| Fac/Perm/Co ID # | Date | Doc ID# |
| --- | --- | --- |
| RC | 6/22/09 | DIN |

# APRIL-JUNE 2006
# SEMI-ANNUAL GROUNDWATER
# and
# SURFACE WATER MONITORING REPORT

*Central Carolina Tire Phase III Scrap Tire Monofill Landfill*
*Harnett County, North Carolina*

May 5, 2006

North Carolina Division of Environment and Natural Resources
Division of Waste Management
Solid Waste Section
P.O. Box 27687
Raleigh, NC 27611-7687

Attention: Ms. Jaclynne Drummond

Re: April-June 2006 Semi-Annual Groundwater and Surface Water Monitoring Report
Central Carolina Tire Phase III Scrap Tire Monofill Landfill (Expansion)
Harnett County, North Carolina
W&R Project No. 202334.09

Dear Ms. Drummond:

Withers & Ravenel (W&R) has completed the first of two semi-annual groundwater surface water monitoring events at the above referenced facility (**Figure 1**). The scope of work performed by W&R included collection of groundwater samples from the site, in general accordance with the Water Quality Monitoring Plan (the Plan) that is included as Section 9 of the Central Carolina Tire Phase III Scrap Tire Monofill Landfill Permit To Construct Application dated October 22, 2004. According to the Plan, samples from five groundwater monitoring wells and one surface water location are to be collected and tested on a semi-annual basis. This is the fourth sampling event conducted for the expansion facility, which is not yet in operation. The following paragraphs describe the methodology and results of the field activities and laboratory analyses.

## 1.0 WATER QUALITY SAMPLING METHODOLOGY

### 1.1 Groundwater Sampling

Five groundwater monitoring wells, MW-10, MW-11, MW-12, MW-13, and MW-14 were installed at the site in September 2004 at locations proximal to the perimeter of the Phase III scrap tire monofill landfill (See **Figure 2**). Monitoring well construction details and groundwater data are summarized in **Table 1**. Hydraulic conductivity testing of monitoring wells MW-10 through MW-14 performed by W&R in September 2004 indicated hydraulic conductivity values ranging from $2.2 \times 10^{-3}$ cm/s to $7.0 \times 10^{-5}$ cm/s. Monitoring well MW-10 serves as the upgradient, natural background well for the facility and MW-11 through MW-14 serve as the downgradient monitoring wells.

Sampling activities were performed in accordance with protocols detailed in the Plan. New disposable nitrile or latex gloves were worn at each sampling location.

Prior to purging and sampling activities, water levels within each well were measured using a decontaminated electronic water-level meter. Measurements were referenced to the top of each well casing. The average groundwater elevation was calculated to be 335.57 feet above mean sea level (MSL) for the sampling event. Individual groundwater elevations determined for each of the monitoring wells on April 1, 2006 are summarized in **Table 1.**

After water level information was collected, at least three times the volume of the water standing in each well was removed using a peristaltic pump and new polyethylene tubing. Measurements of the temperature, pH, and specific conductance of the water produced were recorded. Copies of the Pre-Sampling / Well Purging Field Logs that contain this information are included in **Appendix A.**

Groundwater samples were collected immediately following the completion of well purging activities. Groundwater samples were pumped directly into laboratory provided containers, which were then placed into ice-containing coolers and delivered under proper chain-of-custody to Environmental Conservation Laboratories (ENCO), Inc. in Cary, North Carolina for analysis of Volatile Organic Compounds (VOCs) by EPA Method 8260B and the eight RCRA metals by EPA Methods 200.7 and 7470. All samples were submitted unfiltered and the sample containers included the appropriate type and amount of preservative. The temperature of the groundwater samples ranged between 13.7 and 16.8 degrees Celsius; the pH ranged between 4.70 and 6.19; and the specific conductance ranged between 10 and 184 umhos/cm. The final field parameter measurements for each well are summarized in **Table 1.**

For quality assurance/quality control (QA/QC), ENCO prepared a trip blank, which accompanied the sample bottles to and from the field, for analysis by EPA Method 8260B for VOCs.

### 1.2 Surface Water Sampling

A surface water sample was collected from the downstream location designated as SW-1(Expansion). SW-1(Expansion) is located approximately 280-feet beyond the planned limits of scrap tire disposal at the southeastern property boundary and within the primary drainage feature that bisects the southeastern portion of the Phase III landfill footprint. New disposable nitrile or latex gloves were worn during all sampling activities. To preserve the integrity of the preservatives within the sample container, a decontaminated Teflon ladle was used to collect the surface water samples. The contents of the ladle were immediately decanted into laboratory provided containers. The containers were then labeled and placed into ice-filled coolers and shipped under proper chain-of-custody to ENCO for analysis of VOCs and the eight RCRA metals by the previously referenced methods.

## 2.0 ANALYTICAL RESULTS

Laboratory results for the current sampling event are summarized in **Table 2.** No VOCs were identified in any of the groundwater or surface water samples submitted

during this monitoring event. The only metal detected in the groundwater samples was barium, which was identified in two of the five groundwater samples. Both of the reported barium concentrations were well below the 2000 ug/L North Carolina Groundwater Standard for barium. No metals were detected in the surface water sample submitted during this event. The laboratory results are summarized by sampling location as follows:

MW-10: Barium was reported at a concentration of 107 ug/L.

MW-14: Barium was reported at a concentration of 101 ug/L.

No VOCs were identified in the trip blank and the results of matrix blank analyses were within acceptable tolerances. Copies of the laboratory analytical reports are included in **Appendix B.**

## 3.0 CONCLUSIONS

- The results of the April-June 2006 Semi-Annual monitoring event for the Central Carolina Tire Phase III tire monofill landfill indicate that no VOCs were detected in any of the Groundwater Samples.
- The metal barium was detected in two of the five groundwater samples. The concentrations detected were below the North Carolina groundwater Standard for barium.
- No VOCs or metals were detected in the Surface Water Samples.
- No VOCs were detected in the QA/QC samples prepared by the analytical laboratory.

The next monitoring event for the Central Carolina Tire Phase III scrap tire monofill landfill is tentatively scheduled for October 2006. Please contact me at (919) 795-1926 if you have any questions regarding the contents of this report.

Sincerely,

WITHERS & RAVENEL

NORTH CAROLINA LICENSED SEAL 1994 GEOLOGIST JOHN MARK PALMER

John M. Palmer, P.G.
Project Geologist

Cc: Mr. Thomas Womble

# TABLES

**Table 1**
**Monitoring Well and Groundwater Data**
**April-June 2006 Sampling Event**
**Phase III Tire Monofill Landfill (Planned)**
**Harnet County, North Carolina**
**W&R Project No. 202334.09**

| Well Location | Northing | Easting | TOC Elevation (Ft MSL) | Ground Surface Elevation (Ft MSL) | Depth to GW BTOC (Feet) | GW Elevation (Ft MSL) | Field Parameters | | | Well Depth BTOC (Feet) | Screened Interval Elevation (Ft MSL) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Temp. C° | pH | S.C. umhos/cm | | |
| MW-10 | 549731.36 | 1954619.21 | 356.28 | 353.74 | 13.71 | 342.57 | 16.8 | 4.91 | 184 | 27 | 329.7 - 344.7 |
| MW-11 | 548984.87 | 1955599.35 | 347.80 | 345.70 | 10.50 | 337.30 | 16 | 5.50 | 10 | 23.8 | 325.2 - 340.2 |
| MW-12 | 548054.79 | 1955590.24 | 336.58 | 334.45 | 5.39 | 331.19 | 14.3 | 6.19 | 17 | 21.6 | 316.0 - 331.0 |
| MW-13 | 547826.40 | 1955420.62 | 339.47 | 337.36 | 9.85 | 329.62 | 13.7 | 5.11 | 15 | 20.6 | 319.4 - 334.4 |
| MW-14 | 547781.99 | 1954436.12 | 344.12 | 341.86 | 6.94 | 337.18 | 14.8 | 4.70 | 85 | 12.6 | 331.9 - 336.9 |

Notes:
1) TOC = Top of Casing
2) BTOC = Below Top of Casing
3) GW = Groundwater
4) Ft MSL = Measured in Feet Mean Sea Level
5) S.C. = Specific Conductance
6) All Monitoring Wells are Constructed of 2" PVC

**Table 2**
**Laboratory Results**
**April-June 2006 Sampling Event**
**Phase III Tire Monofill Landfill (Planned)**
**Harnett County, North Carolina**

| ORGANIC CONSTITUENTS (in ug/L) | SW-1 (Expansion) | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | RL (in ug/L) | NCAC 2L STD (in ug/L) |
|---|---|---|---|---|---|---|---|---|
| cetone | ND | ND | ND | ND | ND | ND | 2 | 700 |
| crylonitrile | ND | ND | ND | ND | ND | ND | 5 | N/A |
| enzene | ND | ND | ND | ND | ND | ND | 1 | 1 |
| romochloromethane | ND | ND | ND | ND | ND | ND | 1 | N/A |
| romodichloromethane | ND | ND | ND | ND | ND | ND | 1 | 0.56 |
| romoform (Tribromoethane) | ND | ND | ND | ND | ND | ND | 1 | 4.43 |
| romomethane (Methyl Bromide) | ND | ND | ND | ND | ND | ND | 1 | N/A |
| -Butanone (MEK), (Methyl Ethyl Ketone) | ND | ND | ND | ND | ND | ND | 2 | 4200 |
| arbon Disulfide | ND | ND | ND | ND | ND | ND | 2 | 700 |
| arbon Tetrachloride | ND | ND | ND | ND | ND | ND | 1 | 0.269 |
| hlorobenzene | ND | ND | ND | ND | ND | ND | 1 | 50 |
| hloroethane (Ethyl Chloride) | ND | ND | ND | ND | ND | ND | 1 | 2800 |
| hloroform (Trichloromethane) | ND | ND | ND | ND | ND | ND | 1 | 70 |
| ,2-Dibromo-3-Chloropropane (DBCP) | ND | ND | ND | ND | ND | ND | 1 | 0.025 |
| ibromochloromethane (Chlorodibromomethane) | ND | ND | ND | ND | ND | ND | 1 | 0.41 |
| ,2,-Dibromoethane (Ethylene Dibromide) | ND | ND | ND | ND | ND | ND | 1 | 0.0004 |
| ibromomethane (Methylene Bromide) | ND | ND | ND | ND | ND | ND | 1 | N/A |
| ,2-Dichlorobenzene (O-Dichlorobenzene) | ND | ND | ND | ND | ND | ND | 1 | 620 |
| ,4-Dichlorobenzene (P-Dichlorobenzene) | ND | ND | ND | ND | ND | ND | 1 | 75 |
| rans-1,4-Dichloro-2-butene | ND | ND | ND | ND | ND | ND | 1 | N/A |
| ,1-Dichloroethane | ND | ND | ND | ND | ND | ND | 1 | 70 |
| ,2-Dichloroethane (Ethylene Dichloride) | ND | ND | ND | ND | ND | ND | 1 | 0.38 |
| ,1-Dichloroethene (Vinylidene Chloride) | ND | ND | ND | ND | ND | ND | 1 | 7 |
| is-1,2-Dichloroethene (Cis-1,2-Dichloroethylene) | ND | ND | ND | ND | ND | ND | 1 | 70 |
| -1,2-Dichloroethene (Trans-1,2-Dichloroethylene) | ND | ND | ND | ND | ND | ND | 1 | 70 |
| ,2-Dichloropropane (Propylene Dichloride) | ND | ND | ND | ND | ND | ND | 1 | 0.56 |
| is-1,3-Dichloropropene | ND | ND | ND | ND | ND | ND | 1 | 0.19 |
| thylbenzene | ND | ND | ND | ND | ND | ND | 1 | 29 |
| odomethane (Methyl Iodide) | ND | ND | ND | ND | ND | ND | 2 | N/A |
| -Hexanone (Methyl Butyl Ketone) | ND | ND | ND | ND | ND | ND | 2 | 280 |
| lethyl Chloride (Chloromethane) | ND | ND | ND | ND | ND | ND | 1 | 2.6 |
| lethylene Chloride (Dichloromethane) | ND | ND | ND | ND | ND | ND | 1 | 5 |
| -Methyl-2-Pentanone (Methyl Isobutyl Ketone) | ND | ND | ND | ND | ND | ND | 2 | N/A |
| tyrene | ND | ND | ND | ND | ND | ND | 1 | 100 |
| ,1,1,2-Tetrachloroethane | ND | ND | ND | ND | ND | ND | 1 | N/A |
| ,1,2,2-Tetrachloroethane | ND | ND | ND | ND | ND | ND | 1 | 0.17 |
| etrachloroethene (Tetrachloroethylene), (PCE) | ND | ND | ND | ND | ND | ND | 1 | 0.7 |
| oluene | ND | ND | ND | ND | ND | ND | 1 | 1000 |
| ,1,1-Trichloroethane (Methylchloroform) | ND | ND | ND | ND | ND | ND | 1 | 200 |
| ,1,2-Trichloroethane | ND | ND | ND | ND | ND | ND | 1 | N/A |
| richloroethene (Trichloroethylene), (TCE) | ND | ND | ND | ND | ND | ND | 1 | 2.8 |
| richlorofluoromethane (CFC-11) | ND | ND | ND | ND | ND | ND | 1 | N/A |
| ,2,3-Trichloropropane | ND | ND | ND | ND | ND | ND | 1 | 0.005 |
| inyl Acetate | ND | ND | ND | ND | ND | ND | 2 | N/A |
| inyl Chloride | ND | ND | ND | ND | ND | ND | 1 | 0.015 |
| ,p-Xylenes | ND | ND | ND | ND | ND | ND | 2 | 530 |
| -Xylenes | ND | ND | ND | ND | ND | ND | 1 | 530 |
| **INORGANIC CONSTITUENTS (in ug/L)** | | | | | | | **RL (in ug/L)** | **NCAC 2L STD (in ug/L)** |
| rsenic | ND | ND | ND | ND | ND | ND | 10 | 50 |
| arium | ND | 107 | ND | ND | ND | 101 | 20 | 2000 |
| admium | ND | ND | ND | ND | ND | ND | 1 | 1.75 |
| hromium | ND | ND | ND | ND | ND | ND | 10 | 50 |
| ead | ND | ND | ND | ND | ND | ND | 10 | 15 |
| ercury | ND | ND | ND | ND | ND | ND | 0.20 | 1.05 |
| elenium | ND | ND | ND | ND | ND | ND | 10 | 50 |
| ilver | ND | ND | ND | ND | ND | ND | 10 | 17.5 |

Notes:
NCAC 2L STD = North Carolina Groundwater Standard established in Title 15A of North Carolina Administrative Code Subchapter 2L
RL = Laboratory Reporting Limit
ND = Not Detected at concentration above reporting limit
N/A=Not Applicable, Standard for this compound has not been published

## Table 3
## Historical Summary of Constituent Detections
## Phase III Tire Monofill Landfill (Planned)
## Harnett County, North Carolina

| Sampling Date: | 2L Standard | 11/10/2004 | 6/24/2005 | 10/26/2005 | 4/1/2006 | | |
|---|---|---|---|---|---|---|---|
| Well No: MW-10 | | | | | | | |
| *Arsenic* | 50 | ND | ND | ND | ND | | |
| *Barium* | 2000 | ND | 100 | ND | 107 | | |
| *Cadmium* | 1.75 | ND | ND | ND | ND | | |
| *Chromium* | 50 | ND | ND | ND | ND | | |
| *Lead* | 15 | ND | ND | ND | ND | | |
| *Mercury* | 1.05 | ND | ND | ND | ND | | |
| *Selenium* | 50 | ND | ND | ND | ND | | |
| *Silver* | 17.5 | ND | ND | ND | ND | | |

| Sampling Date: | 2L Standard | 11/10/2004 | 6/25/2005 | 10/26/2005 | 4/1/2006 | | |
|---|---|---|---|---|---|---|---|
| Well No: MW-11 | | | | | | | |
| *Arsenic* | 50 | ND | ND | ND | ND | | |
| *Barium* | 2000 | ND | ND | ND | ND | | |
| *Cadmium* | 1.75 | ND | ND | ND | ND | | |
| *Chromium* | 50 | ND | ND | ND | ND | | |
| *Lead* | 15 | ND | ND | ND | ND | | |
| *Mercury* | 1.05 | ND | ND | ND | ND | | |
| *Selenium* | 50 | ND | ND | ND | ND | | |
| *Silver* | 17.5 | ND | ND | ND | ND | | |

| Sampling Date: | 2L Standard | 11/10/2004 | 6/22/2005 | 10/26/2005 | 4/1/2006 | | |
|---|---|---|---|---|---|---|---|
| Well No: MW-12 | | | | | | | |
| *Arsenic* | 50 | ND | ND | ND | ND | | |
| *Barium* | 2000 | ND | ND | ND | ND | | |
| *Cadmium* | 1.75 | ND | ND | ND | ND | | |
| *Chromium* | 50 | ND | ND | ND | ND | | |
| *Lead* | 15 | ND | ND | ND | ND | | |
| *Mercury* | 1.05 | ND | ND | ND | ND | | |
| *Selenium* | 50 | ND | ND | ND | ND | | |
| *Silver* | 17.5 | ND | ND | ND | ND | | |
| *Toluene* | 1000 | ND | ND | ND | ND | | |

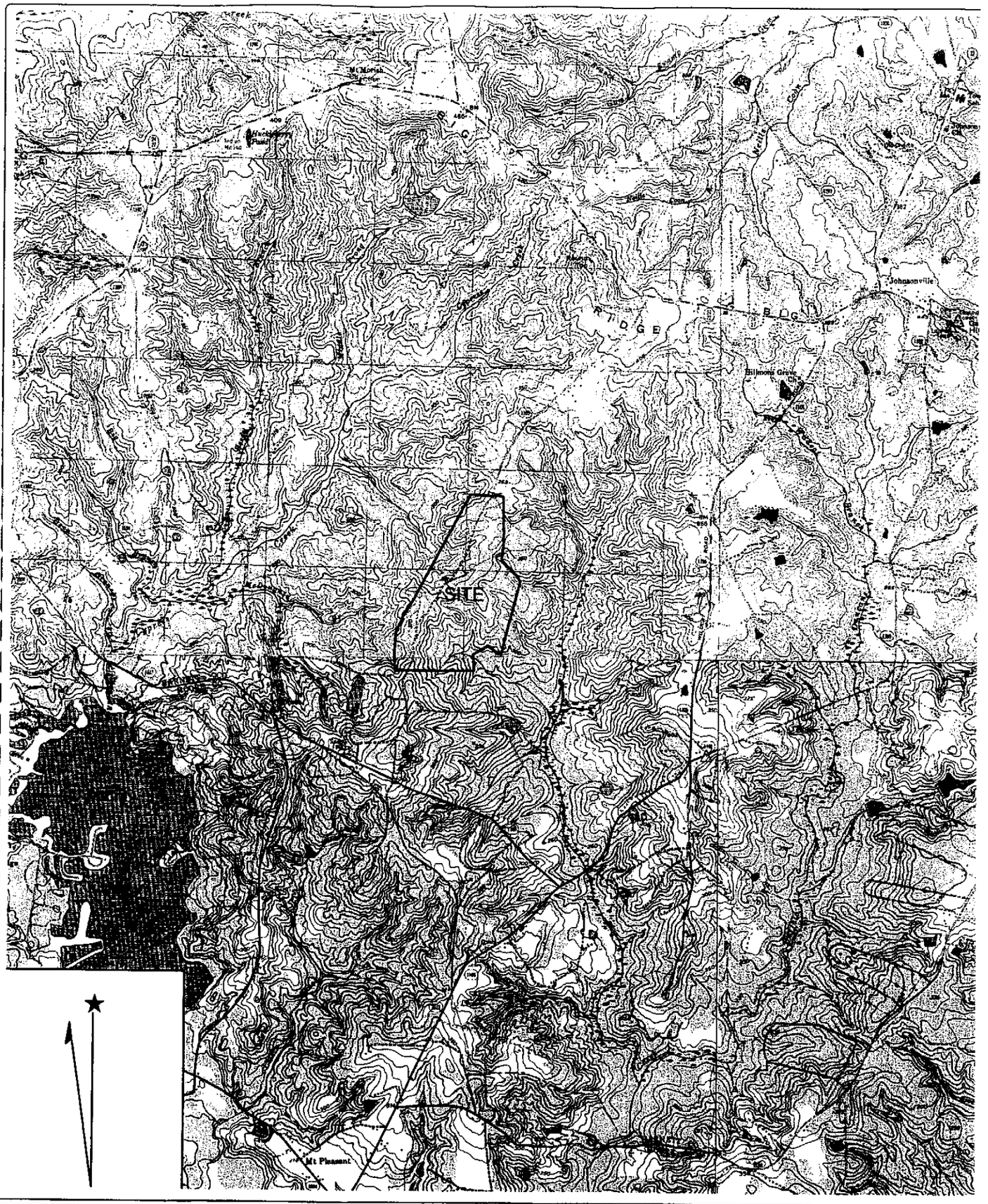
| Sampling Date: | 2L Standard | 11/10/2004 | 6/25/2005 | 10/26/2005 | 4/1/2006 | | |
|---|---|---|---|---|---|---|---|
| Well No: MW-13 | | | | | | | |
| *Arsenic* | 50 | ND | ND | ND | ND | | |
| *Barium* | 2000 | ND | ND | ND | ND | | |
| *Cadmium* | 1.75 | ND | ND | ND | ND | | |
| *Chromium* | 50 | ND | ND | ND | ND | | |
| *Lead* | 15 | ND | ND | ND | ND | | |
| *Mercury* | 1.05 | ND | ND | ND | ND | | |
| *Selenium* | 50 | ND | ND | ND | ND | | |
| *Silver* | 17.5 | ND | ND | ND | ND | | |

| Sampling Date: | 2L Standard | 11/10/2004 | 6/24/2005 | 10/26/2005 | 4/1/2006 | | |
|---|---|---|---|---|---|---|---|
| Well No: MW-14 | | | | | | | |
| *Arsenic* | 50 | ND | ND | ND | ND | | |
| *Barium* | 2000 | 100 | 120 | 120 | 101 | | |
| *Cadmium* | 1.75 | ND | ND | ND | ND | | |
| *Chromium* | 50 | ND | ND | ND | ND | | |
| *Lead* | 15 | ND | ND | ND | ND | | |
| *Mercury* | 1.05 | ND | ND | ND | ND | | |
| *Selenium* | 50 | ND | ND | ND | ND | | |
| *Silver* | 17.5 | ND | ND | ND | ND | | |

| Sampling Date: | 2L Standard | 11/10/2004 | 6/24/2005 | 10/26/2005 | 4/1/2006 | | |
|---|---|---|---|---|---|---|---|
| Well No: SW-1(Exp) | | | | | | | |
| *Arsenic* | 50 | ND | ND | ND | ND | | |
| *Barium* | 2000 | ND | ND | ND | ND | | |
| *Cadmium* | 1.75 | ND | ND | ND | ND | | |
| *Chromium* | 50 | ND | ND | ND | ND | | |
| *Lead* | 15 | ND | ND | ND | ND | | |
| *Mercury* | 1.05 | ND | ND | ND | ND | | |
| *Selenium* | 50 | ND | ND | ND | ND | | |
| *Silver* | 17.5 | ND | ND | ND | ND | | |

Notes: Results in parts per billion (ppb)
ND - Not Detected above the Practical Quantitation Limit
Laboratory results in bold exceed 2L standards
Initial sampling event conducted on 11/10/2004 by Withers& Ravenel.

# FIGURES

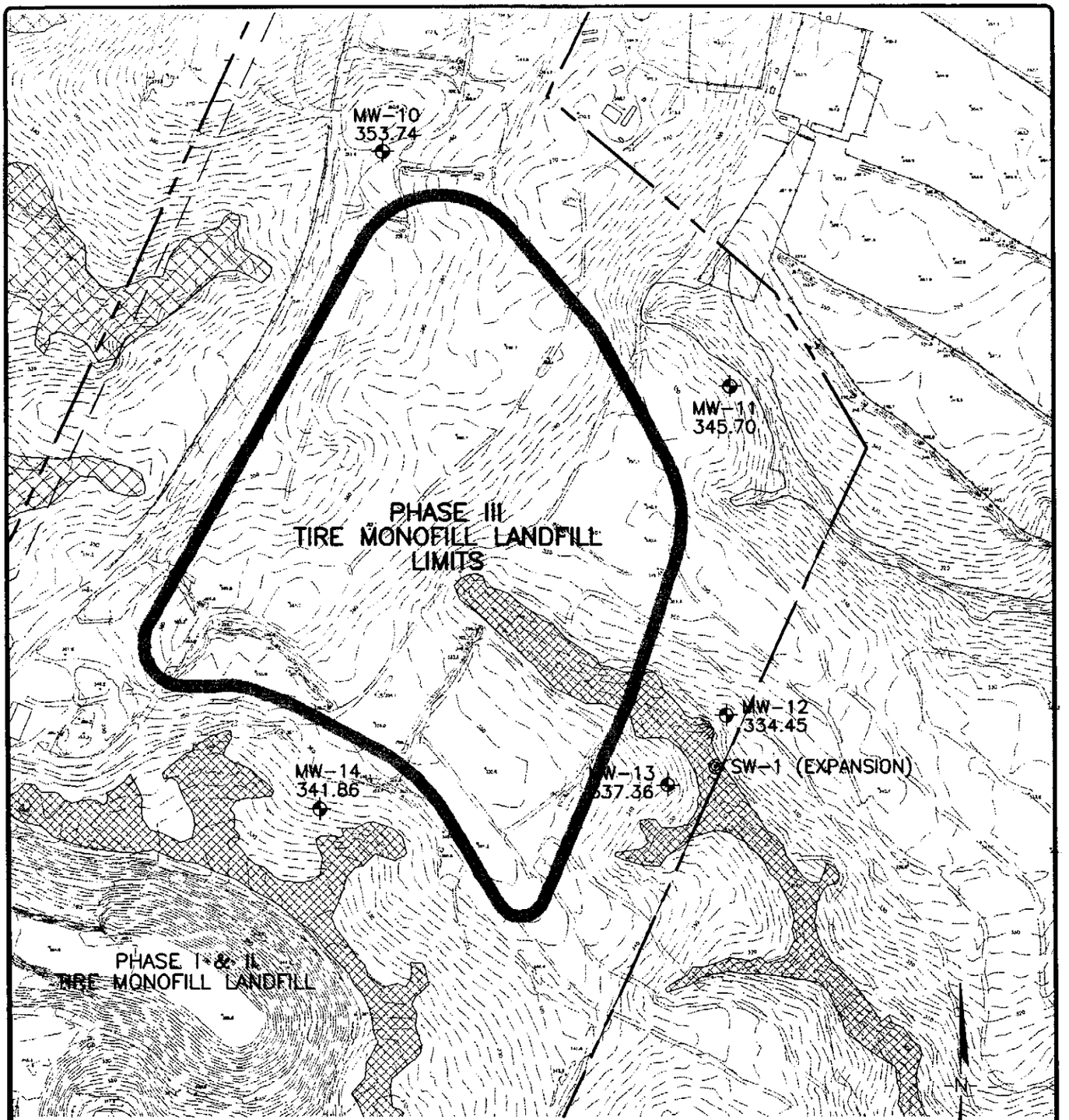



**WITHERS & RAVENEL**
ENGINEERS | PLANNERS | SURVEYORS
111 MacKenan Drive Cary, North Carolina 27511 www.witherasravenel.com
tel: 919-460-8006 fax: 919-535-4545

*CENTRAL CAROLINA TIRE*
*1616 McCoy Town Road*
*Cameron, North Carolina*

*USGS Murchistown, NC*
*7.5 min. Quadrangle*

| DRAWN BY: | SCALE: | FIGURE NO. |
|---|---|---|
| JMP | 1:1200 | 1 |
| APPROVED BY: | DATE: | JOB NO: |
| ML | 11/24/04 | 202334.0 |




**LEGEND**

| | |
|---|---|
| SW-1 (EXPANSION) | SURFACE WATER MONITORING LOCATION |
| MW-10 353.74 | GROUNDWATER MONITORING WELL W/ GROUND ELEVATION |
| | WETLANDS |
| | TOPOGRAPHIC CONTOUR |
| | PROPERTY BOUNDARY |

GRAPHIC SCALE 1"=400'

0 400 800 1200

**WITHERS & RAVENEL**
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www.withersravenel.com

| | | | |
|---|---|---|---|
| CENTRAL CAROLINA TIRE | DRAWN BY: DOU | SCALE: 1"=400' | FIGURE NO. 2 |
| PHASE III TIRE MONOFILL LANDFILL | APPROVED BY: JP | DATE: 11/24/04 | JOB NO: 202334.09 |

02\02-330\02334.09 GW Monitoring\CCT GW Monitoring\BORING PLAN phase 3.pro Thu May 4, 2006 11:36:35AM WITHERS & RAVENEL, Engineers Planners Surveyors

# APPENDIX A

## PRE-SAMPLING / WELL PURGING FIELD LOGS

**WITHERS & RAVENEL**

ENGINEERS | PLANNERS | SURVEYORS

# PRE-SAMPLING WELL PURGING

SAMPLED BY JMP

PROJECT Central Carolina Tire

PROJECT NUMBER 02020334.09

WELL NUMBER MW-10

DATE 4/1/06 PAGE 1 OF 1

WELL INSIDE DIAMETER 2 INCHES

AIR TEMPERATURE (FAHRENHEIT) HIGH 60's

DEPTH OF BOTTOM 27.0 FEET

WEATHER CONDITIONS MOSTLY OVERCAST, BRZY.

DEPTH TO WATER 13.71 FEET

1 WELL VOLUME 2.25 GALLONS

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED

PERISTALTIC PUMP / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

| FLUSHING | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME |
|---|---|---|---|---|---|
| WATER LEVEL BEFORE | 13.71 | | | | |
| WATER LEVEL AFTER | / | | | 13.90 | |
| TIME BEGIN FLUSHING | 1144 | | | | |
| TIME END FLUSHING | / | | | 1239 | |
| ESTIMATED VOLUME FLUSHING (gal) | 2.25 | 4.5 | 6.75 | 9.0 | |
| WELL VOLUMES REMOVED | 1 | 2 | 3 | 4 | |

| FIELD ANALYSIS | | | | | |
|---|---|---|---|---|---|
| WATER TEMPERATURE (°C) | 16.7 | 16.4 | 16.6 | 16.8 | |
| SAMPLE (ph) | 5.04 | 4.96 | 4.93 | 4.91 | |
| SAMPLE CONDUCTIVITY (umhos/cm) | 172 | 178 | 181 | 184 | |
| BUFFER BEFORE | | | | | |
| BUFFER AFTER | | | | | |
| ODOR | | | | | |
| COLOR | | | | | |
| Eh | | | | | |
| TURBIDITY | 0 | 10 | 9 | 10 | |

COMMENTS Sample Time = 1240

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

$\pi r^2 \times h$ = WELL VOLUME IN $FT^3$

$\pi$ = 3.14

R = RADIUS IN INCHES/12 = RADIUS IN FEET

H = HEIGHT OF WATER COLUMN IN WELL IN FEET

CONVERSION FROM $FT^3$ TO GALLONS = 7.48 gal/$ft^3$

Well radius = 1 IN/12= .0833 FT

h= 27.0 (WELL DEPTH) - 13.71 (DEPTH TO WATER) = 13.29 FT = h

3.14 x .00694 ($r^2$) x h = .290 $FT^3$ x 7.48 gal/$ft^3$ = 1 WELL VOLUME IN GAL = 2.17

**WITHERS & RAVENEL**

ENGINEERS | PLANNERS | SURVEYORS

# PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire

WELL NUMBER: MW-11

WELL INSIDE DIAMETER: 2 INCHES

DEPTH OF BOTTOM: 23.8 FEET

DEPTH TO WATER: 10.50 FEET

1 WELL VOLUME: 2.25 GALLONS

SAMPLED BY: JMP

PROJECT NUMBER: 02020334.09

DATE: 4/1/06 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): LOW 70'S

WEATHER CONDITIONS: MOSTLY OVERCAST, BREZY.

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED: PERISTALTIC PUMP / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

| FLUSHING | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME |
|---|---|---|---|---|---|
| WATER LEVEL BEFORE | 10.50 | | | | |
| WATER LEVEL AFTER | | | | 12.49 | |
| TIME BEGIN FLUSHING | 1102 | | | | |
| TIME END FLUSHING | | | | 1134 | |
| ESTIMATED VOLUME FLUSHING (gal) | 2.25 | 4.5 | 6.75 | 7.75 | |
| WELL VOLUMES REMOVED | 1 | 2 | 3 | ~3.5 | |

| FIELD ANALYSIS | | | | | |
|---|---|---|---|---|---|
| WATER TEMPERATURE (°C) | 16.1 | 16.0 | 15.9 | 16.0 | |
| SAMPLE (ph) | 5.43 | 5.52 | 5.51 | 5.50 | |
| SAMPLE CONDUCTIVITY (umhos/cm) | 9 | 12 | 11 | 10 | |
| BUFFER BEFORE | | | | | |
| BUFFER AFTER | | | | | |
| ODOR | | | | | |
| COLOR | CLEAR | → | → | → | |
| Eh | | | | | |
| TURBIDITY | 2 | 1 | 2 | 2 | |

COMMENTS: Sample Time = 1135

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

$\pi r^2 \times h$ = WELL VOLUME IN $FT^3$

$\pi = 3.14$

R = RADIUS IN INCHES/12 = RADIUS IN FEET

H = HEIGHT OF WATER COLUMN IN WELL IN FEET

CONVERSION FROM $FT^3$ TO GALLONS = 7.48 gal/$ft^3$

Well radius = 1 IN/12= .0833 FT

h= 23.8 (WELL DEPTH) - 10.50 (DEPTH TO WATER) = 13.3 FT = h

3.14 x .00694 ($r^2$) x h = .290 $FT^3$ x 7.48 gal/$ft^3$ = 1 WELL VOLUME IN GAL = 2.17

**WITHERS & RAVENEL**

ENGINEERS | PLANNERS | SURVEYORS

# PRE-SAMPLING WELL PURGING

PROJECT Central Carolina Tire

WELL NUMBER MW-12

WELL INSIDE DIAMETER 2 INCHES

DEPTH OF BOTTOM 21.6 FEET

DEPTH TO WATER 5.39 FEET

1 WELL VOLUME 2.75 GALLONS

SAMPLED BY JMP

PROJECT NUMBER 02020334.09

DATE 4/1/06 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT) HIGH 60's

WEATHER CONDITIONS MOSTLY CLR, LT. BRZ.

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED

PERISTALTIC PUMP / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

| FLUSHING | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME |
|---|---|---|---|---|---|
| WATER LEVEL BEFORE | 5.39 | | | | |
| WATER LEVEL AFTER | — | | (DRY) | | |
| TIME BEGIN FLUSHING | 0915 | | | | |
| TIME END FLUSHING | — | | | | |
| ESTIMATED VOLUME FLUSHING (gal) | 2.75 | 4.50 | 8.75 | | |
| WELL VOLUMES REMOVED | 1 | 2 | 3 | | |

| FIELD ANALYSIS | | | | | |
|---|---|---|---|---|---|
| WATER TEMPERATURE (°C) | 14.8 | 14.3 | 14.3 | | |
| SAMPLE (ph) | 6.02 | 6.28 | 6.19 | | |
| SAMPLE CONDUCTIVITY (umhos/cm) | 17 | 20 | 17 | | |
| BUFFER BEFORE | | | | | |
| BUFFER AFTER | | | | | |
| ODOR | | | | | |
| COLOR | VERY CLOUDY | → | → | | |
| Eh | | | | | |
| TURBIDITY | 782 | >999 | >999 | | |

COMMENTS Sample Time = 1029

* PUMPED WELL TO DRYNESS FOLLOWING 3rd WELL VOLUME: PURGED WELL @ 50% THROUGHOUT PURGE PROCESS.

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

$\pi r^2 \times h$ = WELL VOLUME IN $FT^3$

$\pi = 3.14$

R = RADIUS IN INCHES/12 = RADIUS IN FEET

H = HEIGHT OF WATER COLUMN IN WELL IN FEET

CONVERSION FROM $FT^3$ TO GALLONS = 7.48 gal/$ft^3$

Well radius = 1 IN/12= .0833 FT

h= 21.6 (WELL DEPTH) - 5.39 (DEPTH TO WATER) = 16.21 FT = h

3.14 x .00694 ($r^2$) x h = .352 $FT^3$ x 7.48 gal/$ft^3$ = 1 WELL VOLUME IN GAL = 2.62

**WITHERS & RAVENEL**

ENGINEERS | PLANNERS | SURVEYORS

# PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire

WELL NUMBER: MW-13

WELL INSIDE DIAMETER: 2 INCHES

DEPTH OF BOTTOM: 20.6 FEET

DEPTH TO WATER: 9.85 FEET

1 WELL VOLUME: 1.75 GALLONS

SAMPLED BY: JMP

PROJECT NUMBER: 02020334.09

DATE: 4/1/06 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): MID 60's

WEATHER CONDITIONS: MOSTLY OVERCAST, LT. BRZ

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED: PERISTALTIC PUMP / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

| FLUSHING | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME |
|---|---|---|---|---|---|
| WATER LEVEL BEFORE | 9.85 | | | | |
| WATER LEVEL AFTER | — | | | 10.76 | |
| TIME BEGIN FLUSHING | 1010 | | | | |
| TIME END FLUSHING | — | | | 10.41 | |
| ESTIMATED VOLUME FLUSHING (gal) | 1.75 | 3.5 | 5.25 | 6.0 | |
| WELL VOLUMES REMOVED | 1 | 2 | 3 | ~3.5 | |

| FIELD ANALYSIS | | | | | |
|---|---|---|---|---|---|
| WATER TEMPERATURE (°C) | 14.4 | 13.9 | 13.8 | 13.7 | |
| SAMPLE (ph) | 5.22 | 5.17 | 5.13 | 5.11 | |
| SAMPLE CONDUCTIVITY (umhos/cm) | 16 | 16 | 15 | 15 | |
| BUFFER BEFORE | | | | | |
| BUFFER AFTER | | | | | |
| ODOR | | | | | |
| COLOR | SOMEWHAT CLOUDY | CLEAR | → | → | |
| Eh | | | | | |
| TURBIDITY | 95 | 24 | 3 | 1 | |

COMMENTS: Sample Time = 1042

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

$\pi r^2 \times h$ = WELL VOLUME IN $FT^3$

$\pi = 3.14$

R = RADIUS IN INCHES/12 = RADIUS IN FEET

H = HEIGHT OF WATER COLUMN IN WELL IN FEET

CONVERSION FROM $FT^3$ TO GALLONS = 7.48 gal/$ft^3$

Well radius = 1 IN/12= .083 FT

h= 20.6 (WELL DEPTH) - 9.85 (DEPTH TO WATER) = 10.75 FT = h

3.14 x .00694 ($r^2$) x h = .234 $FT^3$ x 7.48 gal/$ft^3$ = 1 WELL VOLUME IN GAL = 1.75

**WITHERS & RAVENEL**

ENGINEERS | PLANNERS | SURVEYORS

# PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire

WELL NUMBER: MW-14

WELL INSIDE DIAMETER: 2 INCHES

DEPTH OF BOTTOM: 12.6 FEET

DEPTH TO WATER: 6.94 FEET

1 WELL VOLUME: 1.0 GALLONS

SAMPLED BY: JMP

PROJECT NUMBER: 02020334.09

DATE: 4/1/06 PAGE: 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): MID 60's

WEATHER CONDITIONS: MOSTLY OVERCAST, LT. BRZ

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED: PERISTALTIC PUMP / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

| | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME |
|---|---|---|---|---|---|
| **FLUSHING** | | | | | |
| WATER LEVEL BEFORE | 6.94 | | | | |
| WATER LEVEL AFTER | / | | | 8.15 | |
| TIME BEGIN FLUSHING | 0935 | | | | |
| TIME END FLUSHING | / | | | 1339 | |
| ESTIMATED VOLUME FLUSHING (gal) | 1.0 | 2.0 | 3.0 | 3.5 | |
| WELL VOLUMES REMOVED | 1 | 2 | 3 | ~3.5 | |
| **FIELD ANALYSIS** | | | | | |
| WATER TEMPERATURE (°C) | 14.4 | 14.4 | 14.7 | 14.8 | |
| SAMPLE (ph) | 5.32 | 4.74 | 4.69 | 4.70 | |
| SAMPLE CONDUCTIVITY (umhos/cm) | 98 | 87 | 85 | 85 | |
| BUFFER BEFORE | | | | | |
| BUFFER AFTER | | | | | |
| ODOR | | | | | |
| COLOR | CLOUDY | → | SLIGHTLY CLOUDY | CLEAR | |
| Eh | | | | | |
| TURBIDITY | 217 | 129 | 36 | 10 | |

COMMENTS: Sample Time = 1340

+ SLOWED PUMP TO 10% AFTER 1ST WELL VOLUME

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

$\pi r^2 \times h$ = WELL VOLUME IN $FT^3$

$\pi$ = 3.14

R = RADIUS IN INCHES/12 = RADIUS IN FEET

H = HEIGHT OF WATER COLUMN IN WELL IN FEET

CONVERSION FROM $FT^3$ TO GALLONS = 7.48 gal/$ft^3$

Well radius = 1 IN/12= .0833 FT

h= 12.6 (WELL DEPTH) - 6.94 (DEPTH TO WATER) = 5.66 FT = h

3.14 x .00694 ($r^2$) x h = .123 $FT^3$ x 7.48 gal/$ft^3$ = 1 WELL VOLUME IN GAL = 0.92

**WITHERS & RAVENEL**

ENGINEERS | PLANNERS | SURVEYORS

# PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire

WELL NUMBER: SW-1 (Expansion)

WELL INSIDE DIAMETER: NA INCHES

DEPTH OF BOTTOM: NA FEET

DEPTH TO WATER: _____ FEET

1 WELL VOLUME: _____ GALLONS

SAMPLED BY: JMP

PROJECT NUMBER: 02020334.09

DATE: 4/1/06 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): MID 60's

WEATHER CONDITIONS: MOSTLY OVERCAST, BRZY.

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED: TEFLON SCOOP / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

| | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME | WELL VOLUME |
|---|---|---|---|---|---|
| FLUSHING | | | | | |
| WATER LEVEL BEFORE | | | | | |
| WATER LEVEL AFTER | | | | | |
| TIME BEGIN FLUSHING | | | | | |
| TIME END FLUSHING | | | | | |
| ESTIMATED VOLUME FLUSHING (gal) | | | | | |
| WELL VOLUMES REMOVED | | | | | |
| FIELD ANALYSIS | | | | | |
| WATER TEMPERATURE (°C) | 13.7 | | | | |
| SAMPLE (ph) | 4.85 | | | | |
| SAMPLE CONDUCTIVITY (umhos/cm) | 36 | | | | |
| BUFFER BEFORE | | | | | |
| BUFFER AFTER | | | | | |
| ODOR | | | | | |
| COLOR | YELLOW | | | | |
| Eh | | | | | |
| TURBIDITY | 39 | | | | |

COMMENTS: Sample Time = 1205

* ORGANIC PARTICLES PRESENT IN SAMPLE

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

$\pi r^2 \times h$ = WELL VOLUME IN $FT^3$

$\pi$ = 3.14

Well radius = _____ IN/12 = _____ FT

h = _____ (WELL DEPTH) - _____ (DEPTH TO WATER) = _____ FT = h

3.14 x _____ $(r^2) \times h$ = _____ $FT^3 \times 7.48\ gal/ft^3$ = 1 WELL VOLUME IN GAL = _____

R = RADIUS IN INCHES/12 = RADIUS IN FEET

H = HEIGHT OF WATER COLUMN IN WELL IN FEET

CONVERSION FROM $FT^3$ TO GALLONS = 7.48 $gal/ft^3$

# ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

1015 Passport Way
Cary, NC 27513
(919) 677-1669 Fax (919) 677-9846



| | |
|---|---|
| Client Name: Withers & Ravenel Environmental (W 009) | Project Number: [none] |
| Address: 111 MacKenan Drive | Project Name/Desc: Central Carolina Tire Ph. III |
| City/ST/Zip: Cary, NC 27511 | PO # / Billing Info: 02020334.09 |
| Tel: (919) 469-3340 Fax: (919) 535-4545 | Reporting Contact: JOHN PALMER |
| Sampler(s) Name, Affiliation (Print): JOHN PALMER | Billing Contact: SAME |
| Sampler(s) Signature: [signature] | Facility # (if required) |

Requested Analyses: 8260B Appendix 1; As,Ba,Cd,Cr,Pb,Hg,Se,Ag

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due ___/___/___

Lab Workorder: C600578

Preservation (See Codes) (Combine as necessary)

| Item # | Sample ID (Field Identification) | Collection Date | Collection Time | Comp / Grab | Matrix (see codes) | Total # of Containers | 8260B Appendix 1 | As,Ba,Cd,Cr,Pb,Hg,Se,Ag | | | | | | | | | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SW-1 Expansion | 4/1/06 | 1205 | G | Water | 4 | X | X | | | | | | | | | |
| | MW-10 | | 1240 | | Water | 4 | X | X | | | | | | | | | |
| | MW-11 | | 1135 | | | | X | X | | | | | | | | | |
| | MW-12 | | 1029 | | | | X | X | | | | | | | | | |
| | MW-13 | | 1042 | | | | X | X | | | | | | | | | |
| | MW-14 | | 1340 | G | Water | 4 | X | X | | | | | | | | | |
| | TRIP BLANK | 4/1/06 | — | ~~G~~ | " | 3 | X | | | | | | | | | | |

<-- Total # of Containers

| Sample Kit Prepared By | Date/Time | Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|---|---|
| [signature] / SPF | 3/27/06 14:30 | [signature] | 1605 4/1/06 | [signature] | 3/31/06 4:10 |
| Comments | 3-28-06 | Relinquished By | Date/Time | Received By | Date/Time |
| | | Relinquished By | Date/Time | Received By | Date/Time |
| | | Cooler #'s & Temps on Receipt | | Condition Upon Receipt: ___ Acceptable ___ Unacceptable | |

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

# APPENDIX B

# LABORATORY ANALYTICAL RESULTS

**Environmental Conservation Laboratories, Inc.**
102-A Woodwinds Industrial Court
Cary NC, 27511
Phone: 919.467.3090 FAX: 919.467.3515
www.encolabs.com

Thursday, April 13, 2006

Withers & Ravenel Environmental (WI009)
Attn: John Palmer
111 MacKenan Drive
Cary, NC 27511

**RE: Project Number: [none], Project Name/Desc: Central Carolina Tire Ph. III**
**ENCO Workorder: C600578**

Dear John Palmer,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, March 31, 2006.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

This data has been produced in accordance with NELAC standards (June, 2003). This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Bob George For Chuck Smith
Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 29.

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## SAMPLE SUMMARY/LABORATORY CHRONICLE

**Client ID:** SW-1 Expansion **Lab ID:** C600578-01

**Sampled:** 03/31/06 12:05 **Received:** 03/31/06 17:00

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 09/27/06 | 04/03/06 10:41 | 4/7/2006 20:01 |
| EPA 7470A | 04/28/06 | 04/04/06 09:27 | 4/4/2006 15:32 |
| EPA 8260B | 04/14/06 | 04/04/06 09:42 | 4/4/2006 22:41 |

**Client ID:** MW-10 **Lab ID:** C600578-02

**Sampled:** 03/31/06 12:40 **Received:** 03/31/06 17:00

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 09/27/06 | 04/03/06 10:41 | 4/7/2006 20:08 |
| EPA 7470A | 04/28/06 | 04/04/06 09:27 | 4/4/2006 15:34 |
| EPA 8260B | 04/14/06 | 04/04/06 09:42 | 4/4/2006 23:07 |

**Client ID:** MW-11 **Lab ID:** C600578-03

**Sampled:** 03/31/06 11:35 **Received:** 03/31/06 17:00

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 09/27/06 | 04/03/06 10:41 | 4/7/2006 20:15 |
| EPA 7470A | 04/28/06 | 04/04/06 09:27 | 4/4/2006 15:36 |
| EPA 8260B | 04/14/06 | 04/04/06 09:42 | 4/4/2006 23:32 |

**Client ID:** MW-12 **Lab ID:** C600578-04

**Sampled:** 03/31/06 10:29 **Received:** 03/31/06 17:00

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 09/27/06 | 04/03/06 10:41 | 4/7/2006 20:36 |
| EPA 7470A | 04/28/06 | 04/04/06 09:27 | 4/4/2006 15:39 |
| EPA 8260B | 04/14/06 | 04/04/06 09:42 | 4/4/2006 23:58 |

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**Client ID:** MW-13 **Lab ID:** C600578-05

**Sampled:** 03/31/06 10:42 **Received:** 03/31/06 17:00

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 09/27/06 | 04/03/06 10:41 | 4/7/2006 20:43 |
| EPA 7470A | 04/28/06 | 04/04/06 09:27 | 4/4/2006 15:42 |
| EPA 8260B | 04/14/06 | 04/04/06 09:42 | 4/5/2006 00:24 |

**Client ID:** MW-14 **Lab ID:** C600578-06

**Sampled:** 03/31/06 13:40 **Received:** 03/31/06 17:00

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 6010B | 09/27/06 | 04/03/06 10:41 | 4/7/2006 20:50 |
| EPA 7470A | 04/28/06 | 04/04/06 09:27 | 4/4/2006 15:43 |
| EPA 8260B | 04/14/06 | 04/04/06 09:42 | 4/5/2006 00:49 |

**Client ID:** Trip Blank **Lab ID:** C600578-07

**Sampled:** 03/30/06 00:00 **Received:** 03/31/06 17:00

| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
|---|---|---|---|
| EPA 8260B | 04/13/06 | 04/04/06 09:42 | 4/5/2006 01:15 |

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## SAMPLE DETECTION SUMMARY

**Client ID:** MW-10 **Lab ID:** C600578-02

| Analyte | Results/Qual | MRL | Units | Method |
|---|---|---|---|---|
| Barium | 107 | 20.0 | ug/L | EPA 6010B |

**Client ID:** MW-14 **Lab ID:** C600578-06

| Analyte | Results/Qual | MRL | Units | Method |
|---|---|---|---|---|
| Barium | 101 | 20.0 | ug/L | EPA 6010B |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | SW-1 Expansion | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-01 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/04/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 1.0 U | 1.0 | ug/L |
| 1,1,1-Trichloroethane | 71-55-6 | 1.0 U | 1.0 | ug/L |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1.0 U | 1.0 | ug/L |
| 1,1,2-Trichloroethane | 79-00-5 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethane | 75-34-3 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethene | 75-35-4 | 1.0 U | 1.0 | ug/L |
| 1,2,3-Trichloropropane | 96-18-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromoethane | 106-93-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichlorobenzene | 95-50-1 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloroethane | 107-06-2 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloropropane | 78-87-5 | 1.0 U | 1.0 | ug/L |
| 1,4-Dichlorobenzene | 106-46-7 | 1.0 U | 1.0 | ug/L |
| 2-Butanone | 78-93-3 | 2.0 U | 2.0 | ug/L |
| 2-Hexanone | 591-78-6 | 2.0 U | 2.0 | ug/L |
| 4-Methyl-2-pentanone | 108-10-1 | 2.0 U | 2.0 | ug/L |
| Acetone | 67-64-1 | 2.0 U | 2.0 | ug/L |
| Acrylonitrile | 107-13-1 | 5.0 U | 5.0 | ug/L |
| Benzene | 71-43-2 | 1.0 U | 1.0 | ug/L |
| Bromochloromethane | 74-97-5 | 1.0 U | 1.0 | ug/L |
| Bromodichloromethane | 75-27-4 | 1.0 U | 1.0 | ug/L |
| Bromoform | 75-25-2 | 1.0 U | 1.0 | ug/L |
| Bromomethane | 74-83-9 | 1.0 U | 1.0 | ug/L |
| Carbon disulfide | 75-15-0 | 2.0 U | 2.0 | ug/L |
| Carbon tetrachloride | 56-23-5 | 1.0 U | 1.0 | ug/L |
| Chlorobenzene | 108-90-7 | 1.0 U | 1.0 | ug/L |
| Chloroethane | 75-00-3 | 1.0 U | 1.0 | ug/L |
| Chloroform | 67-66-3 | 1.0 U | 1.0 | ug/L |
| Chloromethane | 74-87-3 | 1.0 U | 1.0 | ug/L |
| cis-1,2-Dichloroethene | 156-59-2 | 1.0 U | 1.0 | ug/L |
| cis-1,3-Dichloropropene | 10061-01-5 | 1.0 U | 1.0 | ug/L |
| Dibromochloromethane | 124-48-1 | 1.0 U | 1.0 | ug/L |
| Dibromomethane | 74-95-3 | 1.0 U | 1.0 | ug/L |
| Ethylbenzene | 100-41-4 | 1.0 U | 1.0 | ug/L |
| Iodomethane | 74-88-4 | 2.0 U | 2.0 | ug/L |
| m,p-Xylenes | 108-38-3/106-42-3 | 2.0 U | 2.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | SW-1 Expansion | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-01 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/04/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Methylene chloride | 75-09-2 | 1.0 U | 1.0 | ug/L |
| o-Xylene | 95-47-6 | 1.0 U | 1.0 | ug/L |
| Styrene | 100-42-5 | 1.0 U | 1.0 | ug/L |
| Tetrachloroethene | 127-18-4 | 1.0 U | 1.0 | ug/L |
| Toluene | 108-88-3 | 1.0 U | 1.0 | ug/L |
| trans-1,2-Dichloroethene | 156-60-5 | 1.0 U | 1.0 | ug/L |
| trans-1,3-Dichloropropene | 10061-02-6 | 1.0 U | 1.0 | ug/L |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 1.0 U | 1.0 | ug/L |
| Trichloroethene | 79-01-6 | 1.0 U | 1.0 | ug/L |
| Trichlorofluoromethane | 75-69-4 | 1.0 U | 1.0 | ug/L |
| Vinyl acetate | 108-05-4 | 2.0 U | 2.0 | ug/L |
| Vinyl chloride | 75-01-4 | 1.0 U | 1.0 | ug/L |

| Surrogate Recovery | | Result | Spike Level | % Recovery | % Recovery Limits |
|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | 57.1 | 50.0 | 114 % | 70-130 |
| Dibromofluoromethane | 1868-53-7 | 58.3 | 50.0 | 117 % | 73-138 |
| Toluene-d8 | 2037-26-5 | 54.8 | 50.0 | 110 % | 77-118 |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | SW-1 Expansion | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-01 | Work Order #: | C600578 |
| | | Matrix: | Surface Water |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units | Analysis Method | Prep Method | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Mercury | 7439-97-6 | 0.20 U | 0.20 | ug/L | EPA 7470A | EPA 7470A | 6D04006 |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Arsenic | 7440-38-2 | 10.0 U | 10.0 | ug/L |
| Barium | 7440-39-3 | 20.0 U | 20.0 | ug/L |
| Cadmium | 7440-43-9 | 1.0 U | 1.0 | ug/L |
| Chromium | 7440-47-3 | 10.0 U | 10.0 | ug/L |
| Lead | 7439-92-1 | 10.0 U | 10.0 | ug/L |
| Selenium | 7782-49-2 | 10.0 U | 10.0 | ug/L |
| Silver | 7440-22-4 | 10.0 U | 10.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-10 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-02 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/04/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 1.0 U | 1.0 | ug/L |
| 1,1,1-Trichloroethane | 71-55-6 | 1.0 U | 1.0 | ug/L |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1.0 U | 1.0 | ug/L |
| 1,1,2-Trichloroethane | 79-00-5 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethane | 75-34-3 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethene | 75-35-4 | 1.0 U | 1.0 | ug/L |
| 1,2,3-Trichloropropane | 96-18-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromoethane | 106-93-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichlorobenzene | 95-50-1 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloroethane | 107-06-2 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloropropane | 78-87-5 | 1.0 U | 1.0 | ug/L |
| 1,4-Dichlorobenzene | 106-46-7 | 1.0 U | 1.0 | ug/L |
| 2-Butanone | 78-93-3 | 2.0 U | 2.0 | ug/L |
| 2-Hexanone | 591-78-6 | 2.0 U | 2.0 | ug/L |
| 4-Methyl-2-pentanone | 108-10-1 | 2.0 U | 2.0 | ug/L |
| Acetone | 67-64-1 | 2.0 U | 2.0 | ug/L |
| Acrylonitrile | 107-13-1 | 5.0 U | 5.0 | ug/L |
| Benzene | 71-43-2 | 1.0 U | 1.0 | ug/L |
| Bromochloromethane | 74-97-5 | 1.0 U | 1.0 | ug/L |
| Bromodichloromethane | 75-27-4 | 1.0 U | 1.0 | ug/L |
| Bromoform | 75-25-2 | 1.0 U | 1.0 | ug/L |
| Bromomethane | 74-83-9 | 1.0 U | 1.0 | ug/L |
| Carbon disulfide | 75-15-0 | 2.0 U | 2.0 | ug/L |
| Carbon tetrachloride | 56-23-5 | 1.0 U | 1.0 | ug/L |
| Chlorobenzene | 108-90-7 | 1.0 U | 1.0 | ug/L |
| Chloroethane | 75-00-3 | 1.0 U | 1.0 | ug/L |
| Chloroform | 67-66-3 | 1.0 U | 1.0 | ug/L |
| Chloromethane | 74-87-3 | 1.0 U | 1.0 | ug/L |
| cis-1,2-Dichloroethene | 156-59-2 | 1.0 U | 1.0 | ug/L |
| cis-1,3-Dichloropropene | 10061-01-5 | 1.0 U | 1.0 | ug/L |
| Dibromochloromethane | 124-48-1 | 1.0 U | 1.0 | ug/L |
| Dibromomethane | 74-95-3 | 1.0 U | 1.0 | ug/L |
| Ethylbenzene | 100-41-4 | 1.0 U | 1.0 | ug/L |
| Iodomethane | 74-88-4 | 2.0 U | 2.0 | ug/L |
| m,p-Xylenes | 108-38-3/106-42-3 | 2.0 U | 2.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-10 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-02 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/04/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Methylene chloride | 75-09-2 | 1.0 U | 1.0 | ug/L |
| o-Xylene | 95-47-6 | 1.0 U | 1.0 | ug/L |
| Styrene | 100-42-5 | 1.0 U | 1.0 | ug/L |
| Tetrachloroethene | 127-18-4 | 1.0 U | 1.0 | ug/L |
| Toluene | 108-88-3 | 1.0 U | 1.0 | ug/L |
| trans-1,2-Dichloroethene | 156-60-5 | 1.0 U | 1.0 | ug/L |
| trans-1,3-Dichloropropene | 10061-02-6 | 1.0 U | 1.0 | ug/L |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 1.0 U | 1.0 | ug/L |
| Trichloroethene | 79-01-6 | 1.0 U | 1.0 | ug/L |
| Trichlorofluoromethane | 75-69-4 | 1.0 U | 1.0 | ug/L |
| Vinyl acetate | 108-05-4 | 2.0 U | 2.0 | ug/L |
| Vinyl chloride | 75-01-4 | 1.0 U | 1.0 | ug/L |

| Surrogate Recovery | | Result | Spike Level | % Recovery | % Recovery Limits |
|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | 55.9 | 50.0 | 112 % | 70-130 |
| Dibromofluoromethane | 1868-53-7 | 55.7 | 50.0 | 111 % | 73-138 |
| Toluene-d8 | 2037-26-5 | 51.6 | 50.0 | 103 % | 77-118 |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-10 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-02 | Work Order #: | C600578 |
| | | Matrix: | Surface Water |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units | Analysis Method | Prep Method | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Mercury | 7439-97-6 | 0.20 U | 0.20 | ug/L | EPA 7470A | EPA 7470A | 6D04006 |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Arsenic | 7440-38-2 | 10.0 U | 10.0 | ug/L |
| **Barium** | 7440-39-3 | **107** | 20.0 | ug/L |
| Cadmium | 7440-43-9 | 1.0 U | 1.0 | ug/L |
| Chromium | 7440-47-3 | 10.0 U | 10.0 | ug/L |
| Lead | 7439-92-1 | 10.0 U | 10.0 | ug/L |
| Selenium | 7782-49-2 | 10.0 U | 10.0 | ug/L |
| Silver | 7440-22-4 | 10.0 U | 10.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-11 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-03 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/04/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 1.0 U | 1.0 | ug/L |
| 1,1,1-Trichloroethane | 71-55-6 | 1.0 U | 1.0 | ug/L |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1.0 U | 1.0 | ug/L |
| 1,1,2-Trichloroethane | 79-00-5 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethane | 75-34-3 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethene | 75-35-4 | 1.0 U | 1.0 | ug/L |
| 1,2,3-Trichloropropane | 96-18-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromoethane | 106-93-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichlorobenzene | 95-50-1 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloroethane | 107-06-2 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloropropane | 78-87-5 | 1.0 U | 1.0 | ug/L |
| 1,4-Dichlorobenzene | 106-46-7 | 1.0 U | 1.0 | ug/L |
| 2-Butanone | 78-93-3 | 2.0 U | 2.0 | ug/L |
| 2-Hexanone | 591-78-6 | 2.0 U | 2.0 | ug/L |
| 4-Methyl-2-pentanone | 108-10-1 | 2.0 U | 2.0 | ug/L |
| Acetone | 67-64-1 | 2.0 U | 2.0 | ug/L |
| Acrylonitrile | 107-13-1 | 5.0 U | 5.0 | ug/L |
| Benzene | 71-43-2 | 1.0 U | 1.0 | ug/L |
| Bromochloromethane | 74-97-5 | 1.0 U | 1.0 | ug/L |
| Bromodichloromethane | 75-27-4 | 1.0 U | 1.0 | ug/L |
| Bromoform | 75-25-2 | 1.0 U | 1.0 | ug/L |
| Bromomethane | 74-83-9 | 1.0 U | 1.0 | ug/L |
| Carbon disulfide | 75-15-0 | 2.0 U | 2.0 | ug/L |
| Carbon tetrachloride | 56-23-5 | 1.0 U | 1.0 | ug/L |
| Chlorobenzene | 108-90-7 | 1.0 U | 1.0 | ug/L |
| Chloroethane | 75-00-3 | 1.0 U | 1.0 | ug/L |
| Chloroform | 67-66-3 | 1.0 U | 1.0 | ug/L |
| Chloromethane | 74-87-3 | 1.0 U | 1.0 | ug/L |
| cis-1,2-Dichloroethene | 156-59-2 | 1.0 U | 1.0 | ug/L |
| cis-1,3-Dichloropropene | 10061-01-5 | 1.0 U | 1.0 | ug/L |
| Dibromochloromethane | 124-48-1 | 1.0 U | 1.0 | ug/L |
| Dibromomethane | 74-95-3 | 1.0 U | 1.0 | ug/L |
| Ethylbenzene | 100-41-4 | 1.0 U | 1.0 | ug/L |
| Iodomethane | 74-88-4 | 2.0 U | 2.0 | ug/L |
| m,p-Xylenes | 108-38-3/106-42-3 | 2.0 U | 2.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-11 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-03 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/04/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Methylene chloride | 75-09-2 | 1.0 U | 1.0 | ug/L |
| o-Xylene | 95-47-6 | 1.0 U | 1.0 | ug/L |
| Styrene | 100-42-5 | 1.0 U | 1.0 | ug/L |
| Tetrachloroethene | 127-18-4 | 1.0 U | 1.0 | ug/L |
| Toluene | 108-88-3 | 1.0 U | 1.0 | ug/L |
| trans-1,2-Dichloroethene | 156-60-5 | 1.0 U | 1.0 | ug/L |
| trans-1,3-Dichloropropene | 10061-02-6 | 1.0 U | 1.0 | ug/L |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 1.0 U | 1.0 | ug/L |
| Trichloroethene | 79-01-6 | 1.0 U | 1.0 | ug/L |
| Trichlorofluoromethane | 75-69-4 | 1.0 U | 1.0 | ug/L |
| Vinyl acetate | 108-05-4 | 2.0 U | 2.0 | ug/L |
| Vinyl chloride | 75-01-4 | 1.0 U | 1.0 | ug/L |

| Surrogate Recovery | | Result | Spike Level | % Recovery | % Recovery Limits |
|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | 57.2 | 50.0 | 114 % | 70-130 |
| Dibromofluoromethane | 1868-53-7 | 56.2 | 50.0 | 112 % | 73-138 |
| Toluene-d8 | 2037-26-5 | 53.0 | 50.0 | 106 % | 77-118 |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-11 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-03 | Work Order #: | C600578 |
| | | Matrix: | Surface Water |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units | Analysis Method | Prep Method | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Mercury | 7439-97-6 | 0.20 U | 0.20 | ug/L | EPA 7470A | EPA 7470A | 6D04006 |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Arsenic | 7440-38-2 | 10.0 U | 10.0 | ug/L |
| Barium | 7440-39-3 | 20.0 U | 20.0 | ug/L |
| Cadmium | 7440-43-9 | 1.0 U | 1.0 | ug/L |
| Chromium | 7440-47-3 | 10.0 U | 10.0 | ug/L |
| Lead | 7439-92-1 | 10.0 U | 10.0 | ug/L |
| Selenium | 7782-49-2 | 10.0 U | 10.0 | ug/L |
| Silver | 7440-22-4 | 10.0 U | 10.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-12 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-04 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/04/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 1.0 U | 1.0 | ug/L |
| 1,1,1-Trichloroethane | 71-55-6 | 1.0 U | 1.0 | ug/L |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1.0 U | 1.0 | ug/L |
| 1,1,2-Trichloroethane | 79-00-5 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethane | 75-34-3 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethene | 75-35-4 | 1.0 U | 1.0 | ug/L |
| 1,2,3-Trichloropropane | 96-18-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromoethane | 106-93-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichlorobenzene | 95-50-1 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloroethane | 107-06-2 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloropropane | 78-87-5 | 1.0 U | 1.0 | ug/L |
| 1,4-Dichlorobenzene | 106-46-7 | 1.0 U | 1.0 | ug/L |
| 2-Butanone | 78-93-3 | 2.0 U | 2.0 | ug/L |
| 2-Hexanone | 591-78-6 | 2.0 U | 2.0 | ug/L |
| 4-Methyl-2-pentanone | 108-10-1 | 2.0 U | 2.0 | ug/L |
| Acetone | 67-64-1 | 2.0 U | 2.0 | ug/L |
| Acrylonitrile | 107-13-1 | 5.0 U | 5.0 | ug/L |
| Benzene | 71-43-2 | 1.0 U | 1.0 | ug/L |
| Bromochloromethane | 74-97-5 | 1.0 U | 1.0 | ug/L |
| Bromodichloromethane | 75-27-4 | 1.0 U | 1.0 | ug/L |
| Bromoform | 75-25-2 | 1.0 U | 1.0 | ug/L |
| Bromomethane | 74-83-9 | 1.0 U | 1.0 | ug/L |
| Carbon disulfide | 75-15-0 | 2.0 U | 2.0 | ug/L |
| Carbon tetrachloride | 56-23-5 | 1.0 U | 1.0 | ug/L |
| Chlorobenzene | 108-90-7 | 1.0 U | 1.0 | ug/L |
| Chloroethane | 75-00-3 | 1.0 U | 1.0 | ug/L |
| Chloroform | 67-66-3 | 1.0 U | 1.0 | ug/L |
| Chloromethane | 74-87-3 | 1.0 U | 1.0 | ug/L |
| cis-1,2-Dichloroethene | 156-59-2 | 1.0 U | 1.0 | ug/L |
| cis-1,3-Dichloropropene | 10061-01-5 | 1.0 U | 1.0 | ug/L |
| Dibromochloromethane | 124-48-1 | 1.0 U | 1.0 | ug/L |
| Dibromomethane | 74-95-3 | 1.0 U | 1.0 | ug/L |
| Ethylbenzene | 100-41-4 | 1.0 U | 1.0 | ug/L |
| Iodomethane | 74-88-4 | 2.0 U | 2.0 | ug/L |
| m,p-Xylenes | 108-38-3/106-42-3 | 2.0 U | 2.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-12 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-04 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/04/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Methylene chloride | 75-09-2 | 1.0 U | 1.0 | ug/L |
| o-Xylene | 95-47-6 | 1.0 U | 1.0 | ug/L |
| Styrene | 100-42-5 | 1.0 U | 1.0 | ug/L |
| Tetrachloroethene | 127-18-4 | 1.0 U | 1.0 | ug/L |
| Toluene | 108-88-3 | 1.0 U | 1.0 | ug/L |
| trans-1,2-Dichloroethene | 156-60-5 | 1.0 U | 1.0 | ug/L |
| trans-1,3-Dichloropropene | 10061-02-6 | 1.0 U | 1.0 | ug/L |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 1.0 U | 1.0 | ug/L |
| Trichloroethene | 79-01-6 | 1.0 U | 1.0 | ug/L |
| Trichlorofluoromethane | 75-69-4 | 1.0 U | 1.0 | ug/L |
| Vinyl acetate | 108-05-4 | 2.0 U | 2.0 | ug/L |
| Vinyl chloride | 75-01-4 | 1.0 U | 1.0 | ug/L |

| Surrogate Recovery | | Result | Spike Level | % Recovery | % Recovery Limits |
|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | 59.1 | 50.0 | 118 % | 70-130 |
| Dibromofluoromethane | 1868-53-7 | 55.7 | 50.0 | 111 % | 73-138 |
| Toluene-d8 | 2037-26-5 | 54.1 | 50.0 | 108 % | 77-118 |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-12 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-04 | Work Order #: | C600578 |
| | | Matrix: | Surface Water |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units | Analysis Method | Prep Method | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Mercury | 7439-97-6 | 0.20 U | 0.20 | ug/L | EPA 7470A | EPA 7470A | 6D04006 |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Arsenic | 7440-38-2 | 10.0 U | 10.0 | ug/L |
| Barium | 7440-39-3 | 20.0 U | 20.0 | ug/L |
| Cadmium | 7440-43-9 | 1.0 U | 1.0 | ug/L |
| Chromium | 7440-47-3 | 10.0 U | 10.0 | ug/L |
| Lead | 7439-92-1 | 10.0 U | 10.0 | ug/L |
| Selenium | 7782-49-2 | 10.0 U | 10.0 | ug/L |
| Silver | 7440-22-4 | 10.0 U | 10.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-13 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-05 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/05/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 1.0 U | 1.0 | ug/L |
| 1,1,1-Trichloroethane | 71-55-6 | 1.0 U | 1.0 | ug/L |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1.0 U | 1.0 | ug/L |
| 1,1,2-Trichloroethane | 79-00-5 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethane | 75-34-3 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethene | 75-35-4 | 1.0 U | 1.0 | ug/L |
| 1,2,3-Trichloropropane | 96-18-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromoethane | 106-93-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichlorobenzene | 95-50-1 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloroethane | 107-06-2 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloropropane | 78-87-5 | 1.0 U | 1.0 | ug/L |
| 1,4-Dichlorobenzene | 106-46-7 | 1.0 U | 1.0 | ug/L |
| 2-Butanone | 78-93-3 | 2.0 U | 2.0 | ug/L |
| 2-Hexanone | 591-78-6 | 2.0 U | 2.0 | ug/L |
| 4-Methyl-2-pentanone | 108-10-1 | 2.0 U | 2.0 | ug/L |
| Acetone | 67-64-1 | 2.0 U | 2.0 | ug/L |
| Acrylonitrile | 107-13-1 | 5.0 U | 5.0 | ug/L |
| Benzene | 71-43-2 | 1.0 U | 1.0 | ug/L |
| Bromochloromethane | 74-97-5 | 1.0 U | 1.0 | ug/L |
| Bromodichloromethane | 75-27-4 | 1.0 U | 1.0 | ug/L |
| Bromoform | 75-25-2 | 1.0 U | 1.0 | ug/L |
| Bromomethane | 74-83-9 | 1.0 U | 1.0 | ug/L |
| Carbon disulfide | 75-15-0 | 2.0 U | 2.0 | ug/L |
| Carbon tetrachloride | 56-23-5 | 1.0 U | 1.0 | ug/L |
| Chlorobenzene | 108-90-7 | 1.0 U | 1.0 | ug/L |
| Chloroethane | 75-00-3 | 1.0 U | 1.0 | ug/L |
| Chloroform | 67-66-3 | 1.0 U | 1.0 | ug/L |
| Chloromethane | 74-87-3 | 1.0 U | 1.0 | ug/L |
| cis-1,2-Dichloroethene | 156-59-2 | 1.0 U | 1.0 | ug/L |
| cis-1,3-Dichloropropene | 10061-01-5 | 1.0 U | 1.0 | ug/L |
| Dibromochloromethane | 124-48-1 | 1.0 U | 1.0 | ug/L |
| Dibromomethane | 74-95-3 | 1.0 U | 1.0 | ug/L |
| Ethylbenzene | 100-41-4 | 1.0 U | 1.0 | ug/L |
| Iodomethane | 74-88-4 | 2.0 U | 2.0 | ug/L |
| m,p-Xylenes | 108-38-3/106-42-3 | 2.0 U | 2.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-13 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-05 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/05/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Methylene chloride | 75-09-2 | 1.0 U | 1.0 | ug/L |
| o-Xylene | 95-47-6 | 1.0 U | 1.0 | ug/L |
| Styrene | 100-42-5 | 1.0 U | 1.0 | ug/L |
| Tetrachloroethene | 127-18-4 | 1.0 U | 1.0 | ug/L |
| Toluene | 108-88-3 | 1.0 U | 1.0 | ug/L |
| trans-1,2-Dichloroethene | 156-60-5 | 1.0 U | 1.0 | ug/L |
| trans-1,3-Dichloropropene | 10061-02-6 | 1.0 U | 1.0 | ug/L |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 1.0 U | 1.0 | ug/L |
| Trichloroethene | 79-01-6 | 1.0 U | 1.0 | ug/L |
| Trichlorofluoromethane | 75-69-4 | 1.0 U | 1.0 | ug/L |
| Vinyl acetate | 108-05-4 | 2.0 U | 2.0 | ug/L |
| Vinyl chloride | 75-01-4 | 1.0 U | 1.0 | ug/L |

| Surrogate Recovery | | Result | Spike Level | % Recovery | % Recovery Limits |
|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | 58.1 | 50.0 | 116 % | 70-130 |
| Dibromofluoromethane | 1868-53-7 | 57.3 | 50.0 | 115 % | 73-138 |
| Toluene-d8 | 2037-26-5 | 56.3 | 50.0 | 113 % | 77-118 |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-13 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-05 | Work Order #: | C600578 |
| | | Matrix: | Surface Water |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units | Analysis Method | Prep Method | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Mercury | 7439-97-6 | 0.20 U | 0.20 | ug/L | EPA 7470A | EPA 7470A | 6D04006 |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Arsenic | 7440-38-2 | 10.0 U | 10.0 | ug/L |
| Barium | 7440-39-3 | 20.0 U | 20.0 | ug/L |
| Cadmium | 7440-43-9 | 1.0 U | 1.0 | ug/L |
| Chromium | 7440-47-3 | 10.0 U | 10.0 | ug/L |
| Lead | 7439-92-1 | 10.0 U | 10.0 | ug/L |
| Selenium | 7782-49-2 | 10.0 U | 10.0 | ug/L |
| Silver | 7440-22-4 | 10.0 U | 10.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-14 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-06 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/05/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 1.0 U | 1.0 | ug/L |
| 1,1,1-Trichloroethane | 71-55-6 | 1.0 U | 1.0 | ug/L |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1.0 U | 1.0 | ug/L |
| 1,1,2-Trichloroethane | 79-00-5 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethane | 75-34-3 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethene | 75-35-4 | 1.0 U | 1.0 | ug/L |
| 1,2,3-Trichloropropane | 96-18-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromoethane | 106-93-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichlorobenzene | 95-50-1 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloroethane | 107-06-2 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloropropane | 78-87-5 | 1.0 U | 1.0 | ug/L |
| 1,4-Dichlorobenzene | 106-46-7 | 1.0 U | 1.0 | ug/L |
| 2-Butanone | 78-93-3 | 2.0 U | 2.0 | ug/L |
| 2-Hexanone | 591-78-6 | 2.0 U | 2.0 | ug/L |
| 4-Methyl-2-pentanone | 108-10-1 | 2.0 U | 2.0 | ug/L |
| Acetone | 67-64-1 | 2.0 U | 2.0 | ug/L |
| Acrylonitrile | 107-13-1 | 5.0 U | 5.0 | ug/L |
| Benzene | 71-43-2 | 1.0 U | 1.0 | ug/L |
| Bromochloromethane | 74-97-5 | 1.0 U | 1.0 | ug/L |
| Bromodichloromethane | 75-27-4 | 1.0 U | 1.0 | ug/L |
| Bromoform | 75-25-2 | 1.0 U | 1.0 | ug/L |
| Bromomethane | 74-83-9 | 1.0 U | 1.0 | ug/L |
| Carbon disulfide | 75-15-0 | 2.0 U | 2.0 | ug/L |
| Carbon tetrachloride | 56-23-5 | 1.0 U | 1.0 | ug/L |
| Chlorobenzene | 108-90-7 | 1.0 U | 1.0 | ug/L |
| Chloroethane | 75-00-3 | 1.0 U | 1.0 | ug/L |
| Chloroform | 67-66-3 | 1.0 U | 1.0 | ug/L |
| Chloromethane | 74-87-3 | 1.0 U | 1.0 | ug/L |
| cis-1,2-Dichloroethene | 156-59-2 | 1.0 U | 1.0 | ug/L |
| cis-1,3-Dichloropropene | 10061-01-5 | 1.0 U | 1.0 | ug/L |
| Dibromochloromethane | 124-48-1 | 1.0 U | 1.0 | ug/L |
| Dibromomethane | 74-95-3 | 1.0 U | 1.0 | ug/L |
| Ethylbenzene | 100-41-4 | 1.0 U | 1.0 | ug/L |
| Iodomethane | 74-88-4 | 2.0 U | 2.0 | ug/L |
| m,p-Xylenes | 108-38-3/106-42-3 | 2.0 U | 2.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-14 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-06 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/05/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Methylene chloride | 75-09-2 | 1.0 U | 1.0 | ug/L |
| o-Xylene | 95-47-6 | 1.0 U | 1.0 | ug/L |
| Styrene | 100-42-5 | 1.0 U | 1.0 | ug/L |
| Tetrachloroethene | 127-18-4 | 1.0 U | 1.0 | ug/L |
| Toluene | 108-88-3 | 1.0 U | 1.0 | ug/L |
| trans-1,2-Dichloroethene | 156-60-5 | 1.0 U | 1.0 | ug/L |
| trans-1,3-Dichloropropene | 10061-02-6 | 1.0 U | 1.0 | ug/L |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 1.0 U | 1.0 | ug/L |
| Trichloroethene | 79-01-6 | 1.0 U | 1.0 | ug/L |
| Trichlorofluoromethane | 75-69-4 | 1.0 U | 1.0 | ug/L |
| Vinyl acetate | 108-05-4 | 2.0 U | 2.0 | ug/L |
| Vinyl chloride | 75-01-4 | 1.0 U | 1.0 | ug/L |

| Surrogate Recovery | | Result | Spike Level | % Recovery | % Recovery Limits |
|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | 60.8 | 50.0 | 122 % | 70-130 |
| Dibromofluoromethane | 1868-53-7 | 54.1 | 50.0 | 108 % | 73-138 |
| Toluene-d8 | 2037-26-5 | 52.3 | 50.0 | 105 % | 77-118 |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | MW-14 | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-06 | Work Order #: | C600578 |
| | | Matrix: | Surface Water |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units | Analysis Method | Prep Method | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Mercury | 7439-97-6 | 0.20 U | 0.20 | ug/L | EPA 7470A | EPA 7470A | 6D04006 |

**Metals by EPA 6000/7000 Series Methods**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Arsenic | 7440-38-2 | 10.0 U | 10.0 | ug/L |
| **Barium** | 7440-39-3 | **101** | 20.0 | ug/L |
| Cadmium | 7440-43-9 | 1.0 U | 1.0 | ug/L |
| Chromium | 7440-47-3 | 10.0 U | 10.0 | ug/L |
| Lead | 7439-92-1 | 10.0 U | 10.0 | ug/L |
| Selenium | 7782-49-2 | 10.0 U | 10.0 | ug/L |
| Silver | 7440-22-4 | 10.0 U | 10.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | Trip Blank | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-07 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/05/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 1.0 U | 1.0 | ug/L |
| 1,1,1-Trichloroethane | 71-55-6 | 1.0 U | 1.0 | ug/L |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1.0 U | 1.0 | ug/L |
| 1,1,2-Trichloroethane | 79-00-5 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethane | 75-34-3 | 1.0 U | 1.0 | ug/L |
| 1,1-Dichloroethene | 75-35-4 | 1.0 U | 1.0 | ug/L |
| 1,2,3-Trichloropropane | 96-18-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 1.0 U | 1.0 | ug/L |
| 1,2-Dibromoethane | 106-93-4 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichlorobenzene | 95-50-1 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloroethane | 107-06-2 | 1.0 U | 1.0 | ug/L |
| 1,2-Dichloropropane | 78-87-5 | 1.0 U | 1.0 | ug/L |
| 1,4-Dichlorobenzene | 106-46-7 | 1.0 U | 1.0 | ug/L |
| 2-Butanone | 78-93-3 | 2.0 U | 2.0 | ug/L |
| 2-Hexanone | 591-78-6 | 2.0 U | 2.0 | ug/L |
| 4-Methyl-2-pentanone | 108-10-1 | 2.0 U | 2.0 | ug/L |
| Acetone | 67-64-1 | 2.0 U | 2.0 | ug/L |
| Acrylonitrile | 107-13-1 | 5.0 U | 5.0 | ug/L |
| Benzene | 71-43-2 | 1.0 U | 1.0 | ug/L |
| Bromochloromethane | 74-97-5 | 1.0 U | 1.0 | ug/L |
| Bromodichloromethane | 75-27-4 | 1.0 U | 1.0 | ug/L |
| Bromoform | 75-25-2 | 1.0 U | 1.0 | ug/L |
| Bromomethane | 74-83-9 | 1.0 U | 1.0 | ug/L |
| Carbon disulfide | 75-15-0 | 2.0 U | 2.0 | ug/L |
| Carbon tetrachloride | 56-23-5 | 1.0 U | 1.0 | ug/L |
| Chlorobenzene | 108-90-7 | 1.0 U | 1.0 | ug/L |
| Chloroethane | 75-00-3 | 1.0 U | 1.0 | ug/L |
| Chloroform | 67-66-3 | 1.0 U | 1.0 | ug/L |
| Chloromethane | 74-87-3 | 1.0 U | 1.0 | ug/L |
| cis-1,2-Dichloroethene | 156-59-2 | 1.0 U | 1.0 | ug/L |
| cis-1,3-Dichloropropene | 10061-01-5 | 1.0 U | 1.0 | ug/L |
| Dibromochloromethane | 124-48-1 | 1.0 U | 1.0 | ug/L |
| Dibromomethane | 74-95-3 | 1.0 U | 1.0 | ug/L |
| Ethylbenzene | 100-41-4 | 1.0 U | 1.0 | ug/L |
| Iodomethane | 74-88-4 | 2.0 U | 2.0 | ug/L |
| m,p-Xylenes | 108-38-3/106-42-3 | 2.0 U | 2.0 | ug/L |

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# ANALYTICAL REPORT

| | | | |
|---|---|---|---|
| Sample ID: | Trip Blank | Project: | Central Carolina Tire Ph. III |
| Lab #: | C600578-07 | Work Order #: | C600578 |
| Prep. Method: | EPA 5030B_MS | Matrix: | Surface Water |
| Analyzed: | 04/05/06 By: spf | Unit: | ug/L |
| Anal. Method: | EPA 8260B | Dilution Factor: | 1 |
| Anal. Batch: | | | |
| QC Batch: | 6D04008 | | |

**Volatile Organic Compounds by GCMS**

| Parameter | CAS Number | Analytical Results | MRL | Units |
|---|---|---|---|---|
| Methylene chloride | 75-09-2 | 1.0 U | 1.0 | ug/L |
| o-Xylene | 95-47-6 | 1.0 U | 1.0 | ug/L |
| Styrene | 100-42-5 | 1.0 U | 1.0 | ug/L |
| Tetrachloroethene | 127-18-4 | 1.0 U | 1.0 | ug/L |
| Toluene | 108-88-3 | 1.0 U | 1.0 | ug/L |
| trans-1,2-Dichloroethene | 156-60-5 | 1.0 U | 1.0 | ug/L |
| trans-1,3-Dichloropropene | 10061-02-6 | 1.0 U | 1.0 | ug/L |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 1.0 U | 1.0 | ug/L |
| Trichloroethene | 79-01-6 | 1.0 U | 1.0 | ug/L |
| Trichlorofluoromethane | 75-69-4 | 1.0 U | 1.0 | ug/L |
| Vinyl acetate | 108-05-4 | 2.0 U | 2.0 | ug/L |
| Vinyl chloride | 75-01-4 | 1.0 U | 1.0 | ug/L |

**Surrogate Recovery**

| | | Result | Spike Level | % Recovery | % Recovery Limits |
|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | 53.7 | 50.0 | 107 % | 70-130 |
| Dibromofluoromethane | 1868-53-7 | 56.7 | 50.0 | 113 % | 73-138 |
| Toluene-d8 | 2037-26-5 | 53.2 | 50.0 | 106 % | 77-118 |

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# QUALITY CONTROL

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Sanple Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by GCMS - Quality Control** | | | | | | | | | | |
| *Batch 6D04008 - EPA 5030B_MS* | | | | | | | | | | |
| **Blank (6D04008-BLK1)** | | | | | | | | | | |
| Prepared: 04/04/2006 08:42 Analyzed: 04/04/2006 10:33 | | | | | | | | | | |
| Acetone | 2.0 U | 2.0 | ug/L | | | | | | | |
| Acrylonitrile | 5.0 U | 5.0 | ug/L | | | | | | | |
| Benzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 2-Butanone | 2.0 U | 2.0 | ug/L | | | | | | | |
| 2-Hexanone | 2.0 U | 2.0 | ug/L | | | | | | | |
| Iodomethane | 2.0 U | 2.0 | ug/L | | | | | | | |
| Tetrachloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 4-Methyl-2-pentanone | 2.0 U | 2.0 | ug/L | | | | | | | |
| Bromochloromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Trichloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| Bromodichloromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Bromoform | 1.0 U | 1.0 | ug/L | | | | | | | |
| Bromomethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Carbon disulfide | 2.0 U | 2.0 | ug/L | | | | | | | |
| Carbon tetrachloride | 1.0 U | 1.0 | ug/L | | | | | | | |
| Chlorobenzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| Chloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Chloroform | 1.0 U | 1.0 | ug/L | | | | | | | |
| Chloromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Dibromochloromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromoethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Dibromomethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| trans-1,4-Dichloro-2-butene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| cis-1,2-Dichloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| trans-1,2-Dichloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloropropane | 1.0 U | 1.0 | ug/L | | | | | | | |
| cis-1,3-Dichloropropene | 1.0 U | 1.0 | ug/L | | | | | | | |
| trans-1,3-Dichloropropene | 1.0 U | 1.0 | ug/L | | | | | | | |
| Ethylbenzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| Methylene chloride | 1.0 U | 1.0 | ug/L | | | | | | | |
| Styrene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Toluene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Trichlorofluoromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2,3-Trichloropropane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Vinyl acetate | 2.0 U | 2.0 | ug/L | | | | | | | |

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## QUALITY CONTROL

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Sanple Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by GCMS - Quality Control** | | | | | | | | | | |
| *Batch 6D04008 - EPA 5030B_MS* | | | | | | | | | | |
| **Blank (6D04008-BLK1) Continued** | | | | | | | | | | |
| | | | | Prepared: 04/04/2006 08:42 Analyzed: 04/04/2006 10:33 | | | | | | |
| Vinyl chloride | 1.0 U | 1.0 | ug/L | | | | | | | |
| m,p-Xylenes | 2.0 U | 2.0 | ug/L | | | | | | | |
| o-Xylene | 1.0 U | 1.0 | ug/L | | | | | | | |
| *Surrogate: Toluene-d8* | *49.7* | | *ug/L* | *50.0* | | *99* | *77-118* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *54.9* | | *ug/L* | *50.0* | | *110* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *51.0* | | *ug/L* | *50.0* | | *102* | *73-138* | | | |
| **Blank (6D04008-BLK2)** | | | | | | | | | | |
| | | | | Prepared: 04/04/2006 08:42 Analyzed: 04/04/2006 22:16 | | | | | | |
| Acetone | 2.0 U | 2.0 | ug/L | | | | | | | |
| Acrylonitrile | 5.0 U | 5.0 | ug/L | | | | | | | |
| Benzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 2-Butanone | 2.0 U | 2.0 | ug/L | | | | | | | |
| 2-Hexanone | 2.0 U | 2.0 | ug/L | | | | | | | |
| Iodomethane | 2.0 U | 2.0 | ug/L | | | | | | | |
| Tetrachloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 4-Methyl-2-pentanone | 2.0 U | 2.0 | ug/L | | | | | | | |
| Bromochloromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Trichloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| Bromodichloromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Bromoform | 1.0 U | 1.0 | ug/L | | | | | | | |
| Bromomethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Carbon disulfide | 2.0 U | 2.0 | ug/L | | | | | | | |
| Carbon tetrachloride | 1.0 U | 1.0 | ug/L | | | | | | | |
| Chlorobenzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| Chloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Chloroform | 1.0 U | 1.0 | ug/L | | | | | | | |
| Chloromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Dibromochloromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dibromoethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Dibromomethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| trans-1,4-Dichloro-2-butene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1-Dichloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| cis-1,2-Dichloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| trans-1,2-Dichloroethene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2-Dichloropropane | 1.0 U | 1.0 | ug/L | | | | | | | |
| cis-1,3-Dichloropropene | 1.0 U | 1.0 | ug/L | | | | | | | |
| trans-1,3-Dichloropropene | 1.0 U | 1.0 | ug/L | | | | | | | |
| Ethylbenzene | 1.0 U | 1.0 | ug/L | | | | | | | |
| Methylene chloride | 1.0 U | 1.0 | ug/L | | | | | | | |
| Styrene | 1.0 U | 1.0 | ug/L | | | | | | | |

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## QUALITY CONTROL

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Sanple Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by GCMS - Quality Control** | | | | | | | | | | |
| *Batch 6D04008 - EPA 5030B_MS* | | | | | | | | | | |
| **Blank (6D04008-BLK2) Continued** | | | | Prepared: 04/04/2006 08:42 Analyzed: 04/04/2006 22:16 | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Toluene | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Trichlorofluoromethane | 1.0 U | 1.0 | ug/L | | | | | | | |
| 1,2,3-Trichloropropane | 1.0 U | 1.0 | ug/L | | | | | | | |
| Vinyl acetate | 2.0 U | 2.0 | ug/L | | | | | | | |
| Vinyl chloride | 1.0 U | 1.0 | ug/L | | | | | | | |
| m,p-Xylenes | 2.0 U | 2.0 | ug/L | | | | | | | |
| o-Xylene | 1.0 U | 1.0 | ug/L | | | | | | | |
| *Surrogate: Toluene-d8* | *52.8* | | *ug/L* | *50.0* | | *106* | *77-118* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *59.5* | | *ug/L* | *50.0* | | *119* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *53.5* | | *ug/L* | *50.0* | | *107* | *73-138* | | | |
| **LCS (6D04008-BS1)** | | | | Prepared: 04/04/2006 08:42 Analyzed: 04/04/2006 18:48 | | | | | | |
| Benzene | 19.6 | 1.0 | ug/L | 20.0 | | 98 | 69-115 | | | |
| Trichloroethene | 18.2 | 1.0 | ug/L | 20.0 | | 91 | 74-118 | | | |
| Chlorobenzene | 19.1 | 1.0 | ug/L | 20.0 | | 96 | 76-118 | | | |
| 1,1-Dichloroethene | 23.1 | 1.0 | ug/L | 20.0 | | 116 | 0-200 | | | |
| Toluene | 17.6 | 1.0 | ug/L | 20.0 | | 88 | 77-117 | | | |
| *Surrogate: Toluene-d8* | *50.8* | | *ug/L* | *50.0* | | *102* | *77-118* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *55.6* | | *ug/L* | *50.0* | | *111* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *53.7* | | *ug/L* | *50.0* | | *107* | *73-138* | | | |
| **Matrix Spike (6D04008-MS1)** | | | | Prepared: 04/04/2006 08:42 Analyzed: 04/04/2006 19:14 | | | | | | |
| Benzene | 19.5 | 1.0 | ug/L | 20.0 | | 98 | 53-150 | | | |
| Trichloroethene | 19.2 | 1.0 | ug/L | 20.0 | | 96 | 64-124 | | | |
| Chlorobenzene | 19.6 | 1.0 | ug/L | 20.0 | | 98 | 44-128 | | | |
| 1,1-Dichloroethene | 21.8 | 1.0 | ug/L | 20.0 | | 109 | 36-177 | | | |
| Toluene | 18.6 | 1.0 | ug/L | 20.0 | | 93 | 40-161 | | | |
| *Surrogate: Toluene-d8* | *53.4* | | *ug/L* | *50.0* | | *107* | *77-118* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *54.7* | | *ug/L* | *50.0* | | *109* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *50.3* | | *ug/L* | *50.0* | | *101* | *73-138* | | | |
| **Matrix Spike Dup (6D04008-MSD1)** | | | | Prepared: 04/04/2006 08:42 Analyzed: 04/04/2006 19:40 | | | | | | |
| Benzene | 19.4 | 1.0 | ug/L | 20.0 | | 97 | 53-150 | 0.5 | 23 | |
| Trichloroethene | 17.7 | 1.0 | ug/L | 20.0 | | 88 | 64-124 | 8 | 25 | |
| Chlorobenzene | 18.2 | 1.0 | ug/L | 20.0 | | 91 | 44-128 | 7 | 22 | |
| 1,1-Dichloroethene | 21.7 | 1.0 | ug/L | 20.0 | | 108 | 36-177 | 0.5 | 30 | |
| Toluene | 16.1 | 1.0 | ug/L | 20.0 | | 80 | 40-161 | 14 | 23 | |
| *Surrogate: Toluene-d8* | *54.2* | | *ug/L* | *50.0* | | *108* | *77-118* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *48.0* | | *ug/L* | *50.0* | | *96* | *70-130* | | | |
| *Surrogate: Dibromofluoromethane* | *52.1* | | *ug/L* | *50.0* | | *104* | *73-138* | | | |

**Metals by EPA 6000/7000 Series Methods - Quality Control**

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## QUALITY CONTROL

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Sanple Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Metals by EPA 6000/7000 Series Methods - Quality Control** | | | | | | | | | | |
| *Batch 6D03008 - EPA 3005A* | | | | | | | | | | |
| **Blank (6D03008-BLK1)** | | | | Prepared: 04/03/2006 10:41 Analyzed: 04/07/2006 18:09 | | | | | | |
| Arsenic | 10.0 U | 10.0 | ug/L | | | | | | | |
| Barium | 20.0 U | 20.0 | ug/L | | | | | | | |
| Cadmium | 1.0 U | 1.0 | ug/L | | | | | | | |
| Chromium | 10.0 U | 10.0 | ug/L | | | | | | | |
| Lead | 10.0 U | 10.0 | ug/L | | | | | | | |
| Selenium | 10.0 U | 10.0 | ug/L | | | | | | | |
| Silver | 10.0 U | 10.0 | ug/L | | | | | | | |
| **LCS (6D03008-BS1)** | | | | Prepared: 04/03/2006 10:41 Analyzed: 04/07/2006 18:16 | | | | | | |
| Arsenic | 1150 | 10.0 | ug/L | 1000 | | 115 | 82-117 | | | |
| Barium | 982 | 20.0 | ug/L | 1000 | | 98 | 72-125 | | | |
| Cadmium | 571 | 1.0 | ug/L | 500 | | 114 | 72-120 | | | |
| Chromium | 1090 | 10.0 | ug/L | 1000 | | 109 | 78-119 | | | |
| Lead | 1090 | 10.0 | ug/L | 1000 | | 109 | 72-121 | | | |
| Selenium | 1160 | 10.0 | ug/L | 1000 | | 116 | 82-127 | | | |
| Silver | 108 | 10.0 | ug/L | 100 | | 108 | 80-128 | | | |
| **Matrix Spike (6D03008-MS1)** | | **Source: C600577-01** | | Prepared: 04/03/2006 10:41 Analyzed: 04/07/2006 18:30 | | | | | | |
| Arsenic | 1120 | 10.0 | ug/L | 1000 | 4.40 | 112 | 64-126 | | | |
| Barium | 1100 | 20.0 | ug/L | 1000 | 152 | 95 | 74-119 | | | |
| Cadmium | 556 | 1.0 | ug/L | 500 | 1.0 U | 111 | 68-121 | | | |
| Chromium | 1060 | 10.0 | ug/L | 1000 | 10.0 U | 106 | 73-120 | | | |
| Lead | 1060 | 10.0 | ug/L | 1000 | 10.0 U | 106 | 68-126 | | | |
| Selenium | 1110 | 10.0 | ug/L | 1000 | 10.0 U | 111 | 65-129 | | | |
| Silver | 107 | 10.0 | ug/L | 100 | 10.0 U | 107 | 69-121 | | | |
| **Matrix Spike Dup (6D03008-MSD1)** | | **Source: C600577-01** | | Prepared: 04/03/2006 10:41 Analyzed: 04/07/2006 18:37 | | | | | | |
| Arsenic | 1150 | 10.0 | ug/L | 1000 | 4.40 | 115 | 64-126 | 3 | 12 | |
| Barium | 1140 | 20.0 | ug/L | 1000 | 152 | 99 | 74-119 | 4 | 11 | |
| Cadmium | 572 | 1.0 | ug/L | 500 | 1.0 U | 114 | 68-121 | 3 | 12 | |
| Chromium | 1090 | 10.0 | ug/L | 1000 | 10.0 U | 109 | 73-120 | 3 | 10 | |
| Lead | 1100 | 10.0 | ug/L | 1000 | 10.0 U | 110 | 68-126 | 4 | 19 | |
| Selenium | 1140 | 10.0 | ug/L | 1000 | 10.0 U | 114 | 65-129 | 3 | 10 | |
| Silver | 108 | 10.0 | ug/L | 100 | 10.0 U | 108 | 69-121 | 0.9 | 12 | |
| *Batch 6D04006 - EPA 7470A* | | | | | | | | | | |
| **Blank (6D04006-BLK1)** | | | | Prepared: 04/04/2006 09:27 Analyzed: 04/04/2006 14:47 | | | | | | |
| Mercury | 0.20 U | 0.20 | ug/L | | | | | | | |
| **LCS (6D04006-BS1)** | | | | Prepared: 04/04/2006 09:27 Analyzed: 04/04/2006 14:49 | | | | | | |
| Mercury | 5.49 | 0.20 | ug/L | 5.26 | | 104 | 81-126 | | | |
| **Matrix Spike (6D04006-MS1)** | | **Source: C600577-01** | | Prepared: 04/04/2006 09:27 Analyzed: 04/04/2006 14:53 | | | | | | |
| Mercury | 4.95 | 0.20 | ug/L | 5.26 | 0.20 U | 94 | 70-136 | | | |
| **Matrix Spike Dup (6D04006-MSD1)** | | **Source: C600577-01** | | Prepared: 04/04/2006 09:27 Analyzed: 04/04/2006 14:55 | | | | | | |
| Mercury | 4.78 | 0.20 | ug/L | 5.26 | 0.20 U | 91 | 70-136 | 3 | 12 | |

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## NOTES AND DEFINITIONS

| | |
|---|---|
| U | Analyte included in the analysis, but not detected |