APPENDIX D

BCM

# APPENDIX D

## SOIL ANALYTICAL RESULTS - PREVIOUS INVESTIGATIONS

# *SOIL SAMPLING SUMMARY*

GOLDER ASSOCIATES

| | |
|---|---|
| 1987 | Aug-87 |
| | Sep-87 |
| | Nov-87 |

WASTE TECHNOLOGY

| | |
|---|---|
| 1991 | Aug-91 |
| | Sep-91 |

NORBIC ENVIRONMENTAL LTD.

| | |
|---|---|
| 1991 | Mar-91 |
| | Sep-91 |

BCM

GOLDER ASSOCIATES

BORROW PIT SAMPLES

SLUDGE SAMPLES

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: BP-8A

Laboratory I.D.: 64564-004 Enseco I.D.: G01-45

Matrix: Solid Sampled: 09/14/87 Received: 09/15/87

Authorized: 09/15/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 09/25/87 |
| Barium | 0.98 | mg/L | 0.005 | 09/25/87 |
| Cadmium | ND | mg/L | 0.005 | 09/25/87 |
| Chromium | ND | mg/L | 0.01 | 09/25/87 |
| Lead | ND | mg/L | 0.05 | 09/25/87 |
| Mercury | ND | mg/L | 0.001 | 09/29/87 |
| Selenium | ND | mg/L | 0.02 | 09/28/87 |
| Silver | ND | mg/L | 0.005 | 09/25/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: BP-8A

Laboratory I.D.: G01-45 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/14/87 Received: 09/15/87

Authorized: 09/15/87 Prepared: 09/16/87 Analyzed: 09/17/87

| Parameter | Result | Units Wet Wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 1,200 |
| Aroclor-1221 | ND | ug/Kg | 1,200 |
| Aroclor-1232 | ND | ug/Kg | 1,200 |
| Aroclor-1242 | ND | ug/Kg | 1,200 |
| Aroclor-1248 | ND | ug/Kg | 1,200 |
| Aroclor-1254 | ND | ug/Kg | 2,400 |
| Aroclor-1260 | ND | ug/Kg | 2,400 |

ND = Not Detected
NA = Not Applicable

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: BP-8A

Laboratory I.D.: 31441-01 Enseco I.D.: G01-45

Matrix: Solid Sampled: 09/14/87 Received: 09/15/87

Authorized: 09/15/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 3200 | mg/Kg | 50 | 413.1 | 09/23/87 |

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: BP-8B

Laboratory I.D.: 64564-005 Enseco I.D.: G01-46

Matrix: Solid Sampled: 09/14/87 Received: 09/15/87

Authorized: 09/15/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 09/25/87 |
| Barium | 0.69 | mg/L | 0.005 | 09/25/87 |
| Cadmium | 0.012 | mg/L | 0.005 | 09/25/87 |
| Chromium | ND | mg/L | 0.01 | 09/25/87 |
| Lead | ND | mg/L | 0.05 | 09/25/87 |
| Mercury | ND | mg/L | 0.001 | 09/29/87 |
| Selenium | ND | mg/L | 0.02 | 09/28/87 |
| Silver | ND | mg/L | 0.005 | 09/25/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: BP-8B

Laboratory I.D.: G01-46 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/14/87 Received: 09/15/87

Authorized: 09/15/87 Prepared: 09/16/87 Analyzed: 09/17/87

| Parameter | Result | Units Wet Wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 1,200 |
| Aroclor-1221 | ND | ug/Kg | 1,200 |
| Aroclor-1232 | ND | ug/Kg | 1,200 |
| Aroclor-1242 | ND | ug/Kg | 1,200 |
| Aroclor-1248 | ND | ug/Kg | 1,200 |
| Aroclor-1254 | ND | ug/Kg | 2,400 |
| Aroclor-1260 | ND | ug/Kg | 2,400 |

ND = Not Detected
NA = Not Applicable

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: BP-8B

Laboratory I.D.: 31441-02 Enseco I.D.: G01-46

Matrix: Solid Sampled: 09/14/87 Received: 09/15/87

Authorized: 09/15/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 890 | mg/Kg | 50 | 413.1 | 09/23/87 |

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: BP-14

Laboratory I.D.: 31435-04 Enseco I.D.: G01-52

Matrix: Solid Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87 Prepared: 09/22/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.25 | 09/23/87 |
| Barium | ND | mg/L | 2.0 | 09/23/87 |
| Cadmium | ND | mg/L | 0.050 | 09/23/87 |
| Chromium | ND | mg/L | 0.20 | 09/23/87 |
| Lead | ND | mg/L | 0.25 | 09/23/87 |
| Mercury | ND | mg/L | 0.001 | 09/23/87 |
| Selenium | ND | mg/L | 0.020 | 09/23/87 |
| Silver | ND | mg/L | 0.025 | 09/23/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: BP-14

Laboratory I.D.: G01-52 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87 Prepared: 09/17/87 Analyzed: 09/23/87

| Parameter | Result | Units Wet wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 1,200 |
| Aroclor-1221 | ND | ug/Kg | 1,200 |
| Aroclor-1232 | ND | ug/Kg | 1,200 |
| Aroclor-1242 | ND | ug/Kg | 1,200 |
| Aroclor-1248 | ND | ug/Kg | 1,200 |
| Aroclor-1254 | ND | ug/Kg | 2,400 |
| Aroclor-1260 | ND | ug/Kg | 2,400 |

ND = Not Detected
NA = Not Applicable

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: BP-14

Laboratory I.D.: 31435-04 Enseco I.D.: G01-52

Matrix: Solid Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 2000 | mg/Kg | 50 | 413.1 | 09/23/87 |

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: BP-14

Laboratory I.D.: 31435-05 Enseco I.D.: G01-53

Matrix: Solid Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87 Prepared: 09/22/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.25 | 09/23/87 |
| Barium | ND | mg/L | 2.0 | 09/23/87 |
| Cadmium | ND | mg/L | 0.050 | 09/23/87 |
| Chromium | ND | mg/L | 0.20 | 09/23/87 |
| Lead | ND | mg/L | 0.25 | 09/23/87 |
| Mercury | ND | mg/L | 0.001 | 09/23/87 |
| Selenium | ND | mg/L | 0.020 | 09/23/87 |
| Silver | ND | mg/L | 0.025 | 09/23/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: BP-14

Laboratory I.D.: G01-53 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87 Prepared: 09/17/87 Analyzed: 09/23/87

| Parameter | Result | Units Wet wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 1,200 |
| Aroclor-1221 | ND | ug/Kg | 1,200 |
| Aroclor-1232 | ND | ug/Kg | 1,200 |
| Aroclor-1242 | ND | ug/Kg | 1,200 |
| Aroclor-1248 | ND | ug/Kg | 1,200 |
| Aroclor-1254 | ND | ug/Kg | 2,400 |
| Aroclor-1260 | ND | ug/Kg | 2,400 |

ND = Not Detected
NA = Not Applicable

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: BP-14

Laboratory I.D.: 31435-05 Enseco I.D.: G01-53

Matrix: Solid Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 10400 | mg/Kg | 50 | 413.1 | 09/23/87 |

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: BP-17

Laboratory I.D.: 31435-06 Enseco I.D.: G01-54

Matrix: Solid Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87 Prepared: 09/22/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.25 | 09/23/87 |
| Barium | ND | mg/L | 2.0 | 09/23/87 |
| Cadmium | ND | mg/L | 0.050 | 09/23/87 |
| Chromium | ND | mg/L | 0.20 | 09/23/87 |
| Lead | ND | mg/L | 0.25 | 09/23/87 |
| Mercury | ND | mg/L | 0.001 | 09/23/87 |
| Selenium | ND | mg/L | 0.020 | 09/23/87 |
| Silver | ND | mg/L | 0.025 | 09/23/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: BP-17

Laboratory I.D.: G01-54 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87 Prepared: 09/17/87 Analyzed: 09/23/87

| Parameter | Result | Units Wet wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 1,200 |
| Aroclor-1221 | ND | ug/Kg | 1,200 |
| Aroclor-1232 | ND | ug/Kg | 1,200 |
| Aroclor-1242 | ND | ug/Kg | 1,200 |
| Aroclor-1248 | ND | ug/Kg | 1,200 |
| Aroclor-1254 | ND | ug/Kg | 2,400 |
| Aroclor-1260 | ND | ug/Kg | 2,400 |

ND = Not Detected
NA = Not Applicable

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: BP-17

Laboratory I.D.: 31435-06 Enseco I.D.: G01-54

Matrix: Solid Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 280 | mg/Kg | 50 | 413.1 | 09/23/87 |

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: BP-20

Laboratory I.D.: 64564-006 Enseco I.D.: G01-47

Matrix: Solid Sampled: 09/14/87 Received: 09/15/87

Authorized: 09/15/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 09/25/87 |
| Barium | ND | mg/L | 0.005 | 09/25/87 |
| Cadmium | ND | mg/L | 0.005 | 09/25/87 |
| Chromium | ND | mg/L | 0.01 | 09/25/87 |
| Lead | ND | mg/L | 0.05 | 09/25/87 |
| Mercury | 0.005 | mg/L | 0.001 | 09/29/87 |
| Selenium | ND | mg/L | 0.02 | 09/28/87 |
| Silver | ND | mg/L | 0.005 | 09/25/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: BP-20

Laboratory I.D.: G01-47 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/14/87 Received: 09/15/87

Authorized: 09/15/87 Prepared: 09/16/87 Analyzed: 09/17/87

| Parameter | Result | Units Wet Wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 150,000* |
| Aroclor-1221 | ND | ug/Kg | 150,000* |
| Aroclor-1232 | ND | ug/Kg | 150,000* |
| Aroclor-1242 | ND | ug/Kg | 150,000* |
| Aroclor-1248 | ND | ug/Kg | 150,000* |
| Aroclor-1254 | ND | ug/Kg | 150,000* |
| Aroclor-1260 | ND | ug/Kg | 150,000* |

ND = Not Detected
NA = Not Applicable
*Reporting limit raised due to interference.

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: BP-20

Laboratory I.D.: 31441-03 Enseco I.D.: G01-47

Matrix: Solid Sampled: 09/14/87 Received: 09/15/87

Authorized: 09/15/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 310 | mg/Kg | 50 | 413.1 | 09/23/87 |

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: BP-NT3

Laboratory I.D.: 31435-07 Enseco I.D.: G01-55

Matrix: Solid Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87 Prepared: 09/22/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.25 | 09/23/87 |
| Barium | ND | mg/L | 2.0 | 09/23/87 |
| Cadmium | ND | mg/L | 0.050 | 09/23/87 |
| Chromium | ND | mg/L | 0.20 | 09/23/87 |
| Lead | ND | mg/L | 0.25 | 09/23/87 |
| Mercury | ND | mg/L | 0.001 | 09/23/87 |
| Selenium | ND | mg/L | 0.020 | 09/23/87 |
| Silver | ND | mg/L | 0.025 | 09/23/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: BP-NT3

Laboratory I.D.: G01-55 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87 Prepared: 09/17/87 Analyzed: 09/23/87

| Parameter | Result | Units Wet wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 1,200 |
| Aroclor-1221 | ND | ug/Kg | 1,200 |
| Aroclor-1232 | ND | ug/Kg | 1,200 |
| Aroclor-1242 | ND | ug/Kg | 1,200 |
| Aroclor-1248 | ND | ug/Kg | 1,200 |
| Aroclor-1254 | ND | ug/Kg | 2,400 |
| Aroclor-1260 | ND | ug/Kg | 2,400 |

ND = Not Detected
NA = Not Applicable

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: BP-NT3

Laboratory I.D.: 31435-07 Enseco I.D.: G01-55

Matrix: Solid Sampled: 09/16/87 Received: 09/17/87

Authorized: 09/17/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 1700 | mg/Kg | 50 | 413.1 | 09/23/87 |

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: BPNT 4

Laboratory I.D.: 64529-006 Enseco I.D.: G01-44

Matrix: Solid Sampled: 09/10/87 Received: 09/11/87

Authorized: 09/11/87 Prepared: 09/17/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 09/23/87 |
| Barium | 0.016 | mg/L | 0.005 | 09/23/87 |
| Cadmium | ND | mg/L | 0.005 | 09/23/87 |
| Chromium | ND | mg/L | 0.01 | 09/23/87 |
| Lead | 0.33 | mg/L | 0.05 | 09/23/87 |
| Mercury | ND | mg/L | 0.001 | 09/23/87 |
| Selenium | ND | mg/L | 0.02 | 09/25/87 |
| Silver | ND | mg/L | 0.005 | 09/23/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: BPNT 4

Laboratory I.D.: G01-44 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/10/87 Received: 09/11/87

Authorized: 09/11/87 Prepared: 09/15/87 Analyzed: 09/17/87

| Parameter | Result | Units Wet Wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 12,000 |
| Aroclor-1221 | ND | ug/Kg | 12,000 |
| Aroclor-1232 | ND | ug/Kg | 12,000 |
| Aroclor-1242 | ND | ug/Kg | 12,000 |
| Aroclor-1248 | 160,000 | ug/Kg | 12,000 |
| Aroclor-1254 | ND | ug/Kg | 24,000 |
| Aroclor-1260 | ND | ug/Kg | 24,000 |

ND = Not Detected
NA = Not Applicable

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: BPNT 4

Laboratory I.D.: 64529-006 Enseco I.D.: G01-44

Matrix: Solid Sampled: 09/10/87 Received: 09/11/87

Authorized: 09/11/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 291000 | mg/Kg | 100 | 413.1 | 09/24/87 |

BORING SAMPLES

SOIL SAMPLES

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: Boring #88

Laboratory I.D.: 64529-003 Enseco I.D.: G01-40

Matrix: Solid Sampled: 09/09/87 Received: 09/10/87

Authorized: 09/10/87 Prepared: 09/17/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 1 | 09/23/87 |
| Barium | 0.08 | mg/L | 0.05 | 09/23/87 |
| Cadmium | ND | mg/L | 0.05 | 09/23/87 |
| Chromium | ND | mg/L | 0.1 | 09/23/87 |
| Lead | ND | mg/L | 0.5 | 09/23/87 |
| Mercury | ND | mg/L | 0.001 | 09/23/87 |
| Selenium | ND | mg/L | 0.04 | 09/25/87 |
| Silver | ND | mg/L | 0.05 | 09/23/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: Boring #88

Laboratory I.D.: G01-40 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/09/87 Received: 09/10/87

Authorized: 09/10/87 Prepared: 09/18/87 Analyzed: 09/23/87

| Parameter | Result | Units Wet wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 1,200 |
| Aroclor-1221 | ND | ug/Kg | 1,200 |
| Aroclor-1232 | ND | ug/Kg | 1,200 |
| Aroclor-1242 | ND | ug/Kg | 1,200 |
| Aroclor-1248 | ND | ug/Kg | 1,200 |
| Aroclor-1254 | ND | ug/Kg | 2,400 |
| Aroclor-1260 | ND | ug/Kg | 2,400 |

ND = Not Detected
NA = Not Applicable

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: Boring #88

Laboratory I.D.: 64529-003 Enseco I.D.: G01-40

Matrix: Solid Sampled: 09/09/87 Received: 09/10/87

Authorized: 09/10/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 8200 | mg/Kg | 100 | 413.1 | 09/24/87 |

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: Well #89

Laboratory I.D.: 31458-02 Enseco I.D.: G01-58

Matrix: Solid Sampled: 09/18/87 Received: 09/19/87

Authorized: 09/19/87 Prepared: 09/23/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.25 | 09/25/87 |
| Barium | ND | mg/L | 2.0 | 09/25/87 |
| Cadmium | ND | mg/L | 0.050 | 09/25/87 |
| Chromium | ND | mg/L | 0.20 | 09/25/87 |
| Lead | ND | mg/L | 0.25 | 09/25/87 |
| Mercury | ND | mg/L | 0.001 | 09/25/87 |
| Selenium | ND | mg/L | 0.020 | 09/25/87 |
| Silver | ND | mg/L | 0.025 | 09/25/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: Well #89

Laboratory I.D.: G01-58 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/18/87 Received: 09/19/87

Authorized: 09/19/87 Prepared: 09/23/87 Analyzed: 09/27/87

| Parameter | Result | Units Wet Wt. | Reporting Limit* |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 40,000 |
| Aroclor-1221 | ND | ug/Kg | 40,000 |
| Aroclor-1232 | ND | ug/Kg | 40,000 |
| Aroclor-1242 | ND | ug/Kg | 40,000 |
| Aroclor-1248 | ND | ug/Kg | 40,000 |
| Aroclor-1254 | ND | ug/Kg | 40,000 |
| Aroclor-1260 | ND | ug/Kg | 40,000 |

ND = Not Detected
NA = Not Applicable
*Reporting limit raised due to interference.

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: Well #89

Laboratory I.D.: 31458-02 Enseco I.D.: G01-58

Matrix: Solid Sampled: 09/18/87 Received: 09/19/87

Authorized: 09/19/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 5200 | mg/Kg | 50 | 413.1 | 09/23/87 |

TEST PIT SAMPLES

SOIL SAMPLES

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-1

Laboratory I.D.: 64264-001 Enseco I.D.: G01-1

Matrix: Solid Sampled: 08/07/87 Received: 08/08/87

Authorized: 08/08/87 Prepared: 08/11/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/13/87 |
| Barium | 0.14 | mg/L | 0.005 | 08/13/87 |
| Cadmium | ND | mg/L | 0.005 | 08/13/87 |
| Chromium | ND | mg/L | 0.01 | 08/13/87 |
| Lead | ND | mg/L | 0.05 | 08/13/87 |
| Mercury | ND | mg/L | 0.001 | 08/12/87 |
| Selenium | ND | mg/L | 0.02 | 08/13/87 |
| Silver | ND | mg/L | 0.005 | 08/13/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-5

Laboratory I.D.: 64264-002 Enseco I.D.: G01-2

Matrix: Solid Sampled: 08/06/87 Received: 08/08/87

Authorized: 08/08/87 Prepared: 08/11/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/13/87 |
| Barium | 0.038 | mg/L | 0.005 | 08/13/87 |
| Cadmium | ND | mg/L | 0.005 | 08/13/87 |
| Chromium | ND | mg/L | 0.01 | 08/13/87 |
| Lead | ND | mg/L | 0.05 | 08/13/87 |
| Mercury | ND | mg/L | 0.001 | 08/14/87 |
| Selenium | ND | mg/L | 0.02 | 08/13/87 |
| Silver | ND | mg/L | 0.005 | 08/13/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-14

Laboratory I.D.: 64264-003 Enseco I.D.: G01-3

Matrix: Solid Sampled: 08/06/87 Received: 08/08/87

Authorized: 08/08/87 Prepared: 08/11/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/13/87 |
| Barium | 0.073 | mg/L | 0.005 | 08/13/87 |
| Cadmium | ND | mg/L | 0.005 | 08/13/87 |
| Chromium | ND | mg/L | 0.01 | 08/13/87 |
| Lead | ND | mg/L | 0.05 | 08/13/87 |
| Mercury | ND | mg/L | 0.001 | 08/14/87 |
| Selenium | ND | mg/L | 0.02 | 08/13/87 |
| Silver | ND | mg/L | 0.005 | 08/13/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-16

Laboratory I.D.: 64264-004 Enseco I.D.: G01-4

Matrix: Solid Sampled: 08/06/87 Received: 08/08/87

Authorized: 08/08/87 Prepared: 08/11/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/13/87 |
| Barium | 0.19 | mg/L | 0.005 | 08/13/87 |
| Cadmium | ND | mg/L | 0.005 | 08/13/87 |
| Chromium | ND | mg/L | 0.01 | 08/13/87 |
| Lead | ND | mg/L | 0.05 | 08/13/87 |
| Mercury | ND | mg/L | 0.001 | 08/14/87 |
| Selenium | ND | mg/L | 0.02 | 08/13/87 |
| Silver | ND | mg/L | 0.005 | 08/13/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-20

Laboratory I.D.: 64264-005 Enseco I.D.: G01-5

Matrix: Solid Sampled: 08/06/87 Received: 08/08/87

Authorized: 08/08/87 Prepared: 08/11/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/13/87 |
| Barium | 0.064 | mg/L | 0.005 | 08/13/87 |
| Cadmium | ND | mg/L | 0.005 | 08/13/87 |
| Chromium | ND | mg/L | 0.01 | 08/13/87 |
| Lead | ND | mg/L | 0.05 | 08/13/87 |
| Mercury | ND | mg/L | 0.001 | 08/14/87 |
| Selenium | ND | mg/L | 0.02 | 08/13/87 |
| Silver | ND | mg/L | 0.005 | 08/13/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-21

Laboratory I.D.: 64315-010 Enseco I.D.: G01-8

Matrix: Solid Sampled: 08/10/87 Received: 08/15/87

Authorized: 08/15/87 Prepared: 08/18/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/25/87 |
| Barium | 0.29 | mg/L | 0.005 | 08/25/87 |
| Cadmium | ND | mg/L | 0.005 | 08/25/87 |
| Chromium | ND | mg/L | 0.01 | 08/25/87 |
| Lead | ND | mg/L | 0.05 | 08/25/87 |
| Mercury | ND | mg/L | 0.001 | 08/25/87 |
| Selenium | ND | mg/L | 0.02 | 08/24/87 |
| Silver | ND | mg/L | 0.005 | 08/25/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-25

Laboratory I.D.: 64264-006 Enseco I.D.: G01-6

Matrix: Solid Sampled: 08/07/87 Received: 08/08/87

Authorized: 08/08/87 Prepared: 08/11/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/13/87 |
| Barium | 0.020 | mg/L | 0.005 | 08/13/87 |
| Cadmium | ND | mg/L | 0.005 | 08/13/87 |
| Chromium | ND | mg/L | 0.01 | 08/13/87 |
| Lead | ND | mg/L | 0.05 | 08/13/87 |
| Mercury | ND | mg/L | 0.001 | 08/14/87 |
| Selenium | ND | mg/L | 0.02 | 08/13/87 |
| Silver | ND | mg/L | 0.005 | 08/13/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-27

Laboratory I.D.: 64264-007 Enseco I.D.: G01-7

Matrix: Solid Sampled: 08/07/87 Received: 08/08/87

Authorized: 08/08/87 Prepared: 08/11/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.5 | 08/13/87 |
| Barium | 0.26 | mg/L | 0.03 | 08/13/87 |
| Cadmium | ND | mg/L | 0.03 | 08/13/87 |
| Chromium | ND | mg/L | 0.05 | 08/13/87 |
| Lead | ND | mg/L | 0.3 | 08/13/87 |
| Mercury | ND | mg/L | 0.001 | 08/14/87 |
| Selenium | ND | mg/L | 0.04 | 08/13/87 |
| Silver | ND | mg/L | 0.03 | 08/13/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: TP-27

Laboratory I.D.: G01-7 Enseco I.D.: NA

Matrix: Solid Sampled: 08/07/87 Received: 08/08/87

Authorized: 08/08/87 Prepared: 08/10/87 Analyzed: 08/11/87

| Parameter | Result | Units (Wet Wt.) | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 800* |
| Aroclor-1221 | ND | ug/Kg | 800* |
| Aroclor-1232 | ND | ug/Kg | 800* |
| Aroclor-1242 | ND | ug/Kg | 800* |
| Aroclor-1248 | ND | ug/Kg | 800* |
| Aroclor-1254 | ND | ug/Kg | 160 |
| Aroclor-1260 | ND | ug/Kg | 160 |

ND = Not Detected
NA = Not Applicable
* = Reporting limits raised due to interference.

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-28

Laboratory I.D.: 64315-009 Enseco I.D.: G01-9

Matrix: Solid Sampled: 08/10/87 Received: 08/15/87

Authorized: 08/15/87 Prepared: 08/18/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/25/87 |
| Barium | 0.24 | mg/L | 0.005 | 08/25/87 |
| Cadmium | ND | mg/L | 0.005 | 08/25/87 |
| Chromium | ND | mg/L | 0.01 | 08/25/87 |
| Lead | ND | mg/L | 0.05 | 08/25/87 |
| Mercury | ND | mg/L | 0.001 | 08/25/87 |
| Selenium | ND | mg/L | 0.02 | 08/24/87 |
| Silver | ND | mg/L | 0.005 | 08/25/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-31

Laboratory I.D.: 64315-008 Enseco I.D.: G01-10

Matrix: Solid Sampled: 08/11/87 Received: 08/15/87

Authorized: 08/15/87 Prepared: 08/18/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/25/87 |
| Barium | 0.11 | mg/L | 0.005 | 08/25/87 |
| Cadmium | ND | mg/L | 0.005 | 08/25/87 |
| Chromium | ND | mg/L | 0.01 | 08/25/87 |
| Lead | ND | mg/L | 0.05 | 08/25/87 |
| Mercury | ND | mg/L | 0.001 | 08/25/87 |
| Selenium | ND | mg/L | 0.02 | 08/24/87 |
| Silver | ND | mg/L | 0.005 | 08/25/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-36

Laboratory I.D.: 64315-007 Enseco I.D.: G01-11

Matrix: Solid Sampled: 08/11/87 Received: 08/15/87

Authorized: 08/15/87 Prepared: 08/18/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/25/87 |
| Barium | 0.64 | mg/L | 0.005 | 08/25/87 |
| Cadmium | 0.025 | mg/L | 0.005 | 08/25/87 |
| Chromium | ND | mg/L | 0.01 | 08/25/87 |
| Lead | ND | mg/L | 0.05 | 08/25/87 |
| Mercury | ND | mg/L | 0.001 | 08/25/87 |
| Selenium | ND | mg/L | 0.02 | 08/24/87 |
| Silver | ND | mg/L | 0.005 | 08/25/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-38

Laboratory I.D.: 64315-005 Enseco I.D.: G01-12

Matrix: Solid Sampled: 08/11/87 Received: 08/15/87

Authorized: 08/15/87 Prepared: 08/18/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/25/87 |
| Barium | ND | mg/L | 0.005 | 08/25/87 |
| Cadmium | ND | mg/L | 0.005 | 08/25/87 |
| Chromium | ND | mg/L | 0.01 | 08/25/87 |
| Lead | ND | mg/L | 0.05 | 08/25/87 |
| Mercury | ND | mg/L | 0.001 | 08/25/87 |
| Selenium | ND | mg/L | 0.02 | 08/24/87 |
| Silver | ND | mg/L | 0.005 | 08/25/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-44

Laboratory I.D.: 64315-006 Enseco I.D.: G01-13

Matrix: Solid Sampled: 08/12/87 Received: 08/15/87

Authorized: 08/15/87 Prepared: 08/18/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.1 | 08/25/87 |
| Barium | 0.13 | mg/L | 0.005 | 08/25/87 |
| Cadmium | ND | mg/L | 0.005 | 08/25/87 |
| Chromium | ND | mg/L | 0.01 | 08/25/87 |
| Lead | ND | mg/L | 0.05 | 08/25/87 |
| Mercury | ND | mg/L | 0.001 | 08/25/87 |
| Selenium | ND | mg/L | 0.02 | 08/24/87 |
| Silver | ND | mg/L | 0.005 | 08/25/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-49

Laboratory I.D.: 64315-004 Enseco I.D.: G01-14

Matrix: Solid Sampled: 08/13/87 Received: 08/15/87

Authorized: 08/15/87 Prepared: 08/18/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.2 | 08/25/87 |
| Barium | 0.46 | mg/L | 0.01 | 08/25/87 |
| Cadmium | ND | mg/L | 0.01 | 08/25/87 |
| Chromium | ND | mg/L | 0.02 | 08/25/87 |
| Lead | ND | mg/L | 0.1 | 08/25/87 |
| Mercury | ND | mg/L | 0.001 | 08/25/87 |
| Selenium | ND | mg/L | 0.02 | 08/24/87 |
| Silver | ND | mg/L | 0.01 | 08/25/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: TP-49

Laboratory I.D.: G01-14 Enseco I.D.: NA

Matrix: Solid Sampled: 08/13/87 Received: 08/15/87

Authorized: 08/15/87 Prepared: 08/18/87 Analyzed: 08/27/87

| Parameter | Result | Units (Wet Wt.) | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 800* |
| Aroclor-1221 | ND | ug/Kg | 800* |
| Aroclor-1232 | ND | ug/Kg | 800* |
| Aroclor-1242 | ND | ug/Kg | 800* |
| Aroclor-1248 | 2,300 | ug/Kg | 800* |
| Aroclor-1254 | ND | ug/Kg | 1,600* |
| Aroclor-1260 | ND | ug/Kg | 1,600* |

ND = Not Detected
NA = Not Applicable
* = Reporting limits raised due to dilution.

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: TP-49

Laboratory I.D.: 64315-004 Enseco I.D.: G01-14

Matrix: Solid Sampled: 08/13/87 Received: 08/15/87

Authorized: 08/15/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 63300 | mg/Kg | 100 | 413.1 | 08/31/87 |

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-56

Laboratory I.D.: 64315-003 Enseco I.D.: G01-15

Matrix: Solid Sampled: 08/13/87 Received: 08/15/87

Authorized: 08/15/87 Prepared: 08/18/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 0.5 | 08/25/87 |
| Barium | 0.10 | mg/L | 0.03 | 08/25/87 |
| Cadmium | ND | mg/L | 0.03 | 08/25/87 |
| Chromium | ND | mg/L | 0.05 | 08/25/87 |
| Lead | ND | mg/L | 0.3 | 08/25/87 |
| Mercury | ND | mg/L | 0.001 | 08/25/87 |
| Selenium | ND | mg/L | 0.04 | 08/24/87 |
| Silver | ND | mg/L | 0.03 | 08/25/87 |

ND = Not Detected

Enseco

# EP TOX METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-59

Laboratory I.D.: 64529-005 Enseco I.D.: G01-43

Matrix: Solid Sampled: 09/10/87 Received: 09/11/87

Authorized: 09/11/87 Prepared: 09/17/87

| Parameter | Result | Units | Reporting Limit | Date Analyzed |
|---|---|---|---|---|
| Arsenic | ND | mg/L | 1 | 09/23/87 |
| Barium | 0.46 | mg/L | 0.05 | 09/23/87 |
| Cadmium | ND | mg/L | 0.05 | 09/23/87 |
| Chromium | ND | mg/L | 0.1 | 09/23/87 |
| Lead | ND | mg/L | 0.5 | 09/23/87 |
| Mercury | ND | mg/L | 0.001 | 09/23/87 |
| Selenium | ND | mg/L | 0.04 | 09/25/87 |
| Silver | ND | mg/L | 0.05 | 09/23/87 |

ND = Not Detected

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: TP-59

Laboratory I.D.: G01-43 Enseco I.D.: NA

Matrix: Sludge Sampled: 09/10/87 Received: 09/11/87

Authorized: 09/11/87 Prepared: 09/15/87 Analyzed: 09/17/87

| Parameter | Result | Units Wet Wt. | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 1,200 |
| Aroclor-1221 | ND | ug/Kg | 1,200 |
| Aroclor-1232 | ND | ug/Kg | 1,200 |
| Aroclor-1242 | ND | ug/Kg | 1,200 |
| Aroclor-1248 | ND | ug/Kg | 1,200 |
| Aroclor-1254 | ND | ug/Kg | 2,400 |
| Aroclor-1260 | ND | ug/Kg | 2,400 |

ND = Not Detected
NA = Not Applicable

Enseco

# INORGANIC PARAMETERS

Client Name: Golder Associates, Inc.

Client I.D.: TP59

Laboratory I.D.: 64529-005 Enseco I.D.: G01-43

Matrix: Solid Sampled: 09/10/87 Received: 09/11/87

Authorized: 09/11/87

| Parameter | Result | Units (as received) | Reporting Limit | Analytical Method | Date Analyzed |
|---|---|---|---|---|---|
| Oil & Grease | 400 | mg/Kg | 100 | 413.1 | 09/24/87 |

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: TP-62 3.0'

Laboratory I.D.: 32150-001 Enseco I.D.: G01

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87 Prepared: 11/05/87 Analyzed: 11/10/87

| Parameter | Result | Units (Wet Wt.) | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 800 |
| Aroclor-1221 | ND | ug/Kg | 800 |
| Aroclor-1232 | ND | ug/Kg | 800 |
| Aroclor-1242 | ND | ug/Kg | 800 |
| Aroclor-1248 | ND | ug/Kg | 800 |
| Aroclor-1254 | ND | ug/Kg | 1600 |
| Aroclor-1260 | ND | ug/Kg | 1600 |

ND = Not Detected
N/A = Not Available

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: TP-62 4.0'

Laboratory I.D.: 32150-002 Enseco I.D.: G01

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87 Prepared: 11/05/87 Analyzed: 11/10/87

| Parameter | Result | Units (Wet Wt.) | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 800 |
| Aroclor-1221 | ND | ug/Kg | 800 |
| Aroclor-1232 | ND | ug/Kg | 800 |
| Aroclor-1242 | ND | ug/Kg | 800 |
| Aroclor-1248 | ND | ug/Kg | 800 |
| Aroclor-1254 | ND | ug/Kg | 1600 |
| Aroclor-1260 | ND | ug/Kg | 1600 |

ND = Not Detected
N/A = Not Available

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: TP-64 3.0'

Laboratory I.D.: 32150-003 Enseco I.D.: G01

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87 Prepared: 11/05/87 Analyzed: 11/10/87

| Parameter | Result | Units (Wet Wt.) | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 800 |
| Aroclor-1221 | ND | ug/Kg | 800 |
| Aroclor-1232 | ND | ug/Kg | 800 |
| Aroclor-1242 | ND | ug/Kg | 800 |
| Aroclor-1248 | ND | ug/Kg | 800 |
| Aroclor-1254 | ND | ug/Kg | 1600 |
| Aroclor-1260 | ND | ug/Kg | 1600 |

ND = Not Detected
N/A = Not Available

Enseco

# PRIORITY POLLUTANT LIST ORGANOCHLORINE PESTICIDES/PCBs

## Enseco Method 8080/PP List

Client Name: Golder Associates, Inc.

Client I.D.: TP-65 9.5'

Laboratory I.D.: 32150-004 Enseco I.D.: G01

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87 Prepared: 11/05/87 Analyzed: 11/10/87

| Parameter | Result | Units | Reporting Limit |
|---|---|---|---|
| alpha-BHC | ND | ug/Kg | 80 |
| beta-BHC | ND | ug/Kg | 80 |
| delta-BHC | ND | ug/Kg | 80 |
| gamma-BHC (Lindane) | ND | ug/Kg | 80 |
| Heptachlor | ND | ug/Kg | 80 |
| Aldrin | ND | ug/Kg | 80 |
| Heptachlor epoxide | ND | ug/Kg | 80 |
| Endosulfan I | ND | ug/Kg | 80 |
| Dieldrin | ND | ug/Kg | 160 |
| 4,4'-DDE | ND | ug/Kg | 160 |
| Endrin | ND | ug/Kg | 160 |
| Endosulfan II | ND | ug/Kg | 160 |
| 4,4'-DDD | ND | ug/Kg | 160 |
| Endosulfan sulfate | ND | ug/Kg | 160 |
| 4,4'-DDT | ND | ug/Kg | 160 |
| Endrin ketone | ND | ug/Kg | 160 |
| Methoxychlor | ND | ug/Kg | 800 |
| Chlordane | ND | ug/Kg | 800 |
| Toxaphene | ND | ug/Kg | 1600 |
| Aroclor-1016 | ND | ug/Kg | 800 |
| Aroclor-1221 | ND | ug/Kg | 800 |
| Aroclor-1232 | ND | ug/Kg | 800 |
| Aroclor-1242 | ND | ug/Kg | 800 |
| Aroclor-1248 | ND | ug/Kg | 800 |
| Aroclor-1254 | ND | ug/Kg | 1600 |
| Aroclor-1260 | ND | ug/Kg | 1600 |

ND = Not Detected
N/A = Not Available

Enseco

# PRIORITY POLLUTANT LIST VOLATILE ORGANICS

## Enseco Method 8240/PP List

Client Name: Golder Associates, Inc.

Client I.D.: TP-65 9.5'

Laboratory I.D.: 32150-004 Enseco I.D.: G01

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87 Prepared: 11/09/87 Analyzed: 11/10/87

| Parameter | Result | Units | Reporting Limit |
|---|---|---|---|
| Chloromethane | ND | ug/Kg | 1000 |
| Bromomethane | ND | ug/Kg | 1000 |
| Vinyl chloride | ND | ug/Kg | 1000 |
| Chloroethane | ND | ug/Kg | 1000 |
| Methylene chloride | ND | ug/Kg | 2500 |
| 1,1-Dichloroethene | ND | ug/Kg | 500 |
| 1,1-Dichloroethane | ND | ug/Kg | 500 |
| trans-1,2-Dichloroethene | ND | ug/Kg | 500 |
| Chloroform | ND | ug/Kg | 500 |
| 1,2-Dichloroethane | ND | ug/Kg | 500 |
| 1,1,1-Trichloroethane | ND | ug/Kg | 500 |
| Carbon tetrachloride | ND | ug/Kg | 500 |
| Bromodichloromethane | ND | ug/Kg | 500 |
| 1,2-Dichloropropane | ND | ug/Kg | 500 |
| trans-1,3-Dichloropropene | ND | ug/Kg | 500 |
| Trichloroethene | ND | ug/Kg | 500 |
| Dibromochloromethane | ND | ug/Kg | 500 |
| 1,1,2-Trichloroethane | ND | ug/Kg | 500 |
| Benzene | ND | ug/Kg | 500 |
| cis-1,3-Dichloropropene | ND | ug/Kg | 500 |
| 2-Chloroethyl vinyl ether | ND | ug/Kg | 500 |
| Bromoform | ND | ug/Kg | 1000 |
| 1,1,2,2-Tetrachloroethane | ND | ug/Kg | 500 |
| Tetrachloroethene | ND | ug/Kg | 500 |
| Toluene | ND | ug/Kg | 500 |
| Chlorobenzene | ND | ug/Kg | 500 |
| Ethyl benzene | ND | ug/Kg | 500 |

ND = Not Detected
N/A = Not Available

# ORGANIC ANALYSIS DATA SHEET

## TENTATIVELY IDENTIFIED COMPOUNDS

Golder Associates, Inc.

Project: G01
Matrix: Soil
Fraction: VOA

The following sample had no non-HSL compounds at greater than 10 percent of the response of the internal standard 1,4-difluorobenzene:

| Lab I.D. | Client I.D. |
|---|---|
| 32150-004 | TP-65 9.5' |

Enseco

# PRIORITY POLLUTANT LIST SEMIVOLATILE ORGANICS

## Enseco Method 8270/PP List

Client Name: Golder Associates, Inc.

Client I.D.: TP-65 9.5'

Laboratory I.D.: 32150-004 Enseco I.D.: G01

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87 Prepared: 11/05/87 Analyzed: 11/06/87

| Parameter | Result | Units | Reporting Limit |
|---|---|---|---|
| Phenol | ND | ug/Kg | 3300 |
| bis(2-Chloroethyl)ether | ND | ug/Kg | 3300 |
| 2-Chlorophenol | ND | ug/Kg | 3300 |
| 1,3-Dichlorobenzene | ND | ug/Kg | 3300 |
| 1,4-Dichlorobenzene | ND | ug/Kg | 3300 |
| 1,2-Dichlorobenzene | ND | ug/Kg | 3300 |
| bis(2-Chloroisopropyl)ether | ND | ug/Kg | 3300 |
| N-Nitroso-dipropylamine | ND | ug/Kg | 3300 |
| Hexachloroethane | ND | ug/Kg | 3300 |
| Nitrobenzene | ND | ug/Kg | 3300 |
| Isophorone | ND | ug/Kg | 3300 |
| 2-Nitrophenol | ND | ug/Kg | 3300 |
| 2,4-Dimethylphenol | ND | ug/Kg | 3300 |
| bis(2-Chloroethoxy)methane | ND | ug/Kg | 3300 |
| 2,4-Dichlorophenol | ND | ug/Kg | 3300 |
| 1,2,4-Trichlorobenzene | ND | ug/Kg | 3300 |
| Naphthalene | ND | ug/Kg | 3300 |
| Hexachlorobutadiene | ND | ug/Kg | 3300 |
| 4-Chloro-3-methylphenol | ND | ug/Kg | 3300 |
| Hexachlorocyclopentadiene | ND | ug/Kg | 3300 |
| 2,4,6-Trichlorophenol | ND | ug/Kg | 3300 |
| 2-Chloronaphthalene | ND | ug/Kg | 3300 |
| Dimethyl phthalate | ND | ug/Kg | 3300 |
| Acenaphthylene | ND | ug/Kg | 3300 |
| Acenaphthene | ND | ug/Kg | 3300 |
| 2,4-Dinitrophenol | ND | ug/Kg | 3300 |
| 4-Nitrophenol | ND | ug/Kg | 16000 |
| 2,4-Dinitrotoluene | ND | ug/Kg | 16000 |
| 2,6-Dinitrotoluene | ND | ug/Kg | 3300 |
| Diethyl phthalate | ND | ug/Kg | 3300 |
| 4-Chlorophenyl phenyl ether | ND | ug/Kg | 3300 |
| Fluorene | ND | ug/Kg | 3300 |
| 4,6-Dinitro-2-methylphenol | ND | ug/Kg | 3300 |
| 1,2-Diphenylhydrazine | ND | ug/Kg | 16000 |
| N-Nitrosodiphenylamine | ND | ug/Kg | 3300 |
| 4-Bromophenyl phenyl ether | ND | ug/Kg | 3300 |
| | ND | ug/Kg | 3300 |

Enseco

PRIORITY POLLUTANT LIST SEMIVOLATILE ORGANICS Cont.

Enseco Method 8270/PP List

Client Name: Golder Associates, Inc.

Client I.D.: TP-65 9.5'

Laboratory I.D.: 32150-004 Enseco I.D.: G01

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87 Prepared: 11/05/87 Analyzed: 11/06/87

| Parameter | Result | Units | Reporting Limit |
|---|---|---|---|
| Hexachlorobenzene | ND | ug/Kg | 3300 |
| Pentachlorophenol | ND | ug/Kg | 16000 |
| Phenanthrene | ND | ug/Kg | 3300 |
| Anthracene | ND | ug/Kg | 3300 |
| Di-n-butyl phthalate | ND | ug/Kg | 3300 |
| Fluoranthene | ND | ug/Kg | 3300 |
| Pyrene | ND | ug/Kg | 3300 |
| Butyl benzyl phthalate | ND | ug/Kg | 3300 |
| 3,3'-Dichlorobenzidine | ND | ug/Kg | 6600 |
| Benzo(a)anthracene | ND | ug/Kg | 3300 |
| bis(2-Ethylhexyl)phthalate | ND | ug/Kg | 3300 |
| Chrysene | ND | ug/Kg | 3300 |
| Di-n-octyl phthalate | ND | ug/Kg | 3300 |
| Benzo(b)fluoranthene | ND | ug/Kg | 3300 |
| Benzo(k)fluoranthene | ND | ug/Kg | 3300 |
| Benzo(a)pyrene | ND | ug/Kg | 3300 |
| Indeno(1,2,3-c,d)pyrene | ND | ug/Kg | 3300 |
| Dibenzo(a,h)anthracene | ND | ug/Kg | 3300 |
| Benzo(g,h,i)perylene | ND | ug/Kg | 3300 |

ND = Not Detected
N/A = Not Available

# ORGANIC ANALYSIS DATA SHEET

## TENTATIVELY IDENTIFIED COMPOUNDS

Golder Associates, Inc.

Project: G01
Matrix: Soil
Fraction: ABN

The following sample had no non-HSL compounds at greater than 10 percent of the response of the internal standard $d_{10}$-phenanthrene:

| Lab I.D. | Client I.D. |
|---|---|
| 32150-004 | TP-65 9.5' |

# PRIORITY POLLUTANT LIST

## METALS

Client Name: Golder Associates, Inc.

Client I.D.: TP-65 9.5'

Laboratory I.D.: 32150-004 Enseco I.D.: G01

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87 Prepared: 11/05/87 Received: 11/05/87

| Parameter | Result | Units | Reporting Limit | Analytical Method |
|---|---|---|---|---|
| Antimony | ND | mg/Kg | 5 | 6010 |
| Arsenic | 8.5 | mg/Kg | 0.3 | 7060 |
| Beryllium | 0.33 | mg/Kg | 0.1 | 6010 |
| Cadmium | ND | mg/Kg | 0.5 | 6010 |
| Chromium | 1200 | mg/Kg | 1 | 6010 |
| Copper | 63 | mg/Kg | 0.6 | 6010 |
| Lead | 54 | mg/Kg | 0.2 | 7421 |
| Mercury | 0.17 | mg/Kg | 0.1 | 7471 |
| Nickel | 30 | mg/Kg | 4 | 6010 |
| Selenium | ND | mg/Kg | 0.2 | 7740 |
| Silver | 1.5 | mg/Kg | 0.5 | 6010 |
| Thallium | ND | mg/Kg | 0.4 | 7841 |
| Zinc | 410 | mg/Kg | 1 | 6010 |

ND = Not Detected
N/A = Not Available

Enseco

# POLYCHLORINATED BIPHENYLS

## Enseco Method 8080

Client Name: Golder Associates, Inc.

Client I.D.: TP-66 3.0'

Laboratory I.D.: 32150-005 Enseco I.D.: G01

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87 Prepared: 11/05/87 Analyzed: 11/10/87

| Parameter | Result | Units (Wet Wt.) | Reporting Limit |
|---|---|---|---|
| Aroclor-1016 | ND | ug/Kg | 800 |
| Aroclor-1221 | ND | ug/Kg | 800 |
| Aroclor-1232 | ND | ug/Kg | 800 |
| Aroclor-1242 | ND | ug/Kg | 800 |
| Aroclor-1248 | ND | ug/Kg | 800 |
| Aroclor-1254 | ND | ug/Kg | 1600 |
| Aroclor-1260 | ND | ug/Kg | 1600 |

ND = Not Detected
N/A = Not Available

# SAMPLE DESCRIPTION TABLE

FOR

GOLDER ASSOCIATES, INC.

| CLE Project | Laboratory I.D. | Client I.D. | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|---|
| G01 | 32150-001 | TP-62 3.0' | Soil | N/A | 11/04/87 |
| G01 | 32150-002 | TP-62 4.0' | Soil | N/A | 11/04/87 |
| G01 | 32150-003 | TP-64 3.0' | Soil | N/A | 11/04/87 |
| G01 | 32150-004 | TP-65 9.5' | Soil | N/A | 11/04/87 |
| G01 | 32150-005 | TP-66 3.0' | Soil | N/A | 11/04/87 |

N/A = Not Available

Enseco

# OIL AND GREASE

## Enseco Method 413.2

Client Name: Golder Associates, Inc.

Matrix: Soil Sampled: N/A Received: 11/04/87

Authorized: 11/04/87

| Lab I.D. | Result | Units | Reporting Limit | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|
| 32150-001 | 63 | mg/Kg | 20 | 11/09/87 | 11/10/87 |
| 32150-002 | 4000 | mg/Kg | 1000 | 11/09/87 | 11/10/87 |
| 32150-003 | 1200 | mg/Kg | 20 | 11/09/87 | 11/11/87 |
| 32150-004 | 2300 | mg/Kg | 20 | 11/09/87 | 11/11/87 |
| 32150-005 | 560 | mg/Kg | 20 | 11/09/87 | 11/11/87 |

ND = Not Detected
N/A = Not Available

BCM

# WASTE TECHNOLOGY

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

September 28, 1991
Reissued October 23, 1991 (* denotes changes made)

Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street, Suite G
Naperville, IL 60563-1288

Soil Characterization; Waste Technology, Inc.
Project No. 91009-02; Fairless Pipe Mill - USX Fairless
Antech Ltd. Project No. 91-1664

Dear Mr. Kubala:

Enclosed are analytical results for samples submitted by Waste Technology, Inc. The samples were received on August 23, 1991 and logged in for analysis on August 26, 1991.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications and were found to be acceptable. Results of these analyses can be furnished upon request. If you have any questions, please call me.

Sincerely,

Dominic J. Nestasie
Organic Chemistry Manager

DJN:aeb

Enclosures

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1664
Receipt Date: 8/23/91
Verbal Report Date: NR
Report Date: 9/28/91
Page 1 of 1

Reference: Soil Characterization; Project No. 91009-02; Fairless Pipe Mill - USX Fairless; Collected August 22, 1991; Reissude October 23, 1991
(* denotes changes made)

| Parameter | Units | EPA Analytical Method | Sample Identification 08-0815 (South Pond) |
|---|---|---|---|
| pH (1:1) | pH units | 9045 | 7.06 |
| Polychlorinated Biphenyls | µg/g | 8080 | <1 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 2.4 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 6010 | <10 |
| Chromium | µg/g | 6010 | 130 |
| Lead | µg/g | 6010 | <10 |
| Mercury | µg/g | 7471 | <0.01 |
| Selenium | µg/g | 7740 | 0.1 |
| Silver | µg/g | 6010 | <10 |

Approved: Dominic A. Pontelli

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1664
Receipt Date: 8/23/91
Verbal Report Date: NR
Report Date: 9/28/91
Page 1 of 1

Reference: Soil Characterization; Project No. 91009-02; Fairless Pipe Mill - USX Fairless; Collected August 22, 1991; Reissued October 23, 1991
(* denotes changes made)

| Parameter | Units | EPA Analytical Method | Sample Identification 08-0816 (North Pond) |
|---|---|---|---|
| pH (1:1) | pH units | 9045 | 7.25 |
| Polychlorinated Biphenyls | µg/g | 8080 | <1 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 3.2 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 6010 | <10 |
| Chromium | µg/g | 6010 | <10 |
| Lead | µg/g | 6010 | 15 |
| Mercury | µg/g | 7471 | 0.03 |
| Selenium | µg/g | 7740 | 0.4 |
| Silver | µg/g | 6010 | <10 |

Approved: Dominic P. Petrucci

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1664
Receipt Date: 8/23/91
Verbal Report Date: NR
Report Date: 9/28/91
Page 1 of 1

Reference: Soil Characterization; Project No. 91009-02; Fairless Pipe Mill - USX Fairless; Collected August 22, 1991; Reissued October 23, 1991
(* denotes changes made)

| Parameter | Units | EPA Analytical Method | Sample Identification 08-0817 (NT-A Pond) |
|---|---|---|---|
| pH (1:1) | pH units | 9045 | 6.60 |
| Polychlorinated Biphenyls | µg/g | 8080 | <1 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 5.6 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 6010 | 29 |
| Chromium | µg/g | 6010 | 430 |
| Lead | µg/g | 6010 | 150 |
| Mercury | µg/g | 7471 | 0.07 |
| Selenium | µg/g | 7740 | 0.7 |
| Silver | µg/g | 6010 | <10 |

Approved: Dominic P. Perkins

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1664
Receipt Date: 8/23/91
Verbal Report Date: NR
Report Date: 9/28/91
Page 1 of 1

Reference: Soil Characterization; Project No. 91009-02; Fairless Pipe Mill - USX Fairless; Collected August 22, 1991; Reissued October 23, 1991
(* denotes changes made)

| Parameter | Units | EPA Analytical Method | Sample Identification 08-0818 (Bunker C Dike) |
|---|---|---|---|
| pH (1:1) | pH units | 9045 | 6.12 |
| Polychlorinated Biphenyls | µg/g | 8080 | 3 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 6.3 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 6010 | <10 |
| Chromium | µg/g | 6010 | 25 |
| Lead | µg/g | 6010 | 110 |
| Mercury | µg/g | 7471 | <0.01 |
| Selenium | µg/g | 7740 | 0.2 |
| Silver | µg/g | 6010 | <10 |

Approved: Dominic J. Perkins

Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1664
Soil Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 22, 1991
Reissued October 23, 1991 (* denotes changes made)

| Parameter | Units | Sample Identification 08-0815(1)(2)* (South Pond) |
|---|---|---|
| Date Analyzed | - | 8/28/91<br>9/12/91 |
| Acrolein | µg/kg | <31,250 |
| Acrylonitrile | µg/kg | <31,250 |
| Benzene | µg/kg | <625 |
| Carbon Tetrachloride | µg/kg | <625 |
| Chlorobenzene | µg/kg | <625 |
| 1,2-Dichloroethane | µg/kg | <625 |
| 1,1,1-Trichloroethane | µg/kg | <625 |
| 1,1-Dichloroethane | µg/kg | <625 |
| 1,1,2-Trichloroethane | µg/kg | <625 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <625 |
| Chloroethane | µg/kg | <1,250 |
| 2-Chloroethylvinyl Ether | µg/kg | <1,250 |
| Chloroform | µg/kg | <625 |
| 1,1-Dichloroethene | µg/kg | <625 |
| Trans-1,2-Dichloroethene | µg/kg | <625 |
| 1,2-Dichloropropane | µg/kg | <625 |
| 1,3-Dichloropropene | µg/kg | <625 |
| Ethylbenzene | µg/kg | <625 |
| Methylene Chloride | µg/kg | <625 |
| Chloromethane | µg/kg | <1,250 |
| Bromomethane | µg/kg | <1,250 |
| Bromoform | µg/kg | <625 |
| Dichlorobromomethane | µg/kg | <625 |
| Chlorodibromomethane | µg/kg | <625 |
| Tetrachloroethene | µg/kg | <625 |
| Toluene | µg/kg | <625 |
| Trichloroethene | µg/kg | <625 |
| Vinyl Chloride | µg/kg | <1,250 |
| Total Xylenes* | µg/kg | <625 |

(1) Elevated detection limit due to matrix interferences.

(2) The sample was analyzed at low level determination. Quantitation could not be achieved because the matrix interference would not release the internal standards and surrogates. Therefore, the high level analysis was performed and reported.

Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1664
Soil Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 22, 1991
Reissued October 23, 1991 (* denotes changes made)

| Parameter | Units | Sample Identification 08-0816 (North Pond) |
|---|---|---|
| Date Analyzed | - | 8/28/91 |
| Acrolein | µg/kg | <250 |
| Acrylonitrile | µg/kg | <250 |
| Benzene | µg/kg | <5 |
| Carbon Tetrachloride | µg/kg | <5 |
| Chlorobenzene | µg/kg | <5 |
| 1,2-Dichloroethane | µg/kg | <5 |
| 1,1,1-Trichloroethane | µg/kg | <5 |
| 1,1-Dichloroethane | µg/kg | <5 |
| 1,1,2-Trichloroethane | µg/kg | <5 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <5 |
| Chloroethane | µg/kg | <10 |
| 2-Chloroethylvinyl Ether | µg/kg | <10 |
| Chloroform | µg/kg | <5 |
| 1,1-Dichloroethene | µg/kg | <5 |
| Trans-1,2-Dichloroethene | µg/kg | <5 |
| 1,2-Dichloropropane | µg/kg | <5 |
| 1,3-Dichloropropene | µg/kg | <5 |
| Ethylbenzene | µg/kg | <5 |
| Methylene Chloride | µg/kg | <5 |
| Chloromethane | µg/kg | <10 |
| Bromomethane | µg/kg | <10 |
| Bromoform | µg/kg | <5 |
| Dichlorobromomethane | µg/kg | <5 |
| Chlorodibromomethane | µg/kg | <5 |
| Tetrachloroethene | µg/kg | <5 |
| Toluene | µg/kg | <5 |
| Trichloroethene | µg/kg | <5 |
| Vinyl Chloride | µg/kg | <10 |
| Total Xylenes* | µg/kg | <5 |

Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1664
Soil Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 22, 1991
Reissued October 23, 1991 (* denotes changes made)

| Parameter | Units | Sample Identification 08-0817 (NT-A Pond) |
|---|---|---|
| Date Analyzed | - | 8/29/91 |
| Acrolein | µg/kg | <250 |
| Acrylonitrile | µg/kg | <250 |
| Benzene | µg/kg | <5 |
| Carbon Tetrachloride | µg/kg | <5 |
| Chlorobenzene | µg/kg | <5 |
| 1,2-Dichloroethane | µg/kg | <5 |
| 1,1,1-Trichloroethane | µg/kg | <5 |
| 1,1-Dichloroethane | µg/kg | <5 |
| 1,1,2-Trichloroethane | µg/kg | <5 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <5 |
| Chloroethane | µg/kg | <10 |
| 2-Chloroethylvinyl Ether | µg/kg | <10 |
| Chloroform | µg/kg | <5 |
| 1,1-Dichloroethene | µg/kg | <5 |
| Trans-1,2-Dichloroethene | µg/kg | <5 |
| 1,2-Dichloropropane | µg/kg | <5 |
| 1,3-Dichloropropene | µg/kg | <5 |
| Ethylbenzene | µg/kg | <5 |
| Methylene Chloride | µg/kg | 9 |
| Chloromethane | µg/kg | <10 |
| Bromomethane | µg/kg | <10 |
| Bromoform | µg/kg | <5 |
| Dichlorobromomethane | µg/kg | <5 |
| Chlorodibromomethane | µg/kg | <5 |
| Tetrachloroethene | µg/kg | <5 |
| Toluene | µg/kg | <5 |
| Trichloroethene | µg/kg | <5 |
| Vinyl Chloride | µg/kg | <10 |
| Total Xylenes* | µg/kg | <5 |

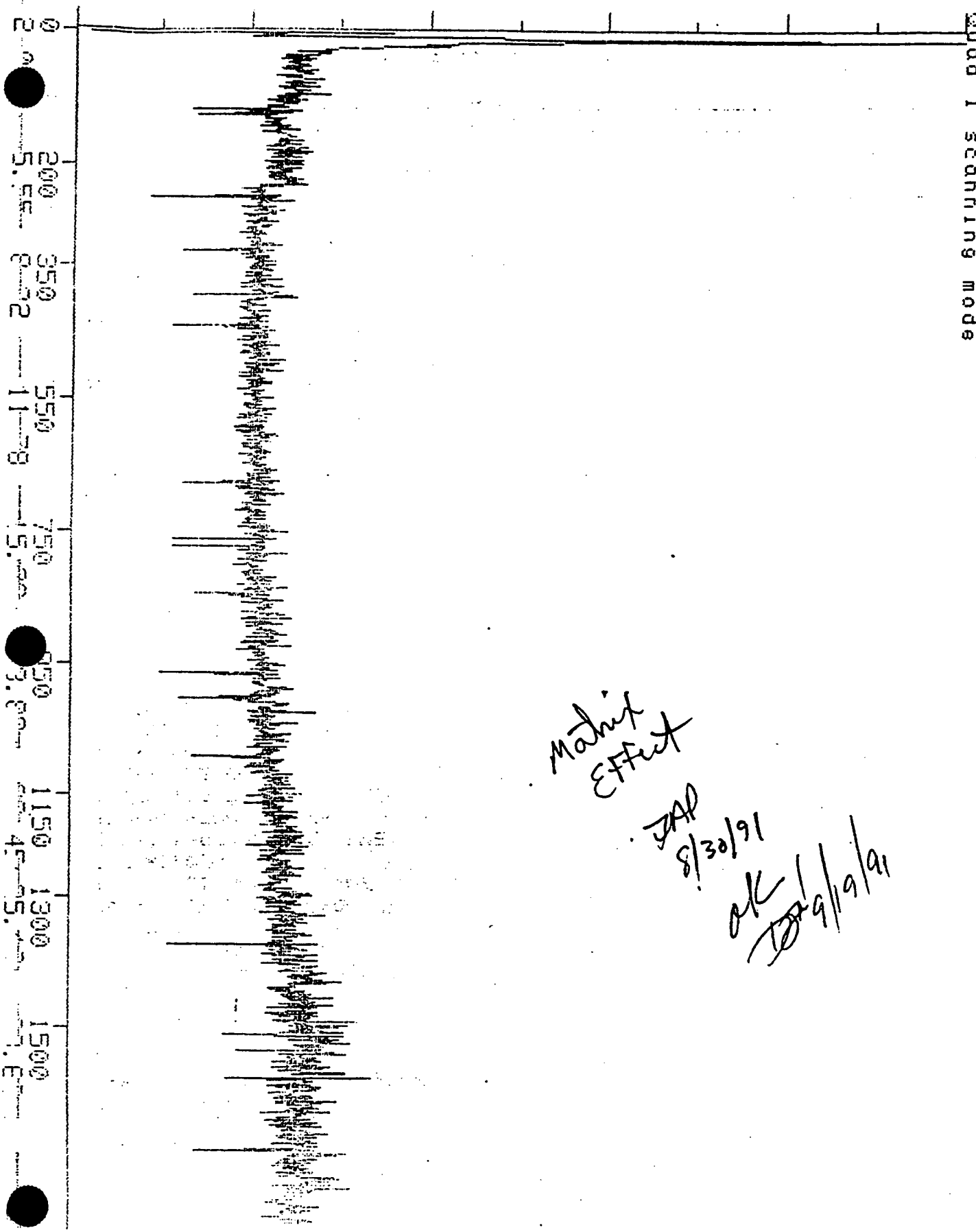
Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1664
Soil Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Reissued October 23, 1991 (* denotes changes made)

| Parameter | Units | Sample Identification | | |
|---|---|---|---|---|
| | | Method Blank | Method Blank | Method Blank |
| Date Analyzed | - | 8/28/91 | 8/29/91 | 9/12/91 |
| Acrolein | µg/kg | <250 | <31,250 | <31,250 |
| Acrylonitrile | µg/kg | <250 | <31,250 | <31,250 |
| Benzene | µg/kg | <5 | <625 | <625 |
| Carbon Tetrachloride | µg/kg | <5 | <625 | <625 |
| Chlorobenzene | µg/kg | <5 | <625 | <625 |
| 1,2-Dichloroethane | µg/kg | <5 | <625 | <625 |
| 1,1,1-Trichloroethane | µg/kg | <5 | <625 | <625 |
| 1,1-Dichloroethane | µg/kg | <5 | <625 | <625 |
| 1,1,2-Trichloroethane | µg/kg | <5 | <625 | <625 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <5 | <625 | <625 |
| Chloroethane | µg/kg | <10 | <1,250 | <1,250 |
| 2-Chloroethylvinyl Ether | µg/kg | <10 | <1,250 | <1,250 |
| Chloroform | µg/kg | <5 | <625 | <625 |
| 1,1-Dichloroethene | µg/kg | <5 | <625 | <625 |
| Trans-1,2-Dichloroethene | µg/kg | <5 | <625 | <625 |
| 1,2-Dichloropropane | µg/kg | <5 | <625 | <625 |
| 1,3-Dichloropropene | µg/kg | <5 | <625 | <625 |
| Ethylbenzene | µg/kg | <5 | <625 | <625 |
| Methylene Chloride | µg/kg | 12 | 1,300 | <625 |
| Chloromethane | µg/kg | <10 | <1,250 | <1,250 |
| Bromomethane | µg/kg | <10 | <1,250 | <1,250 |
| Bromoform | µg/kg | <5 | <625 | <625 |
| Dichlorobromomethane | µg/kg | <5 | <625 | <625 |
| Chlorodibromomethane | µg/kg | <5 | <625 | <625 |
| Tetrachloroethene | µg/kg | <5 | <625 | <625 |
| Toluene | µg/kg | <5 | <625 | <625 |
| Trichloroethene | µg/kg | <5 | <625 | <625 |
| Vinyl Chloride | µg/kg | <10 | <1,250 | <1,250 |
| Total Xylenes* | µg/kg | <5 | <625 | <625 |

Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1664
Soil Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 22, 1991
Reissued October 23, 1991 (* denotes changes made)

| Parameter | Units | Sample Identification 08-0818[1] (Bunker C Dike) |
|---|---|---|
| Date Analyzed | - | 8/29/91 |
| Acrolein | µg/kg | <31,250 |
| Acrylonitrile | µg/kg | <31,250 |
| Benzene | µg/kg | <625 |
| Carbon Tetrachloride | µg/kg | <625 |
| Chlorobenzene | µg/kg | <625 |
| 1,2-Dichloroethane | µg/kg | <625 |
| 1,1,1-Trichloroethane | µg/kg | <625 |
| 1,1-Dichloroethane | µg/kg | <625 |
| 1,1,2-Trichloroethane | µg/kg | <625 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <625 |
| Chloroethane | µg/kg | <1,250 |
| 2-Chloroethylvinyl Ether | µg/kg | <1,250 |
| Chloroform | µg/kg | <625 |
| 1,1-Dichloroethene | µg/kg | <625 |
| Trans-1,2-Dichloroethene | µg/kg | <625 |
| 1,2-Dichloropropane | µg/kg | <625 |
| 1,3-Dichloropropene | µg/kg | <625 |
| Ethylbenzene | µg/kg | <625 |
| Methylene Chloride | µg/kg | <625 |
| Chloromethane | µg/kg | <1,250 |
| Bromomethane | µg/kg | <1,250 |
| Bromoform | µg/kg | <625 |
| Dichlorobromomethane | µg/kg | <625 |
| Chlorodibromomethane | µg/kg | <625 |
| Tetrachloroethene | µg/kg | <625 |
| Toluene | µg/kg | <625 |
| Trichloroethene | µg/kg | <625 |
| Vinyl Chloride | µg/kg | <1,250 |
| Total Xylenes* | µg/kg | <625 |

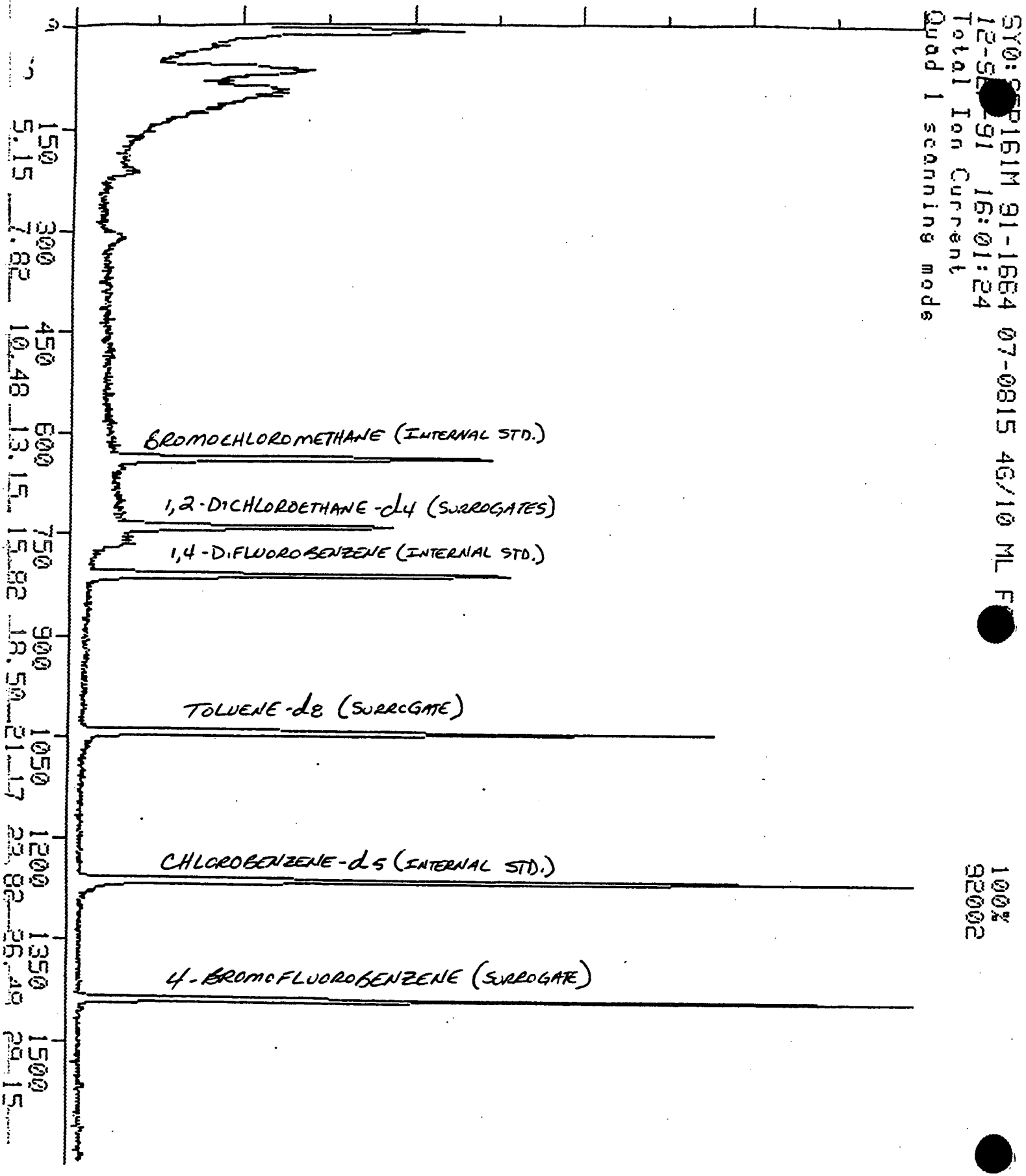
[1] Elevated detection limit due to total xylenes of 3,200 µg/kg and other higher boiling point hydrocarbons.




Matrix Effect

JAP 8/30/91

ok 9/9/91


SY0:CFP161M 91-1664 07-0815 4G/10 ML F
12-SEP-91 16:01:24
Total Ion Current
Quad 1 scanning mode
100%
92002
BROMOCHLOROMETHANE (INTERNAL STD.)
1,2-DICHLOROETHANE-d4 (SURROGATES)
1,4-DIFLUOROBENZENE (INTERNAL STD.)
TOLUENE-d8 (SURROGATE)
CHLOROBENZENE-d5 (INTERNAL STD.)
4-BROMOFLUOROBENZENE (SURROGATE)
150 300 450 600 750 900 1050 1200 1350 1500
5.15 7.82 10.48 13.15 15.82 18.50 21.17 23.82 26.49 29.15

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

September 28, 1991

Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street, Suite G
Naperville, IL 60563-1288

Soil Characterization: Waste Technology, Inc.
Project No. 91009-02; USX Fairless Pipe Mill
Antech Ltd. Project No. 91-1797

Dear Mr. Kubala:

Enclosed are analytical results for samples submitted by Waste Technology, Inc. The samples were received on September 12, 1991 and logged in for analysis on September 12, 1991.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications and were found to be acceptable. Results of these analyses can be furnished upon request. If you have any questions, please call me.

Sincerely,

Dominic J. Nestasie
Organic Chemistry Manager

DJN:aeb

Enclosures

General Data Table

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1797
Receipt Date: 9/12/91
Verbal Report Date: NR
Report Date: 9/28/91
Page 1 of 3

Reference: Soil Characterization; Project No. 91009-02; USX Fairless Pipe Mill; Collected September 11, 1991

| Parameter | Units | EPA Analytical Method | Sample Identification 09-0254 (SS-1) |
|---|---|---|---|
| Total Petroleum Hydrocarbons | µg/g | 418.1 | 8,040 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 2.0 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 7131 | 79 |
| Chromium | µg/g | 6010 | 200 |
| Lead | µg/g | 6010 | 11 |
| Mercury | µg/g | 7471 | 0.28 |
| Selenium | µg/g | 7740 | <0.1 |
| Silver | µg/g | 6010 | <10 |

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1797
Receipt Date: 9/12/91
Verbal Report Date: NR
Report Date: 9/28/91
Page 2 of 3

Reference: Soil Characterization; Project No. 91009-02; USX Fairless Pipe Mill; Collected September 11, 1991

| Parameter | Units | EPA Analytical Method | Sample Identification 09-0255 (SS-2) |
|---|---|---|---|
| Total Petroleum Hydrocarbons | µg/g | 418.1 | <50 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 11 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 7131 | 13 |
| Chromium | µg/g | 6010 | 140 |
| Lead | µg/g | 6010 | 230 |
| Mercury | µg/g | 7471 | 0.07 |
| Selenium | µg/g | 7740 | 0.4 |
| Silver | µg/g | 6010 | <10 |

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1797
Receipt Date: 9/12/91
Verbal Report Date: NR
Report Date: 9/28/91
Page 3 of 3

Reference: Soil Characterization; Project No. 91009-02; USX Fairless Pipe Mill; Collected September 11, 1991

| Parameter | Units | EPA Analytical Method | Sample Identification 09-0256 (SS-3) |
|---|---|---|---|
| Total Petroleum Hydrocarbons | µg/g | 418.1 | 51,000 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 2.5 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 7131 | 68 |
| Chromium | µg/g | 6010 | 77 |
| Lead | µg/g | 6010 | 180 |
| Mercury | µg/g | 7471 | 0.02 |
| Selenium | µg/g | 7740 | 0.3 |
| Silver | µg/g | 6010 | <10 |

Approved: Dominic J. Pirkle

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

October 2, 1991

Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street, Suite G
Naperville, IL 60563-1288

Waste Characterization; Waste Technology, Inc.
Project No. 91009-02; Paint from East Wall at Platform in Warehouse
Paint from inside Instrument Building
Antech Ltd. Project No. 91-1891

Dear Mr. Kubala:

Enclosed are analytical results for the samples submitted by Waste Technology, Inc. The samples were received on September 25, 1991 and logged in for analysis on September 25, 1991.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications and were found to be acceptable. Results of these analyses can be furnished upon request. If you have any questions, please call me.

Sincerely,

Dominick Frollini Jr

Dominick Frollini, Jr.
Inorganic Chemistry Manager

DF:aeb

Enclosures

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1891
Receipt Date: 9/25/91
Verbal Report Date: NR
Report Date: 10/2/91
Page 1 of 1

Reference: Waste Characterization; Project No. 91009-02; Paint from East Wall at Platform in Warehouse

| Parameter | Units | EPA Analytical Method | Sample Identification 09-0654 (P-1) |
|---|---|---|---|
| Total Lead | µg/g | 6010 | 25,000 |

Approved: Dr Dominick Frollini Jr

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1891
Receipt Date: 9/25/91
Verbal Report Date: NR
Report Date: 10/2/91
Page 1 of 1

Reference: Waste Characterization; Project No. 91009-02; Paint from inside Instrument Building

| Parameter | Units | EPA Analytical Method | Sample Identification 09-0655 (P-2) |
|---|---|---|---|
| Total Lead | μg/g | 6010 | 120 |

Approved: Dr. Dominick Frollini Jr.

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

October 15, 1991

Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street, Suite G
Naperville, IL 60563-1288

Waste Characterization; Waste Technology, Inc.
Project No. 91009-02; Fairless Pipe Mill - USX Fairless
Antech Ltd. Project No. 91-1670

Dear Mr. Kubala:

Enclosed are analytical results for samples submitted by Waste Technology, Inc. The samples were received on August 26, 1991 and logged in for analysis on August 26, 1991.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications and were found to be acceptable. Results of these analyses can be furnished upon request. If you have any questions, please call me.

Sincerely,

Dominic J. Nestasie
Organic Chemistry Manager

DJN:aeb

Enclosures

General Data Table

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1670
Receipt Date: 8/26/91
Verbal Report Date: NR
Report Date: 10/15/91
Page 1 of 1

Reference: Waste Characterization; Project No. 91009-02; Fairless Pipe Mill - USX Fairless; Collected August 23, 1991

| Parameter | Units | EPA Analytical Method | Sample Identification 08-0849 (East Scale Pit Sediment) |
|---|---|---|---|
| pH (1:1) | pH units | 9045 | 7.14 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 2.0 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 6010 | 52 |
| Chromium | µg/g | 6010 | 94 |
| Lead | µg/g | 6010 | 11 |
| Mercury | µg/g | 7471 | <0.01 |
| Selenium | µg/g | 7740 | <0.1 |
| Silver | µg/g | 6010 | <10 |

Approved: Dominic F. Gentile

General Data Table

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1670
Receipt Date: 8/26/91
Verbal Report Date: NR
Report Date: 10/15/91
Page 1 of 1

Reference: Waste Characterization; Project No. 91009-02; Fairless Pipe Mill - USX Fairless; Collected August 23, 1991

| Parameter | Units | EPA Analytical Method | Sample Identification 08-0850 (West Scale Pit Sediment) |
|---|---|---|---|
| pH (1:1) | pH units | 9045 | 7.80 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 7.1 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 6010 | 52 |
| Chromium | µg/g | 6010 | 120 |
| Lead | µg/g | 6010 | 11 |
| Mercury | µg/g | 7471 | 0.03 |
| Selenium | µg/g | 7740 | <0.1 |
| Silver | µg/g | 6010 | <10 |

Approved: Dominic J. Perkins

Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1670
Waste Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 23, 1991

| Parameter | Units | Sample Identification 08-0849 (East Scale Pit Sediment) |
|---|---|---|
| Date Analyzed | - | 8/29/91 |
| Acrolein | µg/kg | <250 |
| Acrylonitrile | µg/kg | <250 |
| Benzene | µg/kg | <5 |
| Carbon Tetrachloride | µg/kg | <5 |
| Chlorobenzene | µg/kg | <5 |
| 1,2-Dichloroethane | µg/kg | <5 |
| 1,1,1-Trichloroethane | µg/kg | <5 |
| 1,1-Dichloroethane | µg/kg | <5 |
| 1,1,2-Trichloroethane | µg/kg | <5 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <5 |
| Chloroethane | µg/kg | <10 |
| 2-Chloroethylvinyl Ether | µg/kg | <10 |
| Chloroform | µg/kg | <5 |
| 1,1-Dichloroethene | µg/kg | <5 |
| Trans-1,2-Dichloroethene | µg/kg | <5 |
| 1,2-Dichloropropane | µg/kg | <5 |
| 1,3-Dichloropropene | µg/kg | <5 |
| Ethylbenzene | µg/kg | <5 |
| Methylene Chloride | µg/kg | 36 |
| Chloromethane | µg/kg | <10 |
| Bromomethane | µg/kg | <10 |
| Bromoform | µg/kg | <5 |
| Dichlorobromomethane | µg/kg | <5 |
| Chlorodibromomethane | µg/kg | <5 |
| Tetrachloroethene | µg/kg | <5 |
| Toluene | µg/kg | <5 |
| Trichloroethene | µg/kg | <5 |
| Vinyl Chloride | µg/kg | <10 |
| Total Xylenes | µg/kg | <5 |

Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1670
Waste Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 23, 1991

| Parameter | Units | Sample Identification 08-0850 (West Scale Pit Sediment) |
|---|---|---|
| Date Analyzed | - | 8/30/91 |
| Acrolein | µg/kg | <250 |
| Acrylonitrile | µg/kg | <250 |
| Benzene | µg/kg | <5 |
| Carbon Tetrachloride | µg/kg | <5 |
| Chlorobenzene | µg/kg | <5 |
| 1,2-Dichloroethane | µg/kg | <5 |
| 1,1,1-Trichloroethane | µg/kg | <5 |
| 1,1-Dichloroethane | µg/kg | <5 |
| 1,1,2-Trichloroethane | µg/kg | <5 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <5 |
| Chloroethane | µg/kg | <10 |
| 2-Chloroethylvinyl Ether | µg/kg | <10 |
| Chloroform | µg/kg | <5 |
| 1,1-Dichloroethene | µg/kg | <5 |
| Trans-1,2-Dichloroethene | µg/kg | <5 |
| 1,2-Dichloropropane | µg/kg | <5 |
| 1,3-Dichloropropene | µg/kg | <5 |
| Ethylbenzene | µg/kg | <5 |
| Methylene Chloride | µg/kg | 9 |
| Chloromethane | µg/kg | <10 |
| Bromomethane | µg/kg | <10 |
| Bromoform | µg/kg | <5 |
| Dichlorobromomethane | µg/kg | <5 |
| Chlorodibromomethane | µg/kg | <5 |
| Tetrachloroethene | µg/kg | <5 |
| Toluene | µg/kg | <5 |
| Trichloroethene | µg/kg | <5 |
| Vinyl Chloride | µg/kg | <10 |
| Total Xylenes | µg/kg | <5 |

Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1670
Waste Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless

| Parameter | Units | Sample Identification | |
|---|---|---|---|
| | | Method Blank (1) | Method Blank (2) |
| Date Analyzed | - | 8/29/91 | 8/30/91 |
| Acrolein | µg/kg | <250 | <250 |
| Acrylonitrile | µg/kg | <250 | <250 |
| Benzene | µg/kg | <5 | <5 |
| Carbon Tetrachloride | µg/kg | <5 | <5 |
| Chlorobenzene | µg/kg | <5 | <5 |
| 1,2-Dichloroethane | µg/kg | <5 | <5 |
| 1,1,1-Trichloroethane | µg/kg | <5 | <5 |
| 1,1-Dichloroethane | µg/kg | <5 | <5 |
| 1,1,2-Trichloroethane | µg/kg | <5 | <5 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <5 | <5 |
| Chloroethane | µg/kg | <10 | <10 |
| 2-Chloroethylvinyl Ether | µg/kg | <10 | <10 |
| Chloroform | µg/kg | <5 | <5 |
| 1,1-Dichloroethene | µg/kg | <5 | <5 |
| Trans-1,2-Dichloroethene | µg/kg | <5 | <5 |
| 1,2-Dichloropropane | µg/kg | <5 | <5 |
| 1,3-Dichloropropene | µg/kg | <5 | <5 |
| Ethylbenzene | µg/kg | <5 | <5 |
| Methylene Chloride | µg/kg | 12 | 10 |
| Chloromethane | µg/kg | <10 | <10 |
| Bromomethane | µg/kg | <10 | <10 |
| Bromoform | µg/kg | <5 | <5 |
| Dichlorobromomethane | µg/kg | <5 | <5 |
| Chlorodibromomethane | µg/kg | <5 | <5 |
| Tetrachloroethene | µg/kg | <5 | <5 |
| Toluene | µg/kg | <5 | <5 |
| Trichloroethene | µg/kg | <5 | <5 |
| Vinyl Chloride | µg/kg | <10 | <10 |
| Total Xylenes | µg/kg | <5 | <5 |

Base/Neutral Extractable Analyses
EPA Method 625
Waste Technology, Inc.
Antech Ltd. Project No. 91-1670
Waste Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 23, 1991



| Parameter | Units | Sample Identification 08-0849 (East Scale Pit Sediment) |
|---|---|---|
| Date of Extraction | - | 8/28/91 |
| Date of Analysis | - | 10/8/91 |
| Acenaphthene | µg/kg | <3,300 |
| Benzidine | µg/kg | <16,500 |
| 1,2,4-Trichlorobenzene | µg/kg | <3,300 |
| Hexachlorobenzene | µg/kg | <3,300 |
| Hexachloroethane | µg/kg | <3,300 |
| Bis(2-Chloroethoxy) methane | µg/kg | <3,300 |
| 2-Chloronaphthalene | µg/kg | <3,300 |
| 1,2-Dichlorobenzene | µg/kg | <3,300 |
| 1,3-Dichlorobenzene | µg/kg | <3,300 |
| 1,4-Dichlorobenzene | µg/kg | <3,300 |
| 3,3-Dichlorobenzidine | µg/kg | <3,300 |
| 2,4-Dinitrotoluene | µg/kg | <3,300 |
| 2,6-Dinitrotoluene | µg/kg | <3,300 |
| Fluoranthene | µg/kg | <3,300 |
| 4-Chlorophenyl Phenyl Ether | µg/kg | <3,300 |
| 4-Bromophenyl Phenyl Ether | µg/kg | <3,300 |
| Bis(2-Chloroisopropyl)ether | µg/kg | <3,300 |
| Bis(2-Chloroethyl)ether | µg/kg | <3,300 |
| Hexachlorobutadiene | µg/kg | <3,300 |
| Hexachlorocyclopentadiene | µg/kg | <3,300 |
| Isophorone | µg/kg | <3,300 |
| Naphthalene | µg/kg | <3,300 |
| Nitrobenzene | µg/kg | <3,300 |
| N-Nitrosodimethylamine | µg/kg | <3,300 |
| N-Nitrosodiphenylamine | µg/kg | <3,300 |
| N-Nitrosodi-N-Propylamine | µg/kg | <3,300 |
| Bis(2-Ethylhexyl)phthalate | µg/kg | <3,300 |
| Butyl Benzyl Phthalate | µg/kg | <3,300 |
| Di-n-Butyl Phthalate | µg/kg | <3,300 |
| Di-n-Octyl Phthalate | µg/kg | <3,300 |
| Diethyl Phthalate | µg/kg | <3,300 |
| Dimethyl Phthalate | µg/kg | <3,300 |
| Benzo(a)Anthracene | µg/kg | <3,300 |

Base/Neutral Extractable Analyses
(Continued)



| Parameter | Units | Sample Identification 08-0849 (East Scale Pit Sediment) |
|---|---|---|
| Benzo(a)Pyrene | µg/kg | <3,300 |
| Benzo(b)Fluoranthene | µg/kg | <3,300 |
| Benzo(k)Fluoranthene | µg/kg | <3,300 |
| Chrysene | µg/kg | <3,300 |
| Acenaphthylene | µg/kg | <3,300 |
| Anthracene | µg/kg | <3,300 |
| Benzo(g,h,i)Perylene | µg/kg | <16,500 |
| Fluorene | µg/kg | <3,300 |
| Phenanthrene | µg/kg | <3,300 |
| Dibenzo(a,h)Anthracene | µg/kg | <16,500 |
| Indeno(1,2,3-cd)Pyrene | µg/kg | <16,500 |
| Pyrene | µg/kg | <3,300 |

Base/Neutral Extractable Analyses
EPA Method 625
Waste Technology, Inc.
Antech Ltd. Project No. 91-1670
Waste Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 23, 1991



| Parameter | Units | Sample Identification 08-0850 (West Scale Pit Sediment) |
|---|---|---|
| Date of Extraction | - | 8/28/91 |
| Date of Analysis | - | 10/8/91 |
| Acenaphthene | µg/kg | <3,300 |
| Benzidine | µg/kg | <16,500 |
| 1,2,4-Trichlorobenzene | µg/kg | <3,330 |
| Hexachlorobenzene | µg/kg | <3,330 |
| Hexachloroethane | µg/kg | <3,330 |
| Bis(2-Chloroethoxy) methane | µg/kg | <3,330 |
| 2-Chloronaphthalene | µg/kg | <3,330 |
| 1,2-Dichlorobenzene | µg/kg | <3,330 |
| 1,3-Dichlorobenzene | µg/kg | <3,330 |
| 1,4-Dichlorobenzene | µg/kg | <3,330 |
| 3,3-Dichlorobenzidine | µg/kg | <3,330 |
| 2,4-Dinitrotoluene | µg/kg | <3,330 |
| 2,6-Dinitrotoluene | µg/kg | <3,330 |
| Fluoranthene | µg/kg | <3,330 |
| 4-Chlorophenyl Phenyl Ether | µg/kg | <3,330 |
| 4-Bromophenyl Phenyl Ether | µg/kg | <3,330 |
| Bis(2-Chloroisopropyl)ether | µg/kg | <3,330 |
| Bis(2-Chloroethyl)ether | µg/kg | <3,330 |
| Hexachlorobutadiene | µg/kg | <3,330 |
| Hexachlorocyclopentadiene | µg/kg | <3,330 |
| Isophorone | µg/kg | <3,330 |
| Naphthalene | µg/kg | <3,330 |
| Nitrobenzene | µg/kg | <3,330 |
| N-Nitrosodimethylamine | µg/kg | <3,330 |
| N-Nitrosodiphenylamine | µg/kg | <3,330 |
| N-Nitrosodi-N-Propylamine | µg/kg | <3,330 |
| Bis(2-Ethylhexyl)phthalate | µg/kg | <3,330 |
| Butyl Benzyl Phthalate | µg/kg | <3,330 |
| Di-n-Butyl Phthalate | µg/kg | <3,330 |
| Di-n-Octyl Phthalate | µg/kg | <3,330 |
| Diethyl Phthalate | µg/kg | <3,330 |
| Dimethyl Phthalate | µg/kg | <3,330 |
| Benzo(a)Anthracene | µg/kg | <3,330 |

Base/Neutral Extractable Analyses
(Continued)



| Parameter | Units | Sample Identification 08-0850 (West Scale Pit Sediment) |
|---|---|---|
| Benzo(a)Pyrene | µg/kg | <3,300 |
| Benzo(b)Fluoranthene | µg/kg | <3,300 |
| Benzo(k)Fluoranthene | µg/kg | <3,300 |
| Chrysene | µg/kg | <3,300 |
| Acenaphthylene | µg/kg | <3,300 |
| Anthracene | µg/kg | <3,300 |
| Benzo(g,h,i)Perylene | µg/kg | <16,500 |
| Fluorene | µg/kg | <3,300 |
| Phenanthrene | µg/kg | <3,300 |
| Dibenzo(a,h)Anthracene | µg/kg | <16,500 |
| Indeno(1,2,3-cd)Pyrene | µg/kg | <16,500 |
| Pyrene | µg/kg | <3,300 |

Base/Neutral Extractable Analyses
EPA Method 625
Waste Technology, Inc.
Antech Ltd. Project No. 91-1670
Waste Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless



| Parameter | Units | Sample Identification<br>Method Blank |
|---|---|---|
| Date of Extraction | - | 8/28/91 |
| Date of Analysis | - | 10/8/91 |
| Acenaphthene | µg/kg | <3,300 |
| Benzidine | µg/kg | <16,500 |
| 1,2,4-Trichlorobenzene | µg/kg | <3,300 |
| Hexachlorobenzene | µg/kg | <3,300 |
| Hexachloroethane | µg/kg | <3,300 |
| Bis(2-Chloroethoxy) methane | µg/kg | <3,300 |
| 2-Chloronaphthalene | µg/kg | <3,300 |
| 1,2-Dichlorobenzene | µg/kg | <3,300 |
| 1,3-Dichlorobenzene | µg/kg | <3,300 |
| 1,4-Dichlorobenzene | µg/kg | <3,300 |
| 3,3-Dichlorobenzidine | µg/kg | <3,300 |
| 2,4-Dinitrotoluene | µg/kg | <3,300 |
| 2,6-Dinitrotoluene | µg/kg | <3,300 |
| Fluoranthene | µg/kg | <3,300 |
| 4-Chlorophenyl Phenyl Ether | µg/kg | <3,300 |
| 4-Bromophenyl Phenyl Ether | µg/kg | <3,300 |
| Bis(2-Chloroisopropyl)ether | µg/kg | <3,300 |
| Bis(2-Chloroethyl)ether | µg/kg | <3,300 |
| Hexachlorobutadiene | µg/kg | <3,300 |
| Hexachlorocyclopentadiene | µg/kg | <3,300 |
| Isophorone | µg/kg | <3,300 |
| Naphthalene | µg/kg | <3,300 |
| Nitrobenzene | µg/kg | <3,300 |
| N-Nitrosodimethylamine | µg/kg | <3,300 |
| N-Nitrosodiphenylamine | µg/kg | <3,300 |
| N-Nitrosodi-N-Propylamine | µg/kg | <3,300 |
| Bis(2-Ethylhexyl)phthalate | µg/kg | <3,300 |
| Butyl Benzyl Phthalate | µg/kg | <3,300 |
| Di-n-Butyl Phthalate | µg/kg | <3,300 |
| Di-n-Octyl Phthalate | µg/kg | <3,300 |
| Diethyl Phthalate | µg/kg | <3,300 |
| Dimethyl Phthalate | µg/kg | <3,300 |
| Benzo(a)Anthracene | µg/kg | <3,300 |

Base/Neutral Extractable Analyses
(Continued)



| Parameter | Units | Sample Identification<br>Method Blank |
|---|---|---|
| Benzo(a)Pyrene | µg/kg | <3,300 |
| Benzo(b)Fluoranthene | µg/kg | <3,300 |
| Benzo(k)Fluoranthene | µg/kg | <3,300 |
| Chrysene | µg/kg | <3,300 |
| Acenaphthylene | µg/kg | <3,300 |
| Anthracene | µg/kg | <3,300 |
| Benzo(g,h,i)Perylene | µg/kg | <16,500 |
| Fluorene | µg/kg | <3,300 |
| Phenanthrene | µg/kg | <3,300 |
| Dibenzo(a,h)Anthracene | µg/kg | <16,500 |
| Indeno(1,2,3-cd)Pyrene | µg/kg | <16,500 |
| Pyrene | µg/kg | <3,300 |

Acid Extractable Analyses
EPA Method 625
Waste Technology, Inc.
Antech Ltd. Project No. 91-1670
Waste Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 23, 1991

| Parameter | Units | Sample Identification 08-0849 (East Scale Pit Sediment) |
|---|---|---|
| Date of Extraction | - | 8/28/91 |
| Date of Analysis | - | 10/18/91 |
| 2-Chlorophenol | µg/kg | <3,300 |
| 2,4-Dichlorophenol | µg/kg | <3,300 |
| 2,4-Dimethylphenol | µg/kg | <3,300 |
| 4,6-Dinitro-o-cresol | µg/kg | <16,500 |
| 2,4-Dinitrophenol | µg/kg | <3,300 |
| 2-Nitrophenol | µg/kg | <16,500 |
| 4-Nitrophenol | µg/kg | <16,500 |
| P-Chloro-m-cresol | µg/kg | <3,300 |
| Pentachlorophenol | µg/kg | <16,500 |
| Phenol | µg/kg | <3,300 |
| 2,4,6-Trichlorophenol | µg/kg | <3,300 |

Acid Extractable Analyses
EPA Method 625
Waste Technology, Inc.
Antech Ltd. Project No. 91-1670
Waste Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless
Collected August 23, 1991

| Parameter | Units | Sample Identification 08-0850 (West Scale Pit Sediment) |
|---|---|---|
| Date of Extraction | - | 8/28/91 |
| Date of Analysis | - | 10/8/91 |
| 2-Chlorophenol | µg/kg | <3,300 |
| 2,4-Dichlorophenol | µg/kg | <3,300 |
| 2,4-Dimethylphenol | µg/kg | <3,300 |
| 4,6-Dinitro-o-cresol | µg/kg | <16,500 |
| 2,4-Dinitrophenol | µg/kg | <3,300 |
| 2-Nitrophenol | µg/kg | <16,500 |
| 4-Nitrophenol | µg/kg | <16,500 |
| P-Chloro-m-cresol | µg/kg | <3,300 |
| Pentachlorophenol | µg/kg | <16,500 |
| Phenol | µg/kg | <3,300 |
| 2,4,6-Trichlorophenol | µg/kg | <3,300 |

Acid Extractable Analyses
EPA Method 625
Waste Technology, Inc.
Antech Ltd. Project No. 91-1670
Waste Characterization; Project No. 91009-02
Fairless Pipe Mill - USX Fairless

| Parameter | Units | Sample Identification<br>Method Blank |
|---|---|---|
| Date of Extraction | - | 8/28/91 |
| Date of Analysis | - | 10/8/91 |
| 2-Chlorophenol | µg/kg | <3,300 |
| 2,4-Dichlorophenol | µg/kg | <3,300 |
| 2,4-Dimethylphenol | µg/kg | <3,300 |
| 4,6-Dinitro-o-cresol | µg/kg | <16,500 |
| 2,4-Dinitrophenol | µg/kg | <3,300 |
| 2-Nitrophenol | µg/kg | <16,500 |
| 4-Nitrophenol | µg/kg | <16,500 |
| P-Chloro-m-cresol | µg/kg | <3,300 |
| Pentachlorophenol | µg/kg | <16,500 |
| Phenol | µg/kg | <3,300 |
| 2,4,6-Trichlorophenol | µg/kg | <3,300 |

General Data Table

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1670
Receipt Date: 8/26/91
Verbal Report Date: NR
Report Date: 10/15/91
Page 1 of 1

Reference: Waste Characterization; Project No. 91009-02; Fairless Pipe Mill - USX Fairless; Collected August 23, 1991

| Parameter | Units | EPA Analytical Method | Sample Identification 08-0851 (WWTP Soil) |
|---|---|---|---|
| Total Metals: | | | |
| Chromium | µg/g | 6010 | 1,100 |
| Lead | µg/g | 6010 | 190 |

Approved: Dominic J. Fabrizi

General Data Table

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1670
Receipt Date: 8/26/91
Verbal Report Date: NR
Report Date: 10/15/91
Page 1 of 1

Reference: Waste Characterization; Project No. 91009-02; Fairless Pipe Mill - USX Fairless; Collected August 23, 1991

| Parameter | Units | EPA Analytical Method | Sample Identification 08-0852 (Galv. Dust) |
|---|---|---|---|
| Total Metal: | | | |
| Lead | µg/g | 6010 | 2,400 |

Approved: Dominic J. Perkovic

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

October 15, 1991

Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street, Suite G
Naperville, IL 60563-1288

Soil Characterization; Waste Technology, Inc.
Project No. 91009-02; USX Fairless - P.M.
Antech Ltd. Project No. 91-1751

Dear Mr. Kubala:

Enclosed are analytical results for the sample submitted by Waste Technology, Inc. The sample was received on August 28, 1991. Upon its receipt at the laboratory, the sample was put on hold with the remainder of the soils. Following your authorization to proceed with the analyses, the sample was logged in on September 5, 1991.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications and were found to be acceptable. Results of these analyses can be furnished upon request. If you have any questions, please call me.

Sincerely,

Dominic J. Nestasie
Organic Chemistry Manager

DJN:aeb

Enclosures

General Data Table

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-1751
Receipt Date: 9/5/91
Verbal Report Date: NR
Report Date: 10/15/91
Page 1 of 1

Reference: Soil Characterization; Project No. 91009-02; USX Fairless P.M.; Collected August 22, 1991

| Parameter | Units | EPA Analytical Method | Sample Identification 09-0062 (SB-6-S-2) |
|---|---|---|---|
| pH (1:1) | pH units | 9045 | 6.61 |
| Total Metals: | | | |
| Arsenic | µg/g | 7060 | 3.0 |
| Barium | µg/g | 6010 | <100 |
| Cadmium | µg/g | 6010 | <10 |
| Chromium | µg/g | 6010 | 13 |
| Lead | µg/g | 6010 | 10 |
| Mercury | µg/g | 7471 | 0.16 |
| Selenium | µg/g | 7740 | <0.1 |
| Silver | µg/g | 6010 | <10 |

Approved: Dominic F. Nardi

Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1751
Soil Characterization; Project No. 91009-02
USX Fairless P.M.
Collected August 22, 1991

| Parameter | Units | Sample Identification 09-0062 (SB-6-S-2) |
|---|---|---|
| Date Analyzed | - | 9/12/91 |
| Acrolein | µg/kg | <250 |
| Acrylonitrile | µg/kg | <250 |
| Benzene | µg/kg | <5 |
| Carbon Tetrachloride | µg/kg | <5 |
| Chlorobenzene | µg/kg | <5 |
| 1,2-Dichloroethane | µg/kg | <5 |
| 1,1,1-Trichloroethane | µg/kg | <5 |
| 1,1-Dichloroethane | µg/kg | <5 |
| 1,1,2-Trichloroethane | µg/kg | <5 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <5 |
| Chloroethane | µg/kg | <10 |
| 2-Chloroethylvinyl Ether | µg/kg | <10 |
| Chloroform | µg/kg | <5 |
| 1,1-Dichloroethene | µg/kg | <5 |
| Trans-1,2-Dichloroethene | µg/kg | <5 |
| 1,2-Dichloropropane | µg/kg | <5 |
| 1,3-Dichloropropene | µg/kg | <5 |
| Ethylbenzene | µg/kg | <5 |
| Methylene Chloride | µg/kg | <5 |
| Chloromethane | µg/kg | <10 |
| Bromomethane | µg/kg | <10 |
| Bromoform | µg/kg | <5 |
| Dichlorobromomethane | µg/kg | <5 |
| Chlorodibromomethane | µg/kg | <5 |
| Tetrachloroethene | µg/kg | <5 |
| Toluene | µg/kg | <5 |
| Trichloroethene | µg/kg | <5 |
| Vinyl Chloride | µg/kg | <10 |
| Total Xylenes | µg/kg | <5 |

Volatile Organic Analyses
EPA Method 624
Waste Technology, Inc.
Antech Ltd. Project No. 91-1751
Soil Characterization; Project No. 91009-02
USX Fairless P.M.

| Parameter | Units | Sample Identification<br>Method Blank |
|---|---|---|
| Date Analyzed | - | 9/12/91 |
| Acrolein | µg/kg | <250 |
| Acrylonitrile | µg/kg | <250 |
| Benzene | µg/kg | <5 |
| Carbon Tetrachloride | µg/kg | <5 |
| Chlorobenzene | µg/kg | <5 |
| 1,2-Dichloroethane | µg/kg | <5 |
| 1,1,1-Trichloroethane | µg/kg | <5 |
| 1,1-Dichloroethane | µg/kg | <5 |
| 1,1,2-Trichloroethane | µg/kg | <5 |
| 1,1,2,2-Tetrachloroethane | µg/kg | <5 |
| Chloroethane | µg/kg | <10 |
| 2-Chloroethylvinyl Ether | µg/kg | <10 |
| Chloroform | µg/kg | <5 |
| 1,1-Dichloroethene | µg/kg | <5 |
| Trans-1,2-Dichloroethene | µg/kg | <5 |
| 1,2-Dichloropropane | µg/kg | <5 |
| 1,3-Dichloropropene | µg/kg | <5 |
| Ethylbenzene | µg/kg | <5 |
| Methylene Chloride | µg/kg | <5 |
| Chloromethane | µg/kg | <10 |
| Bromomethane | µg/kg | <10 |
| Bromoform | µg/kg | <5 |
| Dichlorobromomethane | µg/kg | <5 |
| Chlorodibromomethane | µg/kg | <5 |
| Tetrachloroethene | µg/kg | <5 |
| Toluene | µg/kg | <5 |
| Trichloroethene | µg/kg | <5 |
| Vinyl Chloride | µg/kg | <10 |
| Total Xylenes | µg/kg | <5 |

Base/Neutral Extractable Analyses
EPA Method 625
Waste Technology, Inc.
Antech Ltd. Project No. 91-1751
Soil Characterization; Project No. 91009-02
USX Fairless P.M.
Collected August 22, 1991

| Parameter | Units | Sample Identification 09-0062 (SB-6-S-2) |
|---|---|---|
| Date of Extraction | - | 9/9/91 |
| Date of Analysis | - | 10/8/91 |
| Acenaphthene | µg/kg | <330 |
| Fluoranthene | µg/kg | <330 |
| Naphthalene | µg/kg | <330 |
| Benzo(a)Anthracene | µg/kg | <330 |
| 2-Methylnaphthalene | µg/kg | <330 |
| Benzo(a)Pyrene | µg/kg | <330 |
| Benzo(b)Fluoranthene | µg/kg | <330 |
| Benzo(k)Fluoranthene | µg/kg | <330 |
| Chrysene | µg/kg | <330 |
| Acenaphthylene | µg/kg | <330 |
| Anthracene | µg/kg | <330 |
| Benzo(g,h,i)Perylene | µg/kg | <330 |
| Fluorene | µg/kg | <330 |
| Phenanthrene | µg/kg | <330 |
| Dibenzo(a,h)Anthracene | µg/kg | <330 |
| Indeno(1,2,3-cd)Pyrene | µg/kg | <330 |
| Pyrene | µg/kg | <330 |

Base/Neutral Extractable Analyses
EPA Method 625
Waste Technology, Inc.
Antech Ltd. Project No. 91-1751
Soil Characterization; Project No. 91009-02
USX Fairless P.M.

| Parameter | Units | Sample Identification<br>Method Blank |
|---|---|---|
| Date of Extraction | - | 9/9/91 |
| Date of Analysis | - | 10/8/91 |
| Acenaphthene | µg/kg | <330 |
| Fluoranthene | µg/kg | <330 |
| Naphthalene | µg/kg | <330 |
| Benzo(a)Anthracene | µg/kg | <330 |
| 2-Methylnapthalene | µg/kg | <330 |
| Benzo(a)Pyrene | µg/kg | <330 |
| Benzo(b)Fluoranthene | µg/kg | <330 |
| Benzo(k)Fluoranthene | µg/kg | <330 |
| Chrysene | µg/kg | <330 |
| Acenaphthylene | µg/kg | <330 |
| Anthracene | µg/kg | <330 |
| Benzo(g,h,i)Perylene | µg/kg | <330 |
| Fluorene | µg/kg | <330 |
| Phenanthrene | µg/kg | <330 |
| Dibenzo(a,h)Anthracene | µg/kg | <330 |
| Indeno(1,2,3-cd)Pyrene | µg/kg | <330 |
| Pyrene | µg/kg | <330 |

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

October 16, 1991

Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street, Suite G
Naperville, IL 60563-1288

Waste Characterization; Waste Technology, Inc.
Project No. 91009-02; Paint from East Wall at Platform in Warehouse
Paint from inside Instrument Building
Antech Ltd. Project No. 91-2020

Dear Mr. Kubala:

Enclosed are analytical results for the samples submitted by Waste Technology, Inc. The samples were received on September 25, 1991 and logged in for analysis on October 2, 1991.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications and were found to be acceptable. Results of these analyses can be furnished upon request. If you have any questions, please call me.

Sincerely,

Dominick Frollini, Jr.

Dominick Frollini, Jr.
Inorganic Chemistry Manager

DF:sja

Enclosures

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-2020
Receipt Date: 10/15/91
Verbal Report Date: NR
Report Date: 10/16/91
Page 1 of 1

Reference: Waste Characterization; Project No. 91009-02; Paint from East Wall at Platform in Warehouse

| Parameter(1) | Units | EPA Analytical Method | Sample Identification 10-0391 (P-1) |
|---|---|---|---|
| TCLP Lead | mg/l | 7240 | <0.1 |
| TCLP Data: | | | |
| Initial pH | pH units | -(2) | (3) |
| Final pH | pH units | - | 5.30 |
| Extraction Fluid | - | - | No. 1 |
| Amount of Sample used for Extraction | g | - | 1.15 |

(1) Toxicity Characteristic Leaching Procedure (TCLP) results have not been bias corrected.

(2) Dash denotes not applicable.

(3) The preliminary pH test was waved due to the small sample amount received. Experience has shown that Extraction Fluid No. 1 is the most common required for this sample type.

Approved: G. Dominick Follin Jr.

Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-1161

General Data Table

Client: Mr. Andrew O. Kubala
Waste Technology, Inc.
1809 North Mill Street
Suite G
Naperville, IL 60563-1288

Antech Project No.: 91-2033
Receipt Date: 10/17/91
Verbal Report Date: NR
Report Date: 10/23/91
Page 1 of 1

Reference: Waste Characterization; Project No. 91009-02; USX-Fairless Pipe Mill

| Parameter[1] | Units | Sample Identification 10-0462 (WWTP Soil) | 10-0463 (GALV Dust) |
|---|---|---|---|
| TCLP Metals: | | | |
| Chromium | mg/l | <0.1 | NR[2] |
| Lead | mg/l | NR | <0.1 |
| TCLP Data: | | | |
| Initial pH | pH units | 6.95 | 6.60 |
| Final pH | pH units | 6.20 | 5.80 |
| Extraction Fluid | - | No. 1 | No. 2 |
| Amount of Sample used for Extraction | g | 100 | 100 |

(1) Toxicity Characteristic Leaching Procedure (TCLP) results have not been bias corrected.

(2) NR = Not Requested.

Approved: Thomas W. Lee

Chain-of Custody Record

# WTI
## WASTE TECHNOLOGY, INC.

1809 N. MILL ST. - SUITE G
NAPERVILLE, ILLINOIS 60563-1288
PHONE 708/961-5000 FAX 708/961-5555

PROJ. NO.: 71001-02

PROJECT NAME/LOCATION: USX - FAIRLESS PIPE MILL

SAMPLERS: (Signature) Ed Block

| STA. NO. | DATE | TIME | COMP. | GRAB. | STATION LOCATION | NO. OF CONTAINERS | PARAMETER | | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8-20 | 7:25 | | X | SB-7-S1 | 2 | | | | | | | | HOLD-DO NOT ANALYZE |
| | 8-20 | 7:55 | | X | SB-7-S2 | 2 | | | | | | | | " " " " |
| | 8-20 | 9:35 | | X | SB-8-S1 | 2 | | | | | | | | " " " " |
| | | | | | | | | | | | | | | " " " " |
| | -20 | 2:00 | | X | SB-9, S-1 15"-24" | 2 | | | | | | | | " " " " |
| | 8-20 | 2:25 | | X | SB-4, S2 111'-16' | 2 | | | | | | | | " " " " |
| | 8-21 | 8:30 | | X | ~~SB~~ | — | | | | | | | | " " " " |
| | 8-21 | 9:30 | | X | SB-4 S-1 1-14" | 2 | | | | | | | | HOLD-DO NOT ANALYZE |
| | 8-21 | 9:40 | | X | SB-4 S-2 | 2 | | | | | | | | |
| | 8-21 | 10:10 | | X | SB-3 S-1 | 2 | | | | | | | | HOLD-DO NOT ANALYZE |
| | 8-21 | 11:15 | | X | SB-3 S-2 | 2 | | | | | | | | " " " " |
| | 8-21 | 2:55 | | X | SB-2 S-2 | 2 | | | | | | | | " " " " |
| | 8/21 | 1:30 | | X | SB-5 S-1 | 2 | | | | | | | | HOLD-DO NOT ANALYZE |
| | 8/21 | 3:45 | | X | SB-5 S-2 | 2 | | | | | | | | |
| | 8/22 | 8:20 | | X | SB-6 S-1 | 2 | | | | | | | | HOLD-DO NOT ANALYZE |

| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
|---|---|---|---|---|---|
| Ed Block | 8-21-91 15:15 | [signature] | [signature] | 8-21-91 15:22 | Fed-Ex |
| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
| | | | | | |
| Relinquished by: (Signature) | Date / Time | Received for Laboratory by: (Signature) | Date / Time | Remarks | |
| | | | | | |

Distribution Original Accompanies Shipment. Copy returned with Report.

White = Original  Yellow = Laboratory  Pink = Return to Originator

Antech Ltd.
One Triangle Drive
Export, Pennsylvania 15632
412/733-1161
FAX: 412/327-7793

# Antech Ltd.
## Chain of Custody Record

Project No.: 91009-02

Project Name: USX - FAIRLESS PIPE MILL

Samplers: (signature) Matthew O. Kubal

| Station No. | Date | Time | Comp. | Grab | Station Location | No. of Containers | Remarks |
|---|---|---|---|---|---|---|---|
| | ~~[illegible]~~ | ~~[illegible]~~ | | ~~[illegible]~~ | ~~[illegible]~~ | ~~9~~ | ~~[illegible] Well No. 1~~ |
| | 9-10-91 | 9:20 | | X | MW-2 | 9 | " " No 2 |
| | 9-10-91 | 11:20 | | X | MW-3 | 9 | " " No 3 |
| | 9-10-91 | 12:05 | | X | MW-4 | 9 | " " No 4 |
| | 9-10-91 | | | | VOA Trip Blank | 2 | |

| Relinquished By: (signature) | Date/Time | Received By: (signature) | Received for Laboratory By: (signature) |
|---|---|---|---|
| [signature] | 9-10-91 18:30 | Federal Express | |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | Date/Time |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | Remarks: |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | |

6/6/90

Antech Ltd.
One Triangle Drive
Export, Pennsylvania 15632
412/733-1161
FAX: 412/327-7793

# Antech Ltd.
## Chain of Custody Record

Project No.: 91009-02

Project Name: USX-FAIRLESS PIPE MILL

Samplers: (Signature)

| Station No. | Date | Time | Comp. | Grab | Station Location | No. of Containers | RCRA Metals | TPH | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9-11-91 | 8:30 | | X | MW-7 | | | | | | | | Monitoring Well No. 7 |
| | 9-11-91 | 9:45 | | X | MW-8 | | | | | | | | " " " 8 |
| | 9-11-91 | 10:20 | | X | MW-9 | | | | | | | | " " " 9 |
| | 9-11-91 | 11:00 | | X | Bunker C. Diesel Liquid | | | | | | | | Analyze for PCBs |
| | 9-11-91 | 13:10 | | X | SS-1 | | X | X | | | | | Booster Pump Station Soil |
| | 9-11-91 | 13:30 | | X | SS-2 | | X | X | | | | | Storage Bldg Soil |
| | 9-11-91 | 13:45 | | X | SS-3 | | X | X | | | | | Cutting Oil Bldg Soil |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| Relinquished By: (signature) | Date/Time | Received By: (signature) | Received for Laboratory By: (signature) |
|---|---|---|---|
| | 9-11-91 16:50 | Federal Express | |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | Date/Time |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | Remarks: |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | |

BCM

NORBEC ENVIRONMENTAL LTD.

MDS Laboratories

# LABORATORY REPORT

INDUSTRIAL HYGIENE — ENVIRONMENTAL TESTING

- EPA/NVLAP 1262
- AIHA ACCREDITATION NO. 135
- NY DOH 10903
- PA DER 06-353
- NJ DEP 77678

CLIENT: NORBEC ENVIRONMENTAL, LTD.
603 Glenwood Street
Emmaus, PA 18049

Attn: L. Robitaille

SAMPLE #:
SAMPLE DATE: 03-13-91
SAMPLE TIME: ----
SAMPLED BY: ----
RECEIVED BY: SC
DATE & TIME RECEIVED: 03-15-91 1445

PROJECT DESCRIPTION: US Steel tank removal
STATION :

| MDS ID | CLIENT ID | PET. HYDROCARBONS | |
|---|---|---|---|
| 03-1591-15 | Soil # 1 N. wall bottom middle | 191. | mg/kg |
| 03-1151-16 | Soil # 2 W. end fill pump | 58261. | mg/kg |
| 03-1591-17 | Soil # 3 W. end 13' down | 493. | mg/kg |
| 03-1591-18 | Soil # 4 S. wall bottom | 122. | mg/kg |
| 03-1591-19 | Soil # 5 Center 15' down | 145. | mg/kg |
| 03-1591-20 | Soil # 6 E. wall bottom | 22609. | mg/kg |
| 03-1591-21 | Soil # 7 N. wall bottom | 5652. | mg/kg |
| 03-1591-22 | Soil # 8 Top of tanks | 6522. | mg/kg |
| 03-1591-23 | Soil # 9 Top to tanks | 16522. | mg/kg |
| 03-1591-24 | Soil #11 Middle bottom of hole | 8696. | mg/kg |
| 03-1591-25 | Soil #13 S. wall 5' down | 17391. | mg/kg |
| 03-1591-26 | Water # 12 water in pit | 5217. | mg/L |
| 03-1591-27 | Background | 104. | mg/kg |

Reviewed by: Craig R. Achenbach (CT)
Craig R. Achenbach
Laboratory Supervisor

4418 POTTSVILLE PIKE, READING, PENNSYLVANIA 19605 215-921-8833 FAX 215-921-9667

MDS Laboratories

# LABORATORY REPORT

INDUSTRIAL HYGIENE ENVIRONMENTAL TESTING

- EPA/NVLAP 1262
- AIHA ACCREDITATION NO. 135
- NY DOH 10903
- PA DER 06-353
- NJ DEP 77678

CLIENT: NORBEC ENVIRONMENTAL, LTD.
1031 Rear Chestnut St.
Emmaus, PA 18049

Attn: L. Robitaille

SAMPLE #:
SAMPLE DATE: 09-30-91
SAMPLE TIME: ----
SAMPLED BY: LR
RECEIVED BY: CRA
DATE & TIME RECEIVED: 10-03-91 1500

PROJECT DESCRIPTION: USX Fairless Works hydro study
STATION :Soil

| MDS ID | CLIENT ID | PET. HYDROCARBONS |
|---|---|---|
| 10-0391-47 | MW-1 3.5 - 5 | 6,220. mg/kg |
| 10-0391-48 | MW-1 8.5 - 10 | 6,440. mg/kg |
| 10-0391-49 | MW-2 3.5 - 5 | 240. mg/kg |
| 10-0391-50 | MW-2 8.5 - 10 | 1,110. mg/kg |
| 10-0391-51 | MW-2 13.5 - 15 | 107. mg/kg |
| 10-0391-52 | MW-3 3.5 - 5 | 169. mg/kg |
| 10-0391-53 | MW-3 8.5 - 10 | 89.0 mg/kg |

Reviewed by: _____
Craig R. Achenbach
Laboratory Supervisor

4418 POTTSVILLE PIKE, READING, PENNSYLVANIA 19605 215-921-8833 FAX 215-921-9667

Chain-of Custody Record

# WTI
## WASTE TECHNOLOGY, INC.

1809 N. MILL ST. - SUITE G
NAPERVILLE, ILLINOIS 60563-1288
PHONE 708/961-5000 FAX 708/961-5555

PROJ. NO.: 91009-02

PROJECT NAME/LOCATION: USX - FAIRLESS PIPE MILL

SAMPLERS: (Signature)

| STA. NO. | DATE | TIME | COMP. | GRAB. | STATION LOCATION | NO. OF CONTAINERS | PARAMETER | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | 8-23-91 | 8:00 | | X | WEST SCALE PIT LIQUID | 5 | | |
| | 8-23-91 | | | | TRIP BLANK (VOAs) | 2 | | |
| | 8-23-91 | 8:40 | | X | WEST SCALE PIT SEDIMENTS | 2 | | |
| | 8-23-91 | 9:30 | | X | EAST SCALE PIT LIQUID | 5 | | |
| | 8-23-91 | 10:00 | | X | EAST SCALE PIT SEDIMENT | 2 | | |
| | 8-23-91 | 11:00 | | X | BUNKER C DIKE LIQUIDS | 4 | | |
| | 8-23-91 | 11:30 | | X | WWTP SOIL | 1 | | Total Lead & Chrome |
| | 8-23-91 | 11:45 | | X | GALV. DUST | 1 | | Total Lead |

| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
|---|---|---|---|---|---|
| | 8-23-91 2:30 | Fed-Ex | | | |
| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
| | | | | | |
| Relinquished by: (Signature) | Date / Time | Received for Laboratory by: (Signature) | Date / Time | Remarks | |
| | | | | | |

Distribution Original Accompanies Shipment. Copy returned with Report.

White = Original  Yellow = Laboratory  Pink = Return to Originator

Chain-of Custody Record

# WTI
## WASTE TECHNOLOGY, INC.

1809 N. MILL ST. - SUITE G
NAPERVILLE, ILLINOIS 60563-1288
PHONE 708/961-5000 FAX 708/961-5555

PROJ. NO.

PROJECT NAME/LOCATION: USX-FAIRLESS P.M.

SAMPLERS: (Signature)

| STA. NO. | DATE | TIME | COMP. | GRAB. | STATION LOCATION | NO. OF CONTAINERS | PARAMETER | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8-22-91 | 9:20 | | X | SB-6-S-2 | 2 | | | | | | | Soil |
| | 8-22-91 | 10:10 | | X | Pond NT-A | 9 | | | | | | | Pond Liquid |
| | 8-22-91 | 10:40 | | X | South Pond | 9 | | | | | | | " " |
| | 8-22-91 | 11:00 | | X | North Pond | 9 | | | | | | | " " |
| | 8-22-91 | 2:00 | | X | South Pond | 2 | | | | | | | Pond Sediment |
| | 8-22-91 | 1:00 | | X | North Pond | 2 | | | | | | | " " |
| | 8-22-91 | 1:45 | | X | NT-A Pond | 2 | | | | | | | " " |
| | 8-22-91 | 2:00 | | X | Bunker C Dike | 2 | | | | | | | " " |
| | | | | X | | | | | | | | | |

| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
|---|---|---|---|---|---|
| | 8-22-91 18:00 | Fed-Ex | | | |
| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
| Relinquished by: (Signature) | Date / Time | Received for Laboratory by: (Signature) | Date / Time | Remarks | |

Distribution Original Accompanies Shipment. Copy returned with Report.

White = Original  Yellow = Laboratory  Pink = Return to Originator

Antech Ltd.
One Triangle Drive
Export, Pennsylvania 15632
412/733-1161
FAX: 412/327-7793

# Antech Ltd.
## Chain of Custody Record

Project No.: 91069-02

Project Name: USX- FAIRLESS PIPEMILL

Samplers: (signature)

| Station No. | Date | Time | Comp. | Grab | Station Location | No. of Containers | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9-10-91 | 8:20 | | X | MW-1 | 9 | | | | | | | MONITORING WELL No 1 |
| | 9-10-91 | 2:00 | | X | MW-5 | | | | | | | | " " No. 5 |
| | 9-10-91 | 2:45 | | X | MW-6 | | | | | | | | No. 6 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | |

| Relinquished By: (signature) | Date/Time | Received By: (signature) | Received for Laboratory By: (signature) |
|---|---|---|---|
| | 9-10-91 18:30 | Federal Express | |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | Date/Time |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | Remarks: |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | |
| Relinquished By: (signature) | Date/Time | Received By: (signature) | |



/90

Chain-of Custody Record

# WTI
## WASTE TECHNOLOGY, INC.

1809 N. MILL ST. - SUITE G
NAPERVILLE, ILLINOIS 60563-1288
PHONE 708/961-5000 FAX 708/961-5555

PROJ. NO.

PROJECT NAME/LOCATION: Fountain Hills

SAMPLERS: (Signature) Ed Black

| STA. NO. | DATE | TIME | COMP. | GRAB. | STATION LOCATION | NO. OF CONTAINERS | PARAMETER | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8/22 | 1:30 | | ✓ | SB-1 S-1 | 2 | | | | | | | Hold-Do Not Analyze |
| | 8/22 | 1:45 | | ✓ | SB-1 S-2 | 2 | | | | | | | " " " " |

Page B - 82

| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
|---|---|---|---|---|---|
| Ed Black | 8-22-91 15:15 | [illegible] | [illegible] | 8-22-91 18:10 | Fed-Ex |
| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
| | | | | | |
| Relinquished by: (Signature) | Date / Time | Received for Laboratory by: (Signature) | Date / Time | Remarks | |
| | | | | | |

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