✓	Computer Disks:	
Photos:		CD-ROM:	
Blueprints:		Oversized Report:	
Slides:		Log Book:	

Other (describe): Site Maps

Amount of material:

Please contact the appropriate Records Center to view the material.

APPENDIX K

LANDFILL DISPOSAL WASTE MANIFESTS

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays (803) 253-6481

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N C D 0 0 3 2 0 0 3 8 3
MANIFEST DOCUMENT NO: 9 6 0 0 1
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
Beazer East, Inc.
436 Seventh Ave.
Pittsburgh, PA 15219
4. Generator's Phone (412) 227-2955

SITE ADDRESS:
Beazer East, Inc.
903 Church Street
Morrisville, NC 27560

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID NCD 982170292
D. Transporter's Phone 919-362-9010
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone (803) 452-5003

5. Transporter 1 Company Name: Enviro Chem
6. US EPA ID Number: N C D 9 8 2 1 7 0 2 9 2
7. Transporter 2 Company Name
8. US EPA ID Number
9. Designated Facility Name and Site Address
Laidlaw Environmental Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125
10. US EPA ID Number: S C D 0 7 0 3 7 5 9 8 5

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Solid, N.O.S., Class 9, NA-3077, PG. III (Guide - 31) (Carbon)	0 0 1	C H	0 0 0 1 5	Y	F D 3 2
b.					
c.					

J. Additional Descriptions for Materials Listed Above
a. P W 0 4 8 2 1 4 1 0 2 c. P W
b. P W d. P W

K. Handling codes for wastes Listed Above

15. Special Handling Instructions and Additional information
WO# [illegible]
24 Hr. Emergency Phone # (412) 227-2955 or (412) 787-1103

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and [illegible] minutes for treatment storage and disposal facilities. This includes time for reviewing instructions, gathering data and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St. S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. [illegible]

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert A. Fisher
Signature: [signature]
Date: Month Day Year: 0 0 1 1

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ricky Macon
Signature: Ricky Macon
Date: Month Day Year: 0 8 1 A 1

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

19. Discrepancy Indication Space
a. lbs. c. lbs.
b. lbs. d. lbs.

20. FACILITY Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR / TRANSPORTER / FACILITY

EPA Form 8700-22 (REV. 9/88) Previous Editions are Obsolete (DHEC 1988 REV. 5/89)

6 - GENERATOR'S COPY

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Beaser, East, Inc., 436 Seventh Ave., Pgh, PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Designation: PW-04821-4102

Manifest Number: 9600

EPA Waste Number(s): F032

Waste Analysis Available? Yes (attached) _____ No _____ On file at receiving facility X

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☒ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☐ **(2a) Restricted Waste Notification**

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_____ **§268.45(b)(1) - Toxicity characteristic debris;**

_____ **§268.45(b)(2) - Debris contaminated with listed waste;**

_____ **§268.45(b)(3) - Cyanide reactive debris.**

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ [illegible] *or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: [signature] DATE: X 2/14/96

PRINT NAME: Robert A. Fisher TITLE: Manager - Operations

Revised 10/94 585-7510-585003

LAUDLAW ENVIRONMENTAL SERVICES

Sorbent Notification/Certification

FORM H

Generator Name: Beazer East, Inc., 436 Seventh Avenue, Pgh, PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Number: PW-04821-4102

Manifest Number: 96001

Please check the box below which indicates whether or not sorbents have been added to the waste.

☐ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have not** been added to the waste stream(s) described on the accompanying manifest which are represented above.

☒ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have** been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbent agents added to this waste are considered non-biodegradable as defined in 40 CFR Sections 264.314 and/or 265.314.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. The sorbed waste must be incinerated or further treated with appropriate non-biodegradable chemical reagents prior to land disposal.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbed waste has been treated with appropriate non-biodegradable chemical reagents and that the resultant material passes the Paint Filter Test.

Signature: [signature] Date: 2/14/96

Printed Name: Robert A. Fisher Title: Manager - Operations

Rev. 2/94

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219 **Page** 1 **of** 1

I.D. Number : NCD 003 200 383 **Manifest :** 9600

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
PW-04821-4102	1	F032			NWW	

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	Carbon disulfide
5	[illegible]
6	[illegible]
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
16	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
24	[illegible]
25	[illegible]
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanol
33	2-Nitropropane
[illegible]	[illegible]

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays (803) 253-6488

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N C D 0 0 3 2 0 0 3 8 3 — MANIFEST DOCUMENT NO 9 6 0 0 2

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
Beazer East, Inc.
436 Seventh Ave.
Pittsburgh, PA 15219

SITE ADDRESS:
Beazer East, Inc.
908 Church Street
Morrisville, NC 27560

4. Generator's Phone (412) 227-2955

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: Envirocycle
6. US EPA ID Number: NCD981076912

C. State Transporter's ID
D. Transporter's Phone: 919 562 9010

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID

9. Designated Facility Name and Site Address
Laidlaw Environmental Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125

10. US EPA ID Number: S C D 0 7 0 3 7 5 9 8 5

H. Facility's Phone: (803) 452-9012

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Solid, N.O.S., Class 9, NA-3077 PG. III (Guide-31) (Carbon)	001	CM	15	Y	D032
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. PW PA 22 Drums
b. PW

K. Handling codes for wastes Listed Above

15. Special Handling Instructions and Additional Information
WO# ~~273671~~ 202777
24 Hr. Emergency Phone # (412) 227-2955 or (412) 787-1103

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters and 30 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data and completing and reviewing the form. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Chief, Information Policy, Branch PM 223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

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Printed/Typed Name: Robert A. Fisher
Signature: [signature]
Date: Month 0 Day 2 Year 11

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ricky Macon
Signature: Ricky Macon
Date: Month 0 Day 2 Year 11

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space
a. lbs. c. lbs.
b. lbs. d. lbs.

20. FACILITY Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Date: Month Day Year

EPA Form 8700-22 (REV. 9/88) Previous Editions are Obsolete (DHEC 1988 REV. 5/89)

6 - GENERATOR'S COPY

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Beazer East, Inc., 436 Seventh Ave., Pgh. PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Designation: PW-04821-4102

Manifest Number: 96007

EPA Waste Number(s): F032

Waste Analysis Available? Yes (attached) _____ **No** _____ **On file at receiving facility** X

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☒ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☐ **(2a) Restricted Waste Notification**

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_____ **§268.45(b)(1) - Toxicity characteristic debris;**

_____ **§268.45(b)(2) - Debris contaminated with listed waste;**

_____ **§268.45(b)(3) - Cyanide reactive debris.**

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ [illegible] *or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: _____ **DATE:** X 2/21/96

PRINT NAME: Robert A. Fisher **TITLE:** Manager - Operations

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219 **Page** 1 **of** 1

F[illegible] I.D. Number : NCD 003 200 383 **Manifest :** 96002

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
PW-04821-4102	1	F032			NWW	

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	Carbon disulfide
5	[illegible]
6	[illegible]
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
16	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
[illegible]	[illegible]
[illegible]	[illegible]
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanol
33	2-Nitropropane
[illegible]	[illegible]

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

LADDLAW ENVIRONMENTAL SERVICES

Sorbent Notification/Certification

FORM H

Generator Name: Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Number: PW-04821-4102

Manifest Number: 96002

Please check the box below which indicates whether or not sorbents have been added to the waste.

☐ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have not** been added to the waste stream(s) described on the accompanying manifest which are represented above.

☒ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have** been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbent agents added to this waste are considered non-biodegradable as defined in 40 CFR Sections 264.314 and/or 265.314.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. The sorbed waste must be incinerated or further treated with appropriate non-biodegradable chemical reagents prior to land disposal.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbed waste has been treated with appropriate non-biodegradable chemical reagents and that the resultant material passes the Paint Filter Test.

Signature: [signature] Date: 2/21/96

Printed Name: Robert A. Fisher Title: Manager - Operations

Rev. 2/94

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone (803) 734-5200
Emergency & Holidays, (803) 253-6408

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N C D 0 0 3 2 0 0 3 8 3
MANIFEST DOCUMENT NO: 9 6 0 0 3
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
Beazer East, Inc.
436 Seventh Ave.
Pittsburgh, PA 15219

SITE ADDRESS:
Beazer East, Inc.
908 Church Street
Morrisville, NC 27560

4. Generator's Phone (412) 227-2955

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone 919-562-9010
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone (803) 452-5003

5. Transporter 1 Company Name: Enviro Chem
6. US EPA ID Number: N C D 0 8 2 1 1 0 2 1 2
7. Transporter 2 Company Name
8. US EPA ID Number
9. Designated Facility Name and Site Address
Laidlaw Environmental Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125
10. US EPA ID Number: S C D 0 7 0 3 7 5 9 8 5

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
Hazardous Waste Solid, N.O.S., Class 9, NA-3077, PG.III (Guide - 31) (Carbon)	0 0 1	C M	0 0 0 1 5	Y	F 0 3 2
b.					
c.					

J. Additional Descriptions for Materials Listed Above
a. P W 0 4 3 2 1 4 1 0 1 c. P W
b. P W d. P W

K. Handling codes for wastes Listed Above

15. Special Handling Instructions and Additional information
WO# ~~[illegible]~~ 202 [illegible]
24 Hr. Emergency Phone # (412) 227-2955 or (412) 787-1103

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and [illegible] minutes for treatment storage and disposal facilities. This includes [illegible] for reviewing instructions, gathering data and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM 223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert A. Fisher
Signature: [signature]
Date: Month 0 2 Day 2 4 Year 9 [illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ricky Macon
Signature: Ricky Macon
Date: Month 0 2 Day 2 4 Year 9 [illegible]

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

19. Discrepancy Indication Space
a. lbs. c. lbs.
b. lbs. d. lbs.

20. FACILITY Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

EPA Form 8700-22 (REV. 9/88) Previous Editions are Obsolete (DHEC 1988 REV. 5/89)

6 - GENERATOR'S COPY

LAIDLAW ENVIRONMENTAL SERVICES

Sorbent Notification/Certification

FORM H

Generator Name: Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Number: PW-04821-4102

Manifest Number: 96003

Please check the box below which indicates whether or not sorbents have been added to the waste.

☐ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have not** been added to the waste stream(s) described on the accompanying manifest which are represented above.

☒ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have** been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbent agents added to this waste are considered non-biodegradable as defined in 40 CFR Sections 264.314 and/or 265.314.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. The sorbed waste must be incinerated or further treated with appropriate non-biodegradable chemical reagents prior to land disposal.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbed waste has been treated with appropriate non-biodegradable chemical reagents and that the resultant material passes the Paint Filter Test.

Signature: Robert A. Fisher Date: 2/26/96

Printed Name: Robert A. Fisher Title: Manager - Operations

Rev. 2/94

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location Beazer East, Inc., 436 Seventh Ave., Pgh. PA 15219 **Page** 1 **of** 1

A I.D. Number : NCD 003 200 383 **Manifest :** 96003

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
PW-04821-4102	1	F032			NWW	

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	Carbon disulfide
*5	[illegible]
[illegible]	[illegible]
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
16	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
[illegible]	[illegible]
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanol
33	2-Nitropropane
[illegible]	[illegible]

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Designation: PW-04821-4102

Manifest Number: 96003

EPA Waste Number(s): F032

Waste Analysis Available? Yes (attached) _____ No _____ On file at receiving facility X

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☒ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☐ **(2a) Restricted Waste Notification**

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_____ **§268.45(b)(1) - Toxicity characteristic debris;**

_____ **§268.45(b)(2) - Debris contaminated with listed waste;**

_____ **§268.45(b)(3) - Cyanide reactive debris.**

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to a national capacity variance under 40 CFR §268 Subpart C, or a case-by-case extension under 40 CFR §268.5, or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: _____ **DATE:** 2/26/96

PRINT NAME: Robert A. Fisher **TITLE:** Manager - Operations

Revised 10/94 585-7510-585003

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6400

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NCD003200383
MANIFEST DOCUMENT NO.: 96004
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is by State law

3. Generator's Name and Mailing Address
Beazer East, Inc.
436 Seventh Ave.
Pittsburgh, PA 15219

SITE ADDRESS
Beazer East, Inc.
908 Church Street
Morrisville, NC 27560

4. Generator's Phone (412) 227-2955

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone 919 362-9010
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone (803) 452-5001

5. Transporter 1 Company Name: Envirochem
6. US EPA ID Number: NCD982170212
7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Laidlaw Environmental Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125
10. US EPA ID Number: SCD070375985

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
Hazardous Waste Solid, N.O.S., Class 9, NA-3077, PG. III (Guide - 31) (Carbon)	001	CM	00015	Y	F032
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. PW 04 821 4102
b. PW
c. PW
d. PW

K. Handling codes for wastes Listed Above

15. Special Handling Instructions and Additional information
WO# 203233
24 Hr. Emergency Phone # (412) 227-2955 or (412) 787-1103

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and minutes for treatment storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert A. Fisher
Signature: [signature]
Date: Month Day Year: 02 20 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ricky Mason
Signature: [signature]
Date: Month Day Year: 02 28 96

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

19. Discrepancy Indication Space
a. lbs. c. lbs.
b. lbs. d. lbs.

20. FACILITY Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR / TRANSPORTER / FACILITY

EPA Form 8700-22 (REV. 9/88) Previous Editions are Obsolete (DHEC 1988 REV. 5/89)

6 - GENERATOR'S COPY

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219

EPA I.D. Number: NCD-003 200 383

Waste Profile or ARF Designation: PW-04821-4102

Manifest Number: 96004

EPA Waste Number(s): F032

Waste Analysis Available? Yes (attached) _____ No _____ On file at receiving facility X

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☒ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☐ **(2a) Restricted Waste Notification**

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_____ **§268.45(b)(1) - Toxicity characteristic debris;**

_____ **§268.45(b)(2) - Debris contaminated with listed waste;**

_____ **§268.45(b)(3) - Cyanide reactive debris.**

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ [illegible] *or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: _____ DATE: 2/28/96

PRINT NAME: Robert A. Fisher TITLE: Manager - Operations

Revised 10/94 585-7510-585003

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219 **Page** 1 **of** 1

E[illegible] I.D. Number : NCD 003 200 383 **Manifest :** 96004

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
W-04821-4102	1	F032			NWW	

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	[illegible]
5	[illegible]
6	[illegible]
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
16	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
24	[illegible]
25	[illegible]
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanol
33	2-Nitropropane
[illegible]	[illegible]

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

LAIDLAW ENVIRONMENTAL SERVICES

Sorbent Notification/Certification

FORM H

Generator Name: Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Number: PW-04821-4102

Manifest Number: 96004

Please check the box below which indicates whether or not sorbents have been added to the waste.

☐ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have not** been added to the waste stream(s) described on the accompanying manifest which are represented above.

☒ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have** been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbent agents added to this waste are considered non-biodegradable as defined in 40 CFR Sections 264.314 and/or 265.314.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. The sorbed waste must be incinerated or further treated with appropriate non-biodegradable chemical reagents prior to land disposal.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbed waste has been treated with appropriate non-biodegradable chemical reagents and that the resultant material passes the Paint Filter Test.

Signature: [signature] Date: 2/28/96

Printed Name: Robert A. Fisher Title: Manager - Operations

Rev. 2/94

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6480

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N C D 0 0 3 2 0 0 3 8 3
MANIFEST DOCUMENT NO.: 9 6 0 4 4
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
Beazer East, Inc.
436 Seventh Ave.
Pittsburgh, PA 15219

Site Address:
Beazer East, Inc.
908 Church Street
Morrisville, NC 27560

4. Generator's Phone: 412 227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: ENVIROCHEM
6. US EPA ID Number: N C D 1 8 2 1 7 0 2 7 2

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Laidlaw Environmental Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125

10. US EPA ID Number: S C D 0 7 0 3 7 5 9 8 5

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol
Hazardous Waste Solid, N.O.S., Class 9, NA-3077, PG III (Guide-31) (Carbon)	0 0 1	C M	0 0 0 1 5	Y
b.				
c.				

GENERATOR

A. Additional Descriptions for Materials Listed Above
a. P W [illegible] P W
b. P W
d. P W

E. Handling codes for wastes Listed Above

15. Special Handling Instructions and Additional information
WO# 205503
24 Hr. Emergency Contact # (412) 227-2955 or (412) 787-1103

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and [illegible] minutes for treatment storage and disposal facilities. This includes [illegible] for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM 223, U.S. Environmental Protection Agency, 401 M St. S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert A. Fisher
Signature: [signature]
Date: Month 01 Day 24 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ricky Macon
Signature: Ricky Macon
Date: Month 04 Day 21 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space
a. lbs. c. lbs.
b. lbs. d. lbs.

20. FACILITY Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (REV. 9/88) Previous Editions are Obsolete (DHEC 1988 REV. 5/89)

6 - GENERATOR'S COPY

ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Beazer East, Inc., 436 Seventh Ave., Pittsburgh, PA 15219

EPA I.D. Number: NCD 003 200 383 4/25/96

Waste Profile or ARF Designation: PW-04821-~~41036~~ 4102

Manifest Number: 96046

EPA Waste Number(s): F032

Waste Analysis Available? Yes (attached) ____ No ____ On file at receiving facility X

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☒ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☐ ***(2a) Restricted Waste Notification***

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_____ §268.45(b)(1) - Toxicity characteristic debris;

_____ §268.45(b)(2) - Debris contaminated with listed waste;

_____ §268.45(b)(3) - Cyanide reactive debris.

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

[illegible] *or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: [signature] DATE: 4/24/96

PRINT NAME: Robert A. Fisher TITLE: Manager - Operations

Revised 10/94 585-7510-585003

HALLIBURTON ENVIRONMENTAL SERVICES

orbent Notification/Certification

FORM H

Generator Name: Beazer East, Inc., 436 Seventh Ave., Pgh., PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Number: PW-04821-~~4103~~ 4102-96 4/25/96

Manifest Number: 96046

Please check the box below which indicates whether or not sorbents have been added to the waste.

☐ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have not** been added to the waste stream(s) described on the accompanying manifest which are represented above.

☒ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have** been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbent agents added to this waste are considered non-biodegradable as defined in 40 CFR Sections 264.314 and/or 265.314.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. The sorbed waste must be incinerated or further treated with appropriate non-biodegradable chemical reagents prior to land disposal.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbed waste has been treated with appropriate non-biodegradable chemical reagents and that the resultant material passes the Paint Filter Test.

Signature: Robert A. Fisher

Date: 4/24/96

Printed Name: Robert A. Fisher

Title: Manager - Operations

Rev. 2/94

FORM B1 ***(Must be accompanied by Form A)***

Generator Name/Location Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219 **Page** 1 **of** 1

E[illegible] I.D. Number : NCD 003 200 383 **Manifest :** 96046

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
PW-04821-~~4103~~ 4102	1	F032			NWW	

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	Carbon disulfide
5	[illegible]
6	[illegible]
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
[illegible]	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
24	[illegible]
[illegible]	[illegible]
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanol
33	2-Nitropropane

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6400

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. (Expires 9-30-94)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N C D 0 0 3 2 0 0 3 8 3

MANIFEST DOCUMENT NO: 9 6 0 4 1

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is by State law

3. Generator's Name and Mailing Address
Beazer East, Inc.
436 Seventh Ave.
Pittsburgh, PA 15219

Site Address:
Beazer East, Inc.
908 Church Street
Morrisville, NC 27560

4. Generator's Phone (412) 227-2955

5. Transporter 1 Company Name: ENVIROCHEM

6. US EPA ID Number: N K D 9 8 2 1 7 0 2 9 2

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Laidlaw Environmental Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125

10. US EPA ID Number: S C D 0 7 0 3 7 5 9 8 5

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	
a. Hazardous Waste Solid, N.O.S., Class 9, NA-3077, PG III (Guide-31) (Carbon)	0 0 1	C M	0 0 0 1 5	Y	
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. P W
e. P W

K. Handling codes for wastes Listed Above

15. Special Handling Instructions and Additional information
✓ WO#
24 Hr. Emergency Contact # (412) 227-2955 or (412) 787-1103

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 60 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate or any other suggestions for reducing this burden to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert A. Fisher
Signature
Date: Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

19. Discrepancy Indication Space
a. lbs. c. lbs.
b. lbs. d. lbs.

20. FACILITY Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

EPA Form 8700-22 (REV. 9/88) Previous Editions are Obsolete (DHEC 1988 REV. 5/89)

6 - GENERATOR'S COPY

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219 **Page** 1 **of** 1

I.D. Number : NCD 003 200 383 **Manifest :** 96047

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
PW-04821-~~4103~~ 4102	1	F032			NWW	

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name	Legend #	Constituent Name
1	Acetone	19	Nitrobenzene
2	Benzene	20	Pyridine
3	n-Butyl alcohol	21	Tetrachloroethylene
4	[illegible]	22	Toluene
[illegible]	[illegible]	[illegible]	[illegible]
7	Cresol (m-and p-isomers)	26	1,1,2-Trichloro-1,2,2-trifluoroethane
8	o-Cresol	27	Trichloromonofluoro-methane
*9	Cyclohexanone	28	Xylenes (total)
10	1,2-Dichlorobenzene		
11	Ethyl Acetate		
12	Ethyl Benzene		
13	Ethyl Ether		
14	Isobutyl alcohol		
*15	Methanol		
16	Methylene Chloride		
17	Methyl Ethyl Ketone		
18	Methyl isobutyl ketone		

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanol
[illegible]	2-Nitropropane

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

LADLAW ENVIRONMENTAL SERVICES

Sorbent Notification/Certification

FORM H

Generator Name: Beazer East, Inc., 436 Seventh Ave., Pgh., PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Number: PW-04821-~~4103~~ 4102 B4

Manifest Number: 96047

Please check the box below which indicates whether or not sorbents have been added to the waste.

☐ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have not** been added to the waste stream(s) described on the accompanying manifest which are represented above.

☒ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have** been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbent agents added to this waste are considered non-biodegradable as defined in 40 CFR Sections 264.314 and/or 265.314.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. The sorbed waste must be incinerated or further treated with appropriate non-biodegradable chemical reagents prior to land disposal.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbed waste has been treated with appropriate non-biodegradable chemical reagents and that the resultant material passes the Paint Filter Test.

Signature: [signature] Date: 4/26/96

Printed Name: Robert A. Fisher Title: Manager - Operations

Rev. 2/94

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Beazer East, Inc., 436 Seventh Ave., Ste. 1050, Pgh., PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Designation: PW-04821-~~4103~~ 4102 B4

Manifest Number: 96047

EPA Waste Number(s): F032

Waste Analysis Available? Yes (attached) _____ No _____ On file at receiving facility X

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☒ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☐ **(2a) Restricted Waste Notification**

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_____ §268.45(b)(1) - Toxicity characteristic debris;

_____ §268.45(b)(2) - Debris contaminated with listed waste;

_____ §268.45(b)(3) - Cyanide reactive debris.

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ [illegible] *or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: _____ DATE: 4/26/96

PRINT NAME: Robert A. Fisher TITLE: Manager - Operations

Revised 10/94 585-7510-585003

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6488

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N C D 0 0 3 2 0 0 3 8 3
MANIFEST DOCUMENT NO.: 9 6 0 4 2

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
Beazer East, Inc.
436 Seventh Ave.
Pittsburgh, PA 15219

Site Address:
Beazer East, Inc.
908 Church Street
Morrisville, NC 27560

4. Generator's Phone: 412 227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: ENVIROCHEM

6. US EPA ID Number: NCD982170292

C. State Transporter's ID

D. Transporter's Phone: 919-562-9010

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

9. Designated Facility Name and Site Address
Laidlaw Environmental Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125

10. US EPA ID Number: S C D 0 7 0 3 7 5 9 8 5

H. Facility's Phone: (803) 452-5003

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
Hazardous Waste Solid, N.O.S., Class 9, NA-3077, PG III (Guide-31) (Carbon)	0 0 1	C M	0 0 0 1 5	Y	[illegible]
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above

a. P W 0 4 8 2 1 4 1 0 2 P W

b. P W d. P W

K. Handling codes for wastes Listed Above

15. Special Handling Instructions and Additional information

WO# [illegible]
24 Hr. Emergency Contact # (412) 227-2955 or (412) 787-1103

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and [illegible] minutes for treatment storage and disposal facilities. This includes time for reviewing instructions, gathering data and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert A. Fisher
Signature: [signature]
Date: Month Day Year: [illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ricky Macon
Signature: Ricky Macon
Date: Month Day Year: 0[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: FRANKIE RUSSELL
Signature: [signature]
Date: Month Day Year: 0 5 1 6 9 [illegible]

19. Discrepancy Indication Space

a. lbs. c. lbs.
b. lbs. d. lbs.

20. FACILITY Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

EPA Form 8700-22 (REV. 9/88) Previous Editions are Obsolete (DHEC 1988 REV. 5/89)

6 - GENERATOR'S COPY

LAIDLAW ENVIRONMENTAL SERVICES

Sorbent Notification/Certification

FORM H

Generator Name: Beazer East, Inc., 436 Seventh Ave., Pgh., PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Number: PW-04821-~~4103~~ 4102 84

Manifest Number: 9604818

Please check the box below which indicates whether or not sorbents have been added to the waste.

☐ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have not** been added to the waste stream(s) described on the accompanying manifest which are represented above.

☒ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have** been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbent agents added to this waste are considered non-biodegradable as defined in 40 CFR Sections 264.314 and/or 265.314.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. The sorbed waste must be incinerated or further treated with appropriate non-biodegradable chemical reagents prior to land disposal.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbed waste has been treated with appropriate non-biodegradable chemical reagents and that the resultant material passes the Paint Filter Test.

Signature: Robert A. Fisher

Date: 4/25/96

Printed Name: Robert A. Fisher

Title: Manager - Operations

Rev. 2/94

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219 **Page** 1 **of** 1

A I.D. Number : NCD 003 200 383 **Manifest :** 96048

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
PW-04821-4102	1	F032			NWW	

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	Carbon disulfide
5	Carbon tetrachloride
6	[redacted]
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
16	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
24	[redacted]
25	[redacted]
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanol
33	2-Nitropropane
[redacted]	

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Beazer East, Inc., 436 Seventh Ave., Pittsburgh, Pa 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Designation: PW-04821-~~4103~~ 4102 BG

Manifest Number: 96048

EPA Waste Number(s): F032

Waste Analysis Available? Yes (attached) _____ No _____ On file at receiving facility X

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☒ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☐ **(2a) Restricted Waste Notification**

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_____ §268.45(b)(1) - Toxicity characteristic debris;

_____ §268.45(b)(2) - Debris contaminated with listed waste;

_____ §268.45(b)(3) - Cyanide reactive debris.

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ [illegible] *or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: [signature] DATE: 4/29/96

PRINT NAME: Robert R. Fisher TITLE: Manager - Operations

Revised 10/94 585-7510-585003

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6488

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N C D 0 0 3 2 0 0 3 8 3
MANIFEST DOCUMENT NO: 9 6 0 5 0
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
Beazer East, Inc.
436 Seventh Ave.
Pittsburgh, PA 15219

Site Address: 919 462 1534
Beazer East, Inc.
908 Church Street
Morrinville, NC 27560

4. Generator's Phone (412) 227-2955

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: ENVIRO CHEM
6. US EPA ID Number: N C D 9 8 4 1 7 0 2 4 2
C. State Transporter's ID
D. Transporter's Phone 919-462-9110

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
10. US EPA ID Number
G. State Facility's ID

Laidlaw Environmental Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125
S C D 0 7 0 3 7 5 9 8 5
H. Facility's Phone (803) 452-5003

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Solid, N.O.S., Class 9, NA-3077, PG III (Guide-31) (PVC Pipe)	001	CM	15	Y	D032
b.					
c.					

J. Additional Descriptions for Materials Listed Above
a. PW PA 2121 K 105 c. PW
b. PW d. PW

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
WO#
24 Hr. Emergency Phone # (412) 227-2955 or (412) 787-1103

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 15 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate or any other aspects of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert A. Fisher
Signature:
Date: Month Day Year 04 E 11

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ricky Mixon
Signature: Rick Mixon
Date: Month Day Year 04 28 94

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

TRANSPORTER

19. Discrepancy Indication Space
a. lbs. c. lbs.
b. lbs. d. lbs.

20. FACILITY Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

EPA Form 8700-22 (REV. 9/88) Previous Editions are Obsolete (DHEC 1988 REV. 5/89)

6 - GENERATOR'S COPY

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Beazer East, Inc., 436 Seventh Ave., Pittsburgh, PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Designation: PW-04821-4103

Manifest Number: 96050

EPA Waste Number(s): F032

Waste Analysis Available? Yes (attached) _____ No _____ On file at receiving facility X

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☒ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☐ **(2a) Restricted Waste Notification**

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_____§268.45(b)(1)- Toxicity characteristic debris;

_____§268.45(b)(2)- Debris contaminated with listed waste;

_____§268.45(b)(3)- Cyanide reactive debris.

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ *I notify pursuant to 40 CFR §268.7(a)(4) that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that this waste is subject to a national capacity variance under 40 CFR §268 Subpart C, or a case-by-case extension under 40 CFR §268.5, or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.37 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: _____ DATE: 4/29/96

PRINT NAME: Robert A. Fisher TITLE: Manager - Operations

Revised 10/94 585-7510-585003

LAIDLAW ENVIRONMENTAL SERVICES

Sorbent Notification/Certification

FORM H

Generator Name: Beazer East, Inc., 436 Seventh Ave., Pittsburgh, PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Number: PW-04821-4103

Manifest Number: 96050

Please check the box below which indicates whether or not sorbents have been added to the waste.

☐ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have not** been added to the waste stream(s) described on the accompanying manifest which are represented above.

☒ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have** been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbent agents added to this waste are considered non-biodegradable as defined in 40 CFR Sections 264.314 and/or 265.314.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. The sorbed waste must be incinerated or further treated with appropriate non-biodegradable chemical reagents prior to land disposal.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbed waste has been treated with appropriate non-biodegradable chemical reagents and that the resultant material passes the Paint Filter Test.

Signature: [signature] Date: 4/29/96

Printed Name: Robert A. Fisher Title: Manager - Operations

Rev. 2/94

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location Beazer East, Inc., 436 Seventh Ave., Pgh. PA 15219 **Page** 1 **of** 1

A I.D. Number : NCD 003 200 383 **Manifest :** 96050

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
PW-04821-4103	1	F032			NWW	

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	Carbon disulfide
5	Carbon tetrachloride
6	[illegible]
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
16	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
24	1,1,2-Trichloroethane
25	[illegible]
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanol
33	2-Nitropropane

Legends 34-43 RESERVED

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt
2600 Bull Street, Columbia, SC 29201
Phone (803) 734-5200
Emergency & Holidays: (803) 253-6488

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N C D 0 0 3 2 0 0 3 8 3
MANIFEST DOCUMENT NO: 9 6 0 5 1

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
Beazer East, Inc.
436 Seventh Ave.
Pittsburgh, PA 15219

Site Address:
Beazer East, Inc. 919-462-1534
908 Church Street
Morrisville, NC 27560

4. Generator's Phone (412) 227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: Enviro Tech
6. US EPA ID Number: NCD 982170212

C. State Transporter's ID

D. Transporter's Phone: 919-[illegible]

E. State Transporter's ID

7. Transporter 2 Company Name
8. US EPA ID Number

F. Transporter's Phone

G. State Facility's ID

9. Designated Facility Name and Site Address
Laidlaw Environmental Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125

10. US EPA ID Number: S C D 0 7 0 3 7 5 9 8 5

H. Facility's Phone: (803) 452-5003

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Solid, N.O.S., Class 9, NA-3077, PG III (Guide-31) (Filter Socks)	001	CM	15		[illegible]
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above

a. PW 04821 [illegible] c. PW

b. PW d. PW

K. Handling codes for wastes Listed Above

15. Special Handling Instructions and Additional Information

WO# 205507
24 Hr. Emergency Phone # (412) 227-2955 or (412) 787-1103

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and minutes for treatment storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St. Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert A. Fisher
Signature: [signature]
Date: Month Day Year: 05 [illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ricky Macon
Signature: Ricky Macon
Date: Month Day Year: 05 [illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Frankie Russell
Signature: [signature]
Date: Month Day Year: 05 15 [illegible]

19. Discrepancy Indication Space
a. lbs. c. lbs.
b. lbs. d. lbs.

20. FACILITY Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

EPA Form 8700-22 (REV. 9/88) Previous Editions are Obsolete (DHEC 1988 REV. 5/89)

6 - GENERATOR'S COPY

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location Beazer East, Inc. 436 Seventh Ave., Pgh, PA 15219 **Page** 1 **of** 1

A I.D. Number : NCD 003 200 383 **Manifest :** 96051

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
PW-04821-4104	1	F032			NWW	
						5/2/96

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	Carbon disulfide
5	Carbon tetrachloride
[illegible]	[illegible]
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
16	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
24	1,1,2-Trichloroethane
[illegible]	[illegible]
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanol
33	2-Nitropropane
[illegible]	[illegible]

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

LAUDERAW ENVIRONMENTAL SERVICES

Sorbent Notification/Certification

FORM H

Generator Name: Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219

EPA I.D. Number: NCB 003 200 383

Waste Profile or ARF Number: PW-04821-4104

Manifest Number: 96051

Please check the box below which indicates whether or not sorbents have been added to the waste.

☐ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have not** been added to the waste stream(s) described on the accompanying manifest which are represented above.

☒ Sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) **have** been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbent agents added to this waste are considered non-biodegradable as defined in 40 CFR Sections 264.314 and/or 265.314.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. The sorbed waste must be incinerated or further treated with appropriate non-biodegradable chemical reagents prior to land disposal.

☐ Biodegradable sorbents (ie. material that is used to soak up free liquids by either absorption or adsorption, or both) have been added to the waste stream(s) described on the accompanying manifest which are represented above. I certify that the sorbed waste has been treated with appropriate non-biodegradable chemical reagents and that the resultant material passes the Paint Filter Test.

Signature: [signature] Date: 5/2/96

Printed Name: Robert A. Fisher Title: Manager - Operations

Rev. 2/94

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Beazer East, Inc., 436 Seventh Ave., Pgh, PA 15219

EPA I.D. Number: NCD 003 200 383

Waste Profile or ARF Designation: ~~XXX~~ PW-04821-4104

Manifest Number: ~~XXXX~~ 96051

EPA Waste Number(s): F032

Waste Analysis Available? Yes (attached) _____ **No** _____ **On file at receiving facility** X

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☒ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☐ **(2a) Restricted Waste Notification**

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_____ **§268.45(b)(1) - Toxicity characteristic debris;**

_____ **§268.45(b)(2) - Debris contaminated with listed waste;**

_____ **§268.45(b)(3) - Cyanide reactive debris.**

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to a national capacity variance under 40 CFR §268 Subpart C, or a case-by-case extension under 40 CFR §268.5, or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR §268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: _____ **DATE:** 5/2/96

PRINT NAME: Robbrt A. Fisher **TITLE:** Manager - Operations

APPENDIX L

POST-EXCAVATION SOIL SAMPLE COLLECTION FORMS

CUMMINGS RITER CONSULTANTS, INC.

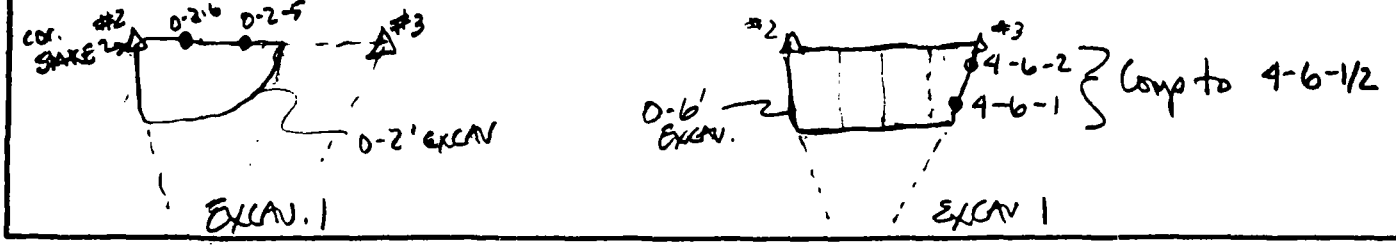
SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	BEAZER EAST - KOPPERS	Project No.	93-145
Date Collected	5/9 - 5/13/96	Time Collected	1115 (EX1-4-6-1/2), 1600 (STP-1), 1615 (STP-2)
Collected By	PAUL WOMACK		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)

STP-2 ; 2-3.5' TRANSITION SOIL BELOW 0-2' EXCAVATION

STP-1 ; 0-2' EXCAV. SIDEWALL SAMPLE - SCREENED between 24 & 95 ppm



Sample I.D. No.	DATE	Depth of Sample	TIME	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX1-0-2-5/6	5/9/96	2'	1000	BROWN SANDY CLAY
1-4-6-1/2	5/9/96	6'	1115	RED CLAY
STP-1	5/13/96	—	1600	EXCAVATION 1 - SOIL STOCKPILE #1 BRN CLAYEY SAND
STP-2	5/13/96	—	1615	EXCAVATION 1 - SOIL STOCKPILE #2 GREY SAND

Sampling Method EITHER (1) collected directly into pan or (2) collected from backhoe bucket

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing Adjacent samples combined in Al pan & mixed

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
PENTA	4 oz	Y ☐	N ☒	Y ☒	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers 4

Date Received by Lab 5/14/96 Laboratory CERMIC ANAL.

Weather Conditions sunny, mid 80's

Remarks sample EX1-0-2-5/6 not sent for lab analysis but used only for penta field screening

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

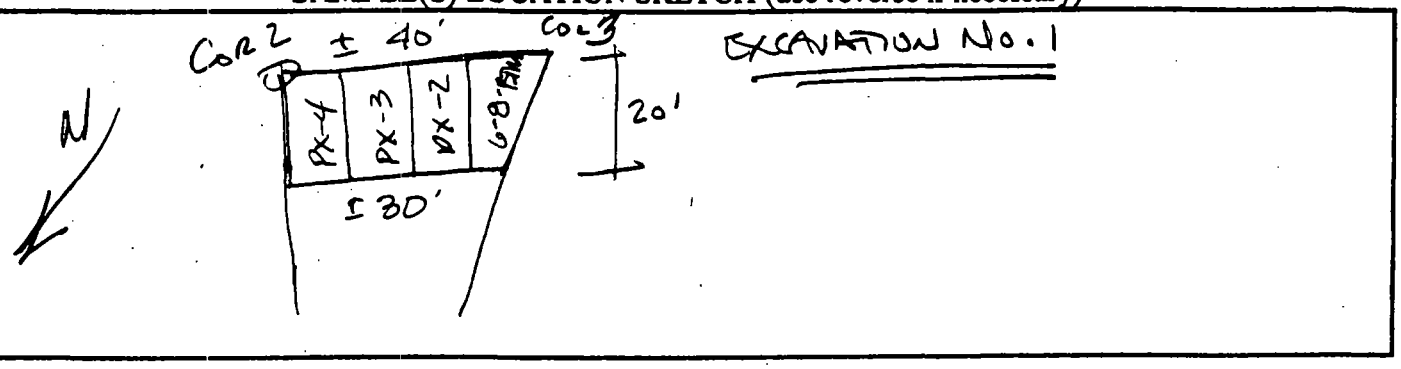
ΠI/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	BEEBE EAST - KOPPERS	Project No.	93-145
Date Collected	5/13/96	Time Collected	1100
Collected By	BRUCE GENO		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	TIME	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX1-PX2	6'	1100	RED clay
EX1-PX3	6'	1230	
EX1-PX4	6'	1300	
EX1-6-8-TPM	7'	1400	

Sampling Method: Backhoe bucket to obtain sample from excav bottom

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No.

Describe Compositing: Backhoe scooped across block bottom

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
PENTA	2 oz	Y ☐	N ☒	Y ☒	N ☐
DIOXIN	2 oz	Y ☐	N ☒	Y ☒	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 3

Laboratory: PENTA - CEIMIC; DIOXIN - ALTA

Date Received by Lab:

Weather Conditions: SUNNY 60-65°F

Remarks: EX1-6-8-TPM Not sent for lab analysis

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

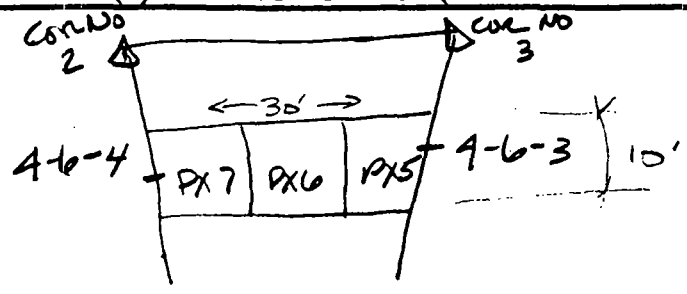
fl1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beaver-Koppers	Project No.	93145.30/55
Date Collected	5/14/96	Time Collected	1100
Collected By	BG/PWW		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



4-6' BTM
EXCAV 1

Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX1-PX5	6'	RED CLAY
PX6	6'	↓
PX7	6'	↓
4-6-3	4-6	RED CLAY/BROWN CLAY
4-6'-4	4-6	" "

Sampling Method: Sampled from Bucket

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing: 2 locations mixed in Al. PAN

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
penta/Dioxin	4 oz	Y ☐	N ☐	Y ☒	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 8 Penta / Dioxin

Date Received by Lab: _____ Laboratory: Ceramic / Alta

Weather Conditions: pretty cloudy 60°F

Remarks: 0-4-3 Not sent for lab anal.

1. Organic vapor analysis, pocket penetrometer, etc.

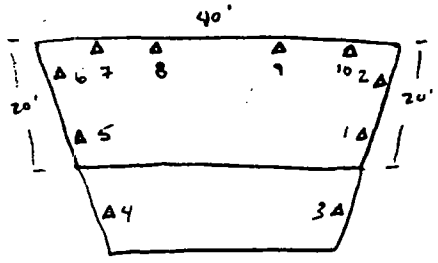
f11/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	BEAZER	Project No.	93-145.30/55
Date Collected	5/15/96	Time Collected	0745
Collected By	PWW		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX1-4-6-5/6	4-6'	Red & BRN clay, v. hard
EX1-4-6-7/8	4-6'	Red clay trace odor
EX1-4-6-9/10	4-6'	red clay and grey sand

Sampling Method: Backhoe bucket

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing: mixed Adjacent samples in Aff. pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory: None

Weather Conditions _____

Remarks: Samples used only for penta field screening

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

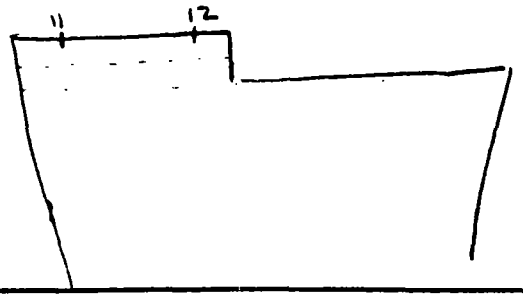
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beaver-Koppers	Project No.	93145.30/53
Date Collected	5/15/96	Time Collected	1435
Collected By	WCS		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Excav 1 - 4-6'

Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
Ex1-4-6-11/12	4-6'	red and brown clay

Sampling Method: From Backhoe bucket

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No.

Describe Compositing: mixed in Aluminum pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers

Date Received by Lab Laboratory

Weather Conditions

Remarks: No lab sample

1. Organic vapor analysis, pocket penetrometer, etc.

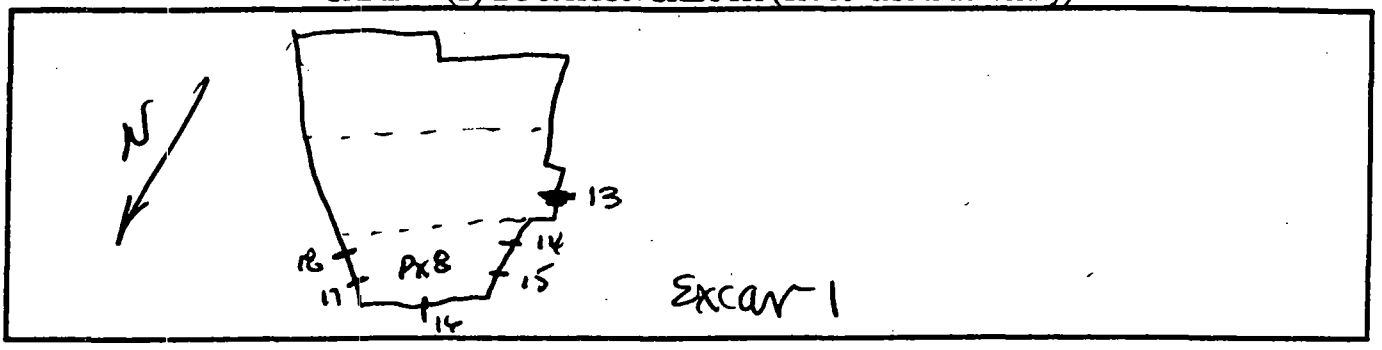
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beaver Koppers	Project No.	93145.30/55
Date Collected	5/16/96	Time Collected	0740
Collected By	WLS		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
Ex1-PX8	6'	RED clay, hard, dry
Ex1-4-6-13	4-6	↓
Ex1-4-6-14/15	4-6	↓
Ex1-4-6-16	4-6	↓
Ex1-4-6-17/18	4-6	↓

Sampling Method: collected from backhoe bucket

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing: mixed in Aluminum pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory _____

Weather Conditions _____

Remarks: No samples sent for lab analysis - penta field screening only

1. Organic vapor analysis, pocket penetrometer, etc.

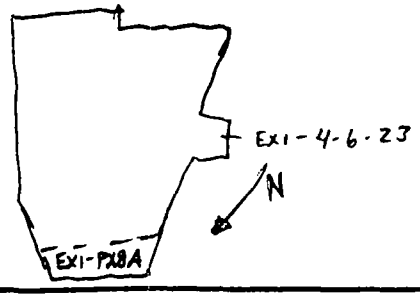
f11/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer East	Project No.	93-145.30/55
Date Collected	5/20/96	Time Collected	1615
Collected By	B. Geno		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX1-PX8A	8'	Red, clay, trace silt, moist, no odor
EX1-4-6-23	4-6'	Red, clay, trace silt, moist, no odor

Sampling Method: Excavator bucket

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: Two equal vol. aliquots mixed w/ wooden spatula in disposable al. pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 2

Date Received by Lab: 5/21/96 Laboratory: Cermic - Penta (PX8A only), Alta - Dioxin (PX8A only)

Weather Conditions: sunny, mid 80's

Remarks: EX1-PX8A sent for lab analysis, EX-4-6-23 screened >95 ppm penta

1. Organic vapor analysis, pocket penetrometer, etc.

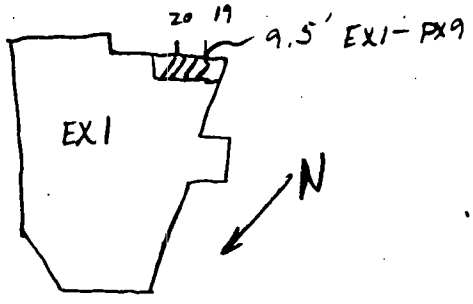
f11/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Bozo	Project No.	93-145.30/55
Date Collected	5/20/96	Time Collected	1530
Collected By	Paul Womax		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX1-PX9	9.5'	Red, weathered shale, moist (groundwater) no odor
EX1-4-6-19/20	4-6'	Red, clay, moist, slight odor

Sampling Method: Excavator bucket

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: Two equal vol. aliquots mixed in disposable al. pan with wooden trowel

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 3

Date Received by Lab: 5/21/96

Laboratory: Ceimic - Penta; Alta - Dioxin (PX9 only)

Weather Conditions: sunny, mid 90's

Remarks: Both samples sent for penta analysis, only PX9 sent for dioxin analysis

1. Organic vapor analysis, pocket penetrometer, etc.

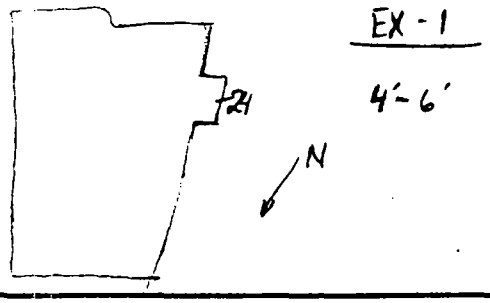
fl1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer	Project No.	93-145
Date Collected	5/21/96	Time Collected	1140
Collected By	P. Womack		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX1-4-6-24	4'-6'	Red, silty clay, hard, moist, slight odor

Sampling Method: Excavator bucket

Composite Sample? Y ☐ N ☑ Composite Sample I.D. No. _____

Describe Compositing _____

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory _____

Weather Conditions _____

Remarks: Sample collected for field penta screening only

1. Organic vapor analysis, pocket penetrometer, etc.

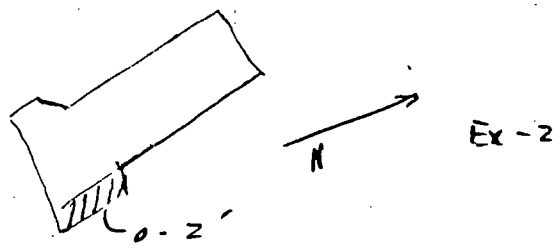
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer - Koppers Superfund Site	Project No.	93-145
Date Collected	5/14/96	Time Collected	1725
Collected By	P. Womack		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
STP-5	0-2'	Tan, silty fine sand, moist

Sampling Method: Nitrile glove

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: Sample of 4 equal vol. aliquots mixed in disposable al. pan by hand (nitrile glove) from 4 sides of stockpile

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
penta	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 1

Date Received by Lab: 5/14/96 Laboratory: Ceimic

Weather Conditions: sunny, mid 70's

Remarks: no odor

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

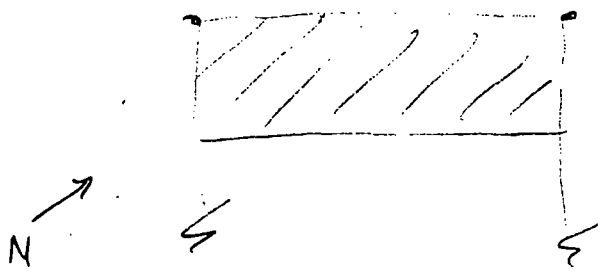
f11/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer - Koppers Superfund	Project No.	93-145
Date Collected	5/14/96	Time Collected	1715
Collected By	P. Womax		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Ex 2

Bottom 2'-3'

area of PX2-1

Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
STP-3	2'-3'	Brown, clayey silt, some fine sand, no odor, moist

Sampling Method: Nitrile glove, composited from 4 grab samples in al pan

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: Equal aliquots from 4 sides of pile mixed by hand (nitrile gloved) in disposable al. pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4 oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 1

Date Received by Lab: 5/15/96 Laboratory: Ceimic

Weather Conditions: sunny, mid 70's

Remarks: no odor

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

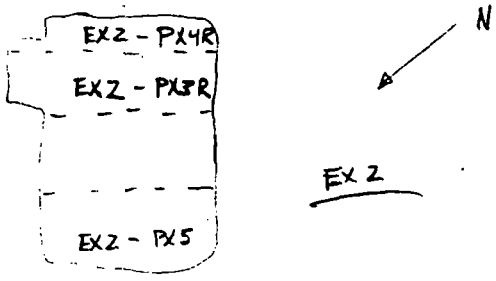
f11/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beaver East	Project No.	93-145
Date Collected	5/14/96	Time Collected	1400
Collected By	B. Geno		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX2 - PX3R	~ 2' 1400	Brownish - Red, dry, clayey silt, trace sand, no odor
- PX4R	~ 2'	" " " " "
- PX5	~ 2'	Grey, silty clay, dry, trace sand no odor

Sampling Method: Trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: 2 equal Vol aliquots mixed in aluminum pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4 oz	Y ☐	N ☐	Y ☑	N ☐
Dioxin	4 oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 6

Date Received by Lab: 5/15/96 Laboratory: Ceimic - Penta ; Alta - Dioxin

Weather Conditions: Sunny, high 60's

Remarks:

[1] Organic vapor analysis, pocket penetrometer, etc.
[2] Metals, VOA, organics, etc.

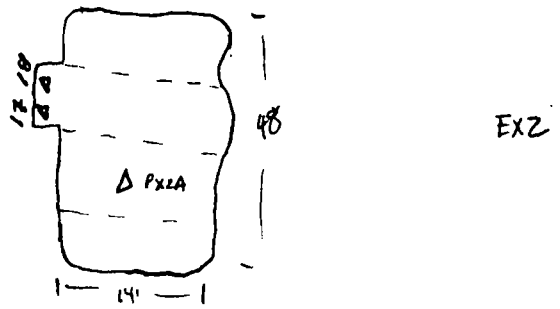
ñ1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	BEAZER	Project No.	93-145.30/55
Date Collected	5/15/96	Time Collected	1000
Collected By	DWW		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX2-PX2A	2'	GREY SILTY CLAY, DRY, NO ODOR
*EX2-0-2-17/18	2'	BROWN, SOFT CLAY, MOIST STIFF, NO ODOR

Sampling Method Dedicated Spoon, al. Pan, Nitrile Gloves, mixed Sample in al. Pan

Composite Sample? Y ☒ N ☐ **Composite Sample I.D. No.** _____

Describe Compositing SAMPLE OF TWO EQUAL Aliquots composited in al. Pan by hand (Nitrile Gloves)

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers 2

Date Received by Lab 5/16/96 **Laboratory** Ceimic - Penta, Alta - Dioxin

Weather Conditions sunny, mid - 80's

Remarks *only sample EX2-0-2-17/18 sent for lab analysis
EX2-P2A used for penta field screening only.

1. Organic vapor analysis, pocket penetrometer, etc.

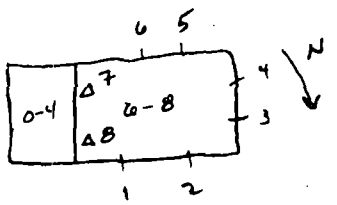
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	BEAZER	Project No.	93-145.30/55
Date Collected	5/15/94	Time Collected	1200
Collected By	PWW		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



EX 2 6-8'

Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX2-6-8-7/8	6-8'	BROWN, SOFT CLAY, MOIST, NO ODOR

Sampling Method: Decomed Stainless Trowel, Al. PAN, NITRILE GLOVES

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing: 2 Equal Aliquots placed in Al. Pan and mixed thoroughly by hand (Nitrile Gloves)

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory None

Weather Conditions: Sunny, high 80's

Remarks: Sample used for field penta screening only

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

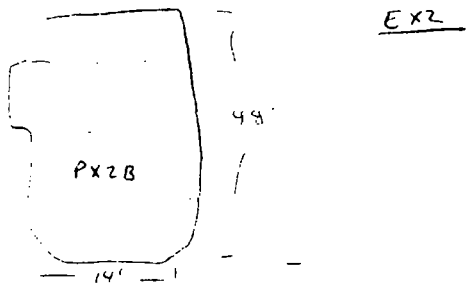
fl1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	BEAZER	Project No.	93-145 30/55
Date Collected	5/15/96	Time Collected	1630
Collected By	DWW		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX2 - PX2B	~3'	Brown soft clay high moisture
900 (Dup)		Blind Dup of above

Sampling Method: Dedicated Trowel, al. pan, nitrile gloves

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing: (2) Equal Aliquots composited into al. pan and mixed by hand (Nitrile Gloves)

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 4

Date Received by Lab: 5/16/96 Laboratory: Ceimic - Penta; Alte - Dioxin

Weather Conditions: sunny, mid 80's

Remarks: Sample 900 blind dup of EX2 - PX2B

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

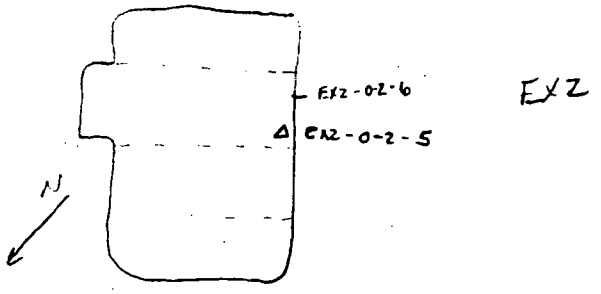
f11/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	BEAZER	Project No.	93145.30/55
Date Collected	5/15/96	Time Collected	1720
Collected By	PWW		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX2-0-2-5/6	~2'	BROWN SOFT CLAY MOIST NO ODOR

Sampling Method: Dedicated trowel, Al. Pan, Nitrile gloves

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No.

Describe Compositing: (2) Equal Vol Aliquots placed in Al. Pan and mixed thoroughly by hand (Nitrile Gloves).

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 1

Date Received by Lab: 5/16/96 Laboratory: Ceimic

Weather Conditions: sunny, mid 80's

Remarks:

1. Organic vapor analysis, pocket penetrometer, etc.

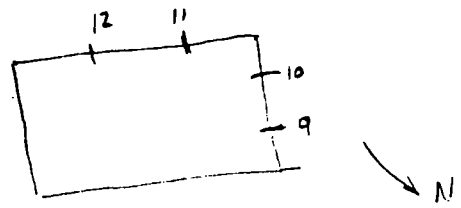
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beezer	Project No.	93-145
Date Collected	5/15/96	Time Collected	1530
Collected By	B. Cone		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Ex 2

6'-8'

Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX2-6-8-9/10	6-8'	Brown, silty clay, little sand, moist, slight odor
EX2-6-8-11/12	6-8'	Grey, clayey silt, little sand, moist, no odor

Sampling Method: Excavator bucket

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: Two equal vol. aliquots mixed in al. pan by hand w/ nitrile glove

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers

Date Received by Lab Laboratory None

Weather Conditions: overcast, light rain, high 60's

Remarks: No lab samples

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

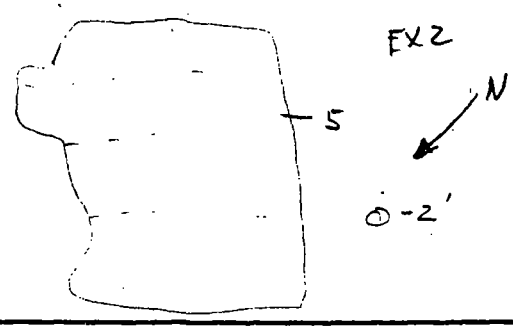
fl1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beezer East	Project No.	93-145
Date Collected	5/15/96	Time Collected	1720
Collected By	B. Geno		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX2-0-2-5	~1.5'	Red, soft silty clay, trace sand, moist. No odor

Sampling Method: S.S. Spatula

Composite Sample? Y ☐ N ☑ Composite Sample I.D. No. _____

Describe Compositing _____

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Dioxin	40z	Y ☑	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 1

Date Received by Lab: 5/16/96 Laboratory: Alta

Weather Conditions: overcast, high 60's

Remarks _____

Organic vapor analysis, pocket penetrometer, etc.
Metals, VOA, organics, etc.

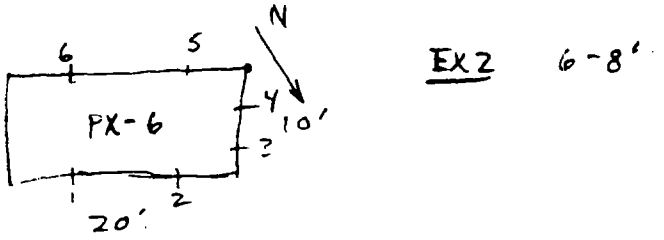
fl1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer	Project No.	97-145
Date Collected	5/15/96	Time Collected	1025
Collected By	B. Geno		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
* ~~EX~~ PX 6	8'	Grey, silty clay, moist, no odor
* EX2-6-8-1/2	6-8'	Brown, soft clay, moist, no odor
EX2-6-8-3/4	6-8'	Brown, soft clay, moist, no odor
EX2-6-8-5/6	6-8'	Red Brown & grey clay, moist, red clay has odor

Sampling Method Excavator bucket

Composite Sample? Y ☑ N ☐ **Composite Sample I.D. No.** _____

Describe Compositing Samples of 2 aliquots of equal volume composited in aluminum pan by hand (nitrile glove)

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers 4

Date Received by Lab 5/16/96 **Laboratory** Ceimic - Penta, Alta - Dioxin

Weather Conditions Sunny, low 80's

Remarks *Only samples EX2-PX6 & EX2-6-8-1/2 sent for lab analysis

1. Organic vapor analysis, pocket penetrometer, etc.

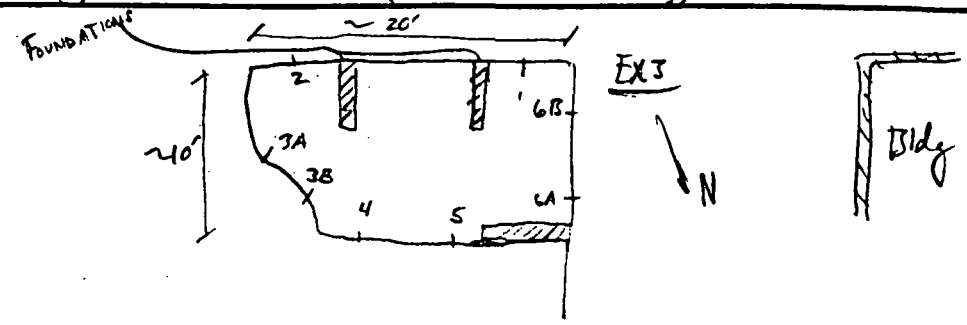
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer East Koppers	Project No.	93-145
Date Collected	5/13/96	Time Collected	1700
Collected By	B. Cend		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX3-2-4-1/2	2-4'	Brown, silty clay, orange mottling, trace sand, moist, no odor
EX3-2-4-3	2-4'	Brown, silty clay, trace fine sand, moist, no odor
EX3-2-4-4/5	2-4'	Grey, clayey silt, trace sand, moist, no odor
E3-2-4-6	2-4'	Grey, sandy gravel, little silt, trace clay, moist, slight odor

Sampling Method: Trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No. _____

Describe Compositing: Two equal vol. aliquots mixed in disposable al. pan with clean trowel.

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory _____

Weather Conditions: sunny, mid 80's

Remarks: samples used for penta field screening only — no lab analysis

1. Organic vapor analysis, pocket penetrometer, etc.

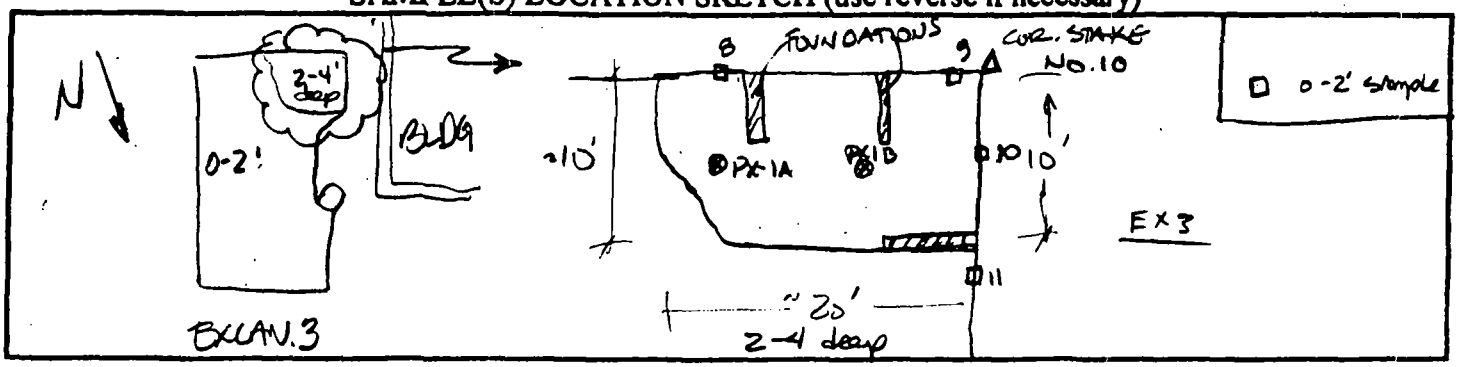
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beaver East - Koppers	Project No.	93145
Date Collected	5/13/96	Time Collected	1700
Collected By	BGENO		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
*EX3-PX1	4'	Brown, silty clay, orange mottling, trace sand, moist, no odor
EX3-0-2-8/9	0-2	Gray, clayey silt, little sand, little gravel, moist, no odor
EX3-0-2-10/11	0-2	" " " " " "

Sampling Method: Trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: Two approx. equal vol. aliquots mixed in disposable aluminum pan with clean trowel

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 2

Date Received by Lab: 5/15/96 Laboratory: Ceimic - Penta; Alta - Dioxin

Weather Conditions: sunny, mid 80's

Remarks: * EX3-PX1 only sent for lab analysis, other samples used for penta field screening only

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

f11/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer East	Project No.	93-145
Date Collected	5/14/96	Time Collected	1720
Collected By	P. Womack		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)

Ex Area 3
0-2'

STP-4

Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
STP-4	0-2'	Brown, silty clay, some sand, trace gravel, moist

Sampling Method: Samples taken by hand with nitrile glove

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: 4 equal vol. aliquots taken from 4 sides of stockpile and mixed in disposable al. pan by hand (nitrile glove)

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
jenta	4 oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 1

Date Received by Lab: 5/15/96 Laboratory: Cpimia

Weather Conditions: sunny, high 70s

Remarks: no odor

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc.

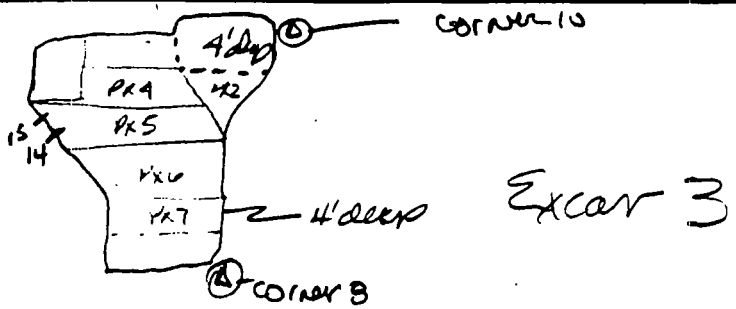
f11/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Baxter - Kansas	Project No.	93445.30/55
Date Collected	5/14/96	Time Collected	1200 - 1500
Collected By	WCS		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	TIME	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
Ex3-PX7	4'	1200	
Ex3-PX4	2'	1500	
Ex3-PX5	2'	1200	
Ex3-PX6	2'	1200	
* Ex3-0-2-14/15	1.5-2'	1500	

Sampling Method: Disposible trowels & Trowels

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing: Mixed 2 samples in Al. pans

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
penta	4 oz	Y ☐	N ☐	Y ☒	N ☐
Dioxin	4 oz	Y ☐	N ☐	Y ☒	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 10

Date Received by Lab: 5/15/96

Laboratory: Cimmie - penta; Alta - Dioxin

Weather Conditions: Sunny mid - 80s

Remarks: _____

1. Organic vapor analysis, pocket penetrometer, etc.

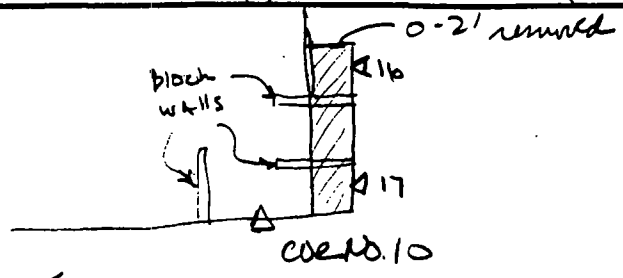
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer-Koppers	Project No.	93145
Date Collected	3/15/96	Time Collected	0800
Collected By	WCS		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Ex 3

Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
Ex3-0-2-16/17	0-2'	(16) blk, brown wet sand & gravel (17) grey to brown sandy clay wet

Sampling Method: hand trowel

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing: Collected both samples into Al pan then mixed

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory None

Weather Conditions _____

Remarks: Sample used only for penta field screening

1. Organic vapor analysis, pocket penetrometer, etc.

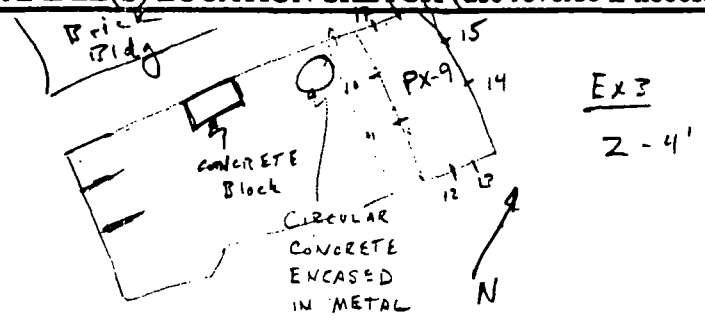
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer	Project No.	93 - 145 . 30/55
Date Collected	5/15/96	Time Collected	1400
Collected By	P. Womack		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX3-2-4-10/11	2-4'	Tan, silty clay, trace sand moist, no odor
EX3-2-4-12/13	2-4'	Reddish brown, clayey silt, trace sand, moist, no odor
EX3-PX9	4'	Brown, silty clay, trace sand moist, no odor
EX3-2-4-14/15	2-4'	Red, clay, moist, no odor
*EX3-2-4-16/17	2'-4'	Grey, hard clayey silt, moist, no odor

Sampling Method: trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No. _____

Describe Compositing: Two approx equal vol. aliquots mixed in al. pan with trowel

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Pentz	4oz	Y ☐	N ☐	Y ☑	N ☐
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 2

Date Received by Lab: 5/16/96 Laboratory: Cornie - Pentz; Atta - Dioxins

Weather Conditions: overcast, light rain, high 60's

Remarks: * only sample EX3-2-4-16/17 sent for lab analysis

1. Organic vapor analysis, pocket penetrometer, etc.
2. Metals, VOA, organics, etc

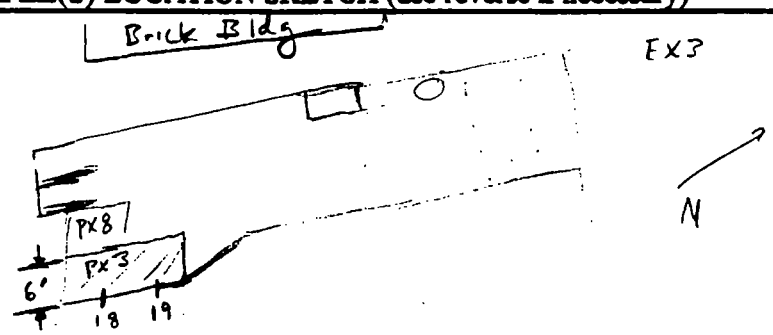
f11/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Bazer	Project No.	93-115
Date Collected	5/15/96	Time Collected	1240
Collected By	B. Geno		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
* EX3-PX3	2'	Grey, m. stiff, mottled clay, red staining, moist
EX3-0-2-18/19	0-2'	Grey, m. stiff, clay, trace sand, moist
* EX3-PX8	2	Red, m. stiff, silty clay, little sand, moist

Sampling Method: Trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: Two equal vol. aliquots composited in disposable gl. pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 4

Date Received by Lab: 5/16/96

Laboratory: Cosmic - Penta; Alta - Dioxin

Weather Conditions: overcast, mid 60's

Remarks: * only samples EX3-PX3 & EX3-PX8 sent for lab analysis

1. Organic vapor analysis, pocket penetrometer, etc.

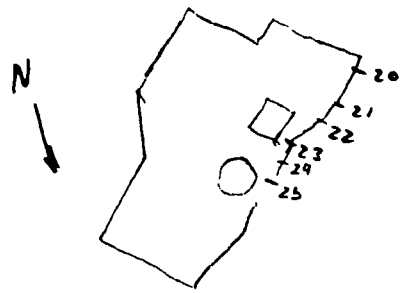
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer	Project No.	93-145
Date Collected	5/16/96	Time Collected	0940
Collected By	B. Crews		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



EX 3
0-2' Sidewall Sample

Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX3-0-2 -20/21	0-2'	Brown, clayey silt, trace sand, moist
EX3-0-2-22/23	0-2'	Gray, silty sand, little clay, little gravel, moist
EX3-0-2-24/25	0-2'	Brown, silty clay & Gray clayey silt, little sand, trace gravel, moist

Sampling Method: S.S. Trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No. _____

Describe Compositing: Two equal vol. aliquots from 2 locations composited in disposable al. pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory _____

Weather Conditions: overcast, light rain, mid 60's

Remarks: No lab samples

1. Organic vapor analysis, pocket penetrometer, etc.

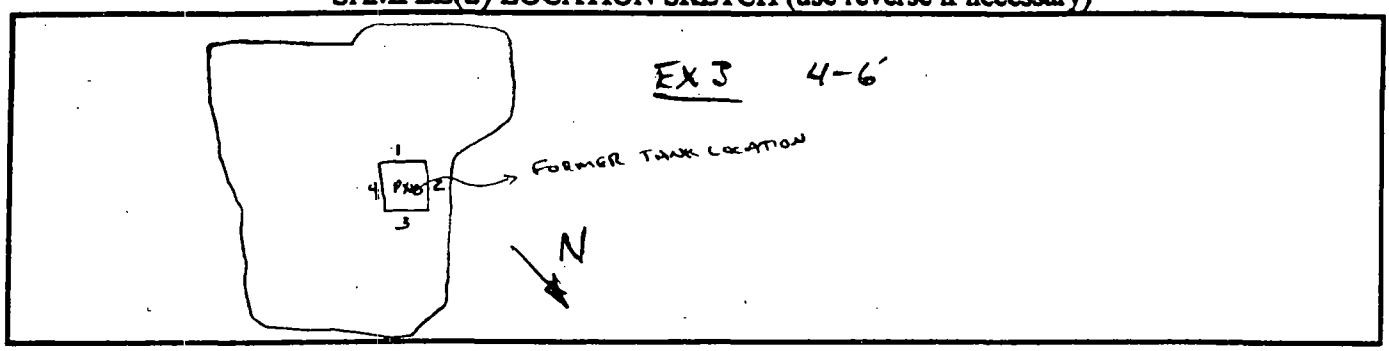
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beezer	Project No.	93-145
Date Collected	5/17/96	Time Collected	1550
Collected By	B. Gand		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX3-4-6-1/2	4-6'	Gray, clayey silt, trace sand, odor
EX3-4-6-3/4	4-6'	Brown, clayey silt, mottled, trace sand odor
EX3-PX10	6'	Brown, clayey silt, little sand, odor

Sampling Method: Trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No. _____

Describe Compositing: Two equal vol. aliquots mixed with trowel in disposable al. pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory _____

Weather Conditions: sunny, 90's, slight breeze

Remarks: Standard for penta screening outside screening limits - repeat sampling & analysis

1. Organic vapor analysis, pocket penetrometer, etc.

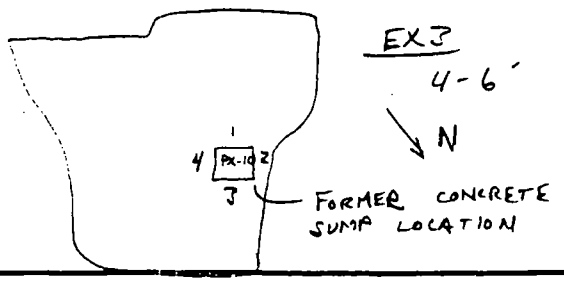
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer	Project No.	93-145
Date Collected	5/20/96	Time Collected	0815
Collected By	B. Geno		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX3-4-6-1/2	4-6'	
EX3-4-6-3/4	4-6'	
EX3-PX10	6'	

Sampling Method: Backhoe bucket

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No. _____

Describe Compositing _____

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory _____

Weather Conditions: sunny, low 80's

Remarks: no lab analysis, screening levels > 24 ppm

1. Organic vapor analysis, pocket penetrometer, etc.

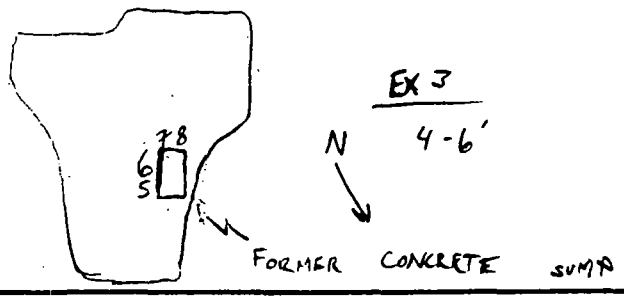
fl l/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Baczek	Project No.	93-145
Date Collected	5/20/96	Time Collected	1045
Collected By	B. Lewis		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX3-4-6-5/6	4-6'	Brown & gray, mottled, silty clay, moist, odor
EX3-4-6-7/8	4-6'	" " " " " "

Sampling Method: Trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: Two equal vol. aliquots mixed w/ trowel in disposable pan.

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers

Date Received by Lab Laboratory

Weather Conditions: sunny, mid 80's

Remarks: no lab analysis, screening levels > 24 ppm

1. Organic vapor analysis, pocket penetrometer, etc.

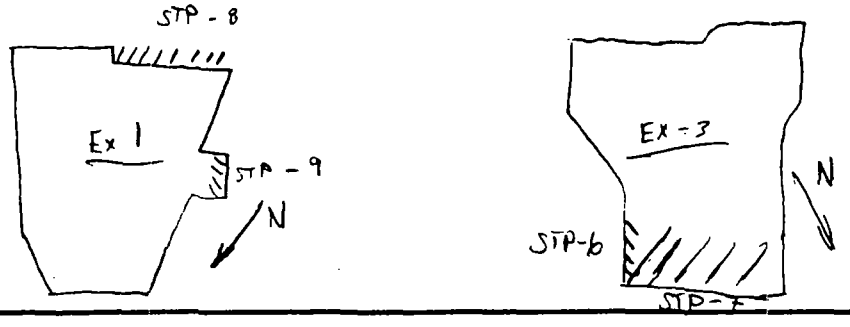
fl1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer	Project No.	93-145.30/55
Date Collected	5/20/96	Time Collected	1645
Collected By	B. Genn		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
STP - 6	2-4'	Brown, clayey silt, trace sand, moist, no odor
STP - 7	2-4'	Brown, silty clay, trace sand, moist, no odor
STP - 8	4-6'	Grey silt and red clay, moist, no odor
STP - 9	4-6'	Grey silt and red clay, moist, no odor

Sampling Method: Trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: 4 equal vol. aliquots

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 4

Date Received by Lab: 5/21/96 Laboratory: Cimic

Weather Conditions: sunny, mid-90's

Remarks: soils screened between 24 ppm & 95 ppm & stockpiled on site

1. Organic vapor analysis, pocket penetrometer, etc.

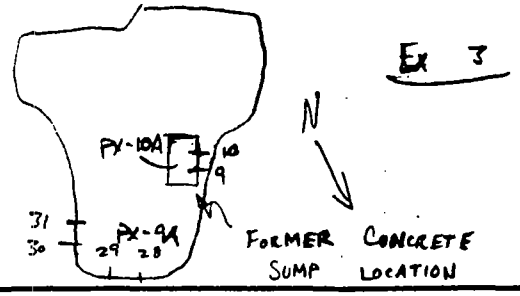
fl1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer	Project No.	93-145 .39/55
Date Collected	5/20/96	Time Collected	1400
Collected By	B. Lund		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
✓ EX3-9A	4'	Brown, silty clay, mottled, slight odor
✓ EX3-10A (901 = Dup)	9.5'	Grey, clayey silt, moist (groundwater) no odor
EX3-4-6 9/10	5'	Brown, silty clay, mottled, trace sand, moist, no odor
EX3-2-4-28/29	3'	Brown, clayey silt, trace sand, moist, no odor
EX3-2-4-32/33	3'	Brown, clayey silt, little sand, moist, no odor

Sampling Method Trowel

Composite Sample? Y ☑ N ☐ **Composite Sample I.D. No.** _____

Describe Compositing Two equal vol aliquots mixed with wooden spatula in disposable aluminum trays

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers 2

Date Received by Lab 5/21/96 **Laboratory** Ceimic - Penta; Alta - Dioxin

Weather Conditions sunny, low 90's

Remarks EX3-9A & EX3-10A only sent for lab analysis. Blind dup of EX3-10A also lab analyzed as 901

1. Organic vapor analysis, pocket penetrometer, etc.

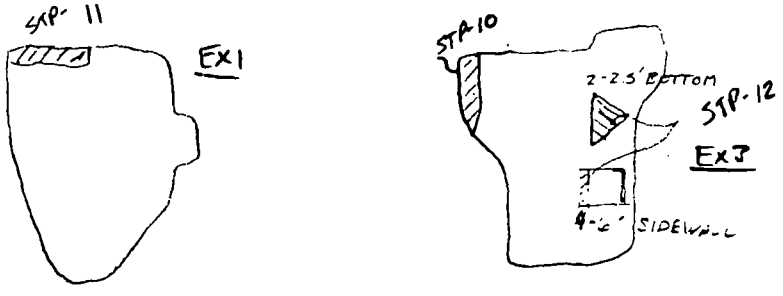
fl l/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	BEAZER	Project No.	9314T. 30/55
Date Collected	5/21/96	Time Collected	1300
Collected By	PWW		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
STP-10	2-4'	DARK BROWN, SILTY CLAY, ORGANIC CONTENT, MOIST
STP-11	4-6'	WHITE SILTY SAND, RED CLAY, DRY
STP-12	2-4'	BROWN, SILTY CLAY, SLIGHT ODOR, DRY

Sampling Method: Trowel, Al. Pan, Nitrile Gloves

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing: 2 equal aliquots placed in container and mixed thoroughly by hand (nitrile gloves)

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Pentra	40 z	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 3

Date Received by Lab: 5/22/96 Laboratory: Ceimic

Weather Conditions: Sunny, mid 90's

Remarks: _____

1. Organic vapor analysis, pocket penetrometer, etc.

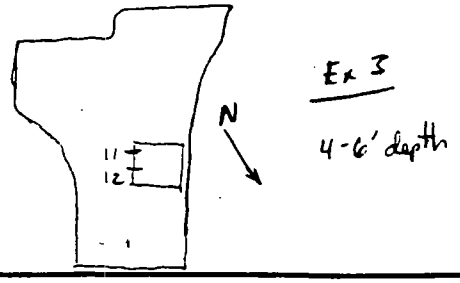
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer East	Project No.	97-145
Date Collected	5/21/96	Time Collected	0910
Collected By	B. Gano		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX3-4-6-11/12	4-6'	Gray, silty clay, orange mottling, moist, slight odor

Sampling Method: Excavator bucket

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No. _____

Describe Compositing: Two equal vol. aliquots soil combined in

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers _____

Date Received by Lab _____ Laboratory _____

Weather Conditions _____

Remarks: No samples sent for lab analysis - penta field screening only

1. Organic vapor analysis, pocket penetrometer, etc.

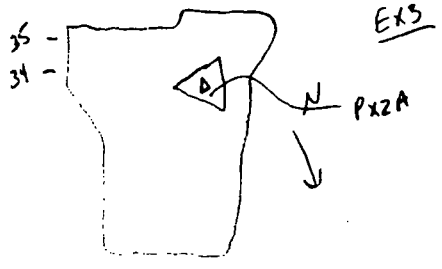
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	BEAZER	Project No.	93145
Date Collected	5/21/96	Time Collected	830
Collected By	PWW		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX3-2-4-34/35	2-4'	DARK BROWN, SILTY CLAY ORGANIC CONTENT, MOIST
* EX3-PXZA	~2-3'	LIGHT BROWN, SILTY SAND, DRY

Sampling Method: TROWEL, AL PAN, NITRILE GLOVES

Composite Sample? Y ☒ N ☐ Composite Sample I.D. No. _____

Describe Compositing: 2 equal aliquots placed in al. pan and mixed thoroughly by hand (Nitrile Gloves)

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 2

Date Received by Lab: 5/22/96 Laboratory: Ceimic - Penta, Alta - Dioxin

Weather Conditions: Sunny, low 80's

Remarks: * EX3-PXZA only sent for lab analysis

1. Organic vapor analysis, pocket penetrometer, etc.

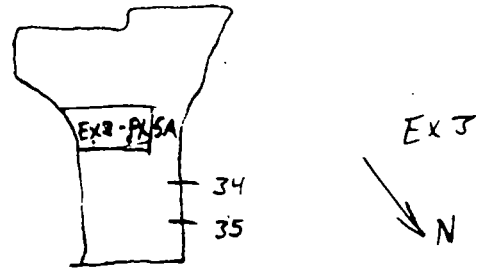
fl 1/corp

CUMMINGS RITER CONSULTANTS, INC.

SOIL SAMPLE FIELD COLLECTION REPORT

Project Name	Beazer East	Project No.	97-145
Date Collected	5/29/96	Time Collected	1045, 1130
Collected By	R Geld		

SAMPLE(S) LOCATION SKETCH (use reverse if necessary)



Sample I.D. No.	Depth of Sample	Soil Description (Color, Composition, Staining, Odor, Field Measurements[1])
EX3-PKSA	2.5' 1130	Gray, clayey silt, trace sand, moist
EX3-2-4-34/35	2-4' 1045	Brown, clayey silt, trace sand, moist

Sampling Method: Trowel

Composite Sample? Y ☑ N ☐ Composite Sample I.D. No.

Describe Compositing: Two equal vol. aliquots mixed in aluminum pan

SAMPLE TYPES COLLECTED

Type[2]	Volume	Per Sample?		Per Composite?	
Penta	4oz	Y ☐	N ☐	Y ☑	N ☐
Dioxin	4oz	Y ☐	N ☐	Y ☑	N ☐
		Y ☐	N ☐	Y ☐	N ☐
		Y ☐	N ☐	Y ☐	N ☐

Number of Containers: 4

Date Received by Lab: 5/30/96

Laboratory: Ceimic - Penta; Alta - Dioxin

Weather Conditions: overcast, mid 70's

Remarks:

1. Organic vapor analysis, pocket penetrometer, etc.

fl 1/corp

APPENDIX M

SOIL INCINERATION WASTE MANIFESTS

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N.C.D.00.32.00.38.3 — Manifest Document No.: 96.C.12
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone: 412-227-2955

A. State Manifest Document Number:
B. State Generator's ID:

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.
6. US EPA ID Number: OHD.0.09.86.58.25
C. State Transporter's ID:
D. Transporter's Phone: 216-539-9841

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029
10. US EPA ID Number: KYD.0.88.43.88.17
G. State Facility's ID:
H. Facility's Phone: 502-395-0318

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above: T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month Day Year: 05 09 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GARRY Frederick — Signature: Garry Frederick — Month Day Year: 05 09 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: — Signature: — Month Day Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: — Signature: — Month Day Year:

GENERATOR — TRANSPORTER — FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N C D 0 0 3 2 0 0 3 8 3 — Manifest Document No. 9 8 0 1 1

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC. 908 CHURCH STREET MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: Q H D 0 0 9 8 6 5 8 2 5

C. State Transporter's ID: T558 JE(ch)

D. Transporter's Phone: 216-533-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: L W D, INC. HIGHWAY 1523 CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above: a).NX50- BILLING ADDRESS: BEAZER EAST, INC. 436 SEVENTH AVE. PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above: T06/T07

15. Special Handling Instructions and Additional Information: EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103 EMERGENCY RESPONSE GUIDE# 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: ROBERT M. FISHER — Signature: [signature] — Month 05 Day 09 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Tom Squire — Signature: [signature] — Month 05 Day 09 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N C D 0 0 3 2 0 0 3 8 3
Manifest Document No. 9 6 0 1 2
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412) 227-2955

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name
DART TRUCKING COMPANY, INC.
6. US EPA ID Number O H D 0 0 9 8 6 5 8 2 5
C. State Transporter's ID
D. Transporter's Phone 216-533-9841

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029
10. US EPA ID Number K Y D 0 8 8 4 3 8 8 1 7
G. State Facility's ID
H. Facility's Phone 502-395-6313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a). NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER
Signature:
Month Day Year: 05 09 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: NICK SUROIA
Signature:
Month Day Year: 05 09 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR | TRANSPORTER | FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. N.C.D. 00. 32. 00. 38. 3	Manifest Document No. 960.13	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD. 0. 09. 86. 58. 25

C. State Transporter's ID

D. Transporter's Phone: 216-533-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD. 0. 88. 43. 88. 17

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name	Signature	Month	Day	Year
Robert A. Fisher	[signature]	05	09	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Chester Shumaker 1254	[signature]	05	09	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

[redacted]

Emergency Contact Telephone Number

[redacted]

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N C D 0 0 3 2 0 0 3 8 3
Manifest Document No.: 98014
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST. INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone ( ) 412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.
6. US EPA ID Number: O H D 0 0 9 8 6 5 8 2 5

C. State Transporter's ID

D. Transporter's Phone: 216-533-9841

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D. INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1 00	DT	0.0025	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a).NX50- BILLING ADDRESS: BEAZER EAST. INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT H. FISNER
Signature: [signature]
Month Day Year: 05 09 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jeff Sullivan
Signature: [signature]
Month Day Year: 05 09 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

[redacted]

GENERATOR'S COPY

[redacted]

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N·C·D·00·32·00·38·3 — Manifest Document No.: 96015

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD·0·09·86·58·25

C. State Transporter's ID

D. Transporter's Phone: 216-538-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD·0·88·43·88·17

G. State Facility's ID

H. Facility's Phone: 502-395-8813

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1 0.0	DT	0.0025	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a).NX50 BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above: T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDEN 31

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Printed/Typed Name: ROBERT H. FISHER — Signature: [signature] — Month 05 Day 10 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bill Whitlatch — Signature: Bill Whitlatch — Month 05 Day 10 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N.C.D.0.0.3.2.0.0.3.8.3
4. Manifest Document No.
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone ( ) 412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: O.H.D.0.0.9.8.6.5.8.2.5

C. State Transporter's ID: T560 SE OH

D. Transporter's Phone: 216-539-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: K.Y.D.0.8.8.4.3.8.8.1.7

G. State Facility's ID

H. Facility's Phone: 502-395-8313

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III		1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER | Signature: [signature] | Month 05 Day 10 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DONNIE SAUERWEIN | Signature: [signature] | Month 05 Day 10 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N.C.D.00.32.00.38.3 — Manifest Document No.: 96017

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: QHD.0.09.86.58.25

C. State Transporter's ID

D. Transporter's Phone: 216-533-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD.0.88.43.88.17

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a).NX50 BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month 05 Day 10 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Harry Crump — Signature: Harry Crump — Month 05 Day 10 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

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Printed/Typed Name — Signature — Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NCD 00 32 00 38 3 — Manifest Document No. 16018

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
~~BEAZER EAST, INC.~~
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD 009 86 58 25

C. State Transporter's ID

D. Transporter's Phone: ~~216-583-9841~~

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD 088 43 88 17

G. State Facility's ID

H. Facility's Phone: 502-395-8813

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		~~HAZARDOUS WASTE SOLID, NOS (GUIDE 31)~~ 9 ,NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT M. FISHER — Signature: [signature] — Month 05 Day 10 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DAVID LENHART — Signature: [signature] — Month 05 Day 10 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. N·C·D·00·32·00·38·3	Manifest Document No. 10020	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD·009·86·58·25

C. State Transporter's ID

D. Transporter's Phone: 216-533-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD·088·43·88·17

G. State Facility's ID

H. Facility's Phone: 502-395-6313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1 00	DT	00025	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above

T06/T07

15. Special Handling Instructions and Additional Information

EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER | Signature: [signature] | Month Day Year: 05 13 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Jeff Sullivan | Signature: [signature] | Month Day Year: 05 13 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

[redacted]

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N.C.D.0.0.3.2.0.0.3.8.3 — Manifest Document No. 4.6.0.2.1 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC. 908 CHURCH STREET MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC. — 6. US EPA ID Number: O.H.D.0.0.9.8.6.5.8.2.5

C. State Transporter's ID

D. Transporter's Phone: 216-539-9841

7. Transporter 2 Company Name — 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: L W D, INC. HIGHWAY 1523 CALVERT CITY, KENTUCKY 42029 — 10. US EPA ID Number: K.Y.D.0.8.8.4.3.8.8.1.7

G. State Facility's ID

H. Facility's Phone: 502-395-8813

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III		1	DT	2.5	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above: a).NX50- BILLING ADDRESS: BEAZER EAST, INC. 436 SEVENTH AVE. PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above: T06/T07

15. Special Handling Instructions and Additional Information: EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103 EMERGENCY RESPONSE GUIDE# 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: ROBERT A. FISHER — Signature — Month Day Year: 05 13 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: NICK SUROIN — Signature — Month Day Year: 05 13 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Month Day Year

GENERATOR | TRANSPORTER | FACILITY

GENERATOR'S COPY

[redacted]

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. NCD003200383 BEAZER EAST, INC.	Manifest Document No. 10022	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD 009 86 58 25

C. State Transporter's ID: 216-533-9041

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD 088 43 88 17

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
		HAZARDOUS WASTE SOLID, NOS (GUIDE 31)	1	DP			
a.		9 NA3077 III			25		
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a7.NX50 BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name	Signature	Month	Day	Year
ROBERT E. FISHER	[signature]	05	13	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
CHESTER SCHUMAKER	[signature]	05	13	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. NCD003200383 BEAZER EAST, INC.	Manifest Document No. 18023	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD 009 865 825

C. State Transporter's ID: T558 [illegible]

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD 088 438 817

G. State Facility's ID

H. Facility's Phone: 502-395-6313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25		
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a).NXSO BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name	Signature	Month	Day	Year
ROBERT [illegible]. FISHER	[signature]	05	13	95

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
TOM SQUIRE	[signature]	05	13	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NCD 003200383 BEAZER EAST, INC. — Manifest Document No. 102 24

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: 908 CHURCH STREET, MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD 009 86 58 25

C. State Transporter's ID: 216-533-9841

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: L W D, INC., HIGHWAY 1523, CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD 088 43 88 17

G. State Facility's ID

H. Facility's Phone: 502-395-6813

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
		HAZARDOUS WASTE SOLID, NOS (GUIDE 31)	1				
a.		9 NA3077 III			25		
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above: BILLING ADDRESS: BEAZER EAST, INC., 436 SEVENTH AVE., PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above: T06/T07

15. Special Handling Instructions and Additional Information: EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103; EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month 05 Day 13 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARRY FREDERICK — Signature: Garry Frederick — Month 05 Day 13 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NCD003200383 Manifest Document No. 98025
BEAZER EAST, INC.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD009865825

C. State Transporter's ID: 216-538-9841

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD088438817

G. State Facility's ID

H. Facility's Phone: 502-395-6813

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
		HAZARDOUS WASTE SOLID, NOS (GUIDE 31)					
a.		9 NA3077 III	1	DT	25		
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a) NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT J. FISHER
Signature: [signature]
Month 05 Day 13 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ed. Overholt
Signature: Ed. Overholt
Month 05 Day 13 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N C D 0 0 3 2 0 0 3 8 3 — Manifest Document No. 90026 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.
6. US EPA ID Number: O H D 0 0 9 8 6 5 8 2 5

C. State Transporter's ID

D. Transporter's Phone: 216-533-0041

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029
10. US EPA ID Number: K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone: 502-395-6313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III			25		
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a). NRSO- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONCE GUIDE# 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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GENERATOR

Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month 05 Day 14 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bill Whitlatch — Signature: Bill Whitlatch — Month 05 Day 14 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NCD 003200383 — Manifest Document No. 10027
BEAZER EAST, INC.

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD 009 865 825

C. State Transporter's ID

D. Transporter's Phone: 216-583-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D. INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD 088 438 817

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a). NX50 BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month 05 Day 14 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DAVID Lenhart — Signature: [signature] — Month 05 Day 14 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

- Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N C D 0 0 3 2 0 0 3 8 2 — Manifest Document No. 18028

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: O H D 0 0 9 8 6 5 8 2 5

C. State Transporter's ID: T 55086 OH

D. Transporter's Phone: 216-533-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone: 502-395-6313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month Day Year: 05 14 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DONNIE SAUERWEIN — Signature: [signature] — Month Day Year: 05 14 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N C D 0 0 3 2 0 0 3 8 3 — Manifest Document No. 48029 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.
6. US EPA ID Number: O H D 0 0 9 8 6 5 8 2 5

C. State Transporter's ID

D. Transporter's Phone: 216-363-9011

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029
10. US EPA ID Number: K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	V	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a). NOSO- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONCE GUIDEN 31

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Printed/Typed Name: ROBERT C. FISHER — Signature — Month Day Year: 05 14 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Gerald W. Yerkey — Signature — Month Day Year: 05 14 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space
QP. 41. 25

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N.C.D. 00. 32. 00. 38. 3 | Manifest Document No. 0

2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: WILLS TRUCKING CO. ~~BART TRUCKING COMPANY~~ INC. | US EPA ID Number: OHD068913409 ~~OHD 0 0 8 4 5 8 2 5~~

C. State Transporter's ID

D. Transporter's Phone 216-533-9841

7. Transporter 2 Company Name | 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: L W D. INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029 | 10. US EPA ID Number: KYD. 0. 88. 43. 88. 17

G. State Facility's ID

H. Facility's Phone 502-995-6913

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	HAZARDOUS WASTE SOLID. NOS (GUIDE 31) 9 NA3077 III		1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a). NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: ROBERT F. FISHER | Signature: [signature] | Month 05 Day 15 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Reford Woodyard | Signature: [signature] | Month 05 Day 15 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N.C.D.00.32.00.38.3 | Manifest Document No. 96131 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
BART TRUCKING COMPANY, INC. 84 5/15/96

6. US EPA ID Number
8 4 8 0 6 9 8 6 3 8 0 2 8

C. State Transporter's ID 800422 [illegible]

D. Transporter's Phone 216-[illegible]

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number
K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103

15. Special Handling Instructions and Additional Information
EMERGENCY RESPONSE GUIDE# 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: ROBERT A. FISHER | Signature: [signature] | Month 05 Day 15 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: David Woodyard | Signature: [signature] | Month 05 Day 15 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. 0 3 8 3 BEAZER EAST, INC.	Manifest Document No. 40032	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: CART TRUCKING COMPANY, INC.

6. US EPA ID Number: O H D 0 5 8 2 5

C. State Transporter's ID: 216-533-9841

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone: 502-395-8813

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	HAZARDOUS WASTE SOLID, NOS (GUIDE 31)	12. Containers No. 1	Type DI	13. Total Quantity	14. Unit Wt/Vol	I. Waste No. K001
a.		9 NA3077 III			25		
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above: BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above: T06/T07

15. Special Handling Instructions and Additional Information
~~EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103~~
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name	Signature	Month	Day	Year
Robert A. Fisher	[signature]	05	15	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Nick Suroin	[signature]	05	15	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. 0 0 3 8 8 [illegible] Manifest Document No. [illegible]
BEAZER EAST, INC.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: BART TRUCKING COMPANY, INC.

6. US EPA ID Number: O H D 0 0 9 8 6 5 8 2 5

C. State Transporter's ID: 216-583-9841

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No. 1	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
		HAZARDOUS WASTE SOLID, NOS (GUIDE 31)					
a.		9 NA3077 III			25		
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above: BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER
Signature: [signature]
Month 05 Day 15 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: CHESTER CAUMAKER 1254
Signature: [signature]
Month 05 Day 15 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NC 0 0 0 3 2 0 0 3 8 3 — Manifest Document No. 16034
BEAZER EAST, INC.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: O H D 0 0 9 8 8 5 8 2 5

C. State Transporter's ID: 216-533-9841

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
		HAZARDOUS WASTE SOLID, NOS (GUIDE 31)					
a.		9 NA3077 III	00		0.5 0.25		
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above: BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above: T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month 05 Day 15 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Jeff Sullivan — Signature: [signature] — Month 05 Day 15 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N C D 0 0 3 2 0 0 3 8 3 | Manifest Document No. 9 0 0 3 5 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
DART TRUCKING COMPANY, INC.

6. US EPA ID Number
O H D 0 0 9 8 6 5 8 2 5

C. State Transporter's ID

D. Transporter's Phone 216-533-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number
K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: Robert A. Fisher | Signature: [signature] | Month Day Year: 05 15 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ed Overholt | Signature: Ed Overholt | Month Day Year: 05 15 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

GENERATOR | TRANSPORTER | FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NCD 00 32 00 38 3 — Manifest Document No. 90036

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD 009 86 58 25

C. State Transporter's ID

D. Transporter's Phone: 216-589-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD 088 43 88 17

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a). NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT R. FISHER — Signature: [signature] — Month Day Year: 05 19 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bill Whitlock — Signature: [signature] — Month Day Year: 05 17 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NCD003200383 — Manifest Document No. 10037 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.
6. US EPA ID Number: OHD009865825

C. State Transporter's ID
D. Transporter's Phone: 216-538-9041

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD088438817

G. State Facility's ID
H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a) NX50 BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month 05 Day 20 Year 95

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bill Whitlatch — Signature: Bill Whitlatch — Month 05 Day 20 Year 95

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. NCD 003200383 BEAZER EAST, INC.	Manifest Document No. 90038	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD 009 86 58 25

C. State Transporter's ID

D. Transporter's Phone: 216-539-9041

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone: T202KC

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD 088 43 88 17

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
		HAZARDOUS WASTE SOLID, NOS (GUIDE 31)	1	DT			
a.		9 NA3077 III			25		
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a). NXSO BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name	Signature	Month Day Year
ROBERT A. FISHER	[signature]	05 20 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Richard B Edmiston	[signature]	05 20 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NC D 0 0 3 2 0 0 3 8 2 — Manifest Document No. 10039 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

BEAZER EAST, INC.

3. Generator's Name and Mailing Address: 908 CHURCH STREET, MORRISVILLE, NC 27560

4. Generator's Phone ( ) 412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: O H D 0 0 9 8 6 5 8 2 5

C. State Transporter's ID: 216-530-9041

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: L W D, INC., HIGHWAY 1523, CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: K Y D 0 8 8 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone: 502-895-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	HAZARDOUS WASTE SOLID, NOS (GUIDE 31)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		9 NA3077 III	1	DP	25		K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above: a). NXSO BILLING ADDRESS: BEAZER EAST, INC., 436 SEVENTH AVE., PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above: T06/T07

15. Special Handling Instructions and Additional Information: EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103; EMERGENCY RESPONSE GUIDE# 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month Day Year: 05 [illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: WAYNE BEST JR — Signature: [signature] — Month Day Year: 05 [illegible] 19 6

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Month Day Year

GENERATOR — TRANSPORTER — FACILITY

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N·C·D·00·32·00·38·3 — Manifest Document No.: 10040

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD·0·09·86·58·25

C. State Transporter's ID

D. Transporter's Phone: 216-533-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD·0·88·43·88·17

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: ROBERT A. FISHER — Signature: [signature] — Month 05 Day 21 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: John Brooks — Signature: [signature] — Month 05 Day 21 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N.C.D. 00. 32. 00. 38. 3 — Manifest Document No. 96601

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: DART TRUCKING COMPANY, INC.

6. US EPA ID Number: OHD 009 86 58 25

C. State Transporter's ID

D. Transporter's Phone: 216-533-9841

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number: KYD 088 43 88 17

G. State Facility's ID

H. Facility's Phone: 502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
__a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: Robert A. Fisher — Signature: [signature] — Month 05 Day 30 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ben Hubbard 911 — Signature: Ben Hubbard 911 — Month 05 Day 30 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

WH03543

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NCD 003 003 [illegible]
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone ( ) 412-777-2955

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name
ENVECCHEM
DUE TRUCKING COMPANY, INC.

6. US EPA ID Number
NCD 982170292

C. State Transporter's ID
D. Transporter's Phone (717) 362-90[illegible]

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number
KYD 988 479 817

G. State Facility's ID
H. Facility's Phone 502-395-6313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	✓	001	DT	0025	Y	K001
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) NOSO- BILLING ADDRESS: BEAZER EAST, INC.
435 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T08/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDEN 31

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Printed/Typed Name: ROBERT A. FISHER
Signature: [illegible]
Month Day Year: 10 6 12 5 19 6

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Richard Macon
Signature: Richard Macon
Month Day Year: 10 6 12 5 19 6

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

TRANSPORTER

19. Discrepancy Indication Space

FACILITY

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: [illegible]
Signature: [illegible]
Month Day Year: 06 26 96

ORIGINAL - RETURN TO GENERATOR

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N.C.D. 0 0 [illegible]
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BEAZER EAST, INC.
908 CHURCH STREET
MORRISVILLE, NC 27560

4. Generator's Phone (412-227-2955

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
Pete Etc, Inc BG 6/5/96
DART TRUCKING COMPANY, INC.

6. US EPA ID Number
NYD 986969997 BG 6/5/96
O.H.D. 0 0 0 8 6 5 8 2 5

C. State Transporter's ID
800
D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
L W D, INC.
HIGHWAY 1523
CALVERT CITY, KENTUCKY 42029

10. US EPA ID Number
K Y D 0 8 0 4 3 8 8 1 7

G. State Facility's ID

H. Facility's Phone
502-395-8313

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		HAZARDOUS WASTE SOLID, NOS (GUIDE 31) 9 NA3077 III	1	DT	25	Y	K001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a).NX50- BILLING ADDRESS: BEAZER EAST, INC.
436 SEVENTH AVE.
PITTSBURGH, PA 15219

K. Handling Codes for Wastes Listed Above
T06/T07

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: 412-227-2955 OR 412-787-1103
EMERGENCY RESPONSE GUIDE# 31

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Printed/Typed Name: ROBERT A. FISHER
Signature: [signature]
Month 06 Day 05 Year 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jerry Seibert
Signature: [signature]
Month 6 Day 5 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY