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OCTOBER-DECEMBER 2005 SEMI-ANNUAL GROUNDWATER and SURFACE WATER MONITORING REPORT

Central Carolina Tire Phase I/II Scrap Tire Monofill Landfill
Harnett County, North Carolina

Received
DEC 2005
Solid Waste Section

WITHERS & RAVENEL

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LETTER OF TRANSMITTAL

DATE December 8, 2005	JOB NO. 202334.09
ATTENTION Jaclynne Drummond	
PHONE #	
RE: Central Carolina Tire	
Phase 1, 2 & 3 - Scrap Tire Monofill Landfill	

TO: NCDENR DWM
Solid Waste Section
PO Box 27687
Raleigh, NC 27611-7687

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December 8, 2005

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: October-December 2005 Semi-Annual Groundwater and Surface-Water Monitoring Report
Central Carolina Tire Phase I/II Scrap Tire Monofill Landfill
Harnett County, North Carolina
W&R Project No. 202334.09

Dear Ms. Drummond:

Withers & Ravenel (W&R) has completed the second of two 2005 semi-annual groundwater and surface-water monitoring events for the above referenced facility **(Figure 1)**. The scope of work performed by W&R included collection and analysis of groundwater and surface water samples from the site, in general accordance with the monitoring plan that is included in the Richard R. Rust Hydrogeologic Investigation and Groundwater Monitoring Plan (Monitoring Plan) for Permit Modification of Central Carolina Tire Monofill Permit 43-04 dated July 18, 1995. Samples from eight groundwater monitoring wells and two surface water collection points are collected and tested on a semi-annual basis as specified in the NC DENR "Groundwater Monitoring Guidance Document." This is the third sampling event conducted by Withers & Ravenel (W&R) for this site. 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

Eight groundwater monitoring wells, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, and MW-9 are located proximal to the existing Phase I/II scrap tire monofill landfill (See **Figure 2**). Seven of the wells, MW-2 through MW-8, were installed in September 1995 and MW-9 was installed in April 2001 as a replacement well to MW-1, which was abandoned in December 2001 to accommodate landfill construction modifications. Monitoring well construction details and depth to groundwater data are summarized in **Table**

1. Hydraulic conductivity testing performed by Engineering & Environmental Company (E^2S) in May 2001 suggest an average hydraulic conductivity value of approximately 5.5 x 10^{-6} cm/s. Based on designations presented in the Monitoring Plan, monitoring well MW-9 serves as the upgradient, natural background well for the facility, and MW-2 through MW-8 serve as the downgradient monitoring wells.

Sampling activities were performed in general accordance with protocols detailed in the Monitoring Plan and the NC DENR "Groundwater Monitoring Guidance Document." 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 the well casing. The average depth to groundwater was calculated to be 8.98 feet below top of casing. Casing stick-ups were observed to be approximately 3.0 feet above ground surface elevations for the majority of the wells sampled. The depth to groundwater data determined for monitoring wells at the Phase I/II monofill landfill for the December 2005 report are summarized in **Table 1**.

After water level information was collected, at least three times the volume of the water standing in all wells except MW-9 was removed using a new disposable bailer. Well MW-9 was bailed dry after approximately 2.5 well volumes. 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 then collected using the same bailer used to purge the wells. Groundwater samples were decanted directly into laboratory provided containers, which were then placed into ice-filled 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 17.4 and 19.0 degrees Celsius; the pH ranged between 4.10 and 5.58; and the specific conductance ranged between 34 and 178 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

Surface water samples were collected from the two downstream locations designated as SW-1 and SW-2. SW-1 is located approximately 140-feet south-southeast of the south-central sedimentation pond and within the drainage feature that parallels the southern limits of scrap tire disposal within the Phase I/II landfill. SW-2 is located approximately 250-feet south-southeast of the southeastern sedimentation pond and within the primary drainage feature that parallels the eastern limits of the Phase I/II landfill. 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**. According to the laboratory analysis report, no VOCs were detected in any of the groundwater samples collected during this event. However, benzene was identified at a concentration equal to its detection limit of 1.0 ug/L in the sample collected at surface water SW-1. This concentration is below the North Carolina Standard of 1.19 ug/L standard for WS class waters. Cadmium was detected in groundwater sample MW-3 (0.0010 mg/L). This concentration is below the North Carolina Groundwater Standard of 0.005 mg/L for cadmium. Barium was detected in two of the groundwater samples: MW-2 (0.17 mg/L) and MW-9 (0.36 mg/L). These concentrations are well below the North Carolina Groundwater Standard of 2.0 mg/L for barium. No metals were detected in any of the surface water samples collected during this event. The laboratory detections are summarized by sampling location as follows:

MW-2: Barium was reported at 0.17 mg/L.

MW-3: Cadmium was reported at 0.0010 mg/L.

MW-9: Barium was reported at 0.36 mg/L.

SW-1: Benzene was reported at 1.0 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 October-December 2005 Semi-Annual monitoring event for the Central Carolina Tire Phase I/II tire monofill landfill indicate that benzene was detected in the surface water sample from SW-1. The concentration of benzene was reported at its laboratory reporting limit, a value below the North Carolina Standard for WS class surface water.

- The RCRA metal barium was detected in the groundwater samples from MW-2 and MW-9. However, the reported concentrations are well below the North Carolina Groundwater Standard for barium.

- The RCRA metal cadmium was detected in the groundwater sample MW-3. However, the reported concentration is below the North Carolina Groundwater Standard for cadmium.

- VOCs were not identified in the QA/QC samples prepared by the analytical laboratory.

The next monitoring event for the Central Carolina Tire Phase I/II scrap tire monofill landfill is tentatively scheduled for May 2006. Please contact us at (919) 469-3340 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
December 2005 Sampling Event
Phase I/II Tire Monofill Landfill (Existing)
Harnett County, North Carolina
W&R Project No. 202334.09

Well Location	Approximate Northing	Approximate Easting	Approximate Ground Surface Elevation (Ft MSL)	Depth to GW BTOC (Feet)	Field Parameters			Well Depth (Ft BLS)	Screened Interval (Ft BLS)
					Temp C°	pH	S.C. umhos/cm		
MW-2	546711.83	1954218.21	308.95	4.50	18.5	4.36	80	20.0	20.0 - 5.0
MW-3	546886.19	1954475.36	316.35	10.35	17.5	4.53	47	20.0	20.0 - 5.0
MW-4	547466.86	1954319.02	324.68	4.63	19.0	4.99	46	20.0	20.0 - 5.0
MW-5	546388.13	1953339.01	318.92	4.99	18.7	5.58	46	20.0	18.0 - 3.0
MW-6	546330.17	1953877.76	302.84	6.73	18.4	4.69	56	25.0	25.0 - 5.0
MW-7	546779.37	1953737.43	313.30	5.63	18.8	4.30	53	20.0	19.0 - 4.0
MW-8	547742.98	1953546.78	344.38	7.44	17.7	4.49	34	20.0	19.0 - 4.0
MW-9	547233.05	1952853.43	374.69	27.55	17.4	4.10	178	30.0	30.0 - 15.0

Notes: BTOC = Below Top of Casing
GW = Groundwater
Ft MSL = Measured in Feet Mean Sea Level
Ft BLS = Measured in Feet Below Land Surface
S.C. = Specific Conductance
All Monitoring Wells are constructed of 2" PVC
Northing / Easting and Surface Elevations for MW-2 through MW-8 were estimated from Richard Rust's drawing "Central Carolina Tire Monofill Phase II Permitting" dated March 1996.
Northing / Easting and Surface Elevation for MW-9 was estimated from Richard Rust's Request to Abandon MW-1 correspondance to NCDENR dated November 2001.
Monitoring Well construction details derived from original well construction records by: Blackwelder Environmental Boring & Drilling dated May 1992 (MW-2 through MW-4); Special, Inc. dated September 1995 (MW-5 through MW-8) ; and J&L Drilling dated April 2001 (MW-9).

Table 2
Laboratory Results
October 2005 Sampling Event
Phase I/II Tire Monofill Landfill (Existing)
Harnett County, North Carolina

ORGANIC CONSTITUENTS (In ug/L)	SW-1	SW-2	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	RL (In ug/L)	NCAC 2L STD (In ug/L)
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50	700
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.56
Bromoform (Tribromoethane)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.19
Bromomethane (Methyl Bromide)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	N/A
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	70
2-Butanone (MEK), (Methyl Ethyl Ketone)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	170
n-Butlybenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	70
s-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	70
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50	700
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.3
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	50
Chloroethane (Ethyl Chloride)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	2800
Chloroethyl Vinyl Ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	N/A
Chloroform (Trichloromethane)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.19
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	14
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
1,2-Dibromo-3-Chloropropane (DBCP)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.025
Dibromochloromethane (Chlorodibromomethane)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.41
1,2,-Dibromoethane (Ethylene Dibromide)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.0004
Dibromomethane (Methylene Bromide)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
1,2-Dichlorobenzene (O-Dichlorobenzene)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	620
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	620
1,4-Dichlorobenzene (P-Dichlorobenzene)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	620
1,2-Dichloroethane (Ethylene Dichloride)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.38
1,1-Dichloroethene (Vinylidene Chloride)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	7
CIS-1,2-Dichloroethene (CIS-1,2-Dichloroethylene)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	70
T-1,2-Dichloroethene (Trans-1,2-Dichloroethylene)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	70
1,2-Dichloropropane (Propylene Dichloride)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.56
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	N/A
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
CIS-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.19
T-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.19
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	29
Hexachlorobutadiene (Hexachloro-1,3-Butadiene)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.44
2-Hexanone (Methyl Butyl Ketone)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	280
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
Methyl Chloride (Chloromethane)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	2.6
Methylene Chloride (Dichloromethane)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	5
4-Methyl-2Pentanone (Methyl Isobutyl Ketone)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	N/A
Methyl Tert-Butyl Ether (MTBE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	200
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	21
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	70
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.1
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.17
Tetrachloroethene (Tetrachloroethylene), (PCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	0.7
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1000
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	70
1,1,1-Trichloroethane (Methylchloroform)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	200
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A
Trichloroethene (Trichloroethylene), (TCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	2.8
Trichlorofluoromethane (CFC-11)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	2100
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.005
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	350
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.35
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	0.015
Xylenes (mixed)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	530
INORGANIC CONSTITUENTS (In mg/L)											**RL (In mg/L)**	**NCAC 2L STD (In mg/L)**
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010	0.05
Barium	ND	ND	0.17	ND	ND	ND	ND	ND	ND	0.36	0.10	2
Cadmium	ND	0.0010	ND	ND	ND	ND	ND	ND	ND	ND	0.0010	0.005
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010	0.05
Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010	0.015
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00020	0.0011
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010	0.05
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010	0.018

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 I/II Tire Monofill Landfill (Existing)
Harnett County, North Carolina

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: MW-2								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	94	130	113	135	170	180	170
Cadmium	5	ND	1.4	ND	ND	ND	ND	ND
Chromium	50	ND	ND	ND	ND	ND	ND	ND
Lead	15	ND	ND	ND	ND	ND	ND	ND
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: MW-3								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	16	11	17	13	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	1
Chromium	50	ND	ND	ND	ND	ND	ND	ND
Lead	15	ND	ND	ND	ND	ND	ND	ND
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND
C-1,2-Dichloroeth	70	NA	NA	NA	NA	1.5	1.0	ND

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: MW-4								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	34	27	32	14	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	ND	ND	ND	ND	ND	ND
Lead	15	ND	ND	5	ND	ND	ND	ND
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND
Chloroethane	2800	ND	ND	ND	ND	ND	3.0	ND

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: MW-5								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	16	23	24	15	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	7	ND	ND	ND	ND	ND
Lead	15	ND	ND	ND	ND	ND	ND	ND
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: MW-6								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	33	47	48	44	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	ND	ND	ND	ND	ND	ND
Lead	15	ND	ND	ND	ND	ND	ND	ND
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND

Notes:

Results in parts per billion (ppb)

ND - Not Detected above the Practical Quantitation Limit

NA - Not analyzed for or not available

Laboratory results in bold exceed 2L standards

Results for sampling conducted prior to November 2004 as presented in previous GW reports prepared by Richard R. Rust.

Results for the 11/9/04 sampling event represent the findings of the initial sampling activities conducted by Withers&Ravenel.

Table 3 (Continued)
Historical Summary of Constituent Detections
Phase I/II Tire Monofill Landfill (Existing)
Harnett County, North Carolina

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: MW-7								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	45	45	119	102	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	ND	ND	ND	ND	ND	ND
Lead	15	ND	ND	5.3	ND	ND	ND	ND
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: MW-8								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	162	112	32	24	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	ND	ND	ND	ND	ND	ND
Lead	15	3	4	ND	ND	ND	ND	ND
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: MW-9								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	111	188	455	308	370	270	360
Cadmium	5	ND	ND	ND	ND	ND	ND	ND
Chromium	50	14	ND	5.3	ND	ND	ND	ND
Lead	15	8	ND	7.0	ND	ND	ND	ND
Mercury	1.1	ND	ND	0.8	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: SW-1								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	11	19	14	15	ND	100	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	ND	ND	ND	ND	ND	ND
Lead	15	ND	ND	ND	ND	ND	ND	ND
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	ND	ND	ND	ND	ND	ND	1.0

Sampling Date:	2L Standard	10/30/2002	4/15/2003	10/23/2003	3/24/2004	11/9/2004	6/23/2005	10/26/2005
Well No: SW-2								
Arsenic	50	ND	ND	ND	ND	ND	ND	ND
Barium	2000	38	26	12	13	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	ND	ND	ND	ND	ND	ND
Lead	15	ND	ND	ND	ND	ND	ND	ND
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND
Selenium	50	ND	ND	ND	ND	ND	ND	ND
Silver	18	ND	ND	ND	ND	ND	ND	ND

Notes:

Results in parts per billion (ppb)

ND - Not Detected above the Practical Quatitation Limit

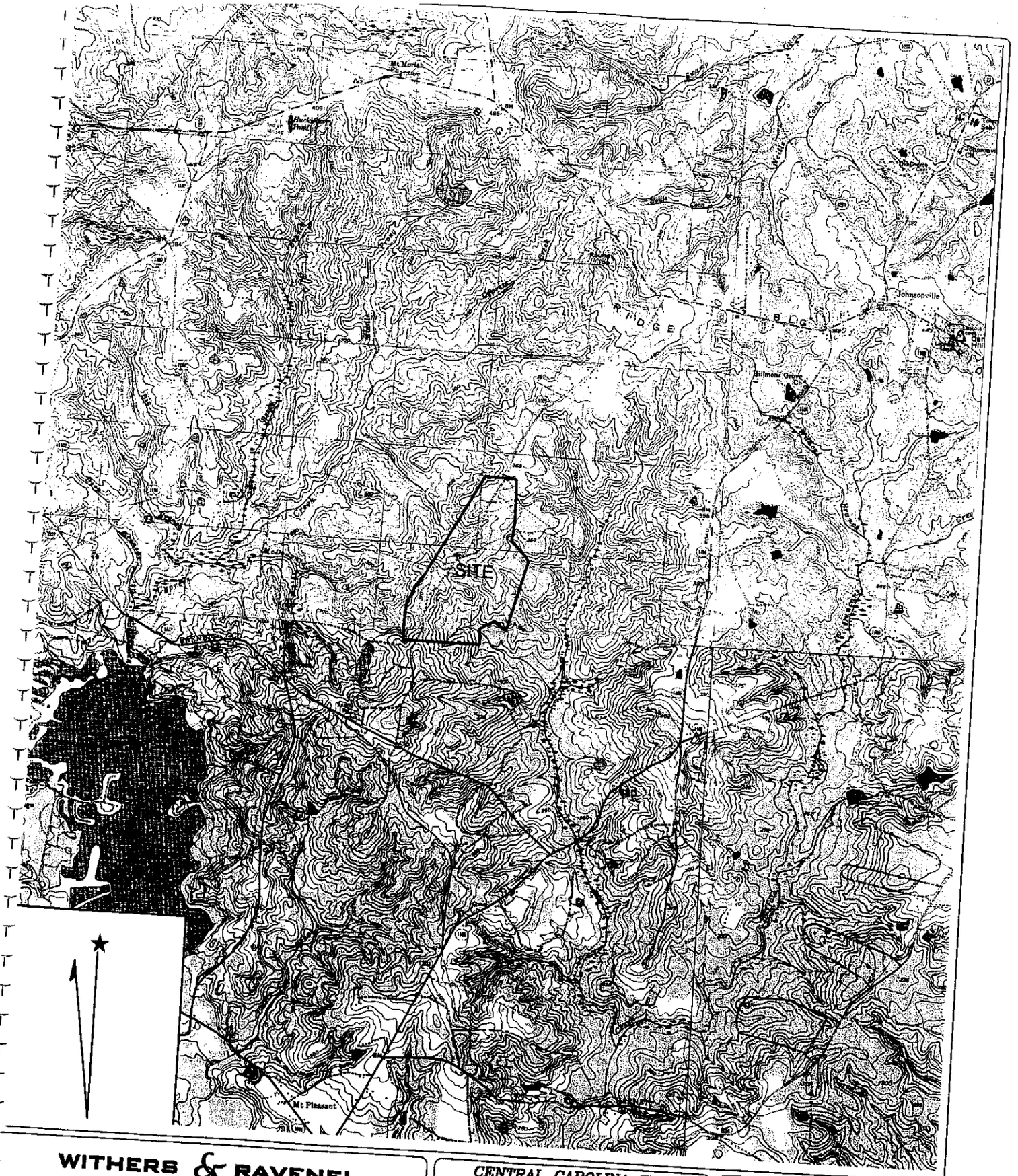
NA - Not analyzed for or not available

Laboratory results in bold exceed 2L standards

Results for sampling conducted prior to November 2004 as presented in previous GW reports prepared by Richard R. Rust.

Results for the 11/9/04 sampling event represent the findings of the initial sampling activities conducted by Withers&Ravenel.

FIGURES

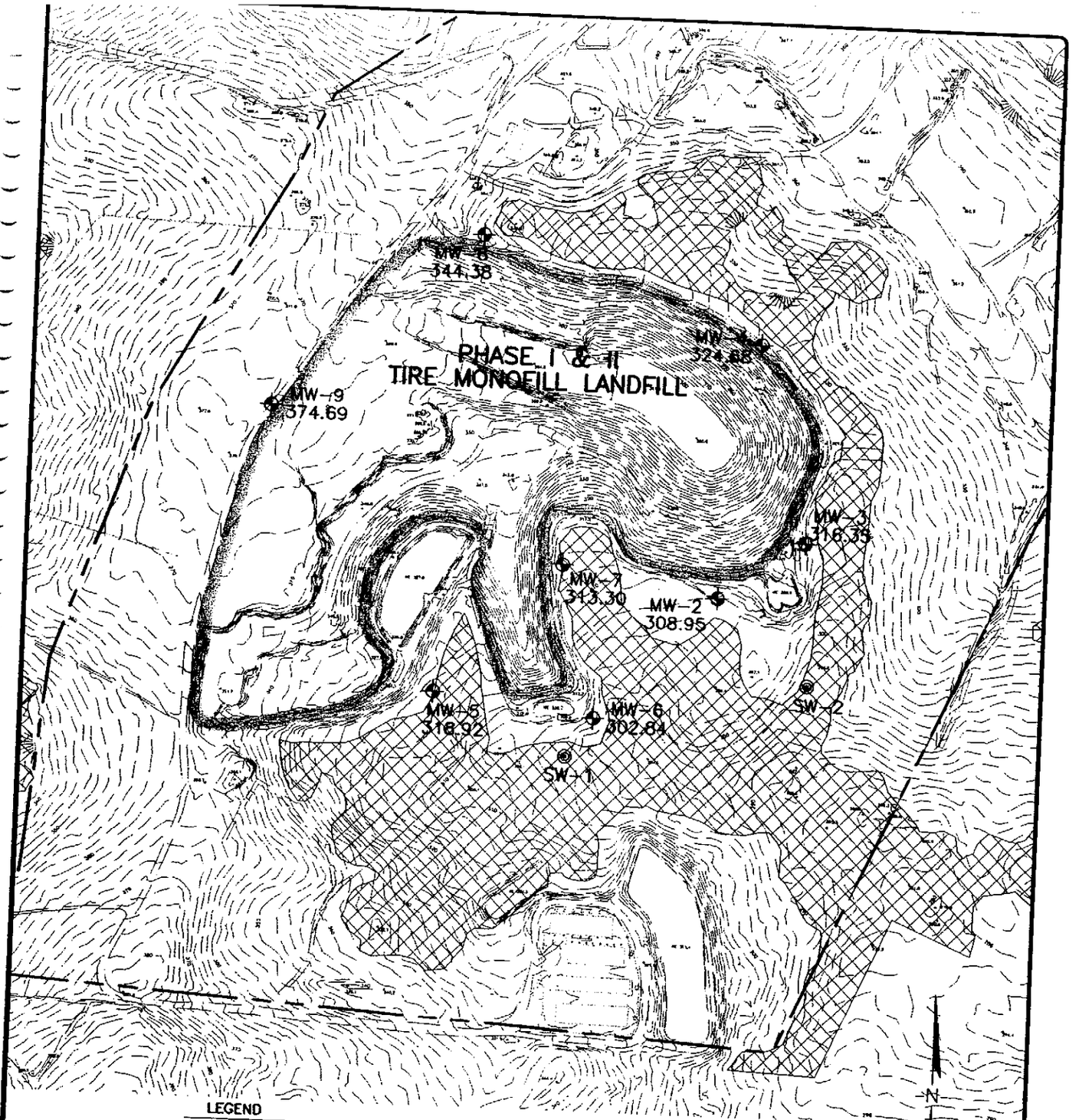


WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS
111 MacKenan Drive Cary, North Carolina 27511 www.withersravenel.com
tel: 919-460-6006 fax: 919-535-4545

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	202334.08



LEGEND

SW-1	SURFACE WATER MONITORING LOCATION
MW-9 374.69	GROUNDWATER MONITORING WELL W/ APPROX. GROUND ELEVATION
	WETLANDS
	TOPOGRAPHIC CONTOUR
	PROPERTY BOUNDARY

GRAPHIC SCALE 1"=400'

0 400 800 1200

WITHERS & RAVENEL
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111 MacKenan Drive Cary, North Carolina 27511 tel: 919-469-3340 fax: 919-535-4545
www.withersravenel.com

CENTRAL CAROLINA TIRE
PHASE I & II
TIRE MONOFILL LANDFILL

DRAWN BY:	SCALE:	FIGURE NO.
DOU	1"= 400'	2
APPROVED BY: JP	DATE: 11/24/04	JOB NO: 202334.09

\02\02-330\02334.09 GW Monitoring\CCT GW Monitoring\PHASE I - 2 SITE PLAN.prc Fri Dec 3, 2004 10:43:52AM WITHERS & RAVENEL, Engineers Planners Surveyors

APPENDIX A

PRE-SAMPLING / WELL PURGING FIELD LOGS

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT Central Carolina Tire

WELL NUMBER MW-2

WELL INSIDE DIAMETER 2 INCHES

DEPTH OF BOTTOM 20 FEET

DEPTH TO WATER 4.50 FEET

1 WELL VOLUME 2.53 GALLONS

SAMPLED BY John Palmer

PROJECT NUMBER 202334.09

DATE 10/25+26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT) HIGH 50'S

WEATHER CONDITIONS OVERCAST, LT. BRZ.

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED

POLY - BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
FLUSHING					
WATER LEVEL BEFORE	4.50				
WATER LEVEL AFTER	—		9.98		
TIME BEGIN FLUSHING	1615				
TIME END FLUSHING	—		16.42		
ESTIMATED VOLUME FLUSHING (gal)	2.5	5.0	7.5		
WELL VOLUMES REMOVED	1	2	3		
FIELD ANALYSIS					
WATER TEMPERATURE (°C)	18.2	18.5	18.5		
SAMPLE (ph)	4.27	4.33	4.36		
SAMPLE CONDUCTIVITY (umhos/cm)	79	81	80		
BUFFER BEFORE					
BUFFER AFTER					
ODOR	NONE	→			
COLOR	CLOUDY	CLEAR	→		
Eh					
TURBIDITY	130	32	29		

COMMENTS Sample Time = 1232 ON 10/26/05

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

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

π = 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= 20.00 (WELL DEPTH) - 4.50 (DEPTH TO WATER) = 15.50 FT = h

3.14 x .00694 (r^2) x h = .338 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 2.53

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT Central Carolina Tire

WELL NUMBER MW-3

WELL INSIDE DIAMETER 2 INCHES

DEPTH OF BOTTOM 22.58 FEET

DEPTH TO WATER 10.35 FEET

1 WELL VOLUME 1.99 GALLONS

SAMPLED BY John Palmer

PROJECT NUMBER 202334.09

DATE 10/25+26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT) LOW 60's

WEATHER CONDITIONS OVERCAST, V. BREZY.

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED

POLY-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
FLUSHING					
WATER LEVEL BEFORE	10.35				
WATER LEVEL AFTER					
TIME BEGIN FLUSHING	1538				1863
TIME END FLUSHING					
ESTIMATED VOLUME FLUSHING (gal)	2.0	4.0	6.0	8.0	1600
WELL VOLUMES REMOVED	1	2	3	4	5
FIELD ANALYSIS					
WATER TEMPERATURE (°C)	18.2	18.1	18.0	17.8	17.5
SAMPLE (ph)	4.30	4.33	4.45	4.57	4.53
SAMPLE CONDUCTIVITY (umhos/cm)	48	49	48	47	47
BUFFER BEFORE					
BUFFER AFTER					
ODOR					
COLOR	NONE →		SULPHUR	→	
Eh	LT. BROWN	V. CLOUDY →		LT. BROWN	→
TURBIDITY					
	590	321	392	468	734

COMMENTS Sample Time = 1201 on 10/26/05

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

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

π = 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= 22.58 (WELL DEPTH) - 10.35 (DEPTH TO WATER) = 12.23 FT = h

3.14 x .00694 (r^2) x h = .267 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 1.99

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT Central Carolina Tire

WELL NUMBER MW-4

WELL INSIDE DIAMETER 2 INCHES

DEPTH OF BOTTOM 19.08 FEET

DEPTH TO WATER 4.63 FEET

1 WELL VOLUME 2.36 GALLONS

SAMPLED BY John Palmer

PROJECT NUMBER 202334.09

DATE 10/25+26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT) LOW 60's

WEATHER CONDITIONS MOSTLY OVERCAST, V. BRZY.

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED

POLY-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
FLUSHING					
WATER LEVEL BEFORE	4.63				
WATER LEVEL AFTER	—				
TIME BEGIN FLUSHING	1502			5.57	
TIME END FLUSHING	—				
ESTIMATED VOLUME FLUSHING (gal)				1523	
WELL VOLUMES REMOVED	2.5	5.0	7.5	10.0	
	1	2	3	4	
FIELD ANALYSIS					
WATER TEMPERATURE (°C)	18.7	19.2	19.3	19.0	
SAMPLE (ph)	4.68	4.79	4.93	4.99	
SAMPLE CONDUCTIVITY (umhos/cm)	47	47	47	46	
BUFFER BEFORE					
BUFFER AFTER					
ODOR					
COLOR	NONE	→	→	→	
Eh	BROWN	GRAY	→	→	
TURBIDITY					
	677	120	7999	7999	

COMMENTS Sample Time = 1150 on 10/26/05

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= 19.08 (WELL DEPTH) - 4.63 (DEPTH TO WATER) = 14.45 FT = h

3.14 x .00694 (r^2) x h = .315 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 2.36

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire
WELL NUMBER: MW-5
WELL INSIDE DIAMETER: 2 INCHES
DEPTH OF BOTTOM: 18.33 FEET
DEPTH TO WATER: 4.99 FEET
1 WELL VOLUME: 2.18 GALLONS

SAMPLED BY: John Palmer
PROJECT NUMBER: 202334.09
DATE: 10/25+26/05 PAGE 1 OF 1
AIR TEMPERATURE (FAHRENHEIT): MID 50's
WEATHER CONDITIONS: OVERCAST, BREEZY

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED
POLY - BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
FLUSHING					
WATER LEVEL BEFORE	4.99				
WATER LEVEL AFTER					
TIME BEGIN FLUSHING				11.39	
TIME END FLUSHING	1812				
ESTIMATED VOLUME FLUSHING (gal)				1833	
WELL VOLUMES REMOVED	2.25	4.5	6.75	9.0	
	1	2	3	4	

FIELD ANALYSIS					
WATER TEMPERATURE (°C)	18.3	18.7	18.8	18.7	
SAMPLE (ph)	5.49	5.40	5.42	5.58	
SAMPLE CONDUCTIVITY (umhos/cm)	50	46	48	46	
BUFFER BEFORE					
BUFFER AFTER					
ODOR	SUL[illegible]	→			
COLOR	ORG/BRWN	→	LT. BRWN.	CRM	
Eh					
TURBIDITY	106	707	512	>999	

COMMENTS: Sample Time = 1338 on 10/26/05

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)
$\pi r^2 \times h$ = WELL VOLUME IN FT^3
π = 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= 18.33 (WELL DEPTH) - 4.99 (DEPTH TO WATER) = 13.34 FT = h
3.14 X .00694 (r^2) x h = .291 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 2.18

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire

WELL NUMBER: MW-6

WELL INSIDE DIAMETER: 2 INCHES

DEPTH OF BOTTOM: 26.46 FEET

DEPTH TO WATER: 6.73 FEET

1 WELL VOLUME: 3.22 GALLONS

SAMPLED BY: John Palmer

PROJECT NUMBER: 202334.09

DATE: 10/25+26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): MID 50's

WEATHER CONDITIONS: OVERCAST, BRZY.

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED: POLY-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
FLUSHING					
WATER LEVEL BEFORE	6.73				
WATER LEVEL AFTER	↗		10.22		
TIME BEGIN FLUSHING	1730				
TIME END FLUSHING	↗		1801		
ESTIMATED VOLUME FLUSHING (gal)	3.25	6.5	9.75		
WELL VOLUMES REMOVED	1	2	3		
FIELD ANALYSIS					
WATER TEMPERATURE (°C)	18.4	18.5	18.4		
SAMPLE (ph)	4.71	4.77	4.69		
SAMPLE CONDUCTIVITY (umhos/cm)	58	57	56		
BUFFER BEFORE					
BUFFER AFTER					
ODOR	NONE	→	→		
COLOR	V. CLOUDY	→	→		
Eh					
TURBIDITY	295	403	468		

COMMENTS: Sample Time = 1256 ON 10/26/05

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= 26.46 (WELL DEPTH) - 6.73 (DEPTH TO WATER) = 19.73 FT = h

3.14 X .00694 (r^2) x h = .430 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 3.22

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT Central Carolina Tire

WELL NUMBER MW-7

WELL INSIDE DIAMETER 2 INCHES

DEPTH OF BOTTOM 21.26 FEET

DEPTH TO WATER 5.65 FEET

1 WELL VOLUME 2.55 GALLONS

SAMPLED BY John Palmer

PROJECT NUMBER 202334.09

DATE 10/25+26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT) HIGH 50's

WEATHER CONDITIONS OVERCAST, BREZY

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED

POLY - BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
FLUSHING					
WATER LEVEL BEFORE	5.65				
WATER LEVEL AFTER					
TIME BEGIN FLUSHING				14.81	
TIME END FLUSHING	1652				
ESTIMATED VOLUME FLUSHING (gal)				1722	
WELL VOLUMES REMOVED	2.5	5.0	7.5	10.0	
	1	2	3	4	
FIELD ANALYSIS					
WATER TEMPERATURE (°C)	18.7	19.0	18.9	18.8	
SAMPLE (ph)	4.39	4.26	4.29	4.30	
SAMPLE CONDUCTIVITY (umhos/cm)	46	45	54	53	
BUFFER BEFORE					
BUFFER AFTER					
ODOR					
COLOR	NONE →				
Eh	LT. BROWN. →				
TURBIDITY					
	573	585	596	431	

COMMENTS Sample Time = 1248 on 10/26/05

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

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

π = 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= 21.26 (WELL DEPTH) - 5.65 (DEPTH TO WATER) = 15.61 FT = h

3.14 x .00694 (r^2) x h = .340 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 2.55

WITHERS & RAVENEL

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PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire

WELL NUMBER: MW-8

WELL INSIDE DIAMETER: 2 INCHES

DEPTH OF BOTTOM: 22.85 FEET

DEPTH TO WATER: 7.44 FEET

1 WELL VOLUME: 2.51 GALLONS

SAMPLED BY: John Palmer

PROJECT NUMBER: 202334.09

DATE: 10/25+26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): LOW 60's

WEATHER CONDITIONS: MOSTLY CLOUDY, VERY BREZY.

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED: POLY-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
FLUSHING					
WATER LEVEL BEFORE	7.44				
WATER LEVEL AFTER	/			—	
TIME BEGIN FLUSHING	1409				
TIME END FLUSHING	/				
ESTIMATED VOLUME FLUSHING (gal)				1450	
WELL VOLUMES REMOVED	2.5	5.0	7.5	10.0	
	1	2	3	4	
FIELD ANALYSIS					
WATER TEMPERATURE (°C)	19.0	18.9	18.8	17.7	
SAMPLE (ph)	4.72	4.50	4.43	4.49	
SAMPLE CONDUCTIVITY (umhos/cm)	36	36	35	34	
BUFFER BEFORE					
BUFFER AFTER					
ODOR					
COLOR	NONE	→	→	→	
Eh	LT. BROWN	→	→	→	
TURBIDITY					
	904	685	7999	7999	

COMMENTS: Sample Time = 1105 on 10/26/05

BAILED WELL DRY AT ~4.25 WELL VOLUMES

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 = 22.85 (WELL DEPTH) - 7.44 (DEPTH TO WATER) = 15.41 FT = h

3.14 x .00694 (r^2) x h = .336 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 2.51

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT Central Carolina Tire

WELL NUMBER MW-9

WELL INSIDE DIAMETER 2 INCHES

DEPTH OF BOTTOM 32.50 FEET

DEPTH TO WATER 27.55 FEET

1 WELL VOLUME .81 GALLONS

SAMPLED BY John Palmer

PROJECT NUMBER 202334.09

DATE 10/25+26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT) LOW 50's

WEATHER CONDITIONS OVERCAST, V. BREZY.

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED

POLY-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
FLUSHING					
WATER LEVEL BEFORE	27.55				
WATER LEVEL AFTER	→	—			
TIME BEGIN FLUSHING	1847				
TIME END FLUSHING	→	1905			
ESTIMATED VOLUME FLUSHING (gal)	1.0	2.0			
WELL VOLUMES REMOVED	1	2			
FIELD ANALYSIS					
WATER TEMPERATURE (°C)	17.7	17.4			
SAMPLE (ph)	4.11	4.10			
SAMPLE CONDUCTIVITY (umhos/cm)	169	178			
BUFFER BEFORE					
BUFFER AFTER					
ODOR					
COLOR	NONE →				
Eh	LT. BROWN →				
TURBIDITY					
	7999	7999			

COMMENTS Sample Time = 1354 ON 10/26/05

BAILED WELL DRY AT ~2.5 WELL VOLUMES

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= 32.50 (WELL DEPTH) - 27.55 (DEPTH TO WATER) = 4.95 FT = h

3.14 x .00694 (r^2) x h = .108 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = .81

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT Central Carolina Tire

WELL NUMBER SW-1

WELL INSIDE DIAMETER _____ INCHES

DEPTH OF BOTTOM _____ FEET

DEPTH TO WATER _____ FEET

1 WELL VOLUME _____ GALLONS

SAMPLED BY John Palmer

PROJECT NUMBER 202334.0

DATE 10/26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT) LOW 60's

WEATHER CONDITIONS CLEAR, BREEZY

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)	14.3				
SAMPLE (ph)	6.72				
SAMPLE CONDUCTIVITY (umhos/cm)	141				
BUFFER BEFORE					
BUFFER AFTER					
ODOR					
COLOR	NONE				
Eh	SLIGHTLY ORANGE				
TURBIDITY					
	15				

COMMENTS Sample Time = 1308 * SILT-SIZED ORANGE SEDIMENT PRESENT IN SAMPLE

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 = _____ IN/12= _____ FT

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

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

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT Central Carolina Tire

WELL NUMBER SW-2

WELL INSIDE DIAMETER _____ INCHES

DEPTH OF BOTTOM _____ FEET

DEPTH TO WATER _____ FEET

1 WELL VOLUME _____ GALLONS

SAMPLED BY John Palmer

PROJECT NUMBER 202334.0

DATE 10/26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT) LOW 50's

WEATHER CONDITIONS CLEAR / 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)	12.6				
SAMPLE (ph)	6.22				
SAMPLE CONDUCTIVITY (umhos/cm)	53				
BUFFER BEFORE					
BUFFER AFTER					
ODOR	NONE				
COLOR	CLOUDY				
Eh					
TURBIDITY	122				

COMMENTS Sample Time = 1213 – SAMPLE IS SOMEWHAT CLOUDY

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

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

π = 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 = _____ IN/12= _____ FT

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

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

APPENDIX B

LABORATORY ANALYTICAL RESULTS

Environmental Conservation Laboratories, Inc.
1015 Passport Way
Cary, North Carolina 27513-2042
919 / 677-1669
Fax 919 / 677-9846
www.encolabs.com

ENCO Laboratories

DHRS Certification No. E82277

CLIENT : Withers & Ravenel Environmental
ADDRESS: 111 MacKenan Drive
Cary, NC 27511

REPORT # : CRY18970
DATE SUBMITTED: October 27, 2005
DATE REPORTED : November 7, 2005

ATTENTION: Mr. Brian Bellis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

REFERENCE: 202334.09

Central Carolina Tire

10/26/05

CRY18970-1 : MW-2 @ 12:32
CRY18970-2 : MW-3 @ 12:01
CRY18970-3 : MW-4 @ 11:50
CRY18970-4 : MW-5 @ 13:38
CRY18970-5 : MW-6 @ 12:56
CRY18970-6 : MW-7 @ 12:48
CRY18970-7 : MW-8 @ 11:05
CRY18970-8 : MW-9 @ 13:54
CRY18970-9 : SW-2 @ 12:13
CRY18970-10 : SW-1 @ 13:08

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

PROJECT MANAGER BB for
Chuck Smith

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	MW-2	MW-3	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS

	MW-2	MW-3	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	1. U	1. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-2	MW-3	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
sec-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	1. U	1. U	ug/L
1,2,3-Trichloropropane	2. U	2. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
	1. U	1. U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	88	90	73-138
D8-Toluene	96	102	77-118
Bromofluorobenzene	94	95	70-130
Date Analyzed	11/02/05 23:00	11/02/05 23:26	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-2	MW-3	Units
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 14:56	10/29/05 15:19	
Barium	6010	**0.17**	0.10 U	mg/L
Date Analyzed		10/29/05 14:56	10/29/05 15:19	
Cadmium	6010	0.0010 U	**0.0010**	mg/L
Date Analyzed		10/29/05 14:56	10/29/05 15:19	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 14:56	10/29/05 15:19	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 14:56	10/29/05 15:19	
Selenium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 14:56	10/29/05 15:19	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 14:56	10/29/05 15:19	

Mercury	METHOD	MW-2	MW-3	Units
Mercury	7470	0.00020 U	**0.00067**	mg/L
Date Analyzed		11/01/05 14:59	11/01/05 15:03	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	MW-4	MW-5	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-4	MW-5	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	1. U	1. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS

	MW-4	MW-5	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
sec-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	1. U	1. U	ug/L
1,2,3-Trichloropropane	2. U	2. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
	1. U	1. U	ug/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	85	86	73-138
D8-Toluene	110	102	77-118
Bromofluorobenzene	91	94	70-130
Date Analyzed	11/02/05 23:53	11/03/05 00:19	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-4	MW-5	Units
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:26	10/29/05 15:33	
Barium	6010	0.10 U	0.10 U	mg/L
Date Analyzed		10/29/05 15:26	10/29/05 15:33	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		10/29/05 15:26	10/29/05 15:33	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:26	10/29/05 15:33	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:26	10/29/05 15:33	
Selenium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:26	10/29/05 15:33	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:26	10/29/05 15:33	

Mercury	METHOD	MW-4	MW-5	Units
Mercury	7470	0.00020 U	0.00020 U	mg/L
Date Analyzed		11/01/05 15:07	11/01/05 15:11	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	MW-6	MW-7	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-6	MW-7	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	1. U	1. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

"U" = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS

	MW-6	MW-7	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
s-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	1. U	1. U	ug/L
1,2,3-Trichloropropane	2. U	2. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
	1. U	1. U	ug/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	108	115	73-138
D8-Toluene	97	105	77-118
Bromofluorobenzene	100	107	70-130
Date Analyzed	11/05/05 16:41	11/05/05 22:24	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-6	MW-7	Units
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:56	10/29/05 16:03	
Barium	6010	0.10 U	0.10 U	mg/L
Date Analyzed		10/29/05 15:56	10/29/05 16:03	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		10/29/05 15:56	10/29/05 16:03	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:56	10/29/05 16:03	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:56	10/29/05 16:03	
Selenium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:56	10/29/05 16:03	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 15:56	10/29/05 16:03	

Mercury	METHOD	MW-6	MW-7	Units
Mercury	7470	0.00020 U	0.00020 U	mg/L
Date Analyzed		11/01/05 15:14	11/01/05 15:18	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	MW-8	MW-9	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-8	MW-9	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	1. U	1. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS

	MW-8	MW-9	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
sec-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	1. U	1. U	ug/L
1,2,3-Trichloropropane	2. U	2. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
	1. U	1. U	ug/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	122	118	73-138
D8-Toluene	100	97	77-118
Bromofluorobenzene	104	111	70-130
Date Analyzed	11/05/05 22:51	11/05/05 23:17	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8	MW-9	Units
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:10	10/29/05 16:17	
Barium	6010	0.10 U	**0.36**	mg/L
Date Analyzed		10/29/05 16:10	10/29/05 16:17	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		10/29/05 16:10	10/29/05 16:17	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:10	10/29/05 16:17	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:10	10/29/05 16:17	
Selenium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:10	10/29/05 16:17	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:10	10/29/05 16:17	

Mercury	METHOD	MW-8	MW-9	Units
Mercury	7470	0.00020 U	0.00020 U	mg/L
Date Analyzed		11/01/05 15:43	11/01/05 15:47	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	SW-2	SW-1	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1.	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L
		1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	SW-2	SW-1	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	1. U	1. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS

	SW-2	SW-1	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
s-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	1. U	1. U	ug/L
1,2,3-Trichloropropane	2. U	2. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
	1. U	1. U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	115	116	73-138
D8-Toluene	102	98	77-118
Bromofluorobenzene	108	116	70-130
Date Analyzed	11/05/05 23:44	11/06/05 00:10	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-2	SW-1	Units
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:24	10/29/05 16:31	
Barium	6010	0.10 U	0.10 U	mg/L
Date Analyzed		10/29/05 16:24	10/29/05 16:31	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		10/29/05 16:24	10/29/05 16:31	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:24	10/29/05 16:31	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:24	10/29/05 16:31	
Selenium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:24	10/29/05 16:31	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:24	10/29/05 16:31	

Mercury	METHOD	SW-2	SW-1	Units
Mercury	7470	0.00020 U	0.00020 U	mg/L
Date Analyzed		11/01/05 15:51	11/01/05 15:55	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	LAB BLANK	LAB BLANK	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	LAB BLANK	LAB BLANK	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	1. U	1. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	LAB BLANK	LAB BLANK	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
s-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	1. U	1. U	ug/L
1,2,3-Trichloropropane	2. U	2. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
	1. U	1. U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	85	110	73-138
D8-Toluene	99	98	77-118
Bromofluorobenzene	90	104	70-130
Date Analyzed	11/02/05 21:13	11/05/05 16:14	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Arsenic	6010	0.010 U	NR	mg/L
Date Analyzed		10/29/05 14:40		
Barium	6010	0.10 U	NR	mg/L
Date Analyzed		10/29/05 14:40		
Cadmium	6010	0.0010 U	NR	mg/L
Date Analyzed		10/29/05 14:40		
Chromium	6010	0.010 U	NR	mg/L
Date Analyzed		10/29/05 14:40		
Lead	6010	0.010 U	NR	mg/L
Date Analyzed		10/29/05 14:40		
Selenium	6010	0.010 U	NR	mg/L
Date Analyzed		10/29/05 14:40		
Silver	6010	0.010 U	NR	mg/L
Date Analyzed		10/29/05 14:40		

Mercury	METHOD	LAB BLANK	LAB BLANK	Units
Mercury	7470	0.00020 U	NR	mg/L
Date Analyzed		11/01/05 14:12		

NR = Analysis not requested for this sample.
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	TRIP BLANK	LAB BLANK	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
trans-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
cis-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

PA METHOD 8260 (cont.) - OLATILE ORGANICS	TRIP BLANK	LAB BLANK	Units
-Chloroethyl vinyl ether	6. U	6. U	ug/L
-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
oluene	1. U	1. U	ug/L
-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
etrachloroethene	1. U	1. U	ug/L
,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
ibromochloromethane	1. U	1. U	ug/L
,2-Dibromoethane	1. U	1. U	ug/L
hlorobenzene	1. U	1. U	ug/L
,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
thylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
-Xylene	1. U	1. U	ug/L
tyrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
sopropylbenzene	1. U	1. U	ug/L
,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
,2,3-Trichlorobenzene	1. U	1. U	ug/L
-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
,3,5-Trimethylbenzene	1. U	1. U	ug/L
-Chlorotoluene	1. U	1. U	ug/L

= Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

PA METHOD 8260 (cont.) -

OLATILE ORGANICS	**TRIP BLANK**	**LAB BLANK**	**Units**
ert-Butylbenzene	1. U	1. U	ug/L
,2,4-Trimethylbenzene	1. U	1. U	ug/L
s-Butylbenzene	1. U	1. U	ug/L
,3-Dichlorobenzene	1. U	1. U	ug/L
-Isopropyltoluene	1. U	1. U	ug/L
,4-Dichlorobenzene	1. U	1. U	ug/L
-Butylbenzene	1. U	1. U	ug/L
,2-Dichlorobenzene	1. U	1. U	ug/L
,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
,2,4-Trichlorobenzene	1. U	1. U	ug/L
exachlorobutadiene	1. U	1. U	ug/L
Naphthalene	2. U	2. U	ug/L
,2,3-Trichloropropane	1. U	1. U	ug/L
romochloromethane	1. U	1. U	ug/L

urrogate:	**% RECOV**	**% RECOV**	**LIMITS**
ibromofluoromethane	116	110	73-138
8-Toluene	101	98	77-118
romofluorobenzene	117	104	70-130
ate Analyzed	11/06/05 03:17	11/05/05 16:14	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	TRIP BLANK	LAB BLANK	Units
Arsenic Date Analyzed	6010	NR	0.010 U 10/29/05 14:40	mg/L
Barium Date Analyzed	6010	NR	0.10 U 10/29/05 14:40	mg/L
Cadmium Date Analyzed	6010	NR	0.0010 U 10/29/05 14:40	mg/L
Chromium Date Analyzed	6010	NR	0.010 U 10/29/05 14:40	mg/L
Lead Date Analyzed	6010	NR	0.010 U 10/29/05 14:40	mg/L
Selenium Date Analyzed	6010	NR	0.010 U 10/29/05 14:40	mg/L
Silver Date Analyzed	6010	NR	0.010 U 10/29/05 14:40	mg/L

Mercury	METHOD	TRIP BLANK	LAB BLANK	Units
Mercury Date Analyzed	7470	NR	0.00020 U 10/31/05 14:00	mg/L

NR = Analysis not requested for this sample.
U = Compound was analyzed for but not detected to the level shown.

LABORATORY CERTIFICATIONS

Laboratory Certification: NCDENR:591

All analyses reported with this project were analyzed by the facility indicated unless identified below.

ENCO LABORATORIES
REPORT # : CRY18970
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

QUALITY CONTROL DATA

Parameter	% RECOVERY LCS/MS/MSD	LCS LIMITS	MS/MSD LIMITS	RPD MS/MSD	RPD LIMITS
EPA Method 8260					
1,1-Dichloroethene	112/120/123	64-139	36-177	2	30
Benzene	82/ 86/ 90	69-115	53-150	4	23
Trichloroethene	117/118/120	74-118	64-124	2	25
Toluene	105/110/114	77-117	40-161	4	23
Chlorobenzene	104/116/117	76-118	44-128	<1	22
TOTAL METALS					
Arsenic, 6010	100/101/100	82-117	64-126	<1	12
Barium, 6010	105/107/106	72-125	74-119	<1	11
Cadmium, 6010	105/106/105	72-120	68-121	<1	12
Chromium, 6010	99/100/ 99	78-119	73-120	1	17
Lead, 6010	93/ 94/ 94	72-121	68-126	<1	19
Selenium, 6010	99/100/100	82-127	65-129	<1	10
Silver, 6010	100/100/ 99	80-128	69-121	1	12
Mercury					
Mercury, 7470	102/ 96/ 98	81-126	70-136	2	12

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

QSARF #[illegible]

P361

ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
Ph. (904) 296-3007 • Fax (904) 296-6210

10207 General Drive
Orlando, Florida 32824-8529
Ph. (407) 826-5314 • Fax (407) 850-6945

1015 Passport Way
Cary, North Carolina 27513
Ph. (919) 677-1669 • Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Central Carolina Tire
PROJECT NO.: 202334.09
P.O. NUMBER:
PAGE 1 OF ~~2~~ 1

PROJECT LOC. (State): NC
SAMPLER(s) NAME: JOHN PALMER
PHONE: (919)-469-3340
FAX: (919)-535-4545

CLIENT NAME: Withers & Ravenel ~~Environmental~~
CLIENT PROJECT MANAGER: Mr. Brian Bellis

CLIENT ADDRESS (CITY, STATE, ZIP): 111 MacKenan Drive Cary, NC 27511

☑ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due:

MATRIX TYPE: SURFACE WATER, GROUND WATER, WASTEWATER, DRINKING WATER, SOIL/SOLID/SEDIMENT, NONAQUEOUS LIQUID (oil, solvent, etc), AIR, SLUDGE, OTHER

REQUIRED ANALYSIS: RCRA 8 METALS; 8260

PRESERVATIVE

STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID	AIR	SLUDGE	OTHER	RCRA 8 METALS	8260	REMARKS
1	10/26/05	1232	✓		MW-2		X								1	3	
2		1201	✓		MW-3		X								1	3	
3		1150	✓		MW-4		X								1	3	
4		1330	✓		MW-5		X								1	3	
5		1256	✓		MW-6		X								1	3	
6		1248	✓		MW-7		X								1	3	
7		1105	✓		MW-8		X								1	3	
8	10/26/05	1354	✓		MW-9		X								1	3	
9					~~MW-10~~		X								~~1~~	~~3~~	
10					~~MW-11~~		X								1	3	
11					~~MW-12~~		X								1	3	
12					~~MW-13~~		X								~~1~~	~~3~~	
13	10/26/05	1213	✓		~~MW-14~~ SW-2	X	X								1	3	
14	10/26/05	1308	✓		SW-1	X	X								1	3	

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐JACKSONVILLE ☐ORLANDO ☒CRY	10/24/05	11:38						

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	10/26/05	1530	[signature]	10/26/05	18:00			

RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS
☐ Jacksonville CRY ☐ Orlando [signature]	10/27/05	8:19	☒ YES ☐ NO	CRY18970	

Fac/Perm/Co ID #	Date	Doc ID#
BC	6/22/09	DIN

Received
DEC 2005
Solid Waste Section

OCTOBER-DECEMBER 2005 SEMI-ANNUAL GROUNDWATER and SURFACE WATER MONITORING REPORT

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

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS

December 8, 2005

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: October-December 2005 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 second 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 third preliminary 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

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7040 Wrightsville Ave | Suite 101 | Wilmington, North Carolina 28403 | tel: 910.256.9277 | fax: 910.256.2584

hydraulic conductivity values ranging from 2.2 x 10^{-3} cm/s to 7.0 x 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 334.61 feet above mean sea level (MSL) for the sampling event. Individual groundwater elevations determined for each of the monitoring wells on October 26, 2005 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 new disposable bailer. 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 then collected using the same bailer used to purge each respective well. Groundwater samples were decanted directly into laboratory provided containers, which were placed into ice-filled 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 17.9 and 20.5 degrees Celsius; the pH ranged between 4.18 and 5.83; and the specific conductance ranged between 5 and 106 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 Oct-Dec 2005 sampling event are summarized in **Table 2**. A low concentration of the VOC toluene was detected in the groundwater sample from well MW-12 (2.0 ug/L). The detected concentration is well below the North Carolina Groundwater Standard for toluene (1,000 ug/L). No VOCs were detected in any of the remaining samples. Barium was detected in the sample from well MW-14 (0.12 mg/L). The detected barium sample is well below the North Carolina Groundwater Standard of 2.0 mg/L. No other RCRA metals were identified in the samples from MW-14 and no RCRA metals were identified in the remaining groundwater samples or in the surface water sample. The laboratory detections can therefore be summarized as follows:

MW-12 : Toluene was reported at 2.0 ug/L.

MW-14 : Barium was reported at 0.12 mg/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 October–December 2005 semi-annual monitoring event for the Central Carolina Tire Phase III scrap tire monofill landfill indicate that a low concentration of toluene was detected in one of the groundwater samples collected during the event. However, the concentration detected was well below the North Carolina Groundwater Standard for Toluene.

- A low concentration of the RCRA metal barium was detected in one of the groundwater samples. However, the detected concentration was well below the North Carolina Groundwater Standard for barium.

- No VOCs or RCRA metals were detected in the Surface Water Sample.

- VOCs were not identified 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 May 2006. Please contact us at (919) 469-3340 if you have any questions regarding the contents of this report.

Sincerely,

WITHERS & RAVENEL

NORTH CAROLINA LICENSED 1594 GEOLOGIST JOHN MARK PALMER

John M. Palmer, P.G.
Project Geologist

cc: Mr. Thomas Womble

TABLES

Table 1
Monitoring Well and Groundwater Data
(October 2005 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. mmhos/cm		
MW-10	549731.36	1954619.21	356.28	353.74	13.99	342.29	20.3	4.42	106	26.5	329.7 - 344.7
MW-11	548984.87	1955599.35	347.80	345.70	11.31	336.49	19	5.13	5	22.6	325.2 - 340.2
MW-12	548054.79	1955590.24	336.58	334.45	6.26	330.32	17.9	5.83	35	20.6	316.0 - 331.0
MW-13	547826.40	1955420.62	339.47	337.36	12.85	326.62	19.1	4.91	12	20.1	319.4 - 334.4
MW-14	547781.99	1954436.12	344.12	341.86	6.77	337.35	20.5	4.18	63	12.3	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
October 2005 Sampling Event
Phase III Tire Monofill Landfill (Planned)
Harnett County, North Carolina

ORGANIC CONSTITUENTS (in ug/L)	SW-1(Exp)	MW-10	MW-11	MW-12	MW-13	MW-14	RL (in ug/L)	NCAC 2L STD (in ug/L)
Acetone	NA	ND	ND	ND	ND	ND	50	700
Benzene	NA	ND	ND	ND	ND	ND	1	1
Bromobenzene	NA	ND	ND	ND	ND	ND	1	N/A
Bromochloromethane	NA	ND	ND	ND	ND	ND	1	N/A
Bromodichloromethane	NA	ND	ND	ND	ND	ND	1	0.56
Bromoform (Tribromoethane)	NA	ND	ND	ND	ND	ND	1	0.19
Bromomethane (Methyl Bromide)	NA	ND	ND	ND	ND	ND	2	N/A
tert-Butylbenzene	NA	ND	ND	ND	ND	ND	1	70
2-Butanone (MEK), (Methyl Ethyl Ketone)	NA	ND	ND	ND	ND	ND	20	170
n-Butlybenzene	NA	ND	ND	ND	ND	ND	1	70
s-Butylbenzene	NA	ND	ND	ND	ND	ND	1	70
Carbon Disulfide	NA	ND	ND	ND	ND	ND	50	700
Carbon Tetrachloride	NA	ND	ND	ND	ND	ND	1	0.3
Chlorobenzene	NA	ND	ND	ND	ND	ND	1	50
Chloroethane (Ethyl Chloride)	NA	ND	ND	ND	ND	ND	2	2800
Chloroethyl Vinyl Ether	NA	ND	ND	ND	ND	ND	6	N/A
Chloroform (Trichloromethane)	NA	ND	ND	ND	ND	ND	1	0.19
2-Chlorotoluene	NA	ND	ND	ND	ND	ND	1	14
4-Chlorotoluene	NA	ND	ND	ND	ND	ND	1	N/A
1,2-Dibromo-3-Chloropropane (DBCP)	NA	ND	ND	ND	ND	ND	1	0.025
Dibromochloromethane (Chlorodibromomethane)	NA	ND	ND	ND	ND	ND	1	0.41
1,2,-Dibromoethane (Ethylene Dibromide)	NA	ND	ND	ND	ND	ND	1	0.0004
Dibromomethane (Methylene Bromide)	NA	ND	ND	ND	ND	ND	1	N/A
1,2-Dichlorobenzene (O-Dichlorobenzene)	NA	ND	ND	ND	ND	ND	1	620
1,3-Dichlorobenzene	NA	ND	ND	ND	ND	ND	1	620
1,4-Dichlorobenzene (P-Dichlorobenzene)	NA	ND	ND	ND	ND	ND	1	620
1,2-Dichloroethane (Ethylene Dichloride)	NA	ND	ND	ND	ND	ND	1	0.38
1,1-Dichloroethene (Vinylidene Chloride)	NA	ND	ND	ND	ND	ND	1	7
CIS-1,2-Dichloroethene (CIS-1,2-Dichloroethylene)	NA	ND	ND	ND	ND	ND	1	70
T-1,2-Dichloroethene (Trans-1,2-Dichloroethylene)	NA	ND	ND	ND	ND	ND	1	70
1,2-Dichloropropane (Propylene Dichloride)	NA	ND	ND	ND	ND	ND	1	0.56
1,3-Dichloropropane	NA	ND	ND	ND	ND	ND	1	N/A
2,2-Dichloropropane	NA	ND	ND	ND	ND	ND	2	N/A
1,1-Dichloropropene	NA	ND	ND	ND	ND	ND	1	N/A
CIS-1,3-Dichloropropene	NA	ND	ND	ND	ND	ND	1	0.19
T-1,3-Dichloropropene	NA	ND	ND	ND	ND	ND	1	0.19
Ethylbenzene	NA	ND	ND	ND	ND	ND	1	29
Hexachlorobutadiene (Hexachloro-1,3-Butadiene)	NA	ND	ND	ND	ND	ND	1	0.44
2-Hexanone (Methyl Butyl Ketone)	NA	ND	ND	ND	ND	ND	20	280
Isopropylbenzene	NA	ND	ND	ND	ND	ND	1	N/A
p-Isopropyltoluene	NA	ND	ND	ND	ND	ND	1	N/A
Methyl Chloride (Chloromethane)	NA	ND	ND	ND	ND	ND	1	2.6
Methylene Chloride (Dichloromethane)	NA	ND	ND	ND	ND	ND	5	5
4-Methyl-2Pentanone (Methyl Isobutyl Ketone)	NA	ND	ND	ND	ND	ND	20	N/A
Methyl Tert-Butyl Ether (MTBE)	NA	ND	ND	ND	ND	ND	1	200
Naphthalene	NA	ND	ND	ND	ND	ND	2	21
n-Propylbenzene	NA	ND	ND	ND	ND	ND	1	70
Styrene	NA	ND	ND	ND	ND	ND	1	0.1
1,1,1,2-Tetrachloroethane	NA	ND	ND	ND	ND	ND	1	N/A
1,1,2,2-Tetrachloroethane	NA	ND	ND	ND	ND	ND	1	0.17
Tetrachloroethene (Tetrachloroethylene), (PCE)	NA	ND	ND	ND	ND	ND	3	0.7
Toluene	NA	ND	ND	2	ND	ND	1	1000
1,2,3-Trichlorobenzene	NA	ND	ND	ND	ND	ND	1	N/A
1,2,4-Trichlorobenzene	NA	ND	ND	ND	ND	ND	1	70
1,1,1-Trichloroethane (Methylchloroform)	NA	ND	ND	ND	ND	ND	1	200
1,1,2-Trichloroethane	NA	ND	ND	ND	ND	ND	1	N/A
Trichloroethene (Trichloroethylene), (TCE)	NA	ND	ND	ND	ND	ND	1	2.8
Trichlorofluoromethane (CFC-11)	NA	ND	ND	ND	ND	ND	1	2100
1,2,3-Trichloropropane	NA	ND	ND	ND	ND	ND	1	0.005
1,2,4-Trimethylbenzene	NA	ND	ND	ND	ND	ND	1	350
1,3,5-Trimethylbenzene	NA	ND	ND	ND	ND	ND	1	0.35
Vinyl Chloride	NA	ND	ND	ND	ND	ND	1	0.015
Xylenes (mixed)	NA	ND	ND	ND	ND	ND	2	530
INORGANIC CONSTITUENTS (in mg/L)							**RL (in mg/L)**	**NCAC 2L STD (in mg/L)**
Arsenic	NA	ND	ND	NA	ND	ND	0.010	0.05
Barium	NA	ND	ND	NA	ND	0.12	0.10	2
Cadmium	NA	ND	ND	NA	ND	ND	0.0010	0.005
Chromium	NA	ND	ND	NA	ND	ND	0.010	0.05
Lead	NA	ND	ND	NA	ND	ND	0.010	0.015
Mercury	NA	ND	ND	NA	ND	ND	0.00020	0.0011
Selenium	NA	ND	ND	NA	ND	ND	0.010	0.05
Silver	NA	ND	ND	NA	ND	ND	0.010	0.018

Notes:

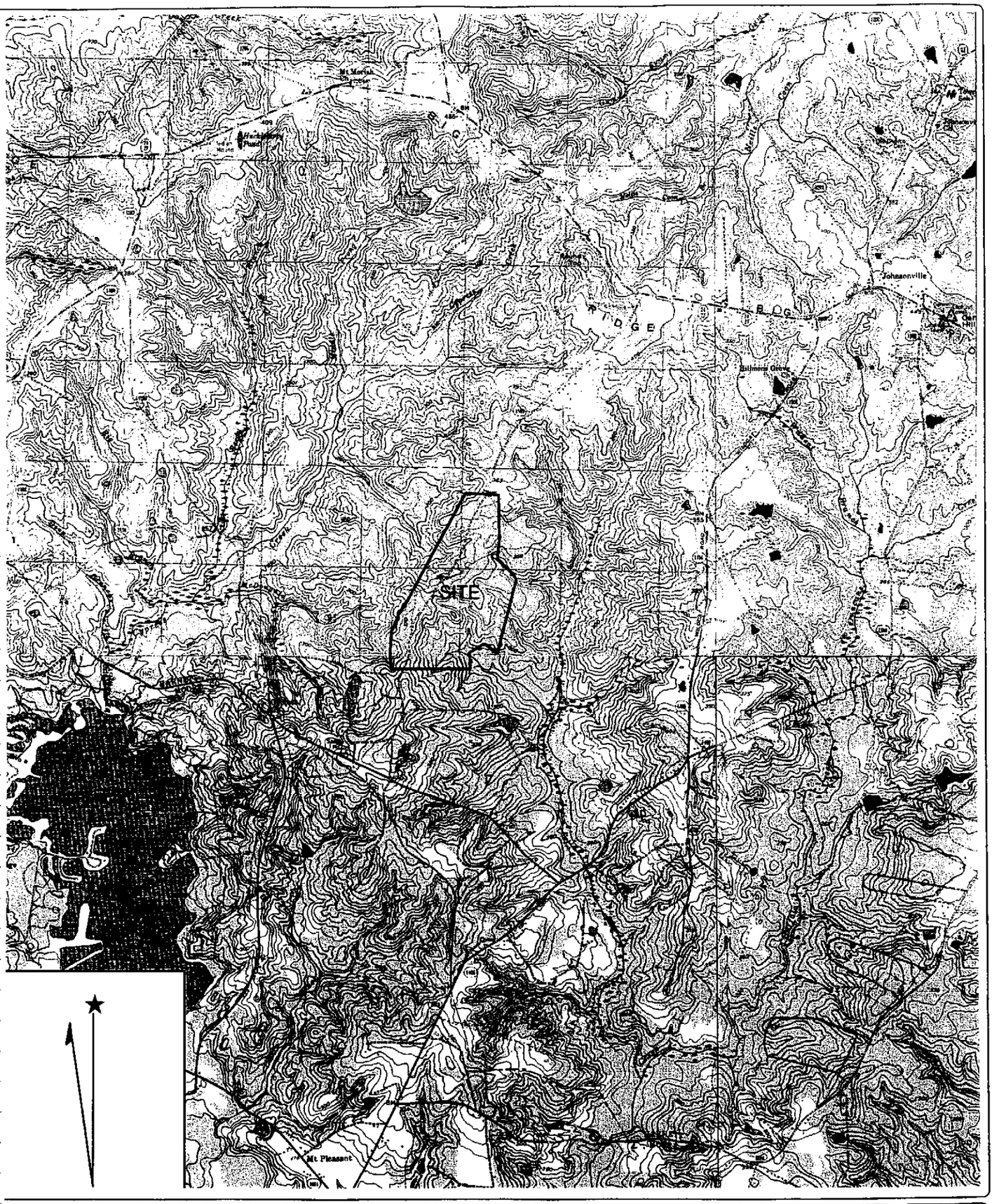
NCAC 2L STD = North Carolina Groundwater Standard established in Title 15A of North Carolina Administrative Code Subchapter 2L

RL = Laboratory Reporting Limit

ND = Not Detected at concentration above reporting limit

N/A=Not Applicable, Standard for this compound has not been published

FIGURES



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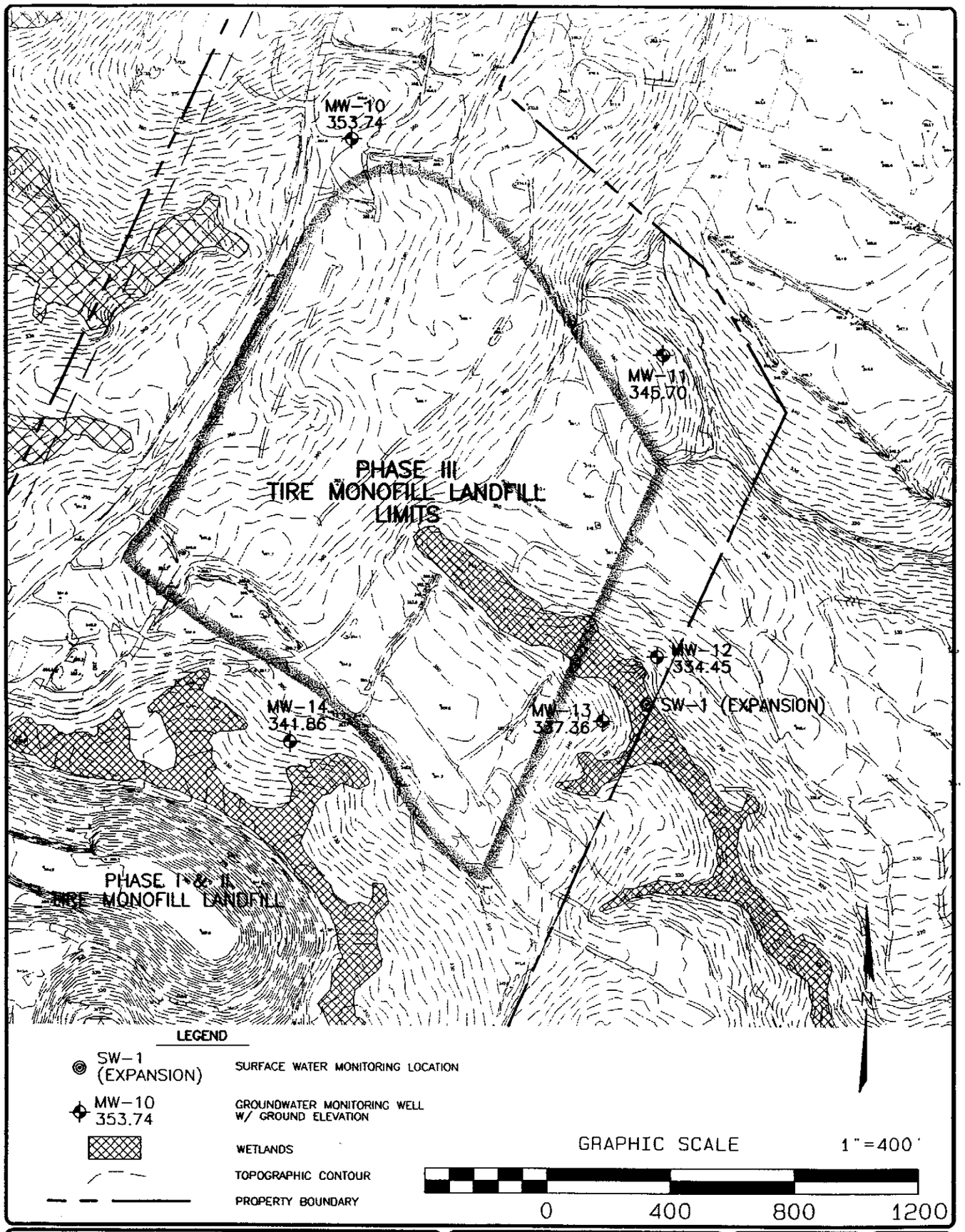
tel: 919-460-6006 fax: 919-535-4545

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	202334.08



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111 MacKenan Drive Cary, North Carolina 27511 tel: 919-469-3340 fax: 919-535-4545
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

APPENDIX A

PRE-SAMPLING / WELL PURGING FIELD LOGS

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire

WELL NUMBER: MW-10

WELL INSIDE DIAMETER: 2 INCHES

DEPTH OF BOTTOM: 26.97 FEET

DEPTH TO WATER: 13.99 FEET

1 WELL VOLUME: 2.12 GALLONS

SAMPLED BY: John Palmer

PROJECT NUMBER: 202334.09

DATE: 10/25 + 26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): MID 60's

WEATHER CONDITIONS: SOMEWHAT OVERCAST, V. BREEZY

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED: POLY-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

FLUSHING	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
WATER LEVEL BEFORE	13.99				
WATER LEVEL AFTER	/			17.54	
TIME BEGIN FLUSHING	1313				
TIME END FLUSHING	/			1333	
ESTIMATED VOLUME FLUSHING (gal)	2.25	4.5	6.75	9.0	
WELL VOLUMES REMOVED	1	2	3	4	

FIELD ANALYSIS					
WATER TEMPERATURE (°C)	20.0	20.0	20.6	20.3	
SAMPLE (ph)	4.84	4.47	4.39	4.42	
SAMPLE CONDUCTIVITY (umhos/cm)	116	107	106	106	
BUFFER BEFORE					
BUFFER AFTER					
ODOR	NONE	→	→	→	
COLOR	LT. BROWN	→	→	→	
Eh					
TURBIDITY	102	355	841	745	

COMMENTS: Sample Time = 0905 on 10/26/05

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= 26.97 (WELL DEPTH) - 13.99 (DEPTH TO WATER) = 12.98 FT = h

3.14 x .00694 (r^2) x h = .283 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 2.12

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PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire
WELL NUMBER: MW-11
WELL INSIDE DIAMETER: 2 INCHES
DEPTH OF BOTTOM: 23.81 FEET
DEPTH TO WATER: 11.31 FEET
1 WELL VOLUME: 2.04 GALLONS

SAMPLED BY: John Palmer
PROJECT NUMBER: 202334.09
DATE: 10/25+26/05 PAGE 1 OF 1
AIR TEMPERATURE (FAHRENHEIT): MID 60'S
WEATHER CONDITIONS: CLEAR, BREEZY

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED
POLY-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

FLUSHING	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
WATER LEVEL BEFORE	11.31				
WATER LEVEL AFTER	/			13.43	
TIME BEGIN FLUSHING	1103				
TIME END FLUSHING	/			11.32	
ESTIMATED VOLUME FLUSHING (gal)	2.0	4.0	6.0	8.0	
WELL VOLUMES REMOVED	1	2	3	4	

FIELD ANALYSIS					
WATER TEMPERATURE (°C)	18.8	19.0	19.0	19.0	
SAMPLE (ph)	5.19	5.08	5.12	5.13	
SAMPLE CONDUCTIVITY (umhos/cm)	6	5	5	5	
BUFFER BEFORE					
BUFFER AFTER					
ODOR	NONE	→	→	→	
COLOR	LT. BROWN	→	→	→	
Eh					
TURBIDITY	419	180	559	360	

COMMENTS: Sample Time = 0937 on 10/26/05

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)
$\pi r^2 \times h$ = WELL VOLUME IN FT^3
π = 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= 23.81 (WELL DEPTH) - 11.31 (DEPTH TO WATER) = 12.5 FT = h
3.14 x .00694 (r^2) x h = .273 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 2.04

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: 21.59 FEET

DEPTH TO WATER: 6.26 FEET

1 WELL VOLUME: 2.50 GALLONS

SAMPLED BY: John Palmer

PROJECT NUMBER: 202334.09

DATE: 10/25+26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): LOW 60's

WEATHER CONDITIONS: CLEAR, BREEZY

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED: PAM-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

FLUSHING	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
WATER LEVEL BEFORE	6.26				
WATER LEVEL AFTER	/		—		
TIME BEGIN FLUSHING	1022				
TIME END FLUSHING	/		1054		
ESTIMATED VOLUME FLUSHING (gal)	2.5	5.0	7.5		
WELL VOLUMES REMOVED	1	2	3		

FIELD ANALYSIS					
WATER TEMPERATURE (°C)	19.0	19.6	17.9		
SAMPLE (ph)	5.32	5.95	5.03		
SAMPLE CONDUCTIVITY (umhos/cm)	22	26	35		
BUFFER BEFORE					
BUFFER AFTER					
ODOR	SULPHUR	→	→		
COLOR	LT. BROWN	→	→		
Eh					
TURBIDITY	7999	7999	7999		

COMMENTS: Sample Time = 1012 on 10/26/05 – SAMPLE IS SOMEWHAT CLOUDY
BAILED WELL DRY AFTER ~3.5 WELL VOLUMES

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= 21.59 (WELL DEPTH) - 6.26 (DEPTH TO WATER) = 15.33 FT = h

3.14 x .00694 (r^2) x h = .334 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 2.50

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: 20.64 FEET

DEPTH TO WATER: 12.85 FEET

1 WELL VOLUME: 1.27 GALLONS

SAMPLED BY: John Palmer

PROJECT NUMBER: 202334.09

DATE: 10/25 + 26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): MID 60's

WEATHER CONDITIONS: MOSTLY CLEAR, BRZY

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED: POLY-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

FLUSHING	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
WATER LEVEL BEFORE	12.85				
WATER LEVEL AFTER	/			—	
TIME BEGIN FLUSHING	1145				
TIME END FLUSHING	/			1218	
ESTIMATED VOLUME FLUSHING (gal)	1.25	2.5	3.75	5.0	
WELL VOLUMES REMOVED	1	2	3	4	

FIELD ANALYSIS					
WATER TEMPERATURE (°C)	19.3	19.6	19.2	19.1	
SAMPLE (ph)	4.79	4.81	4.92	4.95	
SAMPLE CONDUCTIVITY (umhos/cm)	12	11	12	12	
BUFFER BEFORE					
BUFFER AFTER					
ODOR					
COLOR					
Eh					
TURBIDITY	>999	>999	>999	>999	

COMMENTS: Sample Time = 1027 on 10/26/05

BAILED WELL DRY AFTER ~ 4.0 WELL VOLUMES

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= 20.64 (WELL DEPTH) - 12.83 (DEPTH TO WATER) = 7.81 FT = h

3.14 x .00694 (r^2) x h = .170 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = 1.27

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

SAMPLED BY John Palmer

PROJECT Central Carolina Tire

PROJECT NUMBER 202334.09

WELL NUMBER MW-14

DATE 10/25+26/05 PAGE 1 OF 1

WELL INSIDE DIAMETER 2 INCHES

AIR TEMPERATURE (FAHRENHEIT) MID 60's

DEPTH OF BOTTOM 12.04 FEET

WEATHER CONDITIONS MOSTLY CLR, BREZY

DEPTH TO WATER 6.77 FEET

1 WELL VOLUME .86 GALLONS

METHOD OF EXCAVATION AND TYPE OF EQUIPMENT USED

POLY-BAILER / HORIBA U-10

WITHDRAWAL OF WELL VOLUMES

FLUSHING	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME	WELL VOLUME
WATER LEVEL BEFORE	6.77				
WATER LEVEL AFTER	/		—		
TIME BEGIN FLUSHING	1226				
TIME END FLUSHING	/		1301		
ESTIMATED VOLUME FLUSHING (gal)	1.0	2.0	3.0		
WELL VOLUMES REMOVED	1	2	3		

FIELD ANALYSIS					
WATER TEMPERATURE (°C)	20.1	20.3	20.5		
SAMPLE (ph)	4.20	4.18	4.18		
SAMPLE CONDUCTIVITY (umhos/cm)	63	63	63		
BUFFER BEFORE					
BUFFER AFTER					
ODOR	NONE	→	→		
COLOR	LT. BROWN	→	→		
Eh					
TURBIDITY	7 999	7 999	7999		

COMMENTS Sample Time = 1046 on 10/26/05

BAILED WELL DRY AFTER ~3.5 WELL VOLUMES

WELL VOLUME CALCULATIONS (1cf = 7.48 gal)

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

π = 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= 12.04 (WELL DEPTH) - 6.77 (DEPTH TO WATER) = 5.27 FT = h

3.14 x .00694 (r^2) x h = .115 FT^3 x 7.48 gal/ft^3 = 1 WELL VOLUME IN GAL = .86

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

PRE-SAMPLING WELL PURGING

PROJECT: Central Carolina Tire

WELL NUMBER: SW-1 (Expansion)

WELL INSIDE DIAMETER: ____ INCHES

DEPTH OF BOTTOM: ____ FEET

DEPTH TO WATER: ____ FEET

1 WELL VOLUME: ____ GALLONS

SAMPLED BY: John Palmer

PROJECT NUMBER: 202334.0

DATE: 10/26/05 PAGE 1 OF 1

AIR TEMPERATURE (FAHRENHEIT): MID 40's

WEATHER CONDITIONS: CLEAR, 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)					
SAMPLE CONDUCTIVITY (umhos/cm)	4.30				
BUFFER BEFORE	23				
BUFFER AFTER					
ODOR	"ANAEROBIC"				
COLOR	SLIGHTLY BROWN				
Eh					
TURBIDITY	2				

COMMENTS: Sample Time = 0949

SOME HUMIC MATERIAL 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 x 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

APPENDIX B

LABORATORY ANALYTICAL RESULTS

Environmental Conservation Laboratories, Inc.
1015 Passport Way
Cary, North Carolina 27513-2042
919 / 677-1669
Fax 919 / 677-9846
www.encolabs.com

ENCO Laboratories

DHRS Certification No. E82277

CLIENT : Withers & Ravenel Environmental
ADDRESS: 111 MacKenan Drive
Cary, NC 27511

REPORT # : CRY18971
DATE SUBMITTED: October 27, 2005
DATE REPORTED : November 7, 2005

ATTENTION: Mr. Brian Bellis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

REFERENCE: 202334.09

Central Carolina Tire

10/26/05

CRY18971-1	: MW-10	@ 09:05
CRY18971-2	: MW-11	@ 09:37
CRY18971-3	: MW-12	@ 10:12
CRY18971-4	: MW-13	@ 10:27
CRY18971-5	: MW-14	@ 10:46
CRY18971-6	: SW-1 (EXPANSION)	@ 09:49
CRY18971-7	: TRIP BLANK	@ 00:00

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

PROJECT MANAGER _____
Chuck Smith

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	MW-10	MW-11	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-10	MW-11	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	1. U	1. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-10	MW-11	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
sec-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	2. U	2. U	ug/L
1,2,3-Trichloropropane	1. U	1. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	121	123	73-138
D8-Toluene	100	106	77-118
Bromofluorobenzene	105	112	70-130
Date Analyzed	11/06/05 00:37	11/06/05 01:03	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-10	MW-11	Units
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:38	10/29/05 16:45	
Barium	6010	0.10 U	0.10 U	mg/L
Date Analyzed		10/29/05 16:38	10/29/05 16:45	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		10/29/05 16:38	10/29/05 16:45	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:38	10/29/05 16:45	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:38	10/29/05 16:45	
Selenium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:38	10/29/05 16:45	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:38	10/29/05 16:45	
Mercury	**METHOD**	**MW-10**	**MW-11**	**Units**
Mercury	7470	0.00020 U	0.00020 U	mg/L
Date Analyzed		10/31/05 15:07	10/31/05 15:09	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	MW-12	MW-13	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-12	MW-13	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	2.	1. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-12	MW-13	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
sec-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	2. U	2. U	ug/L
1,2,3-Trichloropropane	1. U	1. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	120	117	73-138
D8-Toluene	107	95	77-118
Bromofluorobenzene	113	114	70-130
Date Analyzed	11/06/05 01:30	11/06/05 01:57	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-12	MW-13	Units
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:52	10/29/05 16:59	
Barium	6010	0.10 U	0.10 U	mg/L
Date Analyzed		10/29/05 16:52	10/29/05 16:59	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		10/29/05 16:52	10/29/05 16:59	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:52	10/29/05 16:59	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:52	10/29/05 16:59	
Selenium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:52	10/29/05 16:59	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 16:52	10/29/05 16:59	
Mercury	**METHOD**	**MW-12**	**MW-13**	**Units**
Mercury	7470	0.00020 U	0.00020 U	mg/L
Date Analyzed		10/31/05 15:14	10/31/05 15:27	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	MW-14	SW-1 (EXPANSION)	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-14	SW-1 (EXPANSION)	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	1. U	1. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	MW-14	SW-1 (EXPANSION)	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
sec-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	2. U	2. U	ug/L
1,2,3-Trichloropropane	1. U	1. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	117	128	73-138
D8-Toluene	105	101	77-118
Bromofluorobenzene	104	112	70-130
Date Analyzed	11/06/05 02:24	11/06/05 02:51	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-14	SW-1 (EXPANSION)	Units
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 17:22	10/29/05 17:29	
Barium	6010	**0.12**	0.10 U	mg/L
Date Analyzed		10/29/05 17:22	10/29/05 17:29	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		10/29/05 17:22	10/29/05 17:29	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 17:22	10/29/05 17:29	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 17:22	10/29/05 17:29	
Selenium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 17:22	10/29/05 17:29	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/05 17:22	10/29/05 17:29	
Mercury	**METHOD**	**MW-14**	**SW-1 (EXPANSION)**	**Units**
Mercury	7470	0.00020 U	0.00020 U	mg/L
Date Analyzed		10/31/05 15:30	10/31/05 15:34	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	TRIP BLANK	LAB BLANK	Units
Dichlorodifluoromethane	2. U	2. U	ug/L
Chloromethane	1. U	1. U	ug/L
Vinyl Chloride	1. U	1. U	ug/L
Bromomethane	2. U	2. U	ug/L
Chloroethane	2. U	2. U	ug/L
Trichlorofluoromethane	1. U	1. U	ug/L
1,1-Dichloroethene	1. U	1. U	ug/L
Acetone	50. U	50. U	ug/L
Carbon Disulfide	50. U	50. U	ug/L
Methylene Chloride	5. U	5. U	ug/L
t-1,2-Dichloroethene	1. U	1. U	ug/L
Methyl tert-butyl ether	1. U	1. U	ug/L
1,1-Dichloroethane	1. U	1. U	ug/L
2,2-Dichloropropane	2. U	2. U	ug/L
c-1,2-Dichloroethene	1. U	1. U	ug/L
2-Butanone	20. U	20. U	ug/L
Chloroform	1. U	1. U	ug/L
1,1,1-Trichloroethane	1. U	1. U	ug/L
Carbon tetrachloride	1. U	1. U	ug/L
1,1-Dichloropropene	1. U	1. U	ug/L
Benzene	1. U	1. U	ug/L
1,2-Dichloroethane	1. U	1. U	ug/L
Trichloroethene	1. U	1. U	ug/L
1,2-Dichloropropane	1. U	1. U	ug/L
Dibromomethane	1. U	1. U	ug/L
Bromodichloromethane	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	TRIP BLANK	LAB BLANK	Units
2-Chloroethyl vinyl ether	6. U	6. U	ug/L
t-1,3-Dichloropropene	1. U	1. U	ug/L
4-Methyl-2-pentanone	20. U	20. U	ug/L
Toluene	1. U	1. U	ug/L
c-1,3-Dichloropropene	1. U	1. U	ug/L
1,1,2-Trichloroethane	1. U	1. U	ug/L
Tetrachloroethene	1. U	1. U	ug/L
1,3-Dichloropropane	1. U	1. U	ug/L
2-Hexanone	20. U	20. U	ug/L
Dibromochloromethane	1. U	1. U	ug/L
1,2-Dibromoethane	1. U	1. U	ug/L
Chlorobenzene	1. U	1. U	ug/L
1,1,1,2-Tetrachloroethane	1. U	1. U	ug/L
Ethylbenzene	1. U	1. U	ug/L
m-Xylene & p-Xylene	2. U	2. U	ug/L
o-Xylene	1. U	1. U	ug/L
Styrene	1. U	1. U	ug/L
Bromoform	1. U	1. U	ug/L
Isopropylbenzene	1. U	1. U	ug/L
1,1,2,2-Tetrachloroethane	1. U	1. U	ug/L
Bromobenzene	1. U	1. U	ug/L
1,2,3-Trichlorobenzene	1. U	1. U	ug/L
n-Propylbenzene	1. U	1. U	ug/L
2-Chlorotoluene	1. U	1. U	ug/L
1,3,5-Trimethylbenzene	1. U	1. U	ug/L
4-Chlorotoluene	1. U	1. U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) - VOLATILE ORGANICS	TRIP BLANK	LAB BLANK	Units
tert-Butylbenzene	1. U	1. U	ug/L
1,2,4-Trimethylbenzene	1. U	1. U	ug/L
sec-Butylbenzene	1. U	1. U	ug/L
1,3-Dichlorobenzene	1. U	1. U	ug/L
p-Isopropyltoluene	1. U	1. U	ug/L
1,4-Dichlorobenzene	1. U	1. U	ug/L
n-Butylbenzene	1. U	1. U	ug/L
1,2-Dichlorobenzene	1. U	1. U	ug/L
1,2-Dibromo-3-chloropropane	1. U	1. U	ug/L
1,2,4-Trichlorobenzene	1. U	1. U	ug/L
Hexachlorobutadiene	1. U	1. U	ug/L
Naphthalene	2. U	2. U	ug/L
1,2,3-Trichloropropane	1. U	1. U	ug/L
Bromochloromethane	1. U	1. U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	116	110	73-138
D8-Toluene	101	98	77-118
Bromofluorobenzene	117	104	70-130
Date Analyzed	11/06/05 03:17	11/05/05 16:14	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	TRIP BLANK	LAB BLANK	Units
Arsenic	6010	NR	0.010 U	mg/L
Date Analyzed			10/29/05 14:40	
Barium	6010	NR	0.10 U	mg/L
Date Analyzed			10/29/05 14:40	
Cadmium	6010	NR	0.0010 U	mg/L
Date Analyzed			10/29/05 14:40	
Chromium	6010	NR	0.010 U	mg/L
Date Analyzed			10/29/05 14:40	
Lead	6010	NR	0.010 U	mg/L
Date Analyzed			10/29/05 14:40	
Selenium	6010	NR	0.010 U	mg/L
Date Analyzed			10/29/05 14:40	
Silver	6010	NR	0.010 U	mg/L
Date Analyzed			10/29/05 14:40	
Mercury	**METHOD**	**TRIP BLANK**	**LAB BLANK**	**Units**
Mercury	7470	NR	0.00020 U	mg/L
Date Analyzed			10/31/05 14:00	

NR = Analysis not requested for this sample.
U = Compound was analyzed for but not detected to the level shown.

LABORATORY CERTIFICATIONS

Laboratory Certification: NCDENR:591

All analyses reported with this project were analyzed by the facility indicated unless identified below.

ENCO LABORATORIES
REPORT # : CRY18971
DATE REPORTED: November 7, 2005
REFERENCE : 202334.09
PROJECT NAME : Central Carolina Tire

QUALITY CONTROL DATA

Parameter	% RECOVERY LCS/MS/MSD	LCS LIMITS	MS/MSD LIMITS	RPD MS/MSD	RPD LIMITS
EPA Method 8260					
1,1-Dichloroethene	112/120/123	64-139	36-177	2	30
Benzene	82/ 86/ 90	69-115	53-150	4	23
Trichloroethene	117/118/120	74-118	64-124	2	25
Toluene	105/110/114	77-117	40-161	4	23
Chlorobenzene	104/116/117	76-118	44-128	<1	22
TOTAL METALS					
Arsenic, 6010	100/101/100	82-117	64-126	<1	12
Barium, 6010	105/107/106	72-125	74-119	<1	11
Cadmium, 6010	105/106/105	72-120	68-121	<1	12
Chromium, 6010	99/100/ 99	78-119	73-120	1	17
Lead, 6010	93/ 94/ 94	72-121	68-126	<1	19
Selenium, 6010	99/100/100	82-127	65-129	<1	10
Silver, 6010	100/100/ 99	80-128	69-121	1	12
Mercury					
Mercury, 7470	108/ 98/102	81-126	70-136	4	12

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

QSAKF #_____

ENVIRONMENTAL CONSERVATION LABORATORIES

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1015 Passport Way
Cary, North Carolina 27513
Ph. (919) 677-1669 • Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT REFERENCE: CENTRAL CAROLINA TIRE
PROJECT NO.: 202334.09
P.O. NUMBER:
PROJECT LOC. (State): N.C.
SAMPLER(s) NAME: JOHN PALMER
PHONE: 919-469-3340
FAX: 919-535-4545
CLIENT NAME: WITHERS + RAVENEL
CLIENT PROJECT MANAGER: BRIAN BELLIS
CLIENT ADDRESS (CITY, STATE, ZIP): 111 MACKENAN DR / CARY, N.C. 27511

☑ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due: _____

STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID (oil, solvent, etc.)	AIR	SLUDGE	OTHER	8 RCRA METALS	8260								REMARKS
															PRESERVATIVE									
															NUMBER OF CONTAINERS SUBMITTED									
1	10/26/05	0905	✓		MW-10		X								1	3								
2		0937	✓		MW-11		X								1	3								
3		1012	✓		MW-12		X								1	3								
4		1027	✓		MW-13		X								1	3								
5		1046	✓		MW-14		X								1	3								
6	10/26/05	0949	✓		SW-1 (EXPANSION)	X									1	3								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

SAMPLE KIT PREPARED BY: ☐JACKSONVILLE ☐ORLANDO

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
[signature]	10/26/05	1530	Amy Arnold	10/26/05	8:00
RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME

RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS
☐ Jacksonville CRY ☐ Orlando [signature]	10/27/05	8:20	☒ YES ☐ NO	CRY 18970	5C