EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/31/99 REPORT NUMBER 12

PROJECT & LOCATION Cwm-Vickery

WEATHER Sunny/Breezy TEMPERATURE RANGE 45°-70°F WIND 10-20 mph steady

EARTH TECH PERSONNEL ON SITE JG/AMF/JH TIME ON SITE 0630 -

SUMMARY OF SITE ACTIVITIES

Sample collection/Sample prep of surface samples in the active operations Areas

LEVEL OF HEALTH & SAFETY PROTECTION Level D

INSTRUMENTATION USED Microtip MP1000, multirae

CALIBRATION(S) PERFORMED Isobutylene, $H_2S$, CO, $O_2$, LEL @ 700 and @ 12:30

INSTRUMENT PROBLEMS/REMEDIES None

SAMPLES COLLECTED*

See Attached C-O-C

SAMPLE COLLECTION METHOD(S)

Split spoon

GRAB ~~+ Composite~~ AMF

QUALITY CONTROL SAMPLES* See attached C-O-C

(8) geotech samples · ACA:SL:SF09-01-GT / 541:SL:SF03-01-GT / ACB:SL:SF02-01-GT

(2) Geotech Duplicates ACB:SL:SF02-01-GD / ACH:SL:SF02-01-GT / ACH:SL:SF03-01-GT

ACH:SL:SF03-01-GD / 551:SL:SF01-01-GT / 527:SL:SF03-01-GT / 529:SL:SF04-01-GT

ADDITIONAL REMARKS

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

EARTH TECH

Project: WM- Vickery
Client: WMI
Send Results To: Mike Bedard
Address: 412 Lincoln Hwy
Fairless Hills, PA 19030
Phone: (215) 269-8142

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's PESTICIDES HERBICIDES | METALS CYANIDE SULFIDE | VOC's | SVOC's PESTICIDES HERBICIDES METALS CYANIDE SULFIDE | | | | | | | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turnaround Time | | | | | STND | STND | STND | STND | STND | | | | | | | |
| # of Containers | | | | | 3 | 2 | 2 | 2 | 2 | | | | | | | |
| Container Type | | | | | Encore | 4oz glass | 4oz glass | Encore | 4oz glass | | | | | | | |
| Preservative Used | | | | | N/A | N/A | N/A | N/A | N/A | | | | | | | |
| S30:SL:SF01-01 | 3/31/99 | 1528 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S30:SL:SF02-01 | 3/31/99 | 1544 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S30:SL:SF02-01-FD | 3/31/99 | 1544 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S30:SL:SF03-01 | 3/31/99 | 1554 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S30:SL:SF03-01-MD | 3/31/99 | 1554 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| S30:SL:SF03-01-MS | 3/31/99 | 1554 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| S29:SL:SF01-01 | 3/31/99 | 1610 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S29:SL:SF02-01 | 3/31/99 | 1621 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S29:SL:SF03-01 | 3/31/99 | 1632 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S29:SL:SF04-01 | 3/31/99 | 1656 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S50:SL:SF01-01 | 3/31/99 | 1645 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |

Lab Cooler No.

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/26/99 | [signature] | [signature] 4/1/99 | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/31/99 1515 | [signature] | | | FED EX 8095 9203 8023 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| [signature] | 3/31/99 1700 | [signature] | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

Project: Earth Tech - RFI - WMO
Client: Earth Tech
Send Results To: Mike Broard
Address: 412 Lincoln Hwy.
Fairless Hills, PA 19030
Phone: (215) 269-2142

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOCs | Semi-Volatile Organics | Metals | VOCs | Semi-Volatile Organics | | | | | | | Lab Cooler No. / CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turnaround Time | | | | | STND | STND | STND | STND | STND | | | | | | | |
| # of Containers | | | | | 3 | 1 | 1 | 2 | 2 | | | | | | | |
| Container Type | | | | | Encore | 8oz glass | 8oz glass | Encore | 4oz glass | | | | | | | |
| Preservative Used | | | | | NA | NA | NA | NA | NA | | | | | | | |
| ACB:SL:SF01-01 | 3/31/99 | 1000 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | APPENDIX TX |
| ACB:SL:SF01-01-MD | 3/31/99 | 1000 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACB:SL:SF01-01-MD | 3/31/99 | 1000 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| ACB:SL:SF01-01-MS | 3/31/99 | 1000 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| ACA:SL:SF12-01 | 3/31/99 | 1024 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| SAI:SL:SF01-01 | 3/31/99 | 1030 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| SAI:SL:SF02-01 | 3/31/99 | 1040 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| SAI:SL:SF02-01-FD | 3/31/99 | 1040 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| SAI:SL:SF02-01-MS | 3/31/99 | 1040 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| SAI:SL:SF02-01-MD | 3/31/99 | 1040 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| SAI:SL:SF03-01 | 3/31/99 | 1109 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACA:SL:SF13-01 | 3/31/99 | 1122 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/31/99 | [signature] | [signature] 3/31/99 1400 | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/31/99 930 | [signature] | | | FEDEX 809592538067 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| [signature] | 3/31/99 1207 | [signature] | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference:



Project: Earth Tech - RFI - ~~WMO~~ WMI
Client: Earth Tech WMI
Send Results To: Mr. Bedard
Address: 412 Lincoln Hwy.
Fairless Hills, PA 19030
Phone: (215) 269-2142

| Turnaround Time | STD. | STD. | STD. | STD. | STD. |
|---|---|---|---|---|---|
| # of Containers | 3 | 1 | 1 | 2 | 2 |
| Container Type | Cover | 8oz. glass | 8oz. glass | Cover | 4oz. glass |
| Preservative Used | | | | | |
| Type of Analysis | VOC's | Metals, Cyanide, Sulfide | VOC's | SVOC's, Pesticides, PCB's, Metals, Cyanide | |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's, Pesticides, Metals | PCB's | Metals, Cyanide, Sulfide | VOC's | SVOC's, Pesticides, PCB's, Metals, Cyanide | | | | | | Lab Cooler No. / CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S27: SL: SF03-01 | 3/31/99 | 1454 | Soil | JC | ✓ | ✓ | ✓ | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/31/99 | [signature] | [signature] | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/31/99 1300 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| [signature] | 3/31/99 1330 | [signature] | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference:

1 of 2 Pgs.

Project: Earth Tech - RFI - WMO
Client: Earth Tech WMI
Send Results To: Mike Brand
Address: 412 Lincoln Hwy, Fairless Hills, PA 19030
Phone: (215) 269-2142

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's Pesticides/PCB's Herbicides/Dioxins | Metals | VOC's | SVOC's, Pesticides, Herbicides, PCB's, Dioxins | | | | | | | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turnaround Time | | | | | STND | STND | STND | STND. | STND | | | | | | | |
| # of Containers | | | | | 3 | 1 | 1 | 2 | 2 | | | | | | | |
| Container Type | | | | | Encore | 8oz. glass | 8oz. glass | Encore | 4oz glass | | | | | | | |
| Preservative Used | | | | | | | | | | | | | | | | |
| Type of Analysis | | | | | | | | | | | | | | | | Lab Cooler No. |
| ACH:SL:SF01-01 | 3/31/99 | 1308 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | Append x IX |
| ACH:SL:SF01-01FD | 3/31/99 | 1308 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACH:SL:SF02-01 | 3/31/99 | 1341 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACH:SL:SF02-01-MD | 3/31/99 | 1341 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| ACH:SL:SF02-01-MS | 3/31/99 | 1341 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| ACH:SL:SF03-01 | 3/31/99 | 1355 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACH:SL:SF04-01 | 3/31/99 | 1409 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S31:SL:SF01-01 | 3/31/99 | 1420 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S31:SL:SF01-01-MS | 3/31/99 | 1420 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| S31:SL:SF01-01-MD | 3/31/99 | 1420 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| S27:SL:SF01-01 | 3/31/99 | 1435 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S27:SL:SF02-01 | 3/31/99 | 1445 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/31/99 | [signature] | [signature] 3/31/99 | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/31/99 1500 | [signature] | | | FED EX 809592538056 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| [signature] | 3/31/99 1530 | [signature] | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

Project: Earth Tech - RFI - WMD
Client: Earth Tech
Send Results To: Mike Bedard
Address: 412 Lincoln Hwy
Fairless Hills, PA 19030
Phone: (215) 269-2142

| Turnaround Time | | | | | | RUSH | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Containers | 3 | 1 | 1 | 2 | 2 | | | | | |
| Container Type | Encore | 8oz Glass | | | 40z Glass | | | | | |
| Preservative Used | | | | | | | | | | |
| Type of Analysis | VOC's | SVOC's, Pesticide Herbicide, PCB | Metals (Cyanide Sulfide) | VOC's | | * PCB * | | | | |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's, Pesticide Herbicide, PCB | Metals (Cyanide Sulfide) | VOC's | | * PCB * | | | | | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S35:SL:SF02-01 | 3/31/99 | 0802 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACA:SL:SF02-01 | 3/31/99 | 0815 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACA:SL:SF02-01FD | 3/31/99 | 0815 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACA:SL:SF02-01MS | 3/31/99 | 0815 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| ACA:SL:SF02-01MSD | 3/31/99 | 0815 | Soil | JG | | | | ✓ | ✓ | | | | | | | |
| S31:SL:SF02-01 | 3/31/99 | 0856 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACA:SL:SF08-01 | 3/31/99 | 0845 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACA:SL:SF09-01 | 3/31/99 | 0853 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S46:SL:SF01-01 | 3/31/99 | 0905 | Soil | JG | ✓ | ✓ | ✓ | | | * | | | ✓ | | | *RUSH PCB |
| ACA:SL:SF11-01 | 3/31/99 | 0922 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | if PCB Detected |
| ACA:SL:SF10-01 | 3/31/99 | 0914 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | RUN DOXCUST |
| | | | | | | | | | | | | | | | | FLAGS |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| [signature] | 3/31/99 930 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/31/99 100 | | | | FED EX 855139 7746 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/~~27~~ 30/99 (MF) REPORT NUMBER 11

PROJECT & LOCATION CWM- Vickery

WEATHER Sunny TEMPERATURE RANGE 45°-70°F WIND Light Breeze

EARTH TECH PERSONNEL ON SITE JG/MF/JH TIME ON SITE 0700 - 1830

SUMMARY OF SITE ACTIVITIES Drill Rig repairs (Am). Earth Tech personnel Recon rest of active operations Areas sample locations.
PM - Sample prep and Collection

LEVEL OF HEALTH & SAFETY PROTECTION Level D

INSTRUMENTATION USED miniRAE MP-1000 + multirae

CALIBRATION(S) PERFORMED Isobutylene, $H_2S$, CO, $O_2$ LEL calibrated @ 1200

INSTRUMENT PROBLEMS/REMEDIES None

SAMPLES COLLECTED* see attached C-O-C

SAMPLE COLLECTION METHOD(S) split spoon
GRAB

QUALITY CONTROL SAMPLES* SEE Attached C-O-C

(3) Geotech Samples: S49: SL: SF01-01-GT, ACC: SL: SF01-01-GT
S32: SL: SF02-01-GT

ADDITIONAL REMARKS

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

C:\11-VIC~1\FIELDF~1\QCRPT.FRM

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

EARTH TECH

Project: CWM Valley RTI
Client: WM
Send Results To: Michael Gerard
Address: 412 Lincoln Hwy
Trafford Hills PA 15030
Phone: (215) 269-2142

| Turnaround Time | STD | STD | STD | Rush |
|---|---|---|---|---|
| # of Containers | 3 | 1 | 1 | |
| Container Type | Encore | 8 oz Glass | 8 oz Glass | |
| Preservative Used | None | None | None | |
| Type of Analysis | VOCs | SVOCs, Pesticides, Herbicides, PCBs | Metals, CN's | * PCB * |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOCs | SVOCs, Pesticides, Herbicides, PCBs | Metals, CN's | * PCB * | | | | | | | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S32:SL:SF02-01 | 3/30/99 | 1600 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | Appendix IX |
| ACA:SL:SF05-01 | 3/30/99 | 1610 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACA:SL:SF04-01 | 3/30/99 | 1617 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACA:SL:SF03-01 | 3/30/99 | 1628 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| ACA:SL:SF01-01 | 3/30/99 | 1637 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S35:SL:SF01-01 | 3/30/99 | 1644 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S36:SL:SF01-01 | 3/30/99 | 1650 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S36:SL:SF02-01 | 3/30/99 | 1658 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | |
| S48:SL:SF01-01 | 3/30/99 | 1704 | Soil | JG | ✓ | ✓ | ✓ | * | | | | | ✓ | | | Rush PCB, F |
| ACC:SL:SF01-01 | 3/30/99 | 1717 | Soil | JG | ✓ | ✓ | ✓ | | | | | | | | | Detected RJ |
| | | | | | | | | | | | | | | | | Dioxin + Furans |
| | | | | | | | | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/30/99 | [signature] | [signature] 3/31/99 | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/30/99 1530 ~~3/30/99 1730~~ | [signature] | | | FedEx 8095925 38012 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| [signature] | 3/30/99 1730 | [signature] | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of Pgs.

FARM TECH

Project: Cwm - Dickey RFI
Client: WMI
Send Results To: Michael Pedard
Address: 412 Lincoln Hwy
Tatnall Hills PA 19030
Phone: (215) 269 - 2142

| Turnaround Time | STD | STD | STD | RUSH |
|---|---|---|---|---|
| # of Containers | 3 | 1 | 1 | |
| Container Type | Tubes | 4oz Glass | 6oz Glass | |
| Preservative Used | None | None | None | |
| Type of Analysis | VOC's | SVOCs, PCB, Herbicides, Pest | Metals, Cyanide, Sulfide | PRISA PCB |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOCs, PCB, Herbicides, Pest | Metals, Cyanide, Sulfide | PRISA PCB | | | | | | | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACA:SL:SF07-01 | 3/30/99 | 1400 ~~1500~~ (M) | Sol | AMF | X | X | X | | | | | | | | | Amanda X TX |
| ACA-SL:SF06-01 | 3/30/99 | 1415 | Sol | AMF | X | X | X | | | | | | | | | |
| 533:SL:SF01-01 | 3/30/99 | 1420 | Sol | AMF | X | X | X | | | | | | | | | |
| 534:SL:SF01-01 | 3/30/99 | 1427 | Sol | AMF | X | X | X | | | | | | | | | |
| 534:SL:SF01-01-FD | 3/30/99 | 1427 | Sol | AMF | X | X | X | | | | | | | | | |
| 549:SL:SF01-01-FD | 3/30/99 | 1440 | Sol | AMF | X | X | X | | | | | | | | | If PCB Detected |
| 549:SL:SF01-01 | 3/30/99 | 1440 | Sol | AMF | X | X | X | X | | | | | | | | in Rush sample |
| 534:SL:SF02-01 | 3/30/99 | 1458 | Sol | AMF | X | X | X | | | | | | | | | RUN Dioxins + |
| 533:SL:SF02-01 | 3/30/99 | 1500 | Sol | AMF | X | X | X | | | | | | | | | Furans |
| 531:SL:SF01-01 | 3/30/99 | 1515 | Sol | AMF | X | X | X | | | | | | | | | |
| 532:SL:SF02-01 | 3/30/99 | 1521 | Sol | AMF | X | X | X | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/30/99 | [illegible] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [illegible] | 3/31/99 0830 | | | | Fed Ex 809 9 9 25 58039 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/29/99 REPORT NUMBER 10

PROJECT & LOCATION CWM-Vickery - Group F

WEATHER Sunny TEMPERATURE RANGE 45°-60° WIND 10-15 mph

EARTH TECH PERSONNEL ON SITE AMR/JG/JH TIME ON SITE 0700 - 1500

SUMMARY OF SITE ACTIVITIES

sampling / sample prep / split spoon / Auger sample collection

LEVEL OF HEALTH & SAFETY PROTECTION

Level D

INSTRUMENTATION USED

Minotip + multirae @ 0745 and @ 1240

CALIBRATION(S) PERFORMED

Isobutylene, LEL, CO, $H_2S$, $O_2$

INSTRUMENT PROBLEMS/REMEDIES

SAMPLES COLLECTED*

See attached C-O-C

SAMPLE COLLECTION METHOD(S)

split spoon / Hollow stem Auger

Grab samples

QUALITY CONTROL SAMPLES* See attached C-O-C

(1) geotech Sample S38:SL:SF01-01-GT

ADDITIONAL REMARKS

Drill Rig broke hydraulic line - end sampling @ 1200

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

FRANK TECH 0

Project: CWM - Jackson RPE

Client: WMI

Send Results To: Michael Rabbond

Address: 412 Lincoln Hwy

Frankfort Hills PA 19030

Phone: 215 269 - 2142

| Turnaround Time | STD | STD | STD | STD | STD |
|---|---|---|---|---|---|
| # of Containers | 3 | 1 | 1 | 2 | 1 |
| Container Type | Encore | 8oz glass | 8oz glass | Encore | 8oz glass |
| Preservative Used | None | None | None | None | None |
| Type of Analysis | VOCs | SVOCs, Arsenic, Methylene, PCB | Metals, Cyanide, Sulfide | VOCs | Metals, Sulfide, Cr, Cyanide, Phenols, PCBs |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOCs | SVOCs, Arsenic, Methylene, PCB | Metals, Cyanide, Sulfide | VOCs | Metals, Sulfide, Cr, Cyanide, Phenols, PCBs | | | | | | | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 537:SL:SF01-01 | 3/29/99 | 0830 | Soil | AAF | X | X | X | | | | | | | | | | Normal |
| 537:SL:SF02-01 | 3/29/99 | 0844 | Soil | AAF | X | X | X | | | | | | | | | | |
| 38 ~~SF38~~:SL:SF01-01 | 3/29 | 0877 | Soil | AAF | X | X | X | | | | | | | | | | |
| 38 ~~SF38~~:SL:SF02-01 | 3/29 | 0910 | Soil | AAF | X | X | X | | | | | | | | | | |
| 540:SL:SF01-01 | 3/29 | 0940 | Soil | AAF | X | X | X | | | | | | | | | | |
| 540:SL:SF02-01 | 3/29 | 0955 | Soil | AAF | X | X | X | | | | | | | | | | |
| 540:SL:SF02-01-FD | 3/29 | 0955 | Soil | AAF | X | X | X | | | | | | | | | | |
| 539:SL:SF01-01 | 3/29 | 1010 | Soil | AAF | X | X | X | | | | | | | | | | |
| 539:SL:SF01-01-MS | 3/29 | 100 | Soil | AAF | | | | X | X | X | | | | | | | |
| 539:SL:SF01-01-MSD | 3/29 | 1010 | Soil | AAF | | | | X | X | | | | | | | | |
| 539:SL:SF02-01 | 3/29 | 1022 | Soil | AAF | X | X | X | | | | | | | | | | |
| 552:SL:SF01-01 | 3/29 | 1035 | Soil | AAF | X | X | X | | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/30/99 | | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| | 3/31/99 1400 | | | | FEDEX 807 582 5 3704 5 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 53976 DATE 3/26/99 REPORT NUMBER 9

PROJECT & LOCATION CWM-Vickery - SWMU #13

WEATHER Cool/cloudy TEMPERATURE RANGE 20°F-40°F WIND 5 mph (steady)

EARTH TECH PERSONNEL ON SITE JG/JH/AMF TIME ON SITE 0630 - 1430

SUMMARY OF SITE ACTIVITIES

sample prep / sampling SWMU #13

LEVEL OF HEALTH & SAFETY PROTECTION Level D

INSTRUMENTATION USED microtip MP-1000 / multiRAE (Quad gas)

calibrated @0715 calibrated @ 1005

CALIBRATION(S) PERFORMED Isobutylene and Methane, $H_2S$, $CO + O_2$

INSTRUMENT PROBLEMS/REMEDIES none

SAMPLES COLLECTED*

SEE ATTACHED C-O-C

SAMPLE COLLECTION METHOD(S)

Hollow Stem Auger / split spoon

QUALITY CONTROL SAMPLES* see ATTACHED C-O-C

(1) ~~Qt~~ MLP Geotech Samples S13: SL: GNB2-01-GT

(1) Geotech Dup S13: SL: GNB2-01-GD

ADDITIONAL REMARKS

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

C:\11-VIC~1\FIELDF~1\QCRPT.FRM

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of Pgs.

FMTH TECH

Project: CWM-Uckley OH 8 RFI
Client: WM
Send Results To: Michael Bedard
Address: 412 Lincoln Hwy
Fairless Hills PA 19030
Phone: (215) 269-2142

| Turnaround Time | STD | STD | STD |
|---|---|---|---|
| # of Containers | 3 | 1 | 1 |
| Container Type | Frame | 8oz glass | 8oz glass |
| Preservative Used | None | None | None |
| Type of Analysis | VOC's | Metals, Cyanide, Sulfide | SVOC's, Pesticide, Herbicide, PCB |

| | Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | Metals, Cyanide, Sulfide | SVOC's, Pesticide, Herbicide, PCB | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| S13 | SL:GNB3-01 | 3/26/99 | 1042 | Soil | MF | X | X | X | | [illegible] 1X |
| S13 | SL:GNB3-01 | 3/26/99 | 1059 | Soil | MF | X | X | X | | |
| S13 | SL:GNC3-01 | 3/26/99 | 1116 | Soil | MF | X | X | X | | |
| S13 | SL:GNC4-01 | 3/26/99 | 1130 | Soil | MF | X | X | X | | |
| SL | SL:GNB4-01 | 3/26/99 | 1205 | Soil | MF | X | X | X | | |
| SL | SL:GNA4-01 | 3/26/99 | 1225 | Soil | MF | X | X | X | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/18/99 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/26/99 1430 | | | | FEDEX 855139771 3 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference:

1 of Pgs.

EARTH TECH

Project: CWM - UICKEN RFI
Client: WM
Send Results To: Michael Boland
Address: 412 Lincoln Hwy
Fairless Hills PA 19030
Phone: (215) 269-2142

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's, Pesticides, Herbicides, PCB | Metals, Cyanide, Sulfide | VOC's | SVOC's, Pesticides, Herbicides, PCB | | | | | | | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turnaround Time | | | | | STD | STD | STD | STD | STD | | | | | | | |
| # of Containers | | | | | 3 | 1 | 1 | 2 | 1 | | | | | | | |
| Container Type | | | | | Encore | 8oz Glass | 8oz Glass | Encore | 4oz | | | | | | | |
| Preservative Used | | | | | None | None | None | None | None | | | | | | | |
| 513: SL:GNA1-01 | 3/26/99 | 0805 | Soil | AAF | X | X | X | | | | | | | | | |
| 513: SL:GNA1-01-FD | 3/26/99 | 0805 | Soil | AAF | X | X | X | | | | | | | | | |
| 513: SL:GNB1-01 | 3/26/99 | 0825 | Soil | AAF | X | X | X | | | | | | | | | |
| 513: SL:GNC1-01 | 3/26/99 | 0848 | Soil | AAF | X | X | X | | | | | | | | | |
| 513: SL:GNC2-01 | 3/26/99 | 0906 | Soil | AAF | X | X | X | | | | | | | | | |
| 513: SL:GNC2-01-MS | 3/26 | 0906 | Soil | AAF | | | | X | X | | | | | | | |
| 513: SL:GNC2-01-MSD | 3/26 | 0906 | Soil | AAF | | | | X | X | | | | | | | |
| 513: SL:GNB2-01 | 3/26/99 | 0926 | Soil | AAF | X | X | X | | | | | | | | | |
| 513: SL:GNA2-01 | 3/26/99 | 0946 | Soil | AAF | X | X | X | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/18/99 | [illegible] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [illegible] | 3/26/99 | 1440 | | | FEDEX 8551397724 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/25/99 REPORT NUMBER 8

PROJECT & LOCATION SWMU 12 - CWM-Vickery Ohio

WEATHER Overcast/Cloudy TEMPERATURE RANGE 30°F WIND 10-15 mph

EARTH TECH PERSONNEL ON SITE JG/AMF/JH TIME ON SITE 0645 - 1800

SUMMARY OF SITE ACTIVITIES

Sample prep/sample collection/ Auger, rod and spoon Decontamination

LEVEL OF HEALTH & SAFETY PROTECTION Level D

INSTRUMENTATION USED micro tip MP-1000
multi RAE

CALIBRATION(S) PERFORMED Calibration performed on Micro Tip & Multi RAE @ 0705 and 1300 hrs

INSTRUMENT PROBLEMS/REMEDIES No Problems ENCOUNTERED with INSTRUMENTS.

SAMPLES COLLECTED*

See Attached C-O-C

SAMPLE COLLECTION METHOD(S)

Hollow stem Auger / Split spoon

QUALITY CONTROL SAMPLES*

See Attached C-O-C

(2) Geotech Samples S1R:SL:GNE2-01-GT
S1R:SL:GNC2-01-GT

ADDITIONAL REMARKS

Humid morning w/ snow
Dryer Afternoon windy + partly sunny

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE:

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference:

1 of 1 Pgs.

EARTH TECH

Project: CWM - Uckey RFI
Client: WM
Send Results To: Michael Bedard
Address: 412 Lincoln Hwy
Tanless Hills, PA 19030
Phone: (215) 269-2142

| Turnaround Time | STD | STD | STD |
|---|---|---|---|
| # of Containers | 3 | 1 | 1 |
| Container Type | Encore | 4oz glass | 4oz glass |
| Preservative Used | None | None | None |
| Type of Analysis | VOC's | SVOC's, Pesticides, Herbicides, PCB | Metals, Cyanide, Sulfide |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's, Pesticides, Herbicides, PCB | Metals, Cyanide, Sulfide | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| S12:SL:GNF3-01 | 3/25/99 | 0800 | Soil | MAF | X | X | X | | Appendix IX |
| S12:SL:GNF2-01 | 3/25/99 | 0820 | Soil | MAF | X | X | X | | |
| S12:SL:GNF2-02 | 3/25/99 | 0846 | Soil | MAF | X | X | X | | * RUSH VOC's From this Sample Only * |
| S12:SL:GNF2-03 | 3/25/99 | 0850 | Soil | MAF | X | X | X | | |
| S12:SL:GNF1-01 | 3/25/99 | 0935 | Soil | MAF | X | X | X | | |
| S12:SL:GNF1-02 | 3/25/99 | 0955 | Soil | MAF | X | X | X | | |
| S12:SL:GNF2-01 | 3/25/99 | 1015 | Soil | MAF | X | X | X | | |
| S12:SL:GNF3-01 | 3/25/99 | 1040 | Soil | MAF | X | X | X | | |
| S12:SL:GNF3-01-FD | 3/25/99 | 1040 | Soil | MAF | X | X | X | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/25/99 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/25/99 10:45 | | | | FEDEX 855139768 0 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

EARTH TECH

Project: CWM - Uckerey RFI

Client: WM

Send Results To: Michael Bedard

Address: 412 Lincoln Hwy
Jamison Hills, PA 19030

Phone: (215) 269-2142

| Turnaround Time | 5TD | 5TD | 5TD |
|---|---|---|---|
| # of Containers | 3 | 1 | 1 |
| Container Type | Glass | 8oz glass | 8oz glass |
| Preservative Used | None | None | None |
| Type of Analysis | VOC's | Metals, PCB, Cyanide, Sulfide | |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | Metals, PCB, Cyanide, Sulfide | | | | | | | | | | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 512:SL:GND3-01 | 3/25/99 | 1130 | Soil | MF | X | X | X | | | | | | | | | Appendix IX |
| 512:SL:GND2-01 | 3/25/99 | 1145 | Soil | MF | X | X | X | | | | | | | | | |
| 512:SL:GND1-01 | 3/25/99 | 1200 | Soil | MF | X | X | X | | | | | | | | | |
| 512:SL:GNC2-01 | 3/25/99 | 1330 | Soil | MF | X | X | X | | | | | | | | | |
| 512:SL:GNC3-01 | 3/25/99 | 1351 | Soil | MF | X | X | X | | | | | | | | | |
| 512:SL:GNB3-01 | 3/25/99 | 1415 | Soil | MF | X | X | X | | | | | | | | | |
| 512:SL:GNB2-01 | 3/25 | 1508 | Soil | MF | X | X | X | | | | | | | | | |
| 512:SL:GNB2-01-FD | 3/25 | 1508 | Soil | MF | X | X | X | | | | | | | | | |
| 512:SL:GNA2-01 | 3/25/99 | 1550 | Soil | MF | X | X | X | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/26/99 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/25/99 | 1440 | | | FEDEX 855137676 0 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/24/99 REPORT NUMBER 7

PROJECT & LOCATION CWM-Vickery SWMU 14 + SWMU 15

WEATHER SUNNY TEMPERATURE RANGE 35°F WIND 5-10 mph West

EARTH TECH PERSONNEL ON SITE JG/JH/AMF TIME ON SITE 0630 - 1830

SUMMARY OF SITE ACTIVITIES

Sample prep / sample collection / Decon / sample packaging in 2 solid waste mgt. Units.

LEVEL OF HEALTH & SAFETY PROTECTION level D

INSTRUMENTATION USED microTIP MP 1000 / multi RAE @ 0700 and @ 1235

CALIBRATION(S) PERFORMED Isobutylene, CO, $H_2S$, methane

INSTRUMENT PROBLEMS/REMEDIES None

SAMPLES COLLECTED*

See attached C-O-C

SAMPLE COLLECTION METHOD(S)

Split spoon / Auger

QUALITY CONTROL SAMPLES* See Attached C-O-C

2 Geotech samples 515:SL:GNB4-01-GT, 515:SL:GNB1-01-GT

1 Geotech Duplicate 515:SL:GNB4-01-GD

ADDITIONAL REMARKS

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [illegible]

C:\11-VIC~1\FIELDF~1\QCRPT.FRM

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

EARTH TECH

Project: CWM - Vickery
Client: WM
Send Results To: Michael Bedard
Address: 412 Lincoln Hwy
Jenkintown Hills PA 19030
Phone: (215) 269 - 2142

| Turnaround Time | STD | STD | STD |
|---|---|---|---|
| # of Containers | 3 | 1 | 1 |
| Container Type | Amber | 8oz Glass | 8oz Glass |
| Preservative Used | None | None | None |
| Type of Analysis | VOC's | SVOC's, Pesticides, Herbicides, PCB, Metals, Cyanide, Sulfide | |

| | Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's, Pesticides, Herbicides, PCB, Metals, Cyanide, Sulfide | | | | | | | | | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 515 | SL:GNB1-01 | 3/24/99 | 1355 | Soil | AAF | X | X | X | | | | | | | | | Analyze 1X |
| 515 | SL:GNB2-01 | 3/24/99 | 1500 | Soil | AAF | X | X | X | | | | | | | | | & PCB |
| 515 | SL:GNB2-01-FD | 3/24/99 | 1500 | Soil | AAF | X | X | X | | | | | | | | | Detected non |
| 515 | SL:GNC2-01 | 3/24/99 | 1500 | Soil | AAF | X | X | X | | | | | | | | | Dioxin + |
| 515 | SL:GNC3-01 | 3/24/99 | 1537 | Soil | AAF | X | X | X | | | | | | | | | Furans |
| 515 | SL:GNC4-01 | 3/24/99 | 1554 | Soil | AAF | X | X | X | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/25/99 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/24/99 1610 | | | | |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

EARTH TECH

Project: CWM - Vickery

Client: WM

Send Results To: Michael Bedard

Address: 412 Lincoln Hwy

Fairless Hills PA 19030

Phone: (215) 269 - 2142

| Turnaround Time | RUSH | STD | STD | STD | ~~STD~~ RUSH | STD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Containers | 3 | 1 | 1 | 1 | ~~1~~ | 2 | | | | | |
| Container Type | Encore | 4oz Glass | 4oz Glass | 4oz | ~~4~~ | Encore | | | | | |
| Preservative Used | None | None | None | None | | None | | | | | |
| Type of Analysis | VOC's | SVOC's, Pesticides, Herbicides, PCB | Metals, Cyanide | SVOC's, PCB, Metals, Cyanide | VOC's | | | | | | |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's, Pesticides, Herbicides, PCB | Metals, Cyanide | SVOC's, PCB, Metals, Cyanide | | VOC's | | | | | | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S14:SL:GN02-01 | 3/23/99 | 1610 | Soil | AAF | X | X | X | | | | | | | | | | Approved x TX |
| S14:SL:GN32-01 | 3/23/99 | 1700 | Soil | AAF | X | X | X | | | | | | | | | | |
| S14:SL:GN32-01-FD | 3/23/99 | 1700 | Soil | AAF | X | X | X | | | | | | | | | | ~~x~~ RUSH TURN |
| S14:SL:GN81-01 | 3/23/99 | 1745 | Soil | AAF | X | ✓ | ✓ | | | | | | | | | | AROUND FOR |
| S14:SL:GN01-01 | 3/24/99 | 0755 | Soil | AAF | X | X | X | | | | | | | | | | VOC's. ~~x~~ |
| S14:SL:GN01-01-MS | 3/24/99 | 0755 | Soil | AAF | | | | X | | X | | | | | | | |
| S14:SL:GN01-01-MD | 3/24/99 | 0755 | Soil | AAF | | | | X | | X | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/18/99 | [illegible] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [illegible] | 3/24/99 0900 | | | | FEDEX 855137643 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

FARM TECH

Project: CWM - Derry RFI

Client: WM

Send Results To: Richard Boland

Address: 42 Lincoln Hwy

Fairless Hills PA 19030

Phone: 215 269 - 2142

| Turnaround Time | STD | STD | STD | STD | STD | STD |
|---|---|---|---|---|---|---|
| # of Containers | 3 | 1 | 1 | 1 | 1 | 2 |
| Container Type | Encore | 8oz glass | 8oz glass | 4oz glass | 4oz glass | Encore |
| Preservative Used | None | None | None | None | None | None |
| Type of Analysis | VOC's | SVOC's, Pesticides, Herbicides, PCB | Metals, Cyanide, Sulfide | Dioxins, Furans, PCB congeners | (ALT analyte) VOC's | |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's, Pesticides, Herbicides, PCB | Metals, Cyanide, Sulfide | Dioxins, Furans, PCB congeners | | (ALT analyte) VOC's | | | | | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S15:SL:GNA4-01 | 3/24/99 | 1032 | Sol | AAF | X | X | X | | | | | | | | Appendix IX |
| S15:SL:GNB4-01 | 3/24/99 | 1050 | Sol | AAF | X | X | X | | | | | | | | |
| S15:SL:GNA3-01 | 3/24/99 | 1115 | Sol | AAF | X | X | X | | | | | | | | If PCB present |
| S15:SL:GNB3-01 | 3/24/99 | 1133 | Sol | AAF | X | X | X | | | | | | | | RUN DIOXINS and |
| S15:SL:GNA2-01 | 3/24/99 | 1150 | Sol | AAF | X | X | X | | | | | | | | FURANS |
| S15:SL:GNA1-01 | 3/24/99 | 1312 | Sol | AAF | X | X | X | | | | | | | | |
| S15:SL:GNA1-01MS | 3/24/99 | 1312 | Sol | AAF | | | | X | | X | | | | | |
| S15:SL:GNA1-01MSD | 3/24/99 | 1312 | Sol | AAF | | | | X | | X | | | | | |
| S15:SL:GNB1-01 | 3/24/99 | 1337 | Sol | AAF | X | X | X | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/8/99 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/24/99 | 1430 | | | |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/23/99 REPORT NUMBER 6

PROJECT & LOCATION CWM - Uncle Lex - Background Areas

WEATHER _____ TEMPERATURE RANGE _____ WIND _____

EARTH TECH PERSONNEL ON SITE JG/AMF/JH TIME ON SITE 0630 -

SUMMARY OF SITE ACTIVITIES

H+S Audit conducted By Earth Tech HSO Ron Pantillo.
Sample prep/ Background sampling in NW Corner of site

LEVEL OF HEALTH & SAFETY PROTECTION Level D

INSTRUMENTATION USED MicroTip MP-1000, MultiRae

CALIBRATION(S) PERFORMED Isobutylene, $H_2S$, CO, $O_2$, LEL

INSTRUMENT PROBLEMS/REMEDIES NONE

SAMPLES COLLECTED*

See ATTACHED C-O-C
Background Samples collected Also - metals only

SAMPLE COLLECTION METHOD(S)

Split spoon Hollow Stem Auger

QUALITY CONTROL SAMPLES* SEE ATTACHED C-O-C

1 Geotech Sample 514:SL:GNB1-01-GT

ADDITIONAL REMARKS

Ron on site From 0700 - 1430

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

C:\11-VIC~1\FIELDF~1\QCRPT.FRM

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference



FAITH TECH

Project: CWM - Vickery
Client: WM
Send Results To: Michael Gradad
Address: 412 Lincoln Hwy
Fairless Hills PA 19030
Phone: (215) 269 - 2142

| Turnaround Time | RUSH | STD | STD | STD | ~~STD~~ | STD |
|---|---|---|---|---|---|---|
| # of Containers | 3 | 1 | 1 | 1 | ~~1~~ | 2 |
| Container Type | Encore | 8oz Glass | 8oz Glass | 4oz | ~~4~~ | Encore |
| Preservative Used | None | None | None | None | | None |
| Type of Analysis | VOCs | SVOCs, Pesticides, Herbicides, PCBs | Metals, Cyanide, Sulfide | MBAS, SVOCs, PCBs, Metals, Pesticides | VOCs | |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOCs | SVOCs, Pesticides, Herbicides, PCBs | Metals, Cyanide, Sulfide | MBAS, SVOCs, PCBs, Metals, Pesticides | | VOCs | | | | | | Lab Cooler No. / CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S14:SL:GN02-01 | 3/23/99 | 1610 | Soil | AMF | X | X | X | | | | | | | | | Approved x TX |
| S14:SL:GN30-01 | 3/23/99 | 1700 | Soil | AMF | X | X | X | | | | | | | | | |
| S14:SL:GN32-01-FD | 3/23/99 | 1700 | Soil | AMF | X | X | X | | | | | | | | | * RUSH TURN |
| S14:SL:GN31-01 | 3/23/99 | 1745 | Soil | AMF | X | X | X | | | | | | | | | AROUND FOR |
| S14:SL:GN01-01 | 3/24/99 | 0755 | Soil | AMF | X | X | X | | | | | | | | | VOCs. * |
| S14:SL:GN01-01-MS | 3/24/99 | 0755 | Soil | AMF | | | | X | | X | | | | | | |
| S14:SL:GN01-01-MD | 3/24/99 | 0755 | Soil | AMF | | | | X | | X | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/26/99 | Dolor Tha | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| Dolor Tha | 3/26/99 | | | | FEDEX 855137643 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

# GPL LABORATORIES, LLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of Pgs.

EARTH TECH

Project: CWM-Vicklery OHIO
Client: WM
Send Results To: Michael Becker
Address: 412 Lincoln Hwy
Fairless Hills PA 19030
Phone: (215) 269-2142

| Turnaround Time | STD | STD |
|---|---|---|
| # of Containers | 1 | 1 |
| Container Type | 402 | 402 |
| Preservative Used | None | None |
| Type of Analysis | Metals | Metals |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | Metals | Metals | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|
| BGS:SL:BG03-01 | 3/23/99 | 1005 | Soil | ARF | X | | | Appendix IX |
| BGS:SL:BG03-01-FD | 3/23/99 | 1005 | Soil | ARF | X | | | |
| BGS:SL:BG02-02 | 3/23/99 | 0940 | Soil | ARF | X | | | |
| BGS:SL:BG01-01 | 3/23/99 | 0845 | Soil | ARF | X | | | |
| BGS:SL:BG01-02 | 3/23/99 | 0902 | Soil | ARF | X | | | |
| BGS:SL:BG02-01 | 3/23/99 | 0925 | Soil | ARF | X | | | |
| BGS:SL:BG-03-02 | 3/23/99 | 1035 | Soil | ARF | X | | | |
| BGS:SL:BG03-02-MS | 3/23/99 | 1035 | Soil | ARF | ~~X~~ MS | X | | |
| BGS:SL:BG03-02-MD | 3/23/99 | 1035 | Soil | ARF | | X | | |
| BGS:SL:BG05-01 | 3/23/99 | 1235 | Soil | AJG | X | | | |
| BGS:SL:BG05-02 | 3/23/99 | 1250 | Soil | JG | X | | | |
| BGS:SL:BG04-01 | 3/23/99 | 1110 | Soil | ARF | X | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/8/99 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| | | | | | |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference



EARTH TECH

Project: CWM- Vickery OHIO
Client: WM
Send Results To: Michael Bedard
Address: 412 Lincoln Hwy
Fairless Hills, PA 19030
Phone: (215) 269-2142

| Turnaround Time | STD | STD |
|---|---|---|
| # of Containers | 1 | |
| Container Type | 40z Glass | |
| Preservative Used | NONE | |
| Type of Analysis | metals | |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|
| BG-S:SL:BG04-01 | 3/23/99 | 1125 | Soil | ARF | X | Appendix IX |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| — | 3/18/99 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| | | | | | |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/22/99 REPORT NUMBER 5

PROJECT & LOCATION CWM-Vickery RFI / SWMU 14

WEATHER partly Cloudy TEMPERATURE RANGE 30°-35°F WIND 10-15 mph (snow flurries)

EARTH TECH PERSONNEL ON SITE Jack/Andrea/Jim TIME ON SITE 06:30 - 1830

SUMMARY OF SITE ACTIVITIES

Sampling prep / sampling / Decontamination / Sample packing and shipment

LEVEL OF HEALTH & SAFETY PROTECTION Level D and modified D

INSTRUMENTATION USED mininotip MP 1000 multi rae

CALIBRATION(S) PERFORMED Isobutylene, $H_2S$, CO, Methane

INSTRUMENT PROBLEMS/REMEDIES None

SAMPLES COLLECTED* see attached C-O-C

SAMPLE COLLECTION METHOD(S)

Splitspoon / Auger

QUALITY CONTROL SAMPLES* None today

ADDITIONAL REMARKS

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

C:\11-VIC~1\FIELDF~1\QCRPT.FRM

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

EARTH TECH

Project: CWM-Uckerman RFI
Client: Waste Management
Send Results To: Michael Bedard
Address: 412 Lincoln Hwy
Fairless Hills, PA 19030
Phone: (215) 269 2142

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOCs, Pesticides, Herbicides, PCB | Metals, Cyanide, Sulfide | | | | | | | | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turnaround Time | | | | | STD | STD | STD | | | | | | | | | |
| # of Containers | | | | | 3 | 1 | 1 | | | | | | | | | |
| Container Type | | | | | Freeze | 8oz glass | 8oz glass | | | | | | | | | |
| Preservative Used | | | | | None | None | None | | | | | | | | | |
| SL4-SL:GND1-01 | 3/22/99 | 0900 | Soil | AAF | X | X | X | | | | | | | | | Normal TX |
| SL4-SL:GND1-02 | 3/22/99 | 1145 | Soil | AAF | X | X | X | | | | | | | | | Parameters |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/18/99 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/22/99 1600 | | | | |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/19/99 REPORT NUMBER 4

PROJECT & LOCATION CWM- Vickery - SWMU #14

WEATHER Cloudy TEMPERATURE RANGE 35° WIND 5 mpH west

EARTH TECH PERSONNEL ON SITE Jim Gibson/Jack/Andrea Frostaci TIME ON SITE 0630 - 1400

SUMMARY OF SITE ACTIVITIES

LEVEL OF HEALTH & SAFETY PROTECTION Level D and Modified Level D

INSTRUMENTATION USED microtip MP-1000, multiRAE

CALIBRATION(S) PERFORMED Isobutylene, $H_2S$, CO, methane.

INSTRUMENT PROBLEMS/REMEDIES None

SAMPLES COLLECTED* See attached C-O-C

SAMPLE COLLECTION METHOD(S)

split spoon/ Auger

QUALITY CONTROL SAMPLES* None Today

ADDITIONAL REMARKS

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

C:\11-VIC~1\FIELDF~1\QCRPT.FRM

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference:

1 of Pgs.

EARTH TECH

Project: CWM - McKay RFI
Client: WM - McKAY
Send Results To: Michael Bedard
Address: 412 Lincoln Hwy
Fairless Hills PA 19030
Phone: 215 269-2142

| Turnaround Time | STD | STD | STD |
|---|---|---|---|
| # of Containers | 3 | 1 | 1 |
| Container Type | Funnel | 8oz Jar | 8oz glass |
| Preservative Used | None | None | None |
| Type of Analysis | VOC's | SVOC's, Pesticides, Herbicides, PCB | Metals, Cyanide, Sulfide |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOC's | SVOC's, Pesticides, Herbicides, PCB | Metals, Cyanide, Sulfide | | | | | | | | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S14:SL:GNA2-01 | 3/19/99 | 0815 | Soil | AMF | X | X | X | | | | | | | | | Appendix IX |
| S14:SL:GNA2-02 | 3/19/99 | 1015 | Soil | AMF | X | X | X | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/12/99 | [signature] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [signature] | 3/17/99 1100 | | | | FEDEX 855139763 2 |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/17/99 REPORT NUMBER 2

PROJECT & LOCATION (Area of Concern H) sediment collection

WEATHER SUNNY TEMPERATURE RANGE 30°-55° WIND 10-20 mph (heavy)

EARTH TECH PERSONNEL ON SITE JG/JH/ARF TIME ON SITE 0700

SUMMARY OF SITE ACTIVITIES

Sediment Sampling at various locations both on site and off.

LEVEL OF HEALTH & SAFETY PROTECTION Hard Hat/safety glasses steel toed boots while on site.

INSTRUMENTATION USED NONE

CALIBRATION(S) PERFORMED N/A

INSTRUMENT PROBLEMS/REMEDIES N/A

SAMPLES COLLECTED*

See attached chain-of-custody

SAMPLE COLLECTION METHOD(S)

Encore for VOC's - due to sample moisture content Encores could not be Used directly in stream bed.

Composite for other parameters

Stainless steel ladel to collect sediment samples

QUALITY CONTROL SAMPLES*

See attached chain-of-custody

ADDITIONAL REMARKS

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

C:\11-VIC~1\FIELDF~1\QCRPT.FRM

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

EMPAL TECH

Project: Calm- Vickery OH
Client: Calm Vickery, OH
Send Results To: Michael Bodman
Address: 418 Lincoln Hwy
Fairless Hills PA 19030
Phone: 215 269 2142

| Turnaround Time | STD | STD | STD |
|---|---|---|---|
| # of Containers | 3 | 1 | 1 |
| Container Type | Tedlar | 8oz | 8oz |
| Preservative Used | None | None | None |
| Type of Analysis | VOCs | SVOCs (Calculated Phenols) | Metals (Cr, Pb, Zn) |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOCs | SVOCs (Calculated Phenols) | Metals (Cr, Pb, Zn) | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| AC H:SD:SD07-01 | 3/17 | 1230 | Solvent | JH | X | X | X | | Approx. TX |
| AC H:SD:SD08-01 | 3/17 | 1245 | Solvent | JH | X | X | X | | |
| AC H:SD:SD09-01 | 3/17 | ~~1300~~ 1320 | Solvent | JH | X | X | X | | |
| AC H:SD:SD10-01 | 3/17 | 1350 | Solvent | JH | X | X | X | | Vocs grab samples |
| AC H:SD:SD11-01 | 3/17 | 1425 | Solvent | JH | X | X | X | | All others are Composite |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/17/17 | [illegible] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [illegible] | 3/17/17 ~~1330~~ 1230 | | | | |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference:

1 of 1 Pgs.

Project: CWM - Vickery, OHO
Client: CWM - Vickery
Send Results To: Michael Bedard
Address: 412 Lincoln Hwy
Fairless Hills PA 19030
Phone: (215) 269-2416

| Turnaround Time | STD | STD | STD | STD |
|---|---|---|---|---|
| # of Containers | 3 | 1 | 1 | 2 |
| Container Type | Frame | 8oz | 8oz | Frame |
| Preservative Used | None | None | None | None |
| Type of Analysis | Voc's | SVOC's, PCB, Pesticides, Herbicides, Metals, CN, Sulfide | VOC's | |

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | Voc's | SVOC's, PCB, Pesticides, Herbicides, Metals, CN, Sulfide | VOC's | | | | | | | | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~Active~~ | | | | | | | | | | | | | | | | Appendix IX |
| ACH:SD:SD01-01 | 3/17/99 | 815 | Sediment | JH | X | X | X | | | | | | | | | For methods |
| ACH:SD:SD02-01 | 3/17/99 | 900 | Sediment | JH | X | X | X | | | | | | | | | |
| ACH:SD:SD03-01 | 3/17 | 930 | Sediment | JH | X | X | X | | | | | | | | | Use's grab samples |
| ACH:SD:SD04-01 | 3/17 | 1020 | Sediment | JH | X | X | X | | | | | | | | | All others |
| ACH:SD:SD05-01 | 3/17 | 1045 | Sediment | JH | X | X | X | | | | | | | | | Composites |
| ACH:SD:SD05-01-FD | 3/17 | 1045 | Sediment | JH | X | X | X | | | | | | | | | |
| ACH:SD:SD05-01-MS | 3/17 | 1045 | Sediment | JH | | X | X | X | | | | | | | | |
| ACH:SD:SD05-01-MD | 3/17 | 1045 | Sediment | JH | | X | X | X | | | | | | | | |
| ACH:SD:SD06-01 | 3/17 | 1140 | Sediment | JH | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/18/99 | Jordan Stone | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| Jordan Stone | 3/18/99 1730 | | | | |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/15/99 REPORT NUMBER 1

PROJECT & LOCATION SWMU 14 / Preperation

WEATHER SUNNY 40°F TEMPERATURE RANGE 28° - 40° WIND

EARTH TECH PERSONNEL ON SITE ARF / JG / JH TIME ON SITE 0630

SUMMARY OF SITE ACTIVITIES PREP TO DRILL / RECON / DECON
REPAIR STEAM CLEANER / REPLACE WATER TANK FOR DECON WATER

LEVEL OF HEALTH & SAFETY PROTECTION AM - NONE OFFICE WORK PM - HARD HATS / STEEL TOE BOOTS / EYE PROTECTION WHEN ON SITE IN PM

INSTRUMENTATION USED MICROTIP MP-1000
MultiRAE

CALIBRATION(S) PERFORMED EACH CALIBRATED IN AM (SEE CALIB. LOG)
NEITHER USED TODAY - NO DRILLING OR SAMPLING.

INSTRUMENT PROBLEMS/REMEDIES N/A

SAMPLES COLLECTED* NONE

SAMPLE COLLECTION METHOD(S) N/A

QUALITY CONTROL SAMPLES* N/A

ADDITIONAL REMARKS Contractors on site: Kusmer Surveyors (2) surveying SWMU 12+13
Bonsor - Morrison ~~Surve~~ Drillers (3)

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

C:\11-VIC~1\FIELDF~1\QCRPT.FRM

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY



# DAILY QUALITY CONTROL REPORT

JOB NUMBER 33976 DATE 3/18/99 REPORT NUMBER 3

PROJECT & LOCATION CWM-Vickery, Ohio

WEATHER Cloudy TEMPERATURE RANGE hi 30's F WIND 20-30mph (Heavy winds)

EARTH TECH PERSONNEL ON SITE Jack Hedy, Andrea Frusaci, Jim Gibson TIME ON SITE 0700

SUMMARY OF SITE ACTIVITIES

First Day of Drilling in Summit #14

LEVEL OF HEALTH & SAFETY PROTECTION HHAT/safety/glasses level D

INSTRUMENTATION USED Photo-vac Microtip MP-1000 PID & Multi Rae cgi

CALIBRATION(S) PERFORMED Yes, Isobutylene, $H_2S$, CO, $O_2$, LEL

INSTRUMENT PROBLEMS/REMEDIES No

SAMPLES COLLECTED* see attached C-O-C

SAMPLE COLLECTION METHOD(S)

QUALITY CONTROL SAMPLES*

ADDITIONAL REMARKS

* INDICATE SAMPLE MEDIA: GROUND WATER, SURFACE WATER, SOIL OR SEDIMENT; SAMPLE TYPE: COMPOSITE, GRAB, SPLIT, DUPLICATE, RINSATE; AND SAMPLE I.D. NUMBERS.

SIGNATURE: [signature]

# GPL LABORATORIES, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
(301) 926-6802
Fax (301) 840-1209

Contract #/Billing Reference

1 of 1 Pgs.

EARTH TECH

Project: CWM - Vickery
Client: CWM - Vickery Ohio
Send Results To: Michael Bedard
Address: 412 Lincoln Hwy
Fairless Hills, PA 19030
Phone: 215 269-2146

| Sample ID# | Date Sampled | Time Sampled | Sample Matrix | Sampler's Initials | VOCs | SVOCs | Metals | Sulfide | Lab Cooler No. | CLIENT COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Turnaround Time | | | | | LCU | STD | STD | STD | | |
| # of Containers | | | | | | 3 | 1 | 1 | | |
| Container Type | | | | | | Glass | Poly | Poly | | |
| Preservative Used | | | | | | None | None | None | | |
| Type of Analysis | | | | | | | | | | |
| 3142 SL: GNA1-01 | 3/18/99 | 1130 | Soil | MF | X | X | X | | | Appendix IX |
| 3143 SL: GNA1-02 | 3/18/99 | 1430 | Soil | MF | X | X | X | | | Samples |

| Relinquished By: | Date/Time | Received By: | Relinquished By: | Received for Laboratory By: | Date/Time |
|---|---|---|---|---|---|
| | 3/18/99 | [illegible] | | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | Shipper: | Airbill No.: |
|---|---|---|---|---|---|
| [illegible] | 3/18/99 1700 | | | | FEDEX [illegible] |

| Relinquished By: | Date/Time | Received By: | Lab Comments: | Temp: |
|---|---|---|---|---|
| | | | | |

G.P. W.O. _____

# M E M O

Date: April 2, 1999

To: Mike Bedard cc: File 33976.05

From: Mike Christopher

Subject: **Quality Assurance Field Audit**

This memo documents a quality assurance (QA) field audit that I conducted, in accordance with the project's approved work plan. This audit was performed on March 26, 1999 at the Chemical Waste Management (CWM) Vickery site from 1125 to 1530.

I observed drilling and collection of soil samples in SWMU # 13, at grid node locations C4, B4, and A4. The drillers (Bowser-Morner) used a hollow-stem auger drilling rig mounted on an all-terrain vehicle. Samples were collected with standard 2-foot split-spoon samplers that had been decontaminated at the facility's truck wash building. Our field personnel included Jack Heely and Andrea Frustaci (at the drilling site) and Jim Gibson (at the decontamination area).

In general, I found that the field crew is performing the remedial investigation (RI) work in conformance with the workplan requirements (as amended by variances that have been approved by the EPA Project Officer).

The topics listed below are referenced in the workplan (not necessarily in this order). Where potential issues were identified, these are noted *in italics.*

Custody

Onsite, sample custody is maintained from sample collection and containerization through storage in the carpenter'' shed. Samples that are placed in storage are located in a separate, locked room in the shed. Field personnel maintain custody of samples that are removed from storage until they are submitted to the courier for shipment to the laboratory. *A possible custody issue was identified with the receipt of sample containers onsite. The field crew stated that some containers had been received from the lab without custody seals on the coolers. I recommend that you follow up with the lab to verify that they understand this requirement.*

Blanks/Duplicates

Andrea Frustaci stated that she had collected the required blanks and duplicate samples prior to my arrival (I did not witness this). She indicated that they were collected at the correct frequency as specified in the workplan.

Daily Documentation

I reviewed the field book information being collected by Jack Heely. Due to the speed of drilling, he constructed a table (including the data elements specified in the workplan) so that he can enter required information as abbreviations. As long as the "key" is made clear to all who review the fieldbook, I think this procedure is satisfactory.

Andrea verified that she is preparing daily quality control reports, are required by the workplan. Daily progress reports and drill logs are also prepared by the field crew, although much of this information was not in final form (the field crew has had less time for "office" work because of the time needed to resolve field issues during the first 2 weeks of fieldwork).

Health and Safety

Andrea is serving as Site Safety Officer during drilling activities. I found the field crew to be properly following the health and safety plan, and they monitored the drillers' activities closely as well. A previous concern with the driller's helper (he was not too careful about touching his face with dirty/contaminated gloves) was corrected satisfactorily last week by Jack and Andrea.

Instrument Calibration

Jim Gibson verified that he calibrated the field instruments prior to sample collection that morning. During my visit, we re-calibrated these instruments to determine the relative response to volatiles between the HNU PI-101 that I had transported to the site and the Photovac that was being returned to Cherry Hill. I found both instruments to be satisfactorily calibrated.

Soil Core Screening Method

The three samples that I observed being collected were not contaminated, so there was no response from the photoionization detector used for screening. However, I found the procedure being used to be satisfactory. I did not observe screening of samples that had been heated in the microwave oven, since only grid node samples were being collected during my visit.

Sample Identification/Documentation

Andrea pre-labels all containers prior to sample collection. Jack records blow counts, PID readings, and other pertinent information in the fieldbook. I found these procedures to be satisfactory.

Sample Collection Procedures

I observed collection of soil samples for volatiles analysis with the Encore samplers and bulk sample collection for semi-volatiles/metals analysis. Procedures were in accordance with the workplan. The field crew expressed some concern about having enough sample for geotechnical analysis, following collection of all the other required sample aliquots. *A potential concern was identified during transfer of the split-spoon sampler from the drill rig to the sample preparation table. The driller's helper removes the sampler from the drill rods,*

*brings it to the table, and opens it so that the soil core can be screened. I observed that the driller's helper did not change his gloves between samplers; this could result in contaminant carry-over if the sampler penetrates a contaminated zone. The field crew stated that they would require a glove change in the future if a soil core indicated that contamination was present.*

Decontamination

I observed the decon area that had been prepared by the field crew in the facility's truck wash area. Potable water from the public supply in Clyde, Ohio was being used for wash water. Due to the speed of drilling (and split-spoon sampler usage), both Jim Gibson and another driller's helper are deconning sample equipment on a full-time basis. I think this is adequate justification for having a third full-time field person at the site; otherwise, the rate of sampling will be significantly slowed. Jack Heely explained that the air-dry procedure (as specified in the workplan) had been modified using compressed nitrogen, because the cold and damp conditions in the truck wash area were not allowing equipment to dry quickly enough. Small sampling equipment was returned to the drill rig wrapped in aluminum foil. Augers were returned to the drill rig in a pickup truck, covered by plastic sheeting.

Borehole Abandonment

I observed the three shallow boreholes in SWMU #13 being abandoned with bentonite chips, hydrated with potable water (the procedure agreed upon with EPA). This appeared to result in a satisfactory surface seal. Investigation-derived waste (IDW) was shoveled into a plastic-lined area in driller's support truck and transported to a designated dumpster near the truck wash area.

Other

*The field crew noted that several coolers (with new sample containers) from GPL Laboratories had arrived onsite in poor condition (broken parts, cracked, and/or dirty). I recommend that you contact GPL to correct this situation. I don't believe that it materially affects the quality of data we will generate on this project, but it is an indication of the level of care being applied by the lab.*

From: Allen A. Debus, IL/IN/MI Section

To: Thomas Matheson, OH/MN/WI Section

Date: May 13, 1998

Subject: Performance Evaluation Audit of GP Environmental Laboratory for Chemical Waste - Vickery RFI

I have reviewed the results of a Performance Evaluation Audit recently conducted in support of the Chemical Waste - Vickery, Ohio RFI. This was a double blind evaluation of the GP Environmental, Gaithersburg, MD laboratory. Certified standards were sent to GP by the Environmental resource Associates vendor under a fictitious company name.

Five PE samples were sent. These were VOCs in soil, VOCs in water, SVOCs in water, metals in soil and metals in water.

The following table summarizes the data. Actual data is attachedd (in hard copy).

| Parameter Group | Analysis method | matrix | % Recovery Pass/Fail | Total # parameters reported & specific failed parameters |
|---|---|---|---|---|
| VOCs | 8260B | water | Pass | 18 |
| SVOCs | 8270C | water | Pass | 22 |
| metals | 6010 & 7470 | water | Pass | 19 |
| VOCs | 8260B | soil | Fail | 16 carbon tetrachloride; bromodichloromethane; chloroform; bromoform;1,2-DCE; 4-methyl-2-pentanone; 1,1,1- TCA; xylenes |
| metals | 6010/7470 | soil | Pass | 23 |

GP Environmental must be informed of the outcome of this PE audit, and then implement a course of corrective action to eliminate the low bias evident in reported VOCs in soil.

If GP elects to retry an audit sample to demonstrate proficiency for this project, they must do so at their own expense.

It may be beneficial to discuss these results and GP's intended course of corrective action prior to resubmitting PE sample data to the U.S. EPA.

Presently, it is not recommended that the GP laboratory facility be used for the Chemical Waste Management - Vickery RFI, in the analysis of VOCs in soil.

cc: Brian Freeman

ENVIRONMENTAL
RESOURCE ASSOCIATES

# Double Blind Evaluation of GP Environmental
# Gaithersburg, Maryland

## EPA Project #0320-98-04 (Chem Waste Site)

## *Volatiles (Method 8260B)*

***Sample ID: SE182-3***

| Parameter | Reported Result (µg/l) | ERA Certified Value (µg/l) | Performance Acceptance Limits™ (µg/l) | Comment | Recovery (%) |
|---|---|---|---|---|---|
| Benzene | 35 | 35.0 | 27.1 - 43.6 | Within PAL™ | 100% |
| Bromodichloromethane | 37 | 40.7 | 31.3 - 50.7 | Within PAL™ | 90.9% |
| Bromoform | 120 | 113 | 82.6 - 145 | Within PAL™ | 106% |
| Carbon tetrachloride | 60 | 71.4 | 52.5 - 88.9 | Within PAL™ | 84.0% |
| Chlorobenzene | 74 | 80.3 | 62.8 - 96.3 | Within PAL™ | 92.2% |
| Chlorodibromomethane | 49 | 51.8 | 40.3 - 63.8 | Within PAL™ | 94.6% |
| Chloroform | 37 | 41.6 | 31.9 - 50.9 | Within PAL™ | 88.9% |
| 1,1-Dichloroethane | 63 | 62.2 | 44.7 - 79.1 | Within PAL™ | 101% |
| 1,2-Dichloroethane | 88 | 90.4 | 70.6 - 114 | Within PAL™ | 97.3% |
| Ethylbenzene | 46 | 54.6 | 40.8 - 63.4 | Within PAL™ | 84.2% |
| Methylene chloride | 33 | 35.2 | 24.9 - 45.9 | Within PAL™ | 93.8% |
| 4-Methyl-2-pentanone | 17 | 20.9 | 12.1 - 28.5 | Within PAL™ | 81.3% |
| 1,1,2,2-Tetrachloroethane | 46 | 53.5 | 38.9 - 67.4 | Within PAL™ | 86.0% |
| Tetrachloroethylene | 40 | 50.8 | 37.5 - 61.3 | Within PAL™ | 78.7% |
| Toluene | 140 | 150 | 116 - 181 | Within PAL™ | 93.3% |
| 1,1,1-Trichloroethane | 19 | 21.8 | 15.7 - 26.0 | Within PAL™ | 87.2% |
| Trichloroethylene | 87 | 98.1 | 72.8 - 119 | Within PAL™ | 88.7% |
| Xylenes, total | 94 | 104 | 67.1 - 130 | Within PAL™ | 90.4% |

The ERA Certified Value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.

Performance Acceptance Limits™ are intended for use as a "guideline" for determining acceptable analytical results given the limitations of the USEPA methodologies commonly used to determine these parameters and closely approximate the 95% confidence interval.

ENVIRONMENTAL
RESOURCE ASSOCIATES

# Double Blind Evaluation of GP Environmental
# Gaithersburg, Maryland

## EPA Project #0320-98-04 (Chem Waste Site)

## *Base/Neutrals (Method 8270C)*

***Sample ID: SE182-4***

| Parameter | Reported Result (µg/l) | ERA Certified Value (µg/l) | Performance Acceptance Limits™ (µg/l) | Comment | Recovery (%) |
|---|---|---|---|---|---|
| Anthracene | 34 | 56.0 | 26.4 - 65.3 | Within PAL™ | 60.7% |
| Benzo(k)fluoranthene | 13 | 26.0 | 9.50 - 32.7 | Within PAL™ | 50.0% |
| Benzo(a)pyrene | 9 | 17.2 | 8.18 - 21.8 | Within PAL™ | 52.3% |
| Chrysene | 18 | 35.9 | 16.6 - 44.0 | Within PAL™ | 50.1% |
| Dibenzofuran | 57 | 67.7 | 32.2 - 75.0 | Within PAL™ | 84.2% |
| 1,2-Dichlorobenzene | 46 | 65.3 | 15.3 - 74.6 | Within PAL™ | 70.4% |
| 2,4-Dinitrotoluene | 25 | 31.3 | 13.1 - 36.1 | Within PAL™ | 79.9% |
| Di-n-octylphthalate | 16 | 28.1 | 12.7 - 35.4 | Within PAL™ | 56.9% |
| bis(2-Ethylhexyl)phthalate | 53 | 98.0 | 39.5 - 125 | Within PAL™ | 54.1% |
| Fluoranthene | 89 | 118 | 55.1 - 147 | Within PAL™ | 75.4% |
| Naphthalene | 70 | 94.6 | 33.6 - 108 | Within PAL™ | 74.0% |
| N-Nitroso-di-n-propylamine | 44 | 43.1 | 18.2 - 53.0 | Within PAL™ | 102% |
| Phenanthrene | 34 | 38.5 | 20.8 - 44.3 | Within PAL™ | 88.3% |
| Pyrene | 19 | 22.0 | 10.3 - 26.7 | Within PAL™ | 86.4% |
| 1,2,4-Trichlorobenzene | 100 | 159 | 46.3 - 181 | Within PAL™ | 62.9% |

The ERA Certified Value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.
Performance Acceptance Limits™ are intended for use as a "guideline" for determining acceptable analytical results given the limitations of the USEPA methodologies commonly used to determine these parameters and closely approximate the 95% confidence interval.

ENVIRONMENTAL
RESOURCE ASSOCIATES

# Double Blind Evaluation of GP Environmental
# Gaithersburg, Maryland

## EPA Project #0320-98-04 (Chem Waste Site)

## *Acids (Method 8270C)*

***Sample ID: SE182-4***

| Parameter | Reported Result (µg/l) | ERA Certified Value (µg/l) | Performance Acceptance Limits™ (µg/l) | Comment | Recovery (%) |
|---|---|---|---|---|---|
| 4-Chloro-3-ethylphenol | 63 | 69.3 | 33.2 - 79.0 | Within PAL™ | 90.9% |
| 2-Chlorophenol | 18 | 21.9 | 9.00 - 24.6 | Within PAL™ | 82.2% |
| 2-Methylphenol | 79 | 98.1 | 31.4 - 113 | Within PAL™ | 80.5% |
| 4-Methylphenol | 58 | 68.4 | 21.0 - 79.2 | Within PAL™ | 84.8% |
| Pentachlorophenol | 100 | 94.8 | 29.5 - 119 | Within PAL™ | 105% |
| 2,4,5-Trichlorophenol | 28 | 29.9 | 11.8 - 34.6 | Within PAL™ | 93.6% |
| 2,4,6-Trichlorophenol | 66 | 74.4 | 32.1 - 85.3 | Within PAL™ | 88.7% |

The ERA Certified Value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.
Performance Acceptance Limits™ are intended for use as a "guideline" for determining acceptable analytical results given the limitations of the USEPA methodologies commonly used to determine these parameters and closely approximate the 95% confidence interval.

ENVIRONMENTAL
RESOURCE ASSOCIATES

# Double Blind Evaluation of GP Environmental
# Gaithersburg, Maryland

## EPA Project #0320-98-04 (Chem Waste Site)

## *Metals (Method 6010 & Method 7470)*

***Sample ID: SE182-5***

| Parameter | Reported Result (µg/l) | ERA Certified Value (µg/l) | Performance Acceptance Limits™ (µg/l) | Comment | Recovery (%) |
|---|---|---|---|---|---|
| Aluminum | 630 | 552 | 453 - 651 | Within PAL™ | 114% |
| Antimony | 162 | 163 | 122 - 204 | Within PAL™ | 99.4% |
| Arsenic | 99.4 | 101 | 75.8 - 119 | Within PAL™ | 98.4% |
| Barium | 220 | 220 | 180 - 260 | Within PAL™ | 100% |
| Beryllium | 74.3 | 76.6 | 62.8 - 90.4 | Within PAL™ | 97.0% |
| Cadmium | 61.6 | 62.6 | 51.3 - 73.9 | Within PAL™ | 98.4% |
| Chromium | 749 | 754 | 618 - 890 | Within PAL™ | 99.3% |
| Cobalt | 63.4 | 64.3 | 52.7 - 75.9 | Within PAL™ | 98.6% |
| Copper | 214 | 212 | 174 - 250 | Within PAL™ | 101% |
| Iron | 442 | 449 | 368 - 530 | Within PAL™ | 98.4% |
| Lead | 316 | 318 | 261 - 375 | Within PAL™ | 99.4% |
| Manganese | 199 | 203 | 166 - 240 | Within PAL™ | 98.0% |
| Mercury | 13.3 | 13.5 | 10.1 - 16.9 | Within PAL™ | 98.5% |
| Nickel | 258 | 261 | 214 - 308 | Within PAL™ | 98.9% |
| Selenium | 79.1 | 82.4 | 61.8 - 97.2 | Within PAL™ | 96.0% |
| Silver | 202 | 203 | 166 - 240 | Within PAL™ | 99.5% |
| Thallium | 122 | 126 | 94.5 - 158 | Within PAL™ | 96.8% |
| Vanadium | 282 | 281 | 230 - 332 | Within PAL™ | 100% |
| Zinc | 198 | 199 | 163 - 235 | Within PAL™ | 99.5% |

The ERA Certified Value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.

Performance Acceptance Limits™ are intended for use as a "guideline" for determining acceptable analytical results given the limitations of the USEPA methodologies commonly used to determine these parameters and closely approximate the 95% confidence interval.

Potassium was reported as a "false positive" at a concentration of 746 µg/L.

ENVIRONMENTAL RESOURCE ASSOCIATES

Jeff Lowry

H2O vs. soil
- same instruments
- purge volume
- (no trends)

# Double Blind Evaluation of GP Environmental
# Gaithersburg, Maryland

## EPA Project #0320-98-04 (Chem Waste Site)

## *Volatiles (Method 8260B)*

***Sample ID: SS182-1***

| Parameter | Reported Result (µg/Kg) | ERA Certified Value (µg/Kg) | Performance Acceptance Limits™ (µg/Kg) | Comment | Recovery (%) |
|---|---|---|---|---|---|
| Benzene | 27 | 34.4 | 21.6 - 48.2 | Within PAL™ | 78.5% |
| **Bromodichloromethane** | **47** | **72.5** | **35.2 - 99.5** | Within PAL™ | **64.8%** |
| **Bromoform** | **37** | **88.2** | **24.0 - 130** | Within PAL™ | **42.0%** |
| **Carbon tetrachloride** | **23** | **57.9** | **25.9 - 83.4** | **Outside PAL™** | **39.7%** |
| Chlorobenzene | 27 | 31.1 | 14.4 - 41.9 | Within PAL™ | 86.8% |
| Chlorodibromomethane | 65 | 84.2 | 37.3 - 117 | Within PAL™ | 77.2% |
| **Chloroform** | **19** | **62.6** | **20.3 - 86.4** | **Outside PAL™** | **30.4%** |
| **1,2-Dichloroethane** | **71** | **104** | **36.2 - 147** | Within PAL™ | **68.3%** |
| Ethylbenzene | 27 | 37.5 | 14.0 - 53.2 | Within PAL™ | 72.0% |
| Methylene chloride | 78 | 76.6 | 15.9 - 116 | Within PAL™ | 102% |
| **4-Methyl-2-pentanone** | **ND** | **16.8** | **8.72 - 27.8** | **Outside PAL™** | |
| Tetrachloroethylene | 54 | 67.5 | 20.5 - 97.2 | Within PAL™ | 80.0% |
| Toluene | 31 | 42.9 | **20.4 - 57.5** | Within PAL™ | 72.3% |
| **1,1,1-Trichloroethane** | **10** | **42.8** | **15.5 - 59.5** | **Outside PAL™** | **23.4%** |
| Trichloroethylene | 48 | 58.0 | 15.7 - 78.3 | Within PAL™ | 82.8% |
| **Xylenes, total** | **110** | **179** | **111 - 259** | **Outside PAL™** | **61.5%** |

The ERA Certified Value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.

Performance Acceptance Limits™ are intended for use as a "guideline" for determining acceptable analytical results given the limitations of the USEPA methodologies commonly used to determine these parameters and closely approximate the 95% confidence interval.

ND = Not Detected

ENVIRONMENTAL
RESOURCE ASSOCIATES

# Double Blind Evaluation of GP Environmental
# Gaithersburg, Maryland

## EPA Project #0320-98-04 (Chem Waste Site)

## *Metals (Method 6010 & Method 7470)*
## *Page 1*

***Sample ID: SS182-2***

| Parameter | Reported Result (mg/Kg) | ERA Certified Value (mg/Kg) | Performance Acceptance Limits™ (mg/Kg) | Comment | Recovery (%) |
|---|---|---|---|---|---|
| Aluminum | 7140 | 5380 | 3150 - 7610 | Within PAL™ | 133% |
| Antimony | 40.0 | 34.4 | D.L. - 100 | Within PAL™ | 116% |
| Arsenic | 55.9 | 60.2 | 44.8 - 75.6 | Within PAL™ | 92.9% |
| Barium | 84.0 | 83.4 | 64.3 - 103 | Within PAL™ | 101% |
| Beryllium | 43.3 | 45.2 | 35.4 - 54.9 | Within PAL™ | 95.8% |
| Cadmium | 50.4 | 52.4 | 40.3 - 64.5 | Within PAL™ | 96.2% |
| Calcium | 1790 | 1680 | 1260 - 2100 | Within PAL™ | 107% |
| Chromium | 92.1 | 88.2 | 70.5 - 106 | Within PAL™ | 104% |
| Cobalt | 45.0 | 46.9 | 37.3 - 56.5 | Within PAL™ | 95.9% |
| Copper | 113 | 108 | 88.4 - 127 | Within PAL™ | 105% |
| Iron | 10800 | 7760 | 2890 - 12600 | Within PAL™ | 139% |
| Lead | 74.1 | 75.1 | 57.2 - 93.0 | Within PAL™ | 98.7% |

The ERA Certified Value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.
Performance Acceptance Limits™ are intended for use as a "guideline" for determining acceptable analytical results given the limitations of the USEPA methodologies commonly used to determine these parameters and closely approximate the 95% confidence interval.

ENVIRONMENTAL
RESOURCE ASSOCIATES

# Double Blind Evaluation of GP Environmental
# Gaithersburg, Maryland

## EPA Project #0320-98-04 (Chem Waste Site)

## *Metals (Method 6010 & Method 7470)*
## *Page 2*

***Sample ID: SS182-2***

| Parameter | Reported Result (mg/Kg) | ERA Certified Value (mg/Kg) | Performance Acceptance Limits™ (mg/Kg) | Comment | Recovery (%) |
|---|---|---|---|---|---|
| Magnesium | 1440 | 1360 | 1040 - 1680 | Within PAL™ | 106% |
| Manganese | 144 | 127 | 101 - 154 | Within PAL™ | 113% |
| Mercury | 3.71 | 3.18 | 1.86 - 4.51 | Within PAL™ | 117% |
| Nickel | 53.4 | 55.9 | 43.7 - 68.0 | Within PAL™ | 95.5% |
| Potassium | 1980 | 2000 | 1300 - 2700 | Within PAL™ | 99% |
| Selenium | 46.0 | 51.5 | 33.6 - 69.3 | Within PAL™ | 89.3% |
| Silver | 73.4 | 70.6 | 52.6 - 88.7 | Within PAL™ | 104% |
| Sodium | 805 | 837 | 568 - 1110 | Within PAL™ | 96% |
| Thallium | 47.4 | 44.1 | 25.3 - 63.0 | Within PAL™ | 107% |
| Vanadium | 61.0 | 52.5 | 35.8 - 69.1 | Within PAL™ | 116% |
| Zinc | 90.4 | 87.8 | 67.9 - 108 | Within PAL™ | 103% |

The ERA Certified Value is equal to 100% of the parameter present in the standard as determined by gravimetric and/or volumetric measurements made during standard preparation.
Performance Acceptance Limits™ are intended for use as a "guideline" for determining acceptable analytical results given the limitations of the USEPA methodologies commonly used to determine these parameters and closely approximate the 95% confidence interval.

GP Work Order # 9804013

SAMPLE ANALYSIS REPORT

Prepared For:

VALLEY ENGINEERING
2511 WEST SCHAUMBURG RD
SCHAUMBURG, IL 60194

VALLEY ENG.

Prepared By:

GP Environmental Services, Inc.
202 Perry Parkway
Gaithersburg, MD 20877

April 20, 1998

Cathy Blose for
Marty Sadoughi, Laboratory Director

# GP ENVIRONMENTAL SERVICES
# ANALYTICAL RESULTS



Project: VALLEY ENG.

VALLEY ENGINEERING
2511 WEST SCHAUMBURG RD
SCHAUMBURG, IL 60194
Atten: TIM WALKER

GP ENVIRONMENTAL SERVICES
202 Perry Parkway
Gaithersburg, MD 20877

Atten: Client Services
Phone: (301) 926-6802

Certified by: CB

SAMPLE IDENTIFICATION

| GP ID | Client ID |
|---|---|
| 9804013-01A | SS182-1 |
| 9804013-02A | SS182-2 |
| 9804013-03A | SE182-3 |
| 9804013-03B | |
| 9804013-03C | |
| 9804013-04A | SE182-4 |
| 9804013-05A | SE182-5 |

# GP ENVIRONMENTAL SERVICES
## ORGANIC ANALYSIS RESULTS



GP ID: 9804013-04A
Client ID: SE182-4
Collected: 03/31/98
Dilution: 1

Matrix: WATER
Method: SW846 8270C
Units: ug/L

Analyst: MP
Analyzed: 04/17/98
Prepared: 04/05/98

SEMIVOLATILE TARGET COMPOUNDS

| Parameter | Result | Det.Lim. | Qualifier |
|---|---|---|---|
| bis(2-Chloroethyl)ether | BQL | 10 | |
| Phenol | BQL | 10 | |
| 2-Chlorophenol | 18 | 10 | |
| 1,3-Dichlorobenzene | BQL | 10 | |
| 1,4-Dichlorobenzene | BQL | 10 | |
| 1,2-Dichlorobenzene | 46 | 10 | |
| 2,2'-oxybis(1-chloropropane) | BQL | 10 | |
| 2-Methylphenol | 79 | 10 | |
| Hexachloroethane | BQL | 10 | |
| N-Nitroso-di-n-propylamine | 44 | 10 | |
| 4-Methylphenol | 58 | 10 | |
| Nitrobenzene | BQL | 10 | |
| Isophorone | BQL | 10 | |
| 2-Nitrophenol | BQL | 10 | |
| 2,4-Dimethylphenol | BQL | 10 | |
| bis(2-Chloroethoxy)methane | BQL | 10 | |
| 2,4-Dichlorophenol | BQL | 10 | |
| 1,2,4-Trichlorobenzene | 100 | 10 | |
| Naphthalene | 70 | 10 | |
| 4-Chloroaniline | BQL | 10 | |
| Hexachlorobutadiene | BQL | 10 | |
| 4-Chloro-3-methylphenol | 63 | 10 | |
| 2-Methylnaphthalene | BQL | 10 | |
| Hexachlorocyclopentadiene | BQL | 10 | |
| 2,4,6-Trichlorophenol | 66 | 10 | |
| 2,4,5-Trichlorophenol | 28 | 50 | J |
| 2-Chloronaphthalene | BQL | 10 | |
| 2-Nitroaniline | BQL | 50 | |
| Acenaphthylene | BQL | 10 | |
| Dimethylphthalate | BQL | 10 | |
| 2,6-Dinitrotoluene | BQL | 10 | |
| Acenaphthene | BQL | 10 | |

# GP ENVIRONMENTAL SERVICES
## ORGANIC ANALYSIS RESULTS



GP ID: 9804013-04A
Client ID: SE182-4
Collected: 03/31/98
Dilution: 1

Matrix: WATER
Method: SW846 8270C
Units: ug/L

Analyst: MP
Analyzed: 04/17/98
Prepared: 04/05/98

SEMIVOLATILE TARGET COMPOUNDS

| Parameter | Result | Det.Lim. | Qualifier |
|---|---|---|---|
| 3-Nitroaniline | BQL | 50 | |
| 2,4-Dinitrophenol | BQL | 50 | |
| Dibenzofuran | 57 | 10 | |
| 2,4-Dinitrotoluene | 25 | 10 | |
| 4-Nitrophenol | BQL | 50 | |
| Fluorene | BQL | 10 | |
| 4-Chlorophenyl-phenylether | BQL | 10 | |
| Diethylphthalate | BQL | 10 | |
| 4-Nitroaniline | BQL | 50 | |
| 4,6-Dinitro-2-methylphenol | BQL | 50 | |
| N-nitrosodiphenylamine | BQL | 10 | |
| 4-Bromophenyl-phenylether | BQL | 10 | |
| Hexachlorobenzene | BQL | 10 | |
| Pentachlorophenol | 100 | 50 | |
| Phenanthrene | 34 | 10 | |
| Anthracene | 34 | 10 | |
| Carbazole | BQL | 10 | |
| di-n-Butylphthalate | BQL | 10 | |
| Fluoranthene | 89 | 10 | |
| Pyrene | 19 | 10 | |
| Butylbenzylphthalate | BQL | 10 | |
| 3,3'-Dichlorobenzidine | BQL | 20 | |
| Benzo[a]anthracene | BQL | 10 | |
| Chrysene | 18 | 10 | |
| bis(2-Ethylhexyl)phthalate | 53 | 10 | |
| di-n-Octylphthalate | 16 | 10 | |
| Benzo[b]fluoranthene | BQL | 10 | |
| Benzo[k]fluoranthene | 13 | 10 | |
| Benzo[a]pyrene | 9 | 10 | J |
| Indeno[1,2,3-cd]pyrene | BQL | 10 | |
| Dibenz[a,h]anthracene | BQL | 10 | |
| Benzo[g,h,i]perylene | BQL | 10 | |

# GP ENVIRONMENTAL SERVICES
## ORGANIC ANALYSIS RESULTS



GP ID: 9804013-01A
Client ID: SS182-1
Collected: 03/31/98
Dilution: 1

Matrix: SOIL
Method: SW846 8260B
Units: ug/Kg

Analyst: NH
Analyzed: 04/13/98
Prepared:

VOLATILE TARGET COMPOUNDS

| Parameter | Result | Det.Lim. | Qualifier |
|---|---|---|---|
| Chloromethane | BQL | 11 | |
| Bromomethane | BQL | 11 | |
| Vinyl chloride | BQL | 11 | |
| Chloroethane | BQL | 11 | |
| Methylene chloride | 78 | 6 | |
| Acetone | BQL | 11 | |
| Carbon Disulfide | BQL | 6 | |
| 1,1-Dichloroethene | BQL | 6 | |
| 1,1-Dichloroethane | BQL | 6 | |
| 1,2-Dichloroethene(total) | BQL | 6 | |
| Chloroform | 19 | 6 | |
| 1,2-Dichloroethane | 71 | 6 | |
| 2-Butanone | BQL | 11 | |
| 1,1,1-Trichloroethane | 10 | 6 | |
| Carbon tetrachloride | 23 | 6 | |
| Bromodichloromethane | 47 | 6 | |
| 1,2-Dichloropropane | BQL | 6 | |
| cis-1,3-Dichloropropene | BQL | 6 | |
| Trichloroethene | 48 | 6 | |
| Benzene | 27 | 6 | |
| Dibromochloromethane | 65 | 6 | |
| trans-1,3-Dichloropropene | BQL | 6 | |
| 1,1,2-Trichloroethane | BQL | 6 | |
| Bromoform | 37 | 6 | |
| 4-Methyl-2-pentanone | BQL | 11 | |
| 2-Hexanone | BQL | 11 | |
| Tetrachloroethene | 54 | 6 | |
| 1,1,2,2-Tetrachloroethane | BQL | 6 | |
| Toluene | 31 | 6 | |
| Chlorobenzene | 27 | 6 | |
| Ethylbenzene | 25 | 6 | |
| Styrene | BQL | 6 | |
| Xylene (total) | 110 | 6 | |

Project: VALLEY ENG.

# GP ENVIRONMENTAL SERVICES
# ORGANIC ANALYSIS RESULTS



GP ID: 9804013-03A
Client ID: SE182-3
Collected: 03/31/98
Dilution: 1

Matrix: WATER
Method: SW846 8260B
Units: ug/L

Analyst: NH
Analyzed: 04/03/98
Prepared:

VOLATILE TARGET COMPOUNDS

| Parameter | Result | Det.Lim. | Qualifier |
|---|---|---|---|
| Chloromethane | BQL | 10 | |
| Bromomethane | BQL | 10 | |
| Vinyl chloride | BQL | 10 | |
| Chloroethane | BQL | 10 | |
| Methylene chloride | 33 | 5 | B |
| Acetone | BQL | 10 | |
| Carbon Disulfide | BQL | 5 | |
| 1,1-Dichloroethene | BQL | 5 | |
| 1,1-Dichloroethane | 63 | 5 | |
| 1,2-Dichloroethene(total) | BQL | 5 | |
| Chloroform | 37 | 5 | |
| 1,2-Dichloroethane | 88 | 5 | |
| 2-Butanone | BQL | 10 | |
| 1,1,1-Trichloroethane | 19 | 5 | |
| Carbon tetrachloride | 60 | 5 | |
| Bromodichloromethane | 37 | 5 | |
| 1,2-Dichloropropane | BQL | 5 | |
| cis-1,3-Dichloropropene | BQL | 5 | |
| Trichloroethene | 87 | 5 | |
| Benzene | 35 | 5 | |
| Dibromochloromethane | 49 | 5 | |
| trans-1,3-Dichloropropene | BQL | 5 | |
| 1,1,2-Trichloroethane | BQL | 5 | |
| Bromoform | 120 | 5 | |
| 4-Methyl-2-pentanone | 17 | 10 | |
| 2-Hexanone | BQL | 10 | |
| Tetrachloroethene | 40 | 5 | |
| 1,1,2,2-Tetrachloroethane | 46 | 5 | |
| Toluene | 140 | 5 | |
| Chlorobenzene | 74 | 5 | |
| Ethylbenzene | 46 | 5 | |
| Styrene | BQL | 5 | |
| Xylene (total) | 94 | 5 | |

# GP ENVIRONMENTAL SERVICES
## METALS ANALYSIS RESULTS



GP ID: 9804013-02
Client ID: SS182-2

Matrix: SOIL
Collected: 03/31/98

| Parameter | Method | Result | Det.Lim. | Units | Dil. | Prepared | Analyzed By |
|---|---|---|---|---|---|---|---|
| Mercury | SW846 7471 | 3.71 | 0.156 | mg/Kg | 5 | 04/07/98 | 04/07/98 DDH |
| Silver | SW846 6010 | 73.4 | 0.305 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Aluminum | SW846 6010 | 7140 | 20.3 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Arsenic | SW846 6010 | 55.9 | 1.02 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Barium | SW846 6010 | 84.0 | 1.02 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Beryllium | SW846 6010 | 43.3 | 0.305 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Calcium | SW846 6010 | 1790 | 102 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Cadmium | SW846 6010 | 50.4 | 0.305 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Cobalt | SW846 6010 | 45.0 | 0.509 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Chromium | SW846 6010 | 92.1 | 0.509 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Copper | SW846 6010 | 113 | 0.509 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Iron | SW846 6010 | 10800 | 10.2 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Potassium | SW846 6010 | 1980 | 50.9 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Magnesium | SW846 6010 | 1440 | 50.9 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Manganese | SW846 6010 | 144 | 0.509 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Sodium | SW846 6010 | 805 | 50.9 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Nickel | SW846 6010 | 53.4 | 0.509 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Lead | SW846 6010 | 74.1 | 0.305 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Antimony | SW846 6010 | 40.0 | 0.509 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Selenium | SW846 6010 | 46.0 | 0.509 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Thallium | SW846 6010 | 47.4 | 1.02 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Vanadium | SW846 6010 | 61.0 | 0.509 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |
| Zinc | SW846 6010 | 90.4 | 1.02 | mg/Kg | 1 | 04/05/98 | 04/08/98 SD |

# GP ENVIRONMENTAL SERVICES
## METALS ANALYSIS RESULTS



GP ID: 9804013-05
Client ID: SE182-5

Matrix: WATER
Collected: 03/31/98

| Parameter | Method | Result | Det.Lim. | Units | Dil. | Prepared | Analyzed | By |
|---|---|---|---|---|---|---|---|---|
| Silver | SW846 6010 | 202 | 3.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Aluminum | SW846 6010 | 630 | 200 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Arsenic | SW846 6010 | 99.4 | 10.0 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Barium | SW846 6010 | 220 | 10.0 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Beryllium | SW846 6010 | 74.3 | 3.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Calcium | SW846 6010 | BQL | 1000 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Cadmium | SW846 6010 | 61.6 | 3.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Cobalt | SW846 6010 | 63.4 | 5.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Chromium | SW846 6010 | 749 | 5.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Copper | SW846 6010 | 214 | 5.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Iron | SW846 6010 | 442 | 100 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Mercury | SW846 7470 | 13.3 | 1.00 | ug/L | 5 | 04/08/98 | 04/08/98 | DDH |
| Potassium | SW846 6010 | 746 | 500 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Magnesium | SW846 6010 | BQL | 500 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Manganese | SW846 6010 | 199 | 5.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Sodium | SW846 6010 | BQL | 500 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Nickel | SW846 6010 | 258 | 5.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Lead | SW846 6010 | 316 | 3.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Antimony | SW846 6010 | 162 | 5.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Selenium | SW846 6010 | 79.1 | 5.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Thallium | SW846 6010 | 122 | 10.0 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Vanadium | SW846 6010 | 282 | 5.00 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |
| Zinc | SW846 6010 | 198 | 10.0 | ug/L | 1 | 04/03/98 | 04/13/98 | SD |

# GP ENVIRONMENTAL SERVICES
## WET CHEMISTRY ANALYSIS RESULTS



GP ID: 9804013-01
Client ID: SS182-1

Matrix: SOIL
Collected: 03/31/98

| Parameter | Method | Result | Det.Lim. | Units | Dil. | Prepared | Analyzed By |
|---|---|---|---|---|---|---|---|
| Percent Solids | MCAWW 160.3 | 88.8 | | % | | | 04/06/98 JH |

GP ID: 9804013-02
Client ID: SS182-2

Matrix: SOIL
Collected: 03/31/98

| Parameter | Method | Result | Det.Lim. | Units | Dil. | Prepared | Analyzed By |
|---|---|---|---|---|---|---|---|
| Percent Solids | MCAWW 160.3 | 98.3 | | % | | | 04/06/98 JH |

# G.P. Environmental Services

**Possible notes and definitions for this report:**

BQL = Below Quantitation Limit

J = Value is less than the reporting limits but greater than zero

P = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns

B = Indicates that the compound was found in the associated blank

E = Indicates that the concentration exceeded the calibration range of the instrument

U = Indicates that the compound was analyzed for but not detected, number indicates the reporting limit

D = Indicates that the compound was found in an analysis at a secondary dilution factor

° = Value obtained from a 1:5 dilution

+ = Value obtained from a 1:10 dilution

# = Value obtained from a 1:20 dilution

= = Value obtained from a 1:25 dilution

^ = Value obtained from a 1:50 dilution

– = Value obtained from a 1:100 dilution

! = Value obtained from a 1:250 dilution

@ = Value obtained from a 1:125 dilution (medium level)

$ = Value obtained from a 1:500 dilution

& = Value obtained from a 1:1000 dilution

N = Flashpoint not observed; heated to specified limit

R = Flammable at room temperature

TNTC = Too numerous to count

B.P. = Detection limit taken from boiling point

F.F. = Sample gave off flammable fumes

**Sample Identification and Chain of Custody Form**

| Ship To: | Ship From: |
|---|---|
| GP ENVIRONMENTAL<br>202 PERRY PKWY<br>GAITHERSBURG, MD 20877 | VALLEY ENGINEERING<br>2511 W. SCHAUMBURG RD.<br>STE 355<br>SCHAUMBURG, IL 60194 |
| Attention: SAMPLE CUSTODIAN | Sampled By: TIM WALKER |

| Sample Identification | Sample Date | Sample Time | Sample Type | # of Containers | Type of Preservative | Analysis Required |
|---|---|---|---|---|---|---|
| SS182-1 | 3/31/98 | 1:30 | SOIL | 1 | NONE | 8260 |
| SS182-2 | 3/31/98 | 11:30 | SOIL | 1 | NONE | TARGET ANALYTES LIST |
| SE 182-3 | 3/31/98 | 2:10 | WATER | 3 | HCl | 8260 |
| SE 182-4 | 3/31/98 | 11:45 | WATER | 1 | NONE | 8270 |
| SE 182-5 | 3/31/98 | 12:15 | WATER | 1 | $HNO_3$ | TARGET ANALYTES LIST |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Relinquished By | Date | Time | Received By | Date | Time | Condition of Contents |
|---|---|---|---|---|---|---|
| Tim Walker | 3/31/98 | 4:00 | | | | |
| **Relinquished By** | **Date** | **Time** | **Received By** | **Date** | **Time** | |
| | | | | | | |
| **Relinquished By** | **Date** | **Time** | **Received By** | **Date** | **Time** | |
| | | | [illegible] | 4/2/98 | 11:15 AM | |

*Comments:*

GP ENVIRONMENTAL SERVICES

# SAMPLE RECEIPT CHECKLIST

W.O. No. 97-04-213

Client Name VALLEY. AIR

Date Received 4/24/97

Time Received 9:10 Am

Received By [illegible]

Carrier Name FEDEX

Prepared (Logged In) By [illegible] 4/24/97 (Initials / Date)

Project VALLEY

Site

VOA Holding Blank I.D. No.

| | YES | NO |
|---|---|---|
| Airbill/Manifest Present? No. 8 324 3 956 522 | ✓ | — |
| Shipping Container in Good Condition? | ✓ | — |
| Custody Seals Present on Shipping Container? Condition: Good ___ Broken ___ | — | ✓ |
| Chain-of-Custody Present? | ✓ | — |
| Chain-of-Custody Agrees with Sample Labels? | ✓ | — |
| Chain-of-Custody Signed? | ✓ | — |
| Packing Present in Shipping Container? Type of Packing Bubble | ✓ | — |
| Custody Seals on Sample Bottles? Condition: Good ___ Broken ___ | — | ✓ |
| Total Number of Sample Bottles 7 | | |
| Total Number of Samples 2 | | |
| Samples Intact? | ✓ | — |
| Sufficient Sample Volume for Indicated Test? | ✓ | — |

| | YES | NO |
|---|---|---|
| Trip Blanks Received? No. of Sets ___ | — | N/A |
| VOA Vials Have Zero Headspace? | ✓ | — |
| Preservatives Added to Sample? | ✓ | ✓ |
| pH Check Required? Performed By? [illegible] | ✓ | — |
| Ice Present in Shipping Container? | ✓ | (Blue) |

| Container# | Temperature |
|---|---|
| #1 | 3.5 |
| | |
| | |
| 4/24/97 | |
| | |

Project Manager Contacted? Name: Bob Date Contacted: 4/24/97

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A.

COMMENTS:

Checklist Completed by [illegible]

Date 4/24/97

**Rust Environment & Infrastructure Inc.**

A Rust International Company
412 Lincoln Highway
Fairless Hills, PA 19030

Phone 215.269.2100
Fax 215.269.2171

December 5, 1997

Mr. Thomas Matheson, Corrective Action Project Manager
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard, DRP-8J
Chicago, Illinois 60604-3590

Re: CWM-Vickery RFI (ID #020 273 819)
Laboratory MDL Study

Dear Mr. Matheson:

Enclosed are two copies of GP Environmental Services, Inc.'s Method Detection Limit (MDL) Studies submitted on behalf of CWM-Vickery. As discussed during our meeting on October 15, 1997, these documents are being submitted as part of the "laboratory performance evaluation sample demonstration audit" with respect to your approval of the QAPjP. These studies are also relevant to a determination of how non-detect data will be reported and how they will be handled in the Quantitative Risk Assessment.

Please note that GP Environmental will be doing its annual MDL update in the near future. It would facilitate approval of the QAPjP and initiation of the RFI field work if you could forward any questions, concerns, suggestions, requirements, etc. to CWM-Vickery prior to the update. This will allow GP Environmental to incorporate agreed upon changes as part of their annual program rather than having to make special studies for this project.

Also, please feel free to have your staff contact Ken Ives of GP Environmental directly for clarification or discussion of technical issues, remembering, however, that CWM-Vickery will need to be a party to any formal agreement affecting scope and/or cost.

Sincerely,

Edward A. Need

Edward A. Need
Vice President & Project Manager

cc: Steve Lonneman, Vickery, w/ attch
Barbara Hill, WMI-EML, w/ attch

CHEMICAL WASTE MANAGEMENT, INC.
1996 RCRA GROUNDWATER MONITORING REPORT

ATTACHMENT 2

# ANALYTICAL DATA

# (GRITS DATABASE)

Date: 02/19/97

GRITS GROUND WATER CODING FORM

| | | | |
|---|---|---|---|
| Site Name: CHEMICAL WASTE MANAGEMENT,INC. | FCID: OHD020273819 | Section: 2326 | Latitude:41 22'19..000" |
| Address: 3956 STATE ROUTE 412 | Contact: SANDY CLARK | Twnship: 5N | |
| City/ZIP: VICKERY, OH 43464 | Phone: (419) 547-7791 | Range: 16E | Longitude:082 58'40..000" |

Sample Date: 04/15/96 | Reference: 96-11300/01

Sampling Program: S | Comments: 4/15-GWL;4/15;4/16;4/17 WELLS SAMPLED. SEE GWM LOGBOOK.

| Parameter Name | Units | 02FBB | | 02FBD | | DUP1 | |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | ND<0.500 | YU | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | ND<50.000 | YU | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Benzene Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | ND<1.000 | U | ND<1.000 | U | ND<1.000 | U |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Chloroform Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Chloroethane Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 3.000 | FY | 3.000 | FY | 3030.000 | FY |
| Specific Conductivity, Field Rep b | umhos/cm | 3.000 | FY | 3.000 | FY | 3020.000 | FY |
| Specific Conductivity, Field Rep c | umhos/cm | 3.000 | FY | 3.000 | FY | 3030.000 | FY |
| Specific Conductivity, Field Rep d | umhos/cm | 3.000 | FY | 4.000 | FY | 3050.000 | FY |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Ethanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Ground Water Elevation Rep | feet | | | | | 589.260 | FY |
| Methanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | ND<40.000 | U | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1232 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | ND<5.000 | U | ND<5.000 | U |
| Phenols, total Rep | ppm | ND<0.005 | YU | ND<0.005 | YU | ND<0.005 | YU |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | ND<1.000 | YU | ND<1.000 | YU |
| Temperature, field Rep | C | 9.500 | FY | 6.600 | FY | 11.200 | FY |
| Toluene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| WELL DEPTH Rep | FT | | | | | 65.640 | FY |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | ND<20.000 | U | ND<20.000 | U |
| pH, Field Rep a | SU | 4.010 | FY | 5.010 | FY | 7.170 | FY |
| pH, Field Rep b | SU | 4.000 | FY | 4.980 | FY | 7.160 | FY |
| Field Rep c | SU | 4.010 | FY | 5.050 | FY | 7.170 | FY |
| pH, Field Rep d | SU | 4.140 | FY | 5.010 | FY | 7.170 | FY |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 04/15/96

| Parameter Name | Units | EBFDFT | | G-DRAIN | | MW-14R | |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | | | ND<0.500 | YU | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | ND<50.000 | YU | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Benzene Rep | ppb | | | ND<2.000 | YU | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | ND<1.000 | U | ND<1.000 | U | ND<1.000 | U |
| Chlorobenzene Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| Chloroform Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | ND<10.000 | YU | ND<10.000 | YU |
| Chloroethane Rep | ppb | | | ND<10.000 | YU | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 3.000 | FY | 4120.000 | FY | 2920.000 | FY |
| Specific Conductivity, Field Rep b | umhos/cm | 3.000 | FY | 4110.000 | FY | 2930.000 | FY |
| Specific Conductivity, Field Rep c | umhos/cm | 3.000 | FY | 4100.000 | FY | 2870.000 | FY |
| Specific Conductivity, Field Rep d | umhos/cm | 6.000 | FY | 4130.000 | FY | 3010.000 | FY |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Ethylbenzene Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| Ethanol Rep | ppb | | | ND<100 | YU | ND<100 | YU |
| Ground Water Elevation Rep | feet | | | | | 589.270 | FY |
| Methanol Rep | ppb | | | ND<100 | YU | ND<100 | YU |
| Methylene Chloride Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | 41.700 | | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1232 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | ND<5.000 | U | ND<5.000 | U |
| Phenols, total Rep | ppm | | | ND<0.005 | YU | ND<0.005 | YU |
| Trichloroethene (-ethylene) Rep | ppb | | | ND<1.000 | YU | ND<1.000 | YU |
| Temperature, field Rep | C | 12.000 | FY | 8.700 | FY | 11.600 | FY |
| Toluene Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | | | ND<10.000 | YU | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | | | ND<2.000 | YU | ND<2.000 | YU |
| WELL DEPTH Rep | FT | | | | | 63.350 | FY |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | ND<20.000 | U | ND<20.000 | U |
| pH, Field Rep a | SU | 5.660 | FY | 7.760 | FY | 7.030 | FY |
| pH, Field Rep b | SU | 5.450 | FY | 7.760 | FY | 6.990 | FY |
| pH, Field Rep c | SU | 5.640 | FY | 7.750 | FY | 6.960 | FY |
| pH, Field Rep d | SU | 5.600 | FY | 7.710 | FY | 6.920 | FY |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

·ility Name: CHEMICAL WASTE MANAGEMENT, INC. FCID: OHD020273819

Sample Date: 04/15/96

| Parameter Name | Units | MW-15R | | MW-16R | | MW-20R | |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | ND<0.500 | YU | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | ND<50.000 | YU | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<14.000 | DU | ND<10.000 | U | ND<10.000 | U |
| Benzene Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | ND<1.000 | U | ND<1.000 | U | ND<1.000 | U |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Chloroform Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Chloroethane Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 3200.000 | FY | 3340.000 | FY | 3100.000 | FY |
| Specific Conductivity, Field Rep b | umhos/cm | 3200.000 | FY | 3350.000 | FY | 3100.000 | FY |
| Specific Conductivity, Field Rep c | umhos/cm | 3200.000 | FY | 3350.000 | FY | 3090.000 | FY |
| Specific Conductivity, Field Rep d | umhos/cm | 3190.000 | FY | 3260.000 | FY | 3060.000 | FY |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Ethanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Ground Water Elevation Rep | feet | 589.260 | FY | 589.350 | FY | 589.260 | FY |
| Methanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | ND<40.000 | U | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1232 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | ND<5.000 | U | ND<5.000 | U |
| Phenols, total Rep | ppm | ND<0.005 | YU | ND<0.005 | YU | ND<0.005 | YU |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | ND<1.000 | YU | ND<1.000 | YU |
| Temperature, field Rep | C | 11.000 | FY | 11.200 | FY | 11.500 | FY |
| Toluene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| WELL DEPTH Rep | FT | 65.350 | FY | 67.820 | FY | 67.750 | FY |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | ND<20.000 | U | ND<20.000 | U |
| pH, Field Rep a | SU | 6.880 | FY | 6.920 | FY | 7.020 | FY |
| pH, Field Rep b | SU | 6.870 | FY | 6.910 | FY | 6.990 | FY |
| pH, Field Rep c | SU | 6.870 | FY | 6.890 | FY | 6.960 | FY |
| pH, Field Rep d | SU | 6.860 | FY | 6.880 | FY | 6.920 | FY |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 04/15/96

| Parameter Name | Units | MW-24R | | MW-30R | | MW-36R | |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | ND<0.500 | YU | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | ND<50.000 | YU | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Benzene Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | ND<1.000 | U | ND<1.000 | U | ND<1.000 | U |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Chloroform Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Chloroethane Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 2700.000 | FY | 3030.000 | FY | 3050.000 | FY |
| Specific Conductivity, Field Rep b | umhos/cm | 2700.000 | FY | 3030.000 | FY | 3050.000 | FY |
| Specific Conductivity, Field Rep c | umhos/cm | 2700.000 | FY | 3030.000 | FY | 3060.000 | FY |
| Specific Conductivity, Field Rep d | umhos/cm | 2710.000 | FY | 2980.000 | FY | 3110.000 | FY |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Ethanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Ground Water Elevation Rep | feet | 589.370 | FY | 589.280 | FY | 589.260 | FY |
| Methanol Rep | ppb | ND<100 | YU | ND<100 | YU | 110.000 | Y |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | ND<40.000 | U | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1232 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | ND<5.000 | U | ND<5.000 | U |
| Phenols, total Rep | ppm | ND<0.005 | YU | ND<0.005 | YU | ND<0.005 | YU |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | ND<1.000 | YU | ND<1.000 | YU |
| Temperature, field Rep | C | 12.200 | FY | 11.400 | FY | 11.200 | FY |
| Toluene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| WELL DEPTH Rep | FT | 60.250 | FY | 65.320 | FY | 65.640 | FY |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | ND<20.000 | U | ND<20.000 | U |
| pH, Field Rep a | SU | 6.650 | FY | 6.990 | FY | 6.990 | FY |
| pH, Field Rep b | SU | 6.630 | FY | 6.970 | FY | 6.990 | FY |
| pH, Field Rep c | SU | 6.620 | FY | 6.950 | FY | 6.990 | FY |
| pH, Field Rep d | SU | 6.570 | FY | 6.940 | FY | 6.990 | FY |

Date: 02/19/97

GRITS GROUND WATER CODING FORM

:ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 04/15/96

| Parameter Name | Units | MW-37R | | TBK02FBD | TBK1 | |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<10.000 | U | | ND<10.000 | U |
| Benzene Rep | ppb | ND<2.000 | YU | | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | ND<1.000 | U | | ND<1.000 | U |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| Chloroform Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | | ND<10.000 | YU |
| Chloroethane Rep | ppb | ND<10.000 | YU | | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 2700.000 | FY | | | |
| Specific Conductivity, Field Rep b | umhos/cm | 2690.000 | FY | | | |
| Specific Conductivity, Field Rep c | umhos/cm | 2710.000 | FY | | | |
| Specific Conductivity, Field Rep d | umhos/cm | 2720.000 | FY | | | |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | | ND<10.000 | U |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| Ethanol Rep | ppb | ND<100 | YU | | ND<100 | YU |
| Ground Water Elevation Rep | feet | 604.000 | FY | | | |
| Methanol Rep | ppb | ND<100 | YU | | ND<100 | YU |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1232 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | | ND<5.000 | U |
| Phenols, total Rep | ppm | ND<0.005 | YU | | ND<0.005 | YU |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | | ND<1.000 | YU |
| Temperature, field Rep | C | 11.700 | FY | | | |
| Toluene Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | | ND<2.000 | YU |
| WELL DEPTH Rep | FT | 65.440 | FY | | | |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | | ND<20.000 | U |
| pH, Field Rep a | SU | 6.650 | FY | | | |
| pH, Field Rep b | SU | 6.620 | FY | | | |
| pH, Field Rep c | SU | 6.580 | FY | | | |
| pH, Field Rep d | SU | 6.560 | FY | | | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 04/15/96

| Parameter Name | Units | TBKDRAIN | | TBKMW14R | TBKMW15R | |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | | | | | |
| Benzene Rep | ppb | ND<2.000 | YU | | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | | | | | |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| Chloroform Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | | ND<10.000 | YU |
| Chloroethane Rep | ppb | ND<10.000 | YU | | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | | | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | | | |
| Chromium, dissolved Rep | ppb | | | | | |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| Ethanol Rep | ppb | | | | | |
| Ground Water Elevation Rep | feet | | | | | |
| Methanol Rep | ppb | | | | | |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | | | | | |
| PCB: Aroclor 1016 Rep | ppb | | | | | |
| PCB: Aroclor 1221 Rep | ppb | | | | | |
| PCB: Aroclor 1232 Rep | ppb | | | | | |
| PCB: Aroclor 1242 Rep | ppb | | | | | |
| PCB: Aroclor 1248 Rep | ppb | | | | | |
| PCB: Aroclor 1254 Rep | ppb | | | | | |
| PCB: Aroclor 1260 Rep | ppb | | | | | |
| Lead, dissolved Rep | ppb | | | | | |
| Phenols, total Rep | ppm | | | | | |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | | ND<1.000 | YU |
| Temperature, field Rep | C | | | | | |
| Toluene Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | | ND<2.000 | YU |
| WELL DEPTH Rep | FT | | | | | |
| Zinc, dissolved Rep | ppb | | | | | |
| pH, Field Rep a | SU | | | | | |
| pH, Field Rep b | SU | | | | | |
| pH, Field Rep c | SU | | | | | |
| pH, Field Rep d | SU | | | | | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

:ility Name: CHEMICAL WASTE MANAGEMENT, INC. FCID: OHD020273819

Sample Date: 04/15/96

| Parameter Name | Units | TBKMW20R | TBKMW36R | |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | ND<5.000 | YU |
| Chloroform Rep | ppb | | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | ND<10.000 | YU |
| Chloroethane Rep | ppb | | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | ND<5.000 | YU |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | ND<1.000 | YU |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | | ND<2.000 | YU |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| pH, Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

Date: 02/19/97

GRITS GROUND WATER CODING FORM

| | | | |
|---|---|---|---|
| Site Name: CHEMICAL WASTE MANAGEMENT, INC. | FCID: OHD020273819 | Section: 2326 | Latitude:41 22'19..000" |
| Address: 3956 STATE ROUTE 412 | Contact: SANDY CLARK | Twnship: 5N | |
| City/ZIP: VICKERY, OH 43464 | Phone: (419) 547-7791 | Range: 16E | Longitude:082 58'40..000" |

Sample Date: 05/21/96 | Reference: 96-12073

Sampling Program: S | Comments: RESAMPLE MW-36R - METHANOL.

| Parameter Name | Units | 02FBB | 02FBD | DUP1 |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 05/21/96

| Parameter Name | Units | EBFDFT | G-DRAIN | MW-14R |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| pH, Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

cility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 05/21/96

| Parameter Name | Units | MW-15R | MW-16R | MW-20R |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| pH, Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

Date: 02/19/97

GRITS GROUND WATER CODING FORM

cility Name: CHEMICAL WASTE MANAGEMENT, INC. FCID: OHD020273819

Sample Date: 05/21/96

| Parameter Name | Units | MW-24R | MW-30R | MW-36R | |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | | |
| 1,1-Dichloroethane Rep | ppb | | | | |
| 1,2-Dichloroethane Rep | ppb | | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | | |
| Arsenic, dissolved Rep | ppb | | | | |
| Benzene Rep | ppb | | | | |
| Cadmium, dissolved Rep | ppb | | | | |
| Chlorobenzene Rep | ppb | | | | |
| Chloroform Rep | ppb | | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | | |
| Chloroethane Rep | ppb | | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | 3080.000 | FY |
| Specific Conductivity, Field Rep b | umhos/cm | | | 3090.000 | FY |
| Specific Conductivity, Field Rep c | umhos/cm | | | 3100.000 | FY |
| Specific Conductivity, Field Rep d | umhos/cm | | | 3130.000 | FY |
| Chromium, dissolved Rep | ppb | | | | |
| Ethylbenzene Rep | ppb | | | | |
| Ethanol Rep | ppb | | | | |
| Ground Water Elevation Rep | feet | | | 588.500 | FY |
| Methanol Rep | ppb | | | ND<100 | YU |
| Methylene Chloride Rep | ppb | | | | |
| Nickel, dissolved Rep | ppb | | | | |
| PCB: Aroclor 1016 Rep | ppb | | | | |
| PCB: Aroclor 1221 Rep | ppb | | | | |
| PCB: Aroclor 1232 Rep | ppb | | | | |
| PCB: Aroclor 1242 Rep | ppb | | | | |
| PCB: Aroclor 1248 Rep | ppb | | | | |
| PCB: Aroclor 1254 Rep | ppb | | | | |
| PCB: Aroclor 1260 Rep | ppb | | | | |
| Lead, dissolved Rep | ppb | | | | |
| Phenols, total Rep | ppm | | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | | |
| Temperature, field Rep | C | | | 12.200 | FY |
| Toluene Rep | ppb | | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | | |
| Vinyl chloride Rep | ppb | | | | |
| WELL DEPTH Rep | FT | | | 65.640 | FY |
| Zinc, dissolved Rep | ppb | | | | |
| pH, Field Rep a | SU | | | 7.160 | FY |
| pH, Field Rep b | SU | | | 7.160 | FY |
| pH, Field Rep c | SU | | | 7.130 | FY |
| pH, Field Rep d | SU | | | 7.100 | FY |

GRITS GROUND WATER CODING FORM

cility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 05/21/96

| Parameter Name | Units | MW-37R | TBK02FBD | TBK1 |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| pH, Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

Date: 02/19/97

GRITS GROUND WATER CODING FORM

:ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 05/21/96

| Parameter Name | Units | TBKDRAIN | TBKMW14R | TBKMW15R |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| pH, Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

Date: 02/19/97

GRITS GROUND WATER CODING FORM

cility Name: CHEMICAL WASTE MANAGEMENT, INC. FCID: OHD020273819

Sample Date: 05/21/96

| Parameter Name | Units | TBKMW20R | TBKMW36R |
|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | |
| 1,1-Dichloroethane Rep | ppb | | |
| 1,2-Dichloroethane Rep | ppb | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | |
| Arsenic, dissolved Rep | ppb | | |
| Benzene Rep | ppb | | |
| Cadmium, dissolved Rep | ppb | | |
| Chlorobenzene Rep | ppb | | |
| Chloroform Rep | ppb | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | |
| Chloroethane Rep | ppb | | |
| Specific Conductivity, Field Rep a | umhos/cm | | |
| Specific Conductivity, Field Rep b | umhos/cm | | |
| Specific Conductivity, Field Rep c | umhos/cm | | |
| Specific Conductivity, Field Rep d | umhos/cm | | |
| Chromium, dissolved Rep | ppb | | |
| Ethylbenzene Rep | ppb | | |
| Ethanol Rep | ppb | | |
| Ground Water Elevation Rep | feet | | |
| Methanol Rep | ppb | ND<100 | YU |
| Methylene Chloride Rep | ppb | | |
| Nickel, dissolved Rep | ppb | | |
| PCB: Aroclor 1016 Rep | ppb | | |
| PCB: Aroclor 1221 Rep | ppb | | |
| PCB: Aroclor 1232 Rep | ppb | | |
| PCB: Aroclor 1242 Rep | ppb | | |
| PCB: Aroclor 1248 Rep | ppb | | |
| PCB: Aroclor 1254 Rep | ppb | | |
| PCB: Aroclor 1260 Rep | ppb | | |
| Lead, dissolved Rep | ppb | | |
| Phenols, total Rep | ppm | | |
| Trichloroethene (-ethylene) Rep | ppb | | |
| Temperature, field Rep | C | | |
| Toluene Rep | ppb | | |
| trans-1,2-Dichloroethene Rep | ppb | | |
| Vinyl chloride Rep | ppb | | |
| WELL DEPTH Rep | FT | | |
| Zinc, dissolved Rep | ppb | | |
| pH, Field Rep a | SU | | |
| pH, Field Rep b | SU | | |
| pH, Field Rep c | SU | | |
| pH, Field Rep d | SU | | |

Date: 02/19/97

GRITS GROUND WATER CODING FORM

| | | | |
|---|---|---|---|
| Site Name: CHEMICAL WASTE MANAGEMENT,INC. | FCID: OHD020273819 | Section: 2326 | Latitude:41 22'19..000" |
| Address: 3956 STATE ROUTE 412 | Contact: SANDY CLARK | Twnship: 5N | |
| City/ZIP: VICKERY, OH 43464 | Phone: (419) 547-7791 | Range: 16E | Longitude:082 58'40..000" |

| | |
|---|---|
| Sample Date: 10/21/96 | Reference: 96-13570/71 |
| Sampling Program: S | Comments: 10/21-GWL;10/21;10/22 WELLS SAMPLED. SEE GWM LOGBOOK. |

| Parameter Name | Units | 02FBB | | 02FBD | | DUP1 | |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | ND<0.500 | YU | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | ND<50.000 | YU | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Benzene Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | ND<1.000 | U | ND<1.000 | U | ND<1.000 | U |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Chloroform Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Chloroethane Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 2.000 | FY | 2.000 | FY | 3400.000 | FY |
| Specific Conductivity, Field Rep b | umhos/cm | 3.000 | FY | 2.000 | FY | 3390.000 | FY |
| Specific Conductivity, Field Rep c | umhos/cm | 3.000 | FY | 2.000 | FY | 3390.000 | FY |
| Specific Conductivity, Field Rep d | umhos/cm | 3.000 | FY | 2.000 | FY | 3420.000 | FY |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Ethanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Ground Water Elevation Rep | feet | | | | | 586.670 | FY |
| Methanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | ND<40.000 | U | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | ND<0.400 | DY | ND<0.400 | DY | ND<0.400 | DY |
| PCB: Aroclor 1232 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | ND<5.000 | U | ND<5.000 | U |
| Phenols, total Rep | ppm | ND<0.005 | YU | ND<0.005 | YU | ND<0.005 | YU |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | ND<1.000 | YU | ND<1.000 | YU |
| Temperature, field Rep | C | 13.700 | FY | 15.800 | FY | 12.200 | FY |
| Toluene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| WELL DEPTH Rep | FT | | | | | 67.820 | FY |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | ND<20.000 | U | ND<20.000 | U |
| pH, Field Rep a | SU | 4.260 | FY | 3.860 | FY | 6.700 | FY |
| pH, Field Rep b | SU | 4.260 | FY | 3.860 | FY | 6.670 | FY |
| Field Rep c | SU | 4.270 | FY | 3.870 | FY | 6.610 | FY |
| pH, Field Rep d | SU | 4.260 | FY | 3.930 | FY | 6.550 | FY |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

·ility Name: CHEMICAL WASTE MANAGEMENT, INC. FCID: OHD020273819

Sample Date: 10/21/96

| Parameter Name | Units | EBFDFT | | G-DRAIN | | MW-14R | |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | | | ND<0.500 | YU | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | ND<50.000 | YU | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<10.000 | U | ND<14.000 | DU | ND<14.000 | DU |
| Benzene Rep | ppb | | | ND<2.000 | YU | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | ND<1.000 | U | ND<1.000 | U | ND<1.000 | U |
| Chlorobenzene Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| Chloroform Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | ND<10.000 | YU | ND<10.000 | YU |
| Chloroethane Rep | ppb | | | ND<10.000 | YU | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 2.000 | FY | 4760.000 | FY | 3070.000 | FY |
| Specific Conductivity, Field Rep b | umhos/cm | 2.000 | FY | 4750.000 | FY | 3070.000 | FY |
| Specific Conductivity, Field Rep c | umhos/cm | 3.000 | FY | 4750.000 | FY | 3070.000 | FY |
| Specific Conductivity, Field Rep d | umhos/cm | 3.000 | FY | 4720.000 | FY | 3090.000 | FY |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Ethylbenzene Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| Ethanol Rep | ppb | | | ND<100 | YU | ND<100 | YU |
| Ground Water Elevation Rep | feet | | | | | 586.610 | FY |
| Methanol Rep | ppb | | | ND<100 | YU | ND<100 | YU |
| Methylene Chloride Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | ND<40.000 | U | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | | | ND<0.400 | DY | ND<0.400 | DY |
| PCB: Aroclor 1232 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | | | ND<0.200 | YU | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | ND<5.000 | U | ND<5.000 | U |
| Phenols, total Rep | ppm | | | ND<0.005 | YU | ND<0.005 | YU |
| Trichloroethene (-ethylene) Rep | ppb | | | ND<1.000 | YU | ND<1.000 | YU |
| Temperature, field Rep | C | 16.800 | FY | 16.000 | FY | 11.600 | FY |
| Toluene Rep | ppb | | | ND<5.000 | YU | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | | | ND<10.000 | YU | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | | | ND<2.000 | YU | ND<2.000 | YU |
| WELL DEPTH Rep | FT | | | | | 63.350 | FY |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | ND<20.000 | U | ND<20.000 | U |
| pH, Field Rep a | SU | 4.000 | FY | 7.290 | FY | 6.980 | FY |
| pH, Field Rep b | SU | 4.010 | FY | 7.270 | FY | 6.960 | FY |
| pH, Field Rep c | SU | 4.010 | FY | 7.260 | FY | 6.940 | FY |
| pH, Field Rep d | SU | 4.020 | FY | 7.230 | FY | 6.900 | FY |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

:ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 10/21/96

| Parameter Name | Units | MW-15R | | MW-16R | | MW-20R | |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | ND<0.500 | YU | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | ND<50.000 | YU | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<14.000 | DU |
| Benzene Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | ND<1.000 | U | 1.000 | | ND<1.000 | U |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Chloroform Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Chloroethane Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 3270.000 | FY | 3390.000 | FY | 3110.000 | FY |
| Specific Conductivity, Field Rep b | umhos/cm | 3260.000 | FY | 3380.000 | FY | 3100.000 | FY |
| Specific Conductivity, Field Rep c | umhos/cm | 3280.000 | FY | 3390.000 | FY | 3100.000 | FY |
| Specific Conductivity, Field Rep d | umhos/cm | 3300.000 | FY | 3410.000 | FY | 3140.000 | FY |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | ND<10.000 | U | ND<10.000 | U |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Ethanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Ground Water Elevation Rep | feet | 586.610 | FY | 586.670 | FY | 586.600 | FY |
| Methanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | ND<40.000 | U | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | ND<0.400 | DY | ND<0.400 | DY | ND<0.400 | DY |
| PCB: Aroclor 1232 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | ND<5.000 | U | ND<5.000 | U |
| Phenols, total Rep | ppm | ND<0.005 | YU | 0.006 | Y | ND<0.005 | YU |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | ND<1.000 | YU | ND<1.000 | YU |
| Temperature, field Rep | C | 11.800 | FY | 11.800 | FY | 12.100 | FY |
| Toluene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| WELL DEPTH Rep | FT | 65.350 | FY | 67.820 | FY | 67.750 | FY |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | ND<20.000 | U | ND<20.000 | U |
| pH, Field Rep a | SU | 6.700 | FY | 6.750 | FY | 6.700 | FY |
| pH, Field Rep b | SU | 6.670 | FY | 6.730 | FY | 6.670 | FY |
| pH, Field Rep c | SU | 6.610 | FY | 6.710 | FY | 6.610 | FY |
| pH, Field Rep d | SU | 6.480 | FY | 6.670 | FY | 6.550 | FY |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 10/21/96

| Parameter Name | Units | MW-24R | | MW-30R | | MW-36R | |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | ND<0.500 | YU | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | ND<50.000 | YU | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<10.000 | U | ND<14.000 | DU | ND<10.000 | U |
| Benzene Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | 1.200 | | 1.400 | | 2.300 | |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Chloroform Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Chloroethane Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 2870.000 | FY | 3070.000 | FY | 3100.000 | FY |
| Specific Conductivity, Field Rep b | umhos/cm | 2860.000 | FY | 3070.000 | FY | 3110.000 | FY |
| Specific Conductivity, Field Rep c | umhos/cm | 2890.000 | FY | 3070.000 | FY | 3110.000 | FY |
| Specific Conductivity, Field Rep d | umhos/cm | 2910.000 | FY | 3090.000 | FY | 3140.000 | FY |
| Chromium, dissolved Rep | ppb | 11.500 | | ND<10.000 | U | ND<10.000 | U |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Ethanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Ground Water Elevation Rep | feet | 586.670 | FY | 586.610 | FY | 586.570 | FY |
| Methanol Rep | ppb | ND<100 | YU | ND<100 | YU | ND<100 | YU |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | ND<40.000 | U | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | ND<0.400 | DY | ND<0.400 | DY | ND<0.400 | DY |
| PCB: Aroclor 1232 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | ND<0.200 | YU | ND<0.200 | YU | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | ND<5.000 | U | ND<5.000 | U |
| Phenols, total Rep | ppm | ND<0.005 | YU | ND<0.005 | YU | ND<0.005 | YU |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | ND<1.000 | YU | ND<1.000 | YU |
| Temperature, field Rep | C | 11.600 | FY | 12.100 | FY | 12.100 | FY |
| Toluene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | ND<2.000 | YU |
| WELL DEPTH Rep | FT | 60.250 | FY | 65.320 | FY | 65.640 | FY |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | ND<20.000 | U | ND<20.000 | U |
| pH, Field Rep a | SU | 6.660 | FY | 6.670 | FY | 6.830 | FY |
| pH, Field Rep b | SU | 6.590 | FY | 6.640 | FY | 6.810 | FY |
| pH, Field Rep c | SU | 6.490 | FY | 6.610 | FY | 6.790 | FY |
| pH, Field Rep d | SU | 6.370 | FY | 6.570 | FY | 6.770 | FY |

Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 10/21/96

| Parameter Name | Units | MW-37R | | TBK02FBD | TBK1 | |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | | ND<0.500 | YU |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | | ND<50.000 | YU |
| Arsenic, dissolved Rep | ppb | ND<10.000 | U | | ND<10.000 | U |
| Benzene Rep | ppb | ND<2.000 | YU | | ND<2.000 | YU |
| Cadmium, dissolved Rep | ppb | ND<1.000 | U | | ND<1.000 | U |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| Chloroform Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | | ND<10.000 | YU |
| Chloroethane Rep | ppb | ND<10.000 | YU | | ND<10.000 | YU |
| Specific Conductivity, Field Rep a | umhos/cm | 2760.000 | FY | | | |
| Specific Conductivity, Field Rep b | umhos/cm | 2730.000 | FY | | | |
| Specific Conductivity, Field Rep c | umhos/cm | 2760.000 | FY | | | |
| Specific Conductivity, Field Rep d | umhos/cm | 2810.000 | FY | | | |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | | ND<10.000 | U |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| Ethanol Rep | ppb | ND<100 | YU | | ND<100 | YU |
| Ground Water Elevation Rep | feet | 601.560 | FY | | | |
| Methanol Rep | ppb | ND<100 | YU | | ND<100 | YU |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| Nickel, dissolved Rep | ppb | ND<40.000 | U | | ND<40.000 | U |
| PCB: Aroclor 1016 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1221 Rep | ppb | ND<0.400 | DY | | ND<0.400 | DY |
| PCB: Aroclor 1232 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1242 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1248 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1254 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| PCB: Aroclor 1260 Rep | ppb | ND<0.200 | YU | | ND<0.200 | YU |
| Lead, dissolved Rep | ppb | ND<5.000 | U | | ND<5.000 | U |
| Phenols, total Rep | ppm | ND<0.005 | YU | | 0.005 | Y |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | | ND<1.000 | YU |
| Temperature, field Rep | C | 11.400 | FY | | | |
| Toluene Rep | ppb | ND<5.000 | YU | | ND<5.000 | YU |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | | ND<10.000 | YU |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | | ND<2.000 | YU |
| WELL DEPTH Rep | FT | 65.440 | FY | | | |
| Zinc, dissolved Rep | ppb | ND<20.000 | U | | ND<20.000 | U |
| pH, Field Rep a | SU | 6.600 | FY | | | |
| pH, Field Rep b | SU | 6.570 | FY | | | |
| pH, Field Rep c | SU | 6.530 | FY | | | |
| pH, Field Rep d | SU | 6.480 | FY | | | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT, INC. FCID: OHD020273819

Sample Date: 10/21/96

| Parameter Name | Units | TBKDRAIN | | TBKMW14R | | TBKMW15R |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | |
| 1,1-Dichloroethane Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | |
| 1,2-Dichloroethane Rep | ppb | ND<0.500 | YU | ND<0.500 | YU | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | ND<50.000 | YU | ND<50.000 | YU | |
| Arsenic, dissolved Rep | ppb | | | | | |
| Benzene Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | |
| Cadmium, dissolved Rep | ppb | | | | | |
| Chlorobenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | |
| Chloroform Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | |
| Chloroethane Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | |
| Specific Conductivity, Field Rep a | umhos/cm | | | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | | | |
| Chromium, dissolved Rep | ppb | | | | | |
| Ethylbenzene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | |
| Ethanol Rep | ppb | | | | | |
| Ground Water Elevation Rep | feet | | | | | |
| Methanol Rep | ppb | | | | | |
| Methylene Chloride Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | |
| Nickel, dissolved Rep | ppb | | | | | |
| PCB: Aroclor 1016 Rep | ppb | | | | | |
| PCB: Aroclor 1221 Rep | ppb | | | | | |
| PCB: Aroclor 1232 Rep | ppb | | | | | |
| PCB: Aroclor 1242 Rep | ppb | | | | | |
| PCB: Aroclor 1248 Rep | ppb | | | | | |
| PCB: Aroclor 1254 Rep | ppb | | | | | |
| PCB: Aroclor 1260 Rep | ppb | | | | | |
| Lead, dissolved Rep | ppb | | | | | |
| Phenols, total Rep | ppm | | | | | |
| Trichloroethene (-ethylene) Rep | ppb | ND<1.000 | YU | ND<1.000 | YU | |
| Temperature, field Rep | C | | | | | |
| Toluene Rep | ppb | ND<5.000 | YU | ND<5.000 | YU | |
| trans-1,2-Dichloroethene Rep | ppb | ND<10.000 | YU | ND<10.000 | YU | |
| Vinyl chloride Rep | ppb | ND<2.000 | YU | ND<2.000 | YU | |
| WELL DEPTH Rep | FT | | | | | |
| Zinc, dissolved Rep | ppb | | | | | |
| pH, Field Rep a | SU | | | | | |
| pH, Field Rep b | SU | | | | | |
| pH, Field Rep c | SU | | | | | |
| pH, Field Rep d | SU | | | | | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 10/21/96

| Parameter Name | Units | TBKMW20R | TBKMW36R |
|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | |
| 1,1-Dichloroethane Rep | ppb | | |
| 1,2-Dichloroethane Rep | ppb | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | |
| Arsenic, dissolved Rep | ppb | | |
| Benzene Rep | ppb | | |
| Cadmium, dissolved Rep | ppb | | |
| Chlorobenzene Rep | ppb | | |
| Chloroform Rep | ppb | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | |
| Chloroethane Rep | ppb | | |
| Specific Conductivity, Field Rep a | umhos/cm | | |
| Specific Conductivity, Field Rep b | umhos/cm | | |
| Specific Conductivity, Field Rep c | umhos/cm | | |
| Specific Conductivity, Field Rep d | umhos/cm | | |
| Chromium, dissolved Rep | ppb | | |
| Ethylbenzene Rep | ppb | | |
| Ethanol Rep | ppb | | |
| Ground Water Elevation Rep | feet | | |
| Methanol Rep | ppb | | |
| Methylene Chloride Rep | ppb | | |
| Nickel, dissolved Rep | ppb | | |
| PCB: Aroclor 1016 Rep | ppb | | |
| PCB: Aroclor 1221 Rep | ppb | | |
| PCB: Aroclor 1232 Rep | ppb | | |
| PCB: Aroclor 1242 Rep | ppb | | |
| PCB: Aroclor 1248 Rep | ppb | | |
| PCB: Aroclor 1254 Rep | ppb | | |
| PCB: Aroclor 1260 Rep | ppb | | |
| Lead, dissolved Rep | ppb | | |
| Phenols, total Rep | ppm | | |
| Trichloroethene (-ethylene) Rep | ppb | | |
| Temperature, field Rep | C | | |
| Toluene Rep | ppb | | |
| trans-1,2-Dichloroethene Rep | ppb | | |
| Vinyl chloride Rep | ppb | | |
| WELL DEPTH Rep | FT | | |
| Zinc, dissolved Rep | ppb | | |
| pH, Field Rep a | SU | | |
| pH, Field Rep b | SU | | |
| pH, Field Rep c | SU | | |
| pH, Field Rep d | SU | | |

Date: 02/19/97

GRITS GROUND WATER CODING FORM

| | | | |
|---|---|---|---|
| ite Name: CHEMICAL WASTE MANAGEMENT,INC. | FCID: OHD020273819 | Section: 2326 | Latitude:41 22'19..000" |
| Address: 3956 STATE ROUTE 412 | Contact: SANDY CLARK | Twnship: 5N | |
| City/ZIP: VICKERY, OH 43464 | Phone: (419) 547-7791 | Range: 16E | Longitude:082 58'40..000" |

| | |
|---|---|
| Sample Date: 12/04/96 | Reference: 96-14749/50 |
| Sampling Program: S | Comments: RESAMPLE MW24R-DISS.CHROMIUM RESAMPLE G-DRAIN-PHENOLS |

| Parameter Name | Units | 02FBB | 02FBD | DUP1 |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

GRITS GROUND WATER CODING FORM

cility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 12/04/96

| Parameter Name | Units | EBFDFT | G-DRAIN | MW-14R |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | 4290.000 FY | |
| Specific Conductivity, Field Rep b | umhos/cm | | 4290.000 FY | |
| Specific Conductivity, Field Rep c | umhos/cm | | 4300.000 FY | |
| Specific Conductivity, Field Rep d | umhos/cm | | 4280.000 FY | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | ND<0.005 YU | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | 10.500 FY | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | 7.440 FY | |
| pH, Field Rep b | SU | | 7.000 FY | |
| pH, Field Rep c | SU | | 7.400 FY | |
| pH, Field Rep d | SU | | 7.340 FY | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

cility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 12/04/96

| Parameter Name | Units | MW-15R | MW-16R | MW-20R |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| pH, Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT, INC. FCID: OHD020273819

Sample Date: 12/04/96

| Parameter Name | Units | MW-24R | | MW-30R | MW-36R |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | | |
| 1,1-Dichloroethane Rep | ppb | | | | |
| 1,2-Dichloroethane Rep | ppb | | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | | |
| Arsenic, dissolved Rep | ppb | | | | |
| Benzene Rep | ppb | | | | |
| Cadmium, dissolved Rep | ppb | | | | |
| Chlorobenzene Rep | ppb | | | | |
| Chloroform Rep | ppb | | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | | |
| Chloroethane Rep | ppb | | | | |
| Specific Conductivity, Field Rep a | umhos/cm | 2920.000 | FY | | |
| Specific Conductivity, Field Rep b | umhos/cm | 2910.000 | FY | | |
| Specific Conductivity, Field Rep c | umhos/cm | 2930.000 | FY | | |
| Specific Conductivity, Field Rep d | umhos/cm | 2940.000 | FY | | |
| Chromium, dissolved Rep | ppb | ND<10.000 | U | | |
| Ethylbenzene Rep | ppb | | | | |
| Ethanol Rep | ppb | | | | |
| Ground Water Elevation Rep | feet | 585.380 | FY | | |
| Methanol Rep | ppb | | | | |
| Methylene Chloride Rep | ppb | | | | |
| Nickel, dissolved Rep | ppb | | | | |
| PCB: Aroclor 1016 Rep | ppb | | | | |
| PCB: Aroclor 1221 Rep | ppb | | | | |
| PCB: Aroclor 1232 Rep | ppb | | | | |
| PCB: Aroclor 1242 Rep | ppb | | | | |
| PCB: Aroclor 1248 Rep | ppb | | | | |
| PCB: Aroclor 1254 Rep | ppb | | | | |
| PCB: Aroclor 1260 Rep | ppb | | | | |
| Lead, dissolved Rep | ppb | | | | |
| Phenols, total Rep | ppm | | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | | |
| Temperature, field Rep | C | 11.200 | FY | | |
| Toluene Rep | ppb | | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | | |
| Vinyl chloride Rep | ppb | | | | |
| WELL DEPTH Rep | FT | 60.310 | FY | | |
| Zinc, dissolved Rep | ppb | | | | |
| pH, Field Rep a | SU | 6.980 | FY | | |
| pH, Field Rep b | SU | 6.980 | FY | | |
| pH, Field Rep c | SU | 6.960 | FY | | |
| pH, Field Rep d | SU | 6.960 | FY | | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT, INC. FCID: OHD020273819

Sample Date: 12/04/96

| Parameter Name | Units | MW-37R | TBK02FBD | TBK1 |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| pH, Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT, INC. FCID: OHD020273819

Sample Date: 12/04/96

| Parameter Name | Units | TBKDRAIN | TBKMW14R | TBKMW15R |
|---|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | | |
| 1,1-Dichloroethane Rep | ppb | | | |
| 1,2-Dichloroethane Rep | ppb | | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | | |
| Arsenic, dissolved Rep | ppb | | | |
| Benzene Rep | ppb | | | |
| Cadmium, dissolved Rep | ppb | | | |
| Chlorobenzene Rep | ppb | | | |
| Chloroform Rep | ppb | | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | | |
| Chloroethane Rep | ppb | | | |
| Specific Conductivity, Field Rep a | umhos/cm | | | |
| Specific Conductivity, Field Rep b | umhos/cm | | | |
| Specific Conductivity, Field Rep c | umhos/cm | | | |
| Specific Conductivity, Field Rep d | umhos/cm | | | |
| Chromium, dissolved Rep | ppb | | | |
| Ethylbenzene Rep | ppb | | | |
| Ethanol Rep | ppb | | | |
| Ground Water Elevation Rep | feet | | | |
| Methanol Rep | ppb | | | |
| Methylene Chloride Rep | ppb | | | |
| Nickel, dissolved Rep | ppb | | | |
| PCB: Aroclor 1016 Rep | ppb | | | |
| PCB: Aroclor 1221 Rep | ppb | | | |
| PCB: Aroclor 1232 Rep | ppb | | | |
| PCB: Aroclor 1242 Rep | ppb | | | |
| PCB: Aroclor 1248 Rep | ppb | | | |
| PCB: Aroclor 1254 Rep | ppb | | | |
| PCB: Aroclor 1260 Rep | ppb | | | |
| Lead, dissolved Rep | ppb | | | |
| Phenols, total Rep | ppm | | | |
| Trichloroethene (-ethylene) Rep | ppb | | | |
| Temperature, field Rep | C | | | |
| Toluene Rep | ppb | | | |
| trans-1,2-Dichloroethene Rep | ppb | | | |
| Vinyl chloride Rep | ppb | | | |
| WELL DEPTH Rep | FT | | | |
| Zinc, dissolved Rep | ppb | | | |
| pH, Field Rep a | SU | | | |
| pH, Field Rep b | SU | | | |
| pH, Field Rep c | SU | | | |
| pH, Field Rep d | SU | | | |

 Date: 02/19/97

GRITS GROUND WATER CODING FORM

ility Name: CHEMICAL WASTE MANAGEMENT,INC. FCID: OHD020273819

Sample Date: 12/04/96

| Parameter Name | Units | TBKMW20R | TBKMW36R |
|---|---|---|---|
| 1,1,1-Trichloroethane Rep | ppb | | |
| 1,1-Dichloroethene (-ethylene) Rep | ppb | | |
| 1,1-Dichloroethane Rep | ppb | | |
| 1,2-Dichloroethane Rep | ppb | | |
| 2-Butanone (Methyl ethyl ketone) Rep | ppb | | |
| Arsenic, dissolved Rep | ppb | | |
| Benzene Rep | ppb | | |
| Cadmium, dissolved Rep | ppb | | |
| Chlorobenzene Rep | ppb | | |
| Chloroform Rep | ppb | | |
| cis-1,2-Dichloroethene (-ethylene) Rep | ppb | | |
| Chloroethane Rep | ppb | | |
| Specific Conductivity, Field Rep a | umhos/cm | | |
| Specific Conductivity, Field Rep b | umhos/cm | | |
| Specific Conductivity, Field Rep c | umhos/cm | | |
| Specific Conductivity, Field Rep d | umhos/cm | | |
| Chromium, dissolved Rep | ppb | | |
| Ethylbenzene Rep | ppb | | |
| Ethanol Rep | ppb | | |
| Ground Water Elevation Rep | feet | | |
| Methanol Rep | ppb | | |
| Methylene Chloride Rep | ppb | | |
| Nickel, dissolved Rep | ppb | | |
| PCB: Aroclor 1016 Rep | ppb | | |
| PCB: Aroclor 1221 Rep | ppb | | |
| PCB: Aroclor 1232 Rep | ppb | | |
| PCB: Aroclor 1242 Rep | ppb | | |
| PCB: Aroclor 1248 Rep | ppb | | |
| PCB: Aroclor 1254 Rep | ppb | | |
| PCB: Aroclor 1260 Rep | ppb | | |
| Lead, dissolved Rep | ppb | | |
| Phenols, total Rep | ppm | | |
| Trichloroethene (-ethylene) Rep | ppb | | |
| Temperature, field Rep | C | | |
| Toluene Rep | ppb | | |
| trans-1,2-Dichloroethene Rep | ppb | | |
| Vinyl chloride Rep | ppb | | |
| WELL DEPTH Rep | FT | | |
| Zinc, dissolved Rep | ppb | | |
| pH, Field Rep a | SU | | |
| pH, Field Rep b | SU | | |
| pH, Field Rep c | SU | | |
| pH, Field Rep d | SU | | |

CHEMICAL WASTE MANAGEMENT, INC.
1996 RCRA GROUNDWATER MONITORING REPORT

ATTACHMENT 3

# LABORATORY QUALITY REPORTS

# WMX Environmental Monitoring Laboratories, Inc.
## Quality Report Transmittal Memorandum

Date: May 3, 1996

Report Type
All

To: Sandy Clark

From: Donna Ingersoll

Subject: Vickery - 96-11301

Please find enclosed the Quality Report for the recently completed event at Vickery.

Please take a moment to review the enclosed report to ensure it meets your expectations.

If you have any questions, don't hesitate to call Marti Pruhs at (708)208-3209.

Mail Code: 1

dfg 7/96.

May 3, 1996

# WMX Environmental Monitoring Laboratories, Inc.

## Inorganic Quality Summary - 96-11301

| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9098-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9099-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9100-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9101-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9102-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9103-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9104-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9105-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9106-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 0.887 | 73 | 89.5 | ND | AO9107-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 3.31 | 68.3 | 93.4 | ND | AO9108-A0 | 4/27/96 | Y. DOVE |
| CRPNLRMN01 | PHENOLS | 3.31 | 68.3 | 93.4 | ND | AO9109-A0 | 4/27/96 | Y. DOVE |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | NA | AO9098-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9099-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9100-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9101-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9102-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9103-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9104-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9105-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9106-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9107-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9108-C0 | 4/26/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9109-C0 | 4/26/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9098-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9099-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9100-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9101-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9102-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9103-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9104-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9105-C0 | 4/23/96 | H. SUN |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS % Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Environmental Monitoring Laboratories, Inc.

## Inorganic Quality Summary - 96-11301

| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9106-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9107-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9108-C0 | 4/23/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 1.0 | 99 | 99 | NA | AO9109-C0 | 4/23/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9098-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9099-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9100-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9101-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9102-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9103-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9104-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9105-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9106-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9107-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9108-B0 | 5/1/96 | H.SUN |
| INGFAATOAS | ARSENIC-TOTAL | 11 | 113 | 94 | ND | AO9109-B0 | 5/1/96 | H.SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9098-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9099-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9100-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9101-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9102-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9103-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9104-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9105-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9106-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9107-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9108-B0 | 4/29/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 6.7 | 36 | 102 | ND | AO9109-B0 | 4/29/96 | H. SUN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9098-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9099-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9100-D0 | 5/1/96 | R. NIMSGERN |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Environmental Monitoring Laboratories, Inc.

Inorganic Quality Summary - 96-11301



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9101-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9102-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9103-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9104-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9105-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9106-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9107-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9108-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 1.6 | 97 | 100 | ND | AO9109-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9098-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9099-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9100-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9101-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9102-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9103-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9104-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9105-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9106-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9107-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9108-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 6.9 | 101 | 104 | ND | AO9109-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9098-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9099-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9100-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9101-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9102-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9103-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9104-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9105-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9106-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9107-D0 | 5/1/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9108-D0 | 5/1/96 | R. NIMSGERN |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Environmental Monitoring Laboratories, Inc.

Inorganic Quality Summary - 96-11301

| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INICPDISZN | ZINC-DISSOLVED | 7.7 | 97 | 100 | ND | AO9109-D0 | 5/1/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9098-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9099-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9100-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9101-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9102-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9103-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9104-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9105-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9106-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9107-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9108-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTCR | CHROMIUM-TOTAL | 1.4 | 96 | 102 | ND | AO9109-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9098-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9099-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9100-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9101-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9102-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9103-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9104-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9105-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9106-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9107-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9108-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTNI | NICKEL-TOTAL | 1.8 | 100 | 104 | ND | AO9109-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9098-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9099-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9100-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9101-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9102-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9103-B0 | 4/23/96 | D. SCOVILL |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Environmental Monitoring Laboratories, Inc.

## Inorganic Quality Summary - 96-11301

| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9104-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9105-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9106-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9107-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9108-B0 | 4/23/96 | D. SCOVILL |
| INICPTOTZN | ZINC-TOTAL | 1.4 | 98 | 101 | ND | AO9109-B0 | 4/23/96 | D. SCOVILL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9098-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9099-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9100-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9101-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9102-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9103-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9104-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9105-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9106-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9107-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9108-D0 | 4/17/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 4.6 | 92.6 | 97.2 | ND | AO9109-D0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9098-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9099-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9100-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9101-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9102-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9103-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9104-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9105-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9106-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9107-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9108-B0 | 4/17/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 3.6 | 99.9 | 103 | ND | AO9109-B0 | 4/17/96 | M. HUMMEL |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

Sample ID: AO9106-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW37R
Batch Cross Reference ID: gb3s72

Sample Quality Data: Date Analyzed: 25-APR-1996 09:47

Analyst: brown Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 83.00 | 40-120 | Tetrachloro-m-xylene |

Sample ID: AO9107-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW24R
Batch Cross Reference ID: gb3s73

Sample Quality Data: Date Analyzed: 25-APR-1996 10:28

Analyst: brown Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 76.00 | 40-120 | Tetrachloro-m-xylene |

Sample ID: AO9108-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW16R
Batch Cross Reference ID: gb3s74

Sample Quality Data: Date Analyzed: 25-APR-1996 11:08

Analyst: brown Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 70.00 | 40-120 | Tetrachloro-m-xylene |

Sample ID: AO9109-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: TBK1
Batch Cross Reference ID: gb3s75

Sample Quality Data: Date Analyzed: 25-APR-1996 11:49

Analyst: brown Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 71.00 | 40-120 | Tetrachloro-m-xylene |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 4)

Batch Cross Reference ID: gb3s

Analyst: brown

Sample for Spike: AO9098-E1

Date Analyzed: 24-APR-1996 23:36

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| AROCLOR-1254 | 96.3 | 94.5 | 1.9 | ND |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 1)

Sample ID: AO9098-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW15R
Batch Cross Reference ID: gb3s57

Sample Quality Data: Date Analyzed: 24-APR-1996 23:36

Analyst: brown Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 75.00 | 40-120 | Tetrachloro-m-xylene |

Sample ID: AO9099-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: 02FBD
Batch Cross Reference ID: gb3s61

Sample Quality Data: Date Analyzed: 25-APR-1996 02:18

Analyst: brown Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 72.00 | 40-120 | Tetrachloro-m-xylene |

Sample ID: AO9102-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW20R
Batch Cross Reference ID: gb3s66

Sample Quality Data: Date Analyzed: 25-APR-1996 05:42

Analyst: brown Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 72.00 | 40-120 | Tetrachloro-m-xylene |

Sample ID: AO9103-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW30R
Batch Cross Reference ID: gb3s67

Sample Quality Data: Date Analyzed: 25-APR-1996 06:23

Analyst: brown Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 77.00 | 40-120 | Tetrachloro-m-xylene |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 2)

Sample ID: AO9100-E1
LIMS Method: SVGC1PCB01
Batch Cross Reference ID: gb3s68
Site: 490
Sample Point: 02FBB

Sample Quality Data:
Date Analyzed: 25-APR-1996 07:03

Analyst: brown
Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 82.00 | 40-120 | Tetrachloro-m-xylene |

Sample ID: AO9101-E1
LIMS Method: SVGC1PCB01
Batch Cross Reference ID: gb3s69
Site: 490
Sample Point: MW14R

Sample Quality Data:
Date Analyzed: 25-APR-1996 07:44

Analyst: brown
Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 71.00 | 40-120 | Tetrachloro-m-xylene |

Sample ID: AO9104-E1
LIMS Method: SVGC1PCB01
Batch Cross Reference ID: gb3s70
Site: 490
Sample Point: MW36R

Sample Quality Data:
Date Analyzed: 25-APR-1996 08:25

Analyst: brown
Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 69.00 | 40-120 | Tetrachloro-m-xylene |

Sample ID: AO9105-E1
LIMS Method: SVGC1PCB01
Batch Cross Reference ID: gb3s71
Site: 490
Sample Point: DUP1

Sample Quality Data:
Date Analyzed: 25-APR-1996 09:06

Analyst: brown
Date Extracted: 18-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 83.00 | 40-120 | Tetrachloro-m-xylene |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 1 of 3)

Sample ID: AO9103-F1
LIMS Method: VOGCIAN101
Batch Cross Reference ID: mjl11

Site: 490
Sample Point: MW30R

Sample Quality Data:

Date Analyzed: 19-APR-1996 14:42

Analyst: brisard

Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9102-F1
LIMS Method: VOGCIAN101
Batch Cross Reference ID: mjl12

Site: 490
Sample Point: MW20R

Sample Quality Data:

Date Analyzed: 19-APR-1996 15:11

Analyst: brisard

Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9099-F1
LIMS Method: VOGCIAN101
Batch Cross Reference ID: mjl13

Site: 490
Sample Point: 02FBD

Sample Quality Data:

Date Analyzed: 19-APR-1996 15:41

Analyst: brisard

Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9098-F1
LIMS Method: VOGCIAN101
Batch Cross Reference ID: mjl14

Site: 490
Sample Point: MW15R

Sample Quality Data:

Date Analyzed: 19-APR-1996 16:10

Analyst: brisard

Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9107-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW24R
Batch Cross Reference ID: mjl15

Sample Quality Data: Date Analyzed: 19-APR-1996 16:39

Analyst: brisard Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9106-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW37R
Batch Cross Reference ID: mjl16

Sample Quality Data: Date Analyzed: 19-APR-1996 17:09

Analyst: brisard Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9101-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW14R
Batch Cross Reference ID: mjl17

Sample Quality Data: Date Analyzed: 19-APR-1996 17:38

Analyst: brisard Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9100-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: 02FBB
Batch Cross Reference ID: mjl18

Sample Quality Data: Date Analyzed: 19-APR-1996 18:08

Analyst: brisard Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9109-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: TBK1
Batch Cross Reference ID: mjl07

Sample Quality Data: Date Analyzed: 19-APR-1996 12:44

Analyst: brisard Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9108-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW16R
Batch Cross Reference ID: mjl08

Sample Quality Data: Date Analyzed: 19-APR-1996 13:13

Analyst: brisard Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9105-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: DUP1
Batch Cross Reference ID: mjl09

Sample Quality Data: Date Analyzed: 19-APR-1996 13:43

Analyst: brisard Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AO9104-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW36R
Batch Cross Reference ID: mjl10

Sample Quality Data: Date Analyzed: 19-APR-1996 14:12

Analyst: brisard Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

WMX-EML Quality Summary Report for ENS# 96-11301 (page 1)

Sample ID: AO9100-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: 02FBB
Batch Cross Reference ID: fbp26

Sample Quality Data: Date Analyzed: 19-APR-96 16:31

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 109.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 102.00 | 82-114 | Fluorobenzene (SU 2) |
| | 102.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AO9101-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW14R
Batch Cross Reference ID: fbp27

Sample Quality Data: Date Analyzed: 19-APR-96 17:02

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 106.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 102.00 | 82-114 | Fluorobenzene (SU 2) |
| | 103.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AO9106-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW37R
Batch Cross Reference ID: fbp28

Sample Quality Data: Date Analyzed: 19-APR-96 17:38

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 109.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 102.00 | 82-114 | Fluorobenzene (SU 2) |
| | 103.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 2)

==========

Sample ID: AO9107-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW24R
Batch Cross Reference ID: fbp29

---

Sample Quality Data: Date Analyzed: 19-APR-96 18:09

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 107.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 103.00 | 82-114 | Fluorobenzene (SU 2) |
| | 102.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Sample ID: AO9109-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: TBK1
Batch Cross Reference ID: fbp30

---

Sample Quality Data: Date Analyzed: 19-APR-96 18:40

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 106.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 102.00 | 82-114 | Fluorobenzene (SU 2) |
| | 103.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Batch Cross Reference ID: fbp Analyst: SHIRLEY WILCOX

Sample for Spike: AO8778-C1 Date Analyzed: 19-APR-1996 08:35

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 96.5 | 99.5 | 3.1 | ND |
| Bromodichloromethane | 93.5 | 96.0 | 2.6 | ND |
| Bromoform | 76.0 | 77.5 | 2.0 | ND |
| Bromomethane | 110.5 | 118.5 | 7.0 | ND |
| Carbon tetrachloride | 96.5 | 105.5 | 8.9 | ND |
| Chlorobenzene | 98.0 | 100.5 | 2.5 | ND |
| Chloroethane | 109.5 | 113.0 | 3.1 | ND |
| 2-Chloroethyl vinyl ether | 6.0 | 0.0 | 200.0 | ND |
| Chloroform | 100.5 | 103.0 | 2.5 | ND |
| Chloromethane | 81.0 | 84.0 | 3.6 | ND |
| Dibromochloromethane | 89.0 | 91.0 | 2.2 | ND |
| 1,2-Dichlorobenzene | 90.5 | 93.0 | 2.7 | ND |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 3)

Batch Cross Reference ID: fbp

Analyst: SHIRLEY WILCOX

Sample for Spike: AO8778-C1

Date Analyzed: 19-APR-1996 08:35

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| 1,3-Dichlorobenzene | 95.0 | 97.5 | 2.6 | ND |
| 1,4-Dichlorobenzene | 94.0 | 96.0 | 2.1 | ND |
| 1,1-Dichloroethane | 96.5 | 100.0 | 3.6 | ND |
| 1,2-Dichloroethane | 93.5 | 96.0 | 2.6 | ND |
| 1,1-Dichloroethene | 100.5 | 105.0 | 4.4 | ND |
| trans-1,2-Dichloroethene | 102.0 | 104.5 | 2.4 | ND |
| 1,2-Dichloropropane | 97.0 | 100.0 | 3.0 | ND |
| cis-1,3-Dichloropropene | 81.0 | 79.5 | 1.9 | ND |
| trans-1,3-Dichloropropene | 86.5 | 85.5 | 1.2 | ND |
| Ethylbenzene | 100.5 | 101.0 | 0.5 | ND |
| Methylene chloride | 94.0 | 99.5 | 5.7 | ND |
| 4-Methyl-2-pentanone | 91.0 | 93.5 | 2.7 | ND |
| 1,1,2,2-Tetrachloroethane | 100.0 | 103.5 | 3.4 | ND |
| Tetrachloroethene | 104.0 | 107.0 | 2.8 | ND |
| Tetrahydrofuran | 93.0 | 97.0 | 4.2 | ND |
| Toluene | 99.0 | 101.5 | 2.5 | ND |
| 1,1,1-Trichloroethane | 98.5 | 102.5 | 4.0 | ND |
| 1,1,2-Trichloroethane | 98.0 | 101.5 | 3.5 | ND |
| Trichloroethene | 105.0 | 105.5 | 0.5 | ND |
| Trichlorofluoromethane | 107.5 | 115.5 | 7.2 | ND |
| Vinyl chloride | 101.0 | 101.5 | 0.5 | ND |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 1)

Sample ID: AO9098-I0 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW15R
Batch Cross Reference ID: fbq11

Sample Quality Data: Date Analyzed: 22-APR-96 13:48

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 107.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 102.00 | 82-114 | Fluorobenzene (SU 2) |
| | 104.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AO9098-G2 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW15R
Batch Cross Reference ID: fbq13

Sample Quality Data: Date Analyzed: 22-APR-1996 14:49

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 107.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 102.00 | 82-114 | Fluorobenzene (SU 2) |
| | 102.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AO9099-G2 Site: 490
LIMS Method: VOMSAAO332 Sample Point: 02FBD
Batch Cross Reference ID: fbq14

Sample Quality Data: Date Analyzed: 22-APR-96 15:19

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 109.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 103.00 | 82-114 | Fluorobenzene (SU 2) |
| | 101.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 2)

Sample ID: AO9102-G2 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW20R
Batch Cross Reference ID: fbq15

Sample Quality Data: Date Analyzed: 22-APR-96 15:49

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 109.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 103.00 | 82-114 | Fluorobenzene (SU 2) |
| | 101.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AO9103-G2 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW30R
Batch Cross Reference ID: fbq16

Sample Quality Data: Date Analyzed: 22-APR-96 16:20

Analyst: SHIRLEY WILCOX Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 109.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 102.00 | 82-114 | Fluorobenzene (SU 2) |
| | 101.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: fbq Analyst: SHIRLEY WILCOX

Sample for Spike: AO8780-C1 Date Analyzed: 22-APR-96 11:12

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 111.0 | 117.5 | 5.7 | ND |
| Bromodichloromethane | 104.0 | 111.0 | 6.5 | ND |
| Bromoform | 79.5 | 85.0 | 6.7 | ND |
| Bromomethane | 112.0 | 117.5 | 4.8 | ND |
| Carbon tetrachloride | 111.0 | 118.0 | 6.1 | ND |
| Chlorobenzene | 112.5 | 120.0 | 6.5 | ND |
| Chloroethane | 119.0 | 131.5 | 10.0 | ND |
| 2-Chloroethyl vinyl ether | 0.0 | 0.0 | N/A | ND |
| Chloroform | 113.5 | 120.5 | 6.0 | ND |
| Chloromethane | 97.0 | 103.5 | 6.5 | ND |
| Dibromochloromethane | 98.0 | 105.5 | 7.4 | ND |
| 1,2-Dichlorobenzene | 104.0 | 113.5 | 8.7 | ND |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 3)

==

Batch Cross Reference ID: fbq

Analyst: SHIRLEY WILCOX

Sample for Spike: AO8780-C1

Date Analyzed: 22-APR-96 11:12

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| 1,3-Dichlorobenzene | 110.0 | 118.0 | 7.0 | ND |
| 1,4-Dichlorobenzene | 107.5 | 117.5 | 8.9 | ND |
| 1,1-Dichloroethane | 110.5 | 117.5 | 6.1 | ND |
| 1,2-Dichloroethane | 109.0 | 114.0 | 4.5 | ND |
| 1,1-Dichloroethene | 108.0 | 112.5 | 4.1 | ND |
| trans-1,2-Dichloroethene | 112.0 | 119.0 | 6.1 | ND |
| 1,2-Dichloropropane | 110.0 | 117.0 | 6.2 | ND |
| cis-1,3-Dichloropropene | 97.0 | 103.0 | 6.0 | ND |
| trans-1,3-Dichloropropene | 105.5 | 113.0 | 6.9 | ND |
| Ethylbenzene | 112.0 | 129.5 | 14.5 | ND |
| Methylene chloride | 106.0 | 112.0 | 5.5 | ND |
| 4-Methyl-2-pentanone | 105.2 | 107.0 | 1.6 | ND |
| 1,1,2,2-Tetrachloroethane | 110.5 | 117.5 | 6.1 | ND |
| Tetrachloroethene | 120.0 | 128.0 | 6.5 | ND |
| Tetrahydrofuran | 106.0 | 107.5 | 1.4 | ND |
| Toluene | 112.5 | 121.0 | 7.3 | ND |
| 1,1,1-Trichloroethane | 119.0 | 128.0 | 7.3 | ND |
| 1,1,2-Trichloroethane | 113.0 | 120.5 | 6.4 | ND |
| Trichloroethene | 116.0 | 123.5 | 6.3 | ND |
| Trichlorofluoromethane | 113.0 | 117.5 | 3.9 | ND |
| Vinyl chloride | 106.0 | 113.0 | 6.4 | ND |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 1)

Sample ID: AO9104-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW36R
Batch Cross Reference ID: jx914

Sample Quality Data: Date Analyzed: 23-APR-96 16:26

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 97.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 101.00 | 82-114 | Fluorobenzene (SU 2) |
| | 99.60 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AO9105-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: DUP1
Batch Cross Reference ID: jx915

Sample Quality Data: Date Analyzed: 23-APR-96 16:59

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 97.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 103.00 | 82-114 | Fluorobenzene (SU 2) |
| | 100.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AO9108-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW16R
Batch Cross Reference ID: jx916

Sample Quality Data: Date Analyzed: 23-APR-96 17:31

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 105.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 102.00 | 82-114 | Fluorobenzene (SU 2) |
| | 100.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

WMX-EML Quality Summary Report for ENS# 96-11301 (page 2)

Batch Cross Reference ID: jx9 Analyst: Joanne Pfeifer

Sample for Spike: AO8070-E1 Date Analyzed: 23-APR-1996 12:01

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 111.0 | 105.5 | 5.1 | ND |
| Bromodichloromethane | 112.0 | 105.5 | 6.0 | ND |
| Bromoform | 98.0 | 96.0 | 2.1 | ND |
| Bromomethane | 116.0 | 121.0 | 4.2 | ND |
| Carbon tetrachloride | 120.0 | 112.5 | 6.5 | ND |
| Chlorobenzene | 107.0 | 107.0 | 0.0 | ND |
| Chloroethane | 103.5 | 138.0 | 28.6 | ND |
| 2-Chloroethyl vinyl ether | 0.0 | 0.0 | N/A | ND |
| Chloroform | 111.0 | 109.0 | 1.8 | ND |
| Chloromethane | 92.0 | 90.5 | 1.6 | ND |
| Dibromochloromethane | 106.0 | 104.5 | 1.4 | ND |
| 1,2-Dichlorobenzene | 104.0 | 101.5 | 2.4 | ND |
| 1,3-Dichlorobenzene | 105.0 | 106.0 | 0.9 | ND |
| 1,4-Dichlorobenzene | 101.0 | 104.0 | 2.9 | ND |
| 1,1-Dichloroethane | 115.0 | 108.0 | 6.3 | ND |
| 1,2-Dichloroethane | 109.5 | 106.5 | 2.8 | ND |
| 1,1-Dichloroethene | 117.0 | 116.0 | 0.9 | ND |
| trans-1,2-Dichloroethene | 113.5 | 110.5 | 2.7 | ND |
| 1,2-Dichloropropane | 111.5 | 104.0 | 7.0 | ND |
| cis-1,3-Dichloropropene | 103.5 | 100.5 | 2.9 | ND |
| trans-1,3-Dichloropropene | 109.0 | 109.0 | 0.0 | ND |
| Ethylbenzene | 111.5 | 110.5 | 0.9 | ND |
| Methylene chloride | 112.0 | 106.0 | 5.5 | ND |
| 4-Methyl-2-pentanone | 111.5 | 107.0 | 4.1 | ND |
| 1,1,2,2-Tetrachloroethane | 114.5 | 115.0 | 0.4 | ND |
| Tetrachloroethene | 117.5 | 115.0 | 2.2 | ND |
| Tetrahydrofuran | 107.0 | 102.5 | 4.3 | ND |
| Toluene | 103.5 | 104.5 | 1.0 | ND |
| 1,1,1-Trichloroethane | 108.0 | 105.5 | 2.3 | ND |
| 1,1,2-Trichloroethane | 112.0 | 112.5 | 0.4 | ND |
| Trichloroethene | 113.0 | 113.0 | 0.0 | ND |
| Trichlorofluoromethane | 143.5 | 141.0 | 1.8 | ND |
| Vinyl chloride | 118.0 | 108.0 | 8.8 | ND |

GROUNDWATER WELL - RESAMPLE 5/96

# WMX Environmental Monitoring Laboratories, Inc.
## Quality Report Transmittal Memorandum

Date: May 29, 1996

Report Type
All

To: Sandy Clark

From: Donna Ingersoll

Subject: Vickery - 96-12073

Please find enclosed the Quality Report for the recently completed event at Vickery.

Please take a moment to review the enclosed report to ensure it meets your expectations.

If you have any questions, don't hesitate to call Marti Pruhs at (708)208-3209.

Mail Code: 1

N/A
5/30/96

WMX-EML Quality Summary Report for ENS# 96-12073 (page 1)

==========

Sample ID: AP2884-B0 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW36R
Batch Cross Reference ID: mjr05

---

Sample Quality Data: Date Analyzed: 24-MAY-96 09:39

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | N/A | N/A | N/A |

==========

Sample ID: AP2884-A1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW36R
Batch Cross Reference ID: mjr06

---

Sample Quality Data: Date Analyzed: 24-MAY-1996 10:08

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | N/A | N/A | N/A |

==========

# WMX Environmental Monitoring Laboratories, Inc.
## Quality Report Transmittal Memorandum

Date: May 7, 1996

To: Sandy Clark

From: Donna Ingersoll

Subject: Vickery - 96-11300

Report Type
All

Please find enclosed the Quality Report for the recently completed event at Vickery.

Please take a moment to review the enclosed report to ensure it meets your expectations.

If you have any questions, don't hesitate to call Marti Pruhs at (708)208-3209.

Mail Code: 2

5/15/96

May 7, 1996

# WMX Environmental Monitoring Laboratories, Inc.

## Inorganic Quality Summary - 96-11300



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| CRCODXXX01 | CHEMICAL OXYGEN DEMAND | 12.0 | 110 | 101 | 1.0 | AO9097-A0 | 4/30/96 | D. PANZARELLA |
| CRO&GIRX01 | OIL AND GREASE | NC | NR | 86.2 | ND | AO9097-C0 | 4/30/96 | K. NEISES |
| CRPNLRMN01 | PHENOLS | 8.2 | 16.2 | 88.9 | 0.007 | AO9097-B0 | 5/3/96 | C. SZAFONI |
| CRTOXDUP01 | TOTAL ORGANIC HALOGEN | 0.0 | 124 | 94 | 0.098 | AO9097-D0 | 4/23/96 | S. SOLOWAY |
| INALKCO301 | ALKALINITY, CARBONATE (AS CACO3) | 1.4 | 105 | 98.2 | ND | AO9097-I0 | 4/24/96 | A. NONA |
| INCVAADIHG | MERCURY-DISSOLVED | 7.6 | 143 | 99.2 | ND | AO9097-G0 | 4/20/96 | P. JANOWICZ |
| INCVAATOHG | MERCURY-TOTAL | 7.6 | 143 | 99.2 | ND | AO9097-E0 | 4/20/96 | P. JANOWICZ |
| INGFAADIAS | ARSENIC-DISSOLVED | 2.1 | 43 | 104 | ND | AO9097-F0 | 4/26/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 0.0 | 22 | 103 | ND | AO9097-F0 | 5/1/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 9.9 | 102 | 94 | ND | AO9097-E0 | 5/1/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.8 | 109 | 103 | ND | AO9097-E0 | 4/30/96 | H. SUN |
| INICPDISCR | CHROMIUM-DISSOLVED | 0.3 | 100 | 102 | ND | AO9097-G0 | 5/3/96 | R. NIMSGERN |
| INICPDISCU | COPPER-DISSOLVED | 1.1 | 98 | 99 | ND | AO9097-G0 | 5/3/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 1.1 | 96 | 109 | ND | AO9097-G0 | 5/3/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 0.9 | 103 | 96 | ND | AO9097-G0 | 5/3/96 | R. NIMSGERN |
| INICPTHARD | CALCIUM-TOTAL/HARD | 0.11/0.14 | NC/NC | 92.7/92.2 | ND/ND | AO9097-E0 | 4/29/96 | R. NIMSGERN |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Environmental Monitoring Laboratories, Inc.

Inorganic Quality Summary - 96-11300



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INICPTHARD | HARDNESS, TOTAL AS CACO3 | 0.11/0.14 | NC/NC | 92.7/92.2 | ND/ND | AO9097-E0 | 4/29/96 | R. NIMSGERN |
| INICPTHARD | MAGNESIUM-TOTAL/HARD | 0.11/0.14 | NC/NC | 92.7/92.2 | ND/ND | AO9097-E0 | 4/29/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 1.2 | 96 | 98 | ND | AO9097-E0 | 4/29/96 | R. NIMSGERN |
| INICPTOTCU | COPPER-TOTAL | 3.1 | 100 | 101 | 16.3 | AO9097-E0 | 4/29/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 3.1 | 102 | 99 | ND | AO9097-E0 | 4/29/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 0.1 | 98 | 97 | ND | AO9097-E0 | 4/29/96 | R. NIMSGERN |
| INICXXCLXX | CHLORIDE | 1.4 | 116 | 106 | ND | AO9097-J0 | 4/23/96 | L. BIRKS |
| INTJADISCD | CADMIUM-DISSOLVED | 0.0 | 109 | 109 | ND | AO9097-G0 | 4/24/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0.6 | 114 | 113 | ND | AO9097-E0 | 4/24/96 | M. HUMMEL |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

WMX-EML Quality Summary Report for ENS# 96-11300 (page 1)

Sample ID: AO9097-K2
LIMS Method: SVGC1PCB01
Batch Cross Reference ID: gb3s91

Site: 490
Sample Point: DRAIN

Sample Quality Data:

Date Analyzed: 25-APR-96 22:41

Analyst: brown

Date Extracted: 22-APR-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 84.00 | 40-120 | Tetrachloro-m-xylene |

Batch Cross Reference ID: gb3s

Analyst: brown

Sample for Spike: AO9115-A1

Date Analyzed: 25-APR-1996 14:33

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| AROCLOR-1254 | 79.6 | 90.0 | 12.3 | ND |

WMX-EML Quality Summary Report for ENS# 96-11300 (page 1)

Sample ID: AO9097-L1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: DRAIN
Batch Cross Reference ID: mjn08

Sample Quality Data: Date Analyzed: 26-APR-1996 11:36

Analyst: brisard Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

WMX-EML Quality Summary Report for ENS# 96-11300 (page 1)

Sample ID: AO9097-N3 Site: 490
LIMS Method: VOMSDAX114 Sample Point: DRAIN
Batch Cross Reference ID: itd12

Sample Quality Data: Date Analyzed: 25-APR-96 15:45

Analyst: Jerry Borchert Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 98.00 | 69-121 | Tetrahydrofuran-d8 |

Batch Cross Reference ID: itd Analyst: Jerry Borchert

Sample for Spike: AO9160-F1 Date Analyzed: 25-APR-96 13:24

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Acetonitrile | 80.7 | 80.3 | 0.4 | ND |
| Acrolein | 104.1 | 114.2 | 9.2 | ND |
| Acrylonitrile | 90.4 | 94.9 | 4.9 | ND |
| p-Dioxane | 8.6 | 43.6 | 133.9 | ND |
| Ethanol | 87.9 | 100.3 | 13.2 | ND |
| Ethyl methacrylate | 119.2 | 73.7 | 47.1 | ND |
| Isobutyl Alcohol | 106.0 | 93.7 | 12.3 | ND |
| Methacrylonitrile | 117.0 | 108.9 | 7.1 | ND |
| Methyl methacrylate | 130.4 | 123.4 | 5.5 | ND |
| Propionitrile | 97.5 | 78.3 | 21.8 | ND |
| Pyridine | 71.8 | 82.3 | 13.7 | ND |

WMX-EML Quality Summary Report for ENS# 96-11300 (page 1)

Sample ID: AO9097-M2 Site: 490
LIMS Method: VOMSAAO332 Sample Point: DRAIN
Batch Cross Reference ID: jxa35

Sample Quality Data: Date Analyzed: 25-APR-96 01:15

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 102.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 103.00 | 82-114 | Fluorobenzene (SU 2) |
| | 100.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jxa Analyst: Joanne Pfeifer

Sample for Spike: AO9264-J1 Date Analyzed: 24-APR-1996 11:03

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 107.0 | 104.0 | 2.8 | ND |
| Bromodichloromethane | 110.0 | 106.5 | 3.2 | ND |
| Bromoform | 91.0 | 93.0 | 2.2 | ND |
| Bromomethane | 133.0 | 117.5 | 12.4 | ND |
| Carbon tetrachloride | 112.5 | 114.0 | 1.3 | ND |
| Chlorobenzene | 105.0 | 106.5 | 1.4 | ND |
| Chloroethane | 141.5 | 110.0 | 25.0 | ND |
| 2-Chloroethyl vinyl ether | 0.0 | 0.0 | N/A | ND |
| Chloroform | 110.0 | 104.0 | 5.6 | ND |
| Chloromethane | 103.5 | 105.5 | 1.9 | ND |
| Dibromochloromethane | 98.0 | 98.5 | 0.5 | ND |
| 1,2-Dichlorobenzene | 98.5 | 103.5 | 5.0 | ND |
| 1,3-Dichlorobenzene | 103.0 | 108.0 | 4.7 | ND |
| 1,4-Dichlorobenzene | 105.5 | 107.5 | 1.9 | ND |
| 1,1-Dichloroethane | 108.0 | 104.0 | 3.8 | ND |
| 1,2-Dichloroethane | 103.0 | 101.5 | 1.5 | ND |
| 1,1-Dichloroethene | 120.5 | 122.0 | 1.2 | ND |
| trans-1,2-Dichloroethene | 110.0 | 105.5 | 4.2 | ND |
| 1,2-Dichloropropane | 110.0 | 106.0 | 3.7 | ND |
| cis-1,3-Dichloropropene | 107.0 | 103.5 | 3.3 | ND |
| trans-1,3-Dichloropropene | 117.0 | 118.0 | 0.9 | ND |
| Ethylbenzene | 107.5 | 111.0 | 3.2 | ND |
| Methylene chloride | 108.0 | 102.0 | 5.7 | ND |
| 4-Methyl-2-pentanone | 106.5 | 109.7 | 3.0 | ND |
| 1,1,2,2-Tetrachloroethane | 107.5 | 115.5 | 7.2 | ND |
| Tetrachloroethene | 109.0 | 112.0 | 2.7 | ND |
| Tetrahydrofuran | 108.0 | 104.0 | 3.8 | ND |

WMX-EML Quality Summary Report for ENS# 96-11300 (page 2)

Batch Cross Reference ID: jxa

Analyst: Joanne Pfeifer

Sample for Spike: AO9264-J1

Date Analyzed: 24-APR-1996 11:03

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Toluene | 105.0 | 105.5 | 0.5 | ND |
| 1,1,1-Trichloroethane | 110.0 | 106.0 | 3.7 | ND |
| 1,1,2-Trichloroethane | 109.5 | 111.0 | 1.4 | ND |
| Trichloroethene | 109.0 | 108.0 | 0.9 | ND |
| Trichlorofluoromethane | 159.0 | 153.0 | 3.8 | ND |
| Vinyl chloride | 122.5 | 120.5 | 1.6 | ND |

WMX-EML Quality Summary Report for ENS# 96-11300 (page 1)

Sample ID: AO9097-P0 Site: 490
LIMS Method: VOMSAAO332 Sample Point: DRAIN
Batch Cross Reference ID: jxb12

Sample Quality Data: Date Analyzed: 25-APR-96 13:10

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 102.00 | 80-123 | Pentafluorobenzene (SU 1) |
| | 105.00 | 82-114 | Fluorobenzene (SU 2) |
| | 98.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jxb Analyst: Joanne Pfeifer

Sample for Spike: AO8077-A1 Date Analyzed: 25-APR-1996 09:55

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 111.0 | 110.0 | 0.9 | ND |
| Bromodichloromethane | 111.0 | 107.5 | 3.2 | ND |
| Bromoform | 92.5 | 95.0 | 2.7 | ND |
| Bromomethane | 121.0 | 116.0 | 4.2 | ND |
| Carbon tetrachloride | 117.5 | 109.0 | 7.5 | ND |
| Chlorobenzene | 106.5 | 108.5 | 1.9 | ND |
| Chloroethane | 115.5 | 110.5 | 4.4 | ND |
| 2-Chloroethyl vinyl ether | 0.0 | 0.0 | N/A | ND |
| Chloroform | 108.5 | 104.5 | 3.8 | ND |
| Chloromethane | 113.0 | 117.5 | 3.9 | ND |
| Dibromochloromethane | 100.0 | 101.0 | 1.0 | ND |
| 1,2-Dichlorobenzene | 106.0 | 106.5 | 0.5 | ND |
| 1,3-Dichlorobenzene | 112.5 | 111.0 | 1.3 | ND |
| 1,4-Dichlorobenzene | 110.0 | 113.0 | 2.7 | ND |
| 1,1-Dichloroethane | 111.0 | 106.5 | 4.1 | ND |
| 1,2-Dichloroethane | 108.0 | 104.0 | 3.8 | ND |
| 1,1-Dichloroethene | 124.0 | 119.5 | 3.7 | ND |
| trans-1,2-Dichloroethene | 106.5 | 102.0 | 4.3 | ND |
| 1,2-Dichloropropane | 114.0 | 110.0 | 3.6 | ND |
| cis-1,3-Dichloropropene | 107.0 | 103.0 | 3.8 | ND |
| trans-1,3-Dichloropropene | 114.5 | 114.0 | 0.4 | ND |
| Ethylbenzene | 111.5 | 113.0 | 1.3 | ND |
| thylene chloride | 104.5 | 101.5 | 2.9 | ND |
| 4-Methyl-2-pentanone | 114.5 | 108.7 | 5.2 | ND |
| 1,1,2,2-Tetrachloroethane | 114.0 | 117.0 | 2.6 | ND |
| Tetrachloroethene | 111.5 | 110.0 | 1.4 | ND |
| Tetrahydrofuran | 106.0 | 106.5 | 0.5 | ND |

WMX-EML Quality Summary Report for ENS# 96-11300 (page 2)

Batch Cross Reference ID: jxb

Analyst: Joanne Pfeifer

Sample for Spike: AO8077-A1

Date Analyzed: 25-APR-1996 09:55

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Toluene | 106.5 | 109.5 | 2.8 | ND |
| 1,1,1-Trichloroethane | 108.5 | 110.0 | 1.4 | ND |
| 1,1,2-Trichloroethane | 109.0 | 110.5 | 1.4 | ND |
| Trichloroethene | 111.0 | 107.0 | 3.7 | ND |
| Trichlorofluoromethane | 167.0 | 156.5 | 6.5 | ND |
| Vinyl chloride | 129.0 | 131.0 | 1.5 | ND |

# WMX Technology Center, Inc.
## Quality Report Transmittal Memorandum

Date: November 15, 1996

To: Sandy Clark

From: Donna Ingersoll

Subject: Vickery - 96-13570

Report Type
All

Please find enclosed the Quality Report for the recently completed event at Vickery.

Please take a moment to review the enclosed report to ensure it meets your expectations.

If you have any questions, don't hesitate to call Marti Pruhs at (630)208-3209.

RECEIVED
NOV 18 1996
VICKERY

Mail Code: 2

# WMX Environmental Monitoring Laboratories, Inc.

Inorganic Quality Summary - 96-13570



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| CRCODXXX01 | CHEMICAL OXYGEN DEMAND | 7.0 | 96.6 | 104 | ND | AQ0240-A0 | 10/25/96 | M. BLISS |
| CRO&GIRX01 | OIL AND GREASE | NC | NR | 99.1 | ND | AQ0240-C0 | 10/30/96 | K. NEISES |
| CRPNLRMN01 | PHENOLS | 5.2 | 101 | 84.9 | ND | AQ0240-B0 | 10/31/96 | M. BOYKO |
| CRTOXDUP01 | TOTAL ORGANIC HALOGEN | 9.5 | 100 | 92 | 0.025 | AQ0240-D0 | 11/1/96 | S. SOLOWAY |
| INALKCO301 | ALKALINITY, CARBONATE (AS CACO3) | 0.5 | 98.9 | 99.5 | ND | AQ0240-H0 | 10/30/96 | A. NONA |
| INCVAADIHG | MERCURY-DISSOLVED | 5.58 | 103 | 97 | .162 | AQ0240-G0 | 10/29/96 | E. FENSKE |
| INCVAATOHG | MERCURY-TOTAL | 5.58 | 103 | 97 | .162 | AQ0240-E0 | 10/29/96 | E. FENSKE |
| INGFAADIAS | ARSENIC-DISSOLVED | 3.92 | 78 | 98 | 0.1 | AQ0240-F0 | 11/4/96 | E. FENSKE |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0240-F0 | 10/31/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0240-E0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0240-E0 | 11/8/96 | H. SUN |
| INICPDISCR | CHROMIUM-DISSOLVED | 4.8 | 105 | 102 | ND | AQ0240-G0 | 11/5/96 | R. NIMSGERN |
| INICPDISCU | COPPER-DISSOLVED | 0.1 | 105 | 104 | ND | AQ0240-G0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 5.3 | 112 | 105 | ND | AQ0240-G0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 2.7 | 100 | 102 | ND | AQ0240-G0 | 11/5/96 | R. NIMSGERN |
| INICPTHARD | CALCIUM-TOTAL/HARD | 3.7/1.1 | NR/NR | 91/94 | ND/ND | AQ0240-E0 | 11/6/96 | R. NIMSGERN |
| INICPTHARD | HARDNESS, TOTAL AS CACO3 | 3.7/1.1 | NR/NR | 91/94 | ND/ND | AQ0240-E0 | 11/6/96 | R. NIMSGERN |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Environmental Monitoring Laboratories, Inc.

Inorganic Quality Summary - 96-13570



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INICPTHARD | MAGNESIUM-TOTAL/HARD | 3.7/1.1 | NR/NR | 91/94 | ND/ND | AQ0240-E0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 2.7 | 99 | 97 | ND | AQ0240-E0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCU | COPPER-TOTAL | 0.1 | 100 | 100 | ND | AQ0240-E0 | 11/6/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 7.8 | 98 | 99 | ND | AQ0240-E0 | 11/6/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 1.6 | 87 | 92 | ND | AQ0240-E0 | 11/6/96 | R. NIMSGERN |
| INICXXCLXX | CHLORIDE | 2.2 | 110 | 104 | ND | AQ0240-I0 | 10/25/96 | L. BIRKS |
| INTJADISCD | CADMIUM-DISSOLVED | 1 | 97 | 99 | ND | AQ0240-G0 | 10/25/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0240-E0 | 10/29/96 | M. HUMMEL |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

Quality Summary Report for ENS# 96-13570 (page 1)
WMX - TECHNOLOGY CENTER, INC.

Sample ID: AQ0240-J1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: DRAIN
Batch Cross Reference ID: gb5238

Sample Quality Data: Date Analyzed: 02-NOV-96 09:56

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 32.00 | 38-118 | Tetrachloro-m-xylene |

Batch Cross Reference ID: gb52 Analyst: brown

Sample for Spike: AQ0450-H1 Date Analyzed: 02-NOV-1996 07:13

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| AROCLOR-1254 | 74 | 95 | 25 | ND |

Quality Summary Report for ENS# 96-13570 (page 1)
WMX - TECHNOLOGY CENTER, INC.

Sample ID: AQ0240-N0 Site: 490
LIMS Method: VOMSAAO332 Sample Point: DRAIN
Batch Cross Reference ID: jyv12

Sample Quality Data: Date Analyzed: 24-OCT-96 13:44

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 92.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 102.00 | 85-114 | Fluorobenzene (SU 2) |
| | 99.90 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AQ0240-M1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: DRAIN
Batch Cross Reference ID: jyv22

Sample Quality Data: Date Analyzed: 24-OCT-96 18:49

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 97.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 99.00 | 85-114 | Fluorobenzene (SU 2) |
| | 99.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jyv Analyst: Joanne Pfeifer

Sample for Spike: AQ2704-I1 Date Analyzed: 24-OCT-96 11:12

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 103 | 97 | 6 | ND |
| Bromodichloromethane | 101 | 98 | 3 | ND |
| Bromoform | 83 | 82 | 1 | ND |
| Bromomethane | 120 | 110 | 8 | ND |
| Carbon tetrachloride | 108 | 110 | 1 | ND |
| Chlorobenzene | 105 | 102 | 2 | ND |
| Chloroethane | 175 | 165 | 6 | ND |
| 2-Chloroethyl vinyl ether | 10 | 0 | 200 | ND |
| Chloroform | 102 | 104 | 1 | ND |
| Chloromethane | 98 | 94 | 4 | ND |
| Dibromochloromethane | 92 | 94 | 2 | ND |
| 1,2-Dichlorobenzene | 97 | 93 | 4 | ND |

Batch Cross Reference ID: jyv Analyst: Joanne Pfeifer

Sample for Spike: AQ2704-I1 Date Analyzed: 24-OCT-96 11:12

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| 1,3-Dichlorobenzene | 101 | 98 | 3 | ND |
| 1,4-Dichlorobenzene | 95 | 93 | 1 | ND |
| 1,1-Dichloroethane | 104 | 97 | 7 | ND |
| 1,2-Dichloroethane | 98 | 90 | 8 | ND |
| 1,1-Dichloroethene | 124 | 120 | 3 | ND |
| trans-1,2-Dichloroethene | 112 | 103 | 9 | ND |
| 1,2-Dichloropropane | 106 | 108 | 1 | ND |
| cis-1,3-Dichloropropene | 109 | 97 | 11 | ND |
| trans-1,3-Dichloropropene | 89 | 90 | 0 | ND |
| Ethylbenzene | 114 | 106 | 7 | ND |
| Methylene chloride | 106 | 101 | 5 | ND |
| 4-Methyl-2-pentanone | 98 | 99 | 1 | ND |
| 1,1,2,2-Tetrachloroethane | 98 | 98 | 1 | ND |
| Tetrachloroethene | 115 | 116 | 1 | ND |
| Tetrahydrofuran | 91 | 93 | 2 | ND |
| Toluene | 105 | 109 | 3 | ND |
| 1,1,1-Trichloroethane | 114 | 111 | 2 | ND |
| 1,1,2-Trichloroethane | 122 | 138 | 13 | ND |
| Trichloroethene | 102 | 99 | 4 | ND |
| Trichlorofluoromethane | 124 | 122 | 2 | ND |
| Vinyl chloride | 120 | 117 | 2 | ND |

Quality Summary Report for ENS#96-13570 (page 1)
WMX - TECHNOLOGY CENTER, INC.

Sample ID: AQ0240-K1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: DRAIN
Batch Cross Reference ID: mkv05

Sample Quality Data: Date Analyzed: 25-OCT-1996 11:36

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

# WMX Technology Center, Inc.
## Quality Report Transmittal Memorandum

Date: December 13, 1996

To: Sandy Clark

From: Donna Ingersoll

Subject: Vickery - 96-14749

Report Type
All

Please find enclosed the Quality Report for the recently completed event at Vickery.

Please take a moment to review the enclosed report to ensure it meets your expectations.

If you have any questions, don't hesitate to call Marti Pruhs at (630)208-3209.

Mail Code: 1

RECEIVED
DEC 16 1996

12/17/96

Dec 13, 1996

# WMX Environmental Monitoring Laboratories, Inc.

## Inorganic Quality Summary - 96-14749

| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| CRPNLRMN01 | PHENOLS | 0.305 | 98.4 | 85.1 | ND | AQ5522-A0 | 12/10/96 | D. BRISARD |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Technology Center, Inc.
## Quality Report Transmittal Memorandum

Date: November 15, 1996

To: Sandy Clark

From: Donna Ingersoll

Subject: Vickery - 96-13571

Report Type
All

Please find enclosed the Quality Report for the recently completed event at Vickery.

Please take a moment to review the enclosed report to ensure it meets your expectations.

If you have any questions, don't hesitate to call Marti Pruhs at (630)208-3209.

Mail Code: 2

RECEIVED
NOV 19 1996
VICKERY

11/20/96

# WMX Environmental Monitoring Laboratories, Inc.

## Inorganic Quality Summary - 96-13571



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| CRPNLRMN01 | PHENOLS | 5.2 | 101 | 84.8 | ND | AQ0241-A0 | 10/31/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 1.5 | 86.8 | 86.4 | ND | AQ0242-A0 | 11/7/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 3.1 | 97.5 | 84.2 | ND | AQ0243-A0 | 10/31/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 1.0 | 96.8 | 84.4 | ND | AQ0244-A0 | 10/31/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 1.5 | 86.8 | 86.4 | ND | AQ0245-A0 | 11/7/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 1.5 | 86.8 | 86.4 | ND | AQ0246-A0 | 11/7/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 5.2 | 101 | 84.8 | ND | AQ0247-A0 | 10/31/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 5.2 | 101 | 84.8 | ND | AQ0248-A0 | 10/31/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 1.0 | 96.8 | 84.4 | ND | AQ0249-A0 | 10/31/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 1.0 | 96.8 | 84.4 | ND | AQ0250-A0 | 10/31/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 0.093 | 100 | 85.7 | ND | AQ0251-A0 | 10/31/96 | M. BOYKO |
| CRPNLRMN01 | PHENOLS | 1.5 | 86.8 | 86.4 | ND | AQ0252-A0 | 11/7/96 | M. BOYKO |
| INGFAADIAS | ARSENIC-DISSOLVED | 3.92 | 78 | 107 | 0.1 | AQ0241-C0 | 11/4/96 | E. FENSKE |
| INGFAADIAS | ARSENIC-DISSOLVED | 3.92 | 78 | 107 | 0.1 | AQ0242-C0 | 11/4/96 | E. FENSKE |
| INGFAADIAS | ARSENIC-DISSOLVED | 3.92 | 78 | 107 | 0.1 | AQ0243-C0 | 11/4/96 | E. FENSKE |
| INGFAADIAS | ARSENIC-DISSOLVED | 3.92 | 78 | 107 | 0.1 | AQ0244-C0 | 11/4/96 | E. FENSKE |
| INGFAADIAS | ARSENIC-DISSOLVED | 3.92 | 78 | 107 | 0.1 | AQ0245-C0 | 11/4/96 | E. FENSKE |
| INGFAADIAS | ARSENIC-DISSOLVED | 3.92 | 78 | 107 | 0.1 | AQ0246-C0 | 11/4/96 | E. FENSKE |
| INGFAADIAS | ARSENIC-DISSOLVED | 7.9 | 85 | 101 | ND | AQ0247-C0 | 11/8/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 7.9 | 85 | 101 | ND | AQ0248-C0 | 11/8/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 3.92 | 78 | 107 | 0.1 | AQ0249-C0 | 11/4/96 | E. FENSKE |
| INGFAADIAS | ARSENIC-DISSOLVED | 3.92 | 78 | 96 | ND | AQ0250-C0 | 11/4/96 | E. FENSKE |
| INGFAADIAS | ARSENIC-DISSOLVED | 7.9 | 85 | 101 | ND | AQ0251-C0 | 11/8/96 | H. SUN |
| INGFAADIAS | ARSENIC-DISSOLVED | 7.9 | 85 | 101 | ND | AQ0252-C0 | 11/8/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0241-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0242-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0243-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0244-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0245-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0246-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0247-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0248-C0 | 10/31/96 | H. SUN |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS % Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Environmental Monitoring Laboratories, Inc.

Inorganic Quality Summary - 96-13571



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0249-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0250-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0251-C0 | 10/31/96 | H. SUN |
| INGFAADIPB | LEAD-DISSOLVED | 7.2 | 43 | 106 | ND | AQ0252-C0 | 10/31/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0241-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0242-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0243-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0244-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0245-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0246-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0247-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0248-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0249-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0250-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0251-B0 | 11/8/96 | H. SUN |
| INGFAATOAS | ARSENIC-TOTAL | 0 | 85 | 95 | ND | AQ0252-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0241-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0242-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0243-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0244-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0245-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0246-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0247-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0248-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0249-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0250-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0251-B0 | 11/8/96 | H. SUN |
| INGFAATOPB | LEAD-TOTAL | 1.7 | 30 | 101 | ND | AQ0252-B0 | 11/8/96 | H. SUN |
| INICPDISCR | CHROMIUM-DISSOLVED | 4.8 | 105 | 102 | ND | AQ0241-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 4.8 | 105 | 102 | ND | AQ0242-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 4.8 | 105 | 102 | ND | AQ0243-D0 | 11/5/96 | R. NIMSGERN |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS % Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments.*

# WMX Environmental Monitoring Laboratories, Inc.

## Inorganic Quality Summary - 96-13571

| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INICPDISCR | CHROMIUM-DISSOLVED | 4.8 | 105 | 102 | ND | AQ0244-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 4.8 | 105 | 102 | ND | AQ0245-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 4.8 | 105 | 102 | ND | AQ0246-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 3.3 | 112 | 106 | ND | AQ0247-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 3.3 | 112 | 106 | ND | AQ0248-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 4.8 | 105 | 102 | ND | AQ0249-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 4.8 | 105 | 102 | ND | AQ0250-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 3.3 | 112 | 106 | ND | AQ0251-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISCR | CHROMIUM-DISSOLVED | 3.3 | 112 | 106 | ND | AQ0252-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 5.3 | 112 | 105 | ND | AQ0241-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 5.3 | 112 | 105 | ND | AQ0242-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 5.3 | 112 | 105 | ND | AQ0243-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 5.3 | 112 | 105 | ND | AQ0244-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 5.3 | 112 | 105 | ND | AQ0245-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 5.3 | 112 | 105 | ND | AQ0246-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 4.2 | 114 | 107 | ND | AQ0247-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 4.2 | 114 | 107 | ND | AQ0248-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 5.3 | 112 | 105 | ND | AQ0249-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 5.3 | 112 | 105 | ND | AQ0250-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 4.2 | 114 | 107 | ND | AQ0251-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISNI | NICKEL-DISSOLVED | 4.2 | 114 | 107 | ND | AQ0252-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 2.7 | 100 | 102 | ND | AQ0241-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 2.7 | 100 | 102 | ND | AQ0242-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 2.7 | 100 | 102 | ND | AQ0243-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 2.7 | 100 | 102 | ND | AQ0244-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 2.7 | 100 | 102 | ND | AQ0245-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 2.7 | 100 | 102 | ND | AQ0246-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 1.4 | 111 | 104 | ND | AQ0247-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 1.4 | 111 | 104 | ND | AQ0248-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 2.7 | 100 | 102 | ND | AQ0249-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 2.7 | 100 | 102 | ND | AQ0250-D0 | 11/5/96 | R. NIMSGERN |
| INICPDISZN | ZINC-DISSOLVED | 1.4 | 111 | 104 | ND | AQ0251-D0 | 11/5/96 | R. NIMSGERN |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS% Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Environmental Monitoring Laboratories, Inc.

Inorganic Quality Summary - 96-13571



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INICPDISZN | ZINC-DISSOLVED | 1.4 | 111 | 104 | ND | AQ0252-D0 | 11/5/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 2.7 | 99 | 97 | ND | AQ0241-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 2.7 | 99 | 97 | ND | AQ0242-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 2.7 | 99 | 97 | ND | AQ0243-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 2.7 | 99 | 97 | ND | AQ0244-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 2.7 | 99 | 97 | ND | AQ0245-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 2.7 | 99 | 97 | ND | AQ0246-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 0.1 | 96 | 105 | ND | AQ0247-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 0.1 | 96 | 105 | ND | AQ0248-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 2.7 | 99 | 97 | ND | AQ0249-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 2.7 | 99 | 97 | ND | AQ0250-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 0.1 | 96 | 105 | ND | AQ0251-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTCR | CHROMIUM-TOTAL | 0.1 | 96 | 105 | ND | AQ0252-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 7.8 | 98 | 99 | ND | AQ0241-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 7.8 | 98 | 99 | ND | AQ0242-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 7.8 | 98 | 99 | ND | AQ0243-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 7.8 | 98 | 99 | ND | AQ0244-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 7.8 | 98 | 99 | ND | AQ0245-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 7.8 | 98 | 99 | ND | AQ0246-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 4.2 | 96 | 113 | ND | AQ0247-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 4.2 | 96 | 113 | ND | AQ0248-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 7.8 | 98 | 99 | ND | AQ0249-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 7.8 | 98 | 99 | ND | AQ0250-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 4.2 | 96 | 113 | ND | AQ0251-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTNI | NICKEL-TOTAL | 4.2 | 96 | 113 | ND | AQ0252-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 1.6 | 87 | 92 | ND | AQ0241-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 1.6 | 87 | 92 | ND | AQ0242-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 1.6 | 87 | 92 | ND | AQ0243-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 1.6 | 87 | 92 | ND | AQ0244-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 1.6 | 87 | 92 | ND | AQ0245-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 1.6 | 87 | 92 | ND | AQ0246-B0 | 11/6/96 | R. NIMSGERN |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS % Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

# WMX Environmental Monitoring Laboratories, Inc.

Inorganic Quality Summary - 96-13571



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INICPTOTZN | ZINC-TOTAL | 2.9 | 89 | 103 | ND | AQ0247-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 2.9 | 89 | 103 | ND | AQ0248-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 1.6 | 87 | 92 | ND | AQ0249-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 1.6 | 87 | 92 | ND | AQ0250-B0 | 11/6/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 2.9 | 89 | 103 | ND | AQ0251-B0 | 11/5/96 | R. NIMSGERN |
| INICPTOTZN | ZINC-TOTAL | 2.9 | 89 | 103 | ND | AQ0252-B0 | 11/5/96 | R. NIMSGERN |
| INTJADISCD | CADMIUM-DISSOLVED | 1 | 97 | 99 | ND | AQ0241-D0 | 10/25/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 1 | 97 | 99 | ND | AQ0242-D0 | 10/25/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 1 | 97 | 99 | ND | AQ0243-D0 | 10/25/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 1 | 97 | 99 | ND | AQ0244-D0 | 10/25/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 1 | 97 | 99 | ND | AQ0245-D0 | 10/25/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 1 | 97 | 99 | ND | AQ0246-D0 | 10/25/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 2.0 | 102 | 101 | ND | AQ0247-D0 | 10/30/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 2.0 | 102 | 101 | ND | AQ0248-D0 | 10/30/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 2.0 | 102 | 101 | ND | AQ0249-D0 | 10/30/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 2.0 | 102 | 101 | ND | AQ0250-D0 | 10/30/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 2.0 | 102 | 101 | ND | AQ0251-D0 | 10/30/96 | M. HUMMEL |
| INTJADISCD | CADMIUM-DISSOLVED | 2.0 | 102 | 101 | ND | AQ0252-D0 | 10/30/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0241-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0242-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0243-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0244-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0245-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0246-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0247-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0248-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0249-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 103 | 102 | ND | AQ0250-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 100 | 97 | ND | AQ0251-B0 | 10/29/96 | M. HUMMEL |
| INTJATOTCD | CADMIUM-TOTAL | 0 | 100 | 97 | ND | AQ0252-B0 | 10/29/96 | M. HUMMEL |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS % Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*

Quality Summary Report for ENS# 96-13571 (page 1)
WMX - TECHNOLOGY CENTER, INC.

==========

S ple ID: AQ0252-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: TBK1
Batch Cross Reference ID: gb5261

---

Sample Quality Data: Date Analyzed: 03-NOV-96 01:29

Analyst: brown Date Extracted: 29-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 65.00 | 38-118 | Tetrachloro-m-xylene |

==========

Batch Cross Reference ID: gb52 Analyst: brown

Sample for Spike: AQ0258-A1 Date Analyzed: 02-NOV-1996 22:06

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| AROCLOR-1254 | 76 | 82 | 7 | ND |

Quality Summary Report for ENS# 96-13571 (page 1)
WMX - TECHNOLOGY CENTER, INC.

==========

Sa le ID: AQ0241-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW15R
Batch Cross Reference ID: gb5239

---

Sample Quality Data: Date Analyzed: 02-NOV-96 10:36

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 31.00 | 38-118 | Tetrachloro-m-xylene |

==========

Sample ID: AQ0242-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: 02FBB
Batch Cross Reference ID: gb5240

---

Sample Quality Data: Date Analyzed: 02-NOV-96 11:17

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 37.00 | 38-118 | Tetrachloro-m-xylene |

==========

Sample ID: AQ0243-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW36R
Batch Cross Reference ID: gb5241

---

Sample Quality Data: Date Analyzed: 02-NOV-96 11:57

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 31.00 | 38-118 | Tetrachloro-m-xylene |

==========

Sample ID: AQ0244-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: 02FBD
Batch Cross Reference ID: gb5244

---

Sample Quality Data: Date Analyzed: 02-NOV-96 13:59

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 31.00 | 38-118 | Tetrachloro-m-xylene |

==========

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

==========

Sa..ple ID: AQ0245-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW16R
Batch Cross Reference ID: gb5245

---

Sample Quality Data: Date Analyzed: 02-NOV-96 14:40

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 29.00 | 38-118 | Tetrachloro-m-xylene |

==========

Sample ID: AQ0246-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: DUP1
Batch Cross Reference ID: gb5246

---

Sample Quality Data: Date Analyzed: 02-NOV-96 15:21

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 28.00 | 38-118 | Tetrachloro-m-xylene |

==========

Sample ID: AQ0249-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW37R
Batch Cross Reference ID: gb5247

---

Sample Quality Data: Date Analyzed: 02-NOV-96 16:01

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 31.00 | 38-118 | Tetrachloro-m-xylene |

==========

Sample ID: AQ0250-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW24R
Batch Cross Reference ID: gb5248

---

Sample Quality Data: Date Analyzed: 02-NOV-96 16:42

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 29.00 | 38-118 | Tetrachloro-m-xylene |

==========

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Sample ID: AQ0247-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW14R
Batch Cross Reference ID: gb5249

Sample Quality Data: Date Analyzed: 02-NOV-96 17:22

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 26.00 | 38-118 | Tetrachloro-m-xylene |

Sample ID: AQ0248-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW30R
Batch Cross Reference ID: gb5250

Sample Quality Data: Date Analyzed: 02-NOV-96 18:02

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 21.00 | 38-118 | Tetrachloro-m-xylene |

Sample ID: AQ0251-E1 Site: 490
LIMS Method: SVGC1PCB01 Sample Point: MW20R
Batch Cross Reference ID: gb5251

Sample Quality Data: Date Analyzed: 02-NOV-96 18:43

Analyst: brown Date Extracted: 28-OCT-1996

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 76.00 | 38-118 | Tetrachloro-m-xylene |

Batch Cross Reference ID: gb52 Analyst: brown

Sample for Spike: AQ0450-H1 Date Analyzed: 02-NOV-1996 07:13

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| PCBOCLOR-1254 | 74 | 95 | 25 | ND |

Quality Summary Report for ENS#96-13571 (page 1)
WMX - TECHNOLOGY CENTER, INC.

==========

Sa le ID: AQ0241-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW15R
Batch Cross Reference ID: mkv07

---

Sample Quality Data: Date Analyzed: 25-OCT-1996 12:36

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

==========

Sample ID: AQ0242-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: 02FBB
Batch Cross Reference ID: mkv08

---

Sample Quality Data: Date Analyzed: 25-OCT-1996 13:06

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

==========

Quality Summary Report for ENS#96-13571
WMX - TECHNOLOGY CENTER, INC.

==========

Sample ID: AQ0243-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW36R
Batch Cross Reference ID: mkv09

---

Sample Quality Data: Date Analyzed: 25-OCT-1996 13:36

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

==========

Sample ID: AQ0244-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: 02FBD
Batch Cross Reference ID: mkv10

---

Sample Quality Data: Date Analyzed: 25-OCT-1996 14:07

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

==========

Sample ID: AQ0245-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW16R
Batch Cross Reference ID: mkv11

---

Sample Quality Data: Date Analyzed: 25-OCT-1996 14:37

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

==========

Sample ID: AQ0246-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: DUP1
Batch Cross Reference ID: mkv12

---

Sample Quality Data: Date Analyzed: 25-OCT-1996 15:08

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

==========

Quality Summary Report for ENS#96-13571
WMX - TECHNOLOGY CENTER, INC.

Sample ID: AQ0249-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW37R
Batch Cross Reference ID: mkv13

Sample Quality Data: Date Analyzed: 25-OCT-1996 15:39

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AQ0250-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW24R
Batch Cross Reference ID: mkv14

Sample Quality Data: Date Analyzed: 25-OCT-1996 16:10

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Sample ID: AQ0991-I1 Site: 230
LIMS Method: VOGCIAN102 Sample Point: CCTCOM
Batch Cross Reference ID: mkv15

Sample Quality Data: Date Analyzed: 25-OCT-1996 16:40

Analyst: kalensky Date Extracted: N/A

Sample ID: AQ0247-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW14R
Batch Cross Reference ID: mkv19

Sample Quality Data: Date Analyzed: 25-OCT-1996 18:41

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

Quality Summary Report for ENS#96-13571
WMX - TECHNOLOGY CENTER, INC.

==========

S. le ID: AQ0248-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW30R
Batch Cross Reference ID: mkv21

---

Sample Quality Data: Date Analyzed: 25-OCT-1996 19:39

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

==========

Sample ID: AQ0251-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: MW20R
Batch Cross Reference ID: mkv22

---

Sample Quality Data: Date Analyzed: 25-OCT-1996 20:08

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

==========

Sample ID: AQ0252-F1 Site: 490
LIMS Method: VOGCIAN101 Sample Point: TBK1
Batch Cross Reference ID: mkv23

---

Sample Quality Data: Date Analyzed: 25-OCT-1996 20:37

Analyst: kalensky Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|

==========

Quality Summary Report for ENS# 96-13571 (page 1)
WMX - TECHNOLOGY CENTER, INC.

==========

S ple ID: AQ0247-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW14R
Batch Cross Reference ID: jyz19

---

Sample Quality Data: Date Analyzed: 29-OCT-96 20:51

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 96.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 99.00 | 85-114 | Fluorobenzene (SU 2) |
| | 101.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Sample ID: AQ0248-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW30R
Batch Cross Reference ID: jyz20

---

Sample Quality Data: Date Analyzed: 29-OCT-96 21:21

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 103.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 99.90 | 85-114 | Fluorobenzene (SU 2) |
| | 102.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Sample ID: AQ0251-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW20R
Batch Cross Reference ID: jyz21

---

Sample Quality Data: Date Analyzed: 29-OCT-96 21:51

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 102.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 97.00 | 85-114 | Fluorobenzene (SU 2) |
| | 99.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Sa le ID: AQ0252-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: TBK1
Batch Cross Reference ID: jyz22

Sample Quality Data: Date Analyzed: 29-OCT-96 22:21

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 103.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 99.00 | 85-114 | Fluorobenzene (SU 2) |
| | 102.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jyz Analyst: Joanne Pfeifer

Sample for Spike: AQ2716-A1 Date Analyzed: 29-OCT-96 13:45

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 102 | 101 | 0 | ND |
| Bromodichloromethane | 106 | 106 | 0 | ND |
| Bromoform | 92 | 91 | 1 | ND |
| Bromomethane | 116 | 118 | 2 | ND |
| Carbon tetrachloride | 110 | 110 | 0 | ND |
| Chlorobenzene | 105 | 106 | 1 | ND |
| Chloroethane | 135 | 134 | 0 | ND |
| 2-Chloroethyl vinyl ether | 0 | 0 | N/A | ND |
| Chloroform | 107 | 107 | 1 | ND |
| Chloromethane | 99 | 95 | 3 | ND |
| Dibromochloromethane | 93 | 96 | 3 | ND |
| 1,2-Dichlorobenzene | 102 | 101 | 1 | ND |
| 1,3-Dichlorobenzene | 104 | 102 | 2 | ND |
| 1,4-Dichlorobenzene | 96 | 95 | 1 | ND |
| 1,1-Dichloroethane | 104 | 109 | 5 | ND |
| 1,2-Dichloroethane | 101 | 99 | 2 | ND |
| 1,1-Dichloroethene | 118 | 121 | 3 | ND |
| trans-1,2-Dichloroethene | 105 | 106 | 1 | ND |
| 1,2-Dichloropropane | 112 | 112 | 1 | ND |
| cis-1,3-Dichloropropene | 111 | 110 | 1 | ND |
| trans-1,3-Dichloropropene | 92 | 94 | 1 | ND |
| Ethylbenzene | 107 | 106 | 0 | ND |
| Methylene chloride | 102 | 102 | 0 | ND |
| 4-Methyl-2-pentanone | 99 | 99 | 0 | ND |
| 1,1,2,2-Tetrachloroethane | 105 | 105 | 0 | ND |
| trachloroethene | 109 | 110 | 1 | ND |
| trahydrofuran | 96 | 96 | 1 | ND |

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Batch Cross Reference ID: jyz

Analyst: Joanne Pfeifer

Sample for Spike: AQ2716-A1

Date Analyzed: 29-OCT-96 13:45

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Toluene | 99 | 98 | 1 | ND |
| 1,1,1-Trichloroethane | 109 | 110 | 1 | ND |
| 1,1,2-Trichloroethane | 104 | 104 | 0 | ND |
| Trichloroethene | 109 | 107 | 1 | ND |
| Trichlorofluoromethane | 119 | 120 | 1 | ND |
| Vinyl chloride | 126 | 117 | 7 | ND |

Quality Summary Report for ENS# 96-13571 (page 1)
WMX - TECHNOLOGY CENTER, INC.

S ple ID: AQ0241-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW15R
Batch Cross Reference ID: jyw06

Sample Quality Data: Date Analyzed: 25-OCT-96 11:01

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 99.60 | 88-114 | Pentafluorobenzene (SU 1) |
| | 103.00 | 85-114 | Fluorobenzene (SU 2) |
| | 101.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jyw Analyst: Joanne Pfeifer

Sample for Spike: AQ0241-G1 Date Analyzed: 25-OCT-96 11:01

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 103 | 105 | 2 | ND |
| Bromodichloromethane | 109 | 103 | 6 | ND |
| Bromoform | 81 | 66 | 21 | ND |
| Bromomethane | 112 | 113 | 1 | ND |
| Carbon tetrachloride | 107 | 107 | 0 | ND |
| Chlorobenzene | 102 | 100 | 2 | ND |
| Chloroethane | 172 | 174 | 1 | ND |
| 2-Chloroethyl vinyl ether | 36 | 0 | 200 | ND |
| Chloroform | 107 | 105 | 1 | ND |
| Chloromethane | 101 | 100 | 2 | ND |
| Dibromochloromethane | 91 | 85 | 6 | ND |
| 1,2-Dichlorobenzene | 98 | 94 | 4 | ND |
| 1,3-Dichlorobenzene | 100 | 100 | 0 | ND |
| 1,4-Dichlorobenzene | 97 | 95 | 3 | ND |
| 1,1-Dichloroethane | 108 | 110 | 1 | ND |
| 1,2-Dichloroethane | 100 | 103 | 2 | ND |
| 1,1-Dichloroethene | 125 | 125 | 0 | ND |
| trans-1,2-Dichloroethene | 105 | 106 | 1 | ND |
| 1,2-Dichloropropane | 110 | 119 | 8 | ND |
| cis-1,3-Dichloropropene | 113 | 112 | 1 | ND |
| trans-1,3-Dichloropropene | 92 | 89 | 3 | ND |
| Ethylbenzene | 111 | 110 | 1 | ND |
| Methylene chloride | 103 | 103 | 1 | ND |
| 4-Methyl-2-pentanone | 101 | 110 | 9 | ND |
| 1,1,2,2-Tetrachloroethane | 118 | 110 | 7 | ND |
| etrachloroethene | 108 | 103 | 5 | ND |
| etrahydrofuran | 100 | 101 | 1 | ND |

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Batch Cross Reference ID: jyw

Analyst: Joanne Pfeifer

Sample for Spike: AQ0241-G1

Date Analyzed: 25-OCT-96 11:01

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Toluene | 106 | 102 | 3 | ND |
| 1,1,1-Trichloroethane | 106 | 107 | 1 | ND |
| 1,1,2-Trichloroethane | 107 | 103 | 4 | ND |
| Trichloroethene | 106 | 109 | 3 | ND |
| Trichlorofluoromethane | 118 | 121 | 2 | ND |
| Vinyl chloride | 124 | 124 | 0 | ND |

Quality Summary Report for ENS# 96-13571 (page 1)
WMX - TECHNOLOGY CENTER, INC.

==========

Sa ıe ID: AQ0243-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW36R
Batch Cross Reference ID: jyv14

---

Sample Quality Data: Date Analyzed: 24-OCT-96 14:45

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 99.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 102.00 | 85-114 | Fluorobenzene (SU 2) |
| | 101.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Sample ID: AQ0244-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: 02FBD
Batch Cross Reference ID: jyv15

---

Sample Quality Data: Date Analyzed: 24-OCT-96 15:15

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 100.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 102.00 | 85-114 | Fluorobenzene (SU 2) |
| | 106.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Sample ID: AQ0249-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW37R
Batch Cross Reference ID: jyv16

---

Sample Quality Data: Date Analyzed: 24-OCT-96 15:46

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 99.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 102.00 | 85-114 | Fluorobenzene (SU 2) |
| | 99.80 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Sample ID: AQ0250-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW24R
Batch Cross Reference ID: jyv17

Sample Quality Data: Date Analyzed: 24-OCT-96 16:17

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 99.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 104.00 | 85-114 | Fluorobenzene (SU 2) |
| | 99.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AQ0242-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: 02FBB
Batch Cross Reference ID: jyv23

Sample Quality Data: Date Analyzed: 24-OCT-96 19:20

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 98.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 100.00 | 85-114 | Fluorobenzene (SU 2) |
| | 93.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AQ0245-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW16R
Batch Cross Reference ID: jyv24

Sample Quality Data: Date Analyzed: 24-OCT-96 19:50

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 98.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 98.00 | 85-114 | Fluorobenzene (SU 2) |
| | 100.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

S ple ID: AQ0246-G1 Site: 490
LIMS Method: VOMSAAO332 Sample Point: DUP1
Batch Cross Reference ID: jyv25

Sample Quality Data: Date Analyzed: 24-OCT-96 20:20

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 98.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 98.00 | 85-114 | Fluorobenzene (SU 2) |
| | 98.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jyv Analyst: Joanne Pfeifer

Sample for Spike: AQ2704-I1 Date Analyzed: 24-OCT-96 11:12

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 103 | 97 | 6 | ND |
| Bromodichloromethane | 101 | 98 | 3 | ND |
| Bromoform | 83 | 82 | 1 | ND |
| Bromomethane | 120 | 110 | 8 | ND |
| Carbon tetrachloride | 108 | 110 | 1 | ND |
| Chlorobenzene | 105 | 102 | 2 | ND |
| Chloroethane | 175 | 165 | 6 | ND |
| 2-Chloroethyl vinyl ether | 10 | 0 | 200 | ND |
| Chloroform | 102 | 104 | 1 | ND |
| Chloromethane | 98 | 94 | 4 | ND |
| Dibromochloromethane | 92 | 94 | 2 | ND |
| 1,2-Dichlorobenzene | 97 | 93 | 4 | ND |
| 1,3-Dichlorobenzene | 101 | 98 | 3 | ND |
| 1,4-Dichlorobenzene | 95 | 93 | 1 | ND |
| 1,1-Dichloroethane | 104 | 97 | 7 | ND |
| 1,2-Dichloroethane | 98 | 90 | 8 | ND |
| 1,1-Dichloroethene | 124 | 120 | 3 | ND |
| trans-1,2-Dichloroethene | 112 | 103 | 9 | ND |
| 1,2-Dichloropropane | 106 | 108 | 1 | ND |
| cis-1,3-Dichloropropene | 109 | 97 | 11 | ND |
| trans-1,3-Dichloropropene | 89 | 90 | 0 | ND |
| Ethylbenzene | 114 | 106 | 7 | ND |
| Methylene chloride | 106 | 101 | 5 | ND |
| 4-Methyl-2-pentanone | 98 | 99 | 1 | ND |
| 1,1,2,2-Tetrachloroethane | 98 | 98 | 1 | ND |
| etrachloroethene | 115 | 116 | 1 | ND |
| etrahydrofuran | 91 | 93 | 2 | ND |

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Batch Cross Reference ID: jyv

Analyst: Joanne Pfeifer

Sample for Spike: AQ2704-I1

Date Analyzed: 24-OCT-96 11:12

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Toluene | 105 | 109 | 3 | ND |
| 1,1,1-Trichloroethane | 114 | 111 | 2 | ND |
| 1,1,2-Trichloroethane | 122 | 138 | 13 | ND |
| Trichloroethene | 102 | 99 | 4 | ND |
| Trichlorofluoromethane | 124 | 122 | 2 | ND |
| Vinyl chloride | 120 | 117 | 2 | ND |

Quality Summary Report for ENS# 96-13571 (page 1)
WMX - TECHNOLOGY CENTER, INC.

S. ple ID: AQ0247-I0 Site: 490
LIMS Method: VOMSAAO332 Sample Point: MW14R
Batch Cross Reference ID: jz110

Sample Quality Data: Date Analyzed: 30-OCT-96 11:57

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 104.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 103.00 | 85-114 | Fluorobenzene (SU 2) |
| | 98.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jz1 Analyst: Joanne Pfeifer

Sample for Spike: AP9799-E1 Date Analyzed: 30-OCT-96 09:57

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 100 | 104 | 5 | ND |
| Bromodichloromethane | 103 | 108 | 5 | ND |
| Bromoform | 82 | 92 | 12 | ND |
| Bromomethane | 111 | 115 | 4 | ND |
| Carbon tetrachloride | 108 | 112 | 3 | ND |
| Chlorobenzene | 104 | 106 | 2 | ND |
| Chloroethane | 125 | 132 | 5 | ND |
| 2-Chloroethyl vinyl ether | 0 | 0 | N/A | ND |
| Chloroform | 104 | 106 | 2 | ND |
| Chloromethane | 92 | 96 | 5 | ND |
| Dibromochloromethane | 90 | 95 | 5 | ND |
| 1,2-Dichlorobenzene | 96 | 102 | 5 | ND |
| 1,3-Dichlorobenzene | 99 | 106 | 7 | ND |
| 1,4-Dichlorobenzene | 97 | 100 | 3 | ND |
| 1,1-Dichloroethane | 100 | 106 | 5 | ND |
| 1,2-Dichloroethane | 98 | 101 | 3 | ND |
| 1,1-Dichloroethene | 117 | 120 | 3 | ND |
| trans-1,2-Dichloroethene | 105 | 107 | 2 | ND |
| 1,2-Dichloropropane | 111 | 118 | 6 | ND |
| cis-1,3-Dichloropropene | 108 | 114 | 5 | ND |
| trans-1,3-Dichloropropene | 89 | 93 | 5 | ND |
| Ethylbenzene | 108 | 108 | 1 | ND |
| Methylene chloride | 102 | 103 | 1 | ND |
| 4-Methyl-2-pentanone | 96 | 100 | 5 | ND |
| 1,1,2,2-Tetrachloroethane | 95 | 108 | 12 | ND |
| etrachloroethene | 106 | 113 | 6 | ND |
| Tetrahydrofuran | 90 | 92 | 2 | ND |

Quality Summary Report for ENS# 96-13571 (page 2)
WMX - TECHNOLOGY CENTER, INC.

Batch Cross Reference ID: jz1 Analyst: Joanne Pfeifer

Sample for Spike: AP9799-E1 Date Analyzed: 30-OCT-96 09:57

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Toluene | 95 | 102 | 8 | ND |
| 1,1,1-Trichloroethane | 109 | 110 | 2 | ND |
| 1,1,2-Trichloroethane | 99 | 108 | 9 | ND |
| Trichloroethene | 108 | 111 | 3 | ND |
| Trichlorofluoromethane | 115 | 119 | 3 | ND |
| Vinyl chloride | 118 | 119 | 1 | ND |

Quality Summary Report for ENS# 96-13571 (page 1)
WMX - TECHNOLOGY CENTER, INC.

Sa le ID: AQ0241-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: MW15R
Batch Cross Reference ID: jyw06

Sample Quality Data: Date Analyzed: 25-OCT-96 11:01

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 99.60 | 88-114 | Pentafluorobenzene (SU 1) |
| | 103.00 | 85-114 | Fluorobenzene (SU 2) |
| | 101.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jyw Analyst: Joanne Pfeifer

Sample for Spike: AQ0241-G1 Date Analyzed: 25-OCT-96 11:01

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 103 | 105 | 2 | ND |
| Bromodichloromethane | 109 | 103 | 6 | ND |
| Bromoform | 81 | 66 | 21 | ND |
| Bromomethane | 112 | 113 | 1 | ND |
| Carbon tetrachloride | 107 | 107 | 0 | ND |
| Chlorobenzene | 102 | 100 | 2 | ND |
| Chloroethane | 172 | 174 | 1 | ND |
| 2-Chloroethyl vinyl ether | 36 | 0 | 200 | ND |
| Chloroform | 107 | 105 | 1 | ND |
| Chloromethane | 101 | 100 | 2 | ND |
| Dibromochloromethane | 91 | 85 | 6 | ND |
| 1,2-Dichlorobenzene | 98 | 94 | 4 | ND |
| 1,3-Dichlorobenzene | 100 | 100 | 0 | ND |
| 1,4-Dichlorobenzene | 97 | 95 | 3 | ND |
| 1,1-Dichloroethane | 108 | 110 | 1 | ND |
| 1,2-Dichloroethane | 100 | 103 | 2 | ND |
| 1,1-Dichloroethene | 125 | 125 | 0 | ND |
| trans-1,2-Dichloroethene | 105 | 106 | 1 | ND |
| 1,2-Dichloropropane | 110 | 119 | 8 | ND |
| cis-1,3-Dichloropropene | 113 | 112 | 1 | ND |
| trans-1,3-Dichloropropene | 92 | 89 | 3 | ND |
| Ethylbenzene | 111 | 110 | 1 | ND |
| Methylene chloride | 103 | 103 | 1 | ND |
| 4-Methyl-2-pentanone | 101 | 110 | 9 | ND |
| 1,1,2,2-Tetrachloroethane | 118 | 110 | 7 | ND |
| Tetrachloroethene | 108 | 103 | 5 | ND |
| Tetrahydrofuran | 100 | 101 | 1 | ND |

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Batch Cross Reference ID: jyw

Analyst: Joanne Pfeifer

Sample for Spike: AQ0241-G1

Date Analyzed: 25-OCT-96 11:01

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Toluene | 106 | 102 | 3 | ND |
| 1,1,1-Trichloroethane | 106 | 107 | 1 | ND |
| 1,1,2-Trichloroethane | 107 | 103 | 4 | ND |
| Trichloroethene | 106 | 109 | 3 | ND |
| Trichlorofluoromethane | 118 | 121 | 2 | ND |
| Vinyl chloride | 124 | 124 | 0 | ND |

# Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Sa le ID: AQ0247-H1 Site: 490
LI. Method: VOMSAAD303 Sample Point: MW14R
Batch Cross Reference ID: jyz19

Sample Quality Data: Date Analyzed: 29-OCT-96 20:51

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 96.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 99.00 | 85-114 | Fluorobenzene (SU 2) |
| | 101.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AQ0248-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: MW30R
Batch Cross Reference ID: jyz20

Sample Quality Data: Date Analyzed: 29-OCT-96 21:21

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 103.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 99.90 | 85-114 | Fluorobenzene (SU 2) |
| | 102.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AQ0251-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: MW20R
Batch Cross Reference ID: jyz21

Sample Quality Data: Date Analyzed: 29-OCT-96 21:51

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 102.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 97.00 | 85-114 | Fluorobenzene (SU 2) |
| | 99.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Sa le ID: AQ0252-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: TBK1
Batch Cross Reference ID: jyz22

Sample Quality Data: Date Analyzed: 29-OCT-96 22:21

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 103.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 99.00 | 85-114 | Fluorobenzene (SU 2) |
| | 102.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jyz Analyst: Joanne Pfeifer

Sample for Spike: AQ2716-A1 Date Analyzed: 29-OCT-96 13:45

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 102 | 101 | 0 | ND |
| Bromodichloromethane | 106 | 106 | 0 | ND |
| Bromoform | 92 | 91 | 1 | ND |
| Bromomethane | 116 | 118 | 2 | ND |
| Carbon tetrachloride | 110 | 110 | 0 | ND |
| Chlorobenzene | 105 | 106 | 1 | ND |
| Chloroethane | 135 | 134 | 0 | ND |
| 2-Chloroethyl vinyl ether | 0 | 0 | N/A | ND |
| Chloroform | 107 | 107 | 1 | ND |
| Chloromethane | 99 | 95 | 3 | ND |
| Dibromochloromethane | 93 | 96 | 3 | ND |
| 1,2-Dichlorobenzene | 102 | 101 | 1 | ND |
| 1,3-Dichlorobenzene | 104 | 102 | 2 | ND |
| 1,4-Dichlorobenzene | 96 | 95 | 1 | ND |
| 1,1-Dichloroethane | 104 | 109 | 5 | ND |
| 1,2-Dichloroethane | 101 | 99 | 2 | ND |
| 1,1-Dichloroethene | 118 | 121 | 3 | ND |
| trans-1,2-Dichloroethene | 105 | 106 | 1 | ND |
| 1,2-Dichloropropane | 112 | 112 | 1 | ND |
| cis-1,3-Dichloropropene | 111 | 110 | 1 | ND |
| trans-1,3-Dichloropropene | 92 | 94 | 1 | ND |
| Ethylbenzene | 107 | 106 | 0 | ND |
| Methylene chloride | 102 | 102 | 0 | ND |
| 4-Methyl-2-pentanone | 99 | 99 | 0 | ND |
| 1,1,2,2-Tetrachloroethane | 105 | 105 | 0 | ND |
| Tetrachloroethene | 109 | 110 | 1 | ND |
| Tetrahydrofuran | 96 | 96 | 1 | ND |

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Batch Cross Reference ID: jyz

Analyst: Joanne Pfeifer

Sample for Spike: AQ2716-A1

Date Analyzed: 29-OCT-96 13:45

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Toluene | 99 | 98 | 1 | ND |
| 1,1,1-Trichloroethane | 109 | 110 | 1 | ND |
| 1,1,2-Trichloroethane | 104 | 104 | 0 | ND |
| Trichloroethene | 109 | 107 | 1 | ND |
| Trichlorofluoromethane | 119 | 120 | 1 | ND |
| Vinyl chloride | 126 | 117 | 7 | ND |

Quality Summary Report for ENS# 96-13571 (page 1)
WMX - TECHNOLOGY CENTER, INC.

==========

S ple ID: AQ0243-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: MW36R
Batch Cross Reference ID: jyv14

---

Sample Quality Data: Date Analyzed: 24-OCT-96 14:45

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 99.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 102.00 | 85-114 | Fluorobenzene (SU 2) |
| | 101.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Sample ID: AQ0244-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: 02FBD
Batch Cross Reference ID: jyv15

---

Sample Quality Data: Date Analyzed: 24-OCT-96 15:15

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 100.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 102.00 | 85-114 | Fluorobenzene (SU 2) |
| | 106.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Sample ID: AQ0249-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: MW37R
Batch Cross Reference ID: jyv16

---

Sample Quality Data: Date Analyzed: 24-OCT-96 15:46

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 99.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 102.00 | 85-114 | Fluorobenzene (SU 2) |
| | 99.80 | 86-115 | 4-Bromofluorobenzene (SU 3) |

==========

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Sample ID: AQ0250-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: MW24R
Batch Cross Reference ID: jyv17

Sample Quality Data: Date Analyzed: 24-OCT-96 16:17

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 99.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 104.00 | 85-114 | Fluorobenzene (SU 2) |
| | 99.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AQ0242-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: 02FBB
Batch Cross Reference ID: jyv23

Sample Quality Data: Date Analyzed: 24-OCT-96 19:20

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 98.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 100.00 | 85-114 | Fluorobenzene (SU 2) |
| | 93.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Sample ID: AQ0245-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: MW16R
Batch Cross Reference ID: jyv24

Sample Quality Data: Date Analyzed: 24-OCT-96 19:50

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 98.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 98.00 | 85-114 | Fluorobenzene (SU 2) |
| | 100.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

S le ID: AQ0246-H1 Site: 490
LIMS Method: VOMSAAD303 Sample Point: DUP1
Batch Cross Reference ID: jyv25

Sample Quality Data: Date Analyzed: 24-OCT-96 20:20

Analyst: Joanne Pfeifer Date Extracted: N/A

| Surrogates: | % Recovery | QC Limits | Compound |
|---|---|---|---|
| | 98.00 | 88-114 | Pentafluorobenzene (SU 1) |
| | 98.00 | 85-114 | Fluorobenzene (SU 2) |
| | 98.00 | 86-115 | 4-Bromofluorobenzene (SU 3) |

Batch Cross Reference ID: jyv Analyst: Joanne Pfeifer

Sample for Spike: AQ2704-I1 Date Analyzed: 24-OCT-96 11:12

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Benzene | 103 | 97 | 6 | ND |
| Bromodichloromethane | 101 | 98 | 3 | ND |
| Bromoform | 83 | 82 | 1 | ND |
| Bromomethane | 120 | 110 | 8 | ND |
| Carbon tetrachloride | 108 | 110 | 1 | ND |
| Chlorobenzene | 105 | 102 | 2 | ND |
| Chloroethane | 175 | 165 | 6 | ND |
| 2-Chloroethyl vinyl ether | 10 | 0 | 200 | ND |
| Chloroform | 102 | 104 | 1 | ND |
| Chloromethane | 98 | 94 | 4 | ND |
| Dibromochloromethane | 92 | 94 | 2 | ND |
| 1,2-Dichlorobenzene | 97 | 93 | 4 | ND |
| 1,3-Dichlorobenzene | 101 | 98 | 3 | ND |
| 1,4-Dichlorobenzene | 95 | 93 | 1 | ND |
| 1,1-Dichloroethane | 104 | 97 | 7 | ND |
| 1,2-Dichloroethane | 98 | 90 | 8 | ND |
| 1,1-Dichloroethene | 124 | 120 | 3 | ND |
| trans-1,2-Dichloroethene | 112 | 103 | 9 | ND |
| 1,2-Dichloropropane | 106 | 108 | 1 | ND |
| cis-1,3-Dichloropropene | 109 | 97 | 11 | ND |
| trans-1,3-Dichloropropene | 89 | 90 | 0 | ND |
| Ethylbenzene | 114 | 106 | 7 | ND |
| Methylene chloride | 106 | 101 | 5 | ND |
| 4-Methyl-2-pentanone | 98 | 99 | 1 | ND |
| 1,1,2,2-Tetrachloroethane | 98 | 98 | 1 | ND |
| Tetrachloroethene | 115 | 116 | 1 | ND |
| Tetrahydrofuran | 91 | 93 | 2 | ND |

Quality Summary Report for ENS# 96-13571
WMX - TECHNOLOGY CENTER, INC.

Batch Cross Reference ID: jyv

Analyst: Joanne Pfeifer

Sample for Spike: AQ2704-I1

Date Analyzed: 24-OCT-96 11:12

| Compound | Matrix Spike % Rec | Matrix Spk Dup % Rec | % RPD | Blank Det (ug/L) |
|---|---|---|---|---|
| Toluene | 105 | 109 | 3 | ND |
| 1,1,1-Trichloroethane | 114 | 111 | 2 | ND |
| 1,1,2-Trichloroethane | 122 | 138 | 13 | ND |
| Trichloroethene | 102 | 99 | 4 | ND |
| Trichlorofluoromethane | 124 | 122 | 2 | ND |
| Vinyl chloride | 120 | 117 | 2 | ND |

# WMX Technology Center, Inc.
## Quality Report Transmittal Memorandum

Date: December 12, 1996

Report Type
All

To: Sandy Clark

From: Donna Ingersoll

Subject: Vickery - 96-14750

Please find enclosed the Quality Report for the recently completed event at Vickery.

Please take a moment to review the enclosed report to ensure it meets your expectations.

If you have any questions, don't hesitate to call Marti Pruhs at (630)208-3209.

Mail Code: 1

DEC 13 1996

12/13/96

# WMX Environmental Monitoring Laboratories, Inc.

Inorganic Quality Summary - 96-14750



| Method Id. | Analyte Name | RPD DUP | Matrix Spike % Rec. | External Ref. % Rec. | Blank Det. | Sample Id. | Date Analyzed | Analyst Name |
|---|---|---|---|---|---|---|---|---|
| INICPDISCR | CHROMIUM-DISSOLVED | 15.7 | 92.8 | 102 | ND | AQ5523-A0 | 12/11/96 | P. GEORGIOU |

NR-NOT REPORTED NC-NOT ABLE TO CALCULATE ND-NOT DETECTED NA-NOT AVAILABLE

The listed MS % Rec. (analysis frequency 1:10) is for associated sample spike.

*See the Data Qualifier Report for additional Quality comments*