DEAD CREEK - SEGMENT A
ANALYTICAL RESULTS 153703

RIFS - JULY 1989

C00016

WESTON
MANAGERS DESIGNERS/CONSULTANTS

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

August 31, 1989

Mr. Chris Bade
Avendt Group, Inc.
432 North Saginaw Street
Flint, MI 48502

Dear Mr. Bade:

Please find enclosed the herbicide portion of the reports for the samples submitted to Weston/Gulf Coast Laboratories for analyses. They were identified with our batch numbers 8907G520, 8907G528, 8907G580, 8907G611, 8907G645, 8907G660, 8907G709, 8907G724 and 8907G753. If you have any questions, please contact Sheryl Johnson or Lynn Gifford at our laboratories.

Sincerely,

WESTON/GULF COAST LABORATORIES

Donald Gipple
Donald Gipple
Project Director

Linda S. Mackley
Linda S. Mackley
Organics Unit Leader

dw

Enclosures

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A10 6-7 15-17 EP TOX
Project # 5160-01-01-0001
Lab ID: 8907G611-005
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A11A 8-13 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G724-002
Sample Date: 07/19/89
Date Received: 07/19/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A11b 4-8 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G709-002
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A11c 2-6.5 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G709-006
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: Alld 8-10 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G709-010
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	0.02	0.001	
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A11d 18.5-23.5 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G709-012
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	0.02	0.001	
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A12A 8-11 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G724-005
Sample Date: 07/19/89
Date Received: 07/19/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A12d 17-20 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G709-015
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A13A 9-14 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G753-002
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A13b 4.5-6 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G528-002
Sample Date: 07/11/89
Date Received: 07/12/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A13C 4-8.5 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G580-002
Sample Date: 07/12/89
Date Received: 07/13/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: August 25, 1989

Re: **A13D 18-23 EPTOX**
Project # 5160-01-01-0000
Lab ID: **8907G724-008**
Sample Date: 07/19/89
Date Received: 07/19/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A14A 4-9 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G753-006
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: August 24, 1989

Re: **A14b 4.0-8.5 EPTOX**
Project # 5160-01-01-0000
Lab ID: **8907G528-006**
Sample Date: 07/11/89
Date Received: 07/12/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A14c 4.0-8.5 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G528-009
Sample Date: 07/11/89
Date Received: 07/12/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A14C 4-9 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G580-008
Sample Date: 07/12/89
Date Received: 07/13/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A15A 9-14 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G753-010
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

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Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A15b 13-16 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G520-003
Sample Date: 07/07/89
Date Received: 07/11/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.002	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A15c 4.5-9 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G520-006
Sample Date: 07/10/89
Date Received: 07/11/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A16A 9-14 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G753-014
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A16b 9-12 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G709-018
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.01	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A16c 2-5 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G709-021
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.01	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A16E 13-16 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G753-021
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: August 24, 1989

Re: **A21b 1-6 EPTOX**
Project # 5160-01-01-0000
Lab ID: **8907G660-002**
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A21c 4-8 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G645-002
Sample Date: 07/14/89
Date Received: 07/15/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON
MANAGERS DESIGNERS/CONSULTANTS

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A21d 14-19 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G520-012
Sample Date: 07/10/89
Date Received: 07/11/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON-GULF COAST LABORATORIES, INC.
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A22b 0-7 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G660-006
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A22c 3-9 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G660-009
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON
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Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A23a 19-20 EPTOX
Project # 5160-01-01-0000
Lab ID: 8907G645-008
Sample Date: 07/14/89
Date Received: 07/15/89
Units: MG/L

Organic Client Data Report

Compound	Result	Detection Limit	Flag
2,4-Dichlorophenoxyacetic Acid EP TOX	BDL	0.001	U
2,4,5-Trichlorophenoxy Propionic Acid EP TOX	BDL	0.001	U

WESTON
MANAGERS DESIGNERS/CONSULTANTS

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

September 1, 1989

Mr. Chris Bade
Avendt Group, Inc.
432 North Saginaw Street
Flint, MI 48502

Dear Mr. Bade:

Please find enclosed the polybiphenyl portion of the reports for the samples submitted to Weston/Gulf Coast Laboratories for analyses. They were identified with our batch numbers 8907G611, 8907G645, 8907G660, 8907G709, 8907G724, 8907G753. If you have any questions, please contact Sheryl Johnson or Lynn Gifford at our laboratories.

Sincerely,

WESTON/GULF COAST LABORATORIES

Donald Gipple
Donald Gipple
Project Director

Jeff A. Kaczinski
Jeff A. Kaczinski
GC/MS Unit Leader

dw

Enclosures

WESTON
MANAGERS DESIGNERS/CONSULTANTS

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

INORGANIC QUALIFIERS

u - Indicates compound was analyzed for but not detected
X - Result is by calculation
d - Result is on a dry weight basis.
E - Severe matrix interference.
M - Duplicate injection precision not met.
N - Spike recovery not within control limit.
S - Indicates value determined by Method of Standard Addition.
A - Result is on an "as is basis" (wet weight)
W - Post analytical spike is out of control limits.
B - Reported value is less than the CRDL but greater than IDL.
* - Duplicate not within control limits.
+ - Correlation coefficient for MSA < 0.995.

ORGANIC QUALIFIERS

U - Indicates that the compound was analyzed for but not detected.

J - Indicates an estimated value for either a TIC or an analyte that meets the identification criteria but the result is less than the specified detection limit.

B - Indicates the compound was found in the blank and the sample.

E - Concentrations exceed calibration range of the instrument.

BS - Indicates matrix analyses were conducted on reagent grade water.

BSD - Indicates blank spike duplicate.

BDL - Below Detection Limit.

MS - Indicates matrix spike.

MSD - Indicates matrix spike duplicate.

D - Indicates that surrogate/matrix spike recoveries were not obtained because the extract had to be diluted for analysis.

DL - Indicates a secondary dilution.

NA - Not applicable.

DF - Dilution factor.

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A10 6-7
Project # 5160-01-01-0001
Lab ID: 8907G611-001
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.9	U
Chlorobiphenyl	BDL	7.9	U
Dichlorobiphenyl	BDL	7.9	U
Trichlorobiphenyl	BDL	7.9	U
Tetrachlorobiphenyl	BDL	7.9	U
Pentachlorobiphenyl	BDL	7.9	U
Hexachlorobiphenyl	BDL	7.9	U
Decachlorobiphenyl	BDL	7.9	U

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WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A10 9-10
Project # 5160-01-01-0001
Lab ID: 8907G611-002
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	10	U
Chlorobiphenyl	BDL	10	U
Dichlorobiphenyl	BDL	10	U
Trichlorobiphenyl	BDL	10	U
Tetrachlorobiphenyl	BDL	10	U
Pentachlorobiphenyl	BDL	10	U
Hexachlorobiphenyl	BDL	10	U
Decachlorobiphenyl	BDL	10	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A10 15-17
Project # 5160-01-01-0001
Lab ID: 8907G611-004
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	44.0	U
Chlorobiphenyl	BDL	44.0	U
Dichlorobiphenyl	BDL	44.0	U
Trichlorobiphenyl	BDL	44.0	U
Tetrachlorobiphenyl	BDL	44.0	U
Pentachlorobiphenyl	BDL	44.0	U
Hexachlorobiphenyl	BDL	44.0	U
Decachlorobiphenyl	BDL	44.0	U

WESTON-GULF COAST LABORATORIES, INC.
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A10 20-22
Project # 5160-01-01-0001
Lab ID: 8907G611-006
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	470	U
Chlorobiphenyl	BDL	470	U
Dichlorobiphenyl	BDL	470	U
Trichlorobiphenyl	BDL	470	U
Tetrachlorobiphenyl	BDL	470	U
Pentachlorobiphenyl	BDL	470	U
Hexachlorobiphenyl	BDL	470	U
Decachlorobiphenyl	BDL	470	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A10 24-29
Project # 5160-01-01-0001
Lab ID: 8907G611-008
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	42.0	U
Chlorobiphenyl	BDL	42.0	U
Dichlorobiphenyl	BDL	42.0	U
Trichlorobiphenyl	BDL	42.0	U
Tetrachlorobiphenyl	BDL	42.0	U
Pentachlorobiphenyl	BDL	42.0	U
Hexachlorobiphenyl	BDL	42.0	U
Decachlorobiphenyl	BDL	42.0	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A10 37-38
Project # 5160-01-01-0001
Lab ID: 89076611-009
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.1	U
Chlorobiphenyl	BDL	8.1	U
Dichlorobiphenyl	BDL	8.1	U
Trichlorobiphenyl	BDL	8.1	U
Tetrachlorobiphenyl	BDL	8.1	U
Pentachlorobiphenyl	BDL	8.1	U
Hexachlorobiphenyl	BDL	8.1	U
Decachlorobiphenyl	BDL	8.1	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A11A 8-13
Project # 0000-00-00-0000
Lab ID: 8907G724-001
Sample Date: 07/19/89
Date Received: 07/19/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.8	U
Chlorobiphenyl	BDL	7.8	U
Dichlorobiphenyl	BDL	7.8	U
Trichlorobiphenyl	BDL	7.8	U
Tetrachlorobiphenyl	BDL	7.8	U
Pentachlorobiphenyl	BDL	7.8	U
Hexachlorobiphenyl	BDL	7.8	U
Decachlorobiphenyl	BDL	7.8	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A11A 13-18
Project # 0000-00-00-0000
Lab ID: 8907G724-003
Sample Date: 07/19/89
Date Received: 07/19/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	9.1	U
Chlorobiphenyl	BDL	9.1	U
Dichlorobiphenyl	BDL	9.1	U
Trichlorobiphenyl	BDL	9.1	U
Tetrachlorobiphenyl	BDL	9.1	U
Pentachlorobiphenyl	BDL	9.1	U
Hexachlorobiphenyl	BDL	9.1	U
Decachlorobiphenyl	BDL	9.1	U

WESTON-GULF COAST LABORATORIES, INC
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815)

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A11b 4-8
Project # 5160-01-01-0001
Lab ID: 8907G709-001
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	9.2	U
Chlorobiphenyl	BDL	9.2	U
Dichlorobiphenyl	BDL	9.2	U
Trichlorobiphenyl	BDL	9.2	U
Tetrachlorobiphenyl	BDL	9.2	U
Pentachlorobiphenyl	BDL	9.2	U
Hexachlorobiphenyl	BDL	9.2	U
Decachlorobiphenyl	BDL	9.2	U

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WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A11b 8.1-10.6
Project # 5160-01-01-0001
Lab ID: 8907G709-003
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	58	U
Chlorobiphenyl	BDL	58	U
Dichlorobiphenyl	BDL	58	U
Trichlorobiphenyl	BDL	58	U
Tetrachlorobiphenyl	BDL	58	U
Pentachlorobiphenyl	BDL	58	U
Hexachlorobiphenyl	BDL	58	U
Decachlorobiphenyl	BDL	58	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A11b 12-17
Project # 5160-01-01-0001
Lab ID: 8907G709-004
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.5	U
Chlorobiphenyl	BDL	8.5	U
Dichlorobiphenyl	BDL	8.5	U
Trichlorobiphenyl	BDL	8.5	U
Tetrachlorobiphenyl	BDL	8.5	U
Pentachlorobiphenyl	BDL	8.5	U
Hexachlorobiphenyl	BDL	8.5	U
Decachlorobiphenyl	BDL	8.5	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: Allc 2-6.5
Project # 5160-01-01-0001
Lab ID: 8907G709-005
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	45	U
Chlorobiphenyl	BDL	45	U
Dichlorobiphenyl	BDL	45	U
Trichlorobiphenyl	BDL	45	U
Tetrachlorobiphenyl	BDL	45	U
Pentachlorobiphenyl	BDL	45	U
Hexachlorobiphenyl	BDL	45	U
Decachlorobiphenyl	BDL	45	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: Allc 6.5-10.5
Project # 5160-01-01-0001
Lab ID: 8907G709-007
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	170	U
Chlorobiphenyl	BDL	170	U
Dichlorobiphenyl	BDL	170	U
Trichlorobiphenyl	BDL	170	U
Tetrachlorobiphenyl	BDL	170	U
Pentachlorobiphenyl	BDL	170	U
Hexachlorobiphenyl	BDL	170	U
Decachlorobiphenyl	BDL	170	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A11c 12.5-16.5
Project # 5160-01-01-0001
Lab ID: 8907G709-008
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.7	U
Chlorobiphenyl	BDL	7.7	U
Dichlorobiphenyl	BDL	7.7	U
Trichlorobiphenyl	BDL	7.7	U
Tetrachlorobiphenyl	BDL	7.7	U
Pentachlorobiphenyl	BDL	7.7	U
Hexachlorobiphenyl	BDL	7.7	U
Decachlorobiphenyl	BDL	7.7	U

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A11d 8-10
Project # 5160-01-01-0001
Lab ID: 8907G709-009
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	1800	U
Chlorobiphenyl	BDL	1800	U
Dichlorobiphenyl	BDL	1800	U
Trichlorobiphenyl	BDL	1800	U
Tetrachlorobiphenyl	BDL	1800	U
Pentachlorobiphenyl	BDL	1800	U
Hexachlorobiphenyl	BDL	1800	U
Decachlorobiphenyl	BDL	1800	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: Alld 18.5-23.5
Project # 5160-01-01-0001
Lab ID: 8907G709-011
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	160	U
Chlorobiphenyl	BDL	160	U
Dichlorobiphenyl	BDL	160	U
Trichlorobiphenyl	BDL	160	U
Tetrachlorobiphenyl	BDL	160	U
Pentachlorobiphenyl	BDL	160	U
Hexachlorobiphenyl	BDL	160	U
Decachlorobiphenyl	BDL	160	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A12A 8-118
Project # 0000-00-00-0000
Lab ID: 8907G724-004
Sample Date: 07/19/89
Date Received: 07/19/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.9	U
Chlorobiphenyl	BDL	7.9	U
Dichlorobiphenyl	BDL	7.9	U
Trichlorobiphenyl	BDL	7.9	U
Tetrachlorobiphenyl	BDL	7.9	U
Pentachlorobiphenyl	BDL	7.9	U
Hexachlorobiphenyl	BDL	7.9	U
Decachlorobiphenyl	BDL	7.9	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A12A 11-20.5
Project # 0000-00-00-0000
Lab ID: 8907G724-006
Sample Date: 07/19/89
Date Received: 07/19/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.1	U
Chlorobiphenyl	BDL	7.1	U
Dichlorobiphenyl	BDL	7.1	U
Trichlorobiphenyl	BDL	7.1	U
Tetrachlorobiphenyl	BDL	7.1	U
Pentachlorobiphenyl	BDL	7.1	U
Hexachlorobiphenyl	BDL	7.1	U
Decachlorobiphenyl	BDL	7.1	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A12A 18-23
Project # 0000-00-00-0000
Lab ID: 8907G724-007
Sample Date: 07/19/89
Date Received: 07/19/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.2	U
Chlorobiphenyl	BDL	8.2	U
Dichlorobiphenyl	BDL	8.2	U
Trichlorobiphenyl	BDL	8.2	U
Tetrachlorobiphenyl	BDL	8.2	U
Pentachlorobiphenyl	BDL	8.2	U
Hexachlorobiphenyl	BDL	8.2	U
Decachlorobiphenyl	BDL	8.2	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A12b 3-7
Project # 5160-01-01-0001
Lab ID: 8907G611-010
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	58.0	U
Chlorobiphenyl	BDL	58.0	U
Dichlorobiphenyl	BDL	58.0	U
Trichlorobiphenyl	BDL	58.0	U
Tetrachlorobiphenyl	BDL	58.0	U
Pentachlorobiphenyl	BDL	58.0	U
Hexachlorobiphenyl	BDL	58.0	U
Decachlorobiphenyl	BDL	58.0	U

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A12b 9-12
Project # 5160-01-01-0001
Lab ID: 8907G611-012
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	45	U
Chlorobiphenyl	BDL	45	U
Dichlorobiphenyl	BDL	45	U
Trichlorobiphenyl	BDL	45	U
Tetrachlorobiphenyl	BDL	45	U
Pentachlorobiphenyl	BDL	45	U
Hexachlorobiphenyl	BDL	45	U
Decachlorobiphenyl	BDL	45	U

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A12b 14-17
Project # 5160-01-01-0001
Lab ID: 8907G611-013
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	430	U
Chlorobiphenyl	BDL	430	U
Dichlorobiphenyl	BDL	430	U
Trichlorobiphenyl	BDL	430	U
Tetrachlorobiphenyl	BDL	430	U
Pentachlorobiphenyl	BDL	430	U
Hexachlorobiphenyl	BDL	430	U
Decachlorobiphenyl	BDL	430	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 22, 1989

Re: A12b 17-19
Project # 5160-01-01-0001
Lab ID: 8907G611-014
Sample Date: 07/13/89
Date Received: 07/14/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	43	U
Chlorobiphenyl	BDL	43	U
Dichlorobiphenyl	BDL	43	U
Trichlorobiphenyl	BDL	43	U
Tetrachlorobiphenyl	BDL	43	U
Pentachlorobiphenyl	BDL	43	U
Hexachlorobiphenyl	BDL	43	U
Decachlorobiphenyl	BDL	43	U

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A21c 4-8
Project # 0000-00-00-0000
Lab ID: 8907G645-001
Sample Date: 07/14/89
Date Received: 07/15/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	28	U
Chlorobiphenyl	BDL	28	U
Dichlorobiphenyl	BDL	28	U
Trichlorobiphenyl	BDL	28	U
Tetrachlorobiphenyl	BDL	28	U
Pentachlorobiphenyl	BDL	28	U
Hexachlorobiphenyl	BDL	28	U
Decachlorobiphenyl	BDL	28	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A21c 8-11
Project # 0000-00-00-0000
Lab ID: 8907G645-003
Sample Date: 07/14/89
Date Received: 07/15/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	9.0	U
Chlorobiphenyl	BDL	9.0	U
Dichlorobiphenyl	BDL	9.0	U
Trichlorobiphenyl	BDL	9.0	U
Tetrachlorobiphenyl	BDL	9.0	U
Pentachlorobiphenyl	BDL	9.0	U
Hexachlorobiphenyl	BDL	9.0	U
Decachlorobiphenyl	BDL	9.0	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A21c 13-14.5
Project # 0000-00-00-0000
Lab ID: 8907G645-004
Sample Date: 07/14/89
Date Received: 07/15/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.6	U
Chlorobiphenyl	BDL	7.6	U
Dichlorobiphenyl	BDL	7.6	U
Trichlorobiphenyl	BDL	7.6	U
Tetrachlorobiphenyl	BDL	7.6	U
Pentachlorobiphenyl	BDL	7.6	U
Hexachlorobiphenyl	BDL	7.6	U
Decachlorobiphenyl	BDL	7.6	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A12d 6-13
Project # 5160-01-01-0001
Lab ID: 8907G709-013
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	1700	U
Chlorobiphenyl	BDL	1700	U
Dichlorobiphenyl	BDL	1700	U
Trichlorobiphenyl	BDL	1700	U
Tetrachlorobiphenyl	BDL	1700	U
Pentachlorobiphenyl	BDL	1700	U
Hexachlorobiphenyl	BDL	1700	U
Decachlorobiphenyl	BDL	1700	U

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WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A12d 17-20
Project # 5160-01-01-0001
Lab ID: 8907G709-014
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.9	U
Chlorobiphenyl	BDL	8.9	U
Dichlorobiphenyl	BDL	8.9	U
Trichlorobiphenyl	BDL	8.9	U
Tetrachlorobiphenyl	BDL	8.9	U
Pentachlorobiphenyl	BDL	8.9	U
Hexachlorobiphenyl	BDL	8.9	U
Decachlorobiphenyl	BDL	8.9	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A12d 20-25
Project # 5160-01-01-0001
Lab ID: 8907G709-016
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.1	U
Chlorobiphenyl	BDL	8.1	U
Dichlorobiphenyl	BDL	8.1	U
Trichlorobiphenyl	BDL	8.1	U
Tetrachlorobiphenyl	BDL	8.1	U
Pentachlorobiphenyl	BDL	8.1	U
Hexachlorobiphenyl	BDL	8.1	U
Decachlorobiphenyl	BDL	8.1	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A13A 9-14
Project # 5160-01-01-0001
Lab ID: 8907G753-001
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	6.7	U
Chlorobiphenyl	BDL	6.7	U
Dichlorobiphenyl	BDL	6.7	U
Trichlorobiphenyl	BDL	6.7	U
Tetrachlorobiphenyl	BDL	6.7	U
Pentachlorobiphenyl	BDL	6.7	U
Hexachlorobiphenyl	BDL	6.7	U
Decachlorobiphenyl	BDL	6.7	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A13A 14-19
Project # 5160-01-01-0001
Lab ID: 8907G753-003
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.9	U
Chlorobiphenyl	BDL	7.9	U
Dichlorobiphenyl	BDL	7.9	U
Trichlorobiphenyl	BDL	7.9	U
Tetrachlorobiphenyl	BDL	7.9	U
Pentachlorobiphenyl	BDL	7.9	U
Hexachlorobiphenyl	BDL	7.9	U
Decachlorobiphenyl	BDL	7.9	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A13A 19-20.5
Project # 5160-01-01-0001
Lab ID: 8907G753-004
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.0	U
Chlorobiphenyl	BDL	8.0	U
Dichlorobiphenyl	BDL	8.0	U
Trichlorobiphenyl	BDL	8.0	U
Tetrachlorobiphenyl	BDL	8.0	U
Pentachlorobiphenyl	BDL	8.0	U
Hexachlorobiphenyl	BDL	8.0	U
Decachlorobiphenyl	BDL	8.0	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A14A 4-9
Project # 5160-01-01-0001
Lab ID: 8907G753-005
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.6	U
Chlorobiphenyl	BDL	8.6	U
Dichlorobiphenyl	BDL	8.6	U
Trichlorobiphenyl	BDL	8.6	U
Tetrachlorobiphenyl	BDL	8.6	U
Pentachlorobiphenyl	BDL	8.6	U
Hexachlorobiphenyl	BDL	8.6	U
Decachlorobiphenyl	BDL	8.6	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A14A 13.5-23.5
Project # 5160-01-01-0001
Lab ID: 8907G753-007
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	9.1	U
Chlorobiphenyl	BDL	9.1	U
Dichlorobiphenyl	BDL	9.1	U
Trichlorobiphenyl	BDL	9.1	U
Tetrachlorobiphenyl	BDL	9.1	U
Pentachlorobiphenyl	BDL	9.1	U
Hexachlorobiphenyl	BDL	9.1	U
Decachlorobiphenyl	BDL	9.1	U

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A14A 23.5-28.5
Project # 5160-01-01-0001
Lab ID: 8907G753-008
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.3	U
Chlorobiphenyl	BDL	8.3	U
Dichlorobiphenyl	BDL	8.3	U
Trichlorobiphenyl	BDL	8.3	U
Tetrachlorobiphenyl	BDL	8.3	U
Pentachlorobiphenyl	BDL	8.3	U
Hexachlorobiphenyl	BDL	8.3	U
Decachlorobiphenyl	BDL	8.3	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A15A 9-14
Project # 5160-01-01-0001
Lab ID: 8907G753-009
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.8	U
Chlorobiphenyl	BDL	8.8	U
Dichlorobiphenyl	BDL	8.8	U
Trichlorobiphenyl	BDL	8.8	U
Tetrachlorobiphenyl	BDL	8.8	U
Pentachlorobiphenyl	BDL	8.8	U
Hexachlorobiphenyl	BDL	8.8	U
Decachlorobiphenyl	BDL	8.8	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A15A 14-19
Project # 5160-01-01-0001
Lab ID: 8907G753-011
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	9.1	U
Chlorobiphenyl	BDL	9.1	U
Dichlorobiphenyl	BDL	9.1	U
Trichlorobiphenyl	BDL	9.1	U
Tetrachlorobiphenyl	BDL	9.1	U
Pentachlorobiphenyl	BDL	9.1	U
Hexachlorobiphenyl	BDL	9.1	U
Decachlorobiphenyl	BDL	9.1	U

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WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A15A 19-24
Project # 5160-01-01-0001
Lab ID: 8907G753-012
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.5	U
Chlorobiphenyl	BDL	8.5	U
Dichlorobiphenyl	BDL	8.5	U
Trichlorobiphenyl	BDL	8.5	U
Tetrachlorobiphenyl	BDL	8.5	U
Pentachlorobiphenyl	BDL	8.5	U
Hexachlorobiphenyl	BDL	8.5	U
Decachlorobiphenyl	BDL	8.5	U

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A16A 9-14
Project # 5160-01-01-0001
Lab ID: 8907G753-013
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.9	U
Chlorobiphenyl	BDL	8.9	U
Dichlorobiphenyl	BDL	8.9	U
Trichlorobiphenyl	BDL	8.9	U
Tetrachlorobiphenyl	BDL	8.9	U
Pentachlorobiphenyl	BDL	8.9	U
Hexachlorobiphenyl	BDL	8.9	U
Decachlorobiphenyl	BDL	8.9	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A16A 14-19
Project # 5160-01-01-0001
Lab ID: 8907G753-015
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.7	U
Chlorobiphenyl	BDL	8.7	U
Dichlorobiphenyl	BDL	8.7	U
Trichlorobiphenyl	BDL	8.7	U
Tetrachlorobiphenyl	BDL	8.7	U
Pentachlorobiphenyl	BDL	8.7	U
Hexachlorobiphenyl	BDL	8.7	U
Decachlorobiphenyl	BDL	8.7	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A16A 24-29
Project # 5160-01-01-0001
Lab ID: 8907G753-016
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.2	U
Chlorobiphenyl	BDL	8.2	U
Dichlorobiphenyl	BDL	8.2	U
Trichlorobiphenyl	BDL	8.2	U
Tetrachlorobiphenyl	BDL	8.2	U
Pentachlorobiphenyl	BDL	8.2	U
Hexachlorobiphenyl	BDL	8.2	U
Decachlorobiphenyl	BDL	8.2	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A16b 9-12
Project # 5160-01-01-0001
Lab ID: 8907G709-017
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	550	U
Chlorobiphenyl	BDL	550	U
Dichlorobiphenyl	BDL	550	U
Trichlorobiphenyl	BDL	550	U
Tetrachlorobiphenyl	BDL	550	U
Pentachlorobiphenyl	BDL	550	U
Hexachlorobiphenyl	BDL	550	U
Decachlorobiphenyl	BDL	550	U

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WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A16b 14-19
Project # 5160-01-01-0001
Lab ID: 8907G709-019
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.7	U
Chlorobiphenyl	BDL	8.7	U
Dichlorobiphenyl	BDL	8.7	U
Trichlorobiphenyl	BDL	8.7	U
Tetrachlorobiphenyl	BDL	8.7	U
Pentachlorobiphenyl	BDL	8.7	U
Hexachlorobiphenyl	BDL	8.7	U
Decachlorobiphenyl	BDL	8.7	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A16c 2-5
Project # 5160-01-01-0001
Lab ID: 8907G709-020
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	640	U
Chlorobiphenyl	BDL	640	U
Dichlorobiphenyl	BDL	640	U
Trichlorobiphenyl	BDL	640	U
Tetrachlorobiphenyl	BDL	640	U
Pentachlorobiphenyl	BDL	640	U
Hexachlorobiphenyl	BDL	640	U
Decachlorobiphenyl	BDL	640	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A16c 7-12
Project # 5160-01-01-0001
Lab ID: 8907G709-022
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	9.4	U
Chlorobiphenyl	BDL	9.4	U
Dichlorobiphenyl	BDL	9.4	U
Trichlorobiphenyl	BDL	9.4	U
Tetrachlorobiphenyl	BDL	9.4	U
Pentachlorobiphenyl	BDL	9.4	U
Hexachlorobiphenyl	BDL	9.4	U
Decachlorobiphenyl	BDL	9.4	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 30, 1989

Re: A16c 12-17
Project # 5160-01-01-0001
Lab ID: 8907G709-023
Sample Date: 07/18/89
Date Received: 07/18/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.3	U
Chlorobiphenyl	BDL	8.3	U
Dichlorobiphenyl	BDL	8.3	U
Trichlorobiphenyl	BDL	8.3	U
Tetrachlorobiphenyl	BDL	8.3	U
Pentachlorobiphenyl	BDL	8.3	U
Hexachlorobiphenyl	BDL	8.3	U
Decachlorobiphenyl	BDL	8.3	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A16D 13-18
Project # 5160-01-01-0001
Lab ID: 8907G753-017
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	9.3	U
Chlorobiphenyl	BDL	9.3	U
Dichlorobiphenyl	BDL	9.3	U
Trichlorobiphenyl	BDL	9.3	U
Tetrachlorobiphenyl	BDL	9.3	U
Pentachlorobiphenyl	BDL	9.3	U
Hexachlorobiphenyl	BDL	9.3	U
Decachlorobiphenyl	BDL	9.3	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A16D 18-23
Project # 5160-01-01-0001
Lab ID: 8907G753-018
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.9	U
Chlorobiphenyl	BDL	7.9	U
Dichlorobiphenyl	BDL	7.9	U
Trichlorobiphenyl	BDL	7.9	U
Tetrachlorobiphenyl	BDL	7.9	U
Pentachlorobiphenyl	BDL	7.9	U
Hexachlorobiphenyl	BDL	7.9	U
Decachlorobiphenyl	BDL	7.9	U

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WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A16D 23-31
Project # 5160-01-01-0001
Lab ID: 8907G753-019
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.7	U
Chlorobiphenyl	BDL	8.7	U
Dichlorobiphenyl	BDL	8.7	U
Trichlorobiphenyl	BDL	8.7	U
Tetrachlorobiphenyl	BDL	8.7	U
Pentachlorobiphenyl	BDL	8.7	U
Hexachlorobiphenyl	BDL	8.7	U
Decachlorobiphenyl	BDL	8.7	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A16E 13-18
Project # 5160-01-01-0001
Lab ID: 8907G753-020
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.4	U
Chlorobiphenyl	BDL	8.4	U
Dichlorobiphenyl	BDL	8.4	U
Trichlorobiphenyl	BDL	8.4	U
Tetrachlorobiphenyl	BDL	8.4	U
Pentachlorobiphenyl	BDL	8.4	U
Hexachlorobiphenyl	BDL	8.4	U
Decachlorobiphenyl	BDL	8.4	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A16E 18-23
Project # 5160-01-01-0001
Lab ID: 8907G753-022
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.3	U
Chlorobiphenyl	BDL	8.3	U
Dichlorobiphenyl	BDL	8.3	U
Trichlorobiphenyl	BDL	8.3	U
Tetrachlorobiphenyl	BDL	8.3	U
Pentachlorobiphenyl	BDL	8.3	U
Hexachlorobiphenyl	BDL	8.3	U
Decachlorobiphenyl	BDL	8.3	U

WESTON
MANAGERS DESIGNERS/CONSULTANTS

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: September 1, 1989

Re: A16E 25.5-28
Project # 5160-01-01-0001
Lab ID: 8907G753-023
Sample Date: 07/20/89
Date Received: 07/20/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.8	U
Chlorobiphenyl	BDL	7.8	U
Dichlorobiphenyl	BDL	7.8	U
Trichlorobiphenyl	BDL	7.8	U
Tetrachlorobiphenyl	BDL	7.8	U
Pentachlorobiphenyl	BDL	7.8	U
Hexachlorobiphenyl	BDL	7.8	U
Decachlorobiphenyl	BDL	7.8	U

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A21b 1-6
Project # 5160-01-01-0001
Lab ID: 8907G660-001
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	160	U
Chlorobiphenyl	BDL	160	U
Dichlorobiphenyl	BDL	160	U
Trichlorobiphenyl	BDL	160	U
Tetrachlorobiphenyl	BDL	160	U
Pentachlorobiphenyl	BDL	160	U
Hexachlorobiphenyl	BDL	160	U
Decachlorobiphenyl	BDL	160	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A21b 6-10
Project # 5160-01-01-0001
Lab ID: 8907G660-003
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	12	U
Chlorobiphenyl	BDL	12	U
Dichlorobiphenyl	BDL	12	U
Trichlorobiphenyl	BDL	12	U
Tetrachlorobiphenyl	BDL	12	U
Pentachlorobiphenyl	BDL	12	U
Hexachlorobiphenyl	BDL	12	U
Decachlorobiphenyl	BDL	12	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A21b 10-13
Project # 5160-01-01-0001
Lab ID: 8907G660-004
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.2	U
Chlorobiphenyl	BDL	8.2	U
Dichlorobiphenyl	BDL	8.2	U
Trichlorobiphenyl	BDL	8.2	U
Tetrachlorobiphenyl	BDL	8.2	U
Pentachlorobiphenyl	BDL	8.2	U
Hexachlorobiphenyl	BDL	8.2	U
Decachlorobiphenyl	BDL	8.2	U

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Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A22b 0-7
Project # 5160-01-01-0001
Lab ID: 8907G660-005
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	45	U
Chlorobiphenyl	BDL	45	U
Dichlorobiphenyl	BDL	45	U
Trichlorobiphenyl	BDL	45	U
Tetrachlorobiphenyl	BDL	45	U
Pentachlorobiphenyl	BDL	45	U
Hexachlorobiphenyl	BDL	45	U
Decachlorobiphenyl	BDL	45	U

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A22b 7-13
Project # 5160-01-01-0001
Lab ID: 8907G660-007
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.5	U
Chlorobiphenyl	BDL	8.5	U
Dichlorobiphenyl	BDL	8.5	U
Trichlorobiphenyl	BDL	8.5	U
Tetrachlorobiphenyl	BDL	8.5	U
Pentachlorobiphenyl	BDL	8.5	U
Hexachlorobiphenyl	BDL	8.5	U
Decachlorobiphenyl	BDL	8.5	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A22c 3-9
Project # 5160-01-01-0001
Lab ID: 8907G660-008
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	46	U
Chlorobiphenyl	BDL	46	U
Dichlorobiphenyl	BDL	46	U
Trichlorobiphenyl	BDL	46	U
Tetrachlorobiphenyl	BDL	46	U
Pentachlorobiphenyl	BDL	46	U
Hexachlorobiphenyl	BDL	46	U
Decachlorobiphenyl	BDL	46	U

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Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 25, 1989

Re: A22c 10-15
Project # 5160-01-01-0001
Lab ID: 8907G660-010
Sample Date: 07/17/89
Date Received: 07/17/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.1	U
Chlorobiphenyl	BDL	8.1	U
Dichlorobiphenyl	BDL	8.1	U
Trichlorobiphenyl	BDL	8.1	U
Tetrachlorobiphenyl	BDL	8.1	U
Pentachlorobiphenyl	BDL	8.1	U
Hexachlorobiphenyl	BDL	8.1	U
Decachlorobiphenyl	BDL	8.1	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A23a 12-13
Project # 0000-00-00-0000
Lab ID: 8907G645-005
Sample Date: 07/14/89
Date Received: 07/15/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.5	U
Chlorobiphenyl	BDL	7.5	U
Dichlorobiphenyl	BDL	7.5	U
Trichlorobiphenyl	BDL	7.5	U
Tetrachlorobiphenyl	BDL	7.5	U
Pentachlorobiphenyl	BDL	7.5	U
Hexachlorobiphenyl	BDL	7.5	U
Decachlorobiphenyl	BDL	7.5	U

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A23a 13-19
Project # 0000-00-00-0000
Lab ID: 8907G645-006
Sample Date: 07/14/89
Date Received: 07/15/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	8.9	U
Chlorobiphenyl	BDL	8.9	U
Dichlorobiphenyl	BDL	8.9	U
Trichlorobiphenyl	BDL	8.9	U
Tetrachlorobiphenyl	BDL	8.9	U
Pentachlorobiphenyl	BDL	8.9	U
Hexachlorobiphenyl	BDL	8.9	U
Decachlorobiphenyl	BDL	8.9	U

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A23a 19-20
Project # 0000-00-00-0000
Lab ID: 8907G645-007
Sample Date: 07/14/89
Date Received: 07/15/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	99	U
Chlorobiphenyl	BDL	99	U
Dichlorobiphenyl	BDL	99	U
Trichlorobiphenyl	BDL	99	U
Tetrachlorobiphenyl	BDL	99	U
Pentachlorobiphenyl	BDL	99	U
Hexachlorobiphenyl	BDL	99	U
Decachlorobiphenyl	BDL	99	U

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Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd FLoor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: August 24, 1989

Re: A23a 21-23
Project # 0000-00-00-0000
Lab ID: 8907G645-009
Sample Date: 07/14/89
Date Received: 07/15/89
Units: MG/KG

Organic Client Data Report

Compound	Result	Detection Limit	Flag
Biphenyl	BDL	7.8	U
Chlorobiphenyl	BDL	7.8	U
Dichlorobiphenyl	BDL	7.8	U
Trichlorobiphenyl	BDL	7.8	U
Tetrachlorobiphenyl	BDL	7.8	U
Pentachlorobiphenyl	BDL	7.8	U
Hexachlorobiphenyl	BDL	7.8	U
Decachlorobiphenyl	BDL	7.8	U

N.

VOLATILES DETERMINATION OF CAHOKIA SANDS & CONTAMINATED SEDIMENT

Dish #	SAMPLE	I.D. #	DATE	Station	C DISH	D WET DISH+SAMPLE	(D-C) WET WEIGHT	F DRY DISH+SAMPLE	(F-C) DRY WEIGHT	% Water	G VOLATILE DISH+SAMPLE	(G-F) VOLATILE WEIGHT	1-[(G-F)/(F-C)] PERCENT VOLATILE
	Sands		7/23		18.53	34.4	15.87	32.13	13.6	14.30%	30.45	11.92	12.35%
	Sediment		7/23		19.07	35.85	16.78	32.21	13.14	21.69%	23.65	4.58	65.14%
	Sands	56539	7/26	13+65	18.22	31.37	13.15	27.82	9.6	27.00%	27.57	9.35	2.60%
	Sediment	59540	7/27	14+00	17.41	32.03	14.62	25.12	7.71	47.26%	24.33	6.92	10.25%
	Sands	56541	7/27	14+00	18.32	33.4	15.08	29.59	11.27	25.27%	29.36	11.04	2.04%
	Sediment	59542	7/31	12+50	17.58	34.15	16.57	26.75	9.17	44.66%	22.74	5.16	43.73%
	Sands	56543	7/31	12+50	17.22	31.17	13.95	28.99	11.77	15.63%	27.6	10.38	11.81%
1	Sediment-rerun	59542	7/31	12+50	18.36	32.58	0	23.68	0	ERR	22.77	0	ERR
NO	Sands-rerun	56543	7/31	12+50	17.38	31.47	0	28.86	0	ERR	28.04	0	ERR
3	Sediment	59544	7/31	12+00	16.87	32.13	0	24.32	0	ERR	23.36	0	ERR
4	Sands	56545	7/31	12+00	17.40	32.30	0	28.33	0	ERR	28.13	0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR
							0		0	ERR		0	ERR

C116-15

R. Westin:

If at all possible can we have the samples at stations 1450, 1200, 750, 300 & 250 analyzed for EP Cd & Pb. Between 8-8-90 and 9-25-90 the EP TEST will determine if the sediment is RCRA.

Joe Graner
Cerro
7-27-90

C116-16

CERRO COPPER SEDIMENT SAMPLING - JULY 12-13, 1990

STATION	FEET FROM TRACK CL	SAMPLE NUMBER	PCBs ppm	FLASH POINT deg F	Arsenic	Barium	Cadmium	Chromium	TCLP METALS Lead
			50	140	5	100	1	5	5
17+00	97	CSA2-SD-0025-01		>158	0.023*	2.390	0.054	0.007	0.164
16+50	108	CSA2-SD-0075-01		>158	0.023*	1.570	0.052	0.006	0.273
16+00	93	CSA2-SD-0125-01		>158	0.023*	4.180	0.564	0.005*	2.390
15+50	98	CSA2-SD-0175-01		125*	0.389	2.420	0.417	0.192	3.560
15+50	98	CSA2-SD-0175-01		150*	0.073	4.000	0.041	0.005*	0.814
15+50	98	CSA2-SD-0175-01		>158	0.420	2.130	0.209	0.127	2.670
15+00	98	CSA2-SD-0225-01		>158	0.023*	2.800	1.480 +	0.005*	1.620
14+50	95	CSA2-SD-0275-01		>158	0.171	1.170	2.970 +	0.074	48.700 +
14+00	88	CSA2-SD-0325-01		>158	0.023*	1.890	1.510 +	0.005*	10.600 +
13+50	89	CSA1-SD-0025-01		>158	0.023*	0.398	0.112	0.005*	0.149
12+50	76	CSA1-SD-0075-01		140*	0.042	2.640	2.170 +	0.124	45.000 +
12+00	75	CSA1-SD-0125-01		>158	0.296	0.756	5.740 +	0.087	77.900 +
11+50	66	CSA1-SD-0175-01		>158	0.219	0.989	2.460 +	0.070	34.500 +
11+00	69	CSA1-SD-0225-01		>158	0.056	0.793	4.550 +	0.028	8.660 +
10+50	77	CSA1-SD-0275-01		>158	0.034	0.784	1.520 +	0.023	8.350 +
10+00	72	CSA1-SD-0325-01		92 +	0.047	1.390	2.760 +	0.005*	16.800 +
9+50	80	CSA1-SD-0375-01		>158	0.057	1.410	0.981	0.011	4.850
9+00	82	CSA1-SD-0425-01		>158	0.023*	1.860	1.690 +	0.005*	9.010 +
8+50	72	CSA1-SD-0475-01			0.078	2.230	0.479	0.006	1.450
8+00	73	CSA1-SD-0525-01			0.023*	2.460	1.810 +	0.005*	10.400 +
8+00	73	CSA1-SD-0525-01			0.023*	3.990	1.520 +	0.053	26.700 +
8+00	73	CSA1-SD-0525-01			0.023*	2.800	2.010 +	0.005*	9.870 +
7+50	75	CSA1-SD-0575-01			0.023*	2.800	2.940 +	0.005*	24.800 +
7+00	85	CSA1-SD-0625-01			0.023*	3.280	1.130 +	1.110	5.110 +
6+50	90	CSA1-SD-0675-01			0.023*	2.330	2.200 +	0.005*	5.730 +
6+00	98	CSA1-SD-0725-01			0.023*	1.920	0.477	0.005*	0.997
5+50	102	CSA1-SD-0725-01			0.023*	2.570	0.832	0.005*	1.650
5+00	108	CSA1-SD-0825-01			0.023*	3.180	2.020 +	0.259	23.700 +
4+50	113	CSA1-SD-0875-01			0.023*	1.480	1.880 +	0.611	13.900 +
4+00	112	CSA1-SD-0925-01			0.023*	1.720	0.999	0.531	6.700 +
3+50	120	CSA1-SD-0975-01			0.023*	2.440	0.171	0.134	4.760
3+00	124	CSA1-SD-1025-01			0.023*	1.170	1.150 +	0.550	28.300 +
3+00	124	CSA1-SD-1025-01			0.023*	1.090	1.370 +	0.562	28.100 +
3+00	124	CSA1-SD-1025-01			0.023*	1.080	1.430 +	0.483	40.200 +
2+50	129	CSA1-SD-1075-01			0.025	1.040	1.100 +	0.049	80.500 +
2+00	121	CSA1-SD-1125-01			0.023*	1.090	0.860	0.429	17.000 +

Notes:

* Not detected at detection limit shown

\+ Hazardous D waste

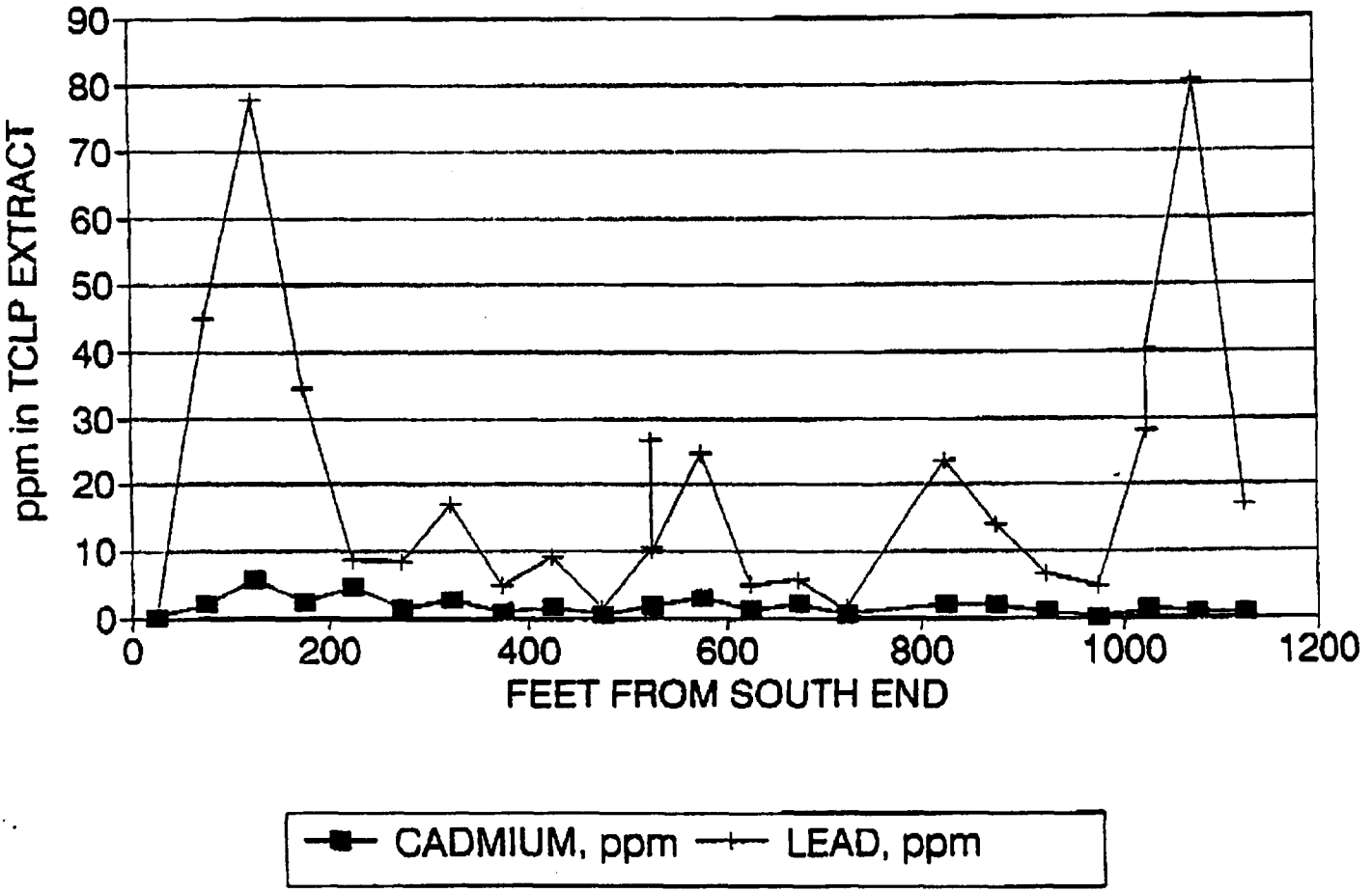
C116-17

CERRO COPPER SEDIMENT SAMPLING - JULY

STATION	FEET FROM TRACK CL	SAMPLE NUMBER	(milligrams/liter) Mercury	Selenium	Silver
			0.2	1	5
17+00	97	CSA2-SD-0025-01	0.0002*	0.003*	0.002*
16+50	108	CSA2-SD-0075-01	0.0002*	0.003*	0.002*
16+00	93	CSA2-SD-0125-01	0.0002*	0.015*	0.002*
15+50	98	CSA2-SD-0175-01	0.0002*	0.030*	0.002*
15+50	98	CSA2-SD-0175-01	0.0002*	0.030*	0.002*
15+50	98	CSA2-SD-0175-01	0.0002*	0.030*	0.002*
15+00	98	CSA2-SD-0225-01	0.0002*	0.015*	0.002*
14+50	95	CSA2-SD-0275-01	0.0002*	0.030*	0.002*
14+00	88	CSA2-SD-0325-01	0.0002*	0.030*	0.002*
13+50	89	CSA1-SD-0025-01	0.0002*	0.015*	0.002*
12+50	76	CSA1-SD-0075-01	0.0002*	0.030*	0.002*
12+00	75	CSA1-SD-0125-01	0.0002*	0.030*	0.002*
11+50	66	CSA1-SD-0175-01	0.0002*	0.030*	0.002*
11+00	69	CSA1-SD-0225-01	0.0002*	0.030*	0.002*
10+50	77	CSA1-SD-0275-01	0.0002*	0.030*	0.002*
10+00	72	CSA1-SD-0325-01	0.0002*	0.030*	0.002*
9+50	80	CSA1-SD-0375-01	0.0002*	0.030*	0.002*
9+00	82	CSA1-SD-0425-01	0.0002*	0.003*	0.002*
8+50	72	CSA1-SD-0475-01	0.0002*	0.030*	0.002*
8+00	73	CSA1-SD-0525-01	0.0002*	0.003*	0.002*
8+00	73	CSA1-SD-0525-01	0.0002*	0.006*	0.002*
8+00	73	CSA1-SD-0525-01	0.0002*	0.003*	0.002*
7+50	75	CSA1-SD-0575-01	0.0002*	0.003*	0.002*
7+00	85	CSA1-SD-0625-01	0.0002*	0.003*	0.002*
6+50	90	CSA1-SD-0675-01	0.0002*	0.015*	0.002*
6+00	98	CSA1-SD-0725-01	0.0002*	0.006*	0.002*
5+50	102	CSA1-SD-0725-01	0.0002*	0.030*	0.002*
5+00	108	CSA1-SD-0825-01	0.0002*	0.030*	0.002*
4+50	113	CSA1-SD-0875-01	0.0002*	0.015*	0.002*
4+00	112	CSA1-SD-0925-01	0.0002*	0.030*	0.002*
3+50	120	CSA1-SD-0975-01	0.0002*	0.015*	0.002*
3+00	124	CSA1-SD-1025-01	0.0002*	0.030*	0.002*
3+00	124	CSA1-SD-1025-01	0.00024	0.030*	0.002*
3+00	124	CSA1-SD-1025-01	0.0002*	0.030*	0.002*
2+50	129	CSA1-SD-1075-01	0.0002*	0.030*	0.002*
2+00	121	CSA1-SD-1125-01	0.0002*	0.015*	0.002*

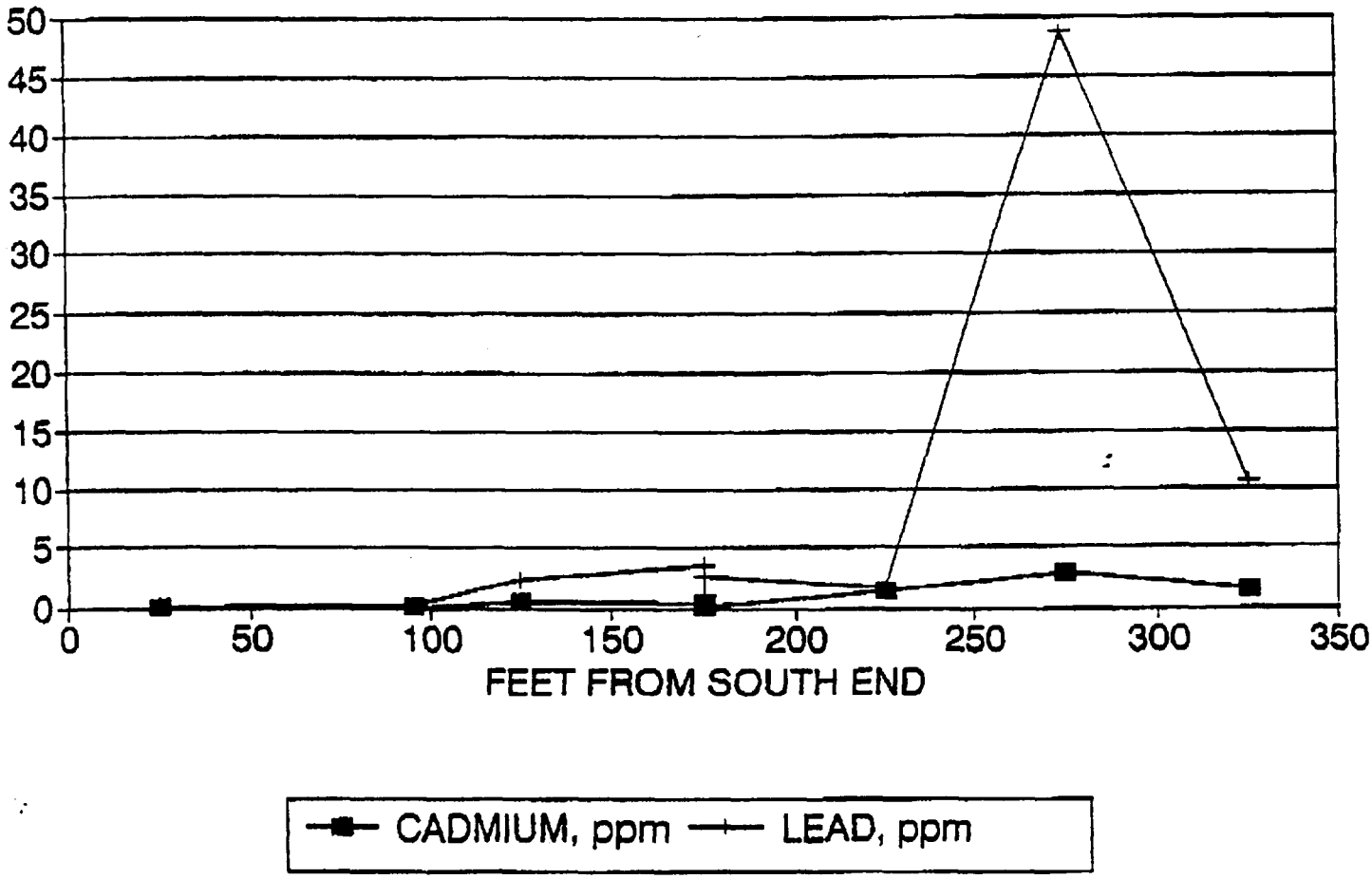
CERRO COPPER CSA-1

TCLP METALS



C116-19

CERRO COPPER CSA-2
TCLP METALS



C116-20

FACSIMILE COVER SHEET

Perland Environmental Technologies, Inc.
8 New England Executive Park
Burlington, Massachusetts 01803
Tel: (617) 270-9888
Fax: (617) 270-6853

Perland

NAME: J. M. Grana

COMPANY: Cerro Copper Products

FAX NO: 618- 332-0108

TELEPHONE NO: 337-~~6000~~ 7273

FROM: B. F. Miller

SENT BY: R. Case

CONFIRMED BY:

DATE: 7-24-90

NUMBER OF PAGES BEING TRANSMITTED: 5

COMMENTS:

C116-21

N.

CHEMICAL WASTE MANAGEMENT, INC.
ENRAC DIVISION

Project # 90-08-265

___ CHANGE ORDER X EXTRA WORK ORDER

CHANGE/EXTRA WORK ORDER NUMBER CC-003

Project: Cerro Copper
Contract: Removal, Loading and Backfill
Contract No. 90-08-265
Plan Reference No. _____
PO # 922268

Date: 11-20-90
Contractor: CWM, Inc
Contract Date 9-18-90
Initiated By: S. Dunaway

By _____
Client (or designee)

Dated _____ _____, 19____

Nature of the Changes or Extra Work: Prepare, load, transport, and dispose of stockpiled concrete at both the south and north ends of the site.

Payment Arrangement: X Unit Price ___ Lump Sum
___ Cost plus ___ Other
(per contract)
___ Decrease in Contract Price, $_____
(Described and detail below)

16 yd³
16.50/yd³

$2200.00 per day, labor and Equipment
$60.00 per load, transportation $264.00 per load, disposal

Effect on Construction Schedule: Will take approximately three (3) days to complete. Approximately six (6) loads will be removed.

The above changes or extra work is accepted.

Copy 1 Client
Copy 2 ENRAC Director
Copy 3 Project Management
Copy 4 ENRAC Region Contract Administrator
Copy 5 ENRAC Director, Operations

Chemical Waste Mgmt/ENRAC Contractor

By _____
Date _____

C123-1

CERRO COPPER PRODUCTS CO.
P.O. Box 66800
St. Louis, MO 63166-6800
618/337-6000

September 24, 1990

BY FAX AND FEDERAL EXPRESS

Mr. Bruce F. Miller
Project Manager
Perland Environmental Technologies
8 New England Executive Park
Burlington, MA 01803

RE: QAPP Change Request

Dear Bruce:

During the past week both Chemical Waste Management and the Permit Section of the Illinois EPA inquired on how we intended to classify waste under the new hazardous waste requirement on September 25, 1990.

In order to properly classify the waste after the above date, the characterization analysis has to be expanded to cover five additional TCLP-Organic compounds. The five compounds are Benzene, 1,4-Dichlorobenzene, Hexachlorobenzene, Tetrachloroethylene, and Trichloroethylene. These chemicals were chosen as "chemicals of concern" because their maximum concentrations in the creek were found to be greater than the TCLP limit, thus having the potential to exceed the limits.

I reviewed Tables 8 & 9 and Section 4.3.2 from the RI/FS to determine the concentrations of the TCLP-Organics. I have attached these items. Except for the chemicals listed above all compounds were either not detected in the sediment or were detected, but the concentrations were far below the TCLP limit. I have attached a summary table of this review.

Because of this change, the QAPP will require modification. I have already instructed Kevin McGowan to plan on the additional analysis. I have also enclosed a revised decision tree for classifying the sediment for shipment.

Also since the sediment in the south pond has already been classified as a RCRA material, the manifest will carry the "D" codes for the two TCLP-Organics that were found in the south pond, D027 and D032. This is because there is no time for a retest with the sediment moving out on September 24, 1990 and the need to properly manifest the material for the potential organic compounds. From a practical standpoint the additional codes do not change how or where the material will be disposed since it has already

C123-2

been classified as a RCRA hazardous waste not requiring treatment because it is a newly identified waste.

If you have any questions, please do not hesitate to call.

Very truly yours,

CERRO COPPER PRODUCTS CO.

J M Grana

Joseph M. Grana
Manager of Environmental
and Energy Affairs

JMG/ge

Attachments

cc: P. Tandler
R. Avendt
M. L. Rodburg, Esq.
K. McGowan (Perland)
J. Hlavacek (CWM)
P. Takacs (IEPA)
File

TCLP - ORGANICS OF CONCERN

WASTE CODE	PARAMETER	TCLP LIMITS	MAX. CONC. ALL SEDIMENT	
D018	BENZENE	0.50	8.8	V
D027	1,4-DICHLOROBENZENE	7.50	390	SV
D032	HEXACHLOROBENZENE	0.13	4.3	SV
D039	TETRACHLOROETHYLENE	0.70	11	V
D040	TRICHLOROETHYLENE	0.50	100	V

TCLP - ORGANICS DETECTED BUT MAXIMUM CONC. < TCLP LIMIT

WASTE CODE	PARAMETER	TCLP LIMITS	MAX. CONC. ALL SEDIMENT	
D021	CHLOROBENZENE	100	31	V
D035	METHYL ETHYL KETONE	200	1.6	V
D037	PENTACHLOROPHENOL	100	0.08	SV

TCLP - PESTICIDES NOT DETECTED

WASTE CODE	PARAMETER	TCLP LIMITS	MAX. CONC. ALL SEDIMENT	
D012	ENDRIN	0.02	ND	P
D013	LINDENE	0.4	ND	P
D014	METHOXYCHLOR	10	ND	P
D015	TOXAPHENE	0.5	ND	P
D016	2,4-D	10	ND	P
D017	2,3,5-TP	1	ND	P
D020	CHLORDANE	0.03	ND	P
D031	HEPTACHOR*	0.008	ND	P

TCLP - ORGANICS NOT DETECTED

WASTE CODE	PARAMETER	TCLP LIMITS	MAX. CONC. ALL SEDIMENT	
D019	CARBON TETRACHLORIDE	0.50	ND	V
D022	CHLOROFORM	6.00	ND	V
D023	O-CRESOL	200.00	ND	SV
D024	M-CRESOL	200.00	ND	SV
D025	P-CRESOL	200.00	ND	SV
D026	CRESOL	200	ND	SV
D028	1,2-DICHLOROETHANE	0.50	ND	V
D029	1,1-DICHLOROETHLENE	0.70	ND	SV
D030	2,4-DINITROTOLUENE	0.13	ND	SV
D033	HEXACHLOROBUTADIENE	0.50	ND	SV
D034	HEXACHLOROETHANE	3.00	ND	SV
D036	NITROBENZENE	2.00	ND	SV
D038	PYRIDINE	5.00	ND	SV
D041	2,4,5-TRICHLOROPHENOL	400.00	ND	SV
D042	2,4,6-TRICHLOROPHENOL	2.00	ND	SV
D043	VINYL CHLORIDE	0.20	ND	V

V=VOLATILE SV=SEMI-VOLATILE P=PESTICIDE

Figure 7
Transverse / Zone Diagram with Boring Location

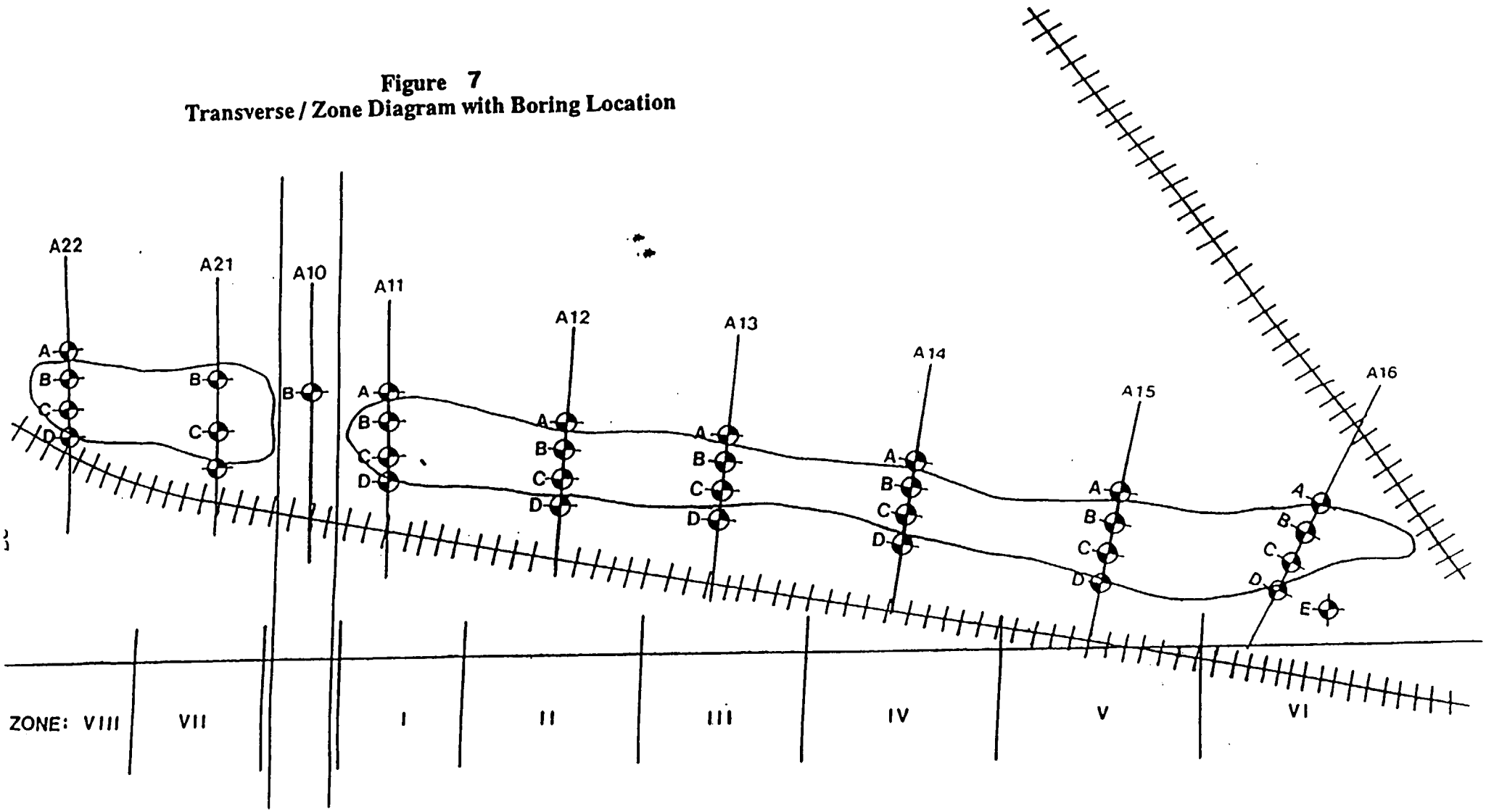


Table 8

CS - A

Volatile Organic Analysis

Sediment in Creek

	SAMPLE I.D. :	~~A10~~ Road	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B
	DEPTH (ft) :	~~15-17~~	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7
	PARAMETERS													
	Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromomethane	ND	ND	ND	ND	ND	580 J	ND	ND	ND	ND	ND	ND	ND
D043	Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Methylene Chloride	1600 B	1500 B	1700 B	25000 B	5400 B	4400 B	2500 B	2300 B	3800 B	20000 B	30000 B	5800 B	3100 B
	Acetone	ND	1000 JB	690 JB	22600 JB	4500 JB	2400 JB	1300 JB	2300 B	6300 B	16000 B	23000 JB	4100 JB	2000 JB
	Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D029	1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	1600	ND	6400 J	ND	260 J
	1,2-Dichloroethene (total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	15000	ND	ND	1400
D022	Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D028	1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D035	2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1600 J	ND
	1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D019	Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D040	Trichloroethene	740 J	ND	ND	ND	ND	ND	ND	ND	870 J	100000	14000 J	ND	690 J
	Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D018	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	440 J	2600 J	8800 J	ND	ND
	Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D039	Tetrachloroethene	ND	ND	ND	ND	ND	380 J	680 J	ND	ND	4600 J	11000 J	ND	ND
	1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	330 J	ND	ND	ND	ND
	Toluene	ND	ND	170 J	ND	690 J	ND	ND	ND	ND	7200 J	ND	ND	ND
D021	Chlorobenzene	650	240 J	530 J	5200 J	4600	2100	590 J	420 J	1100 J	31000	24000	6100	620 J
	Ethylbenzene	1100	2900	ND	3600 J	ND	1400 J	ND	ND	1400 J	80000	50000	ND	560 J
	Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Xylene(total)	ND	360	3800	ND	ND	460 J	ND	ND	5200	500000	240000	ND	ND
	Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	170 J	ND	ND	ND	ND	ND	ND
	Dichlorodifluoromethane	ND	ND	ND	ND	ND	6900	ND	ND	ND	ND	ND	ND	ND
	etonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	odomethane	460 J	630 J	ND	ND	1700 J	1800 J	1300 J	1000 J	ND	ND	ND	3000 J	1000 J
	Propionitrile (Ethyl Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	3-Chloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 8
(Cont.)

Volatile Organic Analysis

(NA)

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A23A
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	19-2[illegible]
PARAMETERS														
Methacrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isobutyl alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachlorethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 9

CS - A

Semivolatile Organic Analysis

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A2
DEPTH (ft) :	16-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	19-
PARAMETERS														
Phenol	ND	720 JB	ND	ND	ND	1300 J	ND	ND	ND	610000 B	21000 JB	ND	ND	38
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,3-Dichlorobenzene	ND	ND	ND	3200 JB	ND	5100	ND	120 J	4900 J	32000 J	23000 J	ND	ND	N
D027 1,4-Dichlorobenzene	210 J	ND	3600 J	58000	18000 J	39000	730	1100	64000	390000 B	260000 B	13000 J	34000 J	290
Benzyl Alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	82
1,2-Dichlorobenzene	58 J	ND	840 J	6100 JB	ND	12000	210 J	1100	74000	650000 B	360000 B	ND	ND	61
D023 2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	60
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
D025 4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12
N-Nitroso-Di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
D034 Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
D036 Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2,4-Dimethylphenol	ND	1600 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55
Benzoic Acid	ND	ND	ND	ND	ND	ND	ND	BDL	ND	ND	ND	ND	ND	280
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,2,4-Trichlorobenzene	ND	ND	8800	12000 J	31000 J	47000	ND	490	46000	160000 B	12000 JB	6000 J	ND	95
Naphthalene	130 J	ND	850 J	ND	ND	ND	ND	ND	ND	ND	5600 J	ND	ND	150
4-Chloroaniline	140 J	17000	9400	13000 J	ND	ND	ND	ND	ND	ND	14000 J	ND	ND	73
D033 Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2-Methylnaphthalene	ND	ND	600 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Methyl methacrylate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
D038 Pyridine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Ethyl methacrylate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2-Picoline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Aniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36
Pentachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
D024 3-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Acetophenone	150 J	ND	1300 JB	ND	ND	24000	320 J	140 J	8100 J	ND	4300 JB	ND	ND	23
N-Nitrosomorpholine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
o-Toluidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
a,a-Dimethylphenethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N

Table 9
(Cont.)

Semivolatile Organic Analysis

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A23
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	19-
PARAMETERS														
Hexachloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
p-Phenylenediamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
N-Nitroso-di-n-butylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Safrole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,2,4,5-Tetrachlorobenzene	ND	ND	19000	3100 J	8000 J	28000	ND	140 J	10000 J	19000 J	ND	ND	ND	N
Isoafrole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,4-Naphthoquinane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,3-Dinitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Pentachlorobenzene	ND	ND	13000	4400 J	18000 J	19000	260 J	380 J	28000	37000 J	ND	ND	ND	N
D042 2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
D041 2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
D030 2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Fluorene	ND	ND	ND	ND	ND	800 J	ND	ND	ND	ND	ND	ND	ND	N
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
N-Nitrosodiphenylamine (1)	110 J	ND	ND	ND	ND	ND	ND	49 J	2500 J	ND	4200 J	ND	ND	N
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
D032 Hexachlorobenzene	ND	ND	1700 J	ND	ND	ND	ND	59 J	4300 J	ND	ND	ND	ND	N
D037 Pentachlorophenol	800 J	ND	ND	ND	ND	ND	ND	88 J	ND	ND	ND	ND	ND	N
Phenanthrene	66 J	ND	670 J	3000 J	ND	1800 J	ND	ND	1800 J	ND	5400 J	4900 J	14000 J	7
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Di-n-Butylphthalate	55 JB	1100 JB	1100 JB	ND	4400 J	ND	ND	56 J	ND	ND	ND	ND	ND	29
Fluoranthene	ND	ND	540 J	3900 J	6700 J	1400 J	ND	ND	ND	ND	3600 J	8100 J	ND	N
Pyrene	ND	ND	540 J	4900 J	ND	1500 J	ND	ND	ND	ND	4200 J	8300 J	10000 J	N
Butylbenzylphthalate	ND	ND	ND	ND	ND	1100 J	ND	160 J	11000 J	70000 JB	100000 B	ND	ND	6
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5700 J	4800 J	ND	1
(2-Ethylhexyl)phthalate	75 J	ND	ND	3400 J	8600 J	6200 B	190 JB	240 JB	11000 JB	26000 JB	ND	6700 J	ND	N
Di-n-octyl phthalate	ND	ND	ND	ND	3800 J	ND	ND	ND	ND	ND	18000 JB	7300 J	ND	N
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N

Table 9
(Cont.)

Semivolatile Organic Analysis

(NA)

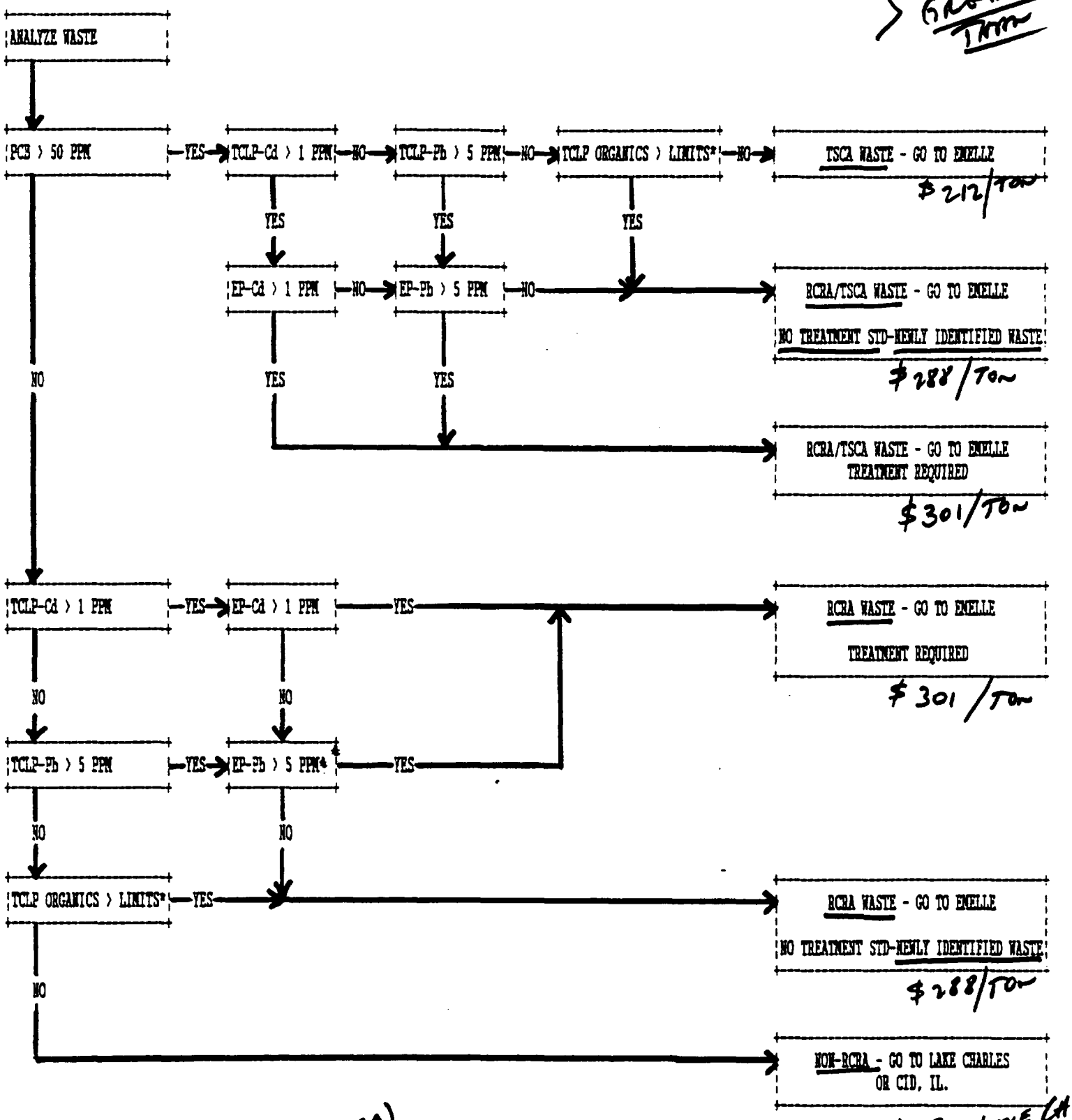
SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A
DEPTH (ft) :	16-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	
PARAMETERS														
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1-Naphthylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Naphthylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	10000 J	ND	ND	ND	
1,3,5-Trinitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Diallate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Phenacetin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Diphenylamine	110 J	ND	ND	ND	ND	ND	ND	42 J	2500 J	ND	4200 J	ND	ND	
5-Nitro-o-toluidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Aminobiphenyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Pronamide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-sec-Butyl-4,6-dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Pentachloronitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Nitroquinoline-1-oxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methapyrilene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
nite	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ulorobenzilate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
p-Dimethylaminoazobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Acetylaminofluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
7,12-Dimethylbenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Hexachlorophene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
3-Methylcholanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

** Units: Ug/Kg **

DECISION TREE FOR WASTE PROFILES AFTER SEPTEMBER 25, 1990

REVISION 3

> GROWTH TRIM



LIST OF TCLP ORGANICS OF CONCERN & LIMITS (RCRA)

D018 BENZENE - 0.5 PPM
D027 1,4,-DICHLOROBENZENE - 7.5 PPM
D032 HEXACHLOROBENZENE - 0.13 PPM
D039 TETRACHLOROETHLYENE - 0.7 PPM
D040 TRICHLOROETHYLENE - 0.5 PPM

22-Sep-90

4.3.2 EP Toxicity Pesticides and Herbicides

The EP Toxicity pesticide and herbicide analysis was performed on 29 samples collected from various borings and various boring depths (Table 3). The method for analyses for EP Toxic pesticides was performed using Method SW-846, 8080. The method used in analyzing for herbicides was SW-846, 8150. Results of the pesticide and herbicide analysis were all below the detectable limits.

CERRO COPPER PRODUCTS CO.
P.O. Box 66800
St. Louis, MO 63166-6800
618/337-6000

September 14, 1990

Mr. John J. Hlavacek
Senior Project Manager
ENRAC Division-Midwest
Chemical Waste Management, Inc.
7250 West College Drive
Palos Heights, IL 60463

RE: Acceptance of sediment for shipment

Dear John:

This letter is written to summarize our discussions of September 13, 1990 concerning the acceptance of the sediment.

Perland will make the sediment ready for transport. Your representative, on site, will make the determination of accepting the sediment or rejecting it based on his/her belief that the sediment will release water during shipment.

If accepted by Chemical Waste Management, and the load from that pile releases water, Chemical Waste will remedy the situation at no cost to Cerro. If the pile is rejected, Perland will prepare the pile for Cerro for shipment to your representative's satisfaction using a hydrating agent. Cerro has received approval from the IEPA to use a hydrating agent to prepare the material for shipment.

The penetrometer test will not be used for shipment criteria. This was agreed to by Chemical Waste Management personnel at the meeting.

If this is not your understanding of the acceptance of sediment for shipment, please contact me immediately.

Very truly yours,

CERRO COPPER PRODUCTS CO.

Joseph M. Grana
Manager of Environmental and Energy Affairs

JMG/ge

cc: R. G. Fitzpatrick (CWM)
M. G. Radek (CWM)
B. F. Miller/B. Huie (Perland)
K. McGowan (Perland)

bcc: P. Tandler
R. J. Avendt
M. L. Rodburg, Esq.
File

0123-3

N.

TCLP - ORGANICS OF CONCERN

WASTE CODE	PARAMETER	TCLP LIMITS	MAX. CONC. ALL SEDIMENT	
D018	BENZENE	0.50	8.8	V
D027	1,4-DICHLOROBENZENE	7.50	390	SV
D032	HEXACHLOROBENZENE	0.13	4.3	SV
D039	TETRACHLOROETHYLENE	0.70	11	V
D040	TRICHLOROETHYLENE	0.50	100	V

TCLP - ORGANICS DETECTED BUT MAXIMUM CONC. < TCLP LIMIT

WASTE CODE	PARAMETER	TCLP LIMITS	MAX. CONC. ALL SEDIMENT	
D021	CHLOROBENZENE	100	31	V
D035	METHYL ETHYL KETONE	200	1.6	V
D037	PENTACHLOROPHENOL	100	0.08	SV

TCLP - PESTICIDES NOT DETECTED

WASTE CODE	PARAMETER	TCLP LIMITS	MAX. CONC. ALL SEDIMENT	
D012	ENDRIN	0.02	ND	P
D013	LINDENE	0.4	ND	P
D014	METHOXYCHLOR	10	ND	P
D015	TOXAPHENE	0.5	ND	P
D016	2,4-D	10	ND	P
D017	2,3,5-TP	1	ND	P
D020	CHLORDANE	0.03	ND	P
D031	HEPTACHOR	0.008	ND	P

TCLP - ORGANICS NOT DETECTED

WASTE CODE	PARAMETER	TCLP LIMITS	MAX. CONC. ALL SEDIMENT	
D019	CARBON TETRACHLORIDE	0.50	ND	V
D022	CHLOROFORM	6.00	ND	V
D023	O-CRESOL	200.00	ND	SV
D024	M-CRESOL	200.00	ND	SV
D025	P-CRESOL	200.00	ND	SV
D026	CRESOL	200	ND	SV
D028	1,2-DICHLOROETHANE	0.50	ND	V
D029	1,1-DICHLOROETHLENE	0.70	ND	SV
D030	2,4-DINITROTOLUENE	0.13	ND	SV
D033	HEXACHLOROBUTADIENE	0.50	ND	SV
D034	HEXACHLOROETHANE	3.00	ND	SV
D036	NITROBENZENE	2.00	ND	SV
D038	PYRIDINE	5.00	ND	SV
D041	2,4,5-TRICHLOROPHENOL	400.00	ND	SV
D042	2,4,6-TRICHLOROPHENOL	2.00	ND	SV
D043	VINYL CHLORIDE	0.20	ND	V

V=VOLATILE SV=SEMI-VOLATILE P=PESTICIDE

Table 8

CS - A

Volatile Organic Analysis

Sediment in Creek

	SAMPLE I.D. :	~~A10~~ Road	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	~~A23A~~ Track
	DEPTH (ft) :	~~15-17~~	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	~~19-20~~
	PARAMETERS														
	Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromomethane	ND	ND	ND	ND	ND	580 J	ND	ND	ND	ND	ND	ND	ND	ND
D043	Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Methylene Chloride	1600 B	1500 B	1700 B	25000 B	5400 B	4400 B	2500 B	2300 B	3800 B	20000 B	30000 B	5800 B	3100 B	2100
	Acetone	ND	1000 JB	690 JB	22600 JB	4500 JB	2400 JB	1300 JB	2300 B	6300 B	16000 B	23000 JB	4100 JB	2000 JB	2400
	Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D029	1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	1600	ND	6400 J	ND	260 J	ND
	1,2-Dichloroethene (total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	15000	ND	ND	1400	ND
D022	Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D028	1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D035	2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1600 J	ND	ND
	1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D019	Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D040	Trichloroethene	740 J	ND	ND	ND	ND	ND	ND	ND	870 J	100000	14000 J	ND	690 J	2100
	Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D018	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	440 J	2600 J	8800 J	ND	ND	ND
	Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D039	Tetrachloroethene	ND	ND	ND	ND	ND	380 J	680 J	ND	ND	4600 J	11000 J	ND	ND	ND
	1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	330 J	ND	ND	ND	ND	ND
	Toluene	ND	ND	170 J	ND	690 J	ND	ND	ND	ND	7200 J	ND	ND	ND	570
D021	Chlorobenzene	650	240 J	530 J	5200 J	4600	2100	590 J	420 J	1100 J	31000	24000	6100	620 J	1800
	Ethylbenzene	1100	2900	ND	3600 J	ND	1400 J	ND	ND	1400 J	80000	50000	ND	560 J	330
	Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Xylene(total)	ND	360	3800	ND	ND	460 J	ND	ND	5200	500000	240000	ND	ND	ND
	Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	170 J	ND	ND	ND	ND	ND	ND	ND
	Dichlorodifluoromethane	ND	ND	ND	ND	ND	6900	ND	ND	ND	ND	ND	ND	ND	ND
	etonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	odomethane	460 J	630 J	ND	ND	1700 J	1800 J	1300 J	1000 J	ND	ND	ND	3000 J	1000 J	ND
	Propionitrile (Ethyl Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	3-Chloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 8
(Cont.)

Volatile Organic Analysis

(NA)

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A23A
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	19-20
PARAMETERS														
Methacrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isobutyl alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachlorethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 9

CS - A

Semivolatile Organic Analysis

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A23
DEPTH (ft) :	16-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	19-20
PARAMETERS														
Phenol	ND	720 JB	ND	ND	ND	1300 J	ND	ND	ND	610000 B	21000 JB	ND	ND	3800
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	3200 JB	ND	5100	ND	120 J	4900 J	32000 J	23000 J	ND	ND	ND
D027 1,4-Dichlorobenzene	210 J	ND	3600 J	58000	18000 J	39000	730	1100	64000	390000 B	260000 B	13000 J	34000 J	2900
Benzyl Alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8200
1,2-Dichlorobenzene	58 J	ND	840 J	6100 JB	ND	12000	210 J	1100	74000	650000 B	360000 B	ND	ND	6100
D023 2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D025 4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200
N-Nitoroso-Di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D034 Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D036 Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	1600 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5500
Benzoic Acid	ND	ND	ND	ND	ND	ND	ND	BDL	ND	ND	ND	ND	ND	28000
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	8800	12000 J	31000 J	47000	ND	490	46000	160000 B	12000 JB	6000 J	ND	9500
Naphthalene	130 J	ND	850 J	ND	ND	ND	ND	ND	ND	ND	5600 J	ND	ND	1500
4-Chloroaniline	140 J	17000	9400	13000 J	ND	ND	ND	ND	ND	ND	14000 J	ND	ND	7300
D033 Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	600 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl methacrylate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D038 Pyridine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl methacrylate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3600
Pentachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D024 3-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	120
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	150 J	ND	1300 JB	ND	ND	24000	320 J	140 J	8100 J	ND	4300 JB	ND	ND	2900
N-Nitrosomorpholine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
a,a-Dimethylphenethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 9
(Cont.)

Semivolatile Organic Analysis

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A23
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	19-20
PARAMETERS														
Hexachloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Phenylenediamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-butylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	19000	3100 J	8000 J	28000	ND	140 J	10000 J	19000 J	ND	ND	ND	ND
Isoafrole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dinitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorobenzene	ND	ND	13000	4400 J	18000 J	19000	260 J	380 J	28000	37000 J	ND	ND	ND	ND
D042 2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D041 2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D030 2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	800 J	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine (1)	110 J	ND	ND	ND	ND	ND	ND	49 J	2500 J	ND	4200 J	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D032 Hexachlorobenzene	ND	ND	1700 J	ND	ND	ND	ND	59 J	4300 J	ND	ND	ND	ND	ND
D037 Pentachlorophenol	800 J	ND	ND	ND	ND	ND	ND	88 J	ND	ND	ND	ND	ND	ND
Phenanthrene	66 J	ND	670 J	3000 J	ND	1800 J	ND	ND	1800 J	ND	5400 J	4900 J	14000 J	790
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-Butylphthalate	55 JB	1100 JB	1100 JB	ND	4400 J	ND	ND	56 J	ND	ND	ND	ND	ND	2900
Fluoranthene	ND	ND	540 J	3900 J	6700 J	1400 J	ND	ND	ND	ND	3600 J	8100 J	ND	ND
Pyrene	ND	ND	540 J	4900 J	ND	1500 J	ND	ND	ND	ND	4200 J	8300 J	10000 J	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	1100 J	ND	160 J	11000 J	70000 JB	100000 B	ND	ND	620
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5700 J	4800 J	ND	1000
(2-Ethylhexyl)phthalate	75 J	ND	ND	3400 J	8600 J	6200 B	190 JB	240 JB	11000 JB	26000 JB	ND	6700 J	ND	200
Di-n-octyl phthalate	ND	ND	ND	ND	3800 J	ND	ND	ND	ND	ND	18000 JB	7300 J	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 9
(Cont.)

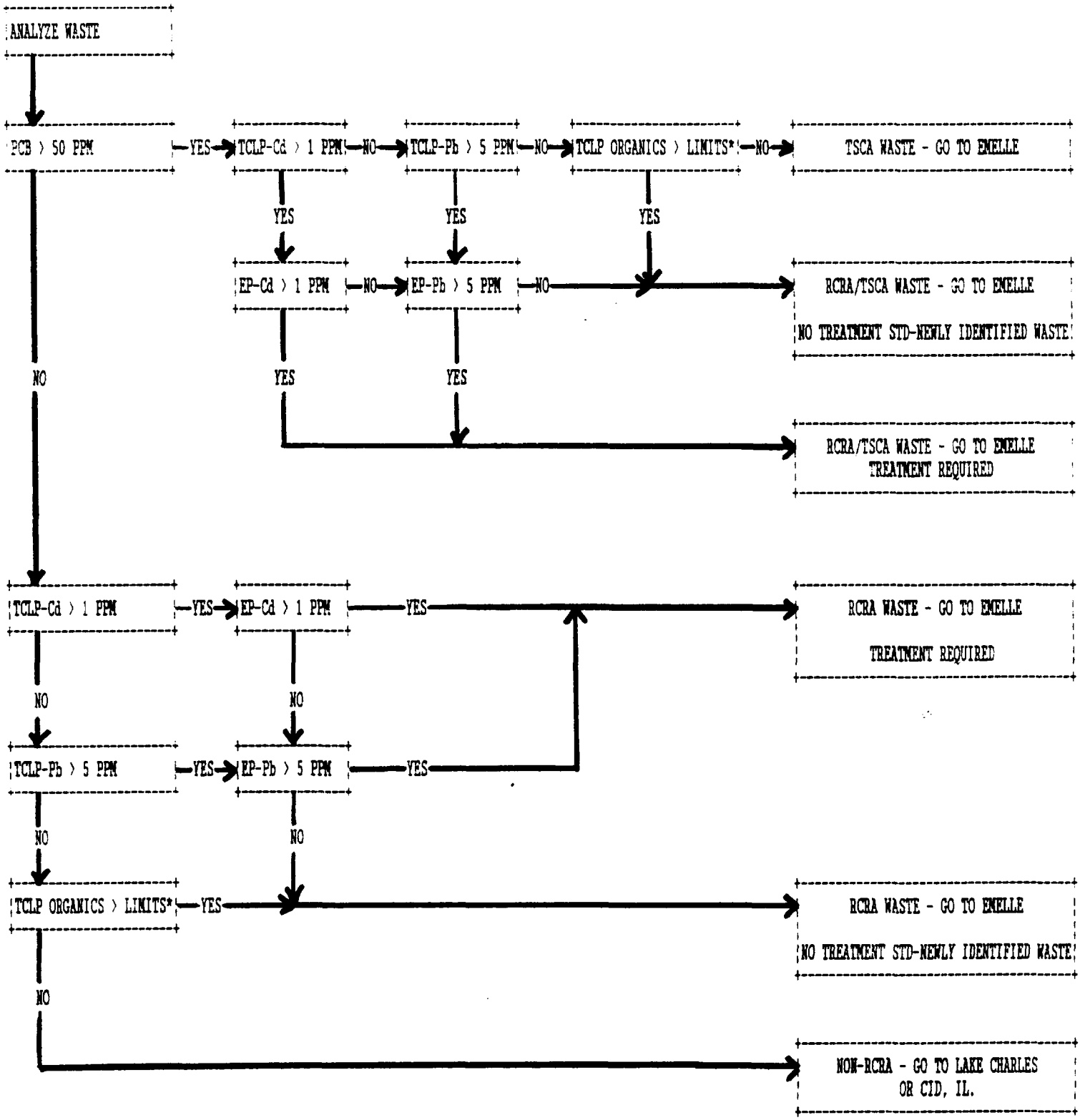
Semivolatile Organic Analysis

(NA)

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A22
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	19-2
PARAMETERS														
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Naphthylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Naphthylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	10000 J	ND	ND	ND	ND
1,3,5-Trinitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diallate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenacetin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diphenylamine	110 J	ND	ND	ND	ND	ND	ND	42 J	2500 J	ND	4200 J	ND	ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Aminobiphenyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pronamide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-sec-Butyl-4,6-dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroquinoline-1-oxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methapyrilene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
nite	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ulorobenzilate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Dimethylaminoazobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Aacetylaminofluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7,12-Dimethylbenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorophene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylcholanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

** Units: Ug/Kg **

DECISION TREE FOR WASTE PROFILES AFTER SEPTEMBER 25, 1990 REVISION 2



LIST OF TCLP ORGANICS OF CONCERN & LIMITS

D018 BENZENE - 0.5 PPM
D027 1,4,-DICHLOROBENZENE - 7.5 PPM
D032 HEXACHLOROBENZENE - 0.13 PPM
D039 TETRACHLOROETHLYENE - 0.7 PPM
D040 TRICHLOROETHYLENE - 0.5 PPM

22-Sep-90

C123-5

CERRO COPPER PRODUCTS CO.
P.O. Box 66800
St. Louis, MO 63166-6800
618/337-6000

N.
N.O.

September 12, 1990

Mr. Ronald G. Fitzpatrick, C.P.G.
Corporate Project Development Manager
Chemical Waste Management, Inc.
3001 Butterfield Road
Oak Brook, IL 60521

RE: Dead Creek Remedial Action

Dear Ron:

Cerro has received analytical results for about 4,000 tons of sediment which is stockpiled in the south end of the south pond. The results showed that approximately 3,000 tons is non-hazardous and non-TSCA material and can be shipped to and disposed of in Lake Charles Landfill if done before September 25, 1990. This can result in a significant savings to Cerro. As you know, prior to the above date the classification of hazardous waste is based on the EP test and after that date it is based on the TCLP test. You will note from the attached results that after September 25, 1990 the 3,000 tons will be classified as a hazardous waste and must go to the Emelle facility for treatment. I am having EP-Cadmium analyzed but do not expect it to be greater than 1 ppm since the TCLP-Cadmium was at the limit of 1ppm and the TCLP test is a more agressive test than the EP.

Cerro was planning that this material would be part of the 10,000 tons of non-hazardous and thus would in no way reduce your overall contract price. Please plan to discuss ways of disposing of this sediment before the September 25, 1990 deadline during our meeting on September 13, 1990. Cerro and Perland will do what it can to assist you in this endeavor. Larry Lee obtained samples from this pile but has classified it as RCRA waste based on it being disposed after September 25, 1990. However, this same sample can be used for non-hazardous waste before September 25, 1990.

Another issue that needs discussion during our meeting is the possibility that sediment analysis can have a TCLP-Lead greater than 5 ppm and the TCLP-Cadmium is less than 1 ppm, but the EP-Lead is less than 5 ppm. This scenario results in the waste being classified as a hazardous waste for Lead (D008) but it meets the treatment standard, and thus can be land disposed without treatment. This issue is discussed in the June 1, 1990 Federal Register on pages 22567 and 22660 of the 3rd/3rd of the land ban disposal regulations. Cerro requests that Chemical Waste Management

C123-6

provide a bid sheet for RCRA and RCRA/TSCA Waste Meeting Treatment Standards, thus not requiring stabilization. I have provided a waste classification decision tree.

Very truly yours,

CERRO COPPER PRODUCTS CO.

J M Grana

Joseph M. Grana
Manager of Environmental
and Energy Affairs

JMG/ge

Attachment

cc: P. Tandler

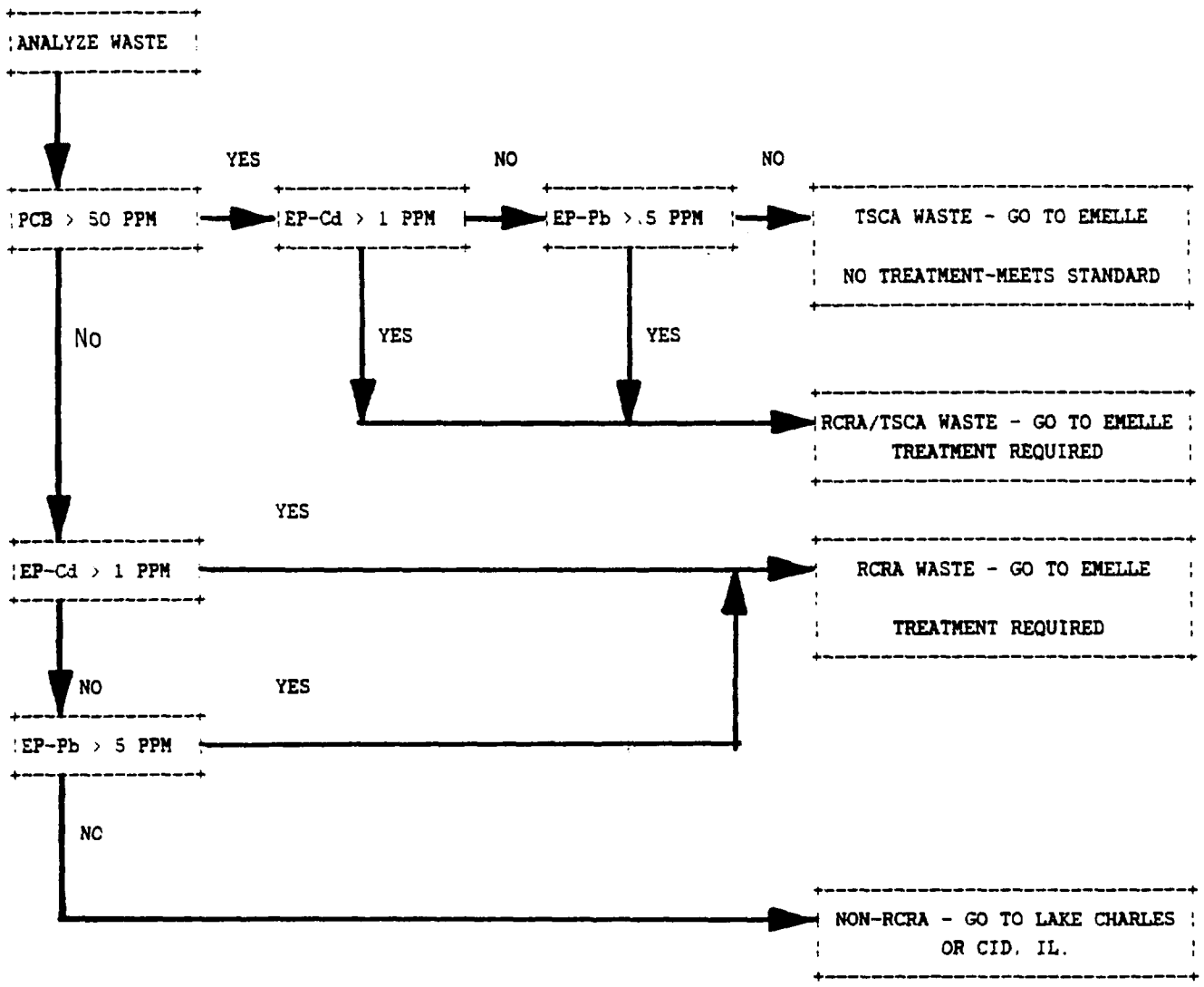
Larry Lee/Mark Medick, w/ attach.
Bruce Miller, w/attach.
[redacted] w/ attach.
Michael L. Rodburg, Esq., w/ attach.
File

ANALYTICAL RESULTS

PILE	TONS	(ppm) TCLP-Pb	(ppm) TCLP-Cd	(ppm) EP-Pb	(ppm) EP-Cd	Before 9/25/90
S-1	1st-1,000	17.4	1.2	1.9	.56	(non-haz)
S-1	2nd-1,000	14.5	1.2	3.0	.75	(non-haz)
S-2	1st-1,000	15.7	1.1	2.5	.55	(non-haz)
~~S-2~~ S3-S5	2nd-1,000	7.6	1.1	5.7	1.32	(hazardous)

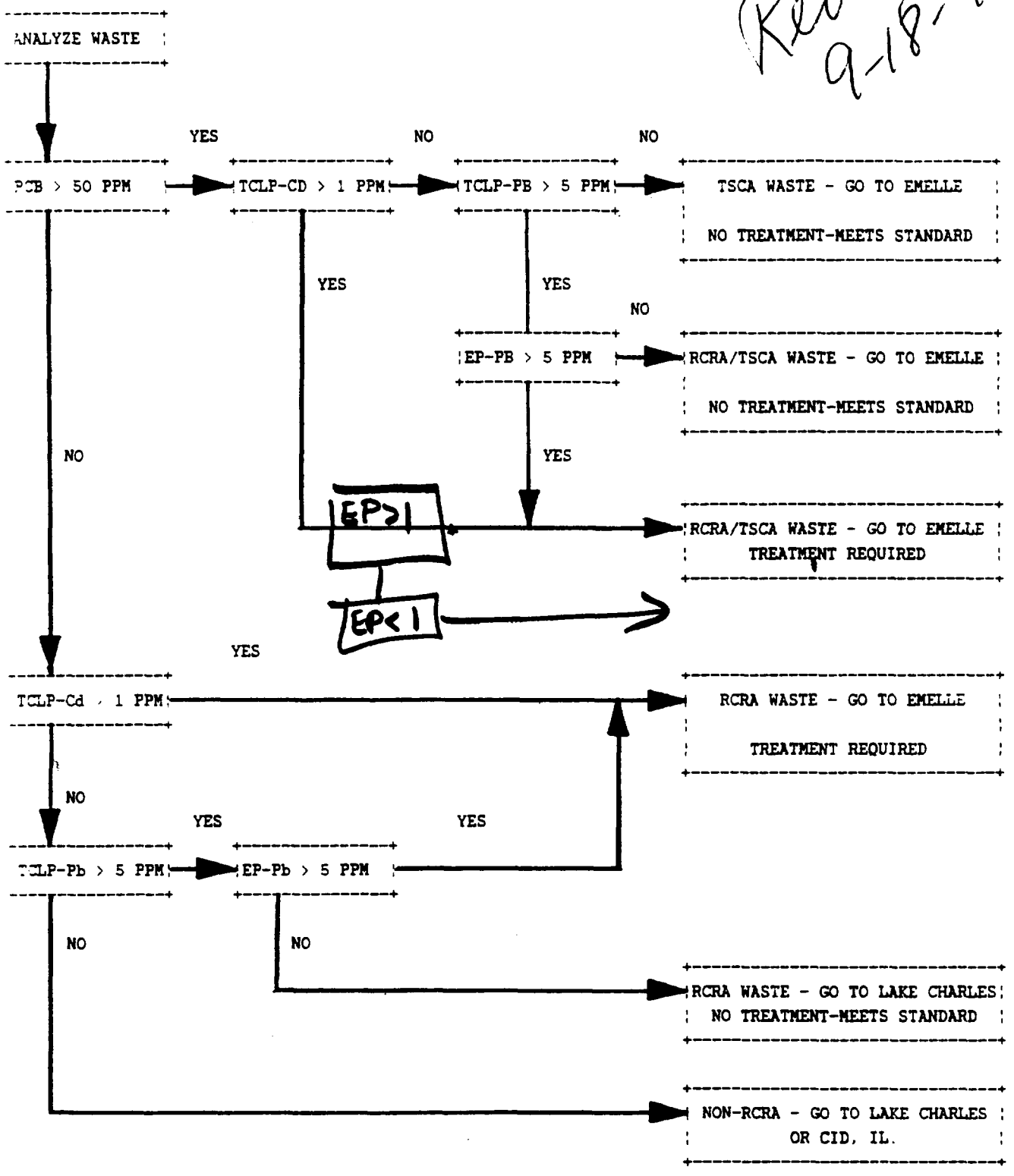
PCB's for all samples was between 33 - 39 ppm.

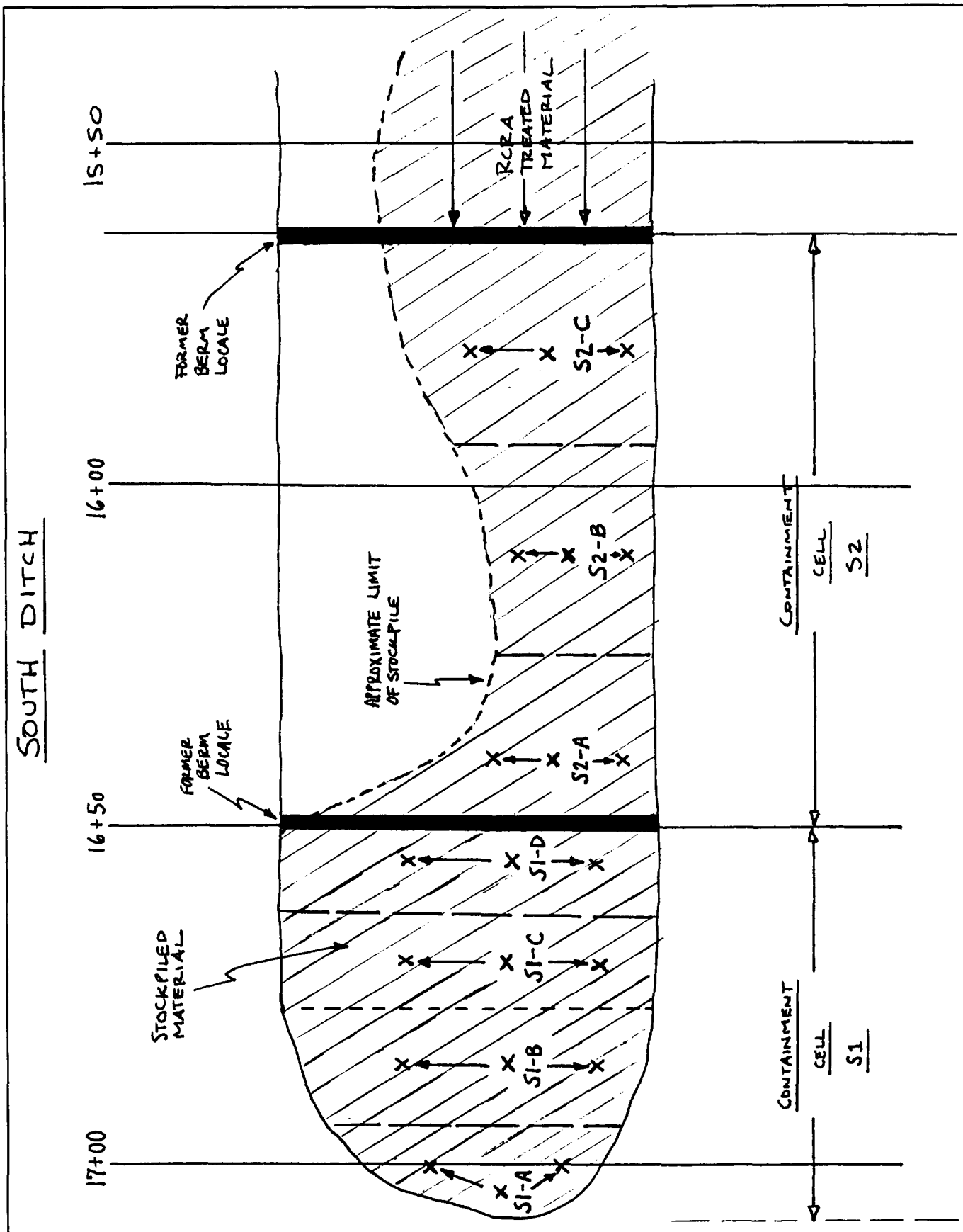
DECISION TREE FOR WASTE PROFILES BEFORE SEPTEMBER 25, 1990



DECISION TREE FOR WASTE PROFILES AFTER SEPTEMBER 25, 1990

Revised 9-18-90





REV. NO.	DESCRIPTION	DESIGN:	SCALE:
DATE	* Sampling at South End of South Ditch - Cerro Copper Dead Creek CS-A.	DRAWN:	DATE:
Perland		CHKD:	DWG.
		APRVD:	

Form 86

CWM ENRAC MIDWEST

xc: PT
RA
BM
KM

PCB Sampling for Cerro Copper
Waste Stream ENR K 14037
9/19/90 - 9/20/90

Background:

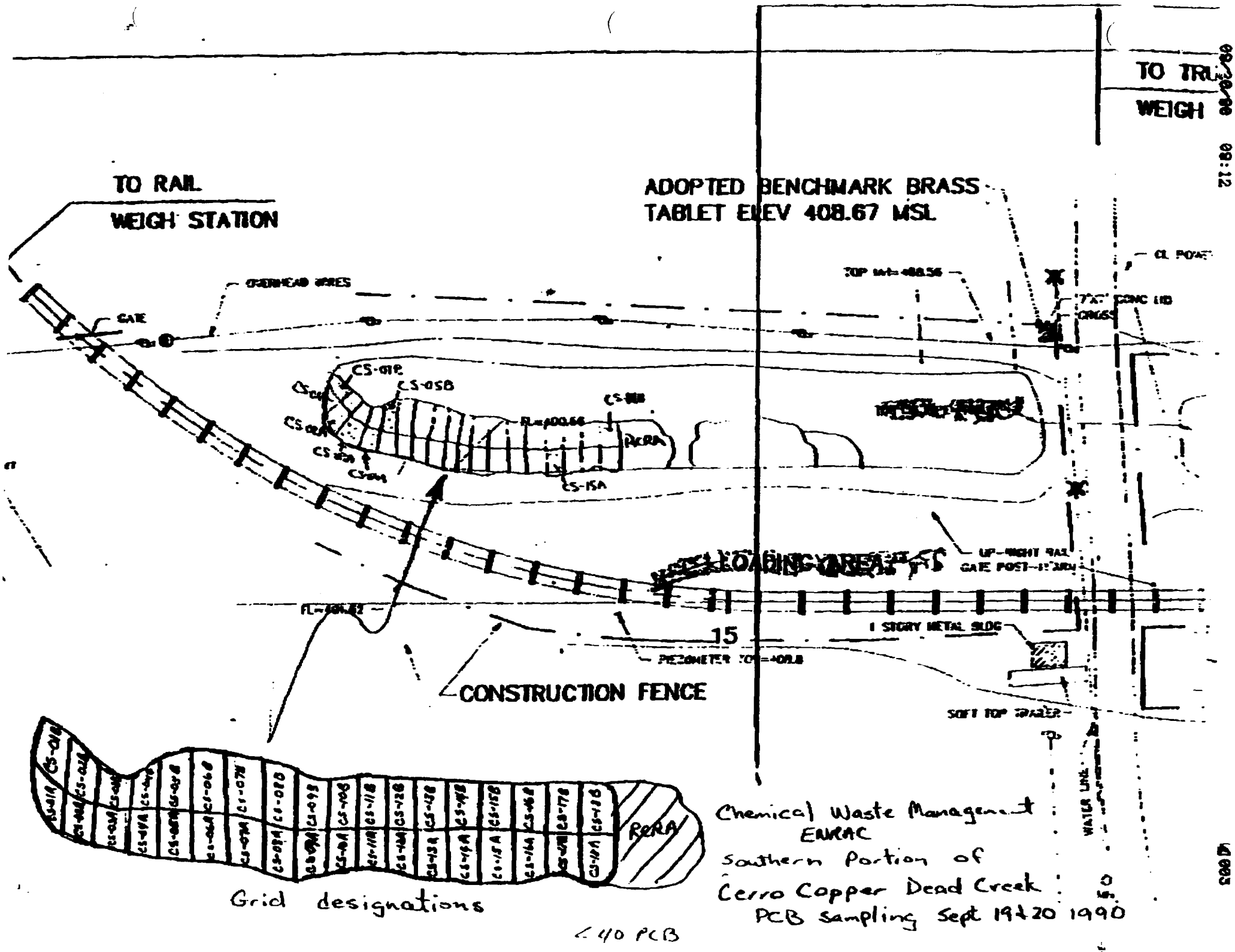
Tom Kurkjy, Technical Manager of Lake Charles Landfill, was provided all the analysis generated by Cerro Copper to characterize the K14037 waste stream. This waste is presently located on the southern portion of the Dead Creak Site in Sauget, Illinois. After reviewing the data, Mr. Kurkjy gave a conditional approval for the waste. The condition was that 20% of the truck loads would require sampling and PCB analysis to verify that no trucks containing greater than 40 ppm PCB would be processed.

It was operationally unacceptable for ENRAC to absorb the cost of demerge on the trucks which would be held up at least three hours. Additionally, the possibility existed that rejected truck loads would have to return the considerable distance back to St. Louis if PCB's were found to be greater than 40 ppm. As a result it was agreed that PCB samples could be taken of the stockpiled material and analyzed prior to loading for transportation.

Sampling Procedure:

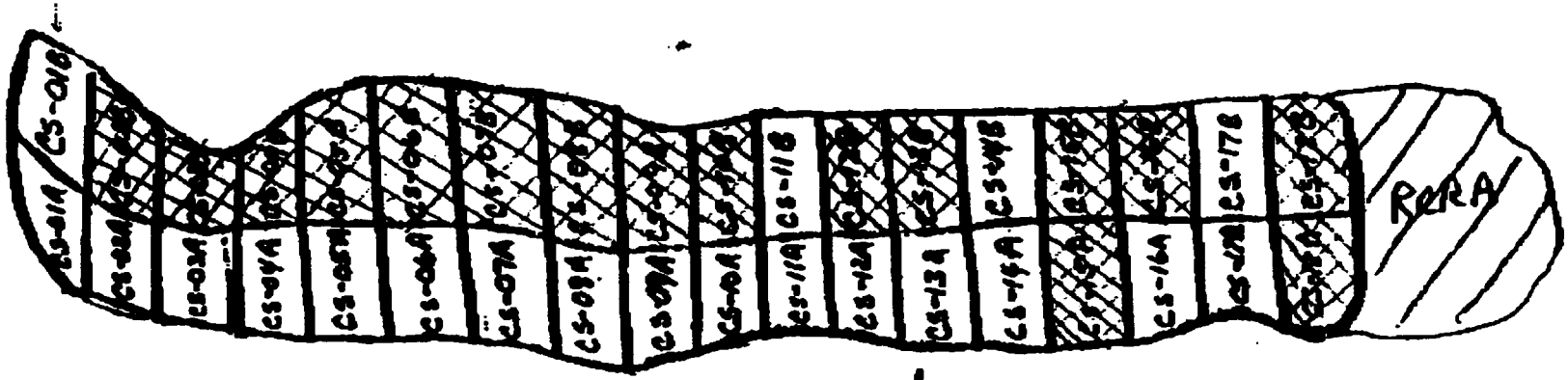
The 3000 ton stockpile would require a total of at least 30 individual PCB analysis. Each sample would represent five (5) truck loads of material. The stockpile was subdivided and marked into grids (see attached diagram). Each grid had a Alpha/Numeric designation assigned to it (i.e. CS-01A). Each grid had a composite sample of five (5) equal aliquots taken from random points at a depth of at least six (6) inches. Each composite was thoroughly mixed prior to containerizing it for shipment to the laboratories.

When PCB results are received from the lab, all grids with PCB greater than 40 ppm will be segregated from the existing stockpile and will be disposed of as PCB contaminated waste. All guides with PCB less than 40 ppm will be loaded and sent to Lake Charles Landfill as non TASA material. No additional PCB analysis will be required at the Lake Charles Landfill when the WPS K14037 waste material arrives. Analytical hard copies will be forwarded to the landfill for their records.


TO RAIL
WEIGH STATION
ADOPTED BENCHMARK BRASS
TABLET ELEV 408.67 MSL
TO TRU
WEIGH
GATE
OVERHEAD WIRES
CS-01B
CS-05B
CS-15A
RCRA
LOADING AREA
15
CONSTRUCTION FENCE
1 STORY METAL BLDG
SOFT TOP TRAILER
WATER LINE
Grid designations
Chemical Waste Management
ENRAC
Southern Portion of
Cerro Copper Dead Creek
PCB sampling Sept 19 & 20 1990
< 40 PCB

PCBs < 40 mg/Kg

PCBs > 40 mg/Kg



Grid designations

D006
D008
D027
D032
} RCRA Codes

Chemical Waste Management

PCB Sample Results for Cerro Copper

Waste Profile K 14037

sampled 9/19 – 9/20/90

results recieved 9/24/90

Chemical Waste Management
PCB Sampling Results for Cerro Copper
ENR K 14037 Stockpile

Sampled September 19, and September 20, 1990
Results Received September 24, 1990

EMS Laboratory

Grid Location	Total PCBs mg/kg		Grid Location	Total PCBs mg/kg
CS-01A	< 40	Lake Charles Landfill Laboratory	*CS-01B	36
CS-02A	< 40		CS-02B	41
CS-03A	< 40		CS-03B	80
CS-04A	< 40		CS-04B	93
CS-05A	< 40		CS-05B	60
CS-06A	< 40		CS-06B	44
*CS-07A	27.2		CS-07B	49
*CS-08A	28.7		CS-08B	53
*CS-09A	19.8		CS-09B	50
*CS-10A	27.5		CS-10B	50
*CS-11A	23.1		*CS-11B	30.4
*CS-12A	22.7		CS-12B	41
*CS-13A	38		CS-13B	56
*CS-14A	24.9		*CS-14B	36
CS-15A	42		CS-15B	43.5
*CS-16A	26.1		CS-16B	48
*CS-17A	23.2		*CS-17B	39
CS-18A	40.3		CS-18B	56

* PCBS < 40

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION S1-A

ESTIMATED QUANTITY ~670 cy

DATE SAMPLED 09/04/90

DATE OF RESULTS 09/10/90(PCB), 09/11/90 (TCLP, EPTOX)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	36	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.2	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	17.4	5.0	✓	
D018	TCLP - BENZENE	NA	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	NA	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	NA	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	NA	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	NA	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.56	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]

DATE 10/08/90

RECEIVED BY [signature]

DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION S1-B

ESTIMATED QUANTITY ~670 cy

DATE SAMPLED 09/04/90

DATE OF RESULTS 09/10/90 PCB, 09/11/90 (TCLP, EPTOX)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	36	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.2	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	17.4	5.0	___	
D018	TCLP - BENZENE	NA	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	NA	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	NA	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	NA	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	NA	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.56	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION 51-C

ESTIMATED QUANTITY ~670 cy

DATE SAMPLED 09/04/90

DATE OF RESULTS 09/10/90 PCB, 09/11/90 (TCLP, EPTOX)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	37	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	14.5	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.2	5.0	___	
D018	TCLP - BENZENE	NA	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	NA	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	NA	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	NA	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	NA	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.75	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]

DATE 10/08/90

RECEIVED BY [signature]

DATE 10/09/90

CWM ENRAC MIDWEST

xc: PT
RA
BM
KM

PCB Sampling for Cerro Copper
Waste Stream ENR X 14037
9/19/90 - 9/20/90

Background:

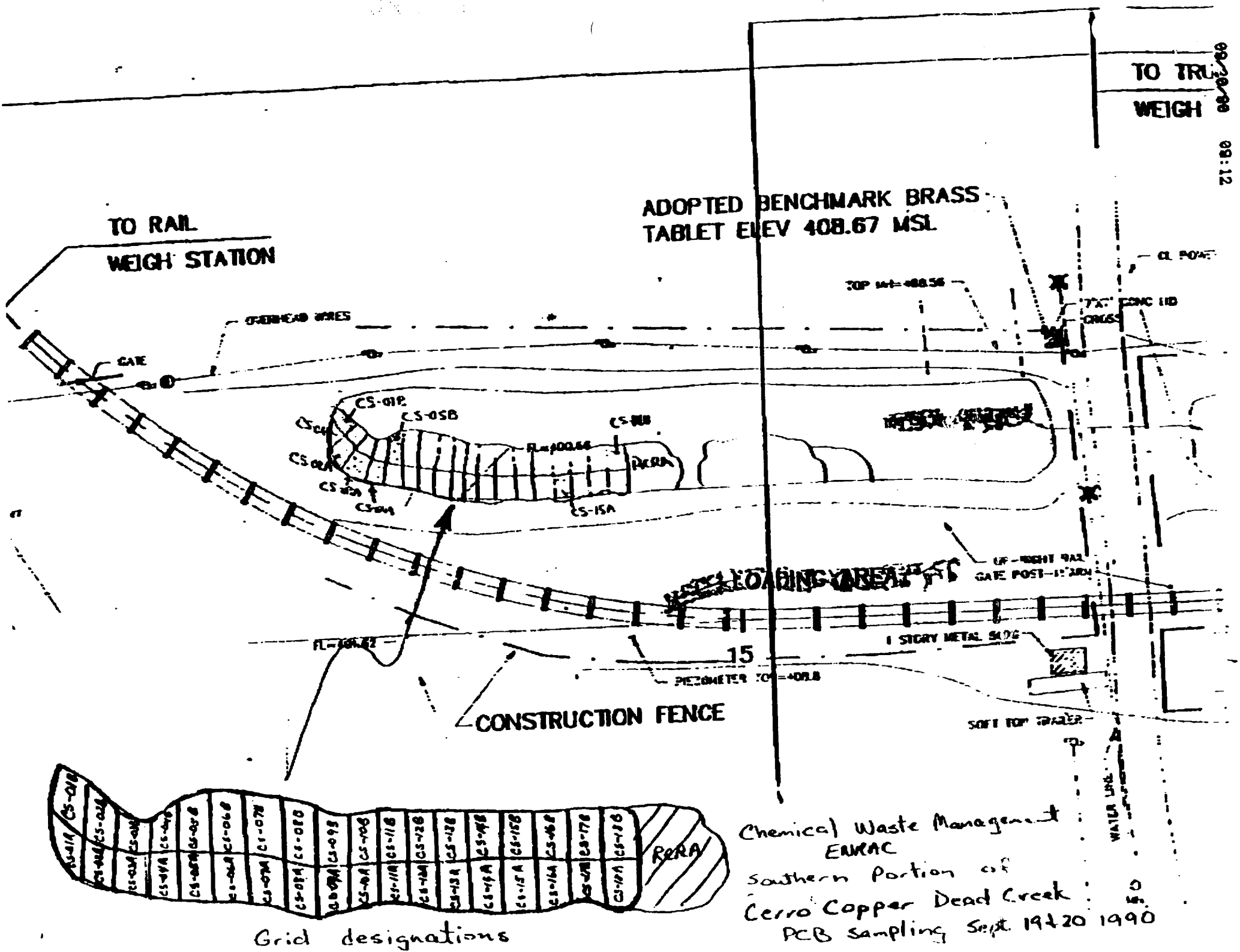
Tom Kurkjy, Technical Manager of Lake Charles Landfill, was provided all the analysis generated by Cerro Copper to characterize the K14037 waste stream. This waste is presently located on the southern portion of the Dead Creek Site in Sauget, Illinois. After reviewing the data, Mr. Kurkjy gave a conditional approval for the waste. The condition was that 20% of the truck loads would require sampling and PCB analysis to verify that no trucks containing greater than 40 ppm PCB would be processed.

It was operationally unacceptable for ENRAC to absorb the cost of demerge on the trucks which would be held up at least three hours. Additionally, the possibility existed that rejected truck loads would have to return the considerable distance back to St. Louis if PCB's were found to be greater than 40 ppm. As a result it was agreed that PCB samples could be taken of the stockpiled material and analyzed prior to loading for transportation.

Sampling Procedure:

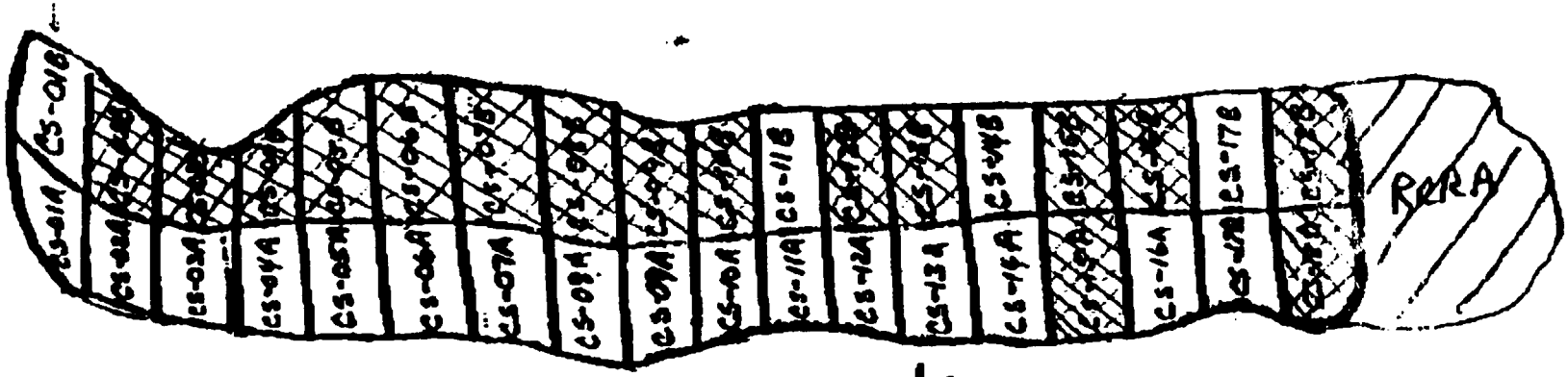
The 3000 ton stockpile would require a total of at least 30 individual PCB analysis. Each sample would represent five (5) truck loads of material. The stockpile was subdivided and marked into grids (see attached diagram). Each grid had a Alpha/Numeric designation assigned to it (i.e. CS-01A). Each grid had a composite sample of five (5) equal aliquots taken from random points at a depth of at least six (6) inches. Each composite was thoroughly mixed prior to containerizing it for shipment to the laboratories.

When PCB results are received from the lab, all grids with PCB greater than 40 ppm will be segregated from the existing stockpile and will be disposed of as PCB contaminated waste. All guides with PCB less than 40 ppm will be loaded and sent to Lake Charles Landfill as non TASA material. No additional PCB analysis will be required at the Lake Charles Landfill when the WPS K14037 waste material arrives. Analytical hard copies will be forwarded to the landfill for their records.


TO TRU
WEIGH
ADOPTED BENCHMARK BRASS
TABLET ELEV 408.67 MSL
TO RAIL
WEIGH STATION
OVERHEAD WIRES
GATE
CS-01P
CS-05B
CS-15A
RCRA
LOADING AREA
1 STORY METAL BLDG
15
CONSTRUCTION FENCE
SOFT TOP TRAILER
WATER LINE
RCRA
Grid designations
Chemical Waste Management
EMRAC
Southern Portion of
Cerro Copper Dead Creek
PCB sampling Sept. 19 & 20 1990

PCBs < 40 mg/Kg

PCBs > 40 mg/Kg



Grid designations

D006
D008
D027
D032
RCRA Codes

Chemical Waste Management

PCB Sample Results for Cerro Copper

Waste Profile K 14037

sampled 9/19 – 9/20/90

results recieved 9/24/90

Chemical Waste Management
PCB Sampling Results for Cerro Copper
ENR K 14037 Stockpile

Sampled September 19, and September 20, 1990
Results Received September 24, 1990

EMS Laboratory

Grid Location	Total PCBs mg/kg		Grid Location	Total PCBs mg/kg
CS-01A	< 40	Lake Charles Landfill Laboratory	*CS-01B	36
CS-02A	< 40		CS-02B	41
CS-03A	< 40		CS-03B	80
CS-04A	< 40		CS-04B	93
CS-05A	< 40		CS-05B	60
CS-06A	< 40		CS-06B	44
*CS-07A	27.2		CS-07B	49
*CS-08A	28.7		CS-08B	53
*CS-09A	19.8		CS-09B	50
*CS-10A	27.5		CS-10B	50
*CS-11A	23.1		*CS-11B	30.4
*CS-12A	22.7		CS-12B	41
*CS-13A	38		CS-13B	56
*CS-14A	24.9		*CS-14B	38
CS-15A	42		CS-15B	43.5
*CS-16A	26.1		CS-16B	48
*CS-17A	23.2		*CS-17B	39
CS-18A	40.3		CS-18B	56

* PCBS < 40

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION S2-A

ESTIMATED QUANTITY 333 cy

DATE SAMPLED 09/04/90

DATE OF RESULTS 09/10/90 PCB, 09/11/90 (TCLP, EPTOX)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	33	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.1	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	15.7	5.0	✓	
D018	TCLP - BENZENE	NA	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	NA	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	NA	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	NA	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	NA	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.55	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	2.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION 52-B

ESTIMATED QUANTITY ~333 cy

DATE SAMPLED 09/04/90

DATE OF RESULTS 09/10/90 PCB, 09/11/90 (TCLP, EPTOX)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	38	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.1	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	15.7	5.0	✓	
D018	TCLP - BENZENE	NA	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	NA	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	NA	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	NA	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	NA	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.55	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	2.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION S2-C (+D)

ESTIMATED QUANTITY ~333 cy

DATE SAMPLED 09/04/90

DATE OF RESULTS 09/10/90 PCB / 09/11/90 (TCLP, EPTOX)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	37	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.1	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	15.7	5.0	✓	
D018	TCLP - BENZENE	NA	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	NA	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	NA	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	NA	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	NA	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.55	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	2.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90

CWM ENRAC MIDWEST

xc: PT
RA
BM
KM

PCB Sampling for Cerro Copper
Waste Stream ENR K 14037
9/19/90 - 9/20/90

Background:

Tom Kurkjy, Technical Manager of Lake Charles Landfill, was provided all the analysis generated by Cerro Copper to characterize the K14037 waste stream. This waste is presently located on the southern portion of the Dead Creek Site in Sauget, Illinois. After reviewing the data, Mr. Kurkjy gave a conditional approval for the waste. The condition was that 20% of the truck loads would require sampling and PCB analysis to verify that no trucks containing greater than 40 ppm PCB would be processed.

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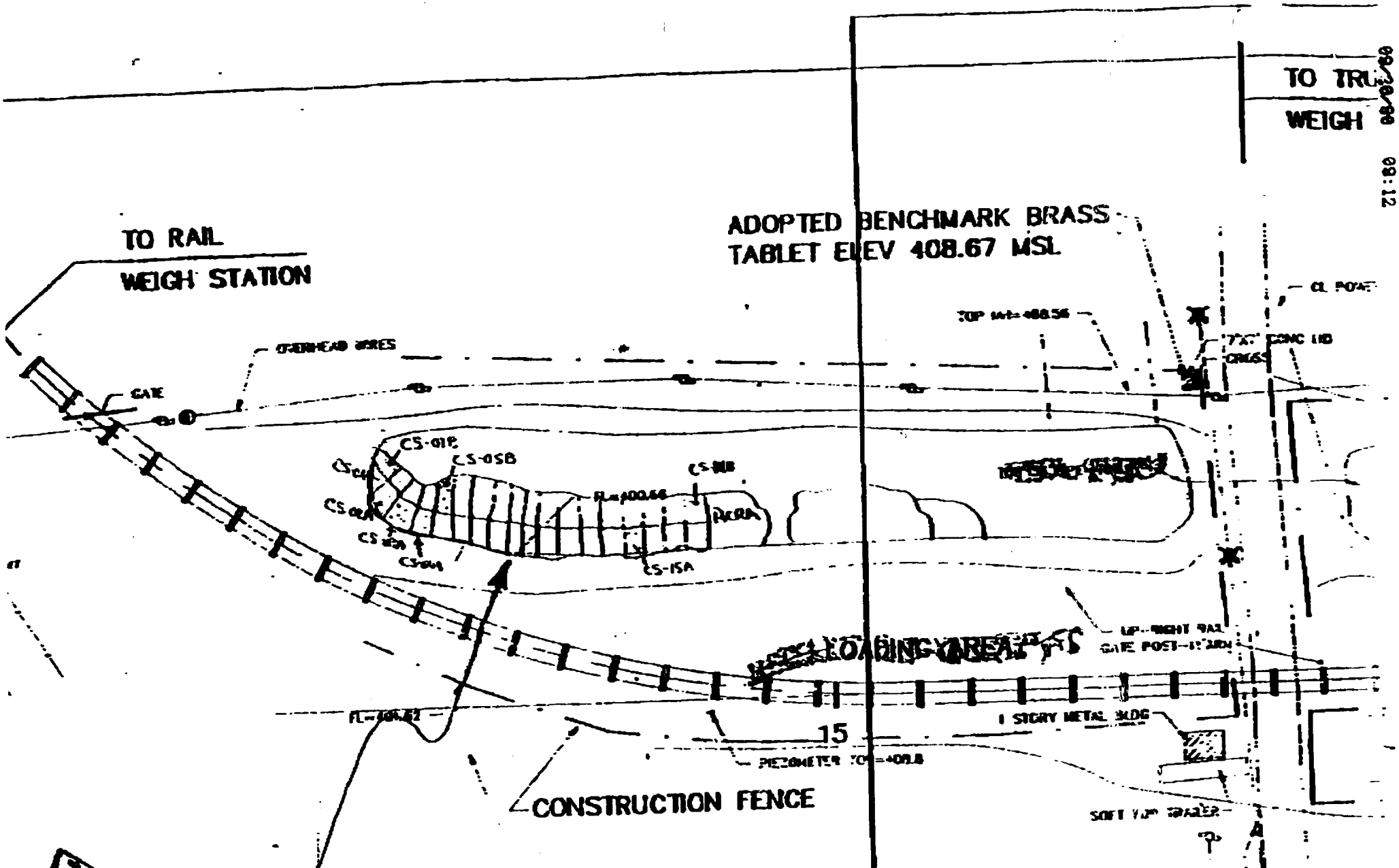
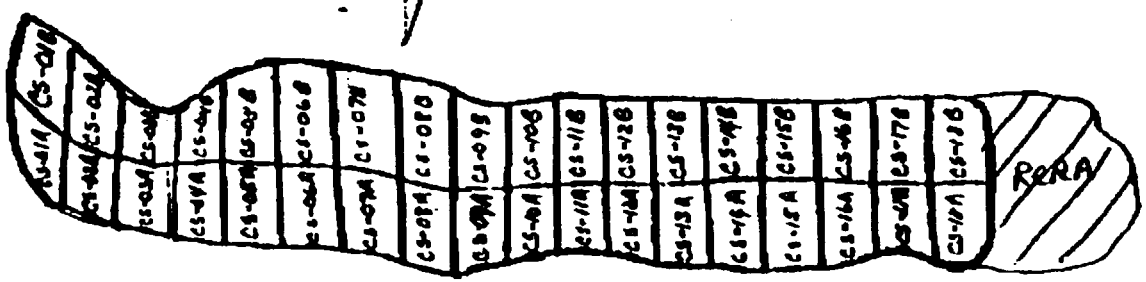


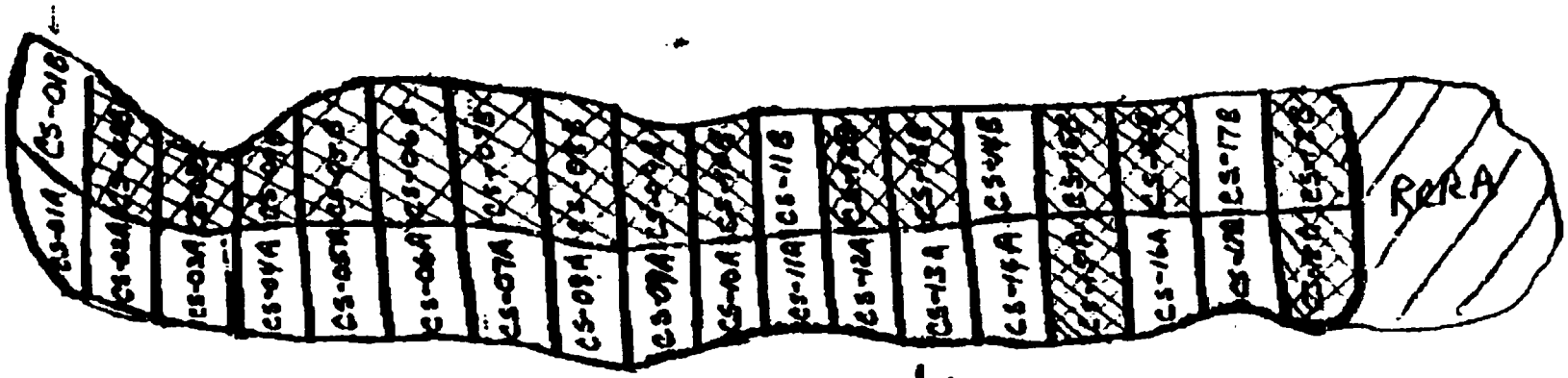


Grid designations

Chemical Waste Management
EMRAC
Southern Portion of
Cerro Copper Dead Creek
PCB sampling Sept 19 & 20 1990

PCBs < 40 mg/kg

PCBs > 40 mg/kg



Grid designations

D006
D008
D027
D032
} RCRA Codes

Chemical Waste Management

PCB Sample Results for Cerro Copper

Waste Profile K 14037

sampled 9/19 – 9/20/90

results recieved 9/24/90

Chemical Waste Management
PCB Sampling Results for Cerro Copper
ENR K 14037 Stockpile

Sampled September 19, and September 20, 1990
Results Received September 24, 1990

EMS Laboratory

Grid Location	Total PCBs mg/kg		Grid Location	Total PCBs mg/kg
CS-01A	< 40	Lake Charles Landfill Laboratory	*CS-01B	36
CS-02A	< 40		CS-02B	41
CS-03A	< 40		CS-03B	80
CS-04A	< 40		CS-04B	93
CS-05A	< 40		CS-05B	60
CS-06A	< 40		CS-06B	44
*CS-07A	27.2		CS-07B	49
*CS-08A	28.7		CS-08B	53
*CS-09A	19.8		CS-09B	50
*CS-10A	27.5		CS-10B	50
*CS-11A	23.1		*CS-11B	30.4
*CS-12A	22.7		CS-12B	41
*CS-13A	38		CS-13B	56
*CS-14A	24.9		*CS-14B	36
CS-15A	42		CS-15B	43.5
*CS-16A	26.1		CS-16B	48
*CS-17A	23.2		*CS-17B	39
CS-18A	40.3		CS-18B	56

* PCBS < 40

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION S3 (A-C)

ESTIMATED QUANTITY 300 cy

DATE SAMPLED 09/04/90

DATE OF RESULTS 09/10/90 (PCB), 09/11/90 (TCLP, EPTOX)

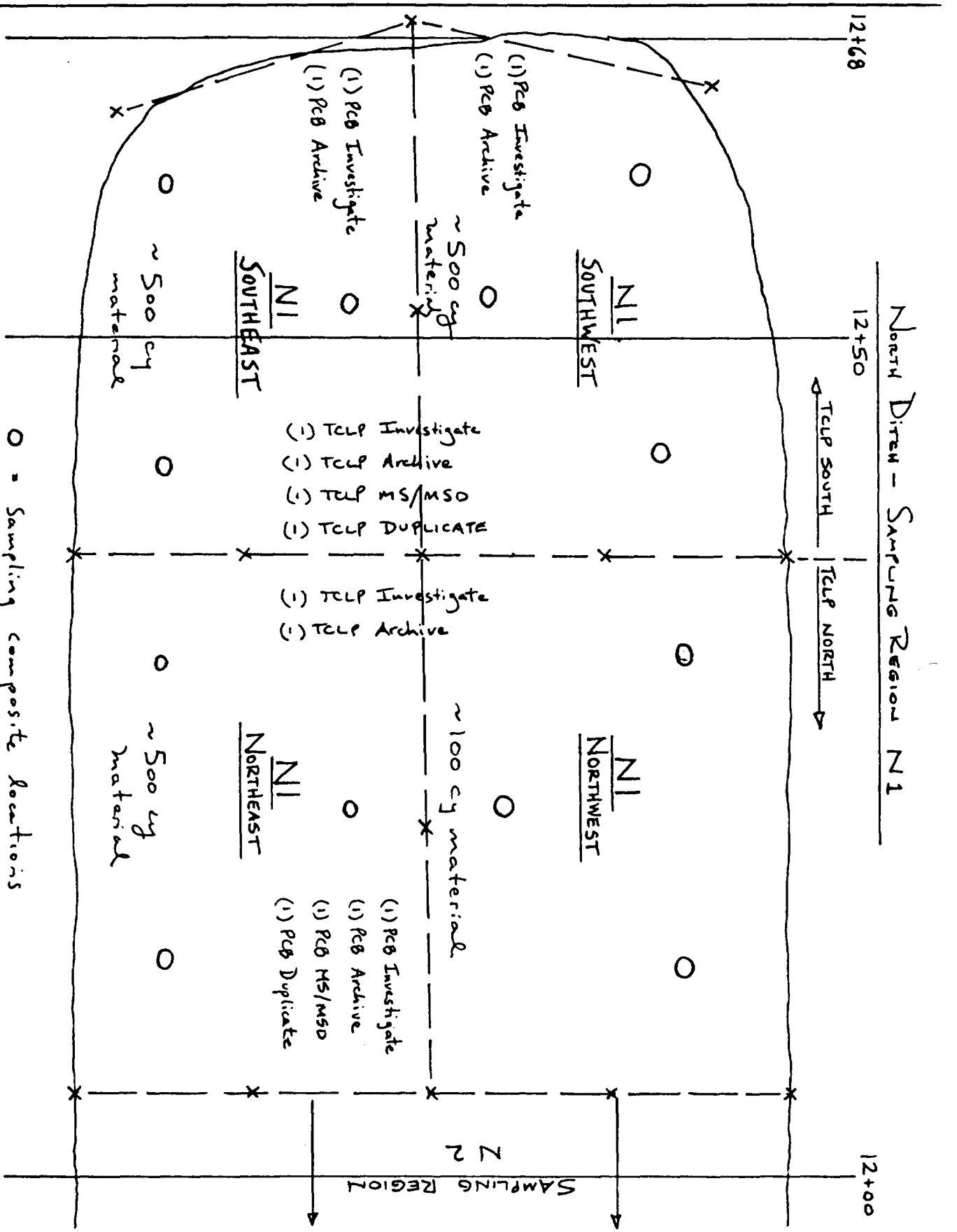
WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	39	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.1	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.6	5.0	✓	
D018	TCLP - BENZENE	NA	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	NA	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	NA	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	NA	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	NA	0.5	___	
D006	EPTOX - CADMIUM (Cd)	1.32	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.7	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90



REV. NO.	DESCRIPTION	DESIGN:	SCALE:
DATE	Sampling at south end of north ditch - Sampling region N1 Sampling done 9/11/90 ~ 1300	DRAWN:	DATE:
Perland		CHKD:	DWG.
		APRVD:	

Form 86

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N1-SW (D) REVISION

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/03/90 (PCB SAMPLE)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	35	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.49	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.50	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N1-SW (E) REVISION

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/03/90 (PCB SAMPLE)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	39	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.49	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.50	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N1-SW (F) Revision

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/03/90 (PCB sample)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	29.3	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.49	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.50	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N1-NW (J) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90 (PCB sample)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	26.7	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.07	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.1	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.17	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	<0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY Ken J. McGee
DATE 10/06/90

RECEIVED BY Stephen Dunaway
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N1-NW (K) REVISION

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/03/90 (PCB SAMPLE)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	35	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.07	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.1	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.17	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	<0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY Ken J. McGee
DATE 10/06/90

RECEIVED BY Stephen Demsavage
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N1-NW (L) REVISION

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/03/90 (PCB SAMPLE)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	66	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	1.07	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.1	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.17	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	<0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY Ken J. McGann
DATE 10/06/90

RECEIVED BY Stephen Demaway
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

ASTE PILE DESIGNATION N1-SE

ESTIMATED QUANTITY 500 cy

DATE SAMPLED 09 / 11 / 90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	55	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	1.49	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	< 0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	< 0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROBENZENE	< 0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	< 0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.50	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10 / 2 / 90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

ASTE PILE DESIGNATION N1-SW

ESTIMATED QUANTITY 500 cy

DATE SAMPLED 09 / 11 / 90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	31	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.49	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROBENZENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.50	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
TE 10 / 2 / 90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N1 - NE

ESTIMATED QUANTITY 500 cy

DATE SAMPLED 09 / 11 / 90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	47	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	1.07	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.1	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROBENZENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.17	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	<0.5	5.0	----	

* Perland decides to ship as F contaminant since it is just under 50 ppm.

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10 / 2 / 90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

ASTE PILE DESIGNATION N1 - NW

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 09 / 11 / 90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	31	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.07	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.1	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROBENZENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.17	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	<0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/2/90

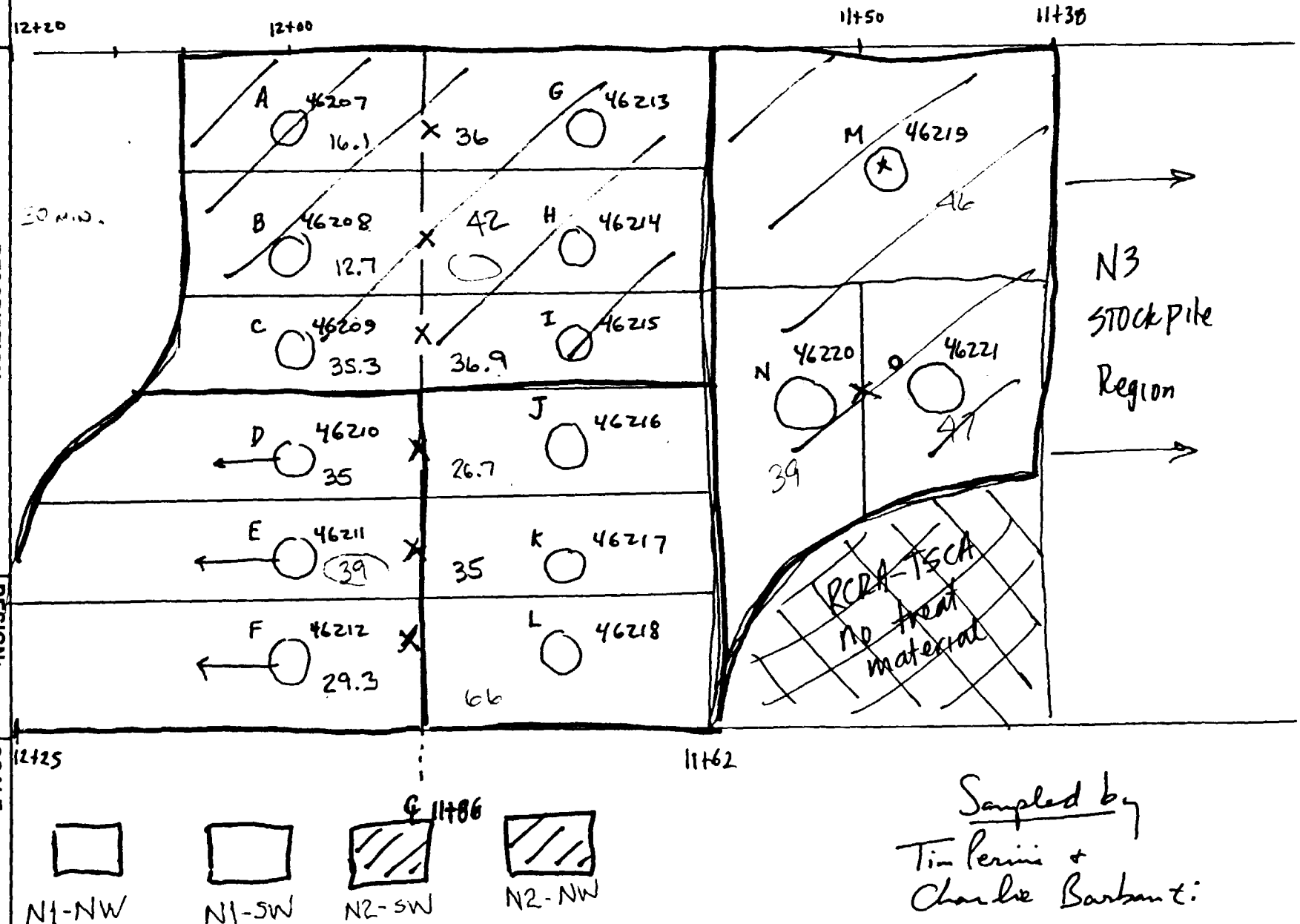
RECEIVED BY [signature]
DATE 10/02/90

Form 88

Perland

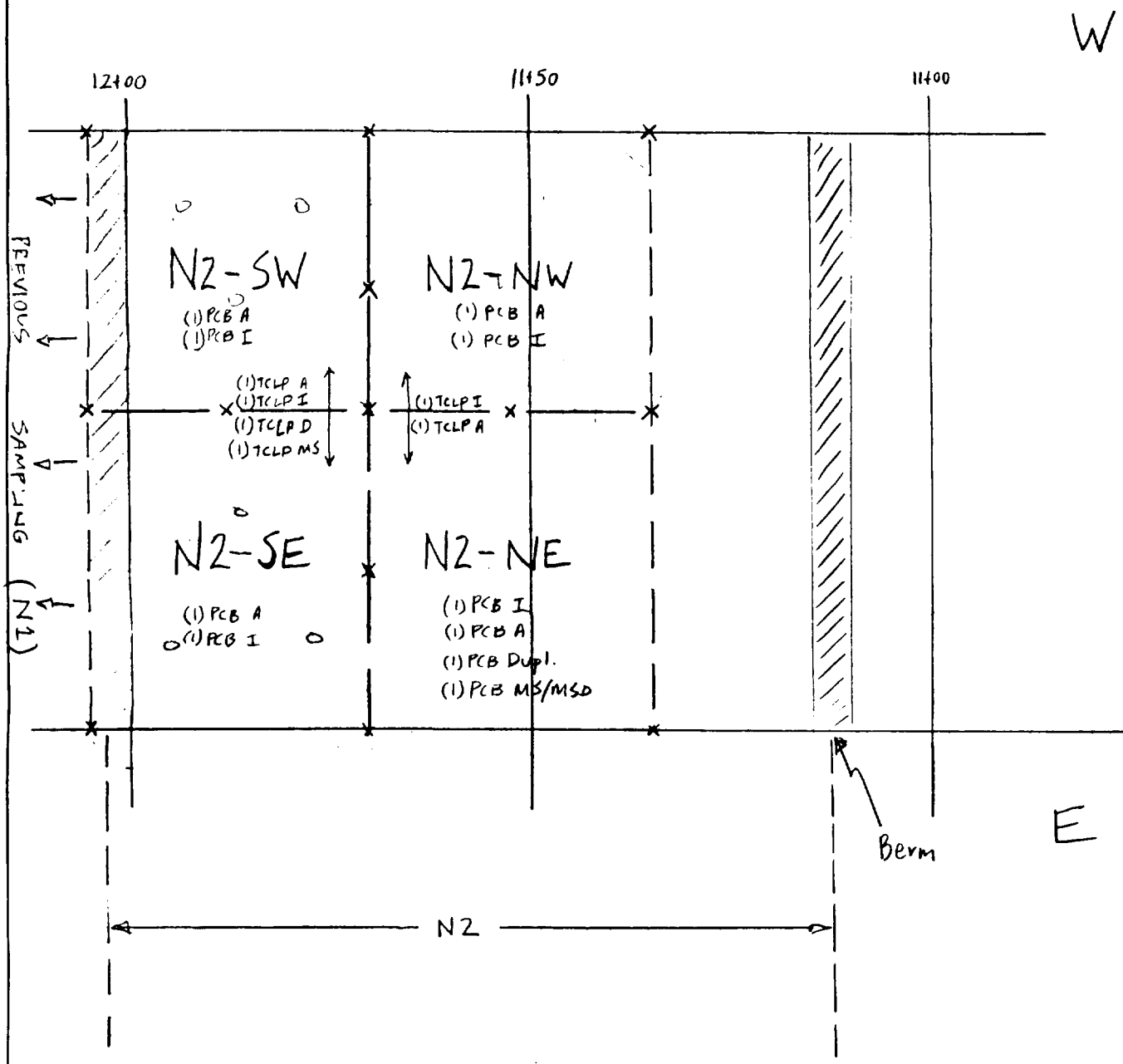
REV. NO.	DATE	DESCRIPTION	DESIGN:	DRAWN:	CHKD:	APRVD:	SCALE:	DATE:	DWG.

PCB Sampling of Regions N1 + N2 (West side – RCRA Nontreat)
(done 10/3/90)



Sampled by
Tim Perini &
Charlie Barbanti

SAMPLING OF STOCKPILE AT CELL N2



Quantity of Stockpiled Material in N2 (blue region)

Approx 40' x 15' x 80' = 1778 cy
30' x 40' x 5' = 222 cy
TOTAL = 2000 cy

REV. NO.	DESCRIPTION	DESIGN:	SCALE:
DATE	Initial Sampling of N2	DRAWN:	DATE:
Perland		CHKD:	DWG.
		APRVD:	

Form 86

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (A) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90 (PCB ONLY)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	16.1	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (B) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90 (PCB only)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	12.7	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (c) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90 (PCB ONLY)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	35.3	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (G) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90 (PCB ONLY)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	36	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY Kenj. M. Gen
DATE 10/06/90

RECEIVED BY Stephen Demang
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (H) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90 (PCB only)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	42	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

DUE TO LANDFILL CRITERIA of 90%

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (I) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90 (PCB only)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	36.9	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-NW (M) REVISION

ESTIMATED QUANTITY 100cy

DATE SAMPLED 10/03/90 (PCB only)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	46	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.97	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.7	5.0	✓	
D018	TCLP - BENZENE	<0.5	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.37	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.51	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

* DUE TO LAKE CHARLE LANDFILL CRITERIA of 40 PPM.

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-NW (N) REVISION

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/03/90 (PCB ONLY)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	39	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.97	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.7	5.0	___	
D018	TCLP - BENZENE	<0.5	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.37	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.51	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-NW ⓪ REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90 (PCB ONLY)

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	47	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.97	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.7	5.0	___	
D018	TCLP - BENZENE	<0.5	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.37	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.51	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___	
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___	
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___	*
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓ NO ___	DUE TO LAKE CHARLES LANDFILL CRITERIA OF 40 PPM
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___	
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___	
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___	

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (A) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	16.1	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (B) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	12.7	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE __/__/__

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (C) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	35.3	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-Treat	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (G) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	36	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY Kenj. M. Gen
DATE 10/06/90

RECEIVED BY Stephen Denning
DATE ___/___/___

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (H) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	42	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

DUE TO LANDFILL CRITERIA of 90

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SW (I) REVISION

ESTIMATED QUANTITY 100 cy.

DATE SAMPLED 10/03/90

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	36.9	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY Kevin J. McGann
DATE 10/06/90

RECEIVED BY [illegible]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2 - NW (M) REVISION

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/03/90

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	46	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.97	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.7	5.0	___	
D018	TCLP - BENZENE	<0.5	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.37	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.51	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓ NO ___ DUE TO LANDFILL CRITERIA 40 PPM
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-NW (N) Revision

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/03/90

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	39	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.97	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.7	5.0	___	
D018	TCLP - BENZENE	<0.5	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.37	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.51	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-NW ⓪ Revision

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/03/90

DATE OF RESULTS 10/05/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	47	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.97	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.7	5.0	___	
D018	TCLP - BENZENE	<0.5	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.37	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.51	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	---	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___ Due to landfill criteria of 40 ppm
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION NZ-SW

ESTIMATED QUANTITY 600 cy

DATE SAMPLED 09/19/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	16	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLORO~~BENZENE~~ ethylene	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/2/90

RECEIVED BY [signature]
DATE ___/___/___

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-SE

ESTIMATED QUANTITY 600 cy

DATE SAMPLED 09/19/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	45	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	1.06	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	8.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	<0.10	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.0	5.0	----	

*Perland decides to ship as PCB contaminated despite <50

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-NW

ESTIMATED QUANTITY 200 cy

DATE SAMPLED 09/19/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	38	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.97	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.7	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.37	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLORO~~BENZENE~~ ethylene	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.51	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N2-NE

ESTIMATED QUANTITY 600 cy

DATE SAMPLED 09/19/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	53	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.97	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.7	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.37	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.51	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.5	5.0	----	

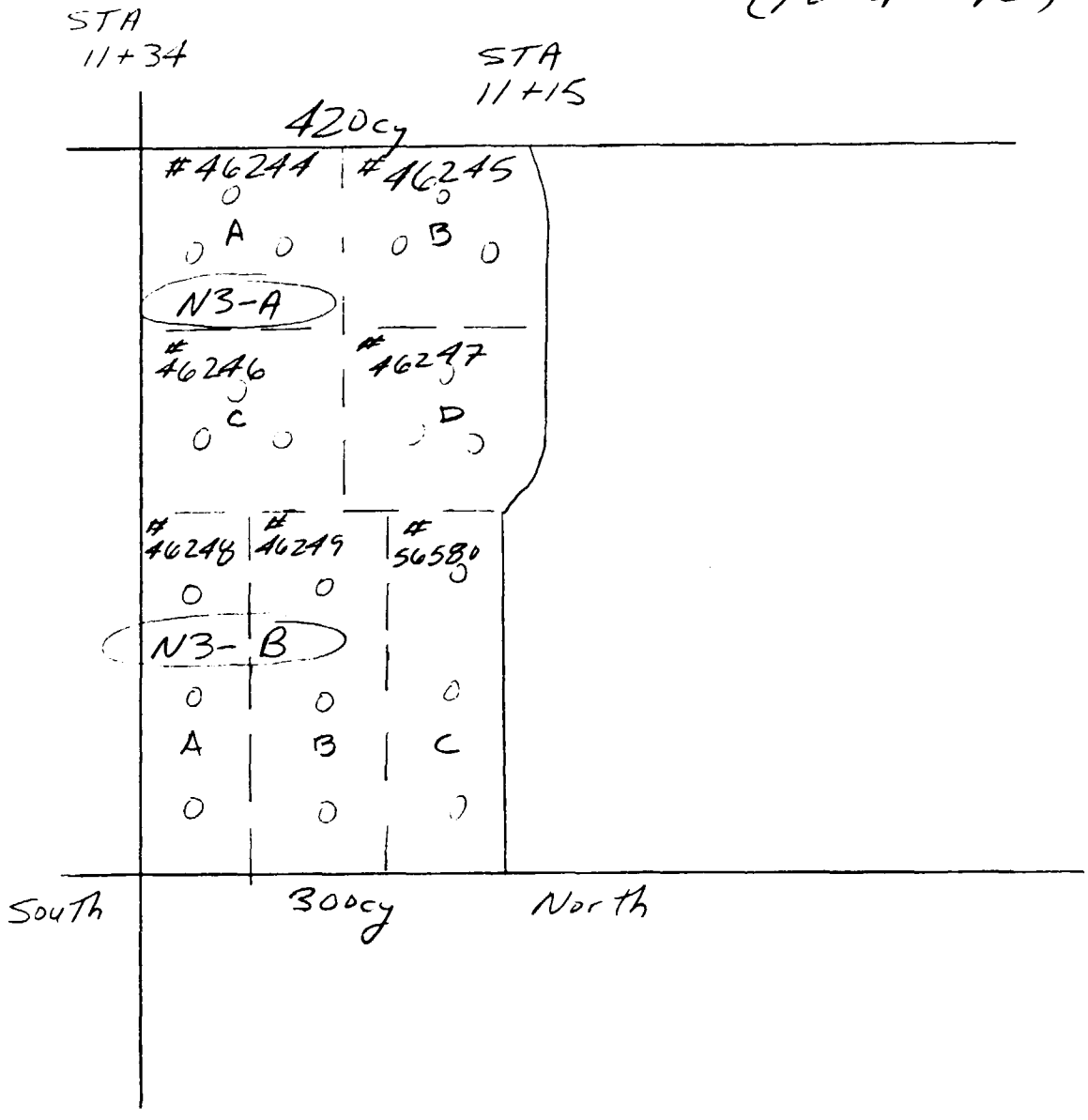
** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

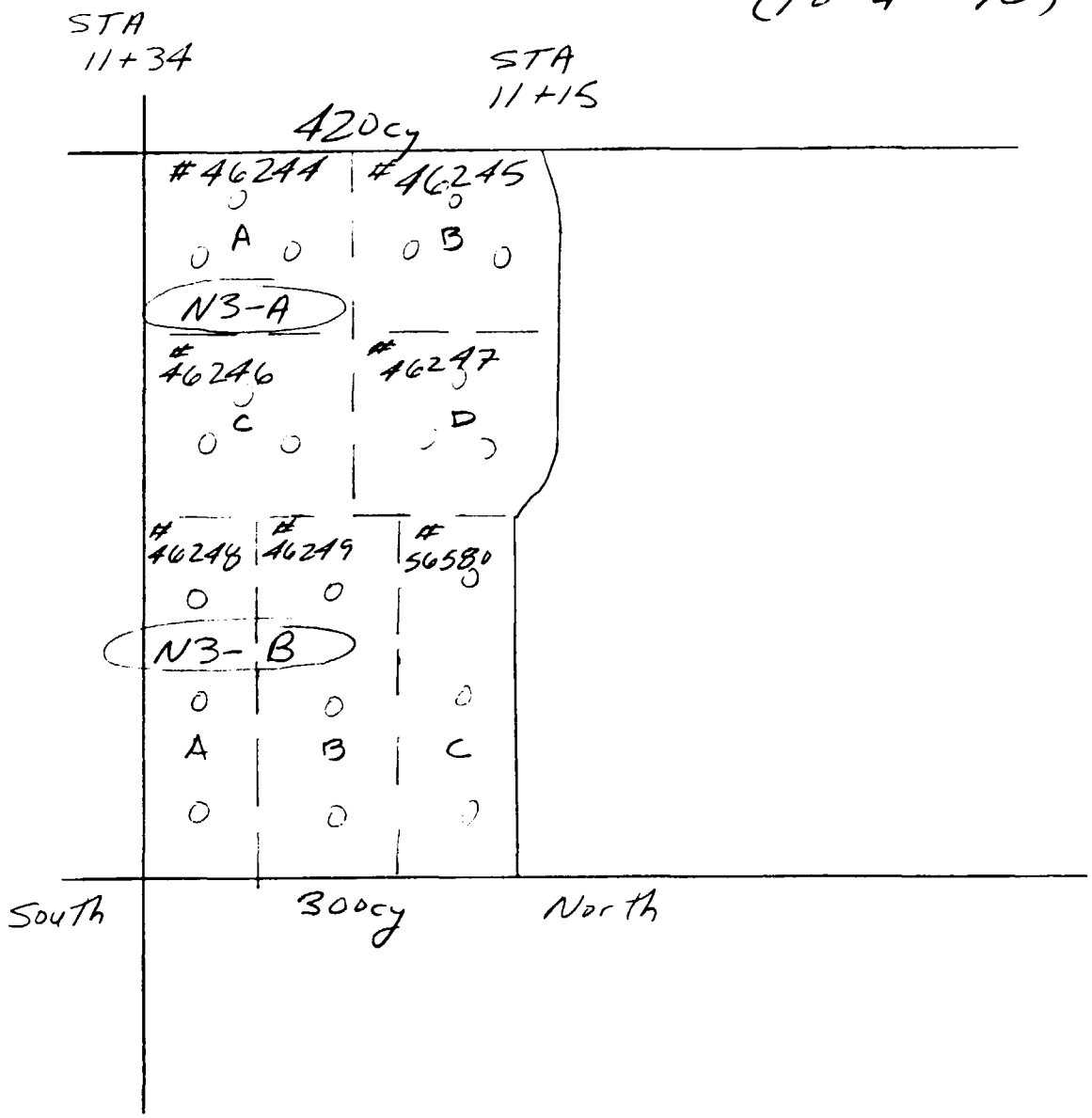
, IS SAMPLING OF REGIONS N3 (...) RCRA NON-TREATMENT
(10-4-90)



REV. NO.	DESCRIPTION	DESIGN:	SCALE:
DATE	DEAD CREEK CS-A	DRAWN: CJB	DATE: 10/6/90
Perland	→ STOCKPILE REGION N3-A N3-B	CHKD:	DWG.
		APRVD:	

Form 86

IS SAMPLING OF REGIONS N3( ) RCRA NON-TREATMENT
(10-4-90)



REV. NO.	DESCRIPTION	DESIGN:	SCALE:
DATE	DGAD CREEK CS-A	DRAWN: CJB	DATE: 10/6/90
Perland	→ STOCKPILE REGION N3-A N3-B	CHKD:	DWG.
		APRVD:	

Form 86

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-A (A)

ESTIMATED QUANTITY 107 cy

DATE SAMPLED 09/28/90-TCLP, 10/4/90-PCB

DATE OF RESULTS 10/03/90-TCLP, 10/6/90-PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	30.8	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.18	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.2	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.24	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT - REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-A(B)

ESTIMATED QUANTITY 107 cy

DATE SAMPLED 09/28/90-TCLP, 10/4/90 - PCB

DATE OF RESULTS 10/03/90-TCLP, 10/6/90 - PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	28.2	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.18	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.2	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.24	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]

DATE 10/08/90

RECEIVED BY [signature]

DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-A (c)

ESTIMATED QUANTITY 107cy

DATE SAMPLED 09/28/90, TCLP, 10/04/90 PCB

DATE OF RESULTS 10/03/90 TCLP, 10/06/90 PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	13.6	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.18	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.2	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.24	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/08/90

RECEIVED BY [signature]

DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-A (O)

ESTIMATED QUANTITY 107 cy

DATE SAMPLED 09/28/90-TCLP, 10/04/90-PCB

DATE OF RESULTS 10/03/90-TCLP, 10/06/90-PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	33.5	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.18	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.2	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.24	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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DATE 10/08/90

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-B(A)

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 09/28/90 - TCLP 10/04/90 PCB

DATE OF RESULTS 10/03/90 - TCLP 10/06/90 PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	30.0	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.18	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.2	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.24	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/08/90

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DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-B (B)

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 09/28/90 TCLP, 10/04/90 PCB

DATE OF RESULTS 10/03/90 TCLP, 10/06/90 PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	34.9	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.18	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.2	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.24	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/08/90

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-B (c)

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 09/28/90 TCLP, 10/04/90 PCB

DATE OF RESULTS 10/03/90 TCLP, 10/06/90 PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	31.7	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.18	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.2	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.24	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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DATE 10/08/90

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DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-C

ESTIMATED QUANTITY ≈ 300 cy

DATE SAMPLED 09/28/90

DATE OF RESULTS 10/03/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	38	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.08	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.64	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	1.0	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	2.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓ NO ___

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DATE 10/03/90

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DATE 10/03/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-D

ESTIMATED QUANTITY ≈ 300 cy

DATE SAMPLED 09/28/90

DATE OF RESULTS 10/03/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	9	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.08	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.64	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	1.0	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	2.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

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DATE 10/03/90

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DATE 10/03/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-E

ESTIMATED QUANTITY ≈ 300 cy

DATE SAMPLED 09/28/90

DATE OF RESULTS 10/03/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	19	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.08	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.64	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	1.00	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	2.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PARED BY [signature]
10/03/90

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DATE 10/03/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
'AUGET, ILLINOIS

WASTE PILE DESIGNATION N3-A

ESTIMATED QUANTITY ≈ 420 cy

DATE SAMPLED 09/28/90

DATE OF RESULTS 10/03/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	6	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.18	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.2	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.24	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PARED BY Lisa S. Pa...
: 10/03/90

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DATE 10/03/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
CAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-B

ESTIMATED QUANTITY ≈ 300 cy

DATE SAMPLED 09/28/90

DATE OF RESULTS 10/03/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	13	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.18	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.2	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.24	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	1.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PARED BY [signature]
10/03/90

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DATE 10/03/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N3-C

ESTIMATED QUANTITY ≈ 300 cy

DATE SAMPLED 09/28/90

DATE OF RESULTS 10/03/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	38	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.08	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.64	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	1.0	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	2.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓ NO ___

PREPARED BY [signature]
DATE 10/03/90

RECEIVED BY [signature]
DATE 10/03/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

ASTE PILE DESIGNATION N3-D

ESTIMATED QUANTITY ≈ 300 cy

DATE SAMPLED 09/28/90

DATE OF RESULTS 10/03/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	9	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.08	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.64	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	1.0	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	2.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/03/90

RECEIVED BY [signature]
DATE 10/03/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

ASTE PILE DESIGNATION N3-E

ESTIMATED QUANTITY ≈ 300 cy

DATE SAMPLED 09/28/90

DATE OF RESULTS 10/03/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	19	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.08	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	7.6	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.64	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	1.00	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	2.0	5.0	----	

** WASTE PILE CHARACTERIZATION **

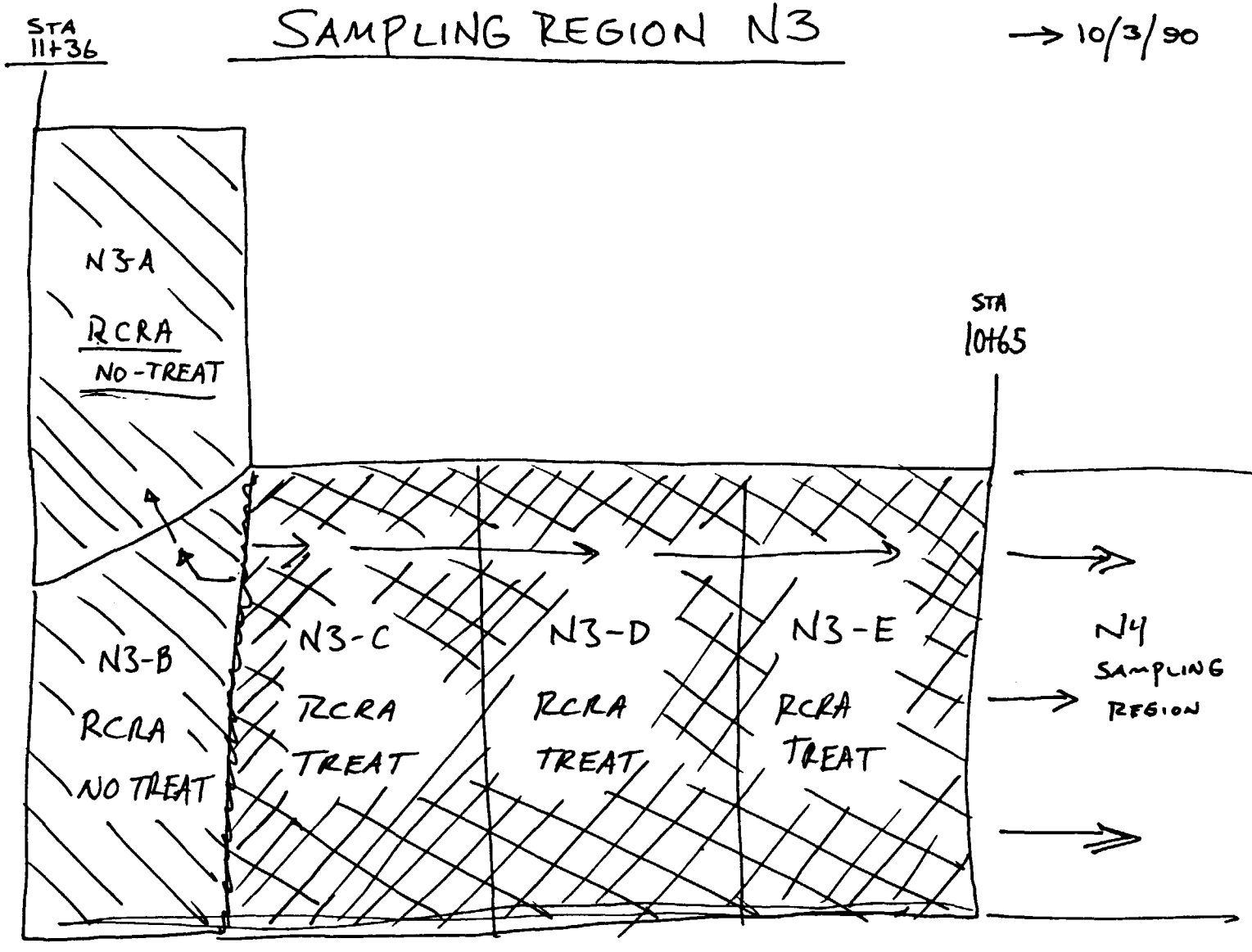
PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/03/90

RECEIVED BY [signature]
DATE 10/03/90

SAMPLING REGION N3

→ 10/3/90



SCALE:			
DATE:			
DWG.			
DESIGN:			
DRAWN:			
CHKD:			
APRVD:			
DESCRIPTION			
REV. NO.			
DATE			

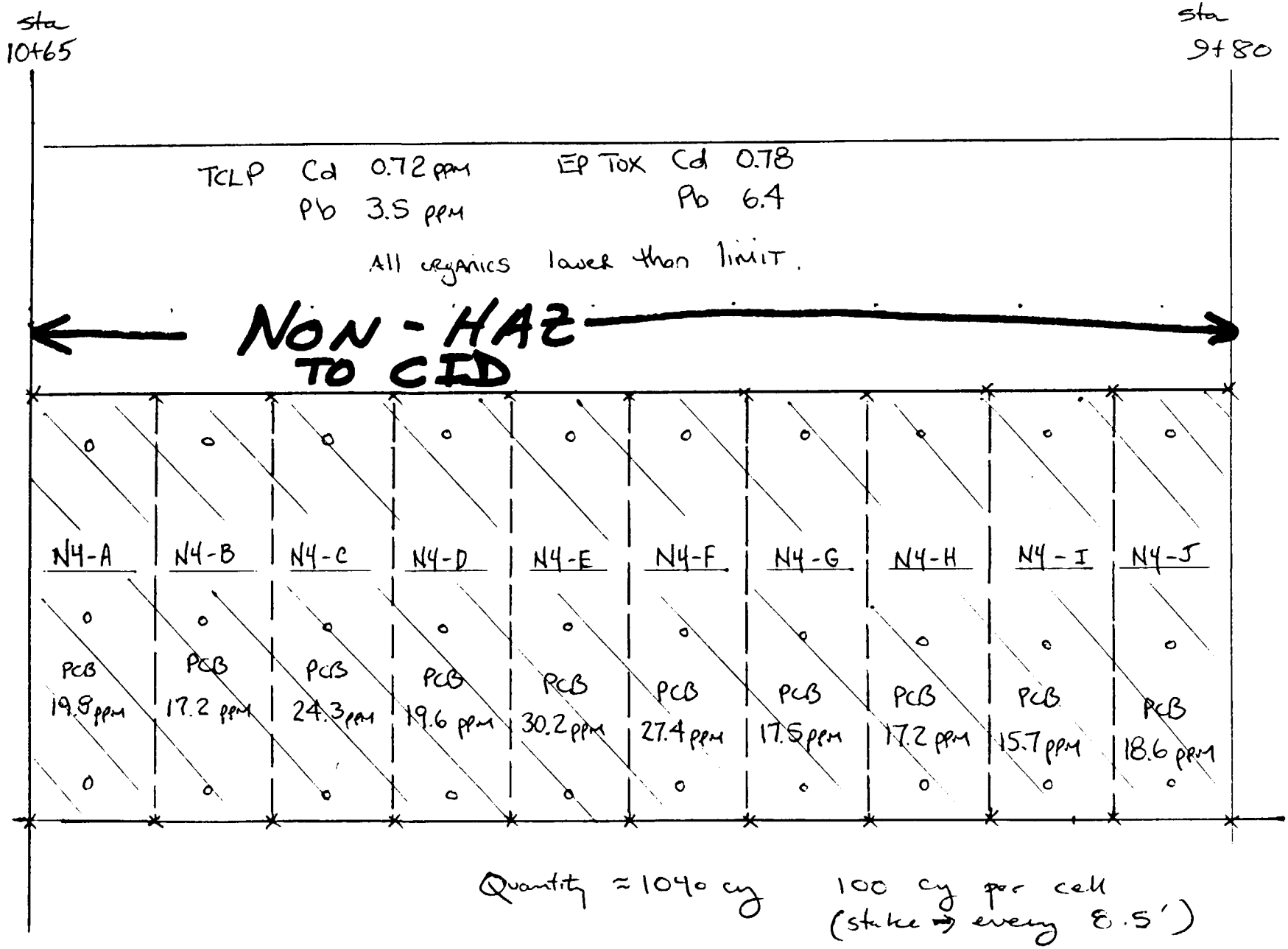
Perland

Form 88

N4

PCB RE Sampling of Stockpile N4

done 10-5-90 by TSP

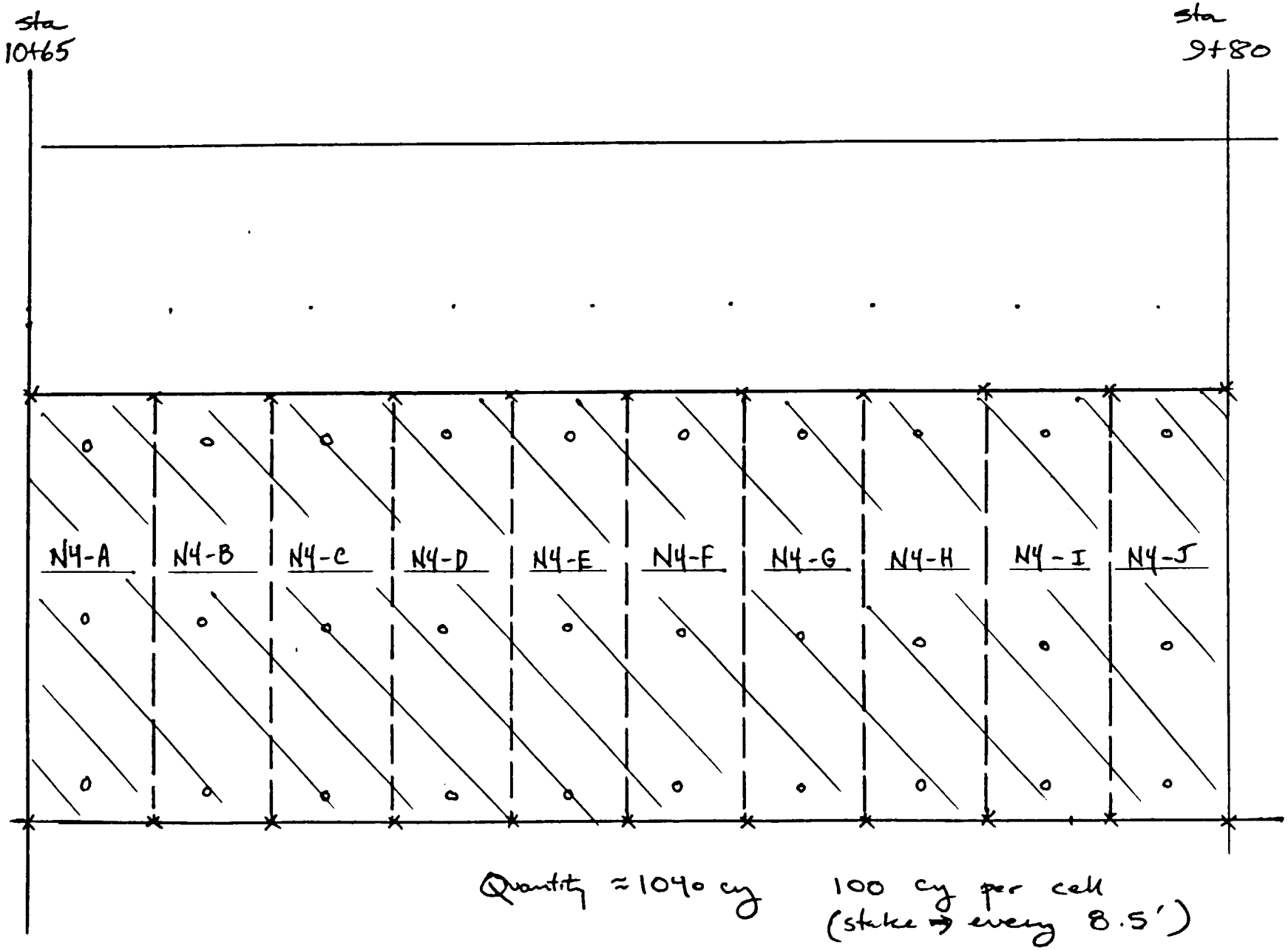


Quantity ≈ 1040 cy 100 cy per cell (stake → every 8.5')

REV. NO.	DESCRIPTION	DESIGN:	SCALE:
DATE		DRAWN: TSP	DATE: 10-5-90
Perland	STOCKPILE N-4	CHKD:	DWG.
		APRVD:	

Form 86

PCB RE Sampling of Stockpile N4



Quantity ≈ 1040 cy

100 cy per cell
(stake every 8.5')

REV. NO.	DESCRIPTION	DESIGN:	SCALE:
DATE		DRAWN:	DATE:
Perland		CHKD:	DWG.
		APRVD:	

Form 86

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-A

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90 - TCLP 10/05/90 - PCB

DATE OF RESULTS 10/05/90 - TCLP 10/08/90 - PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	19.8	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED YES ___ NO ___ NOT APPLICABLE
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]

DATE 10/8/90

RECEIVED BY [signature]

DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-B

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90 -TCLP, 10/05/90-PCB

DATE OF RESULTS 10/05/90 -TCLP, 10/08/90-PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	17.2	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED YES ___ NO ___
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

NOT APPLICABLE

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/8/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-C

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90 -TCLP , 10/05/90 - PCB

DATE OF RESULTS 10/05/90 -TCLP , 10/08/90 - PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	24.3	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED ~~YES~~ ___ NO ___
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

NOT APPLICABLE

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-D

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90 - TCLP, 10/05/90 - PCB

DATE OF RESULTS 10/05/90 - TCLP, 10/08/90 - PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	19.6	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED YES ___ NO ___ → NOT APPLICABLE
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/08/90

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DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-E

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90 - TCLP, 10/05/90 - PCB

DATE OF RESULTS 10/05/90 - TCLP, 10/08/90 - PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	30.2	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED YES ___ NO ___
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

Not Applicable

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-F

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90-TCLP, 10/05/90-PCB

DATE OF RESULTS 10/05/90-TCLP, 10/08/90-PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	27.4	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED ~~YES~~ ___ NO ___
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

Not Applicable

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

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DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-G

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90 - TCLP, 10/05/90 PCB

DATE OF RESULTS 10/05/90 - TCLP, 10/08/90 PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	17.5	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED YES ___ NO ___ → Not Applicable
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-H

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90 - TCLP, 10/05/90 - PCB

DATE OF RESULTS 10/05/90 - TCLP, 10/08/90 - PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	17.2	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED YES ___ NO ___
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

Not Applicable

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-I

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90 - TCLP, 10/05/90 - PCB

DATE OF RESULTS 10/05/90 - TCLP, 10/08/90 - PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	15.7	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED YES ___ NO ___
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

Not Applicable

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/08/90

RECEIVED BY [signature]
DATE 10/09/91

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N4-J

ESTIMATED QUANTITY 100 cy

DATE SAMPLED 10/02/90 - TCLP, 10/05/90 - PCB

DATE OF RESULTS 10/05/90 TCLP, 10/08/90 - PCB

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	18.6	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.72	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.23	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	<0.05	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.78	1.0	----	TREATMENT REQUIRED YES ___ NO ___
D008	EPTOX - LEAD (Pb)	6.4	5.0	----	

Not Applicable

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

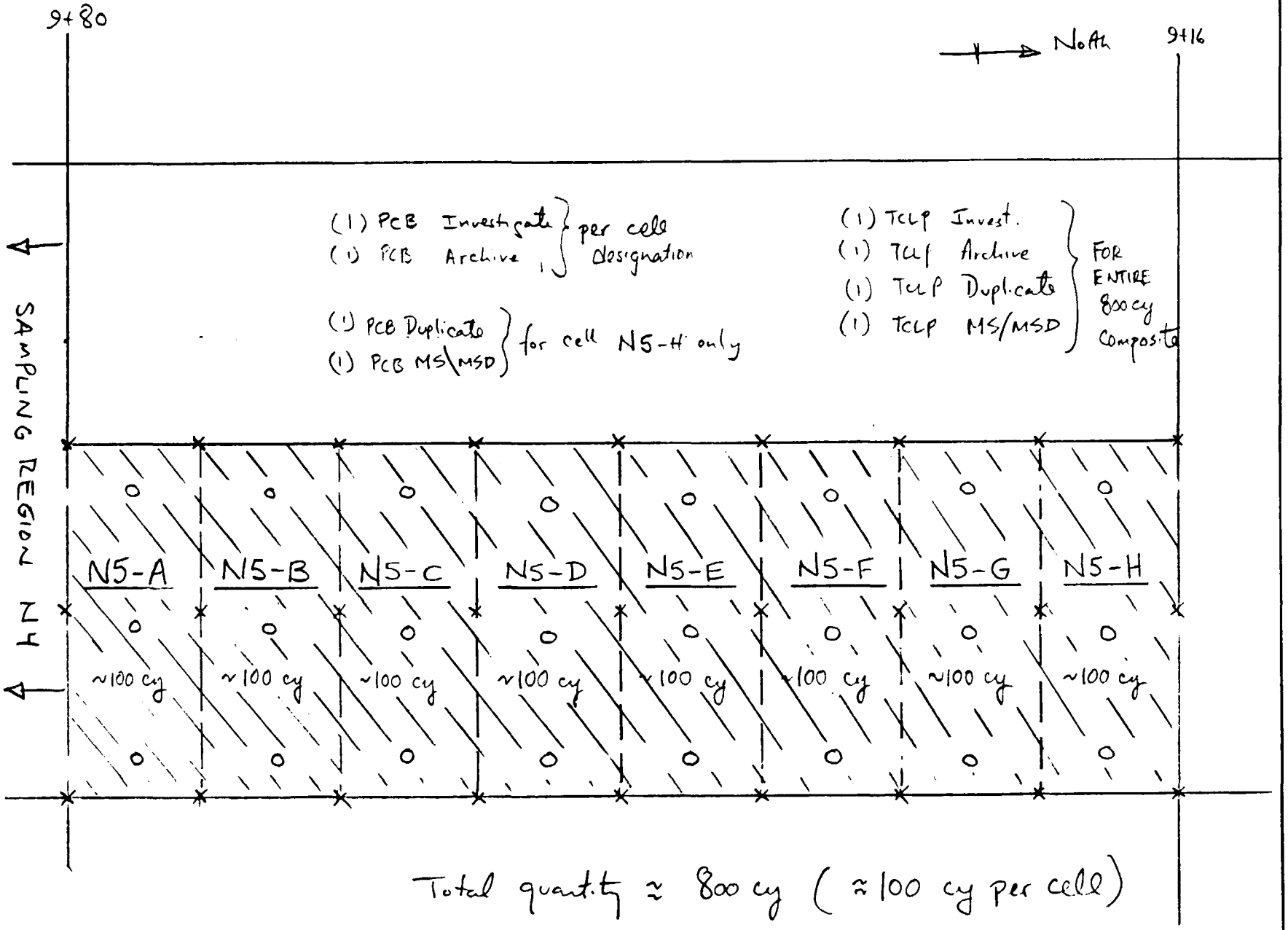
PREPARED BY [signature]

DATE 10/08/90

RECEIVED BY [signature]

DATE 10/09/90

STOCKPILE SAMPLING REGION N5 (Sampling Done 10-4-90)



Total quantity ≈ 800 cy (≈ 100 cy per cell)

REV. NO.	DESCRIPTION	DESIGN:	SCALE:
DATE	Stockpile Sampling Region N5	DRAWN: TSP	DATE: 10/4/90
Perland		CHKD:	DWG.
		APRVD:	

Form 86

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N5-A

ESTIMATED QUANTITY ~ 100 cy

DATE SAMPLED 10/04/90

DATE OF RESULTS 10/08/90 (except TCLP D032 10/09/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	57	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.59	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	0.3	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.46	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY Betty S. Pa...

DATE 10/09/90

RECEIVED BY [illegible]

DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION NS-B

ESTIMATED QUANTITY ~ 100 cy

DATE SAMPLED 10/04/90

DATE OF RESULTS 10/08/90 (except TCLP D032 10/09/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	57	50	----	TSCA YES ___ NO ___
D006	TCLP - CADMIUM (Cd)	0.59	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	0.3	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.46	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/09/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION NS-C

ESTIMATED QUANTITY ~ 100 cy

DATE SAMPLED 10/04/90

DATE OF RESULTS 10/08/90 (except TCLP D032 10/09/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	96	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.59	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	0.3	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.46	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/09/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION NS-D

ESTIMATED QUANTITY ~ 100 cy

DATE SAMPLED 10/04/90

DATE OF RESULTS 10/08/90 (except TCLP D032 10/09/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	61	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.59	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	0.3	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.46	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/09/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION NS-E

ESTIMATED QUANTITY ~ 100 cy

DATE SAMPLED 10/04/90

DATE OF RESULTS 10/08/90 (except TCLP D032 10/09/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	106	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.59	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	0.3	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.46	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/09/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION NS-F

ESTIMATED QUANTITY ~ 100 cy

DATE SAMPLED 10/04/90

DATE OF RESULTS 10/08/90 (except TCLP D032 10/09/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	64	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.59	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	0.3	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.46	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/09/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION NS-G

ESTIMATED QUANTITY ~ 100 cy

DATE SAMPLED 10/04/90

DATE OF RESULTS 10/08/90 (except TCLP D032 10/09/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	66	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.59	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	0.3	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.46	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/09/90

RECEIVED BY [signature]
DATE 10/09/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N5-H

ESTIMATED QUANTITY ~ 100 cy

DATE SAMPLED 10/04/90

DATE OF RESULTS 10/08/90 (except TCLP D032 10/09/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	67	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.59	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	0.3	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	0.46	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.055	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.71	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.9	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY Betty S. Pa...
DATE 10/09/90

RECEIVED BY Stephen Dunaway
DATE 10/09/90

N6N

STOCKPILE SAMPLING REGION N6N

TCLP Cd - 0.12 Pb - <0.2

EP TOX Cd. 0.38 Pb 0.3

All organics lower than limit

GAMPLING DONE

NORTH →

STA 7+45

STA 6+75

(1) PCB INVESTIGATIVE
(1) PCB ARCHIVE
} PER CELL DESIGNATION

(1) PCB DUPLICATE
(1) PCB MS/MSD
} FOR CELL N6N-F

(1) TCLP INVESTIGATIVE
(1) TCLP ARCHIVE
(1) TCLP DUPLICATE
(1) TCLP MS/MSD
} FOR ENTIRE 653.3 C.YD. COMPOSITE

NON-HAZ TO CID

N6-S STOCKPILE 80 FT SOUTH

STOCKPILE REGION N7

EMPTY

	N6N-A	N6N-B	N6N-C	N6N-D	N6N-E	N6N-F	N6N-G
	≈93.3 CU. YD.	≈93.3 CU. YD	→			←	≈93.3 CU. YD
PCB →	15 ppm	14 ppm	11 ppm	10 ppm	34 ppm	31 ppm	88 ppm

≈ TOTAL 653.3 CU.YD. IN REGION

≈ 93.3 CU.YD PER CELL

REV. NO.	
DATE	
DESCRIPTION	STOCKPILE SAMPLING REGION N6N
DESIGN:	
DRAWN: JLD	
CHKD:	
APRVD:	
SCALE:	
DATE: 10/6/90	
DWG.	

Perland

Form 86

STOCKPILE SAMPLING REGION N6N (SAMPLING DONE)

NORTH →

SW 7+45

SW 6+75

(1) PCB INVESTIGATIVE
(1) PCB ARCHIVE
} PER CELL DESIGNATION

(1) TCLP INVESTIGATIVE
(1) TCLP ARCHIVE
(1) TCLP DUPLICATE
(1) TCLP MS/MSD
} FOR ENTIRE 653.3 C.YD. COMPOSITE

(1) PCB DUPLICATE
(1) PCB MS/MSD
} FOR CELL N6N-F

STOCKPILE REGION N7

N6N-A	N6N-B	N6N-C	N6N-D	N6N-E	N6N-F	N6N-G
≈93.3 CU. YD.	≈93.3 CU. YD	→				≈93.3 CU YD

≈ TOTAL 653.3 CU.YD. IN REGION

≈ 93.3 CU.YD PER CELL

Perland	REV. NO.	DESCRIPTION	STOCKPILE SAMPLING REGION N6N
	DATE		
	DESIGN:	DRAWN: JLD	CHKD:
	SCALE:	DATE: 10/6/90	APRVD:
		DWG.	

Form 86

STOCKPILE SAMPLING REGION N6S (SAMPLING DONE)

NORTH →

STA 6+16

(1) PCB INVESTIGATIVE
(1) PCB ARCHIVE
} PER CELL DESIGNATION

(1) PCB DUPLICATE
(1) PCB MS/MSD
} FOR CELL N6S-I

(1) TCLP INESTIGATIVE
(1) TCLP ARCHIVE
(1) TCLP DUPLICATE
(1) TCLP MS/MSD
} FOR ENTIRE 833.3 C.Y. COMPOSITE

← N6S REGION →

N6S-A	N6S-B	N6S-C	N6S-D	N6S-E	N6S-F	N6S-G	N6S-H	N6S-I
≈92.5 C.Y	≈92.5 C.Y	≈92.5 C.Y	≈92.5 C.Y					92.5 C.Y

STA 8+26

≈ 92.5 CY PER CELL
≈ 833.3 CY IN REGION (TOTAL)

REV. NO.	
DATE	
DESCRIPTION	STOCKPILE SAMPLING REGION N6S
DESIGN:	
DRAWN: JLD	
CHKD:	
APRVD:	
SCALE:	
DATE: 10/6/90	
DWG.	

Perland

Form 86

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-North-A

ESTIMATED QUANTITY ≈ 93.3 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	15	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.12	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	< 0.2	5.0	___	
D018	TCLP - BENZENE	< 0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.11	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.38	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-North-B

ESTIMATED QUANTITY ≈ 93.3 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	14	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.12	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.11	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.38	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-North-C

ESTIMATED QUANTITY ≈ 93.3 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	11	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.12	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.11	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.38	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-North-D

ESTIMATED QUANTITY ≈ 93.3 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	10	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.12	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.11	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.38	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-North-E

ESTIMATED QUANTITY ≈ 93.3 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	34	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.12	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.11	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.38	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-North-F

ESTIMATED QUANTITY ≈ 93.3 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	31	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.12	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.11	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.38	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/11/90

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-North-G

ESTIMATED QUANTITY ≈ 93.3 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	88	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.12	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.11	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.38	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/11/90

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DATE 10/13/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-South - A

ESTIMATED QUANTITY ≈ 92.5 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	8	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.0	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.17	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/11/90

RECEIVED BY [signature]
DATE 10/13/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-South - B

ESTIMATED QUANTITY ≈ 92.5 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	33	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.0	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.17	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/11/90

RECEIVED BY [signature]
DATE 10/13/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-South-C

ESTIMATED QUANTITY ≈ 92.5 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	11	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.0	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.17	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/11/90

RECEIVED BY [signature]
DATE ___/___/___

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-South-D

ESTIMATED QUANTITY ≈ 92.5 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	18	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.0	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.17	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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DATE 10/11/90

RECEIVED BY [signature]

DATE 10/13/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-South - E

ESTIMATED QUANTITY ≈92.5 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	44	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.0	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.17	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___	
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___	
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___	
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓ NO ___	* Will go out as TSCA despite <50 PCB due to stricture of landfill..
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___	
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___	
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___	

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DATE 10/11/90

RECEIVED BY [signature]
DATE 10/12/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-South-F

ESTIMATED QUANTITY ≈92.5 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	2	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.0	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.17	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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RECEIVED BY [signature]

DATE 10/13/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-South-G

ESTIMATED QUANTITY ≈ 92.5 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	13	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.0	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.17	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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DATE 10/11/90

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DATE 10/13/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-South - H

ESTIMATED QUANTITY ≈ 92.5 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	30	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.0	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.17	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/11/90

RECEIVED BY [signature]

DATE 10/13/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N6-South - I

ESTIMATED QUANTITY ≈ 92.5 cy

DATE SAMPLED 10/06/90

DATE OF RESULTS 10/11/90 (except for D032 10/12/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	38	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.0	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.17	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.3	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ✓	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

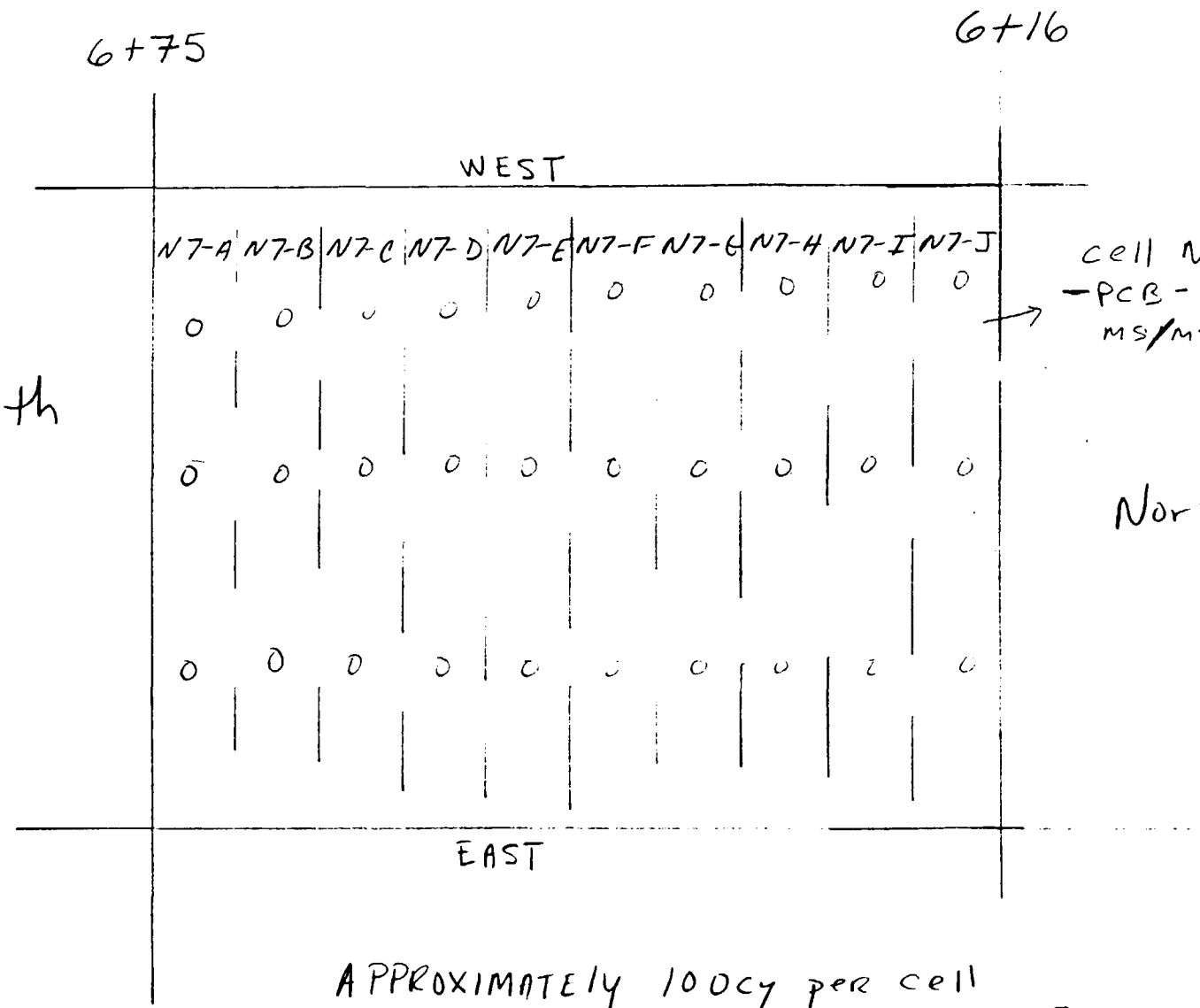
PREPARED BY [signature]
DATE 10/11/90

RECEIVED BY [signature]
DATE 10/13/90

N7

59' long × 35' wide × 13' high 994 cy ≈ 100 cy

Stockpile Sampling Region N7



cell NJ-7 has
- PCB - INV, ARCH, DUPT
MS/MSD

APPROXIMATELY 100 cy per cell
1 PCB sample per 100 cy → FROM 3 composites/cell
1 TCLP sample / 1,000 cy

REV. NO.	
DATE	
DESCRIPTION	Stockpile Sampling Region N7
DESIGN:	
DRAWN:	
CHKD:	
APRVD:	
SCALE:	
DATE:	
DWG.	

Perland

Form 86

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7-A

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	9	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓ NO ___

PREPARED BY [signature]
DATE 10/10/90

RECEIVED BY Stephen Dunaway
DATE 10/12/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7-B

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	6	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/10/90

RECEIVED BY Stephen Dunaway
DATE 10/12/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7-C

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	10	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/10/90

RECEIVED BY [signature]
DATE 10/12/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7-D

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	4	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/10/90

RECEIVED BY [signature]
DATE 10/12/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7-E

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	11	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/10/90

RECEIVED BY [signature]
DATE 10/12/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7-F

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	9	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/10/90

RECEIVED BY [signature]
DATE ___/___/___

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7 - G

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	21	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/10/90

RECEIVED BY [signature]
DATE 10/12/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7-H

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	9	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]

DATE 10/10/90

RECEIVED BY [signature]

DATE 10/12/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7 - I

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	48	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/10/90

RECEIVED BY [signature]
DATE 10/12/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N7 - J

ESTIMATED QUANTITY ≈ 100 cy

DATE SAMPLED 10/05/90

DATE OF RESULTS 10/09/90 (except D032 - 10/10/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	35	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	1.09	1.0	✓	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	6.8	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.4	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.23	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.94	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	7.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

PREPARED BY [signature]
DATE 10/10/90

RECEIVED BY [signature]
DATE 10/12/90

STOCKPILE REGION N8 - SOUTH

NORTH →

← NON-HAZ To Cid

(approx West limit of creek)

STOCKPILE REGION N7

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
PCB = 50 ppm	PCB = 74 ppm	PCB = 75 ppm	PCB = 79 ppm	PCB = 12 ppm	PCB = 24 ppm	PCB = 30 ppm	PCB = 49 ppm	PCB = 48 ppm	PCB = 49 ppm	PCB = 37 ppm	PCB = 143 ppm	PCB = 50 ppm	PCB = 171 ppm	PCB = 135 ppm

STOCKPILE REGION N8-NORTH

(approx east limit of creek)

TCLP Pb = 2.3 ppm
TCLP Cd = 0.80 ppm
EPTOX Pb = 4.2 ppm
EPTOX Cd = 0.45 ppm

* All organics below criteria limits.

TCLP Pb = 4.3 ppm
TCLP Cd = 0.79 ppm
EPTOX Pb = 4.1 ppm
EPTOX Cd = 0.52 ppm

* All organics below criteria limits.

TCLP Pb = 5.3 ppm
TCLP Cd = 0.67 ppm
EPTOX Pb = 5.2 ppm
EPTOX Cd = 0.56 ppm

* All organics below criteria limits.

→ each cell (A-O) ≈ 90 cy ea.

cc. CWM/ENRAC
JOE GRANA - CERRO

Form 86

Perland

REV. NO.	DATE	DESCRIPTION	DESIGN: —	SCALE: NTS
		Stockpile Region N8-South (A-O) Sampling results. Dead Creek CS-A. Cerro Copper Sauget, Illinois	DRAWN: TSP	DATE: 10/19/90
			CHKD: —	DWG. —
			APRVD: —	

STOCKPILE REGION N8 - SOUTH

NORTH →

(approx West limit of creek)

STOCKPILE REGION N7

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
PCB = 50 ppm	PCB = 74 ppm	PCB = 75 ppm	PCB = 79 ppm	PCB = 12 ppm	PCB = 24 ppm	PCB = 30 ppm	PCB = 49 ppm	PCB = 48 ppm	PCB = 49 ppm	PCB = 37 ppm	PCB = 143 ppm	PCB = 50 ppm	PCB = 171 ppm	PCB = 135 ppm

STOCKPILE REGION N8-NORTH

(approx east limit of creek)

TCLP Pb = 2.3 ppm
TCLP Cd = 0.80 ppm
EPTOX Pb = 4.2 ppm
EPTOX Cd = 0.45 ppm

* All organics below criteria limits.

TCLP Pb = 4.3 ppm
TCLP Cd = 0.79 ppm
EPTOX Pb = 4.1 ppm
EPTOX Cd = 0.52 ppm

* All organics below criteria limits.

TCLP Pb = 5.3 ppm
TCLP Cd = 0.67 ppm
EPTOX Pb = 5.2 ppm
EPTOX Cd = 0.56 ppm

* All organics below criteria limits.

→ each cell (A - O) ≈ 90 cy ea.

cc. CWM / ENRAC
JOE GRANA - CERRO

REV. NO.	
DATE	
DESCRIPTION	Stockpile Region N8-South (A - O) Sampling results. Dead Creek CS-A. Cerro Copper Sauget, Illinois
DESIGN:	—
DRAWN:	TSP
CHKD:	—
APRVD:	—
SCALE:	NTS
DATE:	10/19/90
DWG.	—

Perland

Form 86

Stockpile Region N8 - South

NORTH →

STA 6+15

STA 4+70 (approx West limit of creek)

	TSCA NO-TREAT	NON-RCRA NON-HAZ	PROBABLY TSCA-NOTREAT	RCRA TREAT	RCRA/TSCA TREAT
	$272.30	CID $130.90 LC $157.90	$272.30	$301.02	$301.02

Stockpile Region N7

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
PCB = 50 ppm	PCB = 74 ppm	PCB = 75 ppm	PCB = 79 ppm	PCB = 12 ppm	PCB = 24 ppm	PCB = 30 ppm	PCB = 49 ppm	PCB = 48 ppm	PCB = 49 ppm	PCB = 37 ppm	PCB = 143 ppm	PCB = 50 ppm	PCB = 171 ppm	PCB = 135 ppm

Stockpile Region N8-North

(approx east limit of creek)

TCLP Pb = 2.3 ppm	TCLP Pb = 4.3 ppm	TCLP Pb = 5.3 ppm
TCLP Cd = 0.80 ppm	TCLP Cd = 0.79 ppm	TCLP Cd = 0.67 ppm
EPTOX Pb = 4.2 ppm	EPTOX Pb = 4.1 ppm	EPTOX Pb = 5.2 ppm
EPTOX Cd = 0.45 ppm	EPTOX Cd = 0.52 ppm	EPTOX Cd = 0.56 ppm
* All organics below criteria limits.	* All organics below criteria limits.	* All organics below criteria limits.

→ each cell (A-O) ≈ 90 cy ea.

REV. NO.	
DATE	
DESCRIPTION	Stockpile Region N8-South (A-O) Sampling results. Dead Creek CS-A. Cerro Copper Sauget, Illinois
DESIGN: —	
DRAWN: TSP	
CHKD: —	
APRVD: —	
SCALE: NTS	
DATE: 10/19/5	
DWG. —	

Perland

Form 86

Sampling For Stockpile Region
N8 - South

6+15 | 4+70

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PCB (ppm) →	50	74	75	79	12	24	30	49							
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

$150'_{Long} \times 35'_{wide} \times 7'_{High} = \approx 1360$ cy ≈ 90.67 cy/cell

1 PCB ← INVESTIGATE ARCHIVE per lettered cell FOR 30 sample BOTTLES

1 PCB Duplicate MS/MSD IN cell (E) 2 samples

1 PCB Duplicate IN cell (J) 1 sample

TCLP samples FOR (A-E) (includes INVEST, ARCH, DUP, MS/MSD) 4 samples

TCLP sample FOR (F-J) (INV, ARCH 2 Samples

TCLP sample FOR (K-O) (INVEST, ARCH) 2 samples

41 samples

REV. NO.	DESCRIPTION	DESIGN:	SCALE:
DATE	Sampling Region N8 - South	DRAWN:	DATE:
	Sampled 10-15-90 between (1138-1221)	CHKD:	DWG.
Perland		APRVD:	

Form 86

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South A

ESTIMATED QUANTITY ~90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except for D032 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	50	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.8	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	2.3	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.1	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.45	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/19/90

RECEIVED BY [signature]
DATE 10/22/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South B

ESTIMATED QUANTITY ~90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except for D032 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	74	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.8	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	2.3	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.1	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.45	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/19/90

RECEIVED BY [signature]
DATE 10/22/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South-C

ESTIMATED QUANTITY ~90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except for D032 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	75	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.8	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	2.3	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.1	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.45	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]

DATE 10/19/90

RECEIVED BY [signature]

DATE 10/22/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South-D

ESTIMATED QUANTITY ~90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except for D032 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	79	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.8	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	2.3	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.1	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.45	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/19/90

RECEIVED BY [signature]
DATE 10/22/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South-E

ESTIMATED QUANTITY ~90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except for D032 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	12	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.8	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	2.3	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.1	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.45	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South-F

ESTIMATED QUANTITY ≈90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	24	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.79	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	4.3	5.0	___	
D018	TCLP - BENZENE	< 0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	< 0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South-G

ESTIMATED QUANTITY ≈90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	30	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.79	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	4.3	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ✓ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South - H

ESTIMATED QUANTITY ≈90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	49	50	----	TSCA YES ___ NO ___
D006	TCLP - CADMIUM (Cd)	0.79	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	4.3	5.0	___	
D018	TCLP - BENZENE	< 0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	< 0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South - I

ESTIMATED QUANTITY ≈90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	48	50	----	TSCA YES ___ NO ___
D006	TCLP - CADMIUM (Cd)	0.79	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	4.3	5.0	___	
D018	TCLP - BENZENE	< 0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South - J

ESTIMATED QUANTITY ≈90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	49	50	----	TSCA YES ___ NO ___
D006	TCLP - CADMIUM (Cd)	0.79	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	4.3	5.0	___	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.35	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.52	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South - K

ESTIMATED QUANTITY ≈ 90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	37	50	----	TSCA YES ___ NO ✓
D006	TCLP - CADMIUM (Cd)	0.67	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	5.3	5.0	✓	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.42	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.56	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___

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DATE 10/22/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South - L

ESTIMATED QUANTITY ≈ 90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	143	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.67	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	5.3	5.0	✓	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.42	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.56	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/19/90

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DATE 10/22/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South - M

ESTIMATED QUANTITY ≈ 90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	50	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.67	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	5.3	5.0	✓	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.42	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.56	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/19/90

RECEIVED BY [signature]
DATE 10/22/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South-N

ESTIMATED QUANTITY ≈ 90.7 cy

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	171	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.67	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	5.3	5.0	✓	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.42	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.56	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/19/90

RECEIVED BY [signature]

DATE 10/22/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-South

ESTIMATED QUANTITY ≈ 90.7 cy - O

DATE SAMPLED 10/15/90

DATE OF RESULTS 10/18/90 (except D032 - 10/19/90)

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	135	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.67	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	5.3	5.0	✓	
D018	TCLP - BENZENE	<0.1	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.1	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.42	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.56	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/19/90

RECEIVED BY [signature]

DATE 10/22/90

N8 - North

4+70 | 3+10

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
PCB = 51 ppm	PCB = 135 ppm	PCB = 88 ppm	PCB = 75 ppm	PCB = 52 ppm	PCB = 69 ppm	PCB = 65 ppm	PCB = 141 ppm	PCB = 106 ppm	PCB = 166 ppm	PCB = 122 ppm	PCB = 79 ppm	PCB = 107 ppm	PCB = 124 ppm	PCB = 92 ppm
52cy	52cy	52cy	52cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy

TCLP Pb = <0.2 ppm
TCLP Cd = 0.15 ppm
EPTOX Pb = 4.5 ppm
EPTOX Cd = 0.72 ppm

All ORGANICS BELOW LIMIT

TSCA - Notreat

TCLP Pb = 1.6 ppm
TCLP Cd = 0.45 ppm
EPTOX Pb = 3.1 ppm
EPTOX Cd = 0.63 ppm

All organics below limits.

TSCA - Notreat

TCLP Pb = 11.3 ppm
TCLP Cd = 0.7 ppm
EPTOX Pd = 5.7 ppm
EPTOX Cd = 0.67 ppm

All organics below limits

RCRA/TSCA TREAT

SCALE:	
DATE:	10/16/90
DWG.	
DESIGN:	
DRAWN:	TSP
CHKD:	
APRVD:	
DESCRIPTION	Sampling Stockpile Region N8-N Cerro Copper - Dead Creek CS-A
REV. NO.	
DATE	

Perland

Form 86

N8-North

4+70 3+10

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
PCB = 51 ppm	PCB = 135 ppm	PCB = 88 ppm	PCB = 75 ppm	PCB = 52 ppm	PCB = 69 ppm	PCB = 65 ppm	PCB = 141 ppm	PCB = 106 ppm	PCB = 166 ppm	PCB = 122 ppm	PCB = 79 ppm	PCB = 107 ppm	PCB = 124 ppm	PCB = 92 ppm
52cy	52cy	52cy	52cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy	91cy

TCLP Pb = <0.2 ppm
TCLP Cd = 0.15 ppm
EPTOX Pb = 4.5 ppm
EPTOX Cd = 0.72 ppm

All ORGANICS BELOW LIMIT

TSCA - Notreat

TCLP Pb = 1.6 ppm
TCLP Cd = 0.45 ppm
EPTOX Pb = 3.1 ppm
EPTOX Cd = 0.63 ppm

All organics below limits.

TSCA - Notreat

TCLP Pb = 11.3 ppm
TCLP Cd = 0.7 ppm
EPTOX Pd = 5.7 ppm
EPTOX Cd = 0.67 ppm

All organics below limits

RCRA/TSCA TREAT

SCALE:	
DATE:	10/16/90
DWG.	
DESIGN:	
DRAWN:	TSP
CHKD:	
APRVD:	

DESCRIPTION

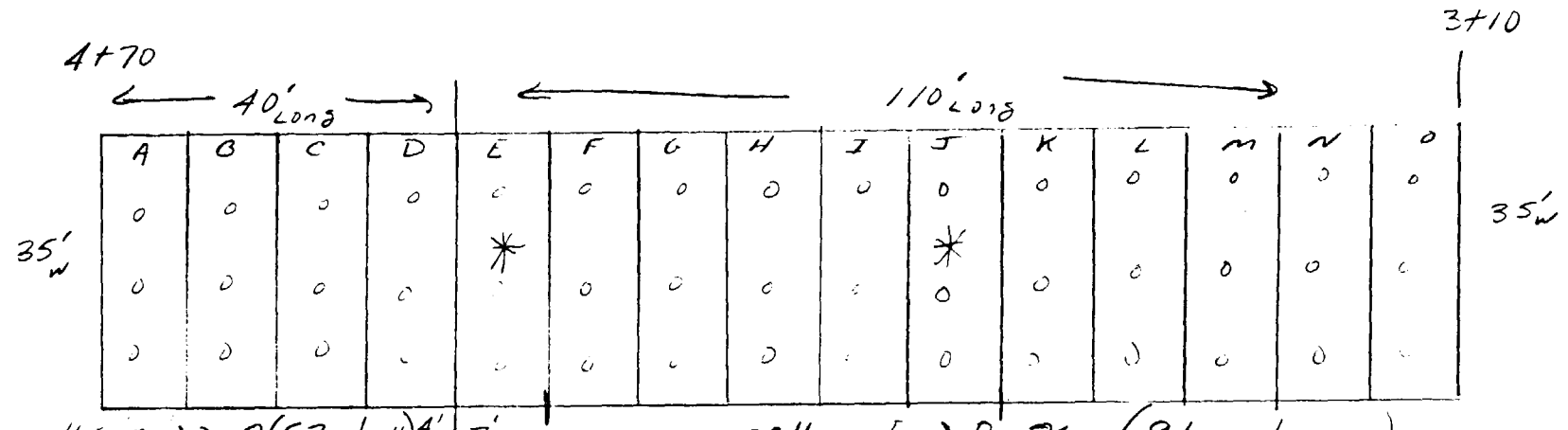
Sampling Stockpile Region N8-N
Cerro Copper - Dead Creek CS-A

REV. NO.
DATE

Perland

Form 86

Section N-8 North



cells A → D ≈ (52 cy/cell) 4' high 7' high

cells E → O ≈ (91 cy/cell)

40' L × 35' W × 4' high = 207 cy

110' L × 35' W × 7' h ≈ 990 cy

TOTAL (1205 cy)

Sampling For

	PCB'S	TCLP
Investigate	15 samples	3
Archive	15 samples	3
Duplicate	2	2
MS/MSD	2	2
	34	10

1 PCB (INV, ARCH) per cell
1 PCB (DUP, MS/MSD) in cells E + J (*) 44 samples
1 TCLP (INV, ARCH, DUP, MS/MSD) in cells (A-E), (F-J)
1 TCLP (INV, ARCH) in cells (K-O)

Perland

REV. NO.	DESCRIPTION	DESIGN:	DRAWN:	CHKD:	APRVD:
DATE					

SCALE:	DATE:	DWG.

Form 86

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-North (A)

ESTIMATED QUANTITY ≈ 52 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	51	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.15	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	< 0.2	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.4	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.72	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/16/90

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-North (B)

ESTIMATED QUANTITY ≈ 52 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	135	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.15	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	< 0.2	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.4	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.72	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-North (C)

ESTIMATED QUANTITY ≈ 52 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	88	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.15	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	< 0.2	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.4	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.72	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-North (D)

ESTIMATED QUANTITY ≈ 52 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	75	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.15	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	< 0.2	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.4	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.72	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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DATE 10/16/90

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WASTE PILE CHARACTERIZATION
PERLMAN ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-North (E)

ESTIMATED QUANTITY ≈ 91 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	52	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.15	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.5	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.4	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.72	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	4.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8 North (F)

ESTIMATED QUANTITY ≈ 91 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	69	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.45	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	1.6	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.6	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.44	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.63	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	3.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

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DATE 10/16/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8 North (G)

ESTIMATED QUANTITY ≈ 91 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	65	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.45	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	1.6	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.6	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.44	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.63	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	3.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/16/90

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DATE 10/16/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-B
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8 North (H)

ESTIMATED QUANTITY ≈ 91 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	141	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.45	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	1.6	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.6	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.44	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.63	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	3.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/16/90

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DATE 10/16/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8 North (I)

ESTIMATED QUANTITY ≈ 91 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	106	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.45	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	1.6	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.6	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.44	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.63	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	3.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/16/90

RECEIVED BY [signature]
DATE 10/16/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8 North (J)

ESTIMATED QUANTITY ≈ 91 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	166	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.45	1.0	___	RCRA YES ___ NO ✓
D008	TCLP - LEAD (Pb)	1.6	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.6	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.44	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.63	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	3.1	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ✓ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/16/90

RECEIVED BY [signature]
DATE 10/16/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-North (K)

ESTIMATED QUANTITY ≈91 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	122	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.70	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.48	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.7	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/16/90

RECEIVED BY [signature]
DATE 10/16/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-North (L)

ESTIMATED QUANTITY ≈91cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	79	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.70	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.48	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.7	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/16/90

RECEIVED BY [signature]
DATE 10/16/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-North (M)

ESTIMATED QUANTITY ≈91 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	107	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.70	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.48	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.7	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/16/90

RECEIVED BY [signature]
DATE 10/16/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-NORTH (N)

ESTIMATED QUANTITY ≈91cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	124	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.70	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.48	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.7	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/16/90

RECEIVED BY [signature]
DATE 10/16/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N8-North (O)

ESTIMATED QUANTITY ≈91 cy

DATE SAMPLED 10/12/90

DATE OF RESULTS 10/16/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	92	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.70	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	11.3	5.0	✓	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.48	0.5	___	
D006	EPTOX - CADMIUM (Cd)	0.67	1.0	----	TREATMENT REQUIRED YES ✓ NO ___
D008	EPTOX - LEAD (Pb)	5.7	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ✓	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/16/90

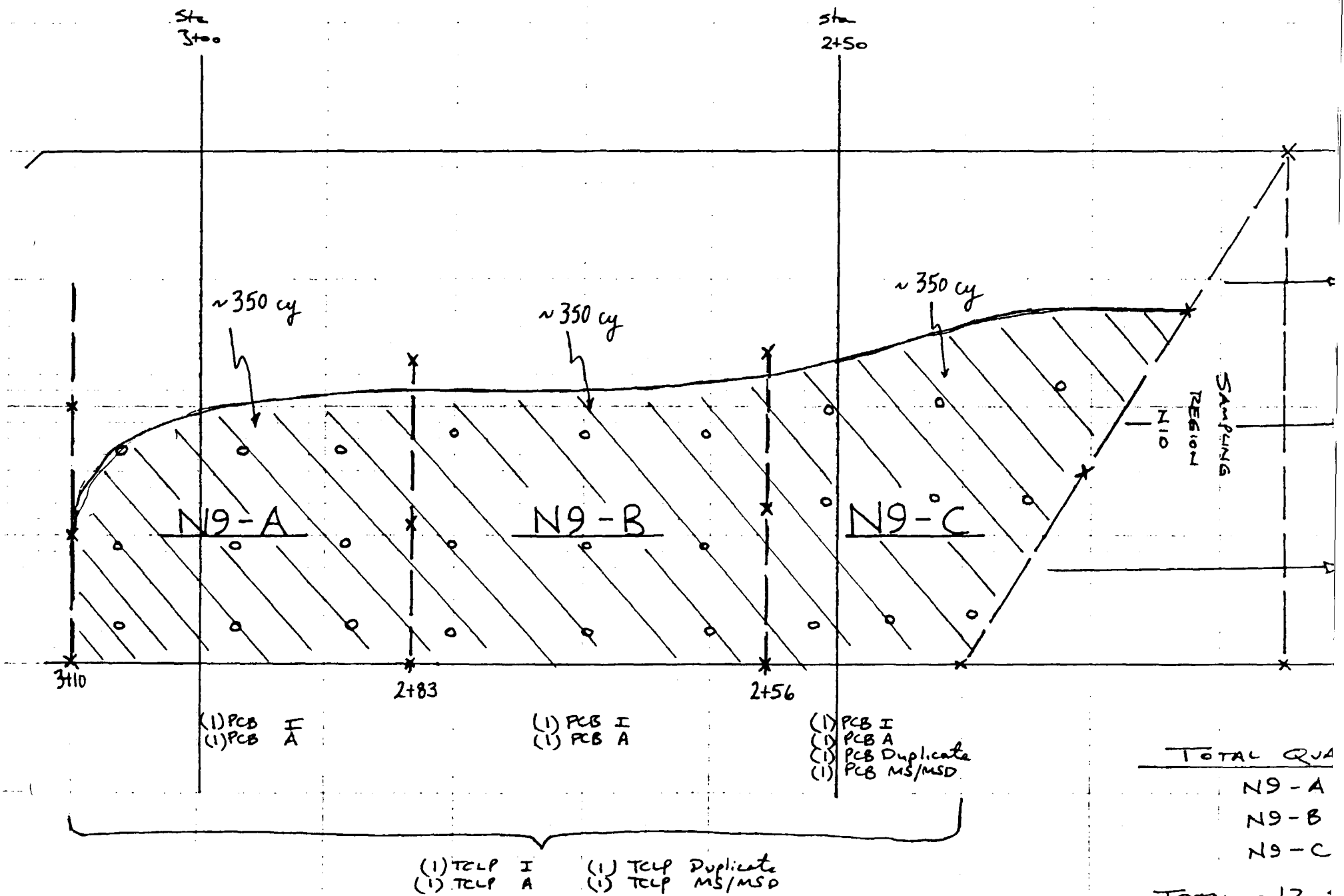
RECEIVED BY [signature]
DATE 10/16/90

From the desk of . . .

JOE GRANA

N8- North

SAMPLING REGION STOCKPILE N9



TOTAL QUA

N9-A

N9-B

N9-C

TOTAL = 12

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N9-A

ESTIMATED QUANTITY 350 cy

DATE SAMPLED 10/3/90

DATE OF RESULTS 10/5/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	215	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.39	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	.09	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	1.1	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.33	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/06/90

RECEIVED BY [signature]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N9-B

ESTIMATED QUANTITY 350 cy

DATE SAMPLED 10/3/90

DATE OF RESULTS 10/5/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	202	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.39	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	.09	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	1.1	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.33	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___	NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY Kevin M. Gam
DATE 10/6/90

RECEIVED BY [illegible]
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N9-C

ESTIMATED QUANTITY 350 cy

DATE SAMPLED 10/3/90

DATE OF RESULTS 10/5/90

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	393	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.39	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	3.5	5.0	___	
D018	TCLP - BENZENE	.09	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.8	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	1.1	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.33	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.4	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14037	RCRA WASTE - LAKE CHARLES, LA	NO-TREAT	YES ___ NO ___
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY Kevin J. McGann
DATE 10/6/90

RECEIVED BY Stephen Dunaway
DATE 10/06/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
"'IGET, ILLINOIS

WASTE PILE DESIGNATION N10-NW (W)

ESTIMATED QUANTITY 250 cy

DATE SAMPLED 09 / 25 / 90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	138	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.5	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	2.9	5.0	___	
D018	TCLP - BENZENE	0.06	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.7	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	1.9	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.17	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	<0.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

ARED BY [signature]
DATE 10 / 2 / 90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
CAHOKIA, ILLINOIS

WASTE PILE DESIGNATION N10-NW (E)

ESTIMATED QUANTITY 250 cy

DATE SAMPLED 09/25/90

DATE OF RESULTS __/__/__

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	36	50	----	TSCA YES ✓ NO ✓
D006	TCLP - CADMIUM (Cd)	0.5	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	2.9	5.0	___	
D018	TCLP - BENZENE	0.06	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.7	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	1.9	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.17	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	<0.2	5.0	----	

* Perland classific pile as TSCA since the natur of the pile in reference to oth TSCA piles wou not allow you to segregate it

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
"IGET, ILLINOIS

WASTE PILE DESIGNATION N10-NE (W)

ESTIMATED QUANTITY 250 cy

DATE SAMPLED 09/25/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	320	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.5	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	2.9	5.0	___	
D018	TCLP - BENZENE	0.06	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.7	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	1.9	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.17	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	<0.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PARED BY [signature]

DATE 10/2/90

RECEIVED BY [signature]

DATE ___/___/___

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
CAUGET, ILLINOIS

WASTE PILE DESIGNATION N10-NE (E)

ESTIMATED QUANTITY 250 cy

DATE SAMPLED 09/25/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	70	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.5	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	2.9	5.0	___	
D018	TCLP - BENZENE	0.06	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.7	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	1.9	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.17	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	<0.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
"UGET, ILLINOIS

WASTE PILE DESIGNATION N10-[redacted]SW (W)

ESTIMATED QUANTITY 250 cy

DATE SAMPLED 09/25/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	135	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.37	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	0.074	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.9	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.056	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	2.6	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.33	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.5	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

'ARED BY [signature]

DATE 10/2/90

RECEIVED BY [signature]

DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
`\UGET, ILLINOIS

WASTE PILE DESIGNATION N10-SW (E)

ESTIMATED QUANTITY 250 cy

DATE SAMPLED 09/25/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	173	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.37	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	0.074	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.9	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.056	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	2.6	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.33	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.50	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

'PARED BY [signature]
DATE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N10 - SE(W)

ESTIMATED QUANTITY 250 cy

DATE SAMPLED 09/25/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	174	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.37	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	0.074	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.9	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	<0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.056	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	2.6	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.33	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.50	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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DATE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
'AUGET, ILLINOIS

WASTE PILE DESIGNATION N10-SE(E)

ESTIMATED QUANTITY 250 cy

DATE SAMPLED 09/25/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	125	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.37	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	1.4	5.0	___	
D018	TCLP - BENZENE	0.074	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	1.9	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	< 0.1	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.056	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	2.6	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.33	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	0.50	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

'PARED BY Lisa S. Ca...

...TE 10/2/90

RECEIVED BY Stephen Demaray

DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

ASTE PILE DESIGNATION N11-SW

ESTIMATED QUANTITY 550 cy

DATE SAMPLED 09/12/90

DATE OF RESULTS __/__/__

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	225	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.26	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	< 0.2	5.0	___	
D018	TCLP - BENZENE	< 0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	2.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLORO~~BENZENE~~ ethylene	0.11	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	1.2	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.09	1.0	----	TREATMENT REQUIRED YES ___ NO ✓
D008	EPTOX - LEAD (Pb)	< 0.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

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TE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N11-SE

ESTIMATED QUANTITY 550 cy

DATE SAMPLED 09/12/90

DATE OF RESULTS __/__/__

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	445	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.26	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	2.1	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	NO	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	0.11	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	1.2	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.09	1.0	----	TREATMENT REQUIRED YES ___ NO ___
D008	EPTOX - LEAD (Pb)	<0.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT		
K14040	TSCA WASTE - EMELLE, AL	---	YES ___	NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___	NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓	NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___	NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___	NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___	NO ___

PREPARED BY [signature]
DATE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

STE PILE DESIGNATION N11-NW

ESTIMATED QUANTITY 550 cy

DATE SAMPLED 09/12/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	236	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.21	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	2.3	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLOROETHYLENE	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.69	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.10	1.0	----	TREATMENT REQUIRED YES ___ NO ___
D008	EPTOX - LEAD (Pb)	<0.2	5.0	----	

** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

PREPARED BY [signature]
DATE 10/2/90

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DATE 10/02/90

WASTE PILE CHARACTERIZATION
PERLAND ENVIRONMENTAL TECHNOLOGIES, INC.
CERRO COPPER PRODUCTS - DEAD CREEK CS-A
SAUGET, ILLINOIS

WASTE PILE DESIGNATION N11-NE

ESTIMATED QUANTITY 550 cy

DATE SAMPLED 09/12/90

DATE OF RESULTS ___/___/___

WASTE CODE	PARAMETER	TEST RESULTS (IN PPM)	CRITERIA (IN PPM)	CODES LISTED ON MANIFEST?	RCRA/TSCA/ TREATMENT
----	PCB	322	50	----	TSCA YES ✓ NO ___
D006	TCLP - CADMIUM (Cd)	0.21	1.0	___	RCRA YES ✓ NO ___
D008	TCLP - LEAD (Pb)	<0.2	5.0	___	
D018	TCLP - BENZENE	<0.05	0.5	___	
D027	TCLP - 1,4-DICHLOROBENZENE	2.3	7.5	___	
D032	TCLP - HEXACHLOROBENZENE	ND	0.13	___	
D039	TCLP - TETRACHLORO~~BENZENE~~ ethylene	<0.05	0.7	___	
D040	TCLP - TRICHLOROETHYLENE	0.69	0.5	✓	
D006	EPTOX - CADMIUM (Cd)	0.10	1.0	----	TREATMENT REQUIRED YES ___ NO ___
D008	EPTOX - LEAD (Pb)	<0.2	5.0	----	

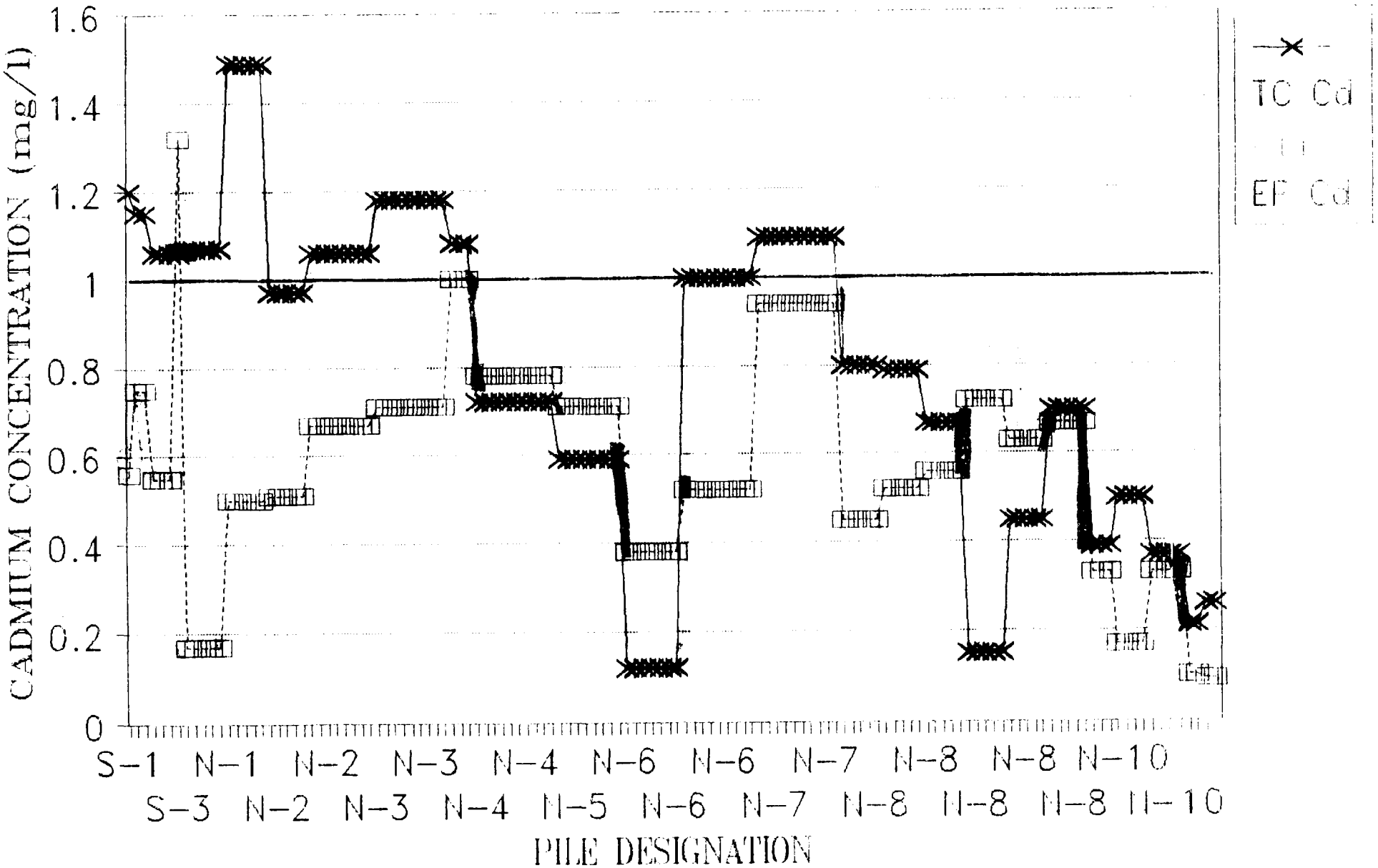
** WASTE PILE CHARACTERIZATION **

PROFILE NUMBER	WASTE TYPE/LANDFILL	TREAT/NO-TREAT	
K14040	TSCA WASTE - EMELLE, AL	---	YES ___ NO ___
K14041	NON-RCRA - LAKE CHARLES, LA/CID	---	YES ___ NO ___
K14042	RCRA/TSCA WASTE - EMELLE, AL	NO-TREAT	YES ✓ NO ___
K14043	RCRA/TSCA WASTE - EMELLE, AL	TREAT	YES ___ NO ___
K14044	RCRA WASTE - EMELLE, AL	NO-TREAT	YES ___ NO ___
K14045	RCRA WASTE - EMELLE, AL	TREAT	YES ___ NO ___

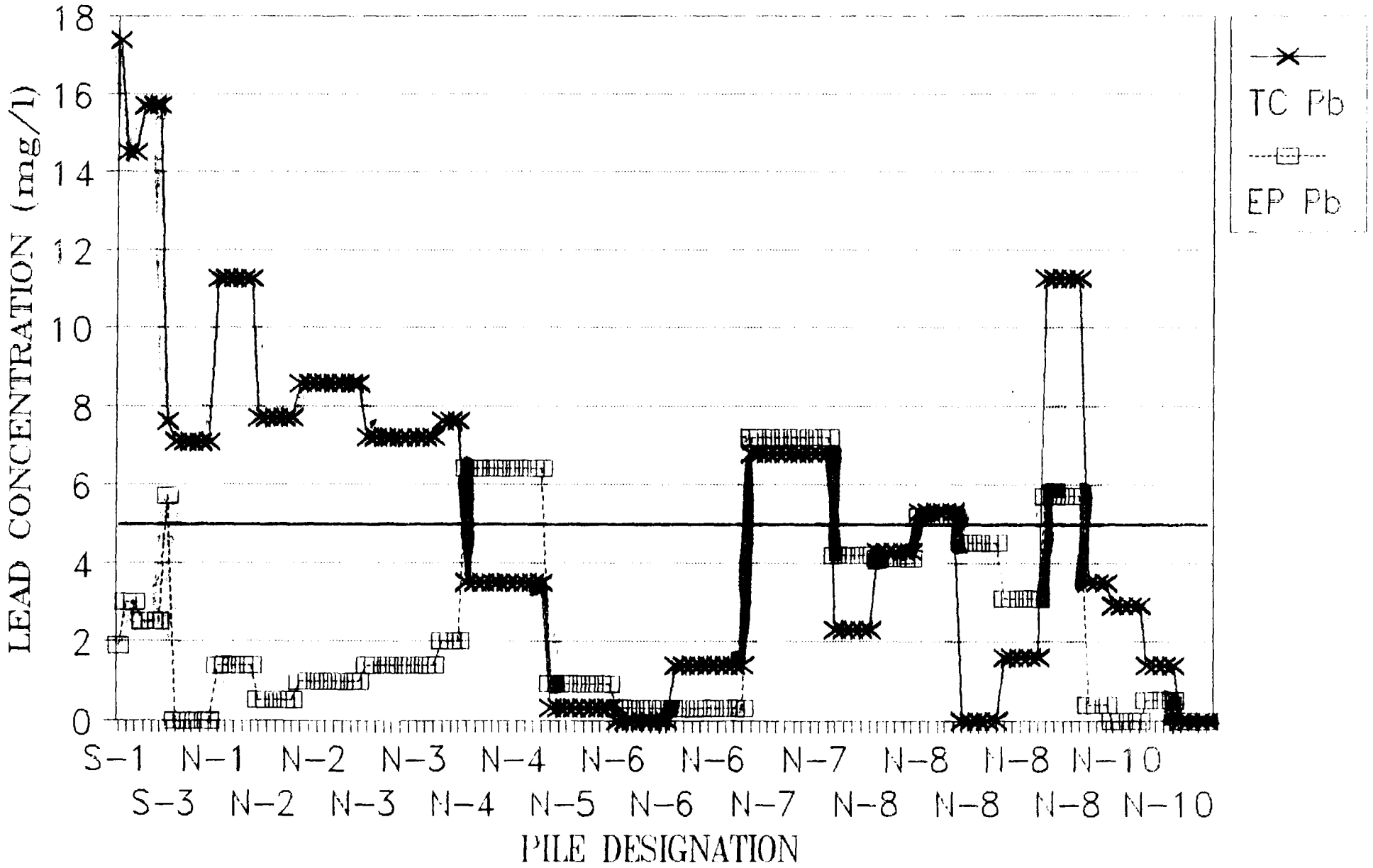
PREPARED BY [signature]
DATE 10/2/90

RECEIVED BY [signature]
DATE 10/02/90

DEAD CREAK SEDIMENT PILES
CADMIUM ANALYSIS



DEAD CREAK SEDIMENT PILES
LEAD ANALYSIS



TIER2FILE.NQ. FIELD SCREEN FILE ANALYSIS FIELD SCREEN FILE CLASSIFICATION DATE USED 10-OCT-91
LAST PRINTED 10-OCT-91

DT	FILE	TOLE			EE		TOLE ORGANICS					FILE	QUANTITY	TSCA/RCRA		TSCA/RCRA		RCRA	RCRA	
DATE	I.D.	RCB	Pb	Cd	Pb	Cd	D018	D027	D032	D033	D040	I.D.	UNITS	TSCA	NO TREAT	TREAT	NO TREAT	TREAT	NON-RCRA
10/04/90	S1-A	16	17.4	1.12	1.0	0.55						S1-A	500	-	X	-	X	-	-
10/04/90	S1-B	35	14.5	1.13	1.0	0.75						S1-B	500	-	X	-	X	-	-
10/04/90	S1-C	37	14.5	1.13	1.0	0.75						S1-C	500	-	X	-	X	-	-
10/04/90	S2-A	33	15.7	1.06	1.5	0.65						S2-A	300	-	X	-	X	-	-
10/04/90	S2-B	30	15.7	1.06	1.5	0.65						S2-B	300	-	X	-	X	-	-
10/04/90	S2-C	37	15.7	1.06	1.5	0.65						S2-C	300	-	X	-	X	-	-
10/04/90	S3	39	7.6	1.06	5.7	1.02						S3	300	-	-	-	-	X	-
09/11/90	N01-NE	47	7.1	1.07	<0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05	N01-NE	500	-	X	-	-	-	-
09/11/90	N01-NW	31	7.1	1.07	<0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05	N01-NW	100	-	-	-	X	-	-
	N01-NW(C)	37	7.1	1.07	<0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05	N01-NW(C)	100	-	-	-	X	-	-
	N01-NW(E)	35	7.1	1.07	<0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05	N01-NW(E)	100	-	-	-	X	-	-
	N01-NW(L)	66	7.1	1.07	0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05	N01-NW(L)	100	-	X	-	-	-	-
09/11/90	N01-SE	55	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05	N01-SE	500	-	X	-	-	-	-
09/11/90	N01-SW	31	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05	N01-SW	500	-	-	-	X	-	-
	N01-SW(D)	35	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05	N01-SW(D)	100	-	-	-	X	-	-
	N01-SW(E)	39	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05	N01-SW(E)	100	-	-	-	X	-	-
	N01-SW(F)	29	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05	N01-SW(F)	100	-	-	-	X	-	-
10/19/90	N02-NE	53	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05	N02-NE	600	-	X	-	-	-	-
10/19/90	N02-NW	33	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05	N02-NW	100	-	-	-	X	-	-
10/03/90	N02-NW(M)	46	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05	N02-NW(M)	100	-	X	-	-	-	-
10/03/90	N02-NW(N)	39	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05	N02-NW(N)	100	-	-	-	X	-	-
10/03/90	N02-NW(O)	47	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05	N02-NW(O)	100	-	X	-	-	-	-
09/19/90	N02-SE	45	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05	N02-SE	600	-	X	-	-	-	-
09/19/90	N02-SW	16	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05	N02-SW	600	-	-	-	X	-	-
10/[illegible]	N02-SW(A)	16	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05	N02-SW(A)	100	-	-	-	X	-	-
10/03/90	N02-SW(B)	13	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05	N02-SW(B)	100	-	-	-	X	-	-
10/03/90	N02-SW(C)	35	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05	N02-SW(C)	100	-	-	-	X	-	-
10/03/90	N02-SW(G)	36	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05	N02-SW(G)	100	-	-	-	X	-	-
10/03/90	N02-SW(H)	42	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05	N02-SW(H)	100	-	X	-	-	-	-
10/03/90	N02-SW(I)	37	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05	N02-SW(I)	100	-	-	-	X	-	-
09/28/90	N03-A	6	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05	N03-A	400	-	-	-	X	-	-
09/28/90	N03-A(A)	31	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05	N03-A(A)	100	-	-	-	X	-	-
09/28/90	N03-A(B)	33	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05	N03-A(B)	100	-	-	-	X	-	-
09/28/90	N03-A(C)	14	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05	N03-A(C)	100	-	-	-	X	-	-
09/28/90	N03-A(D)	34	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05	N03-A(D)	100	-	-	-	X	-	-
09/28/90	N03-B	13	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05	N03-B	300	-	-	-	X	-	-
09/28/90	N03-B(A)	31	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05	N03-B(A)	100	-	-	-	X	-	-
09/28/90	N03-B(B)	35	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05	N03-B(B)	100	-	-	-	X	-	-
09/28/90	N03-B(C)	32	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05	N03-B(C)	100	-	-	-	X	-	-
09/28/90	N03-C	38	7.6	1.08	2.0	1.00	<0.05	0.64	<0.10	<0.05	0.06	N03-C	300	-	-	-	-	X	-
09/28/90	N03-D	9	7.6	1.08	2.0	1.00	<0.05	0.64	<0.10	<0.05	0.06	N03-D	300	-	-	-	-	X	-
09/28/90	N03-E	19	7.6	1.08	2.0	1.00	<0.05	0.64	<0.10	<0.05	0.06	N03-E	300	-	-	-	-	X	-
10/02/90	N04-A	20	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-A	100	-	-	-	-	-	X
10/02/90	N04-B	17	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-B	100	-	-	-	-	-	X
10/02/90	N04-C	24	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-C	100	-	-	-	-	-	X
10/02/90	N04-D	20	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-D	100	-	-	-	-	-	X
10/02/90	N04-E	30	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-E	100	-	-	-	-	-	X
10/02/90	N04-F	27	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-F	100	-	-	-	-	-	X
10/02/90	N04-G	18	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-G	100	-	-	-	-	-	X
10/[illegible]	N04-H	17	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-H	100	-	-	-	-	-	X
10/[illegible]	N04-I	16	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-I	100	-	-	-	-	-	X
10/02/90	N04-J	19	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05	N04-J	100	-	-	-	-	-	X
10/04/90	N5-A	57	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06	N5-A	100	X	-	-	-	-	-
10/04/90	N5-B	57	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06	N5-B	100	X	-	-	-	-	-
10/04/90	N5-C	96	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06	N5-C	100	X	-	-	-	-	-

DATE	FILE I.D.	TCLP Pb	TCLP Cd	SE Pb	SE Cd	TCLP ORGANICS D018	D017	D032	D033	D040	FILE I.D.	QUANTITY TONS	TSCA-RCRA TOSCA	TSCA-RCRA NO TREAT	TSCA-RCRA TREAT	RCRA NO TREAT	RCRA TREAT	NON-RCRA
10/04/90	N5-D	91	0.13	0.59	0.9	0.71	0.05	0.46	<0.10	<0.05	0.06	N5-D	100	X	-	-	-	-	-
10/04/90	N5-E	106	0.13	0.59	0.9	0.71	0.05	0.46	0.10	0.05	0.06	N5-E	100	X	-	-	-	-	-
10/04/90	N5-F	94	0.13	0.59	0.9	0.71	0.05	0.46	0.10	0.05	0.06	N5-F	100	X	-	-	-	-	-
10/04/90	N5-G	86	0.13	0.59	0.9	0.71	0.05	0.46	0.10	0.05	0.06	N5-G	100	X	-	-	-	-	-
10/04/90	N5-H	67	0.13	0.59	0.9	0.71	0.05	0.46	0.10	0.05	0.06	N5-H	100	X	-	-	-	-	-
10/06/90	N6-N(A)	15	0.12	0.12	0.3	0.38	0.10	1.80	0.10	0.11	0.35	N6-N(A)	93.3	-	-	-	-	-	X
10/06/90	N6-N(B)	14	0.12	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35	N6-N(B)	93.3	-	-	-	-	-	X
10/06/90	N6-N(C)	11	<0.12	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35	N6-N(C)	93.3	-	-	-	-	-	X
10/06/90	N6-N(D)	10	<0.12	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35	N6-N(D)	93.3	-	-	-	-	-	X
10/06/90	N6-N(E)	34	<0.12	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35	N6-N(E)	93.3	-	-	-	-	-	X
10/06/90	N6-N(F)	31	<0.12	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35	N6-N(F)	93.3	-	-	-	-	-	X
10/06/90	N6-N(G)	38	<0.12	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35	N6-N(G)	93.3	X	-	-	-	-	-
10/06/90	N6-S(A)	8	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17	N6-S(A)	92.5	-	-	-	X	-	-
10/06/90	N6-S(B)	33	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17	N6-S(B)	92.5	-	-	-	X	-	-
10/06/90	N6-S(C)	11	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17	N6-S(C)	92.5	-	-	-	X	-	-
10/06/90	N6-S(D)	13	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17	N6-S(D)	92.5	-	-	-	X	-	-
10/06/90	N6-S(E)	44	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17	N6-S(E)	92.5	-	X	-	-	-	-
10/06/90	N6-S(F)	2	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17	N6-S(F)	92.5	-	-	-	X	-	-
10/06/90	N6-S(G)	13	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17	N6-S(G)	92.5	-	-	-	X	-	-
10/06/90	N6-S(H)	30	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17	N6-S(H)	92.5	-	-	-	X	-	-
10/06/90	N6-S(I)	38	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17	N6-S(I)	92.5	-	-	-	X	-	-
10/05/90	N7-A	9	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23	N7-A	100	-	-	-	-	X	-
10/05/90	N7-B	6	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23	N7-B	100	-	-	-	-	X	-
10/05/90	N7-C	10	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23	N7-C	100	-	-	-	-	X	-
10/[illegible]	N7-D	4	6.8	1.09	7.2	0.94	0.05	1.40	<0.10	<0.05	0.23	N7-D	100	-	-	-	-	X	-
10/05/90	N7-E	11	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23	N7-E	100	-	-	-	-	X	-
10/05/90	N7-F	9	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23	N7-F	100	-	-	-	-	X	-
10/05/90	N7-G	21	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23	N7-G	100	-	-	-	-	X	-
10/05/90	N7-H	9	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23	N7-H	100	-	-	-	-	X	-
10/05/90	N7-I	48	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23	N7-I	100	-	-	X	-	-	-
10/05/90	N7-J	35	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23	N7-J	100	-	-	-	-	X	-
10/15/90	N8-S(A)	53	2.3	0.8	4.2	0.45	<0.10	1.10	<0.10	<0.10	0.10	N8-S(A)	90	X	-	-	-	-	-
10/15/90	N8-S(B)	74	2.3	0.8	4.2	0.45	<0.10	1.10	<0.10	<0.10	0.10	N8-S(B)	90	X	-	-	-	-	-
10/15/90	N8-S(C)	75	2.3	0.8	4.2	0.45	<0.10	1.10	<0.10	<0.10	0.10	N8-S(C)	90	X	-	-	-	-	-
10/15/90	N8-S(D)	79	2.3	0.8	4.2	0.45	<0.10	1.10	<0.10	<0.10	0.10	N8-S(D)	90	X	-	-	-	-	-
10/15/90	N8-S(E)	12	2.3	0.8	4.2	0.45	0.10	1.10	<0.10	<0.10	0.10	N8-S(E)	90	-	-	-	-	-	X
10/15/90	N8-S(F)	34	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35	N8-S(F)	90	-	-	-	-	-	X
10/15/90	N8-S(G)	30	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35	N8-S(G)	90	-	-	-	-	-	X
10/15/90	N8-S(H)	49	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35	N8-S(H)	90	X	-	-	-	-	-
10/15/90	N8-S(I)	48	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35	N8-S(I)	90	X	-	-	-	-	-
10/15/90	N8-S(J)	49	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35	N8-S(J)	90	X	-	-	-	-	-
10/15/90	N8-S(K)	37	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42	N8-S(K)	90	-	-	-	-	X	-
10/15/90	N8-S(L)	143	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42	N8-S(L)	90	-	-	X	-	-	-
10/15/90	N8-S(M)	50	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42	N8-S(M)	90	-	-	X	-	-	-
10/15/90	N8-S(N)	171	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42	N8-S(N)	90	-	-	X	-	-	-
10/15/90	N8-S(O)	135	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42	N8-S(O)	90	-	-	X	-	-	-
10/12/90	N8-N(A)	51	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40	N8-N(A)	52	X	-	-	-	-	-
10/12/90	N8-N(B)	135	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40	N8-N(B)	52	X	-	-	-	-	-
10/12/90	N8-N(C)	88	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40	N8-N(C)	52	X	-	-	-	-	-
10/[illegible]	N8-N(D)	75	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40	N8-N(D)	52	X	-	-	-	-	-
10/[illegible]	N8-N(E)	52	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40	N8-N(E)	91	X	-	-	-	-	-
10/12/90	N8-N(F)	69	1.6	0.45	3.1	0.63	<0.05	1.60	<0.10	<0.05	0.44	N8-N(F)	91	X	-	-	-	-	-
10/12/90	N8-N(G)	65	1.6	0.45	3.1	0.63	<0.05	1.60	<0.10	<0.05	0.44	N8-N(G)	91	X	-	-	-	-	-
10/12/90	N8-N(H)	141	1.6	0.45	3.1	0.63	<0.05	1.60	<0.10	<0.05	0.44	N8-N(H)	91	X	-	-	-	-	-
10/12/90	N8-N(I)	106	1.6	0.45	3.1	0.63	<0.05	1.60	<0.10	<0.05	0.44	N8-N(I)	91	X	-	-	-	-	-

TITLE:FILE.KQ1 TCLP TREER FILE ANALYSIS TCLP TREER FILE CLASSIFICATION DATE USED 03-Oct-91
LAST PRINTED 19-Oct-91

DT	FILE	TCLP			EP		TCLP ORGANICS					FILE	QUANTITY	TSCA/RCRA	TSCA/RCRA	RCRA	RCRA	
TAKEN	I.D.	PCB	Pb	Cd	Pb	Cd	D018	D027	D032	D039	D040	I.D.	YARDS	TSCA	NO TREAT	TREAT	NO TREAT	TREAT	NON-RCRA
10/12/90	N8-N(C)	166	1.6	0.45	3.1	0.53	<0.05	1.60	<0.10	<0.05	0.44	N8-N(C)	91	X	-	-	-	-	-
10/12/90	N8-N(E)	122	11.0	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48	N8-N(E)	91	-	-	X	-	-	-
10/12/90	N8-N(L)	73	11.0	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48	N8-N(L)	91	-	-	X	-	-	-
10/12/90	N8-N(M)	127	11.0	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48	N8-N(M)	91	-	-	X	-	-	-
10/12/90	N8-N(N)	114	11.0	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48	N8-N(N)	91	-	-	X	-	-	-
10/12/90	N8-N(O)	93	11.0	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48	N8-N(O)	91	-	-	X	-	-	-
10/03/90	N09-A	215	3.5	0.39	0.4	0.33	0.09	1.80	<0.10	<0.05	1.10	N09-A	350	-	X	-	-	-	-
10/03/90	N09-B	192	3.5	0.39	0.4	0.33	0.09	1.80	<0.10	<0.05	1.10	N09-B	350	-	X	-	-	-	-
10/03/90	N09-C	393	3.5	0.39	0.4	0.33	0.09	1.80	<0.10	<0.05	1.10	N09-C	350	-	X	-	-	-	-
09/25/90	N10-NE(E)	70	1.9	0.50	<0.2	0.17	0.06	1.70	<0.10	<0.05	1.90	N10-NE(E)	350	-	X	-	-	-	-
09/25/90	N10-NE(W)	320	1.9	0.50	<0.2	0.17	0.06	1.70	<0.10	<0.05	1.90	N10-NE(W)	350	-	X	-	-	-	-
09/25/90	N10-NW(E)	35	1.9	0.50	<0.2	0.17	0.06	1.70	<0.10	<0.05	1.90	N10-NW(E)	350	-	-	-	X	-	-
09/25/90	N10-NW(W)	133	1.9	0.50	<0.2	0.17	0.06	1.70	<0.10	<0.05	1.90	N10-NW(W)	350	-	X	-	-	-	-
09/25/90	N10-SE(E)	125	1.4	0.37	0.5	0.33	0.07	1.90	<0.10	0.06	2.60	N10-SE(E)	350	-	X	-	-	-	-
09/25/90	N10-SE(W)	174	1.4	0.37	0.5	0.33	0.07	1.90	<0.10	0.06	2.60	N10-SE(W)	350	-	X	-	-	-	-
09/25/90	N10-SW(E)	173	1.4	0.37	0.5	0.33	0.07	1.90	<0.10	0.06	2.60	N10-SW(E)	350	-	X	-	-	-	-
09/25/90	N10-SW(W)	133	1.4	0.37	0.5	0.33	0.07	1.90	<0.10	0.06	2.60	N10-SW(W)	350	-	X	-	-	-	-
09/12/90	N11-NE	232	<0.2	0.21	<0.2	0.10	<0.05	2.30	<0.10	<0.05	0.69	N11-NE	550	-	X	-	-	-	-
09/12/90	N11-NW	236	<0.2	0.21	<0.2	0.10	<0.05	2.30	<0.10	<0.05	0.69	N11-NW	550	-	X	-	-	-	-
09/12/90	N11-SE	445	<0.2	0.26	<0.2	0.09	<0.05	2.10	<0.10	0.11	1.20	N11-SE	550	-	X	-	-	-	-
09/12/90	N11-SW	225	<0.2	0.26	<0.2	0.09	<0.05	2.10	<0.10	0.11	1.20	N11-SW	550	-	X	-	-	-	-

PILE I.D.	PC	TCLP LEAD	TCLP CADMIUM	EP LEAD	EP CADMIUM	TCLP ORGANICS D018	D027	D032	D039	D040
S1-A	36	17.4	1.20	1.9	0.56					
S1-B	36	14.5	1.15	3.0	0.75					
S1-C	37	14.5	1.15	3.0	0.75					
S2-A	33	15.7	1.06	2.5	0.55					
S2-B	38	15.7	1.06	2.5	0.55					
S2-C	37	15.7	1.06	2.5	0.55					
S3	39	7.6	1.06	5.7	1.32					
N01-NE	47	7.1	1.07	<0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05
N01-NW	31	7.1	1.07	<0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05
N01-NW(J)	27	7.1	1.07	<0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05
N01-NW(K)	35	7.1	1.07	<0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05
N01-NW(L)	66	7.1	1.07	<0.5	0.17	<0.05	<0.10	<0.10	<0.05	<0.05
N01-SE	55	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05
N01-SW	31	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05
N01-SW(D)	35	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05
N01-SW(E)	39	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05
N01-SW(F)	29	11.3	1.49	1.4	0.50	<0.05	<0.10	<0.10	<0.05	<0.05
N02-NE	53	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05
N02-NW	38	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05
N02-NW(M)	46	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05
N02-NW(N)	39	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05
N02-NW(O)	47	7.7	0.97	0.5	0.51	<0.05	0.37	<0.10	<0.05	<0.05
N02-SE	45	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05
N02-SW	16	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05
N02-SW(A)	16	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05
N02-SW(B)	13	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05
N02-SW(C)	35	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05
N02-SW(G)	36	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05
N02-SW(H)	42	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05
N02-SW(I)	37	8.6	1.06	1.0	0.67	<0.05	<0.10	<0.10	<0.05	<0.05
N03-A	6	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05
N03-A(A)	31	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05
N03-A(B)	28	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05
N03-A(C)	14	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05
N03-A(D)	34	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05
N03-B	13	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05
N03-B(A)	31	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05
N03-B(B)	35	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05
N03-B(C)	32	7.2	1.18	1.4	0.71	<0.05	0.24	<0.10	<0.05	<0.05
N03-C	38	7.6	1.08	2.0	1.00	<0.05	0.64	<0.10	<0.05	0.06
N03-D	9	7.6	1.08	2.0	1.00	<0.05	0.64	<0.10	<0.05	0.06
N03-E	19	7.6	1.08	2.0	1.00	<0.05	0.64	<0.10	<0.05	0.06
N04-A	20	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N04-B	17	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N04-C	24	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N04-D	20	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N04-E	30	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N04-F	27	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N04-G	18	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N04-H	17	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N04-I	16	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N04-J	19	3.5	0.72	6.4	0.78	<0.05	0.23	<0.10	<0.05	<0.05
N5-A	57	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06

N5-B	57	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06
N5-C	96	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06
N5-D	61	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06
N5-E	106	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06
N5-F	64	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06
N5-G	66	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06
N5-H	67	0.3	0.59	0.9	0.71	<0.05	0.46	<0.10	<0.05	0.06
N6-N(A)	15	<0.2	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35
N6-N(B)	14	<0.2	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35
N6-N(C)	11	<0.2	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35
N6-N(D)	10	<0.2	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35
N6-N(E)	34	<0.2	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35
N6-N(F)	31	<0.2	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35
N6-N(G)	88	<0.2	0.12	0.3	0.38	<0.10	1.80	<0.10	0.11	0.35
N6-S(A)	8	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17
N6-S(B)	33	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17
N6-S(C)	11	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17
N6-S(D)	18	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17
N6-S(E)	44	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17
N6-S(F)	2	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17
N6-S(G)	13	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17
N6-S(H)	30	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17
N6-S(I)	38	1.4	1.00	0.3	0.52	<0.10	1.10	<0.10	<0.10	0.17
N7-A	9	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N7-B	6	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N7-C	10	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N7-D	4	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N7-E	11	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N7-F	9	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N7-G	21	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N7-H	9	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N7-I	48	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N7-J	35	6.8	1.09	7.2	0.94	<0.05	1.40	<0.10	<0.05	0.23
N8-S(A)	50	2.3	0.8	4.2	0.45	<0.10	1.10	<0.10	<0.10	0.10
N8-S(B)	74	2.3	0.8	4.2	0.45	<0.10	1.10	<0.10	<0.10	0.10
N8-S(C)	75	2.3	0.8	4.2	0.45	<0.10	1.10	<0.10	<0.10	0.10
N8-S(D)	79	2.3	0.8	4.2	0.45	<0.10	1.10	<0.10	<0.10	0.10
N8-S(E)	12	2.3	0.8	4.2	0.45	<0.10	1.10	<0.10	<0.10	0.10
N8-S(F)	24	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35
N8-S(G)	30	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35
N8-S(H)	49	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35
N8-S(I)	48	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35
N8-S(J)	49	4.3	0.79	4.1	0.52	<0.10	1.50	<0.10	<0.10	0.35
N8-S(K)	37	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42
N8-S(L)	143	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42
N8-S(M)	50	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42
N8-S(N)	171	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42
N8-S(O)	135	5.3	0.67	5.2	0.56	<0.10	1.50	<0.10	<0.10	0.42
N8-N(A)	51	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40
N8-N(B)	135	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40
N8-N(C)	88	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40
N8-N(D)	75	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40
N8-N(E)	52	<0.2	0.15	4.5	0.72	<0.05	1.50	<0.10	<0.05	0.40
N8-N(F)	69	1.6	0.45	3.1	0.63	<0.05	1.60	<0.10	<0.05	0.44
N8-N(G)	65	1.6	0.45	3.1	0.63	<0.05	1.60	<0.10	<0.05	0.44
N8-N(H)	141	1.6	0.45	3.1	0.63	<0.05	1.60	<0.10	<0.05	0.44

N8-N(I)	106	1.6	0.45	3.1	0.63	<0.05	1.60	<0.10	<0.05	0.44
N8-N(J)	166	1.6	0.45	3.1	0.63	<0.05	1.60	<0.10	<0.05	0.44
N8-N(K)	122	11.3	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48
N8-N(L)	73	11.3	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48
N8-N(M)	107	11.3	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48
N8-N(N)	124	11.3	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48
N8-N(O)	92	11.3	0.7	5.7	0.67	<0.05	1.80	<0.10	<0.05	0.48
N09-A	215	3.5	0.39	0.4	0.33	0.09	1.80	<0.10	<0.05	1.10
N09-B	202	3.5	0.39	0.4	0.33	0.09	1.80	<0.10	<0.05	1.10
N09-C	393	3.5	0.39	0.4	0.33	0.09	1.80	<0.10	<0.05	1.10
N10-NE(E)	70	2.9	0.50	<0.2	0.17	0.06	1.70	<0.10	<0.05	1.90
N10-NE(W)	320	2.9	0.50	<0.2	0.17	0.06	1.70	<0.10	<0.05	1.90
N10-NW(E)	36	2.9	0.50	<0.2	0.17	0.06	1.70	<0.10	<0.05	1.90
N10-NW(W)	138	2.9	0.50	<0.2	0.17	0.06	1.70	<0.10	<0.05	1.90
N10-SE(E)	125	1.4	0.37	0.5	0.33	0.07	1.90	<0.10	0.06	2.60
N10-SE(W)	174	1.4	0.37	0.5	0.33	0.07	1.90	<0.10	0.06	2.60
N10-SW(E)	173	1.4	0.37	0.5	0.33	0.07	1.90	<0.10	0.06	2.60
N10-SW(W)	135	1.4	0.37	0.5	0.33	0.07	1.90	<0.10	0.06	2.60
N11-NE	322	<0.2	0.21	<0.2	0.10	<0.05	2.30	<0.10	<0.05	0.69
N11-NW	236	<0.2	0.21	<0.2	0.10	<0.05	2.30	<0.10	<0.05	0.69
N11-SE	445	<0.2	0.26	<0.2	0.09	<0.05	2.10	<0.10	0.11	1.20
N11-SW	225	<0.2	0.26	<0.2	0.09	<0.05	2.10	<0.10	0.11	1.20

EXM CODE	K14037	K14037	K14037	K14040	K14041	K14042	K14042	K14042	K14042	K14043	K14045	K14045	
Class	RCRA	RCRA	RCRA	TSCA	Non-Haz	TSCA/RCRA	TSCA/RCRA	TSCA/RCRA	TSCA RCRA	TSCA RCRA	RCRA	RCRA	
TREAT	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	
Waste Code.	D006	D006,D008	D006,D003 D027,D032	PCB	NON-HAZ	D006,PCB	D006,D008 PCB	D006,D008 D018,D027 D032,D039 D040,PCB	D040,PCB	D008,PCB	D006,D008	D006,D008 D018,D027 D032,D039 D040	
DISPOSAL	LC	LC	LC	Emelle	CID	Emelle	Emelle	Emelle	Emelle	Emelle	Emelle	Emelle	TOTAL
09/24/90			585.33										585.33
09/25/90			580.32										580.32
09/26/90								566.64					566.64
09/27/90								762.00					762.00
09/28/90								719.15					719.15
09/29/90								1008.53					1008.53
09/30/90													
10/01/90								636.97					636.97
10/02/90								23.94	562.95				586.89
10/03/90									1142.10				1142.10
10/04/90									968.07			22.00	990.07
10/05/90									1008.52				1008.52
10/06/90									1121.07				1121.07
10/07/90													
10/08/90									723.34				723.34
10/09/90													
10/10/90													
10/11/90							212.23					22.72	234.95
10/12/90		845.67											845.67
10/13/90		1041.54										23.94	1065.48
10/14/90													
10/15/90		962.95					164.81						1127.76
10/16/90	533.57	22.37							20.86				576.70
10/17/90				906.59									906.59
10/18/90				413.87		135.3							549.17
10/19/90				157.82					122.02			668.73	948.57
10/20/90				668.58							827.75		1496.33
10/21/90													
10/22/90				1416.21							141.47		1557.68
10/23/90				990.78							132.97		1123.75
10/24/90					94.66						138.33		232.99
10/25/90				23.43	1099.40					24.73	145.21		1292.77
10/26/90					208.53						719.37		927.90
10/27/90					447.56					730.48	75.24		1253.28
10/28/90													
10/29/90					279.76					521.93			801.69
10/30/90					596.27					340.65			936.92
10/31/90					312.92					200.13			513.10
11/01/90										687.83			687.83
TOTAL	533.57	2872.43	1165.65	4577.28	3039.10	135.30	377.04	3717.23	5668.93	2505.80	2180.34	737.39	27,510.06

PROFILE # CUMMULATIVES

PROFILE NO	RCRA/NO TREAT LA K14037			Stockpile designation of sediment removal	RCRA/TSCA NO TREAT Emelle K14042			Stockpile designation of sediment removal	RCRA TREAT Emelle K14045			Stockpile designation of sediment removal	TSCA ONLY Emelle K14040			Stockpile designation of sediment removal	NON HAZARDOUS CHICAGO K 14041			Stockpile designation of sediment removal	RCRA/TSCA TREAT EMELLE K 14043			Stock designa of sedir remov
DATE	Avg	ld Trks	TONS		Avg	ld Trks	TONS		Avg	ld Trks	TONS		Avg	ld Trks	TONS		Avg	ld Trks	TONS		Avg	ld Trks	TONS	
9/24/90	23.47	25	586.74	S1,S2																				
9/25/90	23.38	25	584.41	S1,S2																				
9/26/90					22.8	26	592.75	S1,S2																
9/27/90					23.85	31	739.78	S1,S2																
9/28/90					23.36	31	724.14	N1,N2																
9/29/90					24.14	42	1013.69	N1,N2																
10/1/90					24.58	26	639.08	N1,N2																
10/2/90					24.57	24	589.74	N11,N10																
10/3/90					23.39	49	1146.11	N11,N10																
10/4/90					23.63	41	970.21	N11,N10	22.04	1	22.04	S3												
10/5/90					23.63	29	683.03	N11,N10																
10/5/90					23.63	14	330.86	S1,S2																
10/6/90					23.87	47	1122.97	N9																
10/8/90					23.47	31	727.45	N9																
10/11/90					23.77	9	213.92	N2	23.12	1	23.12	S3												
10/12/90	23.67	36	852.26	N2,N3																				
10/13/90	23.33	45	1049.65	N2,N3					24.19	1	24.19	S3												
10/15/90	23.76	41	974.11	N3-A&B	23.72	7	166.03	N2																
10/16/90	23.36	24	560.73	N6-S,N3-B	20.91	1	20.91	N2																
10/17/90													23.98	38	911.06	N5								
10/18/90					22.66	6	135.94	N6-S					23.1	18	415.76	N5								
10/19/90					24.5	5	122.50	N11	23.18	29	672.11	S3	22.54	7	157.77	N8-N								
10/20/90									23.76	35	831.59	N7	23.36	29	677.35	N8-N								
10/22/90									23.51	6	141.03	N7	23.65	60	1418.84	N6-N(G),N8-N(A-J), N8-S(A-D)								
10/23/90									22.19	6	133.15	N7	23.68	42	994.57	N8-S(A-D),&(H-J)								
10/24/90									23.17	6	138.99	N3(C-E)					22.99	4	91.95	N4				
10/25/90									24.47	6	146.83	N3(C-E)	23.82	1	23.82	N8-S	23.22	47	1091.16	N4 TO C/D	24.62	1	24.62	N8-N
10/26/90									24.06	30	721.70	N3(C-E)					23.11	9	208.03	N4				
10/27/90									25.15	3	75.44	N3-C,D,E					21.9	20	437.98	N4/N8-S	23.66	31	733.46	N8-N
10/29/90																	23.06	12	276.66	N8-S	23.79	22	523.34	N8-N
10/30/90																	23.4	25	585.03	N6-N	24.29	14	340.02	N8-N
10/31/90																	23.79	13	309.25	N6-N	24.87	8	198.93	N8-S
11/1/90					24.28	1	24.28	N8-N													23.64	28	661.94	N8-S(1)&
TOTAL:	23.5	186	4607.92		23.6	414	9963.39		23.53	3	2930.18		23.45	195	4599.18		23.07	130	3000.05		24.14	104	2482.33	

TOTAL NON-HAZ	3000.05	TOTAL K 14043	2482.33
TOTAL K 14040	4599.18	TOTAL K14037	4607.92
TOTAL K14045	2930.18	TOTAL K14042	9963.39
GRAND TOTAL:	27,583.06	TONS PER DAY AVERAGE	661.97

* E : ESTIMATED VALUE

Final 11/8/90

PROFILE * CUMMULATIVES

PROFILE NO	RCRA/NO TREAT LA K14037			Stockpile designation of sediment removal	RCRA/TSCA NO TREAT Emelle K14042			Stockpile designation of sediment removal	RCRA TREAT Emelle K14045			Stockpile designation of sediment removal	TSCA ONLY Emelle K14040			Stockpile designation of sediment removal	NON HAZARDOUS CHICAGO K14041			Stockpile designation of sediment removal	RCRA/TSCA TREAT EMELLE K14043			Stockpile designation of sediment removal
DATE	Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS	
9/24/90	23.47	25	586.74	S1,S2																				
9/25/90	23.38	25	584.41	S1,S2																				
9/26/90					22.8	26	592.75	S1,S2																
9/27/90					23.85	31	739.78	S1,S2																
9/28/90					23.36	31	724.14	N1,N2																
9/29/90					24.14	42	1013.69	N1,N2																
10/1/90					24.58	26	639.08	N1,N2																
10/2/90					24.57	24	589.74	N11,N10																
10/3/90					23.39	49	1146.11	N11,N10																
10/4/90					23.63	41	970.21	N11,N10	22.04	1	22.04	S3												
10/5/90					23.63	29	683.03	N11,N10																
10/5/90					23.63	14	330.86	S1,S2																
10/6/90					23.87	47	1122.97	N9																
10/8/90					23.47	31	727.45	N9																
10/11/90					23.77	9	213.92	N2	23.12	1	23.12	S3												
10/12/90	23.87	36	852.28	N2,N3																				
10/13/90	23.33	45	1049.65	N2,N3					24.19	1	24.19	S3												
10/15/90	23.76	41	974.11	N3-A &B	23.72	7	166.03	N2																
10/16/90	23.36	24	560.73	N6-S,N3-B	20.91	1	20.91	N2																
10/17/90													23.98	38	911.06	N5								
10/18/90					22.66	6	135.94	N6-S					23.1	18	415.76	N5								
10/19/90					24.5	5	122.50	N11	23.18	29	672.11	S3	22.54	7	157.77	N8-N								
10/20/90									23.76	35	831.59	N7	23.36	29	677.35	N8-N								
10/22/90									23.51	6	141.03	N7	23.65	60	1418.84	N6-N(G),N8-N(A-J), N8-S(A-D)								
10/23/90									22.19	6	133.15	N7	23.68	42	994.57	N8-S(A-D),&(H-J)								
10/24/90									23.17	6	138.99	N3(C-E)					22.99	4	91.95	N4				
10/25/90									24.47	6	146.83	N3(C-E)	23.82	1	23.82	N8-S	23.22	47	1091.16	N4 TO C/D	24.62	1	24.62	N8-N
10/26/90									24.06	30	721.70	N3(C-E)					23.11	9	208.03	N4				
10/27/90									25.15	3	75.44	N3-C,D,E					21.9	20	437.98	N4/N8-S	23.66	31	733.48	N8-N
10/29/90																	23.06	12	276.66	N8-S	23.79	22	523.34	N8-N
10/30/90																	23.4	25	585.03	N6-N	24.29	14	340.02	N8-N
10/31/90																	23.79	13	309.25	N6-N	24.87	8	198.93	N8-S
11/1/90					E 23.5	2	47.00	N8-N													E 23.5	27	634.50	N8-S(1)&N
TOTAL	23.3	196	4607.92		23.55	414	9986.11		23.53	3	2930.18		23.45	195	4599.18		23.07	130	3000.05		24.12	103	2454.89	

TOTAL NON-HAZ	3000.05	TOTAL K 14043	2454.89
TOTAL K 14040	4599.18	TOTAL K14037	4607.92
TOTAL K14045	2930.18	TOTAL K14042	9986.11
GRAND TOTAL:	27,578.33	TONS PER DAY AVERAGE	861.82

11/5/90

* E : ESTIMATED VALUE

DEAD CREEK COST ANALYSIS AS OF 10/10/90

	Based on 20,000 cy AEE	Based on 30,000 cy Projected as of 3/7/90	Based on 30,000 cy Projected as of 9/30/90	Based on 35,000 cy Projected as of 10/10/90	Based on 25,000 cy Projected as of 10/23/90
Transportation & Disposal	$6,000,000	$6,042,760	$7,000,000	$6,200,000	$6,698,139
Remediation Activity*	$1,620,000	$2,123,673	$2,901,151	$2,845,975	$2,868,704
Perland/Helikamp		$1,203,497	$1,975,975	$1,975,975	$1,975,975
IEM		$925,176	$925,176	$870,000	$892,729
Engineering/Design	$120,000	$120,000	$120,000	$120,000	$120,000
Analysis by Perland	$100,000	$100,000	$100,000	$100,000	$100,000
Construction Management	$330,000	$260,000	$84,950	$84,950	$84,950
Additional Characterization and dewatering test	$80,000	$42,140	$42,140	$42,140	$42,140
IEPA Oversight	$350,000	$100,000	$50,000	$50,000	$50,000
Subtotal	$8,600,000	$8,793,573	$10,298,241	$9,443,065	$9,963,933
RI/FS	$726,000	$692,000	$692,000	$692,000	$692,000
Total	$9,326,000	$9,485,573	$10,990,241	$10,135,065	$10,655,933

*REMEDIAL ACTIVITY = EXCAVATION, DEWATERING, LOADING, LINER, EMBANKMENT & FINAL GRADING

23-Oct-90

DEAD CREEK COST ESTIMATE

Waste Class	Landfill	Tons	Tipping	Transp.	Unit Price Total	Project Total
RCRA/TSCA	Emelle-Treat	1680	$240.02	$61.30	$301.32	$506,218
	Emelle- no treatment needed	9934	$227.00	$61.30	$288.30	$2,863,972
RCRA	Emelle-Treat	3062	$240.02	$61.30	$301.32	$922,642
	Emelle- no treatment needed	0	$227.00	$61.30	$288.30	$0
	Lake Charles-no treatment needed	3452	$155.00	$89.97	$244.97	$845,636
TSCA	Emelle	3989	$212.00	$61.30	$273.30	$1,090,194
NON-HAZ	Lake Charles	1171	$67.93	$89.97	$157.90	$184,901
	CID	2174	$45.90	$85.00	$130.90	$284,577
		25462				$6,698,139

REMEDIAL CONTRACT

	QUANTITY		UNIT PRICE	BID AMOUNT
LOADING	25462	TONS	7.15	$182,053
LINER	11000	SY	12.16	$133,760
EMBANKMENT	12000	CY	24.86	$298,320
AGGREGATE	9300	SY	13.25	$123,225
CHANNEL BASE	630	CY	95.85	$60,386
FILTER FABRIC	4000	SY	2.54	$10,160
CONCRETE PIPE	270	LF	167.75	$45,293
CONCRETE END SECTION	3	UNITS	1564.67	$4,694
CONCRETE	7	CY	481.29	$3,369
PIPE TRENCH	350	CY	26.13	$9,146
MANHOLE	1	LS	11162	$11,162
				$881,567
LETTER OF CREDIT				$11,162
				$892,729

PROJECT TOTAL----------$7,590,868

Thru 10/30/90

PROFILE * CUMMULATIVES

PROFILE NO	RCPA/NO TREAT LA K14037			Stockpile designation of sediment	RCPA/TSCA NO TREAT Emelle K14042			Stockpile designation of sediment	RCRA TREAT Emelle K14045			Stockpile designation of sediment	TSCA ONLY Emelle K14040			Stockpile designation of sediment	NON HAZARDOUS CHICAGO K14041			Stockpile designation of sediment	RCPA/TSCA TREAT EMELLE K14043			Stockpil designati of sedime
DATE	Avg	Id Trks	TONS	removal	Avg	Id Trks	TONS	removal	Avg	Id Trks	TONS	removal	Avg	Id Trks	TONS	removal	Avg	Id Trks	TONS	removal	Avg	Id Trks	TONS	removal
9/24/90	23.47	25	586.74	S1,S2																				
9/25/90	23.38	25	584.41	S1,S2																				
9/26/90					22.8	26	592.75	S1,S2																
9/27/90					23.85	31	739.78	S1,S2																
9/28/90					23.36	31	724.14	N1,N2																
9/29/90					24.14	42	1013.69	N1,N2																
10/1/90					24.58	26	639.08	N1,N2																
10/2/90					24.57	24	589.74	N11,N10																
10/3/90					23.39	49	1146.11	N11,N10																
10/4/90					23.63	41	970.21	N11,N10	22.04	1	22.04	S3												
10/5/90					23.63	29	683.03	N11,N10																
10/5/90					23.63	14	330.86	S1,S2																
10/6/90					23.87	47	1122.97	N9																
10/8/90					23.47	31	727.45	N9																
10/11/90					23.77	9	213.92	N2	23.12	1	23.12	S3												
10/12/90	23.67	36	852.28	N2,N3																				
10/13/90	23.33	45	1049.65	N2,N3					24.19	1	24.19	S3												
10/15/90	23.76	41	974.11	N3-A &B	23.72	7	166.03	N2																
10/16/90	23.36	24	560.73	N6-S,N3-B	20.91	1	20.91	N2																
10/17/90													23.98	38	911.06	N5								
10/18/90					22.66	6	135.94	N6-S					23.1	18	415.76	N5								
10/19/90					24.5	5	122.50	N11	23.18	29	672.11	S3	22.54	7	157.77	N8-N								
10/20/90									23.76	35	831.59	N7	23.36	29	677.35	N8-N								
10/22/90									23.51	6	141.03	N7	23.65	60	1418.84	N6-N(G),N8-N(A-J), N8-S(A-D)								
10/23/90									22.19	6	133.15	N7	23.68	42	994.57	N8-S(A-D),&(H-J)								
10/24/90									23.17	6	138.99	N3(C-E)					22.99	4	91.95	N4				
10/25/90									24.47	6	146.83	N3(C-E)	23.82	1	23.82	N8-S	23.22	47	1091.16	N4 TO C/D	24.62	1	24.62	N3-N
10/26/90									E 23.4	29	678.6	N3(C-E)					E 23.4	10	234.00	N4				
10/27/90									25.15	3	75.44	N3-C D,E					21.9	20	437.98	N4/N8-S	23.66	31	733.48	N3-N
10/29/90																	E 23.4	12	280.80	N8-S	E 23.4	22	514.80	N3-N
10/30/90																	E 23.4	25	585.00	N6-N	E 23.4	14	327.60	N3-N
TOTAL	23.5	196	4607.92		23.56	414	9939.11		23.47	3	2887.09		23.45	195	4599.18		23.05	118	2720.88		23.77	68	1600.5	

TOTAL NON-HAZ	2720.88	TOTAL K14043:	1600.50
TOTAL K14040:	4599.18	TOTAL K14037:	4607.92
TOTAL K14045:	2887.09	TOTAL K14042:	9939.11
GRAND TOTAL:	**26,354.69**	TONS PER DAY AVERAGE:	878.49

* E ESTIMATED VALUE

Thru 10/29/90

PROFILE # CUMMULATIVES

PROFILE NO	RCRA/NO TREAT LA K14037			Stockpile designation of sediment removal	RCRA/TSCA NO TREAT Emelle K14042			Stockpile designation of sediment removal	RCRA TREAT Emelle K14045			Stockpile designation of sediment removal	TSCA ONLY Emelle K14040			Stockpile designation of sediment removal	NON HAZARDOUS CHICAGO K14041			Stockpile designation of sediment removal	RCRA/TSCA TREAT EMELLE K14043			Stockpile designation of sediment removal
DATE	Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS	
9/24/90	23.47	25	586.74	S1,S2																				
9/25/90	23.38	25	584.41	S1,S2																				
9/26/90					22.8	26	592.75	S1,S2																
9/27/90					23.85	31	739.78	S1,S2																
9/28/90					23.36	31	724.14	N1,N2																
9/29/90					24.14	42	1013.69	N1,N2																
10/1/90					24.58	26	639.08	N1,N2																
10/2/90					24.57	24	589.74	N11,N10																
10/3/90					23.39	49	1146.11	N11,N10																
10/4/90					23.63	41	970.21	N11,N10	22.04	1	22.04	S3												
10/5/90					23.63	29	683.03	N11,N10																
10/5/90					23.63	14	330.86	S1,S2																
10/6/90					23.87	47	1122.97	N9																
10/8/90					23.47	31	727.45	N9																
10/11/90					23.77	9	213.92	N2	23.12	1	23.12	S3												
10/12/90	23.67	36	852.28	N2,N3																				
10/13/90	23.33	45	1049.65	N2,N3					24.19	1	24.19	S3												
10/15/90	23.76	41	974.11	N3-A&B	23.72	7	166.03	N2																
10/16/90	23.36	24	560.73	N6-S,N3-B	20.91	1	20.91	N2																
10/17/90													23.98	38	911.06	N5								
10/18/90					22.66	6	135.94	N6-S					23.1	18	415.76	N5								
10/19/90					24.5	5	122.50	N11	23.18	29	672.11	S3	22.54	7	157.77	N8-N								
10/20/90									23.76	35	831.59	N7	23.36	29	677.35	N8-N								
10/22/90									23.51	6	141.03	N7	23.65	60	1418.84	N6-N(G),N8-N(A-J), N8-S(A-D)								
10/23/90									22.19	6	133.15	N7	23.68	42	994.57	N8-S(A-D),&(H-J)								
10/24/90									23.17	6	138.99	N3(C-E)					22.99	4	91.95	N4				
10/25/90									24.47	6	146.83	N3(C-E)	23.82	1	23.82	N8-S	23.22	47	1091.16	N4 TO C/D	24.62	1	24.62	N8-N
10/26/90									E 23.4	29	678.6	N3(C-E)					E 23.4	10	234.00	N4				
10/27/90									25.15	3	75.44	N3-C,D,E					21.9	20	437.98	N4/N8-S	23.66	31	733.48	N8-N
10/29/90																	E 23.4	12	280.80	N8-S	E 23.4	22	514.80	N8-N
TOTAL	23.5	196	4607.92		23.56	414	9939.11		23.47	3	2887.09		23.45	195	4599.18		22.98	93	2135.88		23.89	54	1272.9	

TOTAL NON-HAZ	2135.88	TOTAL K 14043:	1272.90
TOTAL K 14040:	4599.18	TOTAL K14037:	4607.92
TOTAL K14045:	2887.09	TOTAL K14042:	9939.11
GRAND TOTAL:	25,442.09	TONS PER DAY AVEPAGE:	877.31

* E . ESTIMATED VALUE

PROFILE # CUMMULATIVES

PROFILE NO	RCRA/NO TREAT LA K14037			Stockpile designation of sediment removal	RCRA/TSCA NO TREAT Emelle K14042			Stockpile designation of sediment removal	RCRA TREAT Emelle K14045			Stockpile designation of sediment removal	TSCA ONLY Emelle K14040			Stockpile designation of sediment removal	NON HAZARDOUS CHICAGO K14041			Stockpile designation of sediment removal	RCRA/TSCA TREAT EMELLE K14043			Stockpile designation of sediment removal
DATE	Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS	
9/24/90	23.47	25	586.74	S1,S2																				
9/25/90	23.38	25	584.41	S1,S2																				
9/25/90					22.8	26	592.75	S1,S2																
9/27/90					23.85	31	739.78	S1,S2																
9/28/90					23.36	31	724.14	N1,N2																
9/29/90					24.14	42	1013.69	N1,N2																
10/1/90					24.58	26	639.08	N1,N2																
10/2/90					24.57	24	589.74	N11,N10																
10/3/90					23.39	49	1146.11	N11,N10																
10/4/90					23.63	41	970.21	N11,N10	22.04	1	22.04	S3												
10/5/90					23.63	29	683.03	N11,N10																
10/5/90					23.63	14	330.86	S1,S2																
10/6/90					23.87	47	1122.97	N9																
10/8/90					23.47	31	727.45	N9																
10/11/90					23.77	9	213.92	N2	23.12	1	23.12	S3												
10/12/90	23.67	36	852.28	N2,N3																				
10/13/90	23.33	45	1049.65	N2,N3					24.19	1	24.19	S3												
10/15/90	23.76	41	974.11	N3-A &B	23.72	7	166.03	N2																
10/16/90	23.36	24	560.73	N6-S,N3-B	20.91	1	20.91	N2																
10/17/90													23.98	38	911.06	N5								
10/18/90					22.66	6	135.94	N6-S					23.1	18	415.76	N5								
10/19/90					24.5	5	122.50	N11	23.18	29	672.11	S3	22.54	7	157.77	N8-N								
10/20/90									23.76	35	831.59	N7	23.36	29	677.35	N8-N								
10/22/90									23.51	6	141.03	N7	23.65	60	1418.84	N6-N(G),N8-N(A-J), N8-S(A-D)								
10/23/90									22.19	6	133.15	N7	23.68	42	994.57	N8-S(A-D),&(H-J)								
10/24/90									23.17	6	138.99	N3(C-E)					22.99	4	91.95	N4				
10/25/90									E 23.4	6	140.4	N3(C-E)					E 23.4	49	1146.60	N4 TO C/D				
10/26/90									E 23.4	29	678.6	N3(C-E)					E 23.4	10	234.00	N4				
10/27/90									E 23.4	3	70.2	N3-C,D,E					E 23.4	20	468.00	N4/N8-S	E 23.4	31	725.4	N8-N
TOTAL	23.5	196	4607.92		23.56	414	9939.11		23.21	3	2875.43		23.38	194	4575.36		23.3	83	1940.55		23.4	31	725.4	

TOTAL NON-HAZ	1940.548	TOTAL K14043	725.4
TOTAL K14040:	4575.36	TOTAL K14037:	4607.92
TOTAL K14045:	2875.43	TOTAL K14042:	9939.11
GRAND TOTAL:	24,663.76	TONS PER DAY AVERAGE:	880.85

* E ESTIMATED VALUE

Per K. McGee SD
70 loads R/T Treat
40 " Non Haz

Schedule
10/29 33 R/T Treat
11 NH

10/30 14 R/T Treat
29 NH

10/31 6 R/T Treat

11/1 6 R/T Treat

11/2 29 R/T Treat

	NO TREAT				TREAT			
	R/T NoT K14042	R NoT K14037	T NoT K14040	NON HAZ K14041	R TREAT K14045	R/T TREAT K14043	TOTALS	
10/22/90	9934.11T	4622.60	3556.26		1706.65 T		19,819.62 (T)	
N3 (C-E)					960 cy.		960 cy	
N4				(1244 cy)			1244 cy	
N6-N(A-F)				344 cy			344 cy	
N7					90 cy		90 cy.	
N8-S (A-D)			136 cy.				136 cy	
N8-S (E-O)			225 cy.	225 cy.	80 cy.	300 cy.	830 cy.	
N8-N (K-O)						1100 cy.	1100 cy.	
SUBTOTALS			361 cy	1813 cy	1,130 cy	1400 cy	4704 cy.	
		TOTAL NO TREAT		2174 cy	TOTAL TREAT	2530 cy		
cy - TONS (USE 1.2T/cy)				2610 (T)		3036 T	5646 (T)	
GRAND TOTAL							25,465.62 (T)	

SCALE:
DESIGN:
DRAWN: KJM
CHKD:
APRVD:
DATE: 10/23/90
DWG.
DESCRIPTION
SEDIMENT MATERIAL SUMMARY.
REV. NO.
DATE
Perland
Form 88

PROFILE # CUMMULATIVES

PROFILE NO.	RCRA/NO TREAT LA K14037			Stockpile designation of sediment removal	RCRA/TSCA NO TREAT Emelle K14042			Stockpile designation of sediment removal	RCRA TREAT Emelle K14045			Stockpile designation of sediment removal	TSCA ONLY Emelle K14040			Stockpile designation of sediment removal
DATE -	Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS		Avg	Id Trks	TONS	
9/24/90	23.47	25	586.74	S1,S2												
9/25/90	23.38	25	584.41	S1,S2												
9/26/90					22.8	26	592.75	S1,S2								
9/27/90					23.85	31	739.78	S1,S2								
9/28/90					23.36	31	724.14	N1,N2								
9/29/90					24.14	42	1013.69	N1,N2								
10/1/90					24.58	26	639.08	N1,N2								
10/2/90					24.57	24	589.74	N11,N10								
10/3/90					23.39	49	1146.11	N11,N10								
10/4/90					23.63	41	970.21	N11,N10	22.04	1	22.04	S3				
10/5/90					23.63	29	683.03	N11,N10								
10/5/90					23.63	14	330.86	S1,S2								
10/6/90					23.87	47	1122.97	N9								
10/8/90					23.47	31	727.45	N9								
10/11/90					23.77	9	213.92	N2	23.12	1	23.12	S3				
10/12/90	23.67	36	852.28	N2,N3												
10/13/90	23.14	46	1064.33	N2,N3					24.19	1	24.19	S3				
10/15/90	23.76	41	974.11	N3-A & B	23.72	7	166.03	N2								
10/16/90	23.36	24	560.73	N6-S,N3-B	20.91	1	20.91	N2								
10/17/90													E 23.63	38	897.94	N5
10/18/90					22.66	6	135.94	N6-S					23.1	18	415.76	N5
10/19/90					E 23.5	5	117.50	N11	E 23.39	29	678.31	S3	E 23.36	7	163.52	N8-N
10/20/90									E 23.39	35	818.65	N7	E 23.36	29	677.44	N8-N
10/22/90									E 23.39	6	140.34	N7	E 23.36	60	1401.6	N6-N(G),N8-N(A-J),N8-S(A-D)
TOTAL:	23.46	197	4622.6		23.5	414	9934.11		23.25	3	1706.65		23.36	152	3556.26	

* E : ESTIMATED VALUE

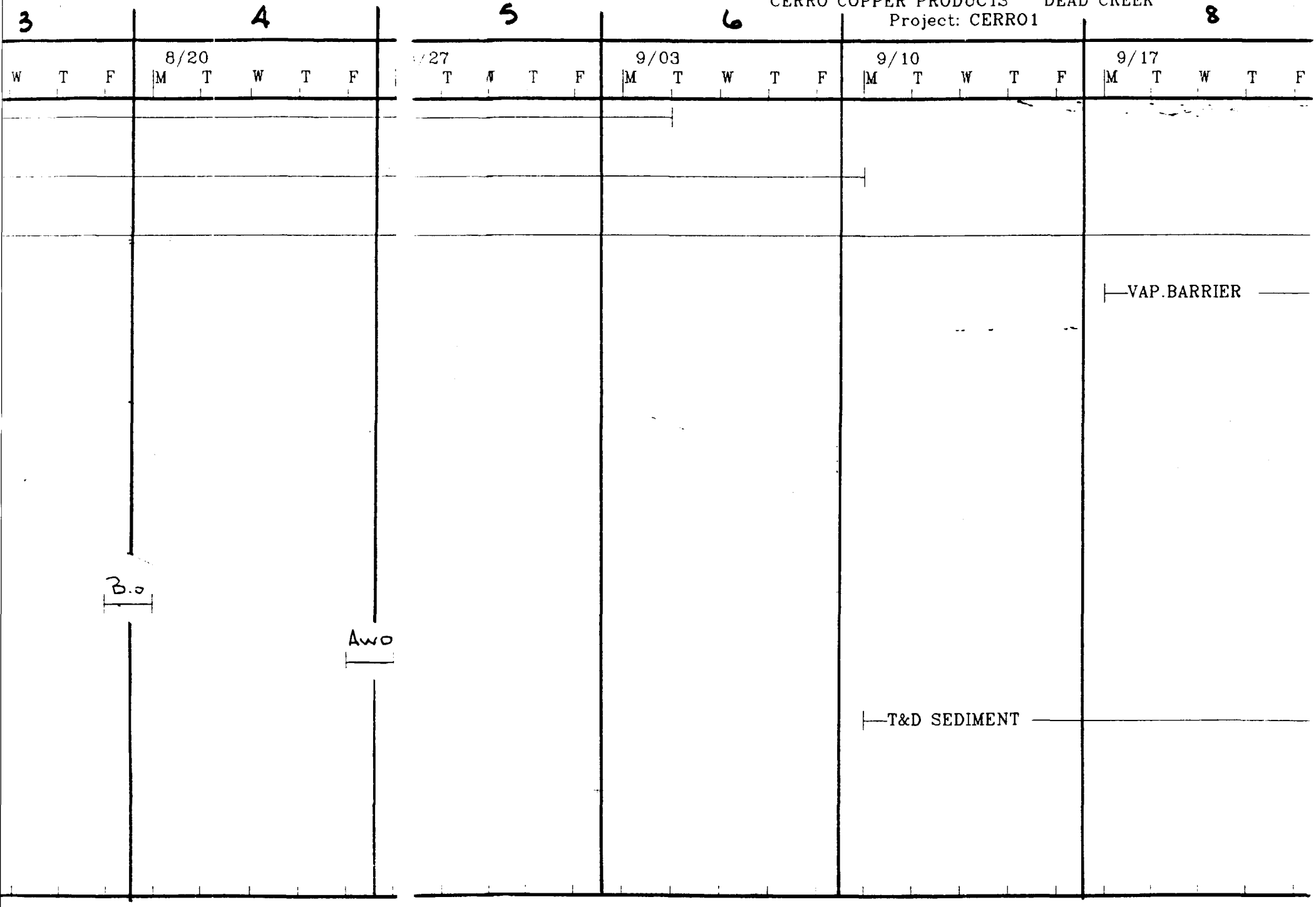
TOTAL K14040:	3556.26	TOTAL K14037:	4622.60
TOTAL K14045:	1706.65	TOTAL K14042:	9934.11

GRAND TOTAL: **19,819.62** TONS PER DAY AVERAGE 861.72

Notes	7/30 F	M	T	W	T	F	8/06 M	T	W	T	F	M	T	W	T	F	M	T
25200 C.Y. @ 1000 C.Y./DAY			EXCAVATION															
BACKFILL TO ELEV.402' 30,000cy			BACKFILL															
SEDIMENT DRYING			SED.DRYING															
VAPOR BARRIER																		
BACKFILL ELEV.402' TO 410' 30,000cy																		
RFP T&D CONTRACT				RF														
PREBID MEETING									2=3.0 Mtg									
BID DATE																3.0		
AWARD T&D CONTRACT																		
TRANSPORT & DISPOSE SEDIMENTS																		
LAND BAN - NOV.8,1990 CALIFORNIA LIST																		

2

CERRO COPPER PRODUCTS DEAD CREEK
Project: CERRO1



UCTS DEAD CREEK
CERRO1

	8	9	10	11	12
	9/17	9/24	10/01	10/08	10/15
W T F	M T W T F	M T W T F	M T W T F	M T W T F	M T W T F
	VAP.BARRIER	BACKFILL			
DIMENT					

31-Jul-1990

0	11	12	13	14.
T F	10/08 M T W T F	10/15 M T W T F	10/22 M T W T F	10/29 M T W T F	11/05 M T W T F

C116-12

WESTON
MANAGERS DESIGNERS/CONSULTANTS

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

August 24, 1989

Mr. Chris Bade
Avendt Group, Inc.
432 North Saginaw Street
Flint, MI 48502

Dear Mr. Bade:

Please find enclosed the wet chem portion of the reports for the samples submitted to Weston/Gulf Coast Laboratories for analyses. They were identified with our batch numbers 8907G520, 8907G528, 8907G580, 8907G611, 8907G645, 8907G660, 8907G709, and 8907G724. If you have any questions, please contact Sheryl Johnson or Lynn Gifford at our laboratories.

Sincerely,

WESTON/GULF COAST LABORATORIES

Donald Gipple

Donald Gipple
Project Director

DG/lg

Enclosures

Table 10

CS - A

Characteristics of Hazardous Waste

Sample I.D.		Date	Ash (%)	Solids (%)	Alkalinity (%)	Cyanide Reactive (mg/kg)	Cyanide Total (mg/kg)	Flash Point (deg F)	pH	Sulfide (mg/kg)	Sulfide Reactive (mg/kg)	Total PCBs	Observed Creek Sediment
A10	6-7	08/22		85.9								0	
A10	9-10	08/22		64.4								0	
A10	15-17	08/22	96.8	76.3	0.87	ND	ND	>200	7.9	ND	ND	.48	
A10	20-22	08/22		70.6								1.4	
A10	24-29	08/22		79.2								14.3	
A10	37-38	08/22		81.0								3.88	
A11A	8-13	07/19		71.9								0	
A11A	13-18	07/19		65.8								0	
A11B	4-8	07/18	96.8	72.6	0.12	ND	ND	>200	7.7	86.0	ND	.53	
A11B	8.1-10.6	07/18		57.3								.21	
A11B	12-17	07/18		76.9								.92	
A11C	2-6.5	07/18	99.7	72.6	ND	ND	ND	>200	7.6	ND	ND	55	
A11C	6.5-10.5	07/18		78.0								13	
A11C	12.5-16.5	07/18		83.7								1.3	
A11D	8-10	07/18	80.8	72.9	0.13	ND	2.5	>200	8.8	ND	ND	0	
A11D	18.5-23.5	07/18	98.5	82.2	0.13	ND	ND	>200	8.0	ND	ND	38	
A12A	8-11	07/19		74.2								0	
A12A	11-20.5	07/19		79.4								.067	
A12B	3-7	08/22	89.0	12.2	6.3	ND	1.6	>200	6.9	ND	ND	32	*
A12B	9-12	08/22		75.3								13.83	
A12B	14-17	08/22		80.6								0	
A12B	17-19	08/22		78.6								.27	
A12C	4-9	07/12	91.7	55.8	1.0	ND	ND	>200	6.2	ND	ND	0	*
A12C	10-13	07/12		78.5								0	
A12C	14-16	07/12		82.8								0	
A12D	6-13	07/18		76.2								530	
A12D	17-20	07/18	98.6	74.1	0.17	ND	ND	>200	7.9	ND	ND	101	
A12D	20-25	07/18		81.3								15.8	
A13A	9-14	07/20										0	
A13A	14-19	07/20										0	
A13A	19-20.5	07/20										0	
A13B	4.5-6	07/11	86.1	32.9	2.2	ND	5.8	>180	6.6	ND	ND	440	*
A13B	6-9.5	07/11		74.9								50	
A13B	9.5-12	07/11		81.6								2.25	
A13C	4-8.5	07/12	91.3	41.0	1.5	ND	ND	98	6.2	ND	ND	910	*
A13C	6-13	07/12		77.5								25.5	
A13C	13-16	07/12		83.1								0	
A13D	18-23	07/19	99.2	76.0	0.14	ND	ND	>200	7.7	ND	ND	1.3	
A14A	4-9	07/20										.099	
A14A	13.5-23.5	07/20										.062	
A14A	23.5-28.5	07/20										0	
A14B	4-8.5	07/11	94.3	59.9	1.1	ND	ND	>200	6.6	ND	ND	114	*
A14B	8.5-13	07/11		84.1								6.3	
A14C	4-8.5	07/11	87.2	23.1	2.7	ND	2.9	>180	6.0	ND	ND	540	*
A14C	8.5-10.5	07/11		59.1								2.22	
A14C	13.5-16.5	07/11		84.0								6.2	
A14D	10-14	07/12	95.8	79.9	0.68	ND	ND	>200	8.0	ND	ND	0	
A14D	15-19	07/12		77.1								0	
A14D	24-29	07/12		84.5								0	

Table 10
(Cont.)

Characteristics of Hazardous Waste

Sample I.D.	Date	Ash (%)	Solids (%)	Alkalinity (%)	Cyanide Reactive (mg/kg)	Cyanide Total (mg/kg)	Flash Point (deg F)	pH	Sulfide (mg/kg)	Sulfide Reactive (mg/kg)	Total PCBs	Observed Creek Sediment
A15A 9-14	07/20										0	
A15A 14-19	07/20										0	
A15A 19-24	07/20										0	
A15B 6-9	07/07	95.1	59.0	1.1	ND	ND	>200	7.9	ND	ND	3.7	
A15B 13-16	07/07		83.8								9	
A15B 16-19	07/07		79.6								0	
A15C 4.5-9	07/10	85.4	26.0	0.97	ND	1.8	>200	7.4	ND	ND	980	*
A15C 9.5-14.5	07/10		79.9								1.66	
A15C 14.5-17.5	07/10		82.3								17.3	
A15D 4-9	07/12	96.6	83.0	0.64	ND	ND	>200	8.5	ND	ND	0	
A15D 12-14	07/12		85.9								0	
A15D 19-24	07/12		81.2								0	
A15D 24-29	07/12		75.0								0	
A16A 9-14	07/20										0	
A16A 14-19	07/20										2.96	
A16A 24-29	07/20										0	
A16B 9-12	07/18	75.3	23.5	0.56	ND	19.2	>200	6.8	ND	ND	1600	*
A16B 14-19	07/18		74.7								5.4	
A16C 2-5	07/18	84.6	20.2	0.14	ND	5.8	>200	6.8	ND	ND	0	*
A16C 7-12	07/18		69.2								13	
A16C 12-17	07/18		79.7								1.55	
A16D 13-18	07/20										0	
A16D 18-23	07/20										.09	
A16D 23-31	07/20										0	
A16E 13-18	07/20										.81	
A16E 18-23	07/20										1.99	
A16E 25.5-28	07/20										.95	
A21B 1-6	08/22	80.6	40.3	2.1	ND	6.0	>200	7.0	1.7	ND	27	*
A21B 6-10	08/22		54.4								.2	
A21B 10-13	08/22		79.4								0	
A21C 4-8	07/14	87.7	23.2	4.2	ND	5.0	>200	7.2	ND	ND	30	*
A21C 8-11	07/14		72.9								0	
A21C 13-14.5	07/14		85.8								0	
A21D 4-9	07/10		82.8								.09	
A21D 9-14	07/10		78.1								.15	
A21D 14-19	07/10		69.6								0	
A22A 9-14	07/11		71.4								0	
A22A 19-22	07/11		79.4								0	
A22A 24-28	07/11		77.4								0	
A22B 0-7	08/22	97.4	72.9	0.88	ND	ND	>200	7.8	ND	ND	120	*
A22B 7-13	08/22		77.2								0	
A22C 3-9	08/22	94.9	70.4	1.1	ND	ND	>200	7.9	41.7	6.6	19	*
A22C 10-15	08/22		79.8								0	
A22D 4-9	07/11		80.7								12	
A22D 9-14	07/11		74.1								0	
A22D 24-27	07/11		84.8								0	
A23A 12-13	07/14		87.6								3.99	
A23A 13-19	07/14		74.0								6.9	
A23A 19-20	07/14	94.7	66.1	1.3	ND	ND	>200	8.6	9.4	ND	150	
A23A 21-23	07/14		83.8								1.6	

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A10 6-7
Project # 5160-01-01-0001
Lab ID: 8907G611-001
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	85.9	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A10 9-10
Project # 5160-01-01-0001
Lab ID: 8907G611-002
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	64.4	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A10 15-17
Project # 5160-01-01-0001
Lab ID: 8907G611-004
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	96.8		%	0.10
% Solids	76.3		%	0.10
Alkalinity	0.87		%	0.10
Cyanide, Reactive	0.62	u	mg/kg	0.62
Cyanide, Total	0.62	u	mg/kg	0.62
Flash Point	>200		DEG F	37
pH	7.9		pH	+-0.20
Sulfide	6.2	u	mg/kg	6.2
Sulfide Reactive	6.2	u	mg/kg	6.2

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A10 20-22
Project # 5160-01-01-0001
Lab ID: 8907G611-006
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	70.6	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A10 24-29
Project # 5160-01-01-0001
Lab ID: 8907G611-008
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	79.2	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A10 37-38
Project # 5160-01-01-0001
Lab ID: 8907G611-009
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	81.0	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A11A 8-13
Project # 5160-01-01-0001
Lab ID: 8907G724-001
Sample Date: 07/19/89
Date Received: 07/19/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	71.9	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A11A 13-18
Project # 5160-01-01-0001
Lab ID: 8907G724-003
Sample Date: 07/19/89
Date Received: 07/19/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	65.8	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: Tuesday August 22nd, 1989

RE: **A11b 4-8**
Project # 5160-01-01-0001
Lab ID: **8907G709-001**
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	96.8		%	0.10
% Solids	72.6		%	0.10
Alkalinity	0.12		%	0.10
Cyanide, Reactive	0.64	u	mg/kg	0.64
Cyanide, Total	0.64	u	mg/kg	0.64
Flash Point	>200		DEG F	25
pH	7.7		pH	+-0.20
Sulfide	86.0		mg/kg	6.9
Sulfide Reactive	6.8	u	mg/kg	6.8

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A11b 8.1-10.6
Project # 5160-01-01-0001
Lab ID: 8907G709-003
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	57.3	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A11b 12-17
Project # 5160-01-01-0001
Lab ID: 8907G709-004
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	76.9	%	0.10

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MANAGERS DESIGNERS/CONSULTANTS

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A11c 2-6.5
Project # 5160-01-01-0001
Lab ID: 8907G709-005
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	99.7		%	0.10
% Solids	72.6		%	0.10
Alkalinity	0.10	u	%	0.10
Cyanide, Reactive	0.44	u	mg/kg	0.44
Cyanide, Total	0.44	u	mg/kg	0.44
Flash Point	>200		DEG F	25
pH	7.6		pH	+-0.20
Sulfide	6.3	u	mg/kg	6.3
Sulfide Reactive	6.3	u	mg/kg	6.3

WESTON-GULF COAST LABORATORIES, INC.
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A11c 6.5-10.5
Project # 5160-01-01-0001
Lab ID: 8907G709-007
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	78.0	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: Allc 12.5-16.5
Project # 5160-01-01-0001
Lab ID: 8907G709-008
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	83.7	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

Avendt Grou
432 North Street
3rd Floor
Flint, MI 4

tn: Mr. Chris

Date: Tuesday August 22nd, 1989

RE: A11d 8-10
Project # 5160-01-01-0001
Lab ID: 8907G709-009
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

	Irs	Result		Units	Reporting Limit
% Ash		80.8		%	0.10
% Solids		72.9		%	0.10
Alkalinity		0.13		%	0.10
Cyanide	Reactive	0.54	u	mg/kg	0.54
Cyanide	C, Total	2.5		mg/kg	0.60
Flash Point		>200		DEG F	25
pH		8.8		pH	+-0.20
Sulfide		6.1	u	mg/kg	6.1
Sulfide	Reactive	6.1	u	mg/kg	6.1

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A11d 18.5-23.5
Project # 5160-01-01-0001
Lab ID: 8907G709-011
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	98.5		%	0.10
% Solids	82.2		%	0.10
Alkalinity	0.13		%	0.10
Cyanide, Reactive	0.37	u	mg/kg	0.37
Cyanide, Total	0.37	u	mg/kg	0.37
Flash Point	>200		DEG F	37
pH	8.0		pH	+-0.20
Sulfide	5.5	u	mg/kg	5.5
Sulfide Reactive	5.5	u	mg/kg	5.5

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12A 8-11
Project # 5160-01-01-0001
Lab ID: 8907G724-004
Sample Date: 07/19/89
Date Received: 07/19/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	74.2	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12A 11-20.5
Project # 5160-01-01-0001
Lab ID: 8907G724-006
Sample Date: 07/19/89
Date Received: 07/19/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	79.4	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12b 3-7
Project # 5160-01-01-0001
Lab ID: 8907G611-010
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	89.0		%	0.10
% Solids	12.2		%	0.10
Alkalinity	6.3		%	0.10
Cyanide, Reactive	0.23	u	mg/kg	0.23
Cyanide, Total	1.6		mg/kg	0.24
Flash Point	>200		DEG F	5
pH	6.9		pH	+-0.20
Sulfide	5.0	u	mg/kg	5.0
Sulfide Reactive	5.0	u	mg/kg	5.0

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12b 9-12
Project # 5160-01-01-0001
Lab ID: 8907G611-012
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	75.3	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12b 14-17
Project # 5160-01-01-0001
Lab ID: 8907G611-013
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	80.6	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12b 17-19
Project # 5160-01-01-0001
Lab ID: 8907G611-014
Sample Date: 07/13/89
Date Received: 07/14/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	78.6	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12C 4-9
Project # 5610-01-01-0001
Lab ID: 8907G580-007
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	91.7		%	0.10
% Solids	55.8		%	0.10
Alkalinity	1.0		%	0.10
Cyanide, Reactive	0.49	u	mg/kg	0.49
Cyanide, Total	0.49	u	mg/kg	0.49
Flash Point	>200		DEG F	37
pH	6.2		pH	+-0.20
Sulfide	6.0	u	mg/kg	6.0
Sulfide Reactive	5.6	u	mg/kg	5.6

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12C 10-13
Project # 5610-01-01-0001
Lab ID: 8907G580-009
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	78.5	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12C 14-16
Project # 5610-01-01-0001
Lab ID: 8907G580-011
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	82.8	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12d 6-13
Project # 5160-01-01-0001
Lab ID: 8907G709-013
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	76.2	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: Tuesday August 22nd, 1989

RE: **A12d 17-20**
Project # 5160-01-01-0001
Lab ID: **8907G709-014**
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	98.6		%	0.10
% Solids	74.1		%	0.10
Alkalinity	0.17		%	0.10
Cyanide, Reactive	0.62	u	mg/kg	0.62
Cyanide, Total	0.62	u	mg/kg	0.62
Flash Point	>200		DEG F	37
pH	7.9		pH	+-0.20
Sulfide	6.8	u	mg/kg	6.8
Sulfide Reactive	6.8	u	mg/kg	6.8

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A12d 20-25
Project # 5160-01-01-0001
Lab ID: 8907G709-016
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	81.3	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A13b 4.5-6
Project # 5160-01-01-0001
Lab ID: 8907G528-001
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	86.1		%	0.10
% Solids	32.9		%	0.10
Alkalinity	2.2		%	0.10
Cyanide, Reactive	0.70	u	mg/kg	0.70
Cyanide, Total	5.8		mg/kg	0.50
Flash Point	>180		DEG F	5
pH	6.6		pH	+-0.20
Sulfide	12.4	u	mg/kg	12.4
Sulfide Reactive	12.4	u	mg/kg	12.4

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A13b 6-9.5
Project # 5160-01-01-0001
Lab ID: 8907G528-003
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	74.9	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A13b 9.5-12
Project # 5160-01-01-0001
Lab ID: 8907G528-004
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	81.6	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: Tuesday August 22nd, 1989

RE: **A13C 4-8.5**
Project # 5610-01-01-0001
Lab ID: **8907G580-001**
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	91.3		%	0.10
% Solids	41.0		%	0.10
Alkalinity	1.5		%	0.10
Cyanide, Reactive	1.1	u	mg/kg	1.1
Cyanide, Total	1.1	u	mg/kg	1.1
Flash Point	98		DEG F	5
pH	6.2		pH	+-0.20
Sulfide	11.3	u	mg/kg	11.3
Sulfide Reactive	12.2	u	mg/kg	12.2

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A13C 6-13
Project # 5610-01-01-0001
Lab ID: 8907G580-003
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	77.5	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A13C 13-16
Project # 5610-01-01-0001
Lab ID: 8907G580-005
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	83.1	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A13D 18-23
Project # 5160-01-01-0001
Lab ID: 8907G724-007
Sample Date: 07/19/89
Date Received: 07/19/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	99.2		%	0.10
% Solids	76.0		%	0.10
Alkalinity	0.14		%	0.10
Cyanide, Reactive	0.34	u	mg/kg	0.34
Cyanide, Total	0.34	u	mg/kg	0.34
Flash Point	>200		DEG F	25
pH	7.7		pH	+-0.20
Sulfide	5.3	u	mg/kg	5.3
Sulfide Reactive	5.3	u	mg/kg	5.3

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A14B 4.0-8.5
Project # 5160-01-01-0001
Lab ID: 8907G528-005
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	94.3		%	0.10
% Solids	59.9		%	0.10
Alkalinity	1.1		%	0.10
Cyanide, Reactive	0.51	u	mg/kg	0.51
Cyanide, Total	0.51	u	mg/kg	0.51
Flash Point	>200		DEG F	5
pH	6.6		pH	+-0.20
Sulfide	7.7	u	mg/kg	7.7
Sulfide Reactive	7.7	u	mg/kg	7.7

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A14B 8.5-13
Project # 5160-01-01-0001
Lab ID: 8907G528-007
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	84.1	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A14c 4.0-8.5
Project # 5160-01-01-0001
Lab ID: 8907G528-008
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	87.2		%	0.10
% Solids	23.1		%	0.10
Alkalinity	2.7		%	0.10
Cyanide, Reactive	1.7	u	mg/kg	1.7
Cyanide, Total	2.9		mg/kg	0.74
Flash Point	>180		DEG F	5
pH	6.0		pH	+-0.20
Sulfide	5.7	u	mg/kg	5.7
Sulfide Reactive	5.7	u	mg/kg	5.7

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A14c 8.5-10.5
Project # 5160-01-01-0001
Lab ID: 8907G528-010
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	59.1	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A14c 13.5-16.5
Project # 5160-01-01-0001
Lab ID: 8907G528-011
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	84.0	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A14D 10-14
Project # 5610-01-01-0001
Lab ID: 8907G580-013
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	95.8		%	0.10
% Solids	79.9		%	0.10
Alkalinity	0.68		%	0.10
Cyanide, Reactive	0.45	u	mg/kg	0.45
Cyanide, Total	0.45	u	mg/kg	0.45
Flash Point	>200		DEG F	37
pH	8.0		pH	+-0.20
Sulfide	6.1	u	mg/kg	6.1
Sulfide Reactive	6.1	u	mg/kg	6.1

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A14D 15-19
Project # 5610-01-01-0001
Lab ID: 8907G580-015
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	77.1	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A14D 24-29
Project # 5610-01-01-0001
Lab ID: 8907G580-016
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	84.5	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A15b 6-9
Project # 5160-01-01-0001
Lab ID: 8907G520-001
Sample Date: 07/07/89
Date Received: 07/11/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	95.1		%	0.10
% Solids	59.0		%	0.10
Alkalinity	1.1		%	0.10
Cyanide, Reactive	0.75	u	mg/kg	0.75
Cyanide, Total	0.75	u	mg/kg	0.75
Flash Point	>200		DEG F	5
pH	7.9		pH	+-0.20
Sulfide	6.0	u	mg/kg	6.0
Sulfide Reactive	6.0	u	mg/kg	6.0

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A15b 13-16
Project # 5160-01-01-0001
Lab ID: 8907G520-002
Sample Date: 07/07/89
Date Received: 07/11/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	83.8	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A15b 16-19
Project # 5160-01-01-0001
Lab ID: 8907G520-004
Sample Date: 07/07/89
Date Received: 07/11/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	79.6	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A15c 4.5-9
Project # 5160-01-01-0001
Lab ID: 8907G520-005
Sample Date: 07/10/89
Date Received: 07/11/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	85.4		%	0.10
% Solids	26.0		%	0.10
Alkalinity	0.97		%	0.10
Cyanide, Reactive	0.70	u	mg/kg	0.70
Cyanide, Total	1.8		mg/kg	0.56
Flash Point	>200		DEG F	5
pH	7.4		pH	+-0.20
Sulfide	14.4	u	mg/kg	14.4
Sulfide Reactive	14.4	u	mg/kg	14.4

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2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A15c 9.5-14.5
Project # 5160-01-01-0001
Lab ID: 8907G520-007
Sample Date: 07/10/89
Date Received: 07/11/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	79.9	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A15c 14.5-17.5
Project # 5160-01-01-0001
Lab ID: 8907G520-008
Sample Date: 07/10/89
Date Received: 07/11/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	82.3	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: Tuesday August 22nd, 1989

RE: **A15D 4-9**
Project # 5610-01-01-0001
Lab ID: **8907G580-017**
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	96.6		%	0.10
% Solids	83.0		%	0.10
Alkalinity	0.64		%	0.10
Cyanide, Reactive	0.47	u	mg/kg	0.47
Cyanide, Total	0.47	u	mg/kg	0.47
Flash Point	>200		DEG F	37
pH	8.5		pH	+-0.20
Sulfide	5.8	u	mg/kg	5.8
Sulfide Reactive	5.8	u	mg/kg	5.8

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A15D 12-14
Project # 5610-01-01-0001
Lab ID: 8907G580-019
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	85.9	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: Tuesday August 22nd, 1989

RE: **A15D 19-24**
Project # 5610-01-01-0001
Lab ID: **8907G580-020**
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	81.2	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: Tuesday August 22nd, 1989

RE: **A15D 24-29**
Project # 5610-01-01-0001
Lab ID: **8907G580-021**
Sample Date: 07/12/89
Date Received: 07/13/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	75.0	%	0.10

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MANAGERS DESIGNERS/CONSULTANTS

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: Tuesday August 22nd, 1989

RE: **A16b 9-12**
Project # 5160-01-01-0001
Lab ID: **8907G709-017**
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	75.3		%	0.10
% Solids	23.5		%	0.10
Alkalinity	0.56		%	0.10
Cyanide, Reactive	0.32	u	mg/kg	0.32
Cyanide, Total	19.2		mg/kg	1.5
Flash Point	>200		DEG F	25
pH	6.8		pH	+-0.20
Sulfide	18.5	u	mg/kg	18.5
Sulfide Reactive	18.5	u	mg/kg	18.5

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2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A16b 14-19
Project # 5160-01-01-0001
Lab ID: 8907G709-019
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	74.7	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A16c 2-5
Project # 5160-01-01-0001
Lab ID: 8907G709-020
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	84.6		%	0.10
% Solids	20.2		%	0.10
Alkalinity	0.14		%	0.10
Cyanide, Reactive	0.28	u	mg/kg	0.28
Cyanide, Total	5.8		mg/kg	1.6
Flash Point	>200		DEG F	25
pH	6.8		pH	+-0.20
Sulfide	23.1	u	mg/kg	23.1
Sulfide Reactive	23.1	u	mg/kg	23.1

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A16c 7-12
Project # 5160-01-01-0001
Lab ID: 8907G709-022
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	69.2	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A16c 12-17
Project # 5160-01-01-0001
Lab ID: 8907G709-023
Sample Date: 07/18/89
Date Received: 07/18/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	79.7	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: Tuesday August 22nd, 1989

RE: **A21b 1-6**
Project # 5160-01-01-0001
Lab ID: **8907G660-001**
Sample Date: 07/17/89
Date Received: 07/17/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	80.6		%	0.10
% Solids	40.3			0.10
Alkalinity	2.1		%	0.10
Cyanide, Reactive	0.62	u	mg/kg	0.62
Cyanide, Total	6.0		mg/kg	1.2
Flash Point	>200		DEG F	5
pH	7.0		pH	+-0.20
Sulfide	11.7		mg/kg	9.8
Sulfide Reactive	12.3	u	mg/kg	12.3

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A21b 6-10
Project # 5160-01-01-0001
Lab ID: 8907G660-003
Sample Date: 07/17/89
Date Received: 07/17/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	54.4	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A21b 10-13
Project # 5160-01-01-0001
Lab ID: 8907G660-004
Sample Date: 07/17/89
Date Received: 07/17/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	79.4	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A21c 4-8
Project # 0000-00-00-0000
Lab ID: 8907G645-001
Sample Date: 07/14/89
Date Received: 07/15/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	87.7		%	0.10
% Solids	23.2		%	0.10
Alkalinity	4.2		%	0.10
Cyanide, Reactive	1.4	u	mg/kg	1.4
Cyanide, Total	5.0		mg/kg	2.0
Flash Point	>200		DEG F	37
pH	7.2		pH	+-0.20
Sulfide	10.8	u	mg/kg	10.8
Sulfide Reactive	10.8	u	mg/kg	10.8

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A21c 8-11
Project # 0000-00-00-0000
Lab ID: 8907G645-003
Sample Date: 07/14/89
Date Received: 07/15/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	72.9	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A21c 13-14.5
Project # 0000-00-00-0000
Lab ID: 8907G645-004
Sample Date: 07/14/89
Date Received: 07/15/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	85.8	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
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Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A21d 4-9
Project # 5160-01-01-0001
Lab ID: 8907G520-009
Sample Date: 07/10/89
Date Received: 07/11/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	82.8	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A21d 9-14
Project # 5160-01-01-0001
Lab ID: 8907G520-010
Sample Date: 07/10/89
Date Received: 07/11/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	78.1	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A21d 14-19
Project # 5160-01-01-0001
Lab ID: 8907G520-011
Sample Date: 07/10/89
Date Received: 07/11/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	69.6	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22a 9-14
Project # 5160-01-01-0001
Lab ID: 8907G528-012
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	71.4	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22a 19-22
Project # 5160-01-01-0001
Lab ID: 8907G528-014
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	79.4	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22a 24-28
Project # 5160-01-01-0001
Lab ID: 8907G528-015
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	77.4	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22b 0-7
Project # 5160-01-01-0001
Lab ID: 8907G660-005
Sample Date: 07/17/89
Date Received: 07/17/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	97.4		%	0.10
% Solids	72.9			0.10
Alkalinity	0.88		%	0.10
Cyanide, Reactive	0.61	u	mg/kg	0.61
Cyanide, Total	0.61	u	mg/kg	0.61
Flash Point	>200		DEG F	5
pH	7.8		pH	+-0.20
Sulfide	6.8	u	mg/kg	6.8
Sulfide Reactive	6.8	u	mg/kg	6.8

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22b 7-13
Project # 5160-01-01-0001
Lab ID: 8907G660-007
Sample Date: 07/17/89
Date Received: 07/17/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	77.2	%	0.10

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22c 3-9
Project # 5160-01-01-0001
Lab ID: 8907G660-008
Sample Date: 07/17/89
Date Received: 07/17/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	94.9		%	0.10
% Solids	70.4			0.10
Alkalinity	1.1		%	0.10
Cyanide, Reactive	0.70	u	mg/kg	0.70
Cyanide, Total	0.70	u	mg/kg	0.70
Flash Point	>200		DEG F	37
pH	7.9		pH	+-0.20
Sulfide	41.7		mg/kg	6.5
Sulfide Reactive	6.6	u	mg/kg	6.6

WESTON-GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22c 10-15
Project # 5160-01-01-0001
Lab ID: 8907G660-010
Sample Date: 07/17/89
Date Received: 07/17/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	79.8	%	0.10

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22d 4-9
Project # 5160-01-01-0001
Lab ID: 8907G528-016
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	80.7	%	0.10

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22d 9-14
Project # 5160-01-01-0001
Lab ID: 8907G528-018
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	74.1	%	0.10

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A22d 24-27
Project # 5160-01-01-0001
Lab ID: 8907G528-019
Sample Date: 07/11/89
Date Received: 07/12/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	84.8	%	0.10

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A23a 12-13
Project # 0000-00-00-0000
Lab ID: 8907G645-005
Sample Date: 07/14/89
Date Received: 07/15/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	87.6	%	0.10

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A23a 13-19
Project # 0000-00-00-0000
Lab ID: 8907G645-006
Sample Date: 07/14/89
Date Received: 07/15/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	74.0	%	0.10

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ANALYTICAL REPORT

To: **Avendt Group, Inc.**
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: **Mr. Chris Bade**

Date: Tuesday August 22nd, 1989

RE: **A23a 19-20**
Project # 0000-00-00-0000
Lab ID: **8907G645-007**
Sample Date: 07/14/89
Date Received: 07/15/89

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
% Ash	94.7		%	0.10
% Solids	66.1		%	0.10
Alkalinity	1.3		%	0.10
Cyanide, Reactive	0.73	u	mg/kg	0.73
Cyanide, Total	0.73	u	mg/kg	0.73
Flash Point	>200		DEG F	37
pH	8.6		pH	+-0.20
Sulfide	9.4		mg/kg	6.9
Sulfide Reactive	6.5	u	mg/kg	6.5

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ANALYTICAL REPORT

To: Avendt Group, Inc.
432 North Saginaw Street
3rd Floor
Flint, MI 48502

Attn: Mr. Chris Bade

Date: Tuesday August 22nd, 1989

RE: A23a 21-23
Project # 0000-00-00-0000
Lab ID: 8907G645-009
Sample Date: 07/14/89
Date Received: 07/15/89

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	83.8	%	0.10