7/21/05

Case Summary and Close Out Request

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME : Ringier America Facility - Former

COPY

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
Bureau for Remediation and Redevelopment

This form is intended to provide instructions and a list of information that must be submitted for evaluation for case closure, each time a request is made. The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

NOTICE: ***Completion of this form is mandatory*** *for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing close out requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].*

In order to expedite the closure process, provide a complete and accurate closure package according to the following instructions, each time a closure decision is requested:

- Submit the Case Summary and Close Out Form and the required attachments as a stand-alone, **unbound** package. Include all information requested per section, as appropriate to the site, in the order shown. Include all attachments per section, as appropriate. Do not attach previously submitted reports. Correctly reference any reports in the case summary, as applicable.
- Include fees with this package at the time it is submitted to the department in order for the application to be considered complete.
- Specify your selected closure option.
- Include all **GIS Registry information** (in Section I) as a stand-alone document (*do not refer to materials in other attachments*). Include copies of **all off-source property and ROW notifications**.
- Place a √ (attached) or NA (not applicable) in the blank next to each attachment, in each section.
- Include a draft of the deed document with the close out application, if a **deed restriction** or **deed notice** is required as a condition of closure of the selected remedy. Include a maintenance plan, if it is required in the deed instrument.
- **Maps for the GIS Registry may not be larger than 8.5 x 14 inches,** unless maps are submitted in electronic form in portable document format (pdf) readable by the Adobe Acrobat Reader. For electronic document submittal requirements, see http://www.dnr.wi.gov/org/aw/rr/archives/pubs/RR690.pdf.
- Prepare maps according to the applicable portions of ss. NR 716.15(2)(h)1 and 726.05(3)(a)4.d. Prepare visual aids, including maps, plans, drawings, cross sections, fence diagrams, tables and photographs according to s. NR 716.15(2)(h)1. – 4.
- **Use a bold font** on information of importance on tables, maps and figures. A **bold font (for ES exceedances)** and *italics (for PALs)* are preferred when differentiation is necessary. **Please do not use shading or highlights** on any of the analytical tables (per s. NR 726.05(3) and maps as the shading obscures the information that is scanned for inclusion in the GIS Registry.
- Put multiple tables submitted for contaminated media data (eg. pre- and post-remedial data) in chronological order. Include the level of detection for results which are below the detection level (i.e. do not just list as no detect (ND)). Summaries of all data should include information collected by previous consultants. Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15(2)(g)3 in the format required in s. NR 716.15(2)(h)3.
- Document free product recovery estimates as required in s. NR 708.15, if applicable.

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME : Ringier America Facility - Former

Section A: Case History and Closure Pathway Selected

ATTACHMENTS:

✓ A brief site summary including results of all investigative activities, interim and remedial actions taken, a description of any residual soil and/or groundwater contamination and their locations, a description of any other media affected, and a description of how actual and potential impacts to receptors have been addressed.

✓ Site location map on USGS topographic base map.

✓ Site map including buildings, utilities, property lines of source property and impacted non-source properties, ground cover and supply wells. *These maps may be combined. A copy of the map(s) from Section I, #5 may be used.*

✓ Verification of the zoning for affected properties.

INFORMATION NEEDED:

1. Site Name Ringier America Facility - Former
   Street Address: 16555 Rogers Drive
   City/Zip Code: New Berlin WI 53151
2. BRRTS #: 03-68-005156
3. DNR FID #: 268017090 PECFA Claim#: NA
4. Responsible Party Name QUAD GRAPHICS
   Mailing Address: N63 W23075 Main Street City/Zip Code: Sussex WI 53089-2827
   Phone number: 414-566-7617 Contact Person: Tom Estock
5. Date of Incident/Discovery: 5.31.1995 Contaminant Type(s): phthalates, vinyl chloride, cis 1,2-DCE
6. Quantity Released: unknown
7. Land Use:
   Current : ____ Residential ____ Commercial X Industrial ____ Other
   If other, specify: ____
   Planned Post Remediation : ____ Residential ____ Commercial X Industrial ____ Other
   If other, specify: ____
8. Is a zoning change required? ____Y X N
   If so, has it been completed for post remedial land use? ____Y ____N
9. 33.5 Acres ready for use (The total area in acres of all adjacent tax parcels owned by the same entity on the site where the contamination originated, rounding fractions to nearest .5 acre and noting >100 acres for acreages above 100 acres. For multiple discharges that are cleaned up concurrently, count the acres once.)
10. Geographic Coordinates (meters/ WTM83/91) E 673135 N 283145
11. Method Used to Obtain Geographic Coordinates:
    ____ On-site using GPS equipment, converted or projected into WTM83/91 coordinates
    X Used RR GIS Registry web site to get WTM83/91 coordinates
    ____ Other (specify): ____
12. *Groundwater Contamination Remaining (>ES):
    On Source Property ___Y X N
    Off Source Property ___Y X N
13. *Residual Soil Contamination > Generic or Site-Specific RCL:
    On Source Property ___Y X N
    Off Source Property ___Y X N
14. Contamination in Right of Way: ___Y X N
15. Closure Pathway Selected: check all that apply

CLOSURE via NR 726	
Soil	Groundwater
X < s. NR 720.09/720.11 Generic RCLs	X < s. NR 140.10 Table 1 & Table 2 Values
___s. NR 720.19(2) Soil Performance Standards	___s. NR 140.28(2) PAL Exemption
___s. NR 720.19(4) Groundwater Pathway	___s. NR 726.05(2)(b), ≥ ES Natural Attenuation
___s. NR 720.19(5) Direct Contact	
___s. NR 720.19(6) Other Pathways	

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME: Ringier America Facility - Former

CLOSURE via NR 746 and NR 726	
Petroleum Storage Tank **Soil** Options for Closure:	
___s. NR 746.07 Requirements Met-Post Investigation	
___s. NR 746.08 Requirements Met-Post Remed.	
Petroleum Storage Tank **GW** Options for Closure:	Petroleum Storage Tank **GW** Options for Closure:
Within Permeable Material:	Within Low Permeability Material:
___s. NR 746.07(3) ≥PAL <ES, Post Investigation	___s. NR 746.07(2), Post Investigation
___s. NR746.07(4) >ES, Post Investigation	___s. NR 746.08(2), Post Remediation
___s. NR 746.08(3)≥ PAL, <ES, Post Remediation	
___s. NR 746.08(4) >ES, Post Remediation	

Section B: Receptor Summary

ATTACHMENTS:
NA Notification(s) regarding contamination in ROW
NA Notification(s) to off-source property owners regarding sampling results

INFORMATION NEEDED:
1. Identify **all** pre-remedial actual receptors, the assessed risk and their locations (e.g., both on- and off-site utility corridors, basements or sumps of nearby buildings, direct contact threat from soil, water supplies, surface waters, sediments, vapors, etc.) *For definitions, refer to s. NR 700.03 (47), Wis. Adm. Code.*
   NA
2. Have the remedial actions addressed the potential or actual impacts to these receptors?
   ___Y (Details in the case history summary (Section A)).
   ___N If no, please identify the nature of the remaining risk and the receptor at risk, if any:
   NA

Section C: Soil Investigation Information

ATTACHMENTS:
NA Complete soil data summary table of field screening and laboratory analytical results, including all detects, regardless of ch. NR 720 standards, with dates, sample locations, depths and detection limits. Identify exceedances.
NA Map(s) of all pre-remedial soil sampling locations: depicting all soil sample locations relative to site facilities. Note in bold font those sample locations that exceed ch. NR 720 RCLs (including free product location) and delineate the extent of contamination.
NA Pre-remedial geologic cross-sections; including geology, source location(s), extent of soil and groundwater contamination, free product location/depth, soil sample locations, water table elevation, and bedrock elevation, if encountered.

INFORMATION NEEDED:
1. Extent Defined? X Y ___N If not, explain why. ___
2. Soil Type(s): Silty Sand > Silty Clay
3. Depth of Contamination: Top: NA Bottom: NA
4. Type of Bedrock: NA Depth to Bedrock: NA

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME : Ringier America Facility - Former

5. Is Any Contaminated Soil (Unsaturated or Saturated) in Contact With the Bedrock? ____Y _X_N
6. Measurable Free Product? ____Y _X_ N Depth/Location: _____

Section D: Soil Remediation Information

ATTACHMENTS:

_NA_ Map showing remediated area (for example, excavation limits or area influenced by SVE) and locations of post-remediation soil samples (if any). This map should show the locations and extent of residual soil contamination exceeding ch. NR 720 RCLs. These samples should be noted in bold font. *A copy of the map(s) from Section I, #10, may be used.*

_NA_ Soil disposal documentation

_NA_ NR 720.19 analysis, assumptions and calculations for site specific RCLs (SSRCLs) , with justification

_NA_ Calculations and results of EPA Soil Screening Level Model.

_NA_ Post-remedial cross-section(s) with post remedial soil sampling results, if soil removal or treatment has occurred. Identify sample results and depths. *A copy of the cross-section(s) from Section I, #11, may be used or you may refer to the cross-section(s) in Section E, as appropriate.*
____see Section E

INFORMATION NEEDED:

1. Remedial Action Completed? ____Y _X_N
2. Were immediate or interim actions conducted? ____Y _X_N If yes, what action was taken?
_____
3. Brief description of remedial action taken:
Natural Attenuation.
4. Were soils excavated? ____Y _X_N
Quantity: _____ Disposal Method: _____
5. Final Confirmation Sample Collection Methods:
NA
6. Final Soil/Drill Cuttings Disposal Location:
NA
7. Estimated volume and depth of in situ soils exceeding ch. NR 720 Table RCLs or Site Specific RCLs:
NA
8. Estimated volume and depth of in situ soils exceeding ch. NR 746 Table 1 or Table 2 or Site Specific RCLs (*underground petroleum tank systems, as defined in ch. NR 746 only*):
NA
9. s. NR 720.19 Analysis? ____Y _X_N
_X_ Performance Standard -NR 720.19(2)
_X_ SSRCL - NR 720.19(3) and (4),(5) or (6)
10. If the remedy includes a Soil Performance Standard, what type? _X_ not applicable
____Cap ____ Soil ____Building ____ Natural Attenuation of Groundwater ____Other
Specify other: _____
11. Will the maintenance of the SPS be consistent with the planned post remediation land use?
____Y _X_N If No, please explain: _____
12. Is the EPA Soil Screening Level Model used as justification for closure of sites with residual contaminated soils?
____ Y _X_N Are the input numbers used: ____ Site Specific , or ____ WI Defaults?

Section E: Groundwater Information

ATTACHMENTS:

~~NA~~ ✓ Table identifying all contaminants, summarizing all pre- and post-remediation groundwater analytical results, with sample collection dates *(prepared in accordance with guidance document RR-628)*

✓ Groundwater sample location map showing the site facilities and all monitoring wells, sumps, extraction wells, and potable and non-potable wells.

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME : Ringier America Facility - Former

NA Isoconcentration map(s) when included as part of the site investigation or map(s) of the horizontal extent of contamination based on most recent data. *A copy of the map(s) from Section I, #7, may be used.*

NA A map showing groundwater flow direction(s) and summarizing the maximum variation in flow direction. *Multiple maps may be used. A copy of the map(s) from Section I, #9, may be used.*

NA A table summarizing all groundwater elevations, with dates, and top and bottom elevations of well screens. (*Wells are to be referenced to national geodetic survey datum, as per NR 141.065(2)).*

NA Graphs and statistical analyses which demonstrate the dynamics of the groundwater plume, for sites requesting closure using natural attenuation that meet the criteria s. NR 726.05(2)(b) or of s. NR 746 (permeable soils). *Refer to WDNR publication RR-614 for guidance.*

NA Geologic cross-sections showing extent of residual soil and/or groundwater contamination, as applicable. *A copy of the cross-section(s) from Section I, #11 may be used.*

INFORMATION NEEDED:

1. Extent of Contamination Defined? ____Y ____N X N/A
2. Remedial Action Completed? ____Y ____N X N/A
   Brief Description of Remedial Action Taken: Natural Attenuation.
3. Depth(s) to Groundwater ____ Flow Direction(s): unknown
4. Field Analyses? ____Y X N
   Lab Analyses? X Y ____N
5. 4 # of Sample Rounds
   3 # of Sampling Points
   2 # NR 141 Monitoring Wells Sampled
   6 # Temporary GW Sampling Points Sampled
   Ø # Recovery Sumps Sampled
   Ø # Municipal Wells Sampled
   Ø # Private Wells Sampled
6. Was DNR notified of substances in groundwater without standards? ____Y ____N X N/A
   If yes, how many? ____ What substances? ____
7. Preventive Action Limit currently exceeded? ____Y X N If yes, identify location(s)
8. Enforcement Standard currently exceeded? ____Y X N If yes, identify location(s)
9. Measurable free product detected? ____Y X N Pre-remediation
   ____Y X N Post-remediation
10. Was free product remediated? ____Y X N
    Method: ____
    Purge water or free product-groundwater mixture disposal method? ____
11. Potable wells within 1200 feet of site? ____Y X N
    Have they been sampled? ____Y X N
    Type (i.e. municipal, private, etc.)? ____
    [NOTE: Include wells on *groundwater well location map*]

NA 12. Has DNR been provided with **all** results of private well sampling? ____Y ____N

NA 13. Have well owners/occupants been notified of results? (*Sec. B Attachments*) ____Y ____N
(*Results also need to be sent to the DNR Water Supply Specialist)*

Section F. Other Contaminated Media Information:

ATTACHMENTS:

NA Table of analytical results for all contaminants for media other than soil or groundwater

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME : Ringwen America Facility - Former

INFORMATION NEEDED:

1. Have other media been impacted (either on-site or off-site e.g. sediment, utilities, air)? ____Y _X_N
   Briefly describe type and extent of **all** contamination found in media other than soil or groundwater:
   _____
   _____
2. Remedial action completed? ____Y ____N _X_N/A
   Brief description of remedial action taken: _____
   _____
3. # of Post Remedial Sample Rounds: NA
   # of Sampling Points: _____
   Field Analyses? ____Y _X_N
   Lab Analyses? ____Y _X_N

Section G. Associated Site Closure Information:

ATTACHMENTS:

NA Construction documentation or as-built report for any constructed remedial action or portion of, or interim action specified in s. NR 724.02(1), in accordance with s. NR 724.15.

NA Maps and photos documenting the cap area, and/or integrity of the cap, with date.

NA Description of any soil performance standard cover system used, including a description of how it meets the requirement to be protective until residual contaminant concentrations no longer pose a threat to public health, safety, welfare or the environment, per s. NR 720.19(2), s. NR 722.09(2) and (3).

NA Maintenance plan with deed restriction for performance standard remedy. (per ss. NR 720.19(2) and 724.13(2))

INFORMATION NEEDED:

1. Enforcement actions closed out? ____Y ____N _X_N/A
2. Permits closed out? ____Y ____N _X_N/A
3. Describe how the following pathways are protected:
   a) Direct Contact Pathway: _____
   _____
   b) Groundwater: _____
   _____
   c) Other: _____
   _____

H. Proposed Institutional Controls: *(See Pub. RR-606)*

ATTACHMENTS:

NA RR GIS Registry of Closed Remediation Sites
____ Soil
____ Groundwater
____ Both

NA Draft deed document (*Contact your DNR project manager for a template or guidance.*)
Type: ____ Deed Restriction
____ Deed Notice
____ Maintenance Agreement
____ Other: _____

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME : Ringer America Facility - Former

I. Required GIS Registry Information: Provide the following information, as a separate, stand-alone attachment, in the order specified.

NA 1. **Copy(s) of most recent deed**, including legal description(s), for all affected properties within or partially within the contaminated site boundary. *(NOTE: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.)*

NA 2. **A copy of certified survey map(s),** as required by s. NR 716.15(2)(j)2., or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map (lots on subdivided or platted property (*e.g.*, lot 2 of xyz subdivision).

NA 3. **The parcel identification number** (if county uses them) for each property within the contaminated site boundaries. Include the address of each property within the contaminated site boundary (regardless of whether parcel id # exists). **Geographic position** data for each property (meters in WTM83/91 projection) in compliance with the requirements of s. NR 716.15 (2)(k), unless this information was previously submitted to the agency with administrative authority for the site as part of the site investigation report, or unless the agency with administrative authority has directed that the responsible party does not need to provide geographic position data for a specific site.

NA 4. **A site location map** which outlines all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit the easy location of all parcels. If groundwater standards are exceeded, the map must also include the location of all municipal and potable wells within 1200 feet of the site. (If only one property, combine with map required in next item #5.)

NA 5. **A map of contaminated properties within the site boundary** showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. This map shall also show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding ch. NR 140 enforcement standards, and/or in relation to the boundaries of soil contamination exceeding generic or site-specific residual contaminant levels as determined under s. NR 720.09, 720.11 and 720.19.

NA 6. **A table of the most recent analytical results**, with sample collection dates from all monitoring wells, and any potable wells for which samples have been collected for groundwater, and/or showing results for all contaminants found in pre-remedial sampling and in the most recent soil sampling event, for soils (without shading or crosshatching). Note occurrence of free product.

NA 7. **A groundwater isoconcentration map**, if required as part of the site investigation (SI), of the contaminated properties within the site boundaries. The map must include the areal extent of groundwater contamination exceeding PALS and the areal extent of groundwater contamination exceeding ESs, groundwater flow direction(s) based on the most recent data, and sample collection dates. **If an isoconcentration map was not required** as part of the SI, substitute a map showing the horizontal extent of contamination, based on the most recent data. Note free product location(s).

NA 8. **A table of the previous 4 water level elevation measurements from all monitoring wells**, at a minimum, with the date measurements were made, is to be included. If present, note free product elevation and thickness on the table.

NA 9. **A groundwater flow direction map** representative of groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, 2 groundwater flow maps showing the maximum variation in flow direction are to be submitted. *Prepare maps according to the applicable portions of ss. NR 716.15(2)(g)5-8 and 716.15(2)(h)1-2.*

NA 10. For sites closing with residual soil contamination, **include a map showing the location of all soil samples** and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds generic or site specific residual contaminant levels.

NA 11. **A geologic cross section**, if required as part of the SI, showing vertical extent and location of residual soil contamination exceeding generic or site specific RCLs and residual groundwater contamination, source extent and location, isoconcentrations for all groundwater contaminants that exceed PALs that remain when closure is requested; water table and piezometric elevations, and the location and elevation of geologic units, bedrock, and confining units, if any.

NA 12. **A statement signed by the responsible party,** which states that he or she believes that the legal description has been attached for each property that is within, or partially within, the contaminated site boundary. *(The purpose of this requirement is that a legal description for each of the contaminated properties has been submitted. The RP is not required to attest to the accuracy of the attached legal descriptions.)*

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME: Ringier America Facility - Former

NA 13. **A copy of the letters sent by the RP to all owners of properties with groundwater exceeding ESs** as required by s. NR 726.05(3)(a)4.g. Letters sent to off-source properties must contain standard provisions in Appendix A of ch. NR 726. *(Off source properties are listed separately on the GIS Registry with a link to the source property.)* If the source property is owned by someone other than the person who is applying for case closure, a copy of the letter notifying the current owner of the source property that case closure has been requested should also be included.

NA 14. **A copy of all written notifications** provided to the city/village/municipal/state agency or other entity responsible for maintenance of a public street or highway or railroad right-of-way, within or partially within the boundaries of the contaminated site, for contamination exceeding groundwater ESs and/or soil exceeding generic or site specific RCLs.

NA 15. **A list of addresses for all off-source properties** affected by residual soil or groundwater contamination exceeding applicable standards.

I certify that, to the best of my knowledge, the information presented on and attached to this form is true and accurate. This recommendation for case closure is based upon all available data as of July 12, 2005 (date). I have read the Case Summary and Close Out Form instructions and all required information has been included.

Form Completed By: Mark A. Manthey (Signature) 7/12/05 (Date)

✓ **$750.00 Closeout Review Fee Attached**
____ **$250.00 GIS Registry Maintenance Fee Attached (GW)**
____ **$200.00 GIS Registry Maintenance Fee Attached (Soil)**

Printed Name: Mark A. Manthey

Company Name: GeoTrans, Inc.

Email address: mmanthey@geotransinc.com

If not site owner, relationship to site owner: Consultant

Address: 175 N. Corporate Drive, Suite 100 City/Zip Code Brookfield, WI 53045

Telephone Number: (262) 792-1282 FAX Number: (262) 792-1310

Environmental Consultant (if different than above): _____

Address: _____ City/Zip Code _____

Telephone Number: (____) _____ FAX Number: (____) _____

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME : Ringier America Facility - Former

FOR DEPARTMENT USE ONLY

PROJECT MANAGER: _____ Date Reviewed: _____

( ) **Approved** ( ) **Denied** ( ) **Sent to Committee**

CLOSURE COMMITTEE DECISION ON CLOSURE:

FIRST COMMITTEE REVIEW DATE: _____ ( ) **Approved** ( ) **Denied**

_____	_____	_____	_____
(Signature)	(Signature)	(Signature)	(Signature)

COMMITTEE RECOMMENDATION:

_____ **Closure Approved With:**

- _____ No Restrictions
- _____ Listing on GIS Registry due to Groundwater impacts
- _____ Listing on GIS Registry due to Soil impacts
- _____ Zoning Verification
- _____ Deed Restriction
- _____ Deed Notice
- _____ Site Specific Close Out Letter
- _____ Well Abandonment Documentation
- _____ Soil Disposal Documentation
- _____ NR 140 Exemption For: _____
- _____ VPLE Insurance needed
- _____ Other Conditions/Comments: _____

_____

_____

_____

_____ **Closure Denied, Needs More:**

- _____ Investigation
- _____ Groundwater Monitoring
- _____ Soil Remediation
- _____ Groundwater Remediation
- _____ Documentation of Soil Landspreading or Biopile Destiny
- _____ Specific Comments: _____

_____

_____

_____

WDNR BRRTS CASE # 03 - 68 - 005156 WDNR SITE NAME : Ringier - America Facility - Former

FOR DEPARTMENT USE ONLY

PROJECT MANAGER: _____ Date Reviewed: _____

( ) Approved ( ) Denied ( ) Sent to Committee

CLOSURE COMMITTEE DECISION ON CLOSURE:

SECOND COMMITTEE REVIEW DATE: _____ **( ) Approved ( ) Denied**

_____	_____	_____	_____
(Signature)	(Signature)	(Signature)	(Signature)

COMMITTEE RECOMMENDATION:

_____ **Closure Approved With:**

- _____ No Restrictions
- _____ Listing on GIS Registry due to Groundwater impacts
- _____ Listing on GIS Registry due to Soil impacts
- _____ Zoning Verification
- _____ Deed Restriction
- _____ Deed Notice
- _____ Site Specific Close Out Letter
- _____ Well Abandonment Documentation
- _____ Soil Disposal Documentation
- _____ NR 140 Exemption For: _____
- _____ VPLE Insurance needed
- _____ Other Conditions/Comments: _____

_____

_____

_____

_____ **Closure Denied, Needs More:**

- _____ Investigation
- _____ Groundwater Monitoring
- _____ Soil Remediation
- _____ Groundwater Remediation
- _____ Documentation of Soil Landspreading or Biopile Destiny
- _____ Specific Comments: _____

_____

_____

_____

Section A Attachments:

GeoTrans, Inc.
A TETRA TECH COMPANY
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045
www.geotransinc.com
262-792-1282 FAX 262-792-1310

February 7, 2005
(4108.003)

Mr. James Delwiche
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
141 NW Barstow St, Room 180
Waukesha WI 53188

RE: Site Summary for Case Closure, Quad/Graphics, New Berlin
FID# 268017090
BRRTS # 03-68-005156

Site Investigation activities performed in 1995 at the former Ringier America Facility case, located at 16555 Rogers Drive, New Berlin Wisconsin, revealed the presence of groundwater contamination beneath the property. Two areas with groundwater impacts above a Chapter NR 140 Preventive Action Limit (PAL) were Area E, with bis-2-ethylhexylphthalate present above its Chapter NR 140 Enforcement Standard (ES) of 6 ug/L, and Area F, with vinyl chloride present above its ES of 0.2 ug/L and cis-1,2-dichloroethene below its ES of 70 ug/L, but above its PAL of 7 ug/L.

Case closure was requested in January of 1997. Closure was denied by the WDNR in a letter dated December 9, 1997. Closure was denied based on a lack of data for both Area E and Area F. The WDNR letter stated that one additional round of groundwater samples should be collected from Area F before closure could be granted, and that Area E could be closed with a groundwater use restriction with the data available at that time. The 1997 WDNR letter is attached for reference.

In order to gain unrestricted closure of Area E and to comply with the requests made in the 1997 WDNR letter, GeoTrans (formerly HSI GeoTrans), on behalf of Quad/Graphics, conducted additional sampling in January of 1998 and July of 2004. In 1998, groundwater in Area F was sampled, with the analytical results confirming the absence of groundwater impacts in the area. Groundwater could not be collected in Area E during the 1998 sampling event. In July of 2004, a temporary well (TW-1) was installed in Area

E and a groundwater sample was collected. Analysis of the groundwater sample collected from TW-1 indicated that no groundwater contamination was present in Area E. Reports and laboratory results for both sampling events are attached for reference.

We believe that all conditions set forth in the 1997 WDNR letter for unrestricted closure have now been met. Based upon the findings presented above, we request unconditional closure for this case on behalf of Quad/Graphics.

Sincerely,

GEOTRANS, INC.

Richard H. Sawall, P.E.
Project Engineer

Mark A. Manthey, P.G.
Senior Hydrogeologist

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutchen, Regional Director

Southeast Region Annex
4041 N. Richards Street, Box 12436
Milwaukee, WI 53212-0436
TELEPHONE 414-229-0800
FAX 414-229-0810

December 9 , 1997

FID# 268017090

Mr. Thomas Estock
Environmental Coordinator
Quad Graphics Inc.
W224 N3322 Duplainville Road
Pewaukee, WI 53072-4195

Subject: Quad Graphics Facility, 16555 W. Rogers Drive, New Berlin, WI 53151

Dear Mr. Estock:

The Wisconsin Department of Natural Resources (WDNR) has reviewed the subject site for case closure. Unfortunately, because compounds in the groundwater have exceeded the Enforcement Standard (ES), case closure can not be granted at this time. In an August, 1995, report, Hydro-Search Inc. detected that the ES in the groundwater was exceeded for the compounds Di (2-ethylhexyl) phthalate in Area E, and Vinyl Chloride in Area F. One additional round of groundwater samples were collected in October, 1996, at Area F and did not detect vinyl chloride. Area E was not resampled.

Therefore, the WDNR recommends that a confirmation groundwater sample be collected from Area E. In addition, because a minimum of two rounds of samples are required after the ES has been exceeded, the two wells in Area F should be sampled for vinyl chloride. If Area E is resampled and the groundwater ES is still exceeded, then case closure can be issued with a groundwater use restriction.

If you have any questions about this letter or the site in general, please contact me at the letterhead address or at (414) 229-0846.

Sincerely,

James C. Delwiche

James C. Delwiche, P.G.
Hydrogeologist
Remediation & Redevelopment Program

cc: SED Case File
Gerald DeMers - Hydro-Search Inc.

HSI
GEOTRANS
A TETRA TECH COMPANY

175 N. Corporate Drive
Suite 100
Brookfield, Wisconsin
53045

414-792-1282 · FAX 414-792-1310

March 13, 1998
(N798/101)

Mr. James Delwiche, P.G., Hydrogeologist
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
4041 N. Richards Street
P. O. Box 12436
Milwaukee, WI 53212-0436

RE: Quad/Graphics Facility, 16555 W. Rogers Drive, New Berlin, Wisconsin 53151

Dear Mr. Delwiche:

As a result of your December 9, 1997 letter to Tom Estock of Quad/Graphics regarding the request for case closure for their New Berlin facility, HSI GeoTrans collected additional groundwater and soil samples at the facility.

On January 16, 1998, groundwater samples were collected from monitor wells MW-9 and MW-10 at the facility. No VOCs, and in particular, no vinyl chloride were detected in these wells. This is now two rounds of groundwater monitoring (January 1998 and October 1996) during which no VOCs have been detected. Analytical results are attached.

Beginning on January 16, 1998, HSI GeoTrans also attempted to collect a groundwater sample inside of the Quad/Graphics building at the location of Area E. A geoprobe unit and a concrete corer were used to install a temporary 1-inch diameter monitor well in exactly the same location where a sample had been collected in 1995. The initial sample of groundwater was collected at a depth of 4.5 feet below the concrete surface in a geoprobe borehole. The geoprobe borehole drilled in 1998 was extended to a depth of approximately 9 feet below the concrete surface. While it took approximately an hour to collect a sufficient quantity of groundwater to analyze for semivolatiles in 1995, no groundwater was present in the temporary well after three days in January of 1998.

It was thought that the abandonment materials from the 1995 borehole may have smeared the surface of the 1998 borehole with bentonite, thereby preventing the inflow of groundwater to the temporary well. Therefore, this borehole was abandoned, and another borehole drilled approximately 2 feet from it. This second borehole also extended to a depth of approximately 9 feet, and a temporary 1-inch diameter monitor well placed in the borehole. Again, no water was present in the borehole after three days.

As a result of these failed attempts to collect a groundwater sample from these two boreholes, a soil sample was collected from the bottom of the second borehole on January 26. This sample was analyzed for polynuclear aromatic hydrocarbons (PAHs) and for bis(2-ethylhexyl)phthalate. None of these parameters were detected in the sample. It should be noted that the analysis for bis(2-ethylhexyl)phthalate was performed 18 days after the date it was collected, which is four days beyond the normal hold time for the analysis of base/neutrals using method 8270. As the compound of concern is a semivolatile compound, that it was not detected at a detection limit of 1.2 mg/kg (or parts per million), and that the sample was properly stored by the lab for this period of time, HSI GeoTrans is confident that the analytical results are representative of the actual site conditions.

The compound bis(2-ethylhexyl)phthalate is not of environmental concern at this site because:

- it was not detected in soil samples taken at a greater depth than the previous groundwater sample;
- the movement of groundwater at this location is very slow, based on our inability to collect a sample after several days being allowed for recharge;
- this location, and a radius of at least 90 feet around it, is paved with concrete and covered with a roof, preventing contact or infiltration of precipitation;
- although detected in the initial August 1995 groundwater sample, based upon HSI GeoTrans' experience at other sites, analytical results for bis(2-ethylhexyl)phthalate are often not repeatable, and therefore, do not represent actual site conditions.

Based upon the above results, we, therefore, request case closure for the Quad/Graphics New Berlin facility.

I trust this information meets your needs. If you have any questions, please do not hesitate to call.

Sincerely,

HSI GEOTRANS

Gerald DeMers

Gerald DeMers, P.E.
Senior Engineer
Project Manager

cc: Tom Estock, Quad/Graphics

A:\N798CLOS.LTR

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

Tel: (920) 261-1660
Fax: (920) 261-8120
WDNR No. 128053530

ANALYTICAL AND QUALITY CONTROL REPORT

MASTER FILE COPY
PROJECT # N798
CC: GLD

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/09/1998

Job No: 98.00438

Page 1

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
283404	SB-1 Quad Graphics	01/26/1998	01/27/1998

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
C = Standard outside of control limits
F = Sample filtered in lab
H = Late eluting hydrocarbons present
J = Estimated concentration
M = Matrix interference
Q = Result confirmed via re-analysis
T = Does not match typical pattern
X = Unidentified compound(s) present
B = Blank is contaminated
D = Diluted for analysis
G = Received past hold time
I = Improperly handled sample
L = Common lab solvent and contaminant
P = Improperly preserved sample
S = Sediment present
W = BOD re-set due to missed dilution
Z = Internal standard outside limits

Brian D. DeJong
Organic Operations Manager

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

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Fax: (920) 261-8120
WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/09/1998
Job No: 98.00438
Sample No: 283404
Account No: 39150

JOB DESCRIPTION: Quad Graphics - New Berlin
PROJECT DESCRIPTION: Soil Analysis
SAMPLE DESCRIPTION: SB-1 Quad Graphics
Rec'd on ice

Date Taken: 01/26/1998 12:00 Date Received: 01/27/1998

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
Solids, Total	82	%	n/a	S-5030	02/02/1998	2056
PNA Extraction	01/30/98			S-3550	01/30/1998	262
PNA - 8310 NONAQUEOUS						
Acenaphthene	<61	ug/kg	50	S-8310	02/06/1998	262 662
Acenaphthylene	<100	ug/kg	85	S-8310	02/06/1998	262 662
Anthracene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
Benzo(a)anthracene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
Benzo(b)fluoranthene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
Benzo(k)fluoranthene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
Benzo(a)pyrene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
Benzo(ghi)perylene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
Chrysene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
Dibenzo(a,h)anthracene	<12	ug/kg	10	S-8310	02/06/1998	262 662
Fluoranthene	<12	ug/kg	10	S-8310	02/06/1998	262 662
Fluorene	<12	ug/kg	10	S-8310	02/06/1998	262 662
Indeno(1,2,3-cd)pyrene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
1-Methylnaphthalene	<36	ug/kg	30	S-8310	02/06/1998	262 662
2-Methylnaphthalene	<30	ug/kg	25	S-8310	02/06/1998	262 662
Naphthalene	<36	ug/kg	30	S-8310	02/06/1998	262 662
Phenanthrene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
Pyrene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262 662
Surr: 2-Fluorobiphenyl	59.3	%	n/a	S-8310	02/06/1998	262 662

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
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Fax: (920) 261-8120
WDNR No. 128053530

QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

02/09/1998

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00438
Account No: 39150

Page 3

Job Description: Quad Graphics - New Berlin

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
PNA - 8310 NONAQUEOUS	S-8310					
Acenaphthene	S-8310	662	5.0	5.320	106.4	cla
Acenaphthylene	S-8310	662	10.0	10.25	102.5	cla
Anthracene	S-8310	662	0.50	0.561	112.2	cla
Benzo(a)anthracene	S-8310	662	0.50	0.508	101.6	cla
Benzo(b)fluoranthene	S-8310	662	1.00	1.062	106.2	cla
Benzo(k)fluoranthene	S-8310	662	0.50	0.524	104.8	cla
Benzo(a)pyrene	S-8310	662	0.50	0.565	113.0	cla
Benzo(ghi)perylene	S-8310	662	1.00	1.112	111.2	cla
Chrysene	S-8310	662	0.50	0.516	103.2	cla
Dibenzo(a,h)anthracene	S-8310	662	1.0	0.997	99.7	cla
Fluoranthene	S-8310	662	1.0	1.023	102.3	cla
Fluorene	S-8310	662	1.0	1.023	102.3	cla
Indeno(1,2,3-cd)pyrene	S-8310	662	0.50	0.530	106.0	cla
1-Methylnaphthalene	S-8310	662	5.00	5.661	113.2	cla
2-Methylnaphthalene	S-8310	662	5.00	4.751	95.0	cla
Naphthalene	S-8310	662	5.00	5.157	103.1	cla
Phenanthrene	S-8310	662	0.50	0.496	99.2	cla
Pyrene	S-8310	662	0.50	0.504	100.8	cla
Surr: 2-Fluorobiphenyl	S-8310	662	10.0	4.155	41.6	cla

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WDNR No. 128053530

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

02/09/1998

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00438
Account No: 39150

Job Description: Quad Graphics - New Berlin

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
PNA - 8310 NONAQUEOUS	S-8310					
Acenaphthene	S-8310	662	5.0	4.674	93.5	cla
Acenaphthylene	S-8310	662	10.0	10.31	103.1	cla
Anthracene	S-8310	662	0.50	0.493	98.6	cla
Benzo(a)anthracene	S-8310	662	0.50	0.540	108.0	cla
Benzo(b)fluoranthene	S-8310	662	1.00	1.122	112.2	cla
Benzo(k)fluoranthene	S-8310	662	0.50	0.479	95.8	cla
Benzo(a)pyrene	S-8310	662	0.50	0.564	112.8	cla
Benzo(ghi)perylene	S-8310	662	1.00	1.168	116.8	cla
Chrysene	S-8310	662	0.50	0.577	115.4	cla
Dibenzo(a,h)anthracene	S-8310	662	1.0	1.043	104.3	cla
Fluoranthene	S-8310	662	1.0	1.061	106.1	cla
Fluorene	S-8310	662	1.0	1.024	102.4	cla
Indeno(1,2,3-cd)pyrene	S-8310	662	0.50	0.461	92.2	cla
1-Methylnaphthalene	S-8310	662	5.00	5.892	117.8	cla
2-Methylnaphthalene	S-8310	662	5.00	4.628	92.6	cla
Naphthalene	S-8310	662	5.00	5.345	106.9	cla
Phenanthrene	S-8310	662	0.50	0.467	93.4	cla
Pyrene	S-8310	662	0.50	0.553	110.6	cla
Surr: 2-Fluorobiphenyl	S-8310	662	4.00	3.917	97.9	cla

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
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WDNR No. 128053530

QUALITY CONTROL REPORT

BLANKS

02/09/1998

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00438
Account No: 39150

Job Description: Quad Graphics - New Berlin

Parameter	Prep Batch	Run Batch	Blank Result	Reporting Limit	Units
PNA - 8310 NONAQUEOUS					
Acenaphthene	262	659	<50	50	ug/kg
Acenaphthylene	262	659	<85	85	ug/kg
Anthracene	262	659	<5.0	5.0	ug/kg
Benzo(a)anthracene	262	659	<5.0	5.0	ug/kg
Benzo(b)fluoranthene	262	659	<5.0	5.0	ug/kg
Benzo(k)fluoranthene	262	659	<5.0	5.0	ug/kg
Benzo(a)pyrene	262	659	<5.0	5.0	ug/kg
Benzo(ghi)perylene	262	659	<5.0	5.0	ug/kg
Chrysene	262	659	<5.0	5.0	ug/kg
Dibenzo(a,h)anthracene	262	659	<10	10	ug/kg
Fluoranthene	262	659	<10	10	ug/kg
Fluorene	262	659	<10	10	ug/kg
Indeno(1,2,3-cd)pyrene	262	659	<5.0	5.0	ug/kg
1-Methylnaphthalene	262	659	<30	30	ug/kg
2-Methylnaphthalene	262	659	<25	25	ug/kg
Naphthalene	262	659	<30	30	ug/kg
Phenanthrene	262	659	<5.0	5.0	ug/kg
Pyrene	262	659	<5.0	5.0	ug/kg
Surr: 2-Fluorobiphenyl	262	659	153.0	42 - 112	%

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

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WDNR No. 128053530

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

02/09/1998

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00438
Account No: 39150

Job Description: Quad Graphics - New Berlin

Analyte	Prep Batch Number	Run Batch Number	LCS Amount	Units	LCS Result	Percent Recovery	LCSD Result	Percent Recovery	Relative Percent Difference	Date Prepped
PNA - 8310 NONAQUEOUS										
Acenaphthene	262	662	400	ug/kg	417	104.3				01/30/1998
Acenaphthylene	262	662	800	ug/kg	912	114.0				01/30/1998
Anthracene	262	662	40.0	ug/kg	38	95.0				01/30/1998
Benzo(a)anthracene	262	662	40.0	ug/kg	38	95.0				01/30/1998
Benzo(b)fluoranthene	262	662	80.0	ug/kg	80	100.0				01/30/1998
Benzo(k)fluoranthene	262	662	40.0	ug/kg	41	102.5				01/30/1998
Benzo(a)pyrene	262	662	40.0	ug/kg	16	40.0				01/30/1998
Benzo(ghi)perylene	262	662	80.0	ug/kg	79	98.8				01/30/1998
Chrysene	262	662	40.0	ug/kg	39	97.5				01/30/1998
Dibenzo(a,h)anthracene	262	662	80.0	ug/kg	98	122.5				01/30/1998
Fluoranthene	262	662	80.0	ug/kg	74	92.5				01/30/1998
Fluorene	262	662	80.0	ug/kg	75	93.8				01/30/1998
Indeno(1,2,3-cd)pyrene	262	662	40.0	ug/kg	39	97.5				01/30/1998
1-Methylnaphthalene	262	662	400	ug/kg	518	129.5				01/30/1998
2-Methylnaphthalene	262	662	400	ug/kg	384	96.0				01/30/1998
Naphthalene	262	662	400	ug/kg	396	99.0				01/30/1998
Phenanthrene	262	662	40.0	ug/kg	39	97.5				01/30/1998
Pyrene	262	662	40.0	ug/kg	39	97.5				01/30/1998
Surr: 2-Fluorobiphenyl	262	662	10.0	%	7.173	71.7				01/30/1998

NET® NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

48.00438

COMPANY HSI GEOTRANS
ADDRESS 175 N. CORPORATE DR. SUITE 100
PHONE (414) 792-1282 FAX (414) 792-1310
PROJECT NAME/LOCATION QUADGRAPHICS NEW BERLIN
PROJECT NUMBER
PROJECT MANAGER JERRY DEMERS

REPORT TO: JERRY DEMERS
INVOICE TO: " "
P.O. NO.
NET QUOTE NO.

SAMPLED BY Bob Golata (PRINT NAME) — Robert A. Golata Jr. (SIGNATURE)
(PRINT NAME) — (SIGNATURE)

To assist us in selecting the proper method
Is this work being conducted for regulatory compliance monitoring? Yes ___ No ___
Is this work being conducted for regulatory enforcement action? Yes ___ No ___
Which regulations apply: RCRA ___ NPDES Wastewater ___ UST ___ Drinking Water ___ Other ___ None ___

DATE	TIME	SAMPLE ID/DESCRIPTION	MATRIX	GRAB	COMP	# and Type of Containers: HCl	NaOH	HNO_3	H_2SO_4	OTHER	ANALYSES: PAHs (8310)								COMMENTS
1-26-98	12:00	SB-1	SO	X							✓								
		8310																	

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO — FIELD FILTERED? YES / NO
COC SEALS PRESENT AND INTACT? YES / NO — VOLATILES FREE OF HEADSPACE? YES / NO
TEMPERATURE UPON RECEIPT: 4°C
Bottles supplied by NET? YES / NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA ___
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS ___ DATE 1/27/98 QMG 16:46

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED FOR NET BY:
Robert Golata	1/27/98	12:00	A Hassenbur	A Hassenbur 01/27/98 1620			A Voigt 1/28/98 1049

METHOD OF SHIPMENT: NET
REMARKS:

PT 1 - ORIGINAL - WHITE PT 2 - NET PROJECT MANAGER - YELLOW PT 3 - CUSTOMER COPY - PINK

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

Tel: (920) 261-1660
Fax: (920) 261-8120
WDNR No. 128053530

ANALYTICAL AND QUALITY CONTROL REPORT

RECEIVED
FEB 23 1998
HSI GeoTrans
Milwaukee

MASTER FILE COPY
PROJECT # N798
CC: GLD

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/19/1998

Job No: 98.00849

Page 1

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
284772	NET #283404 SB-01 N798	01/26/1998	01/27/1998

CASE NARRATIVE

The results for NET sample 284772 are flagged as having been analyzed past hold. This sample was analyzed past hold at the request of the client.

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
B = Blank is contaminated
C = Standard outside of control limits
D = Diluted for analysis
F = Sample filtered in lab
G = Received past hold time
H = Late eluting hydrocarbons present
I = Improperly handled sample
J = Estimated concentration
L = Common lab solvent and contaminant
M = Matrix interference
P = Improperly preserved sample
Q = Result confirmed via re-analysis
S = Sediment present
T = Does not match typical pattern
W = BOD re-set due to missed dilution
X = Unidentified compound(s) present
Z = Internal standard outside limits

Brian D. DeJong
Organic Operations Manager

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

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Fax: (920) 261-8120
WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/19/1998
Job No: 98.00849
Sample No: 284772
Account No: 39150
Page 2

JOB DESCRIPTION: N798 Quad - New Berlin
PROJECT DESCRIPTION: Soil Analysis
SAMPLE DESCRIPTION: NET #283404 SB-01 N798
Rec'd 4 degrees C 1/27/98

Date Taken: 01/26/1998 12:00 Date Received: 01/27/1998

Parameter		Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
Solids, Total		82	%	n/a	S-5030	02/02/1998	2063
BASE/NEUTRALS-8270 NONAQUEOUS				COMPLETE			
Bis(2-ethylhexyl)phthalate	A	<1.2	mg/kg	1.0	S-8270	02/13/1998	193
Surr: Nitrobenzene-d5		79.5	%	n/a	S-8270	02/13/1998	193
Surr: 2-Flurobiphenyl		95.0	%	n/a	S-8270	02/13/1998	193
Surr: Terphenyl-d14		100.0	%	n/a	S-8270	02/13/1998	193

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
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WDNR No. 128053530

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

02/19/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00849
Account No: 39150

Page 3

Job Description: N798 Quad - New Berlin

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
BASE/NEUTRALS-8270 NONAQUEO	S-8270					
Surr: Nitrobenzene-d5	S-8270	193	100	118.0	118.0	pam
Surr: 2-Flurobiphenyl	S-8270	193	100	96.2	96.2	pam
Surr: Terphenyl-d14	S-8270	193	100	105.0	105.0	pam

NET NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

98.00849

COMPANY: HSI Geo Trans
ADDRESS: 175 N. Corporate Drive
PHONE: 414-792-1282 FAX: 414-792-1310
PROJECT NAME/LOCATION: Quad - New Berlin
PROJECT NUMBER: N798
PROJECT MANAGER: DeMers

REPORT TO: DeMers
INVOICE TO:
P.O. NO.
NET QUOTE NO.

SAMPLED BY: Bob Golata (PRINT NAME) SIGNATURE
(PRINT NAME) SIGNATURE

ANALYSES

DATE	TIME	SAMPLE ID/DESCRIPTION	GRAB	COMP	# OF CONTAINERS TYPE	MATRIX	PRESERVED Y/N	Bis-ethylhexyl phthalate Method 8270	Total solids						COMMENTS
1-26-98	12:00	SB-01 (283404)				SOIL		X	X						Ok to run past hold - Flag per WCI & J. DeMers.

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO COC SEALS PRESENT AND INTACT? YES / NO TEMPERATURE UPON RECEIPT:
FIELD FILTERED? YES / NO VOLATILES FREE OF HEADSPACE? YES / NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS DATE

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED FOR NET BY:
DeMers					Reid 1/27/98

METHOD OF SHIPMENT | REMARKS:

a Vogt 2/11/98
1505

TOTAL P.01

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

Tel: (920) 261-1660
Fax: (920) 261-8120
WDNR No. 128053530

ANALYTICAL AND QUALITY CONTROL REPORT

MASTER FILE COPY
OLD PROJECT #
NEW PROJECT # N798
CC: GLD

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998

Job No: 98.00545

Page 1

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
283785	#283327 MW-9 Quad Graphics	01/16/1998	01/26/1998
283786	#283328 MW-10 Quad Graphics	01/16/1998	01/26/1998
283787	#283329 Trip Blank Quad Graphi	01/16/1998	01/26/1998

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
B = Blank is contaminated
C = Standard outside of control limits
D = Diluted for analysis
F = Sample filtered in lab
G = Received past hold time
H = Late eluting hydrocarbons present
I = Improperly handled sample
J = Estimated concentration
L = Common lab solvent and contaminant
M = Matrix interference
P = Improperly preserved sample
Q = Result confirmed via re-analysis
S = Sediment present
T = Does not match typical pattern
W = BOD re-set due to missed dilution
X = Unidentified compound(s) present
Z = Internal standard outside limits

Brian D. DeJong
Organic Operations Manager

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ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283785
Account No: 39150
Page 2

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283327 MW-9 Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 10:30 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Bromobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromochloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromodichloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromoform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
n-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175

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ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283785
Account No: 39150
Page 3

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283327 MW-9 Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 10:30 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Isopropylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methylene Chloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Naphthalene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
n-Propylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Styrene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Tetrachloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Toluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Vinyl Chloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Xylenes, Total	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Surr: Dibromofluoromethane	101.0	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Toluene-d8	92.2	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Bromofluorobenzene	93.0	%	n/a	n/a	S-8260B	02/05/1998	1175

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283786
Account No: 39150
Page 4

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283328 MW-10 Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 11:15 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Bromobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromochloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromodichloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromoform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
n-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175

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ANALYTICAL REPORT

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HYDRO-SEARCH/GEO TRANS
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Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283786
Account No: 39150
Page 5

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283328 MW-10 Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 11:15 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Isopropylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methylene Chloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Naphthalene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
n-Propylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Styrene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Tetrachloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Toluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Vinyl Chloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Xylenes, Total	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Surr: Dibromofluoromethane	101.6	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Toluene-d8	92.6	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Bromofluorobenzene	92.6	%	n/a	n/a	S-8260B	02/05/1998	1175

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ANALYTICAL REPORT

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Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283787
Account No: 39150
Page 6

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283329 Trip Blank Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Bromobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromochloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromodichloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromoform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
n-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175

NATIONAL ENVIRONMENTAL TESTING, INC.

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283787
Account No: 39150
Page 7

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283329 Trip Blank Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 Date Received: 01/26/1998

Parameter		Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Hexachlorobutadiene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Isopropylbenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
p-Isopropyltoluene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methylene Chloride	L	2.5	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methyl-t-butyl ether		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Naphthalene		<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
n-Propylbenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Styrene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Tetrachloroethene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Toluene		<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,2,3-Trichlorobenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trichlorobenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1-Trichloroethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2-Trichloroethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichloroethene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichlorofluoromethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,3-Trichloropropane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trimethylbenzene		<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,3,5-Trimethylbenzene		<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Vinyl Chloride		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Xylenes, Total		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Surr: Dibromofluoromethane		101.6	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Toluene-d8		93.2	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Bromofluorobenzene		92.0	%	n/a	n/a	S-8260B	02/05/1998	1175

NATIONAL ENVIRONMENTAL TESTING, INC.

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WDNR No. 128053530

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

02/06/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00545
Account No: 39150

Page 8

Job Description: Quad Graphics-New Berlin

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
VOC - AQUEOUS - EPA 8260B	S-8260B					
Benzene	S-8260B	1175	50.0	51.0	102.0	gsj
Bromoform	S-8260B	1175	50.0	51.5	103.0	gsj
Chlorobenzene	S-8260B	1175	50.0	49.6	99.2	gsj
Chloroform	S-8260B	1175	50.0	50.3	100.6	gsj
Chloromethane	S-8260B	1175	50.0	49.0	98.0	gsj
1,1-Dichloroethane	S-8260B	1175	50.0	49.8	99.6	gsj
1,1-Dichloroethene	S-8260B	1175	50.0	52.5	105.0	gsj
1,2-Dichloropropane	S-8260B	1175	50.0	49.8	99.6	gsj
Ethylbenzene	S-8260B	1175	50.0	49.9	99.8	gsj
Methyl-t-butyl ether	S-8260B	1175	50.0	54.8	109.6	gsj
1,1,2,2-Tetrachloroethane	S-8260B	1175	50.0	51.4	102.8	gsj
Toluene	S-8260B	1175	50.0	48.9	97.8	gsj
Trichloroethene	S-8260B	1175	50.0	51.1	102.2	gsj
1,2,4-Trimethylbenzene	S-8260B	1175	50.0	49.7	99.4	gsj
1,3,5-Trimethylbenzene	S-8260B	1175	50.0	50.7	101.4	gsj
Vinyl Chloride	S-8260B	1175	50.0	51.5	103.0	gsj
Xylenes, Total	S-8260B	1175	150	152	101.3	gsj
Surr: Dibromofluoromethane	S-8260B	1175	50.0	49.3	98.6	gsj
Surr: Toluene-d8	S-8260B	1175	50.0	48.3	96.6	gsj
Surr: Bromofluorobenzene	S-8260B	1175	50.0	48.6	97.2	gsj

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QUALITY CONTROL REPORT

BLANKS

02/06/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00545
Account No: 39150

Job Description: Quad Graphics-New Berlin

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units	Date Prepped
VOC - AQUEOUS - EPA 8260B							
Benzene		1175	<0.10	0.10	0.33	ug/L	
Bromobenzene		1175	<0.25	0.25	0.83	ug/L	
Bromochloromethane		1175	<0.25	0.25	0.83	ug/L	
Bromodichloromethane		1175	<0.25	0.25	0.83	ug/L	
Bromoform		1175	<0.25	0.25	0.83	ug/L	
Bromomethane		1175	<0.25	0.25	0.83	ug/L	
n-Butylbenzene		1175	<0.25	0.25	0.83	ug/L	
sec-Butylbenzene		1175	<0.25	0.25	0.83	ug/L	
tert-Butylbenzene		1175	<0.25	0.25	0.83	ug/L	
Carbon Tetrachloride		1175	<0.25	0.25	0.83	ug/L	
Chlorobenzene		1175	<0.25	0.25	0.83	ug/L	
Chlorodibromomethane		1175	<0.25	0.25	0.83	ug/L	
Chloroethane		1175	<0.25	0.25	0.83	ug/L	
Chloroform		1175	<0.25	0.25	0.83	ug/L	
Chloromethane		1175	<0.25	0.25	0.83	ug/L	
2-Chlorotoluene		1175	<0.10	0.10	0.33	ug/L	
4-Chlorotoluene		1175	<0.25	0.25	0.83	ug/L	
1,2-Dibromo-3-Chloropropane		1175	<0.25	0.25	0.83	ug/L	
1,2-Dibromoethane (EDB)		1175	<0.25	0.25	0.83	ug/L	
Dibromomethane		1175	<0.25	0.25	0.83	ug/L	
1,2-Dichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
1,3-Dichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
1,4-Dichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
Dichlorodifluoromethane		1175	<0.25	0.25	0.83	ug/L	
1,1-Dichloroethane		1175	<0.25	0.25	0.83	ug/L	
1,2-Dichloroethane		1175	<0.25	0.25	0.83	ug/L	
1,1-Dichloroethene		1175	<0.25	0.25	0.83	ug/L	
cis-1,2-Dichloroethene		1175	<0.25	0.25	0.83	ug/L	
trans-1,2-Dichloroethene		1175	<0.25	0.25	0.83	ug/L	
1,2-Dichloropropane		1175	<0.25	0.25	0.83	ug/L	
1,3-Dichloropropane		1175	<0.25	0.25	0.83	ug/L	
2,2-Dichloropropane		1175	<0.25	0.25	0.83	ug/L	
1,1-Dichloropropene		1175	<0.25	0.25	0.83	ug/L	
cis-1,3-Dichloropropene		1175	<0.25	0.25	0.83	ug/L	
trans-1,3-Dichloropropene		1175	<0.25	0.25	0.83	ug/L	
Di-isopropyl ether		1175	<0.25	0.25	0.83	ug/L	
Ethylbenzene		1175	<0.25	0.25	0.83	ug/L	
Hexachlorobutadiene		1175	<0.25	0.25	0.83	ug/L	

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QUALITY CONTROL REPORT

BLANKS

02/06/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00545
Account No: 39150

Job Description: Quad Graphics-New Berlin

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units	Date Prepped
Isopropylbenzene		1175	<0.25	0.25	0.83	ug/L	
p-Isopropyltoluene		1175	<0.25	0.25	0.83	ug/L	
Methylene Chloride		1175	0.30	0.25	0.83	ug/L	
Methyl-t-butyl ether		1175	<0.25	0.25	0.83	ug/L	
Naphthalene		1175	<0.10	0.10	0.33	ug/L	
n-Propylbenzene		1175	<0.25	0.25	0.83	ug/L	
Styrene		1175	<0.25	0.25	0.83	ug/L	
1,1,1,2-Tetrachloroethane		1175	<0.25	0.25	0.83	ug/L	
1,1,2,2-Tetrachloroethane		1175	<0.25	0.25	0.83	ug/L	
Tetrachloroethene		1175	<0.25	0.25	0.83	ug/L	
Toluene		1175	<0.10	0.10	0.33	ug/L	
1,2,3-Trichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
1,2,4-Trichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
1,1,1-Trichloroethane		1175	<0.25	0.25	0.83	ug/L	
1,1,2-Trichloroethane		1175	<0.25	0.25	0.83	ug/L	
Trichloroethene		1175	<0.25	0.25	0.83	ug/L	
Trichlorofluoromethane		1175	<0.25	0.25	0.83	ug/L	
1,2,3-Trichloropropane		1175	<0.25	0.25	0.83	ug/L	
1,2,4-Trimethylbenzene		1175	<0.10	0.10	0.33	ug/L	
1,3,5-Trimethylbenzene		1175	<0.10	0.10	0.33	ug/L	
Vinyl Chloride		1175	<0.25	0.25	0.83	ug/L	
Xylenes, Total		1175	<0.25	0.25	0.83	ug/L	
Surr: Dibromofluoromethane		1175	99.2	n/a	n/a	%	
Surr: Toluene-d8		1175	91.6	n/a	n/a	%	
Surr: Bromofluorobenzene		1175	93.2	n/a	n/a	%	

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WDNR No. 128053530

QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

02/06/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00545
Account No: 39150

Page 11

Job Description: Quad Graphics-New Berlin

Analyte	Prep Batch Number	Run Batch Number	Sample Result	Spike Amount	Units	Matrix Spike Result	Percent Recovery	MSD Result	Percent Recovery	Relative Percent Difference
VOC - AQUEOUS - EPA 8260B										
Benzene		1175	<0.10	50.0	ug/L	51.0	102.0	50.9	101.8	0.2
Chlorobenzene		1175	<0.25	50.0	ug/L	49.6	99.2	49.9	99.8	0.6
1,1-Dichloroethene		1175	<0.25	50.0	ug/L	51.3	102.6	50.6	101.2	1.4
Ethylbenzene		1175	<0.25	50.0	ug/L	50.0	100.0	50.2	100.4	0.4
Methyl t-butyl ether		1175	3.4	50.0	ug/L	58.5	110.2	59.9	113.0	2.5
Toluene		1175	0.17	50.0	ug/L	48.9	97.5	48.8	97.3	0.2
Trichloroethene		1175	<0.25	50.0	ug/L	51.1	102.2	51.3	102.6	0.4
1,2,4-Trimethylbenzene		1175	0.36	50.0	ug/L	49.9	99.1	49.8	98.9	0.2
1,3,5-Trimethylbenzene		1175	0.11	50.0	ug/L	50.7	101.2	50.8	101.4	0.2
Xylenes, Total		1175	<0.25	150	ug/L	151	100.7	151	100.7	0.0
Surr: Dibromofluoromethane		1175	49.9	50.0	%	49.5	99.0	49.6	99.2	0.2
Surr: Toluene-d8		1175	46.0	50.0	%	48.4	96.8	48.5	97.0	0.2
Surr: Bromofluorobenzene		1175	46.9	50.0	%	48.6	97.2	48.8	97.6	0.4

GeoTrans, Inc.
A TETRA TECH COMPANY
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045
www.geotransinc.com
262-792-1282 FAX 262-792-1310

July 27, 2004
(4108.003)

Ms Diane Marchik
Godfrey & Kahn SC
780 North Water Street
Milwaukee, Wisconsin 53202-3590

Re: Additional Groundwater Sampling in Area E, Quad/Graphics, New Berlin, Wisconsin Facility

Dear Ms. Marchik:

On July 9 and July 12, 2004, additional groundwater sampling activities were performed by GeoTrans, Inc. personnel in Area E of the Quad/Graphics New Berlin facility located at 16555 W. Rogers Drive, New Berlin, Wisconsin. The purpose of the additional groundwater sampling activities was to determine whether the groundwater beneath Area E remained impacted with bis (2-ethylhexyl) phthalate above its Chapter NR140 Enforcement Standard (ES) of 6 ug/L. Area E is the former location of two oil sumps in the former press area of the building. The oil sumps were filled in with concrete before Quad/Graphics took ownership of property from Ringier America in August 1995. A grab groundwater sample collected from Area E on May 31, 1995 during a subsurface investigation in areas of potential environmental concern located on the New Berlin facility property contained bis (2-ethylhexyl) phthalate at a reported concentration of 345 ug/L. The scope of work recently completed by GeoTrans, Inc. is described below.

One temporary monitor well was installed through the concrete floor of the New Berlin facility building in Area E (Figure 1). The direct-push soil sampling method was used to advance the borehole in which the temporary monitor well was installed. The borehole was advanced to a depth of 15.5 feet below the top of the concrete floor of the building. Soil samples collected from the borehole were used to prepare a soil boring log information form, which is provided in Attachment A. The temporary monitor well, designated TW-1, was constructed of 1-inch diameter schedule 40 PVC well materials with a 10-foot screen. The annular space was filled with silica sand to approximately 2 feet above the top of the well screen. Bentonite chips were placed above the silica sand to a depth of approximately 1 foot below the concrete floor. A copy of the monitoring well construction form that summarizes the well construction information for the temporary monitor well is included in Attachment A.

After construction of the temporary monitor well was completed, a reconnaissance of the New Berlin facility was conducted by the GeoTrans environmental technician to determine which of the 11 monitor wells that were installed on the property as part of previous environmental site investigation work were still present on the property. The results of the site reconnaissance are summarized below and depicted on Figure 1.

- Monitor Well MW-1: Could not be located; presumed abandoned.
- Monitor Well MW-2: Could not be located; presumed abandoned.
- Monitor Well MW-3: Could not be located; presumed abandoned.
- Monitor Wells MW-4 and MW-5: Intact, but the protective casing covers could not be opened to inspect the wells. The PVC casing of the wells would have to be cut down several inches to allow the protective casing covers to be opened.
- Monitor well PZ-1: Intact and accessible.
- Monitor Wells MW-6 and MW-7: Could not be located; presumed abandoned.
- Monitor Wells MW-8, MW-9 and MW-10: Intact and accessible.

At the end of the day, the temporary monitor well was checked for groundwater using an electronic water level meter. There was only about 1 foot of standing water in the temporary monitor well, which would not have been sufficient to fill the sample containers. The temporary monitor well was therefore allowed to sit over the weekend to allow a sufficient volume of groundwater to enter the well. On Monday, July 12th, the depth to groundwater in the temporary monitor well was at approximately 7 feet below the concrete floor of the building. A grab groundwater sample was collected from the temporary monitor well using a disposable bailer. The groundwater sample was submitted to the Test America Analytical Testing Corp. laboratory in Watertown, Wisconsin for analysis of semi-volatile organic compounds (SVOCs) by Method SW 8270B. A copy of the analytical report is provided in Attachment B. After the groundwater sample was collected, the temporary monitor well was abandoned in place by GeoTrans, Inc. personnel. A copy of the monitor well abandonment form for the temporary monitor well is provided in Attachment A.

Review the analytical report shows no SVOCs were detected in the groundwater sample collected from the temporary monitor well. In particular, bis (2-ethylhexyl) phthalate was not detected in the groundwater sample above its method detection limit of 3.1 ug/L. The analytical results for SVOCs for the groundwater sample collected from the temporary monitor well indicate natural attenuation processes have successfully remediated the bis (2-ethylhexyl) phthalate impacts that were present in the groundwater beneath Area E in 1995.

It is recommended that this letter report be submitted to the Wisconsin Department of Natural Resources so that it can be considered in the request for case closure of the New Berlin facility. The analytical results for the groundwater sample collected from the temporary monitor well indicate Area E at the New Berlin facility can be closed without having to place the site on the GIS Registry of closed sites with residual groundwater impacts.

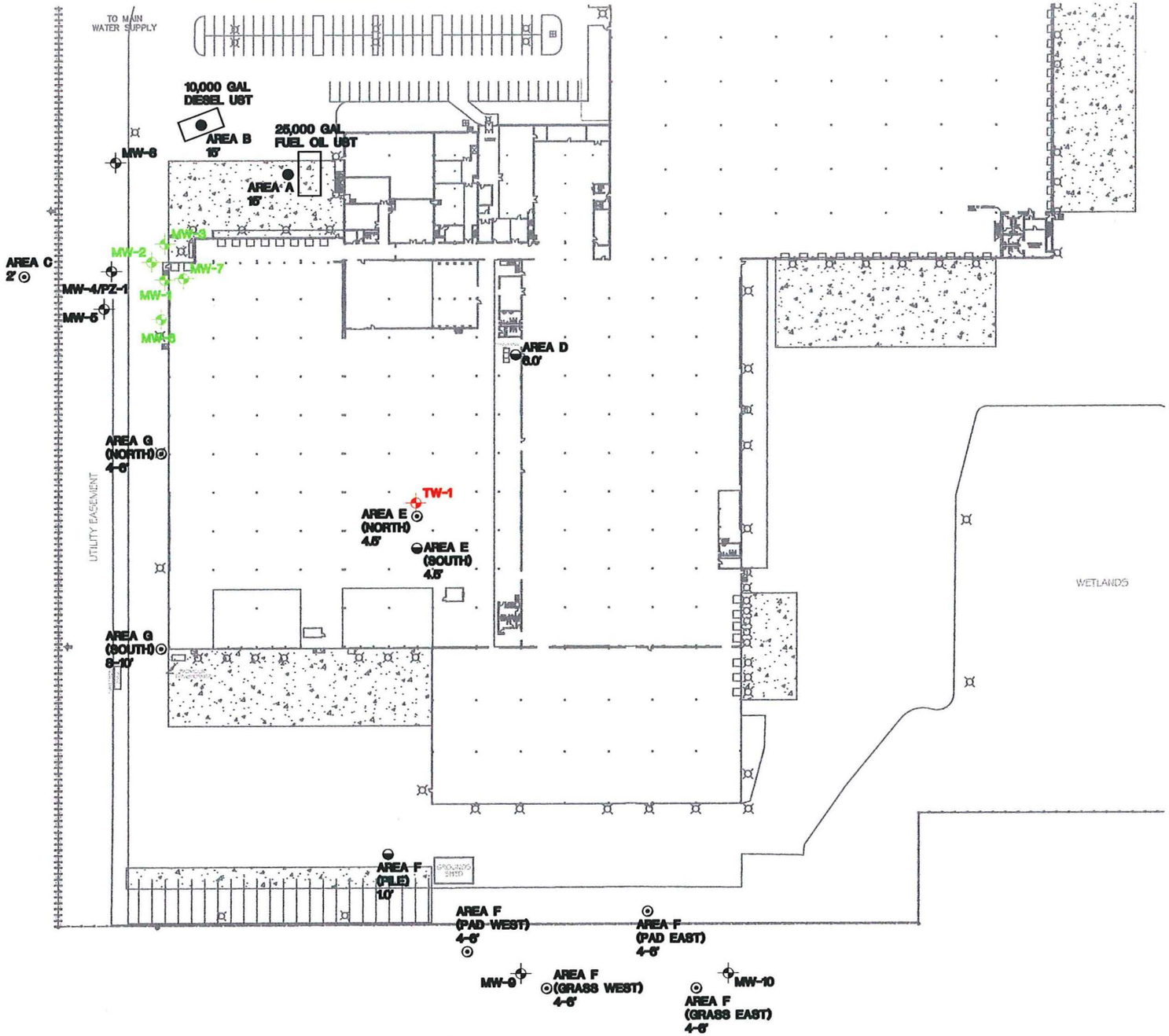
Thank you for the opportunity to perform this work for Quad/Graphics. If you have any questions or would like to discuss the results of the additional investigation activities further, please contact me at your convenience.

Sincerely,

Mark A. Manthey, P.G.
Senior Hydrogeologist

Encl.
Cc: Tom Estock

FIGURE



EXPLANATION

MW-6	EXISTING GROUNDWATER MONITOR WELL LOCATION AND DESIGNATION
AREA E	SOIL SAMPLE LOCATION AND DESIGNATION
AREA B	GROUNDWATER SAMPLE LOCATION AND DESIGNATION
AREA E	SOIL/GROUNDWATER SAMPLE LOCATION AND DESIGNATION
4-6'	DEPTH OF SOIL SAMPLE
TW-1	TEMPORARY GROUNDWATER MONITOR WELL LOCATION AND DESIGNATION
MW-1	ABANDONED GROUNDWATER MONITOR WELL LOCATION AND DESIGNATION

N

SCALE

0 200

Feet

QUAD/GRAPHICS, INC. NEW BERLIN, WISCONSIN	DATE: 7-20-04
	DESIGNED: HJW
SITE LAYOUT AND SAMPLE LOCATIONS	CHECKED: MAM
	APPROVED: MAM
	DRAWN: HJW
	PROJ.: 4108.003
GeoTrans, Inc. A TETRA TECH COMPANY	Figure 1

BASE MAP FROM QUAD/GRAPHICS NEW BERLIN CAD SERVICES, 2003.

Q:\CAD\Quad/Graphics/New Berlin\4108003001.dwg 07/20/2004 08:48:59

ATTACHMENT A
TEMPORARY MONITOR WELL TW-1
SOIL BORING LOG INFORMATION FORM,
MONITORING WELL CONSTRUCTION SUMMARY FORM
AND WELL ABANDONMENT FORM

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☒ Other ☐ _____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
QUAD GRAPHICS	_ _ _ _ _ _ _ _	TW-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: GREG Last Name: KETSON Firm: K.S.I.	07/08/2004 (m m d d y y y y)	07/08/2004 (m m d d y y y y)	DIRECT PUSH

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _ _ _ _ _	_ _ _ _	TW-1	_____ Feet MSL	_____ Feet MSL	_____ inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E S/C/N
SW 1/4 of SW 1/4 of Section 3, T 6 N, R 20 E/W

Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
268017090	Waukesha	68	NEW BERLIN

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	6-8" of concrete	I									
			1	Sandy gravel (BASE) LT BROWN, DRY No odor	GP									
			2											
			3	Gravel / Sand Lt Brown, sl. moist, Loose, No odor										
			4											
X composite			5	Silty Sandy clay, sl. moist, fine grain, brown, firm, no odor	CL-ML									
			6											
			7											
			8	Silty Sandy clay, sl. moist, fine grain Dark Brown firm. no odor										
			9	Sl. SILTY Sand, Fine grain, dense Brown, no odor, moist	SM									
			10	Silty Sand, moist, brown, no odor										
			11											
			12	Silty clay, dark brown, sl. moist, fine grain										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Randy Brinkhoff	GeoTrans Inc.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
		13		Silty Clay, brown, ~~dense~~, fine grain wet, no odor	CL-ML									
		14												
		15		End of Bory - set well										

ATTACHMENT B
GROUNDWATER SAMPLE ANALYTICAL REPORT

TestAmerica
ANALYTICAL TESTING CORPORATION

MASTERFILE COPY
PROJECT #
CC:

WDNR No. 128053530
602 Commerce Drive • Watertown, WI 53094 • 920-261-1660 • 920-261-8120 Fax

ANALYTICAL REPORT

RECEIVED
JUL 20 2004
HSI GeoTrans
Milwaukee

Mr. Mark Manthey
GEOTRANS, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

07/19/2004

Job No: 04.06818

The following samples were received by TestAmerica for analysis:

4108.003 Quad Graphics

Sample Number	Sample Description	Date Taken	Date Received
578696	TW-1	07/12/2004	07/13/2004

Brian D. DeJong
Organic Operations Manager

GEOTRANS, INC.
Job No: 04.06818

07/19/2004

KEY TO DATA FLAGS

The attached sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
B = Blank is contaminated
C = Standard outside of control limits
D = Diluted for analysis
E = TCLP extraction outside of method required temperature range
F = Sample filtered in lab
G = Received past hold time
H = Late eluting hydrocarbons present
I = Improperly handled sample
J = Estimated concentration
L = Common lab solvent
M = Matrix interference
P = Improperly preserved sample
Q = Result confirmed via re-analysis
S = Sediment present
T = Does not match typical pattern
W = BOD re-set due to missed dilution
X = Unidentified compound(s) present
Z = Internal standard outside limits
* = See Case Narrative

KEY TO ANALYST INITIALS

The attached sample(s) may have been analyzed by another certified laboratory. If a number appears in the Analyst Initials field, the following are the appropriate certifications (if the lab code does not appear below, that means that certification is not required for the work performed):

Lab Code	Certification Number
008	WDNR - 999766900
009	WDNR - 241293690
020	WDNR - 999447680
030	ILNELAC - 100230; WDNR - 998294430
060	ILNELAC - 100221; WDNR - 999447130
070	IA - 007; ILNELAC - 000668; MDH - 019-999-319; WDNR - 999917270
130	WDNR - 632021390
147	WDNR - 721026460
300	FLNELAC - 87358; IA - 131; MDH - 047-999-345; WDNR - 998020430
400	WDNR - 113133790
510	WDNR - 241249360
520	WDNR - 999518190; ILNELAC - 100439
700	WDNR - 113289110

TestAmerica Watertown Certifications: WI DNR - 128053530; IL NELAC - 100453; IA DNR - 294; MN DoH - 055-999-366; ND DoH R-046; AR DEQ - 88-0808

Unless sub-contracted (see above), volatiles analyses (including VOC, PVOC, GRO, BTEX and TPH Gasoline) performed by TestAmerica Watertown at 1101 Industrial Drive, Units 9&10. All other analyses performed at 602 Commerce Drive, Watertown WI 53094.

Results reported between the Method Detection Limit (MDL) and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ.

For questions regarding this report, please contact Dan Milewsky or Warren Topel.

ANALYTICAL REPORT

Mr. Mark Manthey
GEOTRANS, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

07/19/2004
Job No: 04.06818
Sample No: 578696
Account No: 39150
Page 3 of 5

JOB DESCRIPTION: 4108.003 Quad Graphics
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: TW-1
New Berlin, WI
Rec'd at 4 degrees C

Date/Time Taken: 07/12/2004 10:00 Date Received: 07/13/2004

Parameter		Results	Units	MDL	LOQ	Method	Date Analyzed	Analyst	Prep/Run Batch	
PREP, BNA AQUEOUS		Complete				SW 3510C	07/14/2004	070	304	
ACID CMPDS - 8270 AQUEOUS	M							070		
Benzoic acid		<10	ug/L	10	30	SW 8270B	07/15/2004	070	304	1044
Benzyl alcohol		<2.5	ug/L	2.5	7.5	SW 8270B	07/15/2004	070	304	1044
4-Chloro-3-methylphenol		<2.7	ug/L	2.7	8.1	SW 8270B	07/15/2004	070	304	1044
2-Chlorophenol		<2.5	ug/L	2.5	7.4	SW 8270B	07/15/2004	070	304	1044
2,4-Dichlorophenol		<2.7	ug/L	2.7	8.0	SW 8270B	07/15/2004	070	304	1044
2,4-Dimethylphenol		<1.5	ug/L	1.5	4.5	SW 8270B	07/15/2004	070	304	1044
2,4-Dinitrophenol		<2.6	ug/L	2.6	7.8	SW 8270B	07/15/2004	070	304	1044
2-Methyl-4,6-dinitrophenol		<3.0	ug/L	3.0	8.9	SW 8270B	07/15/2004	070	304	1044
Cresols, Total		<4.5	ug/L	4.4	13	SW 8270B	07/15/2004	070	304	1044
2-Nitrophenol		<2.8	ug/L	2.8	8.3	SW 8270B	07/15/2004	070	304	1044
4-Nitrophenol		<1.8	ug/L	1.8	5.4	SW 8270B	07/15/2004	070	304	1044
Pentachlorophenol		<2.8	ug/L	2.8	8.3	SW 8270B	07/15/2004	070	304	1044
Phenol		<1.7	ug/L	1.7	5.2	SW 8270B	07/15/2004	070	304	1044
2,4,5-Trichlorophenol		<3.3	ug/L	3.2	9.7	SW 8270B	07/15/2004	070	304	1044
2,4,6-Trichlorophenol		<3.7	ug/L	3.7	11	SW 8270B	07/15/2004	070	304	1044
Surr: Phenol-d6	M,C	26	%		n/a	SW 8270B	07/15/2004	070	304	1044
Surr: 2-Fluorophenol	M,C	39	%		n/a	SW 8270B	07/15/2004	070	304	1044
Surr: 2,4,6-Tribromophenol		69	%		n/a	SW 8270B	07/15/2004	070	304	1044
BASE/NEUTRALS - 8270 AQUEOUS	M+							070		
Acenaphthene		<2.9	ug/L	2.9	8.7	SW 8270B	07/15/2004	070	304	929
Acenaphthylene		<2.6	ug/L	2.5	7.6	SW 8270B	07/15/2004	070	304	929
Anthracene		<2.1	ug/L	2.1	6.3	SW 8270B	07/15/2004	070	304	929
Benzidine		<2.2	ug/L	2.2	6.5	SW 8270B	07/15/2004	070	304	929
Benzo(a)anthracene		<2.8	ug/L	2.7	8.2	SW 8270B	07/15/2004	070	304	929
Benzo(b)fluoranthene		<2.6	ug/L	2.6	7.7	SW 8270B	07/15/2004	070	304	929
Benzo(k)fluoranthene		<2.6	ug/L	2.6	7.8	SW 8270B	07/15/2004	070	304	929
Benzo(g,h,i)perylene		<2.8	ug/L	2.8	8.3	SW 8270B	07/15/2004	070	304	929
Benzo(a)pyrene		<2.5	ug/L	2.5	7.4	SW 8270B	07/15/2004	070	304	929
Benzyl butyl phthalate		<2.8	ug/L	2.7	8.2	SW 8270B	07/15/2004	070	304	929
Bis(2-chloroethoxy)methane		<2.4	ug/L	2.3	7.0	SW 8270B	07/15/2004	070	304	929
Bis(2-chloroethyl)ether		<2.2	ug/L	2.2	6.5	SW 8270B	07/15/2004	070	304	929
Bis(2-chloroisopropyl)ether		<2.2	ug/L	2.2	6.6	SW 8270B	07/15/2004	070	304	929
Bis(2-ethylhexyl)phthalate		<3.1	ug/L	3.1	9.2	SW 8270B	07/15/2004	070	304	929
4-Bromophenyl phenyl ether		<3.3	ug/L	3.3	9.8	SW 8270B	07/15/2004	070	304	929
4-Chloroaniline		<1.7	ug/L	1.7	5.1	SW 8270B	07/15/2004	070	304	929
2-Chloronaphthalene		<2.3	ug/L	2.3	7.0	SW 8270B	07/15/2004	070	304	929
4-Chlorophenyl phenyl ether		<2.6	ug/L	2.6	7.7	SW 8270B	07/15/2004	070	304	929

ANALYTICAL REPORT

Mr. Mark Manthey
GEOTRANS, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

07/19/2004
Job No: 04.06818
Sample No: 578696
Account No: 39150

JOB DESCRIPTION: 4108.003 Quad Graphics
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: TW-1
New Berlin, WI
Rec'd at 4 degrees C

Date/Time Taken: 07/12/2004 10:00 Date Received: 07/13/2004

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Analyst	Prep/Run Batch	
Chrysene	<2.7	ug/L	2.7	8.0	SW 8270B	07/15/2004	070	304	929
Dibenzo(a,h)anthracene	<2.8	ug/L	2.7	8.2	SW 8270B	07/15/2004	070	304	929
Dibenzofuran	<2.0	ug/L	2.0	5.9	SW 8270B	07/15/2004	070	304	929
Di-n-butyl phthalate	<2.5	ug/L	2.5	7.5	SW 8270B	07/15/2004	070	304	929
1,2-Dichlorobenzene	<2.1	ug/L	2.1	6.3	SW 8270B	07/15/2004	070	304	929
1,3-Dichlorobenzene	<2.1	ug/L	2.1	6.3	SW 8270B	07/15/2004	070	304	929
1,4-Dichlorobenzene	<2.1	ug/L	2.1	6.3	SW 8270B	07/15/2004	070	304	929
3,3'-Dichlorobenzidine	<1.6	ug/L	1.6	4.7	SW 8270B	07/15/2004	070	304	929
Diethyl phthalate	<2.5	ug/L	2.5	7.5	SW 8270B	07/15/2004	070	304	929
Dimethyl phthalate	<2.6	ug/L	2.6	7.7	SW 8270B	07/15/2004	070	304	929
2,4-Dinitrotoluene	<2.6	ug/L	2.6	7.8	SW 8270B	07/15/2004	070	304	929
2,6-Dinitrotoluene	<1.6	ug/L	1.6	4.7	SW 8270B	07/15/2004	070	304	929
Di-n-octyl phthalate	<2.9	ug/L	2.8	8.5	SW 8270B	07/15/2004	070	304	929
1,2-Diphenylhydrazine	<2.4	ug/L	2.4	7.1	SW 8270B	07/15/2004	070	304	929
Fluoranthene	<2.1	ug/L	2.1	6.2	SW 8270B	07/15/2004	070	304	929
Fluorene	<2.2	ug/L	2.1	6.4	SW 8270B	07/15/2004	070	304	929
Hexachlorobenzene	<2.2	ug/L	2.2	6.5	SW 8270B	07/15/2004	070	304	929
Hexachlorobutadiene	<2.4	ug/L	2.4	7.2	SW 8270B	07/15/2004	070	304	929
Hexachlorocyclopentadiene	<1.8	ug/L	1.8	5.3	SW 8270B	07/15/2004	070	304	929
Hexachloroethane	<2.0	ug/L	1.9	5.8	SW 8270B	07/15/2004	070	304	929
Indeno(1,2,3-cd)pyrene	<2.6	ug/L	2.6	7.8	SW 8270B	07/15/2004	070	304	929
Isophorone	<2.4	ug/L	2.4	7.1	SW 8270B	07/15/2004	070	304	929
2-Methylnaphthalene	<2.3	ug/L	2.2	6.7	SW 8270B	07/15/2004	070	304	929
Naphthalene	<2.7	ug/L	2.7	8.0	SW 8270B	07/15/2004	070	304	929
2-Nitroaniline	<2.3	ug/L	2.3	6.8	SW 8270B	07/15/2004	070	304	929
3-Nitroaniline	<1.9	ug/L	1.8	5.5	SW 8270B	07/15/2004	070	304	929
4-Nitroaniline	<1.4	ug/L	1.4	4.1	SW 8270B	07/15/2004	070	304	929
Nitrobenzene	<2.1	ug/L	2.0	6.1	SW 8270B	07/15/2004	070	304	929
N-Nitrosodimethylamine	<2.0	ug/L	2.0	6.0	SW 8270B	07/15/2004	070	304	929
N-Nitrosodi-n-propylamine	<2.5	ug/L	2.4	7.3	SW 8270B	07/15/2004	070	304	929
N-Nitrosodiphenylamine	<2.6	ug/L	2.6	7.8	SW 8270B	07/15/2004	070	304	929
Phenanthrene	<2.6	ug/L	2.6	7.7	SW 8270B	07/15/2004	070	304	929
Pyrene	<2.8	ug/L	2.8	8.4	SW 8270B	07/15/2004	070	304	929
Pyridine	<1.4	ug/L	1.4	4.1	SW 8270B	07/15/2004	070	304	929
1,2,4-Trichlorobenzene	<2.4	ug/L	2.3	7.0	SW 8270B	07/15/2004	070	304	929
Surr: Nitrobenzene-d5	61	%		n/a	SW 8270B	07/15/2004	070	304	929
Surr: 2-Fluorobiphenyl	55	%		n/a	SW 8270B	07/15/2004	070	304	929
Surr: Terphenyl-d14	62	%		n/a	SW 8270B	07/15/2004	070	304	929

TestAmerica
ANALYTICAL TESTING CORPORATION
WDNR No. 128053530
602 Commerce Drive • Watertown, WI 53094 • 920-261-1660 • 920-261-8120 Fax

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

07/19/2004

Mr. Mark Manthey
GEOTRANS, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 04.06818
Account No: 39150

Job Description: 4108.003 Quad Graphics

Analyte	Prep Batch Number	Run Batch Number	LCS Amount	Units	LCS Result	LCSD Result	LCS Percent Recovery	LCSD Percent Recovery	Control Limits	Relative Percent Difference
ACID CMPDS - 8270 AQUEOUS										
4-Chloro-3-methylphenol		1044	100	ug/L	83.2		83			
2-Chlorophenol		1044	100	ug/L	74.9		75			
4-Nitrophenol		1044	100	ug/L	30.7		31			
Pentachlorophenol		1044							14 - 176	
Phenol		1044	100	ug/L	35.7		36			
Surr: Phenol-d6		1044	100	ug/L	32.8		33		10 - 94	
Surr: 2-Fluorophenol		1044	100	ug/L	49.3		49		21 - 100	
Surr: 2,4,6-Tribromophenol		1044	100	ug/L	89.6		90		10 - 123	
BASE/NEUTRALS - 8270 AQUEO										
Acenaphthene		929	100	ug/L	87.6		88			
1,4-Dichlorobenzene		929	100	ug/L	54.3		54			
2,4-Dinitrotoluene		929	100	ug/L	100		100			
N-Nitrosodi-n-propylamine		929	100	ug/L	89.2		89			
Pyrene		929	100	ug/L	93.4		93			
1,2,4-Trichlorobenzene		929	100	ug/L	61.8		62			
Surr: Nitrobenzene-d5		929	100	ug/L	81.0		81			
Surr: 2-Fluorobiphenyl		929	100	ug/L	82.6		83			
Surr: Terphenyl-d14		929	100	ug/L	90.8		91			

0406818

TestAmerica ANALYTICAL TESTING CORPORATION

Watertown Division
602 Commerce Drive
Watertown, WI 53094

Phone 920-261-1660 or 800-833-7036
Fax 920-261-8120

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: GeoTrans Client #: _____
Address: 175 N. Corporate Dr. #100
City/State/Zip Code: Brookfield, WI 53045
Project Manager: Mark Manthey
Telephone Number: 262-792-1282 Fax: 262-792-1310
Sampler Name: (Print Name) Randy Barnhill
Sampler Signature: Randy Barnhill

Project Name: Quad Graphics
Project #: 4108.003
Site/Location ID: New Berlin State: WI
Report To: Mark Manthey
Invoice To: GeoTrans
Quote #: _____ PO#: _____

TAT: ~~Standard~~ / Rush (surcharges may apply)
Date Needed: 7-16-4
Fax Results: (Y) N

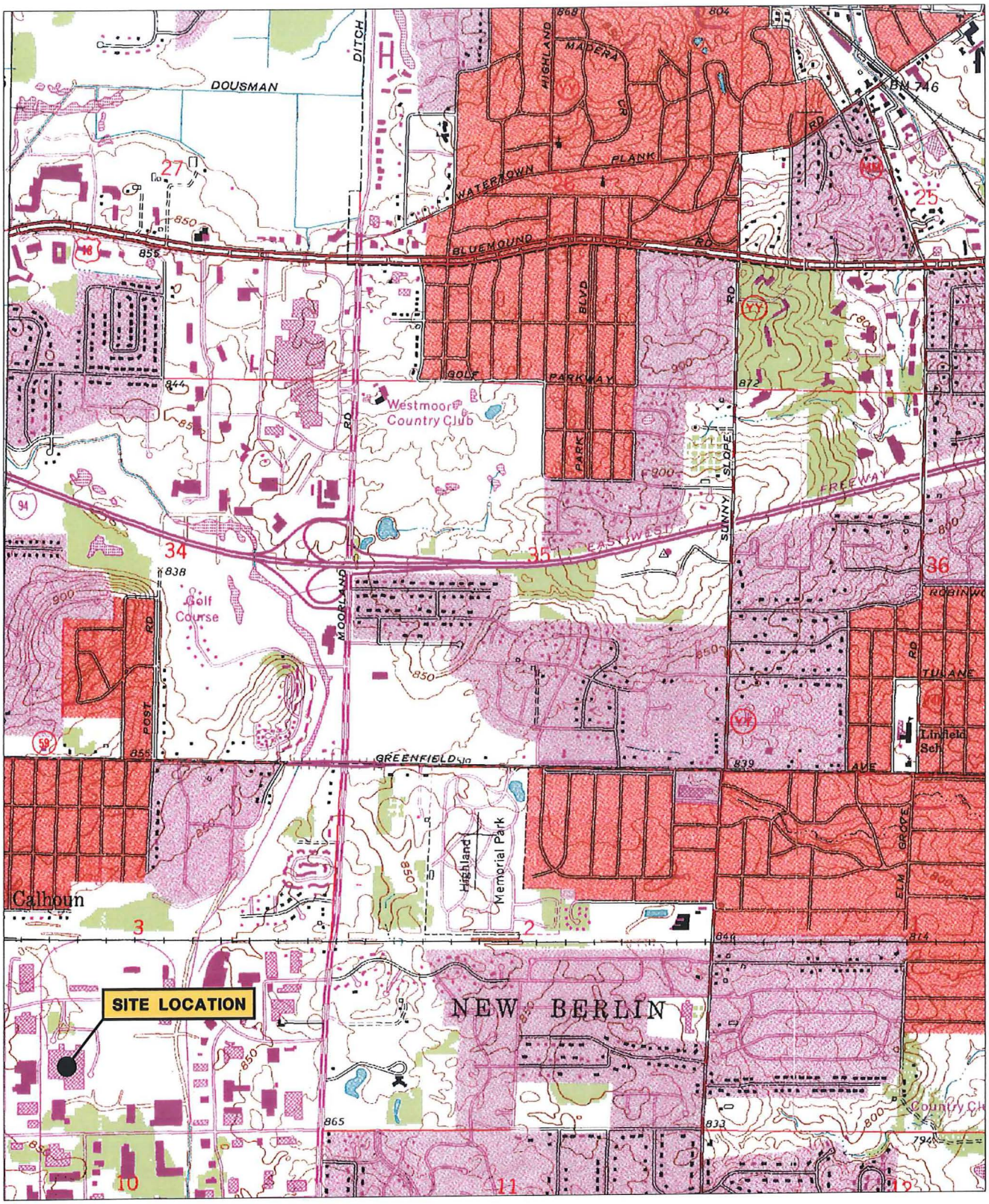
SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix (SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other)	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: Semi volatile organic compounds (8270)	QC Deliverables: ___ None ___ Level 2 (Batch QC) ___ Level 3 ___ Level 4 Other: _____	REMARKS
TW-1	7-12-4	1000	G	N	GW		X				2		X		SAMPLE CONSISTS OF 2-1L containers 2ND container is a backup

Special Instructions:

LABORATORY COMMENTS:
Init Lab Temp: 4°C
Rec Lab Temp:
Custody Seals: Y N N/A
Bottles Supplied by Test America: Y N
Method of Shipment:

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Randy Barnhill	7-12-4			7/13	1009
	7/13	1430			
				7/13	1445

7/13/04



EXTRACTED FROM WAUWATOSA, WI, USGS QUADRANGLE, 1993

-N-

0 2000 4000

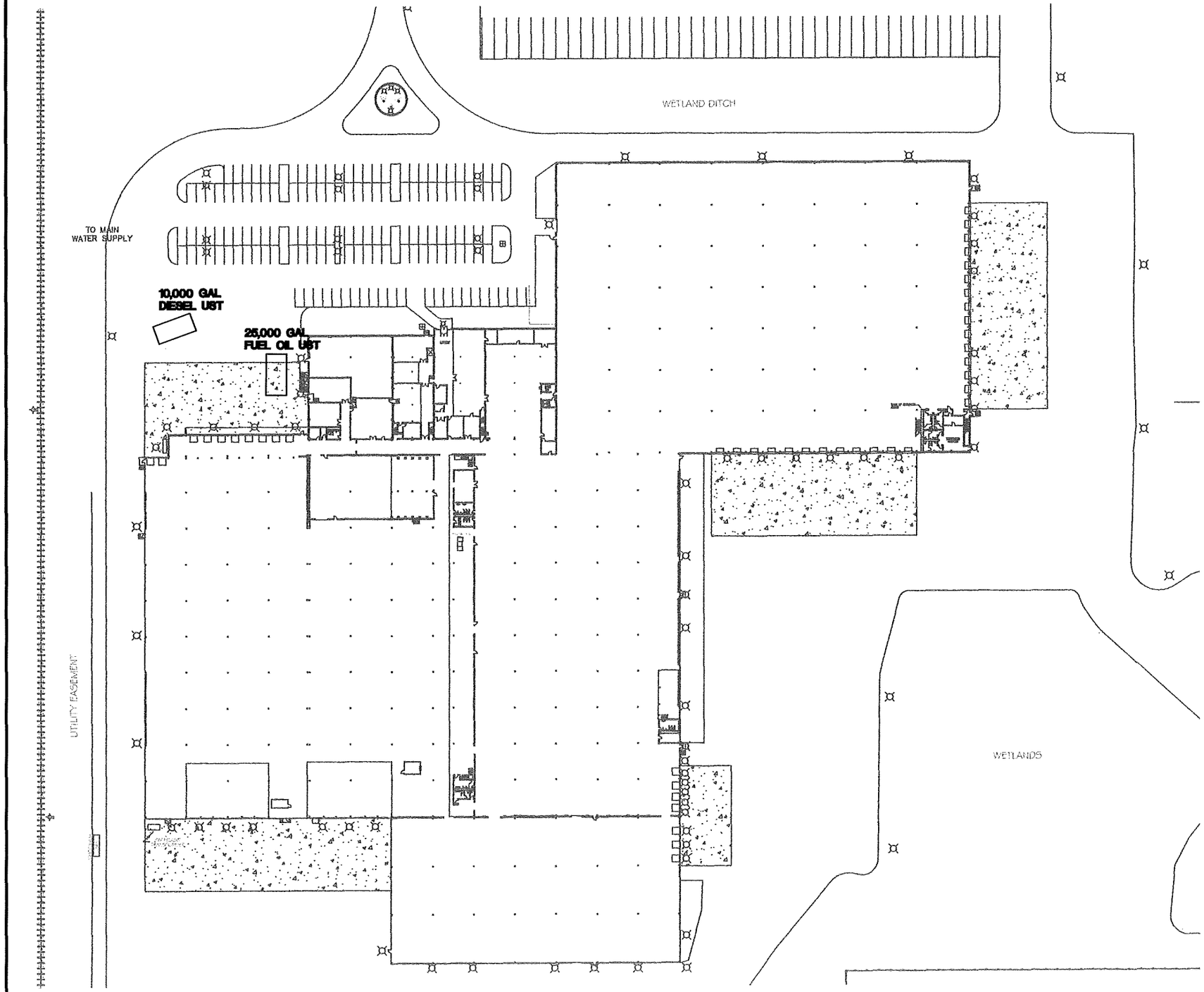
SCALE IN FEET

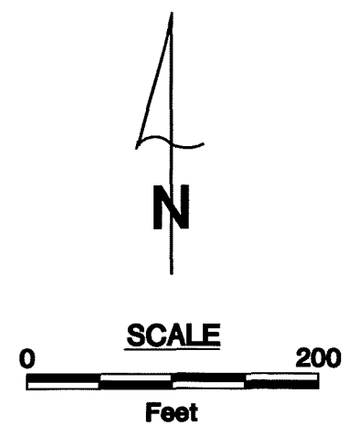
TITLE:	SITE LOCATION MAP
LOCATION:	QUAD/GRAPHICS, INC. NEW BERLIN, WISCONSIN

GeoTrans, Inc.
A TETRA TECH COMPANY

CHECKED	MAM	FIGURE:
DRAFTED	HJW	1
PROJECT	4108.003	
DATE	10/4/04	

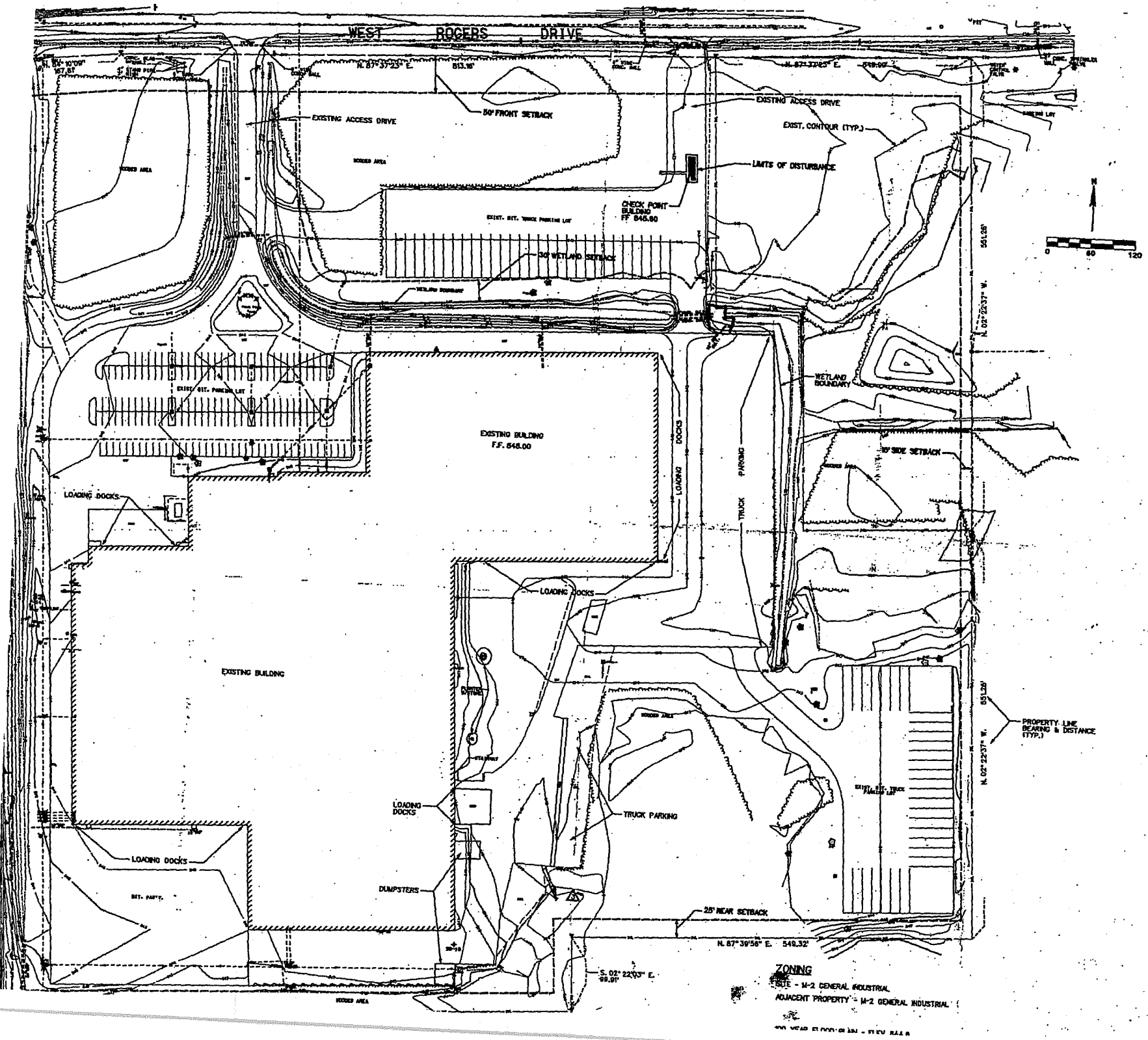
S:\CAD\QuadGraphics\New Berlin\4108003002.dwg 10/04/2004 16:06:52





BASE MAP FROM QUAD/GRAPHICS NEW BERLIN CAD SERVICES, 2003.

QUAD/GRAPHICS, INC. NEW BERLIN, WISCONSIN	DATE: 10-15-04
	DESIGNED: HJW
SITE LAYOUT	CHECKED: MAM
	APPROVED: MAM
	DRAWN: HJW
	PROJ.: 4108.003
GeoTrans, Inc. A TETRA TECH COMPANY	Figure 1



Quad/Graphics Inc.

CONSTRUCTION MANAGER
QUAD CONSTRUCTION
W224 N3322 Duplainville Rd.
Pewaukee, WI. 53072
414-891-9200

GRAEF ANHALT SCHLOEMER and Associates Inc.
One Honeycreek Corporate Center
125 South 84th Street, Suite 401
Milwaukee, WI. 53214-1470
414-259-1500
(Fax) 414-259-0037

PROJECT LOCATION
ARRIVAL AND DEPARTURE CHECKPOINT
QUAD GRAPHICS, INC.
NEW BERLIN PLANT

REVISIONS

NO.	DATE	BY	DESCRIPTION

OVERALL SITE PLAN

SHEET TITLE	
PROJECT NO. 20030216.00	DATE 6-10-03
DRAWN BY CAV	DRAWING NO.
CHECKED BY WCG	C100

Section B Attachments
N/A

Section C Attachments
N/A

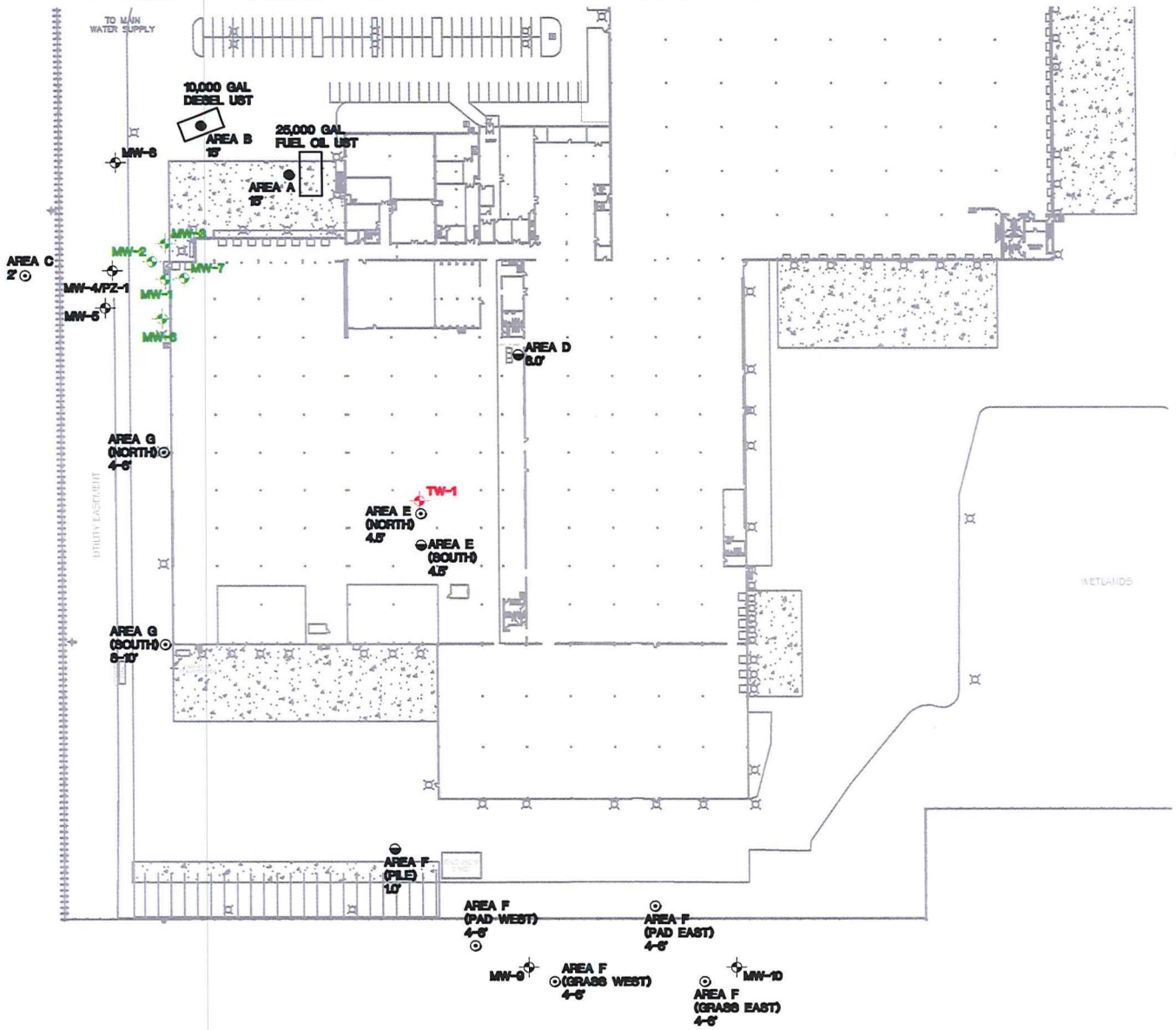
Section D Attachments
N/A

Section E Attachments:

Summary of Sampling Results for Groundwater
Quad/Graphics, former Ringier America Facility, New Berlin, Wisconsin

Sampling Point:	Collection Date:	Benzene	Bromoform	n-Butylbenzene	sec-Butylbenzene	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	2,2-Dichloropropane	Ethylbenzene	Isopropylbenzene	Napthalene	n-Propylbenzene	Tetrachloroethene	Trichloroethene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Xylenes (Total)	bis-2-ethylhexylpthalate	total VOC
WDNR NR140	PAL	0.5	0.44	NS	NS	85	0.7	7	20	NS	140	NS	8	NS	0.5	0.5	200	NS	96	96	0.02	1000	0.6	
	ES	5	4.4	NS	NS	850	7	70	100	NS	700	NS	40	NS	5	5	1000	NS	480	480	0.2	10000	6	
Area E	5/31/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**345**	0
	7/12/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3.1	0
MW-9 (Area F west)	6/1/1995 G	<1.0	NA	NA	NA	2.7	<1.0	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	<1.0	1	NA	3.7
	6/1/1995 P	<1.0	NA	NA	NA	1	<1.0	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	<1.0	3	NA	4
	10/2/1996	<0.5	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	3	NA	3
	1/16/1998	<0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.1	<0.1	<0.25	<0.25	NA	0
MW-10 (Area F east)	6/1/1995 G	<1.0	NA	NA	NA	<1.0	<1.0	<u>17.6</u>	<1.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	**1.4**	1	NA	20
	6/1/1995 P	<1.0	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	NA	1.3	NA	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	<1.0	<1.0	NA	1.3
	10/2/1996	<0.5	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	3	NA	3
	1/16/1998	<0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.1	<0.1	<0.25	<0.25	NA	0

NOTES:
Values in ug/L (ppb)
PAL- Preventive Action Limit
ES - Enforcement Std.
- - No detection limit available
NA - Not available or not analyzed
NS - Not stated in WI Adm. Code NR 140.05
G- grass
P- pad
Bold - above ES
Underlined - above PAL



EXPLANATION

MW-6	EXISTING GROUNDWATER MONITOR WELL LOCATION AND DESIGNATION
AREA E	SOIL SAMPLE LOCATION AND DESIGNATION
AREA B	GROUNDWATER SAMPLE LOCATION AND DESIGNATION
AREA E	SOIL/GROUNDWATER SAMPLE LOCATION AND DESIGNATION
4-6'	DEPTH OF SOIL SAMPLE
TW-1	TEMPORARY GROUNDWATER MONITOR WELL LOCATION AND DESIGNATION
MW-1	ABANDONED GROUNDWATER MONITOR WELL LOCATION AND DESIGNATION

N

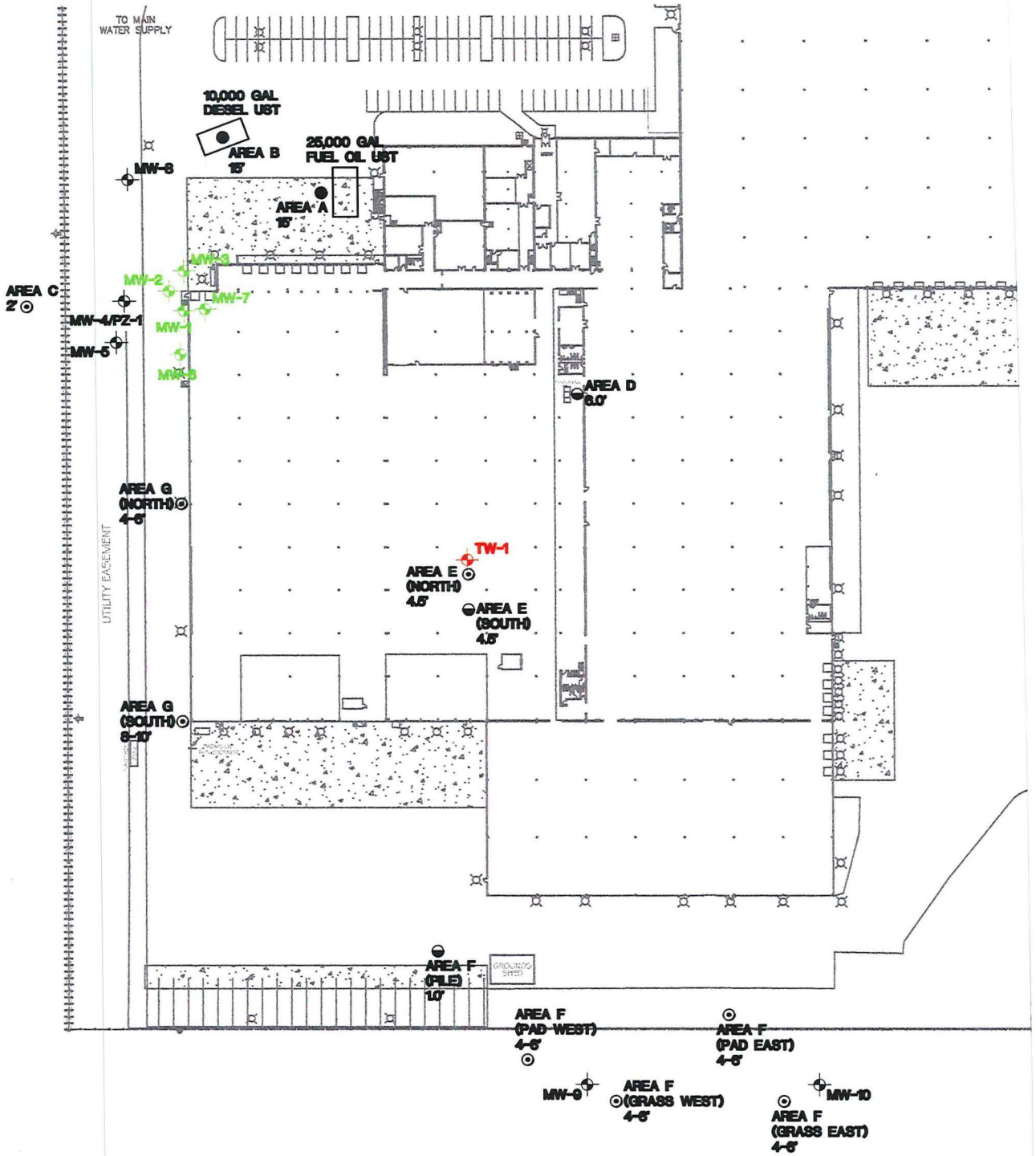
SCALE

0 200

Feet

BASE MAP FROM QUAD/GRAPHICS NEW BERLIN CAD SERVICES, 2003.

QUAD/GRAPHICS, INC. NEW BERLIN, WISCONSIN	DATE: 7-20-04
	DESIGNED: HJW
SITE LAYOUT AND SAMPLE LOCATIONS	CHECKED: MAM
	APPROVED: MAM
	DRAWN: HJW
	PROJ: 4108.003
GeoTrans, Inc. A TETRA TECH COMPANY	Figure 1



BASE MAP FROM QUAD/GRAPHICS
NEW BERLIN CAD SERVICES, 2003.

Section F Attachments
N/A

Section G Attachments
N/A

Section H Attachments
N/A

Section I Attachments
N/A

HSI GEOTRANS
A TETRA TECH COMPANY

175 N. Corporate Drive
Suite 100
Brookfield, Wisconsin
53045

414-792-1282 FAX 414-792-1310

March 13, 1998
(N798/101)

Fid 268017090

Mr. James Delwiche, P.G., Hydrogeologist
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
4041 N. Richards Street
P. O. Box 12436
Milwaukee, WI 53212-0436

RECEIVED
JUN 30 2000
PECFA SITE REVIEW
MILWAUKEE OFFICE

RE: Quad/Graphics Facility, 16555 W. Rogers Drive, New Berlin, Wisconsin 53151

Dear Mr. Delwiche:

As a result of your December 9, 1997 letter to Tom Estock of Quad/Graphics regarding the request for case closure for their New Berlin facility, HSI GeoTrans collected additional groundwater and soil samples at the facility.

On January 16, 1998, groundwater samples were collected from monitor wells MW-9 and MW-10 at the facility. No VOCs, and in particular, no vinyl chloride were detected in these wells. This is now two rounds of groundwater monitoring (January 1998 and October 1996) during which no VOCs have been detected. Analytical results are attached.

Beginning on January 16, 1998, HSI GeoTrans also attempted to collect a groundwater sample inside of the Quad/Graphics building at the location of Area E. A geoprobe unit and a concrete corer were used to install a temporary 1-inch diameter monitor well in exactly the same location where a sample had been collected in 1995. The initial sample of groundwater was collected at a depth of 4.5 feet below the concrete surface in a geoprobe borehole. The geoprobe borehole drilled in 1998 was extended to a depth of approximately 9 feet below the concrete surface. While it took approximately an hour to collect a sufficient quantity of groundwater to analyze for semivolatiles in 1995, no groundwater was present in the temporary well after three days in January of 1998.

It was thought that the abandonment materials from the 1995 borehole may have smeared the surface of the 1998 borehole with bentonite, thereby preventing the inflow of groundwater to the temporary well. Therefore, this borehole was abandoned, and another borehole drilled approximately 2 feet from it. This second borehole also extended to a depth of approximately 9 feet, and a temporary 1-inch diameter monitor well placed in the borehole. Again, no water was present in the borehole after three days.

As a result of these failed attempts to collect a groundwater sample from these two boreholes, a soil sample was collected from the bottom of the second borehole on January 26. This sample was analyzed for polynuclear aromatic hydrocarbons (PAHs) and for bis(2-ethylhexyl)phthalate. None of these parameters were detected in the sample. It should be noted that the analysis for bis(2-ethylhexyl)phthalate was performed 18 days after the date it was collected, which is four days beyond the normal hold time for the analysis of base/neutrals using method 8270. As the compound of concern is a semivolatile compound, that it was not detected at a detection limit of 1.2 mg/kg (or parts per million), and that the sample was properly stored by the lab for this period of time, HSI GeoTrans is confident that the analytical results are representative of the actual site conditions.

The compound bis(2-ethylhexyl)phthalate is not of environmental concern at this site because:

- it was not detected in soil samples taken at a greater depth than the previous groundwater sample;
- the movement of groundwater at this location is very slow, based on our inability to collect a sample after several days being allowed for recharge;
- this location, and a radius of at least 90 feet around it, is paved with concrete and covered with a roof, preventing contact or infiltration of precipitation;
- although detected in the initial August 1995 groundwater sample, based upon HSI GeoTrans' experience at other sites, analytical results for bis(2-ethylhexyl)phthalate are often not repeatable, and therefore, do not represent actual site conditions.

Based upon the above results, we, therefore, request case closure for the Quad/Graphics New Berlin facility.

I trust this information meets your needs. If you have any questions, please do not hesitate to call.

Sincerely,

HSI GEOTRANS

Gerald DeMers

Gerald DeMers, P.E.
Senior Engineer
Project Manager

cc: Tom Estock, Quad/Graphics

A:\N798CLOS.LTR

TABLE 1. SUMMARY OF QUARTERLY GROUNDWATER SAMPLING ANALYTICAL RESULTS

Well Identification				Town Hall Water Supply Well			MW-1	MW-1 (DUP)	MW-1	MW-1
					(1)					
Date Sample Collected				06/19/94	08/08/96	06/05/97	11/09/93	11/09/93	05/11/95	08/08/96
Parameter	Units	ES	PAL							
Lead	ug/L	15	1.5	1.0	**130**	**57**	**23**	14	**72**	12
Diesel Range Organics	mg/L	NS	NS	<0.10	<0.10	<0.10	1.7	2.1	25.0	5.1
Gasoline Range Organics	ug/L	NS	NS	<50	<50	<50	19,000	19,000	35,000	25,000
Detected VOCs:										
Benzene	ug/L	5.0	0.5	<0.19	<0.50	<0.31	<20	<20	<50	**23**
Bromodichloromethane	ug/L	0.6	0.06	<0.17	<1.0	<0.20	<20	<20	<50	<20
n-Butylbenzene	ug/L	NS	NS	NA	<1.0	<0.44	<20	<20	97	230
sec-Butylbenzene	ug/L	NS	NS	NA	<1.0	<0.45	<20	<20	<20	<20
Chlorodibromomethane	ug/L	NS	NS	<0.16	<1.0	<0.10	<20	<20	<50	<20
Chloroform	ug/L	6.0	0.6	<0.18	<1.0	<0.18	<20	<20	<50	<20
1,2-Dichloroethane	ug/L	5.0	0.5	<0.16	<1.0	<0.20	<20	<20	<50	<20
Ethylbenzene	ug/L	700	140	<0.050	<1.0	<0.38	**1,200**	**1,200**	**2,300**	**1,500**
Isopropylbenzene	ug/L	NS	NS	NA	<1.0	<0.36	61	62	110	93
p-Isopropyltoluene	ug/L	NS	NS	NA	<1.0	<0.35	<20	<20	51	<20
Methyl-tert-butyl-ether	ug/L	60	12	NA	<1.0	<0.14	<20	<20	<50	<20
Naphthalene	ug/L	40	8.0	NA	<1.0	<0.35	**310**	**320**	**730**	**420**
n-Propylbenzene	ug/L	NS	NS	NA	<1.0	<0.46	160	160	220	270
Toluene	ug/L	343	68.6	3.0	<1.0	<0.39	**1,400**	**1,400**	**2,600**	**480**
1,2,3-Trichloropropane	ug/L	NS	NS	NA	<1.0	<0.28	<20	<20	<50	<20
1,2,4-Trimethylbenzene	ug/L	NS	NS	NA	<1.0	<0.32	1,300	1,300	2,700	1,800
1,3,5-Trimethylbenzene	ug/L	NS	NS	NA	<1.0	<0.33	350	360	740	590
Total Xylenes	ug/L	620	124	<0.34	<3.0	<1.1	**5,200**	**5,200**	**9,300**	**5,200**
Sum of VOC Detections	ug/L	NS	NS	3.0	0.0	0.0	9,981	10,002	18,848	10,606

TABLE 1. SUMMARY OF QUARTERLY GROUNDWATER SAMPLING ANALYTICAL RESULTS

Well Identification				MW-1	MW-1 (6)	MW-1	MW-1	MW-1	MW-1 (DUP)	MW-2
Date Sample Collected				11/27/96	03/06/97	06/05/97	09/03/97	12/22/97	12/22/97	11/08/93
Parameter	Units	ES	PAL							
Lead	ug/L	15	1.5	8.1	8.8	4.4	4.4	1.7	1.8	2.4
Diesel Range Organics	mg/L	NS	NS	5.4	4.7	4.1	2.2	1.6	1.8	3.6
Gasoline Range Organics	ug/L	NS	NS	19,000	16,000	18,000	15,000	8,300	10,000	31,000
Detected VOCs:										
Benzene	ug/L	5.0	0.5	<50	<6.2	0.39	<3.1	<3.1	<3.1	**540**
Bromodichloromethane	ug/L	0.6	0.06	<100	<4.0	<0.20	<3.2	<3.2	<3.2	<50
n-Butylbenzene	ug/L	NS	NS	160	<8.8	34	35	23	29	<50
sec-Butylbenzene	ug/L	NS	NS	<100	<9.0	10	9	6	7.3	<50
Chlorodibromomethane	ug/L	NS	NS	<100	<2.0	<0.10	<1.0	<1.0	<1.0	<50
Chloroform	ug/L	6.0	0.6	<100	<3.6	<0.18	<1.8	<1.8	<1.8	<50
1,2-Dichloroethane	ug/L	5.0	0.5	<100	<4.0	<0.20	<2.0	<2.0	<2.0	<50
Ethylbenzene	ug/L	700	140	**1,200**	**1,100**	**920**	**990**	510	690	**3,200**
Isopropylbenzene	ug/L	NS	NS	<100	76	66	80	33	45	88
p-Isopropyltoluene	ug/L	NS	NS	<100	<7.0	3.6	4.2	<3.5	4.2	<50
Methyl-tert-butyl-ether	ug/L	60	12	<100	<2.8	<0.14	<1.4	<1.4	<1.4	<50
Naphthalene	ug/L	40	8.0	**330**	**310**	**300**	**600**	**270**	**280**	**670**
n-Propylbenzene	ug/L	NS	NS	250	180	170	210	100	140	250
Toluene	ug/L	343	68.6	260	110	63	45	16	21	**1,800**
1,2,3-Trichloropropane	ug/L	NS	NS	<100	<5.6	<0.28	<2.8	<2.8	<2.8	<50
1,2,4-Trimethylbenzene	ug/L	NS	NS	1,400	1,400	1,500	1,800	990	1,300	2,000
1,3,5-Trimethylbenzene	ug/L	NS	NS	460	390	430	440	250	330	560
Total Xylenes	ug/L	620	124	**4,100**	**3,700**	**3,000**	**2,900**	**1,400**	**1,900**	**9,700**
Sum of VOC Detections	ug/L	NS	NS	8,160	7,266	6,496.99	7,112.70	3,597.60	4,746.50	18,808

TABLE 1. SUMMARY OF QUARTERLY GROUNDWATER SAMPLING ANALYTICAL RESULTS

Well Identification				MW-2	MW-2	MW-2	P-7	P-7 (DUP)	P-7	P-7 (DUP)
Date Sample Collected				05/10/95	08/08/96	06/04/97	05/11/95	05/11/95	08/08/96	08/08/96
Parameter	Units	ES	PAL							
Lead	ug/L	15	1.5	<2.0	<1.5	<0.89	<2.0	<2.0	<1.5	<1.5
Diesel Range Organics	mg/L	NS	NS	5.1	<0.10	<0.10	1.0	1.3	2.1	1.9
Gasoline Range Organics	ug/L	NS	NS	18,000	74	100	9,600	10,000	7,700	8,200
Detected VOCs:										
Benzene	ug/L	5.0	0.5	**120**	<0.50	0.38	**2,300**	**2,300**	**1,900**	**2,100**
Bromodichloromethane	ug/L	0.6	0.06	<25	<1.0	<0.20	<25	<25	<10	<10
n-Butylbenzene	ug/L	NS	NS	46	1.1	<0.44	<25	<25	78	89
sec-Butylbenzene	ug/L	NS	NS	<25	<1.0	<0.45	<25	<25	<10	<10
Chlorodibromomethane	ug/L	NS	NS	<25	<1.0	<0.10	<25	<25	<10	<10
Chloroform	ug/L	6.0	0.6	<25	<1.0	<0.18	<25	<25	<10	<10
1,2-Dichloroethane	ug/L	5.0	0.5	<25	<1.0	<0.20	**43**	**40**	**34**	**37**
Ethylbenzene	ug/L	700	140	**1,400**	1.6	8.7	**1,200**	**1,200**	**1,200**	**1,400**
Isopropylbenzene	ug/L	NS	NS	85	<1.0	0.51	40	40	50	57
p-Isopropyltoluene	ug/L	NS	NS	31	<1.0	<0.35	<25	<25	<10	<10
Methyl-tert-butyl-ether	ug/L	60	12	<25	<1.0	<0.14	35	34	27	29
Naphthalene	ug/L	40	8.0	**530**	<1.0	4.2	**200**	**210**	**290**	**330**
n-Propylbenzene	ug/L	NS	NS	180	<1.0	1.1	63	65	150	170
Toluene	ug/L	343	68.6	**390**	<1.0	2.2	260	260	260	290
1,2,3-Trichloropropane	ug/L	NS	NS	<25	<1.0	<0.28	<25	<25	<10	<10
1,2,4-Trimethylbenzene	ug/L	NS	NS	1,800	2.6	6.7	320	330	390	450
1,3,5-Trimethylbenzene	ug/L	NS	NS	580	1.1	1.8	170	170	260	300
Total Xylenes	ug/L	620	124	**2,560**	<3.0	21.0	**820**	**820**	**740**	**840**
Sum of VOC Detections	ug/L	NS	NS	7,722	6.4	46.59	5,451	5,469	5,379	6,092

TABLE 1. SUMMARY OF QUARTERLY GROUNDWATER SAMPLING ANALYTICAL RESULTS

Well Identification				P-7	P-7 (DUP)	MW-4	MW-4 (2)	MW-4	MW-4 (DUP)	MW-4 (7)
Date Sample Collected				06/04/97	06/04/97	05/03/95	08/08/96	11/25/96	11/25/96	03/06/97
Parameter	Units	ES	PAL							
Lead	ug/L	15	1.5	<0.89	<0.89	<2.0	<1.5	<1.5	<1.5	<0.89
Diesel Range Organics	mg/L	NS	NS	2.9	2.9	1.5	0.77	0.61	0.77	0.71
Gasoline Range Organics	ug/L	NS	NS	9,600	8,900	5,600	3,000	1,100	1,000	2,200
Detected VOCs:										
Benzene	ug/L	5.0	0.5	**1,400**	**1,400**	<10	<0.50	<0.50	<0.50	<0.31
Bromodichloromethane	ug/L	0.6	0.06	<2.0	<2.0	<10	<1.0	<1.0	<1.0	<0.20
n-Butylbenzene	ug/L	NS	NS	21	19	23	71	32	34	<0.44
sec-Butylbenzene	ug/L	NS	NS	6.0	4.8	<10	5.3	2.6	3.0	4.5
Chlorodibromomethane	ug/L	NS	NS	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<0.10
Chloroform	ug/L	6.0	0.6	<1.8	<1.8	<10	<1.0	<1.0	<1.0	<0.18
1,2-Dichloroethane	ug/L	5.0	0.5	**49**	**48**	<10	<1.0	<1.0	<1.0	<0.20
Ethylbenzene	ug/L	700	140	**1,400**	**1,400**	67	23	3.9	3.3	9.5
Isopropylbenzene	ug/L	NS	NS	49	50	32	18	6.2	7.0	15
p-Isopropyltoluene	ug/L	NS	NS	<3.5	<3.5	24	3.0	<1.0	<1.0	1.9
Methyl-tert-butyl-ether	ug/L	60	12	17	16	<10	<1.0	<1.0	<1.0	<0.14
Naphthalene	ug/L	40	8.0	**370**	**330**	**100**	**41**	14	16	31
n-Propylbenzene	ug/L	NS	NS	130	130	41	22	4.2	3.7	11
Toluene	ug/L	343	68.6	230	230	39	8.6	2.1	2.0	1.0
1,2,3-Trichloropropane	ug/L	NS	NS	<2.8	<2.8	<10	<1.0	<1.0	<1.0	<0.28
1,2,4-Trimethylbenzene	ug/L	NS	NS	640	630	800	250	72	71	140
1,3,5-Trimethylbenzene	ug/L	NS	NS	230	230	250	110	33	33	62
Total Xylenes	ug/L	620	124	**1,900**	**1,900**	**500**	170	21	18	40
Sum of VOC Detections	ug/L	NS	NS	6,442.0	6,387.8	1,876	721.9	191.0	191.0	315.9

TABLE 1. SUMMARY OF QUARTERLY GROUNDWATER SAMPLING ANALYTICAL RESULTS

Well Identification				MW-4	MW-4	MW-4	MW-5	MW-5	MW-5 (4)	MW-5 (8)
Date Sample Collected				06/04/97	09/03/97	12/22/97	05/03/95	08/08/96	11/25/96	03/06/97
Parameter	Units	ES	PAL							
Lead	ug/L	15	1.5	<0.89	<0.89	0.10	<2.0	<1.5	<1.5	<0.89
Diesel Range Organics	mg/L	NS	NS	0.31	<0.10	0.12	<0.10	<0.10	<0.10	<0.10
Gasoline Range Organics	ug/L	NS	NS	1,300	1,100	530	730	520	650	620
Detected VOCs:										
Benzene	ug/L	5.0	0.5	<0.31	<0.31	<0.31	**390**	**680**	**380**	**520**
Bromodichloromethane	ug/L	0.6	0.06	<0.20	<0.20	<0.20	<5.0	<1.0	<1.0	<1.0
n-Butylbenzene	ug/L	NS	NS	10	7.6	5.6	<5.0	<1.0	<1.0	<2.2
sec-Butylbenzene	ug/L	NS	NS	3.0	2.5	1.5	<5.0	<1.0	<1.0	<2.2
Chlorodibromomethane	ug/L	NS	NS	<0.10	<0.10	<0.10	<5.0	<1.0	<1.0	<0.50
Chloroform	ug/L	6.0	0.6	<0.18	<0.18	<0.18	<5.0	<1.0	<1.0	<0.90
1,2-Dichloroethane	ug/L	5.0	0.5	<0.20	<0.20	<0.20	<5.0	**6.0**	4.0	<1.0
Ethylbenzene	ug/L	700	140	6.9	6.2	2.3	36	16	19	4.6
Isopropylbenzene	ug/L	NS	NS	7.8	5.5	2.1	<5.0	1.4	1.5	<1.8
p-Isopropyltoluene	ug/L	NS	NS	1.2	1.1	0.68	<5.0	<1.0	<1.0	<1.8
Methyl-tert-butyl-ether	ug/L	60	12	<0.14	<0.14	<0.14	<5.0	19	5.6	14
Naphthalene	ug/L	40	8.0	12	18	3.1	<10	<1.0	<1.0	<1.8
n-Propylbenzene	ug/L	NS	NS	7.7	5.9	3.0	5.8	2.5	3.7	<2.3
Toluene	ug/L	343	68.6	0.44	<0.39	<0.39	<5.0	9.0	4.3	7.4
1,2,3-Trichloropropane	ug/L	NS	NS	<0.28	<0.28	<0.28	<5.0	1.4	<1.0	<1.4
1,2,4-Trimethylbenzene	ug/L	NS	NS	87	61	19	<5.0	<1.0	<1.0	<1.6
1,3,5-Trimethylbenzene	ug/L	NS	NS	39	29	12	<5.0	<1.0	<1.0	<1.6
Total Xylenes	ug/L	620	124	20	18	4	<10	<3.0	<3.0	<5.5
Sum of VOC Detections	ug/L	NS	NS	195.04	154.80	53.48	431.8	735.3	418.1	546.0

TABLE 1. SUMMARY OF QUARTERLY GROUNDWATER SAMPLING ANALYTICAL RESULTS

Well Identification				MW-5 (DUP) (9)	MW-5	MW-5	MW-5 (DUP)	MW-5	MW-6	MW-6 (3)
Date Sample Collected				03/06/97	06/04/97	09/03/97	09/03/97	12/22/97	05/03/95	08/08/96
Parameter	Units	ES	PAL							
Lead	ug/L	15	1.5	<0.89	<0.89	<0.89	1.2	<0.89	<2.0	5.0
Diesel Range Organics	mg/L	NS	NS	<0.10	<0.10	<0.10	<0.10	<0.10	<0.050	0.11
Gasoline Range Organics	ug/L	NS	NS	570	220	160	150	780	<50	<50
Detected VOCs:										
Benzene	ug/L	5.0	0.5	**430**	**470**	**190**	**110**	**300**	<1.0	<0.50
Bromodichloromethane	ug/L	0.6	0.06	<1.0	0.25	**0.62**	**0.66**	<0.64	<1.0	<1.0
n-Butylbenzene	ug/L	NS	NS	<2.2	<0.44	<0.44	<0.44	<0.88	<1.0	<1.0
sec-Butylbenzene	ug/L	NS	NS	<2.2	<0.45	<0.45	<0.45	<0.90	<1.0	<1.0
Chlorodibromomethane	ug/L	NS	NS	<0.50	<0.10	0.26	0.25	<0.20	<1.0	<1.0
Chloroform	ug/L	6.0	0.6	<0.90	1.4	1.7	1.8	0.78	<1.0	<1.0
1,2-Dichloroethane	ug/L	5.0	0.5	<1.0	**15**	**8.1**	4.4	**10**	<1.0	<1.0
Ethylbenzene	ug/L	700	140	4.4	6.6	11	6.6	12	<1.0	<1.0
Isopropylbenzene	ug/L	NS	NS	<1.8	0.61	0.83	0.52	0.78	<1.0	<1.0
p-Isopropyltoluene	ug/L	NS	NS	<1.8	<0.35	<0.35	<0.35	<0.35	<1.0	<1.0
Methyl-tert-butyl-ether	ug/L	60	12	12	6.9	3.1	2.0	3.4	<2.0	<1.0
Naphthalene	ug/L	40	8.0	<1.8	<0.35	0.35	<0.35	<0.70	<1.0	<1.0
n-Propylbenzene	ug/L	NS	NS	<2.3	0.76	1.2	0.83	1.3	<1.0	<1.0
Toluene	ug/L	343	68.6	6.8	8.1	4.4	2.5	7.2	<1.0	<1.0
1,2,3-Trichloropropane	ug/L	NS	NS	<1.4	<0.28	<0.28	<0.28	<0.56	<1.0	<1.0
1,2,4-Trimethylbenzene	ug/L	NS	NS	<1.6	0.38	<0.32	<0.32	0.80	<1.0	<1.0
1,3,5-Trimethylbenzene	ug/L	NS	NS	<1.6	<0.33	<0.33	<0.33	<0.66	<1.0	<1.0
Total Xylenes	ug/L	620	124	<5.5	1.4	<1.1	<1.1	<2.2	<1.0	<3.0
Sum of VOC Detections	ug/L	NS	NS	453.2	511.40	221.56	129.56	336.26	0.0	0.0

TABLE 1. SUMMARY OF QUARTERLY GROUNDWATER SAMPLING ANALYTICAL RESULTS

Well Identification				MW-6 (5)	MW-6	MW-6 (10)	MW-6
Date Sample Collected				11/25/96	03/06/97	06/04/97	09/03/97
Parameter	Units	ES	PAL				
Lead	ug/L	15	1.5	<1.5	<0.89	<0.89	<0.89
Diesel Range Organics	mg/L	NS	NS	<0.10	<0.10	<0.10	<0.10
Gasoline Range Organics	ug/L	NS	NS	<50	<50	<50	<50
Detected VOCs:							
Benzene	ug/L	5.0	0.5	<0.50	<0.31	<0.31	<0.31
Bromodichloromethane	ug/L	0.6	0.06	<1.0	<0.20	<0.20	<0.20
n-Butylbenzene	ug/L	NS	NS	<1.0	<0.44	<0.44	<0.44
sec-Butylbenzene	ug/L	NS	NS	<1.0	<0.45	<0.45	<0.45
Chlorodibromomethane	ug/L	NS	NS	<1.0	<0.10	<0.10	<0.10
Chloroform	ug/L	6.0	0.6	<1.0	<0.18	<0.18	<0.18
1,2-Dichloroethane	ug/L	5.0	0.5	<1.0	<0.20	<0.20	<0.20
Ethylbenzene	ug/L	700	140	<1.0	<0.38	<0.38	<0.38
Isopropylbenzene	ug/L	NS	NS	<1.0	<0.36	<0.36	<0.36
p-Isopropyltoluene	ug/L	NS	NS	<1.0	<0.35	<0.35	<0.35
Methyl-tert-butyl-ether	ug/L	60	12	<1.0	<0.14	<0.14	<0.14
Naphthalene	ug/L	40	8.0	<1.0	<0.35	<0.35	<0.35
n-Propylbenzene	ug/L	NS	NS	<1.0	<0.46	<0.46	<0.46
Toluene	ug/L	343	68.6	<1.0	<0.39	<0.39	<0.39
1,2,3-Trichloropropane	ug/L	NS	NS	<1.0	<0.28	<0.28	<0.28
1,2,4-Trimethylbenzene	ug/L	NS	NS	<1.0	<0.32	<0.32	<0.32
1,3,5-Trimethylbenzene	ug/L	NS	NS	<1.0	<0.33	<0.33	<0.33
Total Xylenes	ug/L	620	124	<3.0	<1.1	<1.1	<1.1
Sum of VOC Detections	ug/L	NS	NS	0.0	0.0	0.0	0.0

Notes:
ES = Enforcement Standard as listed in Ocotber 1996 issue of Chapter NR140 of the Wisconsin Administrative Code.
PAL = Preventive Action Limit as listed in October 1996 issue of Chapter NR140 of the Wisconsin Administrative Code.
VOCs = Volatile Organic Compounds
NS = No NR140 standard
NA = Parameter not analyzed

ug/L = micrograms per liter which is equivalent to parts per billion (ppb).
mg/L = miligrams per liter which is equivalent to parts per million (ppm).
DUP = Duplicate groundwater sample

(1) = Methylene Chloride detected in sample at 13 ppb; not included on VOC list as is most likely a laboratory contaminant.
(2) = Methylene Chloride detected in sample at 14 ppb; not included on VOC list as is most likely a laboratory contaminant.
(3) = Methylene Chloride detected in sample at 7.5 ppb; not inlcuded on VOC list as is most likely a laboratory contaminant.
(4) = Methylene Chloride detected in sample at 7.9 ppb; not included on VOC list as is most likely a laboratory contaminant.
(5) = Methylene Chloride detected in sample at 5.3 ppb; not included on VOC list as is most likely a laboratory contaminant.
(6) = Methylene Chloride detected in sample at 42 ppb; not included on VOC list as is most likely a laboratory contaminant.
(7) = Methylene Chloride detected in sample at 3.5 ppb; not included on VOC list as is most likely a laboratory contaminant.
(8) = Methylene Chloride detected in sample at 9.5 ppb; not included on VOC list as is most likely a laboratory contaminant.
(9) = Methylene Chloride detected in sample at 7.4 ppb; not included on VOC list as is most likely a laboratory contaminant.
(10) = Methylene Chloride detected in sample at 1.3 ppb; not included on VOC list as is most likely a laboratory contaminant.

Bold values exceed NR140 ES.
Underlined values exceed NR140 PAL.

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WDNR No. 128053530

ANALYTICAL AND QUALITY CONTROL REPORT

RECEIVED

MASTER FILE COPY
OLD PROJECT #
NEW PROJECT # N798
CC: GLD

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

FEB 09 1998
HydroSearch/GeoTrans
Milwaukee

02/06/1998

Job No: 98.00545

Page 1

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
283785	#283327 MW-9 Quad Graphics	01/16/1998	01/26/1998
283786	#283328 MW-10 Quad Graphics	01/16/1998	01/26/1998
283787	#283329 Trip Blank Quad Graphi	01/16/1998	01/26/1998

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Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
C = Standard outside of control limits
F = Sample filtered in lab
H = Late eluting hydrocarbons present
J = Estimated concentration
M = Matrix interference
Q = Result confirmed via re-analysis
T = Does not match typical pattern
X = Unidentified compound(s) present
B = Blank is contaminated
D = Diluted for analysis
G = Received past hold time
I = Improperly handled sample
L = Common lab solvent and contaminant
P = Improperly preserved sample
S = Sediment present
W = BOD re-set due to missed dilution
Z = Internal standard outside limits

Brian D. DeJong
Organic Operations Manager

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ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283785
Account No: 39150
Page 2

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283327 MW-9 Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 10:30 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Bromobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromochloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromodichloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromoform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
n-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175

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ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283785
Account No: 39150
Page 3

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283327 MW-9 Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 10:30 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Isopropylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methylene Chloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Naphthalene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
n-Propylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Styrene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Tetrachloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Toluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Vinyl Chloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Xylenes, Total	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Surr: Dibromofluoromethane	101.0	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Toluene-d8	92.2	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Bromofluorobenzene	93.0	%	n/a	n/a	S-8260B	02/05/1998	1175

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ANALYTICAL REPORT

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02/06/1998
Job No: 98.00545
Sample No: 283786
Account No: 39150
Page 4

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283328 MW-10 Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 11:15 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Bromobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromochloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromodichloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromoform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
n-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175

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HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283786
Account No: 39150
Page 5

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283328 MW-10 Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 11:15 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Isopropylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methylene Chloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Naphthalene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
n-Propylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Styrene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Tetrachloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Toluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Vinyl Chloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Xylenes, Total	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Surr: Dibromofluoromethane	101.6	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Toluene-d8	92.6	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Bromofluorobenzene	92.6	%	n/a	n/a	S-8260B	02/05/1998	1175

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283787
Account No: 39150
Page 6

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283329 Trip Blank Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 Date Received: 01/26/1998

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Bromobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromochloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromodichloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromoform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Bromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
n-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloroform	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Chloromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dibromomethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175

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ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/06/1998
Job No: 98.00545
Sample No: 283787
Account No: 39150
Page 7

JOB DESCRIPTION: Quad Graphics-New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: #283329 Trip Blank Quad Graphics
Rec'd 4 degrees C

Date Taken: 01/16/1998 Date Received: 01/26/1998

Parameter		Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Ethylbenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Hexachlorobutadiene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Isopropylbenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
p-Isopropyltoluene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methylene Chloride	L	2.5	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Methyl-t-butyl ether		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Naphthalene		<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
n-Propylbenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Styrene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Tetrachloroethene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Toluene		<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,2,3-Trichlorobenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trichlorobenzene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,1-Trichloroethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,1,2-Trichloroethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichloroethene		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Trichlorofluoromethane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,3-Trichloropropane		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
1,2,4-Trimethylbenzene		<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
1,3,5-Trimethylbenzene		<0.10	ug/L	0.10	0.33	S-8260B	02/05/1998	1175
Vinyl Chloride		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Xylenes, Total		<0.25	ug/L	0.25	0.83	S-8260B	02/05/1998	1175
Surr: Dibromofluoromethane		101.6	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Toluene-d8		93.2	%	n/a	n/a	S-8260B	02/05/1998	1175
Surr: Bromofluorobenzene		92.0	%	n/a	n/a	S-8260B	02/05/1998	1175

NATIONAL ENVIRONMENTAL TESTING, INC.

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WDNR No. 128053530

QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

02/06/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00545
Account No: 39150

Page 8

Job Description: Quad Graphics-New Berlin

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
VOC - AQUEOUS - EPA 8260B	S-8260B					
Benzene	S-8260B	1175	50.0	51.0	102.0	gsj
Bromoform	S-8260B	1175	50.0	51.5	103.0	gsj
Chlorobenzene	S-8260B	1175	50.0	49.6	99.2	gsj
Chloroform	S-8260B	1175	50.0	50.3	100.6	gsj
Chloromethane	S-8260B	1175	50.0	49.0	98.0	gsj
1,1-Dichloroethane	S-8260B	1175	50.0	49.8	99.6	gsj
1,1-Dichloroethene	S-8260B	1175	50.0	52.5	105.0	gsj
1,2-Dichloropropane	S-8260B	1175	50.0	49.8	99.6	gsj
Ethylbenzene	S-8260B	1175	50.0	49.9	99.8	gsj
Methyl-t-butyl ether	S-8260B	1175	50.0	54.8	109.6	gsj
1,1,2,2-Tetrachloroethane	S-8260B	1175	50.0	51.4	102.8	gsj
Toluene	S-8260B	1175	50.0	48.9	97.8	gsj
Trichloroethene	S-8260B	1175	50.0	51.1	102.2	gsj
1,2,4-Trimethylbenzene	S-8260B	1175	50.0	49.7	99.4	gsj
1,3,5-Trimethylbenzene	S-8260B	1175	50.0	50.7	101.4	gsj
Vinyl Chloride	S-8260B	1175	50.0	51.5	103.0	gsj
Xylenes, Total	S-8260B	1175	150	152	101.3	gsj
Surr: Dibromofluoromethane	S-8260B	1175	50.0	49.3	98.6	gsj
Surr: Toluene-d8	S-8260B	1175	50.0	48.3	96.6	gsj
Surr: Bromofluorobenzene	S-8260B	1175	50.0	48.6	97.2	gsj

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QUALITY CONTROL REPORT

BLANKS

02/06/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00545
Account No: 39150

Job Description: Quad Graphics-New Berlin

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units	Date Prepped
VOC - AQUEOUS - EPA 8260B							
Benzene		1175	<0.10	0.10	0.33	ug/L	
Bromobenzene		1175	<0.25	0.25	0.83	ug/L	
Bromochloromethane		1175	<0.25	0.25	0.83	ug/L	
Bromodichloromethane		1175	<0.25	0.25	0.83	ug/L	
Bromoform		1175	<0.25	0.25	0.83	ug/L	
Bromomethane		1175	<0.25	0.25	0.83	ug/L	
n-Butylbenzene		1175	<0.25	0.25	0.83	ug/L	
sec-Butylbenzene		1175	<0.25	0.25	0.83	ug/L	
tert-Butylbenzene		1175	<0.25	0.25	0.83	ug/L	
Carbon Tetrachloride		1175	<0.25	0.25	0.83	ug/L	
Chlorobenzene		1175	<0.25	0.25	0.83	ug/L	
Chlorodibromomethane		1175	<0.25	0.25	0.83	ug/L	
Chloroethane		1175	<0.25	0.25	0.83	ug/L	
Chloroform		1175	<0.25	0.25	0.83	ug/L	
Chloromethane		1175	<0.25	0.25	0.83	ug/L	
2-Chlorotoluene		1175	<0.10	0.10	0.33	ug/L	
4-Chlorotoluene		1175	<0.25	0.25	0.83	ug/L	
1,2-Dibromo-3-Chloropropane		1175	<0.25	0.25	0.83	ug/L	
1,2-Dibromoethane (EDB)		1175	<0.25	0.25	0.83	ug/L	
Dibromomethane		1175	<0.25	0.25	0.83	ug/L	
1,2-Dichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
1,3-Dichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
1,4-Dichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
Dichlorodifluoromethane		1175	<0.25	0.25	0.83	ug/L	
1,1-Dichloroethane		1175	<0.25	0.25	0.83	ug/L	
1,2-Dichloroethane		1175	<0.25	0.25	0.83	ug/L	
1,1-Dichloroethene		1175	<0.25	0.25	0.83	ug/L	
cis-1,2-Dichloroethene		1175	<0.25	0.25	0.83	ug/L	
trans-1,2-Dichloroethene		1175	<0.25	0.25	0.83	ug/L	
1,2-Dichloropropane		1175	<0.25	0.25	0.83	ug/L	
1,3-Dichloropropane		1175	<0.25	0.25	0.83	ug/L	
2,2-Dichloropropane		1175	<0.25	0.25	0.83	ug/L	
1,1-Dichloropropene		1175	<0.25	0.25	0.83	ug/L	
cis-1,3-Dichloropropene		1175	<0.25	0.25	0.83	ug/L	
trans-1,3-Dichloropropene		1175	<0.25	0.25	0.83	ug/L	
Di-isopropyl ether		1175	<0.25	0.25	0.83	ug/L	
Ethylbenzene		1175	<0.25	0.25	0.83	ug/L	
Hexachlorobutadiene		1175	<0.25	0.25	0.83	ug/L	

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

BLANKS

02/06/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEOTRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00545
Account No: 39150

Job Description: Quad Graphics-New Berlin

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units	Date Prepped
Isopropylbenzene		1175	<0.25	0.25	0.83	ug/L	
p-Isopropyltoluene		1175	<0.25	0.25	0.83	ug/L	
Methylene Chloride		1175	0.30	0.25	0.83	ug/L	
Methyl-t-butyl ether		1175	<0.25	0.25	0.83	ug/L	
Naphthalene		1175	<0.10	0.10	0.33	ug/L	
n-Propylbenzene		1175	<0.25	0.25	0.83	ug/L	
Styrene		1175	<0.25	0.25	0.83	ug/L	
1,1,1,2-Tetrachloroethane		1175	<0.25	0.25	0.83	ug/L	
1,1,2,2-Tetrachloroethane		1175	<0.25	0.25	0.83	ug/L	
Tetrachloroethene		1175	<0.25	0.25	0.83	ug/L	
Toluene		1175	<0.10	0.10	0.33	ug/L	
1,2,3-Trichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
1,2,4-Trichlorobenzene		1175	<0.25	0.25	0.83	ug/L	
1,1,1-Trichloroethane		1175	<0.25	0.25	0.83	ug/L	
1,1,2-Trichloroethane		1175	<0.25	0.25	0.83	ug/L	
Trichloroethene		1175	<0.25	0.25	0.83	ug/L	
Trichlorofluoromethane		1175	<0.25	0.25	0.83	ug/L	
1,2,3-Trichloropropane		1175	<0.25	0.25	0.83	ug/L	
1,2,4-Trimethylbenzene		1175	<0.10	0.10	0.33	ug/L	
1,3,5-Trimethylbenzene		1175	<0.10	0.10	0.33	ug/L	
Vinyl Chloride		1175	<0.25	0.25	0.83	ug/L	
Xylenes, Total		1175	<0.25	0.25	0.83	ug/L	
Surr: Dibromofluoromethane		1175	99.2	n/a	n/a	%	
Surr: Toluene-d8		1175	91.6	n/a	n/a	%	
Surr: Bromofluorobenzene		1175	93.2	n/a	n/a	%	

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QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

02/06/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00545
Account No: 39150

Page 11

Job Description: Quad Graphics-New Berlin

Analyte	Prep Batch Number	Run Batch Number	Sample Result	Spike Amount	Units	Matrix Spike Result	Percent Recovery	MSD Result	Percent Recovery	Relative Percent Difference
VOC - AQUEOUS - EPA 8260B										
Benzene		1175	<0.10	50.0	ug/L	51.0	102.0	50.9	101.8	0.2
Chlorobenzene		1175	<0.25	50.0	ug/L	49.6	99.2	49.9	99.8	0.6
1,1-Dichloroethene		1175	<0.25	50.0	ug/L	51.3	102.6	50.6	101.2	1.4
Ethylbenzene		1175	<0.25	50.0	ug/L	50.0	100.0	50.2	100.4	0.4
Methyl-t-butyl ether		1175	3.4	50.0	ug/L	58.5	110.2	59.9	113.0	2.5
Toluene		1175	0.17	50.0	ug/L	48.9	97.5	48.8	97.3	0.2
Trichloroethene		1175	<0.25	50.0	ug/L	51.1	102.2	51.3	102.6	0.4
1,2,4-Trimethylbenzene		1175	0.36	50.0	ug/L	49.9	99.1	49.8	98.9	0.2
1,3,5-Trimethylbenzene		1175	0.11	50.0	ug/L	50.7	101.2	50.8	101.4	0.2
Xylenes, Total		1175	<0.25	150	ug/L	151	100.7	151	100.7	0.0
Surr: Dibromofluoromethane		1175	49.9	50.0	%	49.5	99.0	49.6	99.2	0.2
Surr: Toluene-d8		1175	46.0	50.0	%	48.4	96.8	48.5	97.0	0.2
Surr: Bromofluorobenzene		1175	46.9	50.0	%	48.6	97.2	48.8	97.6	0.4

NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

COMPANY HSI GEOTRANS
ADDRESS 175 N. CORPORATE DRIVE SUITE 100
PHONE (414) 792-1282 FAX (414) 792-1310
PROJECT NAME/LOCATION QUADGRAPHICS NEW BERLIN
PROJECT NUMBER
PROJECT MANAGER GERRY DeMERS

REPORT TO: GERRY DeMERS
INVOICE TO: GERRY DeMERS
P.O. NO.
NET QUOTE NO.

LED BY BOB GOLATA (NAME) SIGNATURE Robert A. Golata Jr.
(NAME) SIGNATURE

ANALYSES

To assist us in selecting the proper method
Is this work being conducted for regulatory compliance monitoring? Yes ___ No ___
Is this work being conducted for regulatory enforcement action? Yes ___ No ___
Which regulations apply: RCRA ___ NPDES Wastewater ___ UST ___ Drinking Water ___ Other ___ None ___

E	TIME	SAMPLE ID/DESCRIPTION	MATRIX	GRAB	COMP	# and Type of Containers: HCl	NaOH	HNO_3	H_2SO_4	OTHER	PVOC	COMMENTS
8						8						
6	10:30	MW-9	GW			X3					X	
6	11:15	MW-10	GW			X3					X	
		TRIP BLANK				2					X	

NDITION OF SAMPLE: BOTTLES INTACT? YES / NO FIELD FILTERED? YES / NO
COC SEALS PRESENT AND INTACT? YES / NO VOLATILES FREE OF HEADSPACE? YES / NO
TEMPERATURE UPON RECEIPT: 4°C
Bottles supplied by NET? YES / NO

MPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS DATE

NQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED FOR NET BY:
Robert A. Golata Jr.	1/20/98	2:30	012698 A Kassube 1235	012698 A Kassube 1500			1/27/98

THOD OF SHIPMENT NET

REMARKS:

PT 1 - ORIGINAL - WHITE PT 2 - NET PROJECT MANAGER - YELLOW PT 3 - CUSTOMER COPY - PINK

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

Tel: (920) 261-1660
Fax: (920) 261-8120
WDNR No. 128053530

ANALYTICAL AND QUALITY CONTROL REPORT

MASTER FILE COPY
PROJECT # N798
CC: GLD

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/09/1998

Job No: 98.00438

Page 1

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
283404	SB-1 Quad Graphics	01/26/1998	01/27/1998

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
C = Standard outside of control limits
F = Sample filtered in lab
H = Late eluting hydrocarbons present
J = Estimated concentration
M = Matrix interference
Q = Result confirmed via re-analysis
T = Does not match typical pattern
X = Unidentified compound(s) present
B = Blank is contaminated
D = Diluted for analysis
G = Received past hold time
I = Improperly handled sample
L = Common lab solvent and contaminant
P = Improperly preserved sample
S = Sediment present
W = BOD re-set due to missed dilution
Z = Internal standard outside limits

Brian D. DeJong
Organic Operations Manager

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

Tel: (920) 261-1660
Fax: (920) 261-8120
WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/09/1998
Job No: 98.00438
Sample No: 283404
Account No: 39150
Page 2

JOB DESCRIPTION: Quad Graphics - New Berlin
PROJECT DESCRIPTION: Soil Analysis
SAMPLE DESCRIPTION: SB-1 Quad Graphics
Rec'd on ice

Date Taken: 01/26/1998 12:00 Date Received: 01/27/1998

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch	
Solids, Total	82	%	n/a	S-5030	02/02/1998		2056
PNA Extraction	01/30/98			S-3550	01/30/1998	262	
PNA - 8310 NONAQUEOUS							
Acenaphthene	<61	ug/kg	50	S-8310	02/06/1998	262	662
Acenaphthylene	<100	ug/kg	85	S-8310	02/06/1998	262	662
Anthracene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
Benzo(a)anthracene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
Benzo(b)fluoranthene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
Benzo(k)fluoranthene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
Benzo(a)pyrene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
Benzo(ghi)perylene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
Chrysene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
Dibenzo(a,h)anthracene	<12	ug/kg	10	S-8310	02/06/1998	262	662
Fluoranthene	<12	ug/kg	10	S-8310	02/06/1998	262	662
Fluorene	<12	ug/kg	10	S-8310	02/06/1998	262	662
Indeno(1,2,3-cd)pyrene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
1-Methylnaphthalene	<36	ug/kg	30	S-8310	02/06/1998	262	662
2-Methylnaphthalene	<30	ug/kg	25	S-8310	02/06/1998	262	662
Naphthalene	<36	ug/kg	30	S-8310	02/06/1998	262	662
Phenanthrene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
Pyrene	<6.1	ug/kg	5.0	S-8310	02/06/1998	262	662
Surr: 2-Fluorobiphenyl	59.3	%	n/a	S-8310	02/06/1998	262	662

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Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

Tel: (920) 261-1660
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WDNR No. 128053530

QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

02/09/1998

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00438
Account No: 39150

Job Description: Quad Graphics - New Berlin

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
PNA - 8310 NONAQUEOUS	S-8310					
Acenaphthene	S-8310	662	5.0	5.320	106.4	cla
Acenaphthylene	S-8310	662	10.0	10.25	102.5	cla
Anthracene	S-8310	662	0.50	0.561	112.2	cla
Benzo(a)anthracene	S-8310	662	0.50	0.508	101.6	cla
Benzo(b)fluoranthene	S-8310	662	1.00	1.062	106.2	cla
Benzo(k)fluoranthene	S-8310	662	0.50	0.524	104.8	cla
Benzo(a)pyrene	S-8310	662	0.50	0.565	113.0	cla
Benzo(ghi)perylene	S-8310	662	1.00	1.112	111.2	cla
Chrysene	S-8310	662	0.50	0.516	103.2	cla
Dibenzo(a,h)anthracene	S-8310	662	1.0	0.997	99.7	cla
Fluoranthene	S-8310	662	1.0	1.023	102.3	cla
Fluorene	S-8310	662	1.0	1.023	102.3	cla
Indeno(1,2,3-cd)pyrene	S-8310	662	0.50	0.530	106.0	cla
1-Methylnaphthalene	S-8310	662	5.00	5.661	113.2	cla
2-Methylnaphthalene	S-8310	662	5.00	4.751	95.0	cla
Naphthalene	S-8310	662	5.00	5.157	103.1	cla
Phenanthrene	S-8310	662	0.50	0.496	99.2	cla
Pyrene	S-8310	662	0.50	0.504	100.8	cla
Surr: 2-Fluorobiphenyl	S-8310	662	10.0	4.155	41.6	cla

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WDNR No. 128053530

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

02/09/1998

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00438
Account No: 39150

Page 4

Job Description: Quad Graphics - New Berlin

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
PNA - 8310 NONAQUEOUS	S-8310					
Acenaphthene	S-8310	662	5.0	4.674	93.5	cla
Acenaphthylene	S-8310	662	10.0	10.31	103.1	cla
Anthracene	S-8310	662	0.50	0.493	98.6	cla
Benzo(a)anthracene	S-8310	662	0.50	0.540	108.0	cla
Benzo(b)fluoranthene	S-8310	662	1.00	1.122	112.2	cla
Benzo(k)fluoranthene	S-8310	662	0.50	0.479	95.8	cla
Benzo(a)pyrene	S-8310	662	0.50	0.564	112.8	cla
Benzo(ghi)perylene	S-8310	662	1.00	1.168	116.8	cla
Chrysene	S-8310	662	0.50	0.577	115.4	cla
Dibenzo(a,h)anthracene	S-8310	662	1.0	1.043	104.3	cla
Fluoranthene	S-8310	662	1.0	1.061	106.1	cla
Fluorene	S-8310	662	1.0	1.024	102.4	cla
Indeno(1,2,3-cd)pyrene	S-8310	662	0.50	0.461	92.2	cla
1-Methylnaphthalene	S-8310	662	5.00	5.892	117.8	cla
2-Methylnaphthalene	S-8310	662	5.00	4.628	92.6	cla
Naphthalene	S-8310	662	5.00	5.345	106.9	cla
Phenanthrene	S-8310	662	0.50	0.467	93.4	cla
Pyrene	S-8310	662	0.50	0.553	110.6	cla
Surr: 2-Fluorobiphenyl	S-8310	662	4.00	3.917	97.9	cla

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602 Commerce Drive
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WDNR No. 128053530

QUALITY CONTROL REPORT

BLANKS

02/09/1998

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00438
Account No: 39150

Job Description: Quad Graphics - New Berlin

Parameter	Prep Batch	Run Batch	Blank Result	Reporting Limit	Units
PNA - 8310 NONAQUEOUS					
Acenaphthene	262	659	<50	50	ug/kg
Acenaphthylene	262	659	<85	85	ug/kg
Anthracene	262	659	<5.0	5.0	ug/kg
Benzo(a)anthracene	262	659	<5.0	5.0	ug/kg
Benzo(b)fluoranthene	262	659	<5.0	5.0	ug/kg
Benzo(k)fluoranthene	262	659	<5.0	5.0	ug/kg
Benzo(a)pyrene	262	659	<5.0	5.0	ug/kg
Benzo(ghi)perylene	262	659	<5.0	5.0	ug/kg
Chrysene	262	659	<5.0	5.0	ug/kg
Dibenzo(a,h)anthracene	262	659	<10	10	ug/kg
Fluoranthene	262	659	<10	10	ug/kg
Fluorene	262	659	<10	10	ug/kg
Indeno(1,2,3-cd)pyrene	262	659	<5.0	5.0	ug/kg
1-Methylnaphthalene	262	659	<30	30	ug/kg
2-Methylnaphthalene	262	659	<25	25	ug/kg
Naphthalene	262	659	<30	30	ug/kg
Phenanthrene	262	659	<5.0	5.0	ug/kg
Pyrene	262	659	<5.0	5.0	ug/kg
Surr: 2-Fluorobiphenyl	262	659	153.0	42 - 112	%

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
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Watertown, WI 53094

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Fax: (920) 261-8120
WDNR No. 128053530

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

02/09/1998

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00438
Account No: 39150

Job Description: Quad Graphics - New Berlin

Analyte	Prep Batch Number	Run Batch Number	LCS Amount	Units	LCS Result	Percent Recovery	LCSD Result	Percent Recovery	Relative Percent Difference	Date Prepped
PNA - 8310 NONAQUEOUS										
Acenaphthene	262	662	400	ug/kg	417	104.3				01/30/1998
Acenaphthylene	262	662	800	ug/kg	912	114.0				01/30/1998
Anthracene	262	662	40.0	ug/kg	38	95.0				01/30/1998
Benzo(a)anthracene	262	662	40.0	ug/kg	38	95.0				01/30/1998
Benzo(b)fluoranthene	262	662	80.0	ug/kg	80	100.0				01/30/1998
Benzo(k)fluoranthene	262	662	40.0	ug/kg	41	102.5				01/30/1998
Benzo(a)pyrene	262	662	40.0	ug/kg	16	40.0				01/30/1998
Benzo(ghi)perylene	262	662	80.0	ug/kg	79	98.8				01/30/1998
Chrysene	262	662	40.0	ug/kg	39	97.5				01/30/1998
Dibenzo(a,h)anthracene	262	662	80.0	ug/kg	98	122.5				01/30/1998
Fluoranthene	262	662	80.0	ug/kg	74	92.5				01/30/1998
Fluorene	262	662	80.0	ug/kg	75	93.8				01/30/1998
Indeno(1,2,3-cd)pyrene	262	662	40.0	ug/kg	39	97.5				01/30/1998
1-Methylnaphthalene	262	662	400	ug/kg	518	129.5				01/30/1998
2-Methylnaphthalene	262	662	400	ug/kg	384	96.0				01/30/1998
Naphthalene	262	662	400	ug/kg	396	99.0				01/30/1998
Phenanthrene	262	662	40.0	ug/kg	39	97.5				01/30/1998
Pyrene	262	662	40.0	ug/kg	39	97.5				01/30/1998
Surr: 2-Fluorobiphenyl	262	662	10.0	%	7.173	71.7				01/30/1998

NET NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

98.00438

COMPANY: HSI GEOTRANS
ADDRESS: 175 N. CORPORATE DR. SUITE 100
PHONE: (414) 792-1282 FAX: (414) 792-1310
PROJECT NAME/LOCATION: QUADGRAPHICS NEW BERLIN
PROJECT NUMBER:
PROJECT MANAGER: JERRY DEMERS

REPORT TO: JERRY DEMERS
INVOICE TO: " "
P.O. NO.:
NET QUOTE NO.:

SAMPLED BY: Bob Golata (PRINT NAME) — Robert A. Golata Jr. (SIGNATURE)
(PRINT NAME) — (SIGNATURE)

To assist us in selecting the proper method
Is this work being conducted for regulatory compliance monitoring? Yes ___ No ___
Is this work being conducted for regulatory enforcement action? Yes ___ No ___
Which regulations apply: RCRA ___ NPDES Wastewater ___ UST ___ Drinking Water ___ Other ___ None ___

DATE	TIME	SAMPLE ID/DESCRIPTION	MATRIX	GRAB	COMP	HCl	NaOH	HNO_3	H_2SO_4	OTHER	PAHs (8310)	COMMENTS
1-26-98	12:00	SB-1	SO	X							✓	
		8310										

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO — COC SEALS PRESENT AND INTACT? YES / NO — TEMPERATURE UPON RECEIPT: 4°C
FIELD FILTERED? YES / NO — VOLATILES FREE OF HEADSPACE? YES / NO — Bottles supplied by NET? YES / NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA ___
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS ___ DATE ___

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED FOR NET BY:
Robert Golata	1/27/98	12:00	A Kassenbe	A Kassenbe 012798 1620			A Vogt 1/28/98 1049

METHOD OF SHIPMENT: NET
REMARKS:

1/27/98 OMG 16:46

PT 1 - ORIGINAL - WHITE PT 2 - NET PROJECT MANAGER - YELLOW PT 3 - CUSTOMER COPY - PINK

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

Tel: (920) 261-1660
Fax: (920) 261-8120
WDNR No. 128053530

ANALYTICAL AND QUALITY CONTROL REPORT

RECEIVED
FEB 23 1998
HSI GeoTrans
Milwaukee

MASTER FILE COPY
PROJECT # N798
CC: GLD

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/19/1998

Job No: 98.00849

Page 1

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
284772	NET #283404 SB-01 N798	01/26/1998	01/27/1998

CASE NARRATIVE

The results for NET sample 284772 are flagged as having been analyzed past hold. This sample was analyzed past hold at the request of the client.

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
C = Standard outside of control limits
F = Sample filtered in lab
H = Late eluting hydrocarbons present
J = Estimated concentration
M = Matrix interference
Q = Result confirmed via re-analysis
T = Does not match typical pattern
X = Unidentified compound(s) present
B = Blank is contaminated
D = Diluted for analysis
G = Received past hold time
I = Improperly handled sample
L = Common lab solvent and contaminant
P = Improperly preserved sample
S = Sediment present
W = BOD re-set due to missed dilution
Z = Internal standard outside limits

Brian D. DeJong
Organic Operations Manager

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094

Tel: (920) 261-1660
Fax: (920) 261-8120
WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

02/19/1998
Job No: 98.00849
Sample No: 284772
Account No: 39150

JOB DESCRIPTION: N798 Quad - New Berlin
PROJECT DESCRIPTION: Soil Analysis
SAMPLE DESCRIPTION: NET #283404 SB-01 N798
Rec'd 4 degrees C 1/27/98

Date Taken: 01/26/1998 12:00 Date Received: 01/27/1998

Parameter		Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
Solids, Total		82	%	n/a	S-5030	02/02/1998	2063
BASE/NEUTRALS-8270 NONAQUEOUS				COMPLETE			
Bis(2-ethylhexyl)phthalate	A	<1.2	mg/kg	1.0	S-8270	02/13/1998	193
Surr: Nitrobenzene-d5		79.5	%	n/a	S-8270	02/13/1998	193
Surr: 2-Flurobiphenyl		95.0	%	n/a	S-8270	02/13/1998	193
Surr: Terphenyl-d14		100.0	%	n/a	S-8270	02/13/1998	193

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
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WDNR No. 128053530

QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

02/19/1998

Mr. Jerry DeMers
HYDRO-SEARCH/GEO TRANS
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 98.00849
Account No: 39150

Job Description: N798 Quad - New Berlin

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
BASE/NEUTRALS-8270 NONAQUEO	S-8270					
Surr: Nitrobenzene-d5	S-8270	193	100	118.0	118.0	pam
Surr: 2-Flurobiphenyl	S-8270	193	100	96.2	96.2	pam
Surr: Terphenyl-d14	S-8270	193	100	105.0	105.0	pam

NET NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

98.00849

COMPANY HSI GeoTrans
ADDRESS 175 N. Corporate Drive
PHONE 414-792-1282 FAX 414-792-1310
PROJECT NAME/LOCATION Quad - New Berlin
PROJECT NUMBER N798
PROJECT MANAGER DeMers

REPORT TO: DeMers
INVOICE TO:
P.O. NO.
NET QUOTE NO.

SAMPLED BY Bob Golata (PRINT NAME) SIGNATURE
(PRINT NAME) SIGNATURE

ANALYSES

DATE	TIME	SAMPLE ID/DESCRIPTION	GRAB	COMP	# OF CONTAINERS TYPE	MATRIX	PRESERVED Y/N	Bis-ethylhexyl phthalate Method 8270	Total solids						COMMENTS
1-26-98	12:00	SB-01 (283404)				SOIL		X	X						Ok to run past hold - Flag per Wxi & J. DeMers.

RECEIVED JUL 30 1998 PECFA SITE REVIEW MILWAUKEE OFFICE

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO COC SEALS PRESENT AND INTACT? YES / NO TEMPERATURE UPON RECEIPT:
FIELD FILTERED? YES / NO VOLATILES FREE OF HEADSPACE? YES / NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS DATE

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED FOR NET BY:
DeMers					Reid 1/27/98

METHOD OF SHIPMENT

REMARKS:

a Vogt 2/11/98 1505

FEB-11-1998 15:48 FROM HYDRO-SEARCH, INC. TO 1 920 261 8120 P.01
TOTAL P.01

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutchen, Regional Director

Southeast Region Annex
4041 N. Richards Street, Box 12436
Milwaukee, WI 53212-0436
TELEPHONE 414-229-0800
FAX 414-229-0810

December 9 , 1997

FID# 268017090

Mr. Thomas Estock
Environmental Coordinator
Quad Graphics Inc.
W224 N3322 Duplainville Road
Pewaukee, WI 53072-4195

Subject: Quad Graphics Facility, 16555 W. Rogers Drive, New Berlin, WI 53151

Dear Mr. Estock:

The Wisconsin Department of Natural Resources (WDNR) has reviewed the subject site for case closure. Unfortunately, because compounds in the groundwater have exceeded the Enforcement Standard (ES), case closure can not be granted at this time. In an August, 1995, report, Hydro-Search Inc. detected that the ES in the groundwater was exceeded for the compounds Di (2-ethylhexyl) phthalate in Area E, and Vinyl Chloride in Area F. One additional round of groundwater samples were collected in October, 1996, at Area F and did not detect vinyl chloride. Area E was not resampled.

Therefore, the WDNR recommends that a confirmation groundwater sample be collected from Area E. In addition, because a minimum of two rounds of samples are required after the ES has been exceeded, the two wells in Area F should be sampled for vinyl chloride. If Area E is resampled and the groundwater ES is still exceeded, then case closure can be issued with a groundwater use restriction.

If you have any questions about this letter or the site in general, please contact me at the letterhead address or at (414) 229-0846.

Sincerely,

James C. Delwiche

James C. Delwiche, P.G.
Hydrogeologist
Remediation & Redevelopment Program

cc: SED Case File
Gerald DeMers - Hydro-Search Inc.

HYDRO-SEARCH, INC.
A Tetra Tech Company

December 12, 1996
304253396/1002)

268017090
ERR/LUST
0368005156

Mr. Charles Krohn
Southeast District LUST Section Supervisor
Wisconsin Department of Natural Resources
4041 N. Richards Street
P. O. Box 12436
Milwaukee, WI 53212

RE: Site Closure at Quad/Graphics (Former Ringier America) Facility
16555 W. Rogers Drive
New Berlin, Wisconsin
FID#: 268017090

Dear Mr. Krohn:

Hydro-Search, Inc. (HSI) has completed a hydrogeologic investigation of the Quad/Graphics New Berlin facility, and the results of that investigation are provided below. As a result of the investigation, site closure is being requested.

Background

Quad/Graphics purchased the former Ringier America facility at 16555 W. Rogers Avenue, West Allis in 1995. At that time, an environmental assessment of the property was performed to identify any environmental liabilities associated with it. Low concentrations of VOCs were detected in ground water from sampling boreholes at a few locations at the site, and reported to you in a letter dated August 29, 1995. A site investigation plan was proposed at that time, and later revised in a July 18, 1996 letter. The purpose of this letter is to report the results of that investigation.

Investigation Activities

The Quad/Graphics New Berlin facility layout is provided on the attached figure. On September 13, 1996, monitor wells MW-8, MW-9, and MW-10 were installed at the site. Borehole logs are

provided in Attachment A and well construction logs are provided in Attachment B. The monitor wells were developed and sampled on October 2, 1996; field forms for development and sampling are provided in Attachment C. Samples from each monitor well were submitted to National Environmental Testing Company of Watertown, Wisconsin for analysis. The sample collected from MW-8 was analyzed for PVOCs and DRO. The samples from MW-9 and MW-10 were analyzed for VOCs. A trip blank was also analyzed for VOCs. Analytical results are provided in Attachment D.

Analytical Results

The laboratory analyses indicated that no VOCs were detected in any of the three monitor wells. DRO as also not detected in MW-8.

* * * * * * * * * * * * *

Therefore, HSI, on behalf of Quad/Graphics, Inc. is requesting the above referenced site be closed. No additional environmental remedial activities are planned related to the site. This closure request relates only to the areas identified in the August 29, 1995 environmental assessment; it does not relate to the RCRA-related closure of hazardous waste tanks at the northwest corner of the building, which remain the responsibility of Ringier America.

If you require any additional information or need any further assistance, please do not hesitate to call.

Sincerely,

HYDRO-SEARCH, INC.

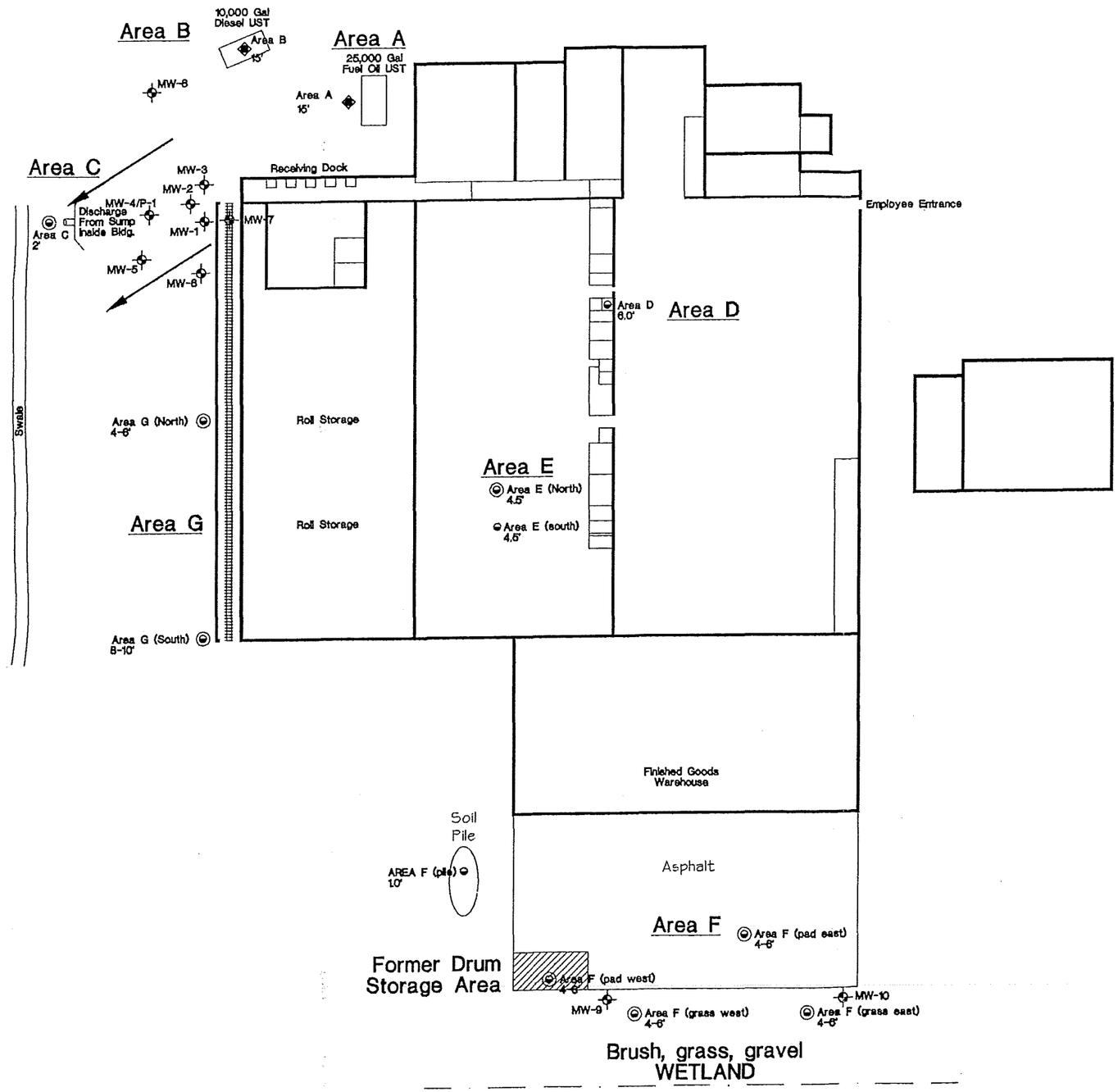
Gerald DeMers

Gerald DeMers, P.E.
Senior Engineer

GLD:gf

attachments

FIGURE



EXPLANATION

MW-2	EXISTING GROUND-WATER MONITOR WELL LOCATION
Area E	SOIL SAMPLE LOCATION AND DESIGNATION
Area C	GROUND-WATER SAMPLE LOCATION AND DESIGNATION
Area E	SOIL/GROUND-WATER SAMPLE LOCATION AND DESIGNATION
4-6'	DEPTH OF SOIL SAMPLE
	DIRECTION OF GROUNDWATER FLOW (Sigma Environmental Sevices, April 4, 1996)

N

SCALE

0 200

Feet

QUAD GRAPHICS, INC.
NEW BERLIN, WISCONSIN

MONITOR WELL LOCATIONS

DATE:	12/10/96
DESIGNED:	BOB
CHECKED:	GLD
APPROVED:	GLD
DRAWN:	BOB
PROJ.:	304253396

HYDRO-SEARCH INC
A Tetra Tech Company

Figure 1

Base map modified from Ringier America Bldg. Layout Map.

/hsi/425/3396/3396-b1

ATTACHMENT A
BOREHOLE LOGS

State of Wisconsin
Department of Natural Resources

Route To:
___ Solid Waste
___ Emergency Response
___ Wastewater
___ Haz. Waste
X Underground Tanks
___ Water Resources
___ Other _____

SOIL BORING LOG INFORMAT
Form: 4400-122 7

Page 1 of

Facility\Project Name	License/Permit/Monitoring Number	Boring Number
Quad/Graphics, Inc. New Berlin Facility \ Monitor Well Installation	___ ___ ___ ___ ___ ___ ___	MW-8

Boring Drilled by (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Metho
Midwest Engineering Services, Inc. Scott Hayes	09/13/96 MM DD YY	09/13/96 MM DD YY	Hollow Stem Auger

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diamete
___ ___ ___	___ ___ ___ ___ ___ ___	MW-8	_____ Feet MSL	_____ Feet MSL	8.0 inches

Boring Location
State Plane _____ N, _____ E S/C/N
SW ¼ of SW ¼ of Section 3 T 6 N, R 20 E

Lat ___ ___ ___
Long ___ ___ ___

Local Grid Location (if applicable)
_____ Feet N or S
_____ Feet E or W

County	DNR County Code	Civil Town/City/or Village
Waukesha	6 8	City of New Berlin

SAMPLE NUMBER	SAMPLE LENGTH RECOVERED (in)	BLOW COUNTS	DEPTH (ft.)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT (Borehole logged from soil cuttings)	USCS	GRAPHIC LOG	WELL DIAGRAM	PID/FID	SOIL PROPERTIES: STANDARD PENETRATION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	Qu	RQD COMMENTS
			1	0.0-0.2: POORLY GRADED SAND, fine to medium grained, yellowish brown (10YR 5/6), less than 5% grass roots, moist. (Fill)	SP									
			2 3	0.2-4.0: LEAN CLAY, less than 5% fine gravel, less than 5% fine to medium sand, subrounded to rounded, about 95% medium plasticity fines with medium toughness, mottled different shades of yellowish brown (10YR 5/4 and 5/6), moist. (TILL)	CL									
			4 5	4.0-6.0: LEAN CLAY, as above, but yellowish brown (10YR 5/4), wet. (TILL)	CL									
			6 7 8 9	6.0-12.0: LEAN CLAY, as above, but dark yellowish brown (1oYR 4/4), wet. (TILL)	CL									

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Mark A. Martz

Firm HYDRO-SEARCH, INC.
175 N. Corporate Dr., #100, Brookfield, WI 53045

This form is authorized by Chapters 144.147 AND 162, Wis. Stats. Completion of this report is mandatory. Penalties; Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisonec not less than 30 days, or both, for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

HSI HYDRO-SEARCH, INC. A Tetra Tech Company

SAMPLE NUMBER	LENGTH	RECOVERED (in)	BLOW COUNTS	DEPTH (ft.)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID / FID	SOIL PROPERTIES: STANDARD PENETRATION	MOISTURE	CONTENT	LIQUID LIMIT	PLASTIC LIMIT	Qu	RQD COMMENTS
				11		CL										
				12	12.0-15.0: SILTY SAND, 80 to 85% fine sand, rounded, 15 to 20% silty fines, dark grayish brown (10YR 4/2), wet. (TILL)											
				13												
				14		SM										
				15	End of Boring: 15.0 feet Borehole completed as monitor well.											

State of Wisconsin
Department of Natural Resources

Route To:
___ Solid Waste
___ Emergency Response
___ Wastewater
___ Haz. Waste
X Underground Tanks
___ Water Resources
___ Other _____

SOIL BORING LOG INFORMAT
Form: 4400-122 7

Facility\Project Name	License/Permit/Monitoring Number	Boring Number
Quad/Graphics, Inc. New Berlin Facility \ Monitor Well Installation	___ ___ ___ ___ ___ ___ ___	MW-9

Boring Drilled by (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Metho
Midwest Engineering Services, Inc. Scott Hayes	09/13/96 MM DD YY	09/13/96 MM DD YY	Hollow Stem Auger

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diamete
___ ___ ___	___ ___ ___ ___ ___ ___	MW-9	_____ Feet MSL	_____ Feet MSL	8.0 inches

Boring Location		Local Grid Location (if applicable)
State Plane _____ N, _____ E S/C/N SW ¼ of SW ¼ of Section 3 T 6 N, R 20 E	Lat ___ ___ ___ Long ___ ___ ___	_____ Feet N or S _____ Feet E or W

County	DNR County Code	Civil Town/City/or Village
Waukesha	6 8	City of New Berlin

SAMPLE NUMBER	SAMPLE LENGTH RECOVERED (in)	BLOWS COUNTS	DEPTH (ft.)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT (Borehole logged from soil cuttings)	USCS	GRAPHIC LOG	WELL DIAGRAM	PID / FID	SOIL PROPERTIES: STANDARD PENETRATION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	Qu	RQD COMMENTS
			1	0.0-0.5: POORLY GRADED GRAVEL, 80 to 85% fine gravel, subrounded to rounded, 10 to 15% fine to medium sand rounded, 5 to 10% silty fines, dark gray, moist. (FILL)	GP									
			2	0.5-3.0: POORLY GRADED SAND WITH SILT AND GRAVEL, 20 to 25% fine gravel, subrounded to rounded, 70 to 75% fine to medium sand, subrounded to rounded, 5 to 10% silt, yellowish brown (10YR 5/4), moist. (FILL)	SP-SM									
			3											
1	12	3,2,3	4	3.0-4.5: ELASTIC SILT, 10 to 15% fine sand, rounded, 80 to 85% low plasticity fines with low toughness, about 5% organic fines and roots, dark grayish brown (2.5Y 4/2), some black mottling, moist, wet below 4 feet. (WETLAND)	MH									
			5	4.5-5.6: ELASTIC SILT, as above, but dark gray (2.5Y 4/1) with some olive brown (2.5Y 4/3) mottling, wet. (WETLAND)	MH									
2	14	0,6,13,12	6	5.6-5.9: COBBLE, piece of weathered gabbro, very dark gray (2.5Y 3/1), wet. (TILL)										
			7	5.9-8.0: LEAN CLAY, less than 5% fine sand, subrounded to rounded, about 95% low plasticity fines with medium toughness, yellowish brown (10YR 5/6) with some gray (10YR 6/1) mottling, wet. (TILL)	CL									
			8											
			9	8.0-15.0: LEAN CLAY, as above, but dark grayish brown (10YR 4/2), wet. (TILL)	CL									

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Mark A. Mantey	HYDRO-SEARCH, INC. 175 N. Corporate Dr., #100, Brookfield, WI 53045

This form is authorized by Chapters 144.147 AND 162, Wis. Stats. Completion of this report is mandatory. Penalties; Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisone not less than 30 days, or both, for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

SAMPLE NUMBER	SAMPLE LENGTH RECOVERED (in)	BLOW COUNTS	DEPTH (ft.)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID / FID	SOIL PROPERTIES: STANDARD PENETRATION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	Qu	RQD COMMENTS
			11											
			12		CL									
			13											
			14											
			15	End of Boring: 15.0 feet Borehole completed as monitor well.										

State of Wisconsin
Department of Natural Resources

Route To:
___ Solid Waste
___ Emergency Response
___ Wastewater
___ Haz. Waste
X Underground Tanks
___ Water Resources
___ Other _____

SOIL BORING LOG INFORMATI
Form: 4400-122 7/

Page 1 of _

Facility\Project Name	License/Permit/Monitoring Number	Boring Number
Quad/Graphics, Inc. New Berlin Facility \ Monitor Well Installation	___ ___ ___ ___ ___ ___ ___	MW-10

Boring Drilled by (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Midwest Engineering Services, Inc. Scott Hayes	09/13/96 MM DD YY	09/13/96 MM DD YY	Hollow Stem Auger

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___ ___ ___	___ ___ ___ ___ ___ ___	MW-10	_____ Feet MSL	_____ Feet MSL	8.0 inches

Boring Location	Local Grid Location (if applicable)
State Plane _____ N, _____ E S/C/N SW ¼ of SW ¼ of Section 3 T 6 N, R 20 E Lat ___ ___ ___ Long ___ ___ ___	_____ Feet N or S _____ Feet E or W

County	DNR County Code	Civil Town/City/or Village
Waukesha	6 8	City of New Berlin

SAMPLE NUMBER	SAMPLE LENGTH	SAMPLE RECOVERED (in)	BLOWS	DEPTH (ft.)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT (Borehole logged from soil cuttings)	USCS	GRAPHIC LOG	WELL DIAGRAM	PID/FID	STANDARD PENETRATION	MOISTURE	CONTENT	LIQUID LIMIT	PLASTIC LIMIT	Qu	RQD/ COMMENTS
				1	0.0-1.0: POORLY GRADED GRAVEL, 85 to 90% fine to coarse dolomite gravel, subrounded, 5 to 10% fine sand, rounded, 5 to 10% silt, light gray, moist. (FILL)	GP										
				2 3	1.0-4.0: SILTY SAND, 10 to 15% fine gravel, subrounded to rounded, 60 to 65% fine to medium sand, rounded, 25 to 30% silt, yellowish brown (10YR 5/4), moist. (FILL)	SM										
				4 5	4.0-6.0: SANDY ELASTIC SILT, less than 5% fine gravel, subrounded to rounded, 35 to 40% medium sand, rounded, 55 to 60% medium plasticity fines with low toughness, very dark gray (10YR 3/1), some roots and organic fines, wet. (WETLAND)	MH										
				6 7 8	6.0-9.0: ELASTIC SILT, 5 to 10% fine to medium sand, subrounded to rounded, 90 to 95% medium plasticity fines with low toughness, olive brown (2.5Y 4/3). (WETLAND)	MH										
				9	9.0-13.0: LEAN CLAY, less than 5% fine gravel, subrounded to rounded, less than 5% fine to medium sand, subrounded to rounded, 90 to 95% medium plasticity fines with	CL										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Mark A. Manthey	HYDRO-SEARCH, INC. 175 N. Corporate Dr., #100, Brookfield, WI 53045

This form is authorized by Chapters 144.147 AND 162, Wis. Stats. Completion of this report is mandatory. Penalties; Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisonec not less than 30 days, or both, for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

HYDRO-SEARCH, INC. A Tetra Tech Company

SAMPLE NUMBER	SAMPLE LENGTH RECOVERED (in)	BLOW COUNTS	DEPTH (ft.)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	GRAPHIC LOG	WELL DIAGRAM	PID / FID	SOIL PROPERTIES: STANDARD PENETRATION	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	Qu	RQD COMMENTS
				medium toughness, yellowish brown (10YR 5/4), wet. (TILL)										
			11		CL									
			12											
			13	13.0-15.0: LEAN CLAY, as above, but dark grayish brown (10YR 4/2), wet. (TILL)										
			14		CL									
			15	End of Boring: 15.0 feet Borehole completed as monitor well.										

ATTACHMENT B
WELL CONSTRUCTION LOGS

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☒ Other ☐ _____

MONITORING WELL CONSTRUCTI
Form 4400-113A Rev. 4

Facility/Project Name: Quad/Graphics New Berlin	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: MW-8
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ____ Long. ____ or	Wis. Unique Well Number: _____ DNR Well Num
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	St. Plane ____ ft. N, ____ ft. E.	Date Well Installed: 09/13/96 (m m d d y y)
Distance Well Is From Waste/Source Boundary: ____ ft.	Section Location of Waste/Source: SW 1/4 of SW 1/4 of Sec. 3, T. 6 N, R 20 ☒ E. ☐ W.	Well Installed By: (Person's Name and Firm): Scott Hayes, MES
Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient; d ☒ Downgradient n ☐ Not Known	

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 0.5 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; Other ☐ __

15. Drilling fluid used: Water ☐ 02; Air ☐ 01; Drilling Mud ☐ 03; None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis): _____

E. Bentonite seal, top _____ ft. MSL or 0.5 ft.

F. Fine sand, top _____ ft. MSL or 3.0 ft.

G. Filter pack, top _____ ft. MSL or 3.5 ft.

H. Screen joint, top _____ ft. MSL or 4.7 ft.

I. Well bottom _____ ft. MSL or 14.9 ft.

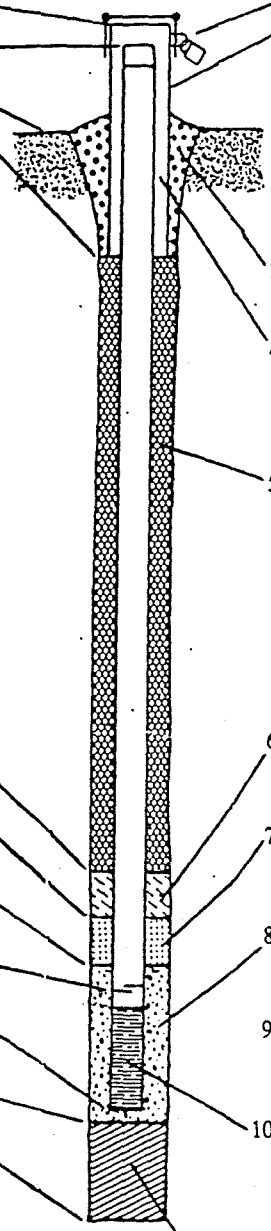
J. Filter pack, bottom _____ ft. MSL or 15.0 ft.

K. Borehole, bottom _____ ft. MSL or 15.0 ft.

L. Borehole, diameter 8.0 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.05 in.



1. Cap and lock? ☒ Yes ☐ N
2. Protective cover pipe:
a. Inside diameter: 4.0
b. Length: 5.0
c. Material: Steel ☒ Other ☐
d. Additional protection? ☐ Yes ☒ N
If yes, describe: _____
3. Surface seal: Bentonite ☐ Concrete ☐ Other ☒ Native Soil
4. Material between well casing and protective pipe: Bentonite ☐ Annular space seal ☐ Other ☒ Filter Pack Sand
5. Annular space seal: Chipped ~~a. Granular~~ Bentonite ☒
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐
e. 0.7 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ Tremie pumped ☐ Gravity ☒
6. Bentonite seal: a. Bentonite granules ☐
b. ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐
c. Same as annular Space Seal Other ☒
7. Fine sand material: Manufacturer, product name & mesh:
a. Red Flint, 60-65
b. Volume added 0.2 ft^3
8. Filter pack material: Manufacturer, product name and mes
a. Red Flint, #30
b. Volume added 4.0 ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ Flush threaded PVC schedule 80 ☐ Other ☐ _____
10. Screen material: Schedule 40 PVC
a. Screen type: Factory cut ☒ Continuous slot ☐ Other ☐ _____
b. Manufacturer Diedrich
c. Slot size: 0.0
d. Slotted length: 9
11. Backfill material (below filter pack): None ☒ Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Mark A. Mentley	Firm: Hydro-Search, Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. and ch. NR 141, Wis. Ad. Code. In accordance with ch.144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for e

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMEN
Form 4400-113B Rev. 4-9(

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
QUAD/GRAPHICS - NEW BERLIN	MILWAUKEE	MW-8

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_____	41	_____	_____

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other _____	☐	

3. Time spent developing well 15 min.

4. Depth of well (from top of well casisng) 17.6 ft.

5. Inside diameter of well 2.05 in.

6. Volume of water in filter pack and well casing ___.__ gal.

7. Volume of water removed from well 4.0 gal.

8. Volume of water added (if any) ___.__ gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 12.81 ft.	NM ft
Date	b. 10/02/96 (mm dd yy)	10/02/96 (mm dd yy)
Time	c. 8:45 ☒ a.m. ☐ p.m.	9:00 ☒ a.m ☐ p.m
12. Sediment in well bottom	__.0 inches	__.0 inche
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) BROWN	Clear ☐ 20 Turbid ☒ 25 (Describe) BROWN

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/
15. COD	____.__ mg/l	____.__ mg/

16. Additional comments on development:

Well developed by: Person's Name and Firm

Name: ALAN M. LIJEWSKI

Firm: HYDRO SEARCH, INC. - BROOKFIELD

I hereby certify that the above information is true and correct to the bes of my knowledge.

Signature: [signature]

Print Initials: A M L

Firm: HSI

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTI(
Form 4400-113A Rev. 4-

Facility/Project Name: Quad / Graphics, New Berlin	Local Grid Location of Well: ☐N. ☐S. _____ ft. ☐E. ☐W. _____ ft.	Well Name: MW-9
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. _____ Long. _____ or St. Plane _____ ft. N, _____ ft. E.	Wis. Unique Well Number: DNR Well Numi _____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	Section Location of Waste/Source: SW 1/4 of SW 1/4 of Sec. 3, T. 6 N, R. 20 ☒E. ☐W.	Date Well Installed: 09/13/96 (m m d d y y)
Distance Well Is From Waste/Source Boundary: _____ ft.	Location of Well Relative to Waste/Source: u ☐ Upgradient, s ☐ Sidegradient, d ☐ Downgradient, n ☐ Not Known	Well Installed By: (Person's Name and Firm): Scott Hayes, MES
Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No		

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 0.5 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☒ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; Other ☐ __

15. Drilling fluid used: Water ☐ 02; Air ☐ 01; Drilling Mud ☐ 03; None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis): _____

E. Bentonite seal, top _____ ft. MSL or 0.5 ft.

F. Fine sand, top _____ ft. MSL or 3.0 ft.

G. Filter pack, top _____ ft. MSL or 3.5 ft.

H. Screen joint, top _____ ft. MSL or 4.3 ft.

I. Well bottom _____ ft. MSL or 14.5 ft.

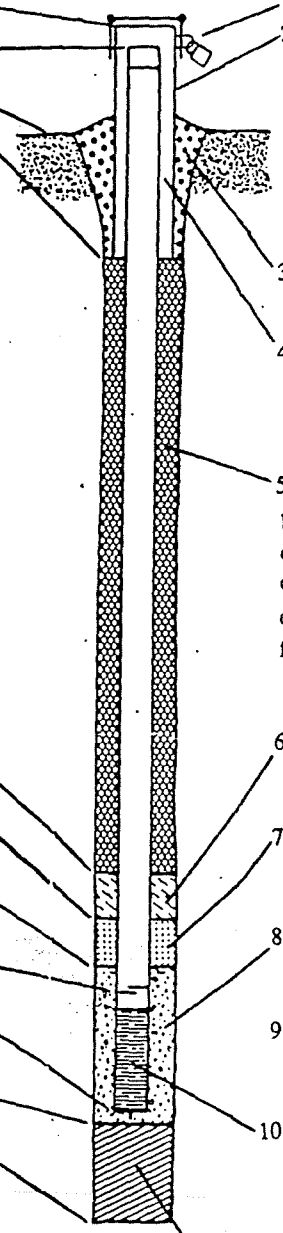
J. Filter pack, bottom _____ ft. MSL or 15.0 ft.

K. Borehole, bottom _____ ft. MSL or 15.0 ft.

L. Borehole, diameter 8.0 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.05 in.



1. Cap and lock? ☒ Yes ☐ N

2. Protective cover pipe:
a. Inside diameter: 4.0
b. Length: 5.0
c. Material: Steel ☒; Other ☐ _____
d. Additional protection? ☐ Yes ☒ N
If yes, describe: _____

3. Surface seal: Bentonite ☐; Concrete ☐; Other ☒ Native Soil

4. Material between well casing and protective pipe: Bentonite ☐; Annular space seal ☐; Other ☒ Filter Pack Sand

5. Annular space seal: Chipped ~~a. Granular~~ Bentonite ☒
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐
e. 0.7 Ft^3 volume added for any of the above
f. How installed: Tremie ☐; Tremie pumped ☐; Gravity ☒

6. Bentonite seal: a. Bentonite granules ☐
b. ☐1/4 in. ☐3/8 in. ☐1/2 in. Bentonite pellets ☐
c. Same as Annular Space Seal Other ☒

7. Fine sand material: Manufacturer, product name & mesh s
a. Red Flint, 60-65
b. Volume added 0.2 ft^3

8. Filter pack material: Manufacturer, product name and mesl
a. Red Flint, #30
b. Volume added 4.0 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒; Flush threaded PVC schedule 80 ☐; Other ☐ _____

10. Screen material: Schedule 40 PVC
a. Screen type: Factory cut ☒; Continuous slot ☐; Other ☐ _____
b. Manufacturer Diedrich
c. Slot size: 0.0
d. Slotted length: 9

11. Backfill material (below filter pack): None ☒; Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Mark A. Wittig	Hydro-Search, Inc

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. and ch. NR 141, Wis. Ad. Code. In accordance with ch.144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more t $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for e.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMEN
Form 4400-113B Rev. 4-9(

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
QUAD/GRAPHICS - NEW BERLIN	MILWAUKEE	MW-9

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_____	41	_____	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method
- surged with bailer and bailed ☒ 41
- surged with bailer and pumped ☐ 61
- surged with block and bailed ☐ 42
- surged with block and pumped ☐ 62
- surged with block, bailed and pumped ☐ 70
- compressed air ☐ 20
- bailed only ☐ 10
- pumped only ☐ 51
- pumped slowly ☐ 50
- Other _____ ☐ __

3. Time spent developing well 15 min.

4. Depth of well (from top of well casisng) 17.0 ft.

5. Inside diameter of well 2.05 in.

6. Volume of water in filter pack and well casing ___.__ gal.

7. Volume of water removed from well 6.0 gal.

8. Volume of water added (if any) ___.__ gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 5.45 ft.	NM ft
Date	b. 10/02/96 (mm dd yy)	10/02/96 (mm dd yy)
Time	c. 9:40 ☒ a.m. ☐ p.m.	9:55 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	.0 inches	.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) CLOUDY, BROWN	Clear ☐ 20 Turbid ☒ 25 (Describe) CLOUDY, BROWN

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/
15. COD	____.__ mg/l	____.__ mg/

16. Additional comments on development:

Well developed by: Person's Name and Firm

Name: ALAN M. LISEWSKI

Firm: HYDRO-SEARCH, INC. - BROOKFIELD

I hereby certify that the above information is true and correct to the bes of my knowledge.

Signature: [signature]

Print Initials: AML

Firm: HSI

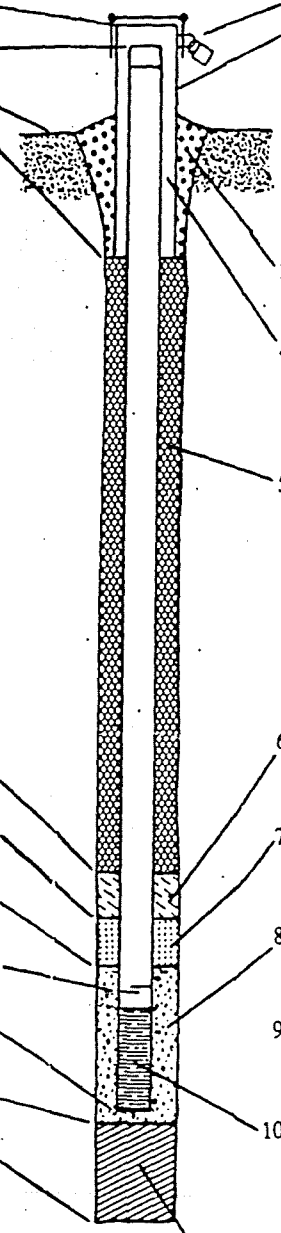
NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCT
Form 4400-113A Rev.

Facility/Project Name: Quad/Graphics, New Berlin	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: MW-10
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ____ Long. ____ or	Wis. Unique Well Number: DNR Well Nur
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	St. Plane ____ ft. N. ____ ft. E.	Date Well Installed: 09/13/96 (m m / d d / y y)
Distance Well Is From Waste/Source Boundary: ____ ft.	Section Location of Waste/Source: SW 1/4 of SW 1/4 of Sec. 3, T. 6 N, R. 20 ☒E. ☐W.	Well Installed By: (Person's Name and Firm): Scott Hayes, MES
Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	



A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 0.5 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☒ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; Other ☐ __

15. Drilling fluid used: Water ☐ 02; Air ☐ 01; Drilling Mud ☐ 03; None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis): _____

E. Bentonite seal, top _____ ft. MSL or 0.5 ft.

F. Fine sand, top _____ ft. MSL or 3.0 ft.

G. Filter pack, top _____ ft. MSL or 3.5 ft.

H. Screen joint, top _____ ft. MSL or 4.3 ft.

I. Well bottom _____ ft. MSL or 14.5 ft.

J. Filter pack, bottom _____ ft. MSL or 15.0 ft.

K. Borehole, bottom _____ ft. MSL or 15.0 ft.

L. Borehole, diameter 8.0 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.05 in.

1. Cap and lock? ☒ Yes ☐

2. Protective cover pipe:
a. Inside diameter: 4.
b. Length: 5.
c. Material: Steel ☒; Other ☐ _____
d. Additional protection? ☐ Yes ☒
If yes, describe: _____

3. Surface seal: Bentonite ☐; Concrete ☐; Other ☒ Native Soil

4. Material between well casing and protective pipe: Bentonite ☐; Annular space seal ☐; Other ☒ Filter Pack Sand

5. Annular space seal: Chipped a. ~~Granular~~ Bentonite ☒
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐
e. 0.7 Ft^3 volume added for any of the above
f. How installed: Tremie ☐; Tremie pumped ☐; Gravity ☒

6. Bentonite seal: a. Bentonite granules ☐
b. ☐1/4 in. ☐3/8 in. ☐1/2 in. Bentonite pellets ☐
c. Same as Annular Space Seal Other ☒

7. Fine sand material: Manufacturer, product name & mesh
a. Red Flint, 60-65
b. Volume added 0.2 ft^3

8. Filter pack material: Manufacturer, product name and me
a. Red Flint, #30
b. Volume added 4.0 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒; Flush threaded PVC schedule 80 ☐; Other ☐ _____

10. Screen material: Schedule 40 PVC
a. Screen type: Factory cut ☒; Continuous slot ☐; Other ☐ _____
b. Manufacturer Diedrich
c. Slot size: 0.0
d. Slotted length: 5

11. Backfill material (below filter pack): None ☒; Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Mark A. Manthey | Firm: Hydro-Search, Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. and ch. NR 141, Wis. Ad. Code. In accordance with ch.144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPME
Form 4400-113B Rev. 4-

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
QUAD/GRAPHICS - NEW BERLIN	MILWAUKEE	MW-10

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_____	41	_____	_____

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method
- surged with bailer and bailed ☒ 41
- surged with bailer and pumped ☐ 61
- surged with block and bailed ☐ 42
- surged with block and pumped ☐ 62
- surged with block, bailed and pumped ☐ 70
- compressed air ☐ 20
- bailed only ☐ 10
- pumped only ☐ 51
- pumped slowly ☐ 50
- Other _____ ☐ __

3. Time spent developing well 10 min.

4. Depth of well (from top of well casisng) 17.4 ft.

5. Inside diameter of well 2.05 in.

6. Volume of water in filter pack and well casing ___.__ gal.

7. Volume of water removed from well 6.0 gal.

8. Volume of water added (if any) ___.__ gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 6.94 ft.	NA
Date	b. 10/02/96 (mm dd yy)	10/02/9 (mm dd y)
Time	c. 9:15 ☒ a.m. ☐ p.m.	9:25 ☒ a. ☐ p.
12. Sediment in well bottom	0 inches	0 inch
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) CLOUDY, BROWN	Clear ☐ 20 Turbid ☒ 25 (Describe) CLOUDY, BROWN

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ m
15. COD	____.__ mg/l	____.__ m

16. Additional comments on development:

Well developed by: Person's Name and Firm

Name: ALAN M. LITEWSKI

Firm: HYDRO-SEARCH, INC. - BROOKFIELD

I hereby certify that the above information is true and correct to the b of my knowledge.

Signature: [signature]

Print Initials: AML

Firm: HSI

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

ATTACHMENT C
WELL DEVELOPMENT SUMMARIES
AND FIELD SAMPLING FORM

WELL DEVELOPMENT/PURGE SUMMARY

Well MW-8

PROJECT: QUAD/GRAPHICS - NEW BERLIN
PROJECT #: 304253396
LOCATION: NEW BERLIN, WI
PERSONNEL: AML

WELL COORDINATES: NM
PVC RISER ELEVATION: NM
GROUND LEVEL ELEVATION: NM
CONSTRUCTED WELL DEPTH: 15' bgs
WELL CASING INSIDE DIAMETER: 2.047"

INSTRUMENTS
TEMPERATURE: COLE P. DIG #2
CONDUCTIVITY: #4 YSI
pH METER: #2 COLE P. DIG.
WATER LEVEL PROBE: #3 SOLINST
OTHER: NONE

Date	Time	Method	Water Level* (ft.msl)	Measured Well Depth (ft.msl)	Volume Purged** (gallons)	Appearance: Color / Odor / Clarity	pH (s.u.)	T (C)	Elec. Cond. (umhos/cm): Measured	Elec. Cond. (umhos/cm): at 25C	Comments
10/02/96	845	BAILER	12.81	17.63	0	BROWN / NONE / TURBID	6.52	13.8	920		FIRM BOTTOM - SURGED 2 MINS
"	900	"	NM	17.59	4	"	6.85	13.2	900		DRY - SAMPLED - STILL FIRM

HYDRO-SEARCH, IN

WELL DEVELOPMENT/PURGE SUMMARY

Well MW-9

PROJECT: QUAD/GRAPHICS - NEW BERLIN
PROJECT #: 30425339G
LOCATION: NEW BERLIN, WI
PERSONNEL: ALAN M. LUTENSKI

WELL COORDINATES: NM
PVC RISER ELEVATION: NM
GROUND LEVEL ELEVATION: NM
CONSTRUCTED WELL DEPTH: 15' bgs
WELL CASING INSIDE DIAMETER: 2.047"

INSTRUMENTS
TEMPERATURE: COLE P. DIG #2
CONDUCTIVITY: #4 YSI
pH METER: #2 COLE P DIG.
WATER LEVEL PROBE: #3 SOLINST
OTHER: NONE

Date	Time	Method	Water Level* (ft.msl)	Measured Well Depth (ft.msl)	Volume Purged** (gallons)	Appearance Color / Odor / Clarity	pH (s.u.)	T (C)	Elec. Cond. (umhos/cm) Measured	Elec. Cond. (umhos/cm) at 25C	Comments
10/02/96	940	BAILER	5.45	16.99	0	BROWN / NONE / CLOUDY	6.82	15.5	660		SURGED 2 MINS. - FIRM BOTTOM
"	945	"	NM	NM	5	"	6.83	15.4	680		SURGED 2 MINS.
"	955	"	NM	16.99	6	"	6.86	15.0	680		DRY - STILL FIRM - SAMPLED

HYDRO-SEARCH, IN

WELL DEVELOPMENT/PURGE SUMMARY

Well MW-10

PROJECT: QUAD-NEW BERLIN
PROJECT #: 304253396
LOCATION: NEW BERLIN, WI
PERSONNEL: AML

WELL COORDINATES: NM
PVC RISER ELEVATION: NM
GROUND LEVEL ELEVATION: NM
CONSTRUCTED WELL DEPTH: 15' bgs
WELL CASING INSIDE DIAMETER: 2.097"

INSTRUMENTS
TEMPERATURE: COLE P. DIG #2
CONDUCTIVITY: #4 YSE
pH METER: #2 COLE P. DIG.
WATER LEVEL PROBE: #3 SOLINST
OTHER: NONE

Date	Time	Method	Water Level* (ft.msl)	Measured Well Depth (ft.msl)	TOTAL Volume Purged** (gallons)	Appearance Color / Odor / Clarity	pH (s.u.)	T (C)	Elec. Cond. (umhos/cm) Measured	Elec. Cond. (umhos/cm) at 25C	Comments
10/02/96	915	BAILER	6.94	17.40	0	BROWN / NONE / CLOUDY	6.54	14.8	1790		SURGED 2 MINS - FIRM BOTTOM
"	920	"	NM	NM	5	"	6.55	14.6	1810		SURGED 2 MINS
"	925	"	NM	17.40	6	"	6.57	14.7	1790		DRY - SAMPLED - STILL FIRM

* Record both initial and final measurements when using as Well Development Summary.
** Purge four borehole volumes, if possible, prior to sampling.

HYDRO-SEARCH, INC.

FIELD WATER QUALITY SAMPLING AND ANALYSIS

PROJECT: QUAD/GRAPHICS - NEW BERLIN
PROJECT #: 30425339G
LOCATION: NEW BERLIN, WI
PERSONNEL: ALAN WJEWSKI

INSTRUMENTS
TEMPERATURE: COLE P. DIG. #2
CONDUCTIVITY: YSI #4
pH: COLE P. DIG. #2
OTHER: SCLINST #3 WLP

GENERAL: SAMPLE POINT	MW-8	MW-10	MW-9		
WATER TYPE	GW	→	→		
DATE	10/02/96	→	→		
CLOCK TIME	9:00	9:25	9:55		
DEPTH TO WATER* **	12.81	6.94	5.45		
MEASURED WELL DEPTH	17.59	17.40	16.99		
PURGE VOL/CASING VOL(g)	4	6	4		
DEPTH SAMPLE TAKEN	~16'	~15'	~13'		
SAMPLING DEVICE	BAILER	→	→		
FIELD TEMPERATURE (°C)	13.2	14.7	15.0		
ELEC. COND. (umhos/cm) MEASURED	900	1790	680		
ELEC. COND. (umhos/cm) AT 25°C					
pH	6.85	6.57	6.84		
ALKALINITY	NM	→	→		
COLOR	BROWN	BROWN	BROWN		
ODOR	NONE	NONE	NONE		
CLARITY	TURBID	CLOUDY	CLOUDY		
SAMPLING PARAMETERS	# OF CONTAINERS & CONT. VOLUME; CONTAINER TYPE (A=AMBER GLASS; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE - (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES OR NO)				
PVOC's 8020	3-40ml; G; HCl-L; N				
VOC's 8260		3-40ml; G; HCl-L; No	→		
DRO	1-L; A; HCl-L; N				
LABORATORY: SENT TO:	NET	→	→		
DATE SENT:	10/02/96				
SAMPLED BY:	AML	→	→		

*Measured from top of well riser.

** PRIOR TO DEVELOPMENT

ATTACHMENT D
ANALYTICAL RESULTS

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120
WDNR No. 128053530

ANALYTICAL AND QUALITY CONTROL REPORT

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

10/09/1996

Job No: 96.09752

Page 1

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
211077	MW-8 #304253396	10/02/1996	10/02/1996
211078	MW-9 #304253396	10/02/1996	10/02/1996
211079	MW-10 #304253396	10/02/1996	10/02/1996
211080	Trip Blank #304253396	10/02/1996	10/02/1996

MASTER FILE COPY
PROJECT # 30425 3396
CC: GED

The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
C = Standard outside of control limits
F = Sample filtered in lab
H = Late eluting hydrocarbons present
J = Estimated concentration
M = Matrix interference
Q = Result confirmed via re-analysis
T = Does not match typical pattern
X = Unidentified compound(s) present
B = Blank is contaminated
D = Diluted for analysis
G = Received past hold time
I = Improperly handled sample
L = Common lab solvent and contaminant
P = Improperly preserved sample
S = Sediment present
W = BOD re-set due to missed dilution
Z = Internal standard outside limits

Brian DeJong
Brian D. DeJong, Organic Operations Manager
Certification No. 128053530

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120
WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

10/09/1996
Job No: 96.09752
Sample No: 211077
Account No: 39150
Page 2

JOB DESCRIPTION: #304253396 Quad New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-8 #304253396
Recv'd 4.0 C

Date Taken: 10/02/1996 09:00 Date Received: 10/02/1996

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Ru Batch
DRO Extraction	10/04/96			WDNR	10/04/1996	797
PVOC - AQUEOUS						
Benzene	<0.50	ug/L	0.50	S-8020	10/07/1996	30
Ethylbenzene	<1.0	ug/L	1.0	S-8020	10/07/1996	30
MTBE	<1.0	ug/L	1.0	S-8020	10/07/1996	30
Toluene	<1.0	ug/L	1.0	S-8020	10/07/1996	30
1,2,4-Trimethylbenzene	<1.0	ug/L	1.0	S-8020	10/07/1996	30
1,3,5-Trimethylbenzene	<1.0	ug/L	1.0	S-8020	10/07/1996	30
Xylenes, Total	<3.0	ug/L	3.0	S-8020	10/07/1996	30
Surr: Bromofluorobenzene	103.5	%	n/a	S-8020	10/07/1996	30
DRO - AQUEOUS	<0.10	mg/L	0.10	WDNR	10/05/1996	797 11

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120
WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

10/09/1996
Job No: 96.09752
Sample No: 211078
Account No: 39150

JOB DESCRIPTION: #304253396 Quad New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-9 #304253396
Recv'd 4.0 C

Date Taken: 10/02/1996 ~~09:25~~ 9:55 AL Date Received: 10/02/1996

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260A						
Benzene	<0.50	ug/L	0.50	S-8260A	10/08/1996	168
Bromobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Bromochloromethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Bromodichloromethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Bromoform	<2.0	ug/L	2.0	S-8260A	10/08/1996	168
Bromomethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
n-Butylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
sec-Butylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
tert-Butylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Carbon Tetrachloride	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chlorodibromomethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chloroethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
Chloroform	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chloromethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
2-Chlorotoluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
4-Chlorotoluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dibromo-3-Chloropropane	<10	ug/L	10	S-8260A	10/08/1996	168
1,2-Dibromoethane (EDB)	<10	ug/L	10	S-8260A	10/08/1996	168
Dibromomethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,3-Dichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,4-Dichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Dichlorodifluoromethane	<3.0	ug/L	3.0	S-8260A	10/08/1996	168
1,1-Dichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1-Dichloroethene	<2.0	ug/L	2.0	S-8260A	10/08/1996	168
cis-1,2-Dichloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
trans-1,2-Dichloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,3-Dichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
2,2-Dichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1-Dichloropropene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
cis-1,3-Dichloropropene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
trans-1,3-Dichloropropene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Di-isopropyl ether	<1.0	ug/L	1.0	S-8260A	10/08/1996	168

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

10/09/1996
Job No: 96.09752
Sample No: 211078
Account No: 39150
Page 4

JOB DESCRIPTION: #304253396 Quad New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-9 #304253396
Recv'd 4.0 C

Date Taken: 10/02/1996 ~~09:25~~ 9:55 AC Date Received: 10/02/1996

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Ru Batch
Ethylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Hexachlorobutadiene	<2.0	ug/L	2.0	S-8260A	10/08/1996	168
Isopropylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
p-Isopropyltoluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Methylene Chloride	<10	ug/L	10	S-8260A	10/08/1996	168
Methyl-t-butyl ether	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Naphthalene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
n-Propylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Styrene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1,1,2-Tetrachloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1,2,2-Tetrachloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Tetrachloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Toluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2,3-Trichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2,4-Trichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1,1-Trichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1,2-Trichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Trichloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Trichlorofluoromethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
1,2,3-Trichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2,4-Trimethylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,3,5-Trimethylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Vinyl Chloride	<0.50	ug/L	0.50	S-8260A	10/08/1996	168
Xylenes, Total	<3.0	ug/L	3.0	S-8260A	10/08/1996	168
Surr: Dibromofluoromethane	98.6	%	n/a	S-8260A	10/08/1996	168
Surr: Toluene-d8	98.8	%	n/a	S-8260A	10/08/1996	168
Surr: Bromofluorobenzene	96.8	%	n/a	S-8260A	10/08/1996	168

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

10/09/1996
Job No: 96.09752
Sample No: 211079
Account No: 39150
Page 5

JOB DESCRIPTION: #304253396 Quad New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-10 #304253396
Recv'd 4.0 C

Date Taken: 10/02/1996 ~~09:55~~ 9:25 AM Date Received: 10/02/1996

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Ru Batch
VOC - AQUEOUS - EPA 8260A						
Benzene	<0.50	ug/L	0.50	S-8260A	10/08/1996	168
Bromobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Bromochloromethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Bromodichloromethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Bromoform	<2.0	ug/L	2.0	S-8260A	10/08/1996	168
Bromomethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
n-Butylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
sec-Butylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
tert-Butylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Carbon Tetrachloride	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chlorodibromomethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chloroethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
Chloroform	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chloromethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
2-Chlorotoluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
4-Chlorotoluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dibromo-3-Chloropropane	<10	ug/L	10	S-8260A	10/08/1996	168
1,2-Dibromoethane (EDB)	<10	ug/L	10	S-8260A	10/08/1996	168
Dibromomethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,3-Dichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,4-Dichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Dichlorodifluoromethane	<3.0	ug/L	3.0	S-8260A	10/08/1996	168
1,1-Dichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1-Dichloroethene	<2.0	ug/L	2.0	S-8260A	10/08/1996	168
cis-1,2-Dichloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
trans-1,2-Dichloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,3-Dichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
2,2-Dichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1-Dichloropropene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
cis-1,3-Dichloropropene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
trans-1,3-Dichloropropene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Di-isopropyl ether	<1.0	ug/L	1.0	S-8260A	10/08/1996	168

NATIONAL ENVIRONMENTAL TESTING, INC.

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

10/09/1996
Job No: 96.09752
Sample No: 211079
Account No: 39150
Page 6

JOB DESCRIPTION: #304253396 Quad New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-10 #304253396
Recv'd 4.0 C

Date Taken: 10/02/1996 ~~09:55~~ 9:25 AM Date Received: 10/02/1996

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/R Batch
Ethylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Hexachlorobutadiene	<2.0	ug/L	2.0	S-8260A	10/08/1996	16
Isopropylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
p-Isopropyltoluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Methylene Chloride	<10	ug/L	10	S-8260A	10/08/1996	16
Methyl-t-butyl ether	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Naphthalene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
n-Propylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Styrene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,1,1,2-Tetrachloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,1,2,2-Tetrachloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Tetrachloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Toluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,2,3-Trichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,2,4-Trichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,1,1-Trichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,1,2-Trichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Trichloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Trichlorofluoromethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	16
1,2,3-Trichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,2,4-Trimethylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,3,5-Trimethylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Vinyl Chloride	<0.50	ug/L	0.50	S-8260A	10/08/1996	16
Xylenes, Total	<3.0	ug/L	3.0	S-8260A	10/08/1996	16
Surr: Dibromofluoromethane	101.4	%	n/a	S-8260A	10/08/1996	16
Surr: Toluene-d8	98.6	%	n/a	S-8260A	10/08/1996	16
Surr: Bromofluorobenzene	96.2	%	n/a	S-8260A	10/08/1996	16

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

10/09/1996
Job No: 96.09752
Sample No: 211080
Account No: 39150
Page 7

JOB DESCRIPTION: #304253396 Quad New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: Trip Blank #304253396
Recv'd 4.0 C

Date Taken: 10/02/1996 Date Received: 10/02/1996

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Ru Batch
VOC - AQUEOUS - EPA 8260A						
Benzene	<0.50	ug/L	0.50	S-8260A	10/08/1996	168
Bromobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Bromochloromethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Bromodichloromethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Bromoform	<2.0	ug/L	2.0	S-8260A	10/08/1996	168
Bromomethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
n-Butylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
sec-Butylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
tert-Butylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Carbon Tetrachloride	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chlorodibromomethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chloroethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
Chloroform	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Chloromethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	168
2-Chlorotoluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
4-Chlorotoluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dibromo-3-Chloropropane	<10	ug/L	10	S-8260A	10/08/1996	168
1,2-Dibromoethane (EDB)	<10	ug/L	10	S-8260A	10/08/1996	168
Dibromomethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,3-Dichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,4-Dichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Dichlorodifluoromethane	<3.0	ug/L	3.0	S-8260A	10/08/1996	168
1,1-Dichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1-Dichloroethene	<2.0	ug/L	2.0	S-8260A	10/08/1996	168
cis-1,2-Dichloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
trans-1,2-Dichloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,2-Dichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,3-Dichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
2,2-Dichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
1,1-Dichloropropene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
cis-1,3-Dichloropropene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
trans-1,3-Dichloropropene	<1.0	ug/L	1.0	S-8260A	10/08/1996	168
Di-isopropyl ether	<1.0	ug/L	1.0	S-8260A	10/08/1996	16

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

10/09/1996
Job No: 96.09752
Sample No: 211080
Account No: 39150
Page 8

JOB DESCRIPTION: #304253396 Quad New Berlin
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: Trip Blank #304253396
Recv'd 4.0 C

Date Taken: 10/02/1996 Date Received: 10/02/1996

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/R Batch
Ethylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Hexachlorobutadiene	<2.0	ug/L	2.0	S-8260A	10/08/1996	16
Isopropylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
p-Isopropyltoluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Methylene Chloride	<10	ug/L	10	S-8260A	10/08/1996	16
Methyl-t-butyl ether	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Naphthalene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
n-Propylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Styrene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,1,1,2-Tetrachloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,1,2,2-Tetrachloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Tetrachloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Toluene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,2,3-Trichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,2,4-Trichlorobenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,1,1-Trichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,1,2-Trichloroethane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Trichloroethene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Trichlorofluoromethane	<4.0	ug/L	4.0	S-8260A	10/08/1996	16
1,2,3-Trichloropropane	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,2,4-Trimethylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
1,3,5-Trimethylbenzene	<1.0	ug/L	1.0	S-8260A	10/08/1996	16
Vinyl Chloride	<0.50	ug/L	0.50	S-8260A	10/08/1996	16
Xylenes, Total	<3.0	ug/L	3.0	S-8260A	10/08/1996	16
Surr: Dibromofluoromethane	102.2	%	n/a	S-8260A	10/08/1996	16
Surr: Toluene-d8	98.8	%	n/a	S-8260A	10/08/1996	16
Surr: Bromofluorobenzene	97.4	%	n/a	S-8260A	10/08/1996	16

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

10/09/1996

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 96.09752
Account No: 39150

Job Description: #304253396 Quad New Berlin

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
PVOC - AQUEOUS	S-8020					
Benzene	S-8020	3019	20.0	20.4	102.0	cjp
Ethylbenzene	S-8020	3019	20.0	20.6	103.0	cjp
MTBE	S-8020	3019	20.0	20.8	104.0	cjp
Toluene	S-8020	3019	20.0	20.4	102.0	cjp
1,2,4-Trimethylbenzene	S-8020	3019	20.0	20.7	103.5	cjp
1,3,5-Trimethylbenzene	S-8020	3019	20.0	20.9	104.5	cjp
Xylenes, Total	S-8020	3019	60.0	62.8	104.7	cjp
Surr: Bromofluorobenzene	S-8020	3019	20.0	19.6	98.0	cjp
DRO - AQUEOUS	WDNR	1130	1000	973	97.3	pju
DRO - AQUEOUS	WDNR	1130	1000	944	94.4	pju
VOC - AQUEOUS - EPA 8260A	S-8260A					
Benzene	S-8260A	168	50.0	49.3	98.6	gsj
Bromoform	S-8260A	168	50.0	45.9	91.8	gsj
Chlorobenzene	S-8260A	168	50.0	49.8	99.6	gsj
Chloroform	S-8260A	168	50.0	50.1	100.2	gsj
Chloromethane	S-8260A	168	50.0	49.6	99.2	gsj
1,1-Dichloroethane	S-8260A	168	50.0	50.2	100.4	gsj
1,1-Dichloroethene	S-8260A	168	50.0	50.7	101.4	gsj
1,2-Dichloropropane	S-8260A	168	50.0	49.0	98.0	gsj
Di-isopropyl ether	S-8260A	168	40.0	49.9	124.8	gsj
Ethylbenzene	S-8260A	168	50.0	49.6	99.2	gsj
Methyl-t-butyl ether	S-8260A	168	50.0	48.1	96.2	gsj
1,1,2,2-Tetrachloroethane	S-8260A	168	50.0	46.7	93.4	gsj
Toluene	S-8260A	168	50.0	49.8	99.6	gsj
Trichloroethene	S-8260A	168	50.0	49.9	99.8	gsj
1,2,4-Trimethylbenzene	S-8260A	168	50.0	50.6	101.2	gsj
1,3,5-Trimethylbenzene	S-8260A	168	50.0	49.7	99.4	gsj
Vinyl Chloride	S-8260A	168	50.0	49.2	98.4	gsj
Xylenes, Total	S-8260A	168	150	150	100.0	gsj
Surr: Dibromofluoromethane	S-8260A	168	50.0	50.8	101.6	gsj
Surr: Toluene-d8	S-8260A	168	50.0	49.7	99.4	gsj
Surr: Bromofluorobenzene	S-8260A	168	50.0	49.9	99.8	gsj

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

QUALITY CONTROL REPORT
BLANKS

10/09/1996

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 96.09752
Account No: 39150

Job Description: #304253396 Quad New Berlin

Parameter	Prep Batch	Run Batch	Blank Result	Detection Limit	Units
PVOC - AQUEOUS					
Benzene		3019	<0.50	0.50	ug/L
Ethylbenzene		3019	<1.0	1.0	ug/L
MTBE		3019	<1.0	1.0	ug/L
Toluene		3019	<1.0	1.0	ug/L
1,2,4-Trimethylbenzene		3019	<1.0	1.0	ug/L
1,3,5-Trimethylbenzene		3019	<1.0	1.0	ug/L
Xylenes, Total		3019	<3.0	3.0	ug/L
Surr: Bromofluorobenzene		3019	94.5	n/a	%
DRO - AQUEOUS	797	1130	<0.050	0.10	mg/L
VOC - AQUEOUS - EPA 8260A					
Benzene		168	<0.50	0.50	ug/L
Bromobenzene		168	<1.0	1.0	ug/L
Bromochloromethane		168	<1.0	1.0	ug/L
Bromodichloromethane		168	<1.0	1.0	ug/L
Bromoform		168	<2.0	2.0	ug/L
Bromomethane		168	<4.0	4.0	ug/L
n-Butylbenzene		168	<1.0	1.0	ug/L
sec-Butylbenzene		168	<1.0	1.0	ug/L
tert-Butylbenzene		168	<1.0	1.0	ug/L
Carbon Tetrachloride		168	<1.0	1.0	ug/L
Chlorobenzene		168	<1.0	1.0	ug/L
Chlorodibromomethane		168	<1.0	1.0	ug/L
Chloroethane		168	<4.0	4.0	ug/L
Chloroform		168	<1.0	1.0	ug/L
Chloromethane		168	<4.0	4.0	ug/L
2-Chlorotoluene		168	<1.0	1.0	ug/L
4-Chlorotoluene		168	<1.0	1.0	ug/L
1,2-Dibromo-3-Chloropropane		168	<10	10	ug/L
1,2-Dibromoethane (EDB)		168	<10	10	ug/L
Dibromomethane		168	<1.0	1.0	ug/L
1,2-Dichlorobenzene		168	<1.0	1.0	ug/L
1,3-Dichlorobenzene		168	<1.0	1.0	ug/L
1,4-Dichlorobenzene		168	<1.0	1.0	ug/L
Dichlorodifluoromethane		168	<3.0	3.0	ug/L

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

BLANKS

10/09/1996

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 96.09752
Account No: 39150

Job Description: #304253396 Quad New Berlin

Parameter	Prep Batch	Run Batch	Blank Result	Detection Limit	Units
1,1-Dichloroethane		168	<1.0	1.0	ug/L
1,2-Dichloroethane		168	<1.0	1.0	ug/L
1,1-Dichloroethene		168	<2.0	2.0	ug/L
cis-1,2-Dichloroethene		168	<1.0	1.0	ug/L
trans-1,2-Dichloroethene		168	<1.0	1.0	ug/L
1,2-Dichloropropane		168	<1.0	1.0	ug/L
1,3-Dichloropropane		168	<1.0	1.0	ug/L
2,2-Dichloropropane		168	<1.0	1.0	ug/L
1,1-Dichloropropene		168	<1.0	1.0	ug/L
cis-1,3-Dichloropropene		168	<1.0	1.0	ug/L
trans-1,3-Dichloropropene		168	<1.0	1.0	ug/L
Di-isopropyl ether		168	<1.0	1.0	ug/L
Ethylbenzene		168	<1.0	1.0	ug/L
Hexachlorobutadiene		168	<2.0	2.0	ug/L
Isopropylbenzene		168	<1.0	1.0	ug/L
p-Isopropyltoluene		168	<1.0	1.0	ug/L
Methylene Chloride		168	<10	10	ug/L
Methyl-t-butyl ether		168	<1.0	1.0	ug/L
Naphthalene		168	<1.0	1.0	ug/L
n-Propylbenzene		168	<1.0	1.0	ug/L
Styrene		168	<1.0	1.0	ug/L
1,1,1,2-Tetrachloroethane		168	<1.0	1.0	ug/L
1,1,2,2-Tetrachloroethane		168	<1.0	1.0	ug/L
Tetrachloroethene		168	<1.0	1.0	ug/L
Toluene		168	<1.0	1.0	ug/L
1,2,3-Trichlorobenzene		168	<1.0	1.0	ug/L
1,2,4-Trichlorobenzene		168	<1.0	1.0	ug/L
1,1,1-Trichloroethane		168	<1.0	1.0	ug/L
1,1,2-Trichloroethane		168	<1.0	1.0	ug/L
Trichloroethene		168	<1.0	1.0	ug/L
Trichlorofluoromethane		168	<4.0	4.0	ug/L
1,2,3-Trichloropropane		168	<1.0	1.0	ug/L
1,2,4-Trimethylbenzene		168	<1.0	1.0	ug/L
1,3,5-Trimethylbenzene		168	<1.0	1.0	ug/L
Vinyl Chloride		168	<0.50	0.50	ug/L

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

BLANKS

10/09/1996

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 96.09752
Account No: 39150

Job Description: #304253396 Quad New Berlin

Parameter	Prep Batch	Run Batch	Blank Result	Detection Limit	Units
Xylenes, Total		168	<3.0	3.0	ug/L
Surr: Dibromofluoromethane		168	94.6	n/a	%
Surr: Toluene-d8		168	99.2	n/a	%
Surr: Bromofluorobenzene		168	95.6	n/a	%

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QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

10/09/1996

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 96.09752
Account No: 39150

Job Description: #304253396 Quad New Berlin

Analyte	Prep Batch Number	Run Batch Number	LCS Amount	Units	LCS Result	Percent Recovery	LCSD Result	Percent Recovery	Relative Percent Difference
PVOC - AQUEOUS									
Benzene		3019	20.0	ug/L	20.4	102.0	21.0	105.0	2.9
Ethylbenzene		3019	20.0	ug/L	20.6	103.0	21.5	107.5	4.3
MTBE		3019	20.0	ug/L	20.8	104.0	20.9	104.5	0.5
Toluene		3019	20.0	ug/L	20.4	102.0	21.1	105.5	3.4
1,2,4-Trimethylbenzene		3019	20.0	ug/L	20.7	103.5	21.3	106.5	2.9
1,3,5-Trimethylbenzene		3019	20.0	ug/L	20.9	104.5	21.7	108.5	3.8
Xylenes, Total		3019	60.0	ug/L	62.8	104.7	65.0	108.3	3.4
Surr: Bromofluorobenzene		3019	20.0	%	19.6	98.0	20.9	104.5	6.3
DRO - AQUEOUS	797	1130	1000	mg/L	918	91.8	895	89.5	2.5

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
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Fax: (414) 261-8120

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

10/09/1996

Mr. Jerry De Mers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 96.09752
Account No: 39150

Job Description: #304253396 Quad New Berlin

Analyte	Prep Batch Number	Run Batch Number	Sample Result	Spike Amount	Units	Matrix Spike Result	Percent Recovery	MSD Result	Percent Recovery	Relative Percent Difference
VOC - AQUEOUS - EPA 8260A										
Benzene		168	14	50.0	ug/L	66.2	104.4	63.7	99.4	4.8
Chlorobenzene		168	21	50.0	ug/L	75.0	108.0	73.1	104.2	3.6
1,1-Dichloroethene		168	<2.0	50.0	ug/L	53.3	106.6	49.6	99.2	7.1
Ethylbenzene		168	<1.0	50.0	ug/L	52.3	104.6	51.2	102.4	2.1
Methyl-t-butyl ether		168	<1.0	50.0	ug/L	54.7	109.4	56.4	112.8	3.1
Toluene		168	3.0	50.0	ug/L	55.1	104.2	53.4	100.8	3.3
Trichloroethene		168	<1.0	50.0	ug/L	51.5	103.0	49.8	99.6	3.3
1,2,4-Trimethylbenzene		168	<1.0	50.0	ug/L	52.5	105.0	51.6	103.2	1.7
1,3,5-Trimethylbenzene		168	<1.0	50.0	ug/L	52.8	105.6	51.5	103.0	2.5
Xylenes, Total		168	<3.0	150	ug/L	159	106.0	155	103.3	2.6
Surr: Dibromofluoromethane		168	49.9	50.0	%	49.8	99.6	49.4	98.8	0.8
Surr: Toluene-d8		168	49.8	50.0	%	50.9	101.8	50.5	101.0	0.8
Surr: Bromofluorobenzene		168	48.2	50.0	%	48.7	97.4	48.7	97.4	0.0

NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

COMPANY HSI - BROOKFIELD
ADDRESS
PHONE FAX
PROJECT NAME/LOCATION QUAD/GRAPHICS - NEW BERLIN
PROJECT NUMBER 30425339L
PROJECT MANAGER JERRY DEMERS

REPORT TO: HSI
INVOICE TO:
P.O. NO.
NET QUOTE NO.

SAMPLED BY
ALAN LIJEWSKI (PRINT NAME) SIGNATURE
(PRINT NAME) SIGNATURE

ANALYSES

DATE	TIME	SAMPLE ID/DESCRIPTION	GRAB	COMP	# OF CONTAINERS TYPE	MATRIX	PRESERVED Y/N	TPO	PVOCS	VOCS								COMMENTS
10/02/96	900	MW-8	X		3-40ml	GW	Y	X	X									X 1-L-A
	955	MW-9			6					X								
	925	MW-10								X								
		TRIP BLANK																

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO
FIELD FILTERED? YES / NO
COC SEALS PRESENT AND INTACT? YES / NO
VOLATILES FREE OF HEADSPACE? YES / NO
TEMPERATURE UPON RECEIPT: 4°C

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS DATE

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED FOR NET BY:
	10-7-96 12:30				

METHOD OF SHIPMENT

REMARKS:

HYDRO-SEARCH, INC.
A Tetra Tech Company

July 18, 1996
(304253281)

FID# 268017090
ERR-LUST

Mr. Charles Krohn
Southeast District LUST Section Supervisor
Wisconsin Department of Natural Resources
4041 N. Richards Street
P. O. Box 12436
Milwaukee, WI 53212

RE: Quad/Graphics (Former Ringier America) Facility, 16555 W. Rogers Drive, New Berlin, Wisconsin

Dear Mr. Krohn:

Thank you for your March 26, 1996 letter to Quad/Graphics indicating that WDNR will not be actively managing the remedial investigation and action at the former Ringier America facility now owned by Quad/Graphics in New Berlin.

Hydro-Search, Inc. (HSI) had submitted a subsurface investigation report dated August 29, 1995 regarding work which was performed for Quad/Graphics prior to their purchase of the facility. The purpose of this letter is to revise the proposed investigation of the site in light of the closure flexibility rules that have been proposed by the WDNR.

The following is a summary of the impacts that were observed that exceed a NR 140 PAL for ground water or impacts without NR140 standards.

Area A - former 25,000-gallon fuel oil UST excavation

One ground-water sample collected from north of the former tank location contains benzene at 3.5 $\mu g/\ell$, which exceeds the PAL of 0.5 but is below the 5.0 $\mu g/\ell$ ES.

Area B - former 10,000-gallon diesel fuel UST excavation

DRO is present at a concentration of 1320 ppb in ground water. There is no NR 140 ground-water standard for DRO. No PVOCs were detected.

Area C - location of sump discharge

Benzene, xylenes, 1,2-DCE, and TCE are present in ground water at concentrations above NR 140 PALs. None of these compounds exceed NR 140 ESs. Based upon the stiff clay soils present at this location and field observation of soil samples collected at three locations

175 N. Corporate Drive, Suite 100, Brookfield, Wisconsin 53045 Telephone (414) 792-1282 Facsimile (414) 792-1310

about 3 feet from the sump discharge, the extent of impacts at this location is expected to be quite limited.

Area E - north oil sump in press area of the building

The NR 140 ES for bis-2-ethylhexyl phthalate was exceeded for ground water at this location. DRO was also detected at a concentration of 1700 ppb in ground water; there is no NR 140 standard for DRO.

Area F - outdoor product and drum storage

Ground water from one sample beneath the asphalt pad exceeded the NR140 PAL for benzene. The ES was not exceeded at this location. Ground water from beneath the grassy area south of the asphalt pad exceeded the NR140 PAL for 1,2 DCE and the ES for vinyl chloride.

Revised Investigation

HSI had previously proposed five monitor wells for the site, as shown on the attached Figure 1. In light of the proposed closure flexibility rules, however, HSI proposes to reduce this to three monitor wells, as shown on Figure 2.

Sigma Environmental Services, Inc. completed a "Progress Report of Additional Subsurface Investigation, Ringier America, Inc.,"dated April 4, 1996. This report describes the results of installing and sampling five additional monitor wells near the northwest corner of the building. The purpose of that investigation was to identify the extent of impacts from three former underground storage tanks which contained naphthalene, alcohol, and blanket wash. The direction of ground-water flow reported by Sigma at the northwest corner of the building is shown on Figure 2; ground-water flow is to the southwest.

Because the seven water table wells installed by Sigma are designated MW-1 through MW-7, the additional wells proposed by Quad/Graphics are now designated MW-8 through MW-10.

Monitor well MW-1 was previously proposed near the former 25,000-gallon fuel oil UST. Now that the direction of ground-water movement is known, it is apparent that existing monitor wells MW-1, MW-2, MW-3, and MW-7, installed by Sigma, are downgradient of this former tank. As these wells are located between the former UST location and the property line, they provide adequate monitoring to determine any possible off-site migration from the 25,000-gallon UST. Sampling results from Sigma indicate no PVOCs are present in MW-2 and MW-3, and naphthalene was detected in MW-7 at 1.5 parts per billion. Other VOCs, related to the former tanks near it, were detected in MW-1.

Monitor well MW-8 replaces what had previously been designated MW-2. This well is located downgradient of the former 10,000-gallon diesel UST between the former UST and the western property line. This monitor well will detect whether any impacts from the 10,000-gallon diesel UST have potential to migrate off site.

Monitor wells MW-9 and MW-10 were previously designated MW-4 and MW-5. No change is proposed regarding these two well locations.
Monitor well MW-3 had previously been proposed to monitor the degradation of bis-2-ethylhexyl phthalate over time at this location. This compound is not very mobile in ground water, and its suspected source has been removed. The location of these ground-water impacts beneath the building also eliminates percolation of precipitation at this location. It is highly unlikely that this compound could travel at least 400 feet to the nearest property line prior to being biodegraded. Therefore, there is not a need to monitor ground water at Area E, and the monitor well at this location will not be installed.

For each of the above areas, natural biodegradation has been chosen as the means of remediation at this time, given the relatively low levels of concentrations detected at each area.

I trust this information meets your needs. If you have any questions, please feel free to call.

Sincerely,

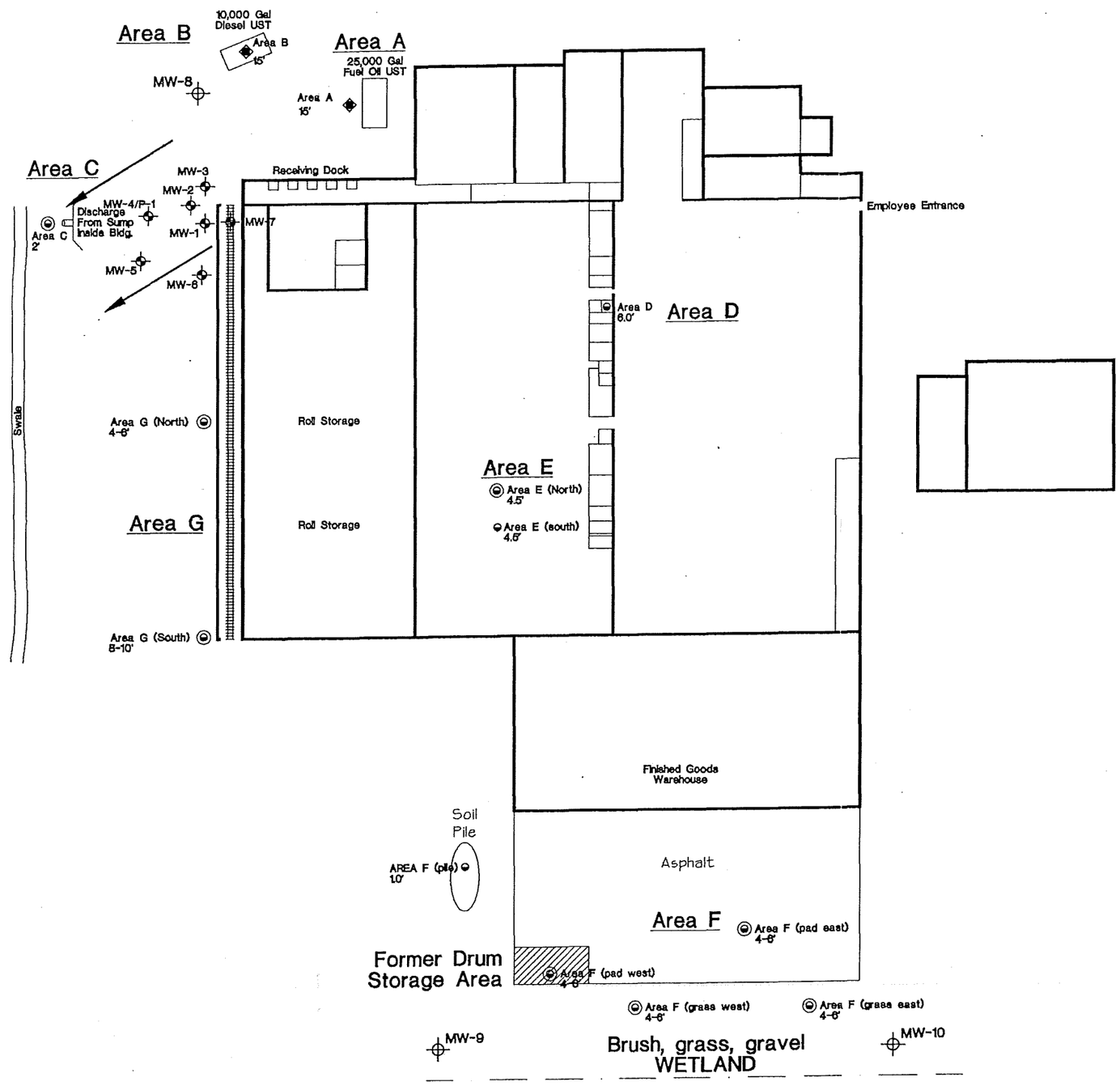
HYDRO-SEARCH, INC.

Gerald L. DeMers

Gerald L. DeMers, P.E.
Senior Engineer

GLD:gf

cc: Tom Estock
Art Harrington
Debra Kraft



EXPLANATION

MW-2	EXISTING GROUND-WATER MONITOR WELL LOCATION
Area E	SOIL SAMPLE LOCATION AND DESIGNATION
Area C	GROUND-WATER SAMPLE LOCATION AND DESIGNATION
Area E	SOIL/GROUND-WATER SAMPLE LOCATION AND DESIGNATION
4-6'	DEPTH OF SOIL SAMPLE
MW-8	PROPOSED MONITORING WELL LOCATION AND DESIGNATION
	DIRECTION OF GROUNDWATER FLOW (Sigma Environmental Sevices, April 4, 1996)

N

SCALE

0 200

Feet

QUAD GRAPHICS, INC.
NEW BERLIN, WISCONSIN

REVISED PROPOSED MONITORING WELL LOCATIONS

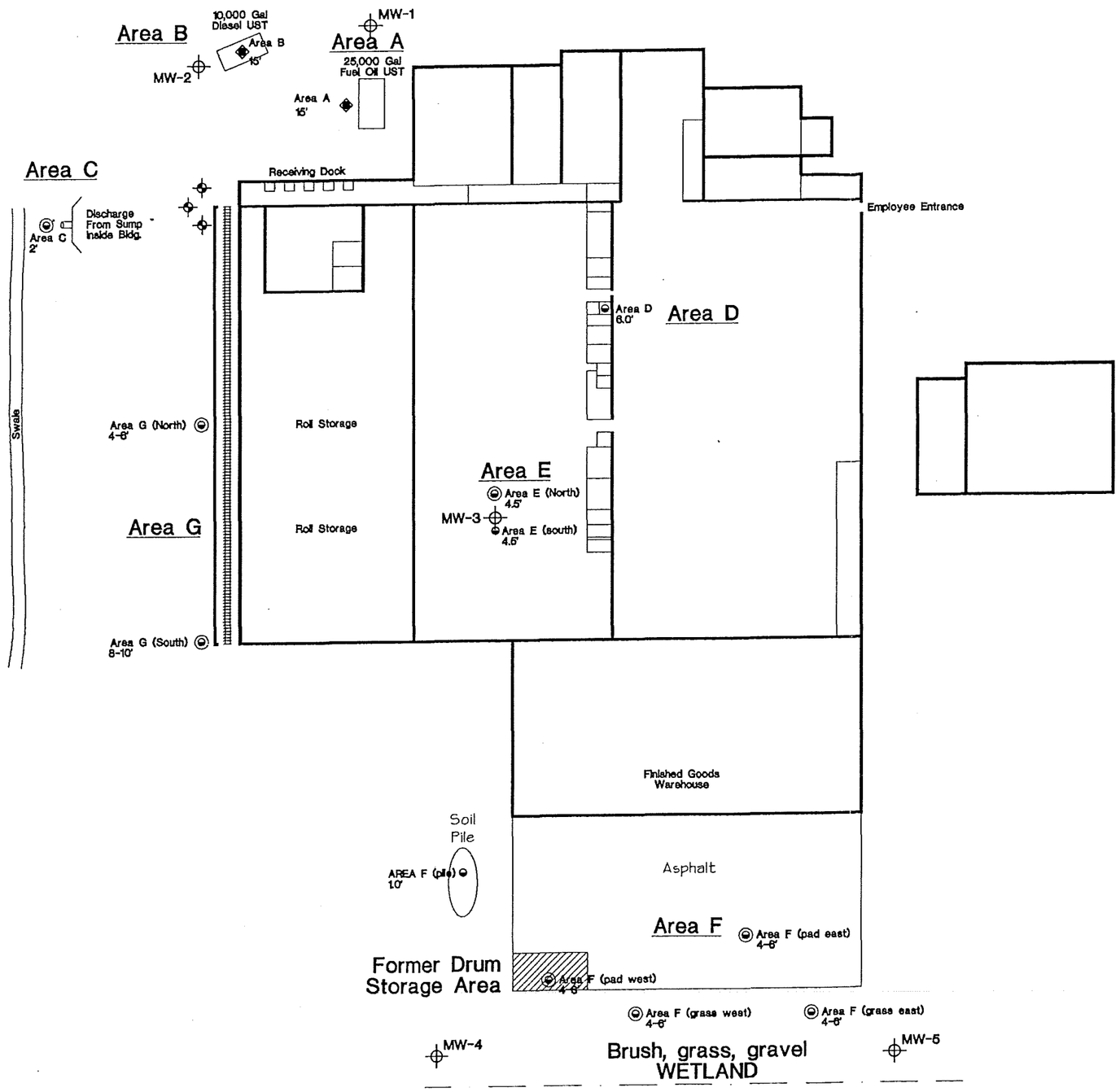
DATE:	05/16/96
DESIGNED:	GLD
CHECKED:	SPF
APPROVED:	MRN
DRAWN:	bob
PROJ.:	304253288

HYDRO-SEARCH INC
A Tetra Tech Company

Figure 2

Base map modified from Ringier America Bldg. Layout Map.

/hsi/425/3288/3288-b2



EXPLANATION

	EXISTING GROUND-WATER MONITOR WELL LOCATION
Area E	SOIL SAMPLE LOCATION AND DESIGNATION
Area C	GROUND-WATER SAMPLE LOCATION AND DESIGNATION
Area E	SOIL/GROUND-WATER SAMPLE LOCATION AND DESIGNATION
4-6'	DEPTH OF SOIL SAMPLE
MW-2	PROPOSED MONITORING WELL LOCATION AND DESIGNATION

N

SCALE

0 200

Feet

QUAD GRAPHICS, INC.
NEW BERLIN, WISCONSIN

PREVIOUSLY PROPOSED MONITORING WELL LOCATIONS

DATE:	05/16/96
DESIGNED:	gld
CHECKED:	spf
APPROVED:	mrn
DRAWN:	bob
PROJ.:	304253288

HYDRO-SEARCH INC
A Tetra Tech Company

Figure 1

Base map modified from Ringier America Bldg. Layout Map.

/hsi/425/3181/3181-b2

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, District Director

Southeast District Annex
4041 N. Richards Street, Box 12436
Milwaukee, WI 53212-0436
TELEPHONE 414-229-0800
FAX 414-229-0810

April 23, 1996

FID#: 268017090
LUST

QUAD GRAPHICS INC
16555 W ROGERS DR
NEW BERLIN WI 53151

ATTN: PLANT MANAGER

RE: former Ringier America Facility, same address

On January 1, 1996, the Federal Grant to Wisconsin for implementing the Leaking Underground Storage Tank (LUST) Program was greatly reduced. Due to this unforeseen shortfall in funds, the Wisconsin Department of Natural Resources (WDNR) has reduced the LUST staff in Southeast District.

In order to expedite the remedial action on your case, the WDNR will no longer actively manage your leaking underground storage tank case. The non-management status of your case should not delay the site investigation and/or remedial activities as required by Wisconsin State Statute 144.76. Your professional environmental consultant should be able to guide you through the remedial investigation and/or cleanup of your property.

When your environmental consultant feels that the site meets the closure criteria outlined in Wisconsin Administrative Code NR-700, then your consultant should request, in writing, a review of the case file by the Department. The request for closure will be logged into a database upon receipt and will be handled by the first available reviewer on a "first in - first out" basis.

By allowing your consultant to proceed with investigation and remedial action without waiting for specific approval, the Department hopes to prevent a backlog of plan reviews and associated delays.

Sincerely,

Charles J. Krohn
LUST Section Supervisor
Southeast District

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, District Director

Southeast District Annex
4041 N. Richards Street, Box 12436
Milwaukee, WI 53212-0436
TELEPHONE 414-229-0800
FAX 414-229-0810

FID#:268017090
LUST

(Note: originals sent 3-26-96 thru 3-29-96. **File copy.**)

QUAD GRAPHICS/PEWAUKEE
W224 N3322 DUPLAINVILLE ROAD
PEWAUKEE, WI, 53072-4195

Dear QUAD GRAPHICS/PEWAUKEE,

RE: FORMER RINGIER AMERICA FACILITY
16555 W ROGERS DR
NEW BERLIN

On January 1, 1996, the Federal Grant to Wisconsin for implementing the Leaking Underground Storage Tank (LUST) Program was greatly reduced. Due to this unforeseen shortfall in funds, the Wisconsin Department of Natural Resources (WDNR) has reduced the LUST staff in Southeast District.

In order to expedite the remedial action on your case, the WDNR will no longer actively manage your leaking underground storage tank case. The non-management status of your case should not delay the site investigation and/or remedial activities as required by Wisconsin State Statute 144.76. Your professional environmental consultant should be able to guide you through the remedial investigation and/or cleanup of your property.

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By allowing your consultant to proceed with investigation and remedial action without waiting for specific approval, the Department hopes to prevent a backlog of plan reviews and associated delays.

Sincerely,

Charles J. Krohn
LUST Section Supervisor
Southeast District

HYDRO-SEARCH, INC.
A Tetra Tech Company

August 29, 1995
(304253281)

Mr. Charles Krohn
Hydrogeologist Supervisor
Wisconsin Department of Natural Resources
P. O. Box 12436
Milwaukee, WI 53212

RE: Subsurface Investigation - Former Ringier America Facility, 16555 W. Rogers Drive, New Berlin, Wisconsin

Dear Mr. Krohn:

On August 1, 1995, Quad/Graphics, Inc. closed in trust and on August 15, 1995 received the title to the former Ringier America facility in New Berlin. On August 1, 1995, Mr. Thomas Estock sent to you the results of an environmental assessment which was performed as part of the pre-purchase environmental due diligence. The purpose of this letter is to provide a written summary of the analytical results, and to propose to the WDNR additional assessment and remediation activities at areas of potential concern. As you are probably aware, Ringier America has retained responsibility for closure of its RCRA storage areas which encompasses the former UST area on the northwest side of the facility. Therefore, this letter will not address the RCRA closure area.

Investigative Results

A soil and ground-water investigation was conducted on May 31, June 2, and June 22, 1995 at areas of potential concern at the Ringier facility. This investigation focused on areas identified to be of greatest environmental concern based on HSI conversations with Quad/Graphics, Inc. and a site visit by HSI. The investigation objectives were to determine whether soil and ground-water impacts exist at the Ringier site through photoionization detector (PID) screening and soil and ground-water sample collection for laboratory analysis using hand auger and GeoProbe-type technology.

175 N. Corporate Drive, Suite 100, Brookfield, Wisconsin 53045 Telephone (414) 792-1282 Facsimile (414) 792-1310

The seven major investigation locations are labeled Area A through G as shown on Figure 1. Soil and ground-water samples are also labeled by major area and/or by specific location within the area and depth below ground surface. PID screening results are found in Attachment A. Laboratory results are presented in Attachment B, soil analytical results are summarized on Table 1, and ground-water results on Table 2. Detailed investigation results for each location are presented below.

AREA A

Area A is the location of a former 25,000-gallon fuel oil underground storage tank (UST) north of the boiler room (Figure 1). It was proposed that a ground-water sample be collected from directly beneath the former tank location. If volatile organic compounds (VOCs) were detected during field screening, a sample of the most impacted soils was to be collected for lab analysis. All samples were to be analyzed for diesel range organics (DRO) and petroleum volatile organic compounds (PVOCs).

Initial Soil Results

On May 31, 1995, two soil borings near the center of the location of the former UST encountered what was thought to be a concrete anchor pad at approximately 13 feet below ground surface (bgs). The gravelly nature of the backfill also prevented the collection of a soil sample for PID screening within the excavation. A third borehole was installed at a western location thought to be immediately adjacent to the excavation based on the appearance of the asphalt replacement. The apparent concrete pad obstruction was encountered again at approximately 13 feet bgs. A fourth borehole was installed approximately 10 feet west of the third borehole and encountered hard clays and compacted fine sand. A soil sample from approximately 17 feet bgs yielded no odor or significant PID reading. The fourth borehole was not located within the former UST excavation; therefore, no soil sample was collected for lab analysis.

Initial Ground-Water Results

On May 31, 1995, no ground-water samples were collected from within the former UST excavation or immediately adjacent due to the apparent concrete pad obstruction. On that date, a ground-water sample (Area A-15') was collected at approximately 15 feet bgs at the fourth borehole. Lab analyses indicated that no DRO or PVOCs were present above method detection limits (Table 2).

Subsequent Investigation

Because the direction of ground-water flow was not clearly defined at this site, it was decided that additional samples would be collected to the north, east and west of the former 25,000 gallon tank to determine if hydrocarbon impacts were present. Additional samples were collected on June 22, 1995.

A ground-water sample was collected using a GeoProbe type sampler from immediately north of the former UST location. The ground-water sample was analyzed for PVOCs. The analytical results are attached, and summarized on Table 2. Benzene, toluene, xylenes and trimethylbenzenes were detected at concentrations of less than 5 μg/ℓ each; benzene, however, was detected at 3.5 μg/ℓ, which is greater than the NR140 Preventative Actions limit of 0.5 μg/ℓ.

Insufficient ground water could be collected for analysis of diesel range organics (DRO) from the north sampling location. A saturated soil sample was collected from a depth of 15 to 17 feet; no DRO was detected in this soil sample.

A ground-water sample was also collected from immediately east of the former UST location. Sufficient ground water was collected for analysis of both PVOCs and DRO. 1,2,3-trimethylbenzene was the only PVOC detected; DRO was detected at 0.55 mg/ℓ

Because of lengthy periods to collect ground-water samples at the locations north and east of the former UST, insufficient time was available for the collection of a ground-water sample south of the UST. Therefore, a saturated soil sample was collected from a depth of 15 to 17 feet. No PVOCs, nor DRO, were detected in the sample.

The results of this additional investigation indicate that low concentrations of PVOCs are present in ground water at the location of the former 25,000 gallon fuel oil tank. The only VOC of concern in benzene, which was detected above its NR140 PAL, but below its enforcement standard. Because of the clay soils present, the removal of the suspected source, and the other sample analyses from around the tank, the extent of benzene impacts is expected to be limited to the area immediately north of the apparent concrete pad.

AREA B

Area B is the location of a former 10,000-gallon diesel fuel UST east of the railroad spur (Figure 1). It was proposed that a ground-water sample be collected from directly beneath the former tank location and a soil sample of the most impacted soil if VOCs were detected during drilling. The samples were to be analyzed for DRO and PVOCs.

Soil Results

No soil sample was collected for lab analysis as no odor or significant PID readings were encountered from borehole samples. Very plastic, stiff clays were found at approximately 14 feet bgs.

Ground-Water Results

A ground-water sample (Area B-15') was collected at approximately 15 feet bgs. Lab analyses indicated that no PVOCs were present above method detection limits. However, a DRO concentration of 1320 parts per billion (ppb) was present (Table 2).

AREA C

Area C is the location of a discharge point for the sump serving the railroad spur within the building (Figure 1). A soil sample and a ground-water sample were to be collected and analyzed for the VOCs for which NR 140 ground-water standards have been established.

Soil Results

A soil sample (Area C-2') was collected at approximately 2 feet bgs directly west of the discharge point using a hand auger. The sample consisted of black, silty clay that had a strong petroleum odor. PID screening resulted in a detection of 75 parts per million (ppm). Lab analyses indicated that ethylbenzene, toluene, and xylenes were present, but in concentrations below NR 720 standards (Table 1). Two compounds that do not have NR 720 soil standards were also detected; tetrachloroethene (PCE) and trichloroethene (TCE).

Three additional hand-augered boreholes were made (approximately 3 feet to the north, south, and west of the sump discharge) to determine the extent of soil impacts in this area. Soil samples at 1 foot bgs in each of these boreholes yielded no odors or significant PID readings. Therefore, the extent of soil impacts was determined to be limited to soil directly west of (in front of) the sump discharge point.

Ground-Water Results

A water sample was collected from a depth of 2 feet from the hand-augered borehole in front of the sump discharge point. The sample location is only a few feet from a ditch filled with storm water, and the sample is apparently of perched ground water. A sheen and petroleum odor were observed from the water sample. Lab analyses indicated that benzene, xylenes, cis-1,2-dichloroethene (1,2-DCE), and TCE were present at concentrations above NR 140 preventive action limits (PAL; Table 2); no enforcement standards (ES) were exceeded for these compounds, however. Low concentrations of naphthalene and toluene were also present.

AREA D

Area D is the location of the collection sump in the floor of the solvent product storage room (Figure 1). It was proposed that a soil sample, and possibly a ground-water sample, be collected from directly beneath the sump for analysis of the VOCs for which an NR 140 standard has been established. Concrete coring through the bottom of the sump, and hand augering below the sump were to be used as access was too restrictive for GeoProbe sampling.

Soil Results

Approximately 8 inches of concrete was cored before a hand-augered soil sample (Area D-6') was collected at approximately 6 feet bgs. Very stiff clay was encountered. Lab analyses indicated that benzene, ethylbenzene, toluene, and xylenes (BETX) were present, but at concentrations below NR 720 standards. Two compounds without NR 720 soil standards (naphthalene and 1,2-DCE) were also detected (Table 1).

Ground-Water Results

No ground-water was encountered or sampled due to the difficulties associated with hand augering in a confined manhole.

AREA E

Area E is the former location of two oil sumps in the former press area of the building. The oil sumps were filled in with concrete and the general area is overlaid by 12 inches of concrete floor. It was proposed that soil samples be collected at approximately 4.5 feet bgs at each sump and ground-water samples be collected at greater depth. Samples were to be lab analyzed for DRO and the polynuclear aromatics (PNA) for which NR 140 standards have been established. Twelve inches of concrete floor was to be cored at each sump location prior to GeoProbe sampling.

Soil Results

Two soil samples (Area E-North 4.5' and Area E-South 4.5') were collected for lab analysis. Soil stratigraphy consisted of sand and gravel and gray clay. No detection of DRO above the detection limit was found in either sample. One compound without a soil standard was found in both samples: bis-2-ethylhexyl phthalate (Table 1).

Ground-Water Results

One ground-water sample (Area E-North) was collected at the north sump location. DRO was detected at 1700 ppb; there is no NR 140 PAL established for DRO (Table 2). The NR 140 ES was exceeded for bis-2-ethylhexyl phthalate at 345 ppb; no other PNA was detected (Table 2). As this ground-water sample required 70 minutes to collect with GeoProbe methods, a second sample at the south sump location was not attempted.

AREA F

Area F is the location of the outdoor product and drum storage. It was proposed to collect five soil and four ground-water samples: two soil and ground-water samples from below the asphalt pad, two soil and ground-water samples from the grass/marsh area south of the asphalt pad, and one soil sample from a soil pile west of the pad. All samples were to be analyzed for the VOCs for which NR 140 standards have been established.

Soil Results

No significant odors or PID readings were observed in any soil sample. Between two and five PID readings were made at each borehole. Soils consisted of clayey sand and gravel and clay.

Lab analyses (Table 1) indicated that one or more VOCs were detected in low concentrations (less than 7 ppb total VOCs) at three of five soil sampling locations. No NR 720 soil standards were exceeded for soil samples.

Ground-Water Results

One or more VOCs were detected in low concentrations (less than 18 ppb total VOCs) at four of four ground-water sampling locations (Table 2). Concentrations of VOCs in two of the four locations, however, exceed NR 140 standards. The western asphalt pad ground-water sample (Area F- Pad West) exceeded the PAL for benzene at 1.1 ppb. The eastern grass area south of the asphalt pad (Area F-Grass East) exceeded the ES for vinyl chloride and the PAL for 1,2-DCE at 1.4 ppb and 17.6 ppb, respectively.

AREA G

Area G is adjacent to the railroad spur inside the building. It was proposed to sample soil and ground-water inside the building at two locations. However, the stone subgrade of the railroad line and access around rail cars to stained areas within the building required GeoProbe sampling to be conducted adjacent to the west wall outside the building. All samples were to be lab analyzed for the VOCs for which NR 140 standards have been established.

Soil Results

Three to four PID readings were recorded at each sampling location. Soils consisted of clayey sand and gravel and stiff clay. No odors or significant PID measurements were observed in any soil sample. Lab analyses indicated no detection of VOCs in concentrations above NR 720 standards.

Ground-Water Results

Lab analyses indicated no concentration of VOCs above detection limits in either ground-water sample.

Summary of Impacts

The following are areas where analytical results exceed a NR 140 PAL for ground water or have impacts without NR140 standards, or exceed NR 720 standards for soils:

Area A - former 25,000-gallon fuel oil UST excavation

One ground-water sample collected from north of the former tank location contains benzene at 3.5 μg/ℓ, which exceeds the PAL of 0.5 but is below the 5.0 μg/ℓ ES.

Area B - former 10,000-gallon diesel fuel UST excavation

DRO is present at a concentration of 1320 ppb in ground water. There is no NR 140 ground-water standard for DRO. No PVOCs were detected at this location.

The results indicate that a release occurred from the former diesel fuel tank.

Area C - location of sump discharge

Benzene, xylenes, 1,2-DCE, and TCE are present in ground water at concentrations above NR 140 PALs. None of these compounds exceed NR 140 ESs. NR 720 soil standards were not exceeded for those VOCs for which standards exist. Based upon the stiff clay soils present at this location and field observation of soil samples collected at three locations about 3 feet from the sump discharge, the extent of impacts at this location is expected to be quite limited.

Area E - north oil sump in press area of the building

The NR 140 ES for bis-2-ethylhexyl phthalate was exceeded for ground water at this location. DRO was also detected at a concentration of 1700 ppb in ground water; there is no NR 140 standard for DRO.

Area F - outdoor product and drum storage

Ground water from one sample beneath the asphalt pad exceeded the NR 140 PAL for benzene. The ES was not exceeded at this location. Ground water from beneath the grassy area south of the asphalt pad exceeded the NR 140 PAL for 1,2 DCE and the ES for vinyl chloride.

Proposed Remedial Investigations and Actions

No significant impacts were observed in areas D and G. Therefore, no additional monitoring or action is required in these two areas. Each of the other areas is addressed below. In each case, the suspected source of impacts has been removed. Proposed monitor well locations are shown on Figure 2.

Area A - former 25,000-gallon fuel oil UST excavation

A single monitor well, (MW-1) located just north of the former tank location is proposed. This location is proposed as benzene was detected in the sample north of this tank. A ground-water sample will be collected and analyzed for PVOCs. A ground-water sample will be collected quarterly for the first year. Assuming an average concentration for the four quarters no higher than existing results, it will be sampled on an annual basis thereafter. The well will be sampled until the expected natural processes degrade the benzene until it is to a concentration below its PAL for two consecutive quarters.

Area B - former 10,000-gallon diesel fuel UST excavation

The extent of ground-water impacts at this location is not known. However, because no PVOCs have been detected, and because clay soils are present, it is expected that the

extent of ground-water impacts is limited. In order to define the extent of impacts, a ground-water monitor MW-2 well is proposed just west of the former 10,000 gallon diesel UST, as shown on Figure 2. Ground water will be sampled upon well installation, and analyzed for PVOCs, PNAs, and DRO in the first round, and for PVOCs and DRO in subsequent quarters. MW-1, MW-2 and the Sigma Environmental wells can be used to confirm the direction of ground-water flow. A long term monitoring schedule and the need for remediation will be determined after the initial samples are analyzed.

Area C - location of sump discharge

The impacts at this location are likely associated with past storage and handling activity associated with the area undergoing RCRA closure. For this reason, further assessment and remediation in this area should be made part of the ongoing RCRA closure that is to be conducted by Ringier at the facility. The extent of impacts at this location is expected to be limited to a few cubic feet of clay soils at most. It is proposed that impacted soils be excavated from this location and properly disposed. Based upon previous observations at this location, the extent of impacted soil should be based upon visual observations and PID readings during excavation. One soil sample should be collected at the base of the excavation and analyzed for VOCs to confirm that clean soils have been reached. If perched ground water enters the hole during excavation, a water sample should be collected and analyzed for VOCs. No further remediation or monitoring should be necessary at this time.

Area E - Oil sump in press area of the building

Bis-2-ethylhexyl phthalate is not highly mobile in ground water and its suspected sources (sumps) have been removed. The impacted ground water is located under the concrete floor of the building, and therefore, precipitation will not provide a means of flushing

residual soil impacts from the unsaturated zone to ground water. This compound has a half-life due to biological breakdown of approximately one year (see Attachment C). For these reasons, off-site migration of the impacts is not likely. Therefore, Quad/Graphics proposes to monitor the ground water adjacent to these two former sumps. Monitor well MW-3, located between the sumps, will be installed. The ground water will be analyzed quarterly for the first year for PNAs, and, assuming an average concentration for the four quarters at a level no higher than the existing results, annually for these compounds thereafter until the concentration of bis-2-ethylhexyl phthalate declines to below its PAL for two consecutive sampling rounds.

Area F - Outdoor Product and Waste Drum Storage Area

The extent of VOCs which exceed their respective PAL has not been determined for this area. Because ground water likely discharges to the wetland along the southern property line at the facility, it is probable that any of the observed impacts are volatilized in the wetland. Because of the very low concentrations observed, no active remediation is proposed.

Two ground-water monitor wells, MW-4 and MW-5, are proposed as shown on Figure 2. The intent of these wells is to define the probable downgradient extent of VOCs impacts to ground water. Upon installation, each will be properly developed and sampled, and the samples analyzed for VOCs. The wells will be subsequently analyzed quarterly for the first year. Assuming an average concentration for the four quarters at a level no higher than existing results, it will be sampled annually thereafter for VOCs until concentrations have decreased to below PALs for two consecutive sampling rounds.

Upon construction of the proposed wells and the receipt of analytical results, a report will be prepared which evaluates the analytical results. The direction of ground-water flow

at the site will also be determined using data collected during the first round of quarterly samples. Assuming WDNR approval of this plan, the first round of samples will be collected in October 1995, and a report completed before the end of December.

For each of the above areas, natural biodegradation has been chosen as the means of remediation at this time, given the relatively low levels of concentrations detected at each area. The results of additional investigative work may indicate that more active remediation may be desirable, such as at the diesel fuel tank. Additional activity to encourage natural degradation may also be implemented.

* * * * * * * * * * * * *

I trust this information meets your needs. If you have any questions, please feel free to call.

Sincerely,

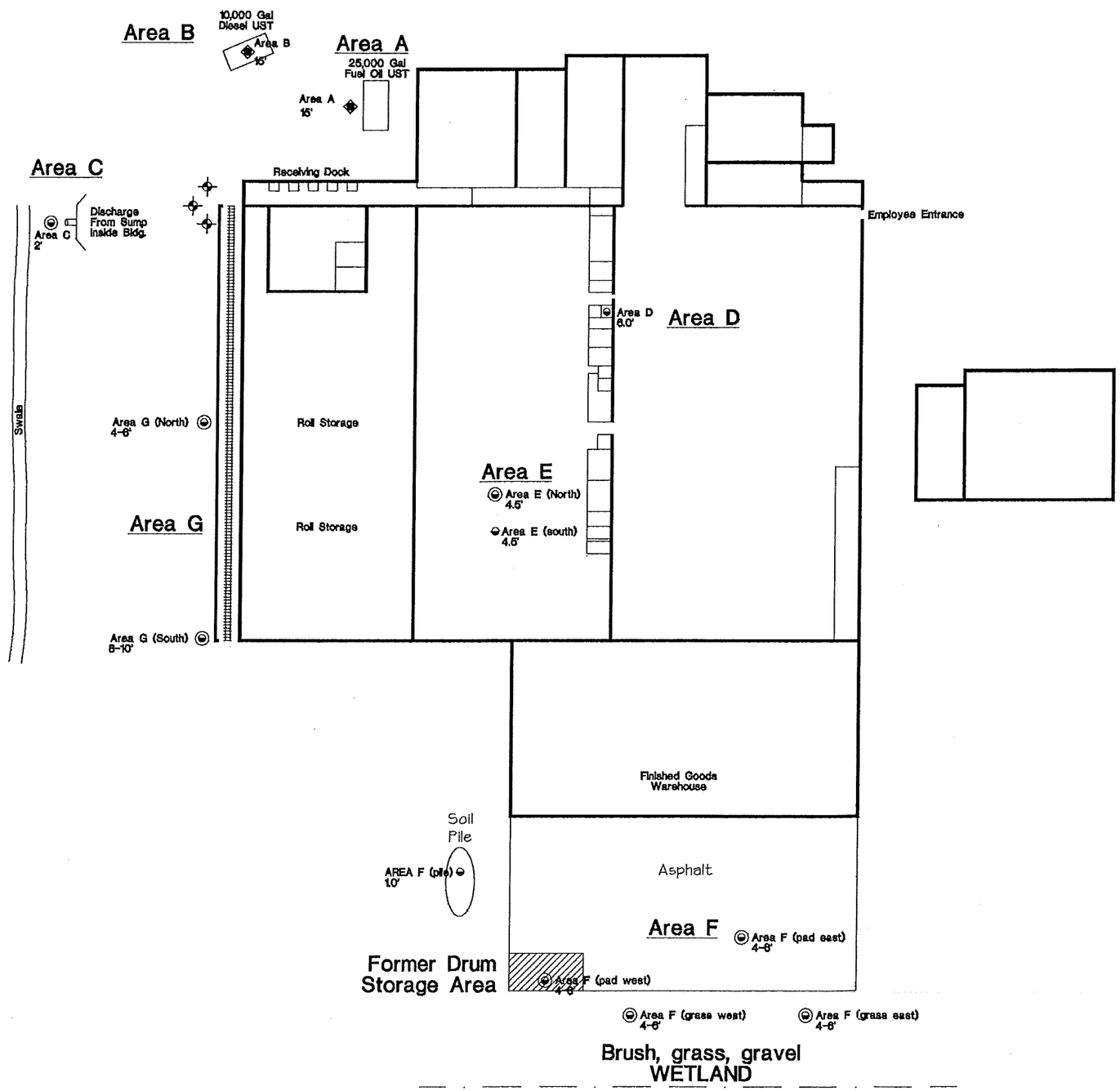
HYDRO-SEARCH, INC.

Gerald L. DeMers

Gerald L. DeMers, P.E.
Senior Engineer

GLD:gf

cc: Tom Estock
Art Harrington
Debra Kraft



EXPLANATION

	EXISTING GROUND-WATER MONITOR WELL LOCATION
Area E	SOIL SAMPLE LOCATION AND DESIGNATION
Area C	GROUND-WATER SAMPLE LOCATION AND DESIGNATION
Area E	SOIL/GROUND-WATER SAMPLE LOCATION AND DESIGNATION
4-6'	DEPTH OF SOIL SAMPLE

N

SCALE

0 200

Feet

QUAD GRAPHICS, INC.
NEW BERLIN, WISCONSIN

SITE AND INVESTIGATION LOCATIONS

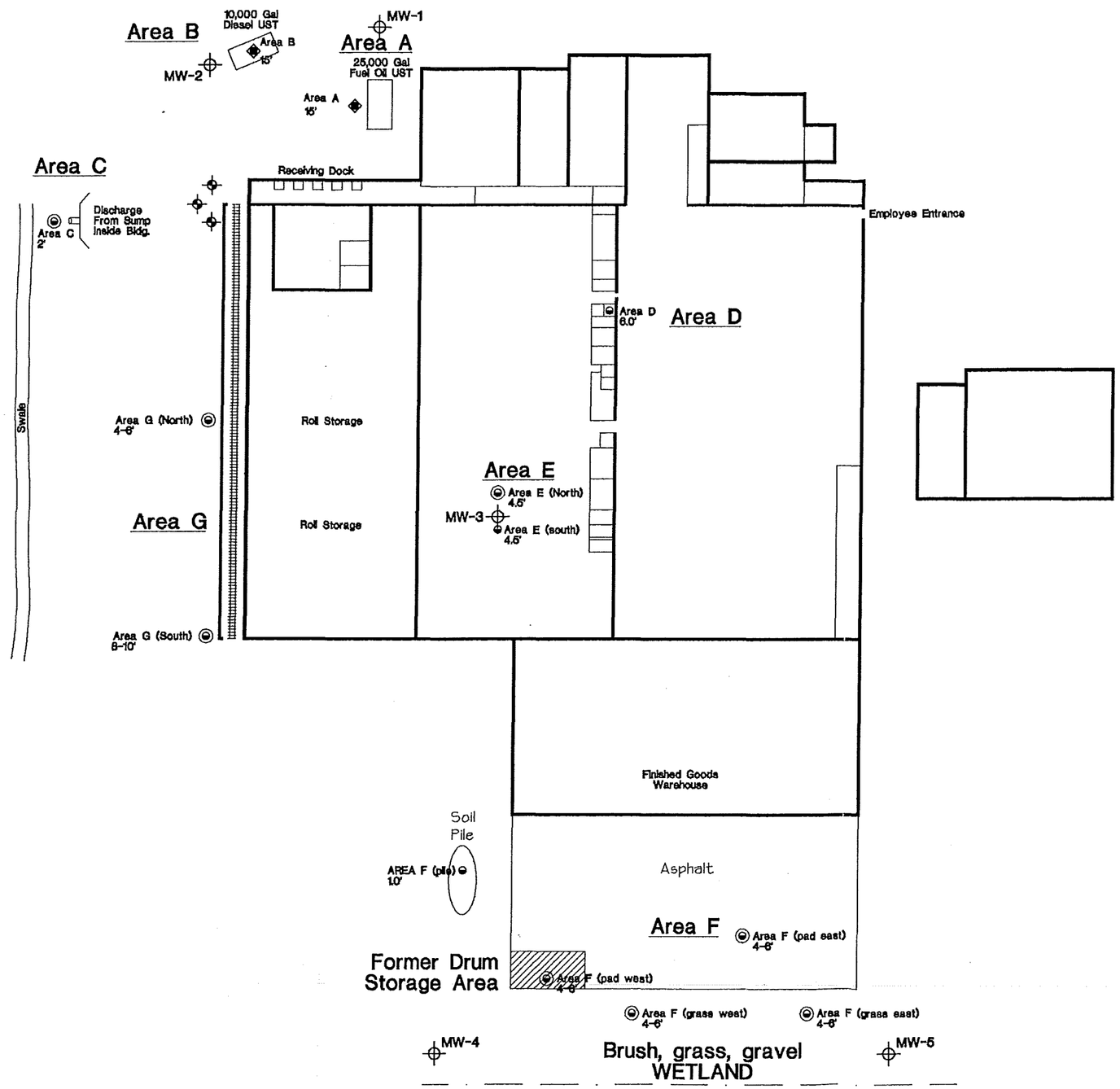
DATE:	06/07/95
DESIGNED:	DCN
CHECKED:	DCN
APPROVED:	DLM
DRAWN:	MCL
PROJ.:	304253281

HYDRO-SEARCH INC
A Tetra Tech Company

Figure 1

Base map modified from Ringier America Bldg. Layout Map.

/hsi/425/3181/3181-b1



EXPLANATION

	EXISTING GROUND-WATER MONITOR WELL LOCATION
Area E	SOIL SAMPLE LOCATION AND DESIGNATION
Area C	GROUND-WATER SAMPLE LOCATION AND DESIGNATION
Area E	SOIL/GROUND-WATER SAMPLE LOCATION AND DESIGNATION
4-6'	DEPTH OF SOIL SAMPLE
MW-2	PROPOSED MONITORING WELL LOCATION AND DESIGNATION

N

SCALE

0 200

Feet

Base map modified from Ringler America Bldg. Layout Map.

/hsi/425/3181/3181-b2

QUAD GRAPHICS, INC.
NEW BERLIN, WISCONSIN

PROPOSED MONITORING WELL LOCATIONS

DATE:	08/18/95
DESIGNED:	GLD
CHECKED:	SPF
APPROVED:	MRN
DRAWN:	MCL
PROJ.:	304253281

HYDRO-SEARCH INC
A Tetra Tech Company

Figure 2

Table 1. Laboratory Analytical Results for Soil
Former Ringier America Facility, June 1995

Compound	NR 720 Standard	Sample Location and I.D.											
		Area A	Area C	Area D	Area E		Area F					Area G	
		Soil South	Area C-2'	Area D-6'	North 4.5'	South 4.5'	Pile 1'	Pad East 4-6'	Pad West 4-6'	Grass East 4-6'	Grass West 4-6'	North 4-6'	South 8-10'
Volatile Organic Compounds													
Benzene	5.5			1.9	NA	NA		2.7				1.2	
Ethylbenzene	2,900		229.0	538.0	NA	NA							
Naphthalene	None			4.0	NA	NA							
Toluene	1,500		15.0	53.6	NA	NA		1.2		1.0		2.0	
Xylenes (total)	4,100		1960.0	988.0	NA	NA		3.1		1.1	1.0	5.8	
Vinyl chloride	None				NA	NA							
1,1-Dichloroethane	None				NA	NA							
1,1-Dichloroethene	None				NA	NA							
cis-1,2-Dichloroethene	None			56.0	NA	NA				3.5			
Tetrachloroethene	None		34.0		NA	NA							
Trichloroethene	None		17.0		NA	NA							
Diesel Range Organics	100		NA	NA			NA	NA	NA	NA	NA	NA	NA
Polynuclear Aromatics													
Bis-2-ethylhexylphthalate	None		NA	NA	2.67	0.50	NA	NA	NA	NA	NA	NA	NA

Note: All concentrations in parts per billion except diesel range organics and polynuclear aromatics (parts per million).

Blank entries mean no detection above quantification limits.

NA means not analyzed.

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Table 2. Laboratory Analytical Results for Ground Water
Former Ringier America Facility, June 1995

Compound	NR 140 Preventive Action Limit	NR 140 Enforcement Standard	Sample Location and I.D.											
			Area A			Area B	Area C	Area E	Area F				Area G	
			Area A-15' West	North	East	Area B-15'	Area C-2'	North	Pad East	Pad West	Grass East	Grass West	North	South
Volatile Organic Compounds														
Benzene	0.5	5		3.5			1.3	NA		1.1				
Ethylbenzene	140	700					70.5	NA	1.3					
Naphthalene	8	40	NA			NA	3.0	NA						
Toluene	68.6	343		1.9			7.2	NA						
Xylenes	124	620		4.5			511	NA		3.0		1.0		
1,2,4 Trimethylbenzene				4.9	1.9									
1,3,5 Trimethylbenzene				1.9										
Vinyl chloride	0.02	0.2	NA			NA		NA			1.4			
1,1-Dichloroethane	85	850	NA			NA		NA		1.0		2.7		
1,1-Dichloroethene	0.7	7	NA			NA		NA						
cis-1,2-Dichloroethene	7	70	NA			NA	12.3	NA			17.6			
Tetrachloroethene	0.5	5	NA			NA		NA						
Trichloroethene	0.5	5	NA			NA	1.2	NA						
Diesel Range Organics	None	None	NA	<5*	0.55	1,320	NA	1,700	NA	NA	NA	NA	NA	NA
Polynuclear Aromatics														
Bis-2-ethylhexylphthalate	0.3	3	NA			NA	NA	345	NA	NA	NA	NA	NA	NA

Note: All concentrations in parts per billion.
Blank entries mean no detection above quantification limits.
NA means not analyzed.
Shaded concentrations indicate exceedance of an NR 140 PAL or ES
* = Soil sample for DRO

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ATTACHMENT A

PID Screening Results

PID measurements 5/31/95

Area C Sump discharge (1:30 pm) 2' petroleum odor

Area A 10' west at 17' depth (1:42) no odor

Area C 3' north of discharge 1' depth (1:47) (no odor)

" 3' south of discharge 1' depth (1:40) (no odor)

" 3' west " " 1' depth (1:57) (no odor)

Area B Center of excav. 14' depth (3:55) (no odor)

7-5-3 HNU calibration
67 ppm isobutylene
span 3.9

Background	Reading	
.5	2:00 pm	75 ppm
.5	2:16	4 ppm
.5	2:17	2 ppm
.5	2:15	10 ppm
.5	2:19	1.8 ppm
.5	4:16	5 ppm

PID measurements 6/1/95

LOCATION			TIME COLLECT	Background	Reading + TIME
Area F	Pile	1'	7:51 am	.2	2 ppm 8:16 am
Area G	North	2-4'	10:58	.4	3 ppm 11:19
		4-6'	11:04	.2	2 ppm 11:22
		6-8'	11:10	.2	2.5 ppm 11:30
Area G	South	2-4'	12:16 pm	.2	2.8 ppm 12:43 pm
		4-6'	12:19	.3	2.2 ppm 12:45
		6-8'	12:30	.2	3.2 ppm 13:07
		8-10'	12:38	.2	2 ppm 13:09
Area F	Pad West	2-4'	1:40	.2	3 ppm 14:12
		4-6'	1:45	.5	2.2 ppm 14:13
Area F	Pad East	2-4'	2:09	.3	3.5 ppm 2:39
		4-6'	2:24	.3	4 ppm 2:45
		6-8'	2:25	.4	2 ppm 2:48
		8-10'	2:28	.3	2.5 ppm 2:50
		10-12'	2:36	.2	3 ppm 3:18
Area F	Grass East	2-4'	3:45	.2	3 ppm 4:06
		4-6'	3:50	.2	2 ppm 4:10
Area F	Grass West	2-4'	4:20	.2	2.8 ppm 4:45
		4-6'	4:31	.3	2 ppm 4:47

7:46 HNU calibration
67 ppm isobutylene
span 4.14

ATTACHMENT B

Laboratory Analytical Results

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, TN 37204
615-726-0177
FAX 615/726-3404

REFERRING CLIENT

Hydro-Search, Inc. 6129
175 N. Corporate Dr.
#100
Brookfield, WI 53045 → 414-792-1282 Fax 792-1310

LLING CONTROL NUMBER (FOR LAB USE ONLY): 26469

PROJECT #: 30425 3281

P.O. #:

MPLERS (Signature-Please Print): DAVID NADER

PROJECT NAME: QuadGraphics

FOR LAB USE ONLY ACC#	SAMPLE DESCRIPTION	DATE	TIME	COMP	GRAB	# OF CONT	ANALYSIS REQUESTED
5-A081009	Area A - 15'	5/31/95	1:55		✓ GW	1 L	DRO
5-A081010	Area A - 15'	5/31/95	2:15		✓	2-40 ml	PVOC
5-A081011	TRIP					3-40 ml	PVOC
5-A081012	Area B - 15'	5/31/95	4:20		✓ GW	1 L 2-40 ml	DRO and PVOC
5-A081021	Area C - 2'	5/31/95	7:20		✓ SOIL	1-4 oz	VOCs
5-A081014	Area C - 2'	6/1/95	8:20		✓ GW	2-40 ml	VOCs
5-A081022	Area D - 6'	6/1/95	9:45		✓ SOIL	1-4 oz	VOCs
5-A081023	Area F Pile - 1'	6/1/95	7:55		✓ SOIL	1-4 oz	VOCs
5-A081024	Area F Grass West 4-6'	6/1/95	4:30		✓ SOIL	1-4 oz	VOCs
5-A081025	Area F Grass East 4-6'	6/1/95	3:50		✓ SOIL	1-4 oz	VOCs

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Received for Laboratory by:	Date / Time
David Nader	6/2/95 5:00		[illegible]	6/5/95 0937
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Remarks	
			Sample bottles came late so I used PAL and NET containers	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)		
			*only report results for cmpds noted in the attached for VOC, PVOC, and PAH	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)		

For further assistance in completing the chain of custody form please refer to the instructions found on the opposite sid

RESULTS FAXED TO HSI by 6/9/95

SPECIALIZED ASSAYS
ENVIRONMENTAL

2 of 3

REFERRING CLIENT
Hydro-Search, Inc.
175 N. Corporate Dr. #100
Brookfield, WI 53045
414-792-1282 Fax 792-1310

2960 Foster Creighton Drive
Nashville, TN 37204
615-726-0177
FAX 615/726-3404

NG CONTROL NUMBER (FOR LAB USE ONLY)

PROJECT # 3042533281

P.O. #

MPLERS (Signature-Please Print) DAVID NADER

PROJECT NAME QuadGraphics

FOR LAB USE ONLY ACC#	SAMPLE DESCRIPTION	DATE	TIME	COMP	GRAB	# OF CONT	ANALYSIS REQUESTED
5-A031025	Area F Pad West 4-6'	6/1/95	1:45		✓ Soil	1 4 oz	VOCs
5-A031027	Area F Pad East 4-6'	6/1/95	2:46		✓ Soil	1 4 oz	VOCs
5-A031028	Area G South 8-10'	6/1/95	12:40		✓ Soil	1 4 oz	VOCs
5-A031029	Area G North 4-6'	6/1/95	11:35		✓ Soil	1 4 oz	VOCs
5-A031015	Area G South	6/1/95	1:00		✓ GW	2 40 ml	VOCs
5-A031016	Area G North	6/1/95	11:45		✓ GW	2 40 ml	VOCs
5-A031013	Area E North	5/31/95	9:35		✓ GW	2 L	DRO and PAH
5-A031017	Area F Grass West	6/1/95	4:45		✓ GW	2 40 ml	VOCs
5-A031018	Area F Grass East	6/1/95	4:00		✓ GW	2 40 ml	VOCs
5-A031019	Area F Pad West	6/1/95	2:05		✓ GW	2 40 ml	VOCs

quished by: (Signature)	Date / Time	Received by: (Signature)	Received for Laboratory by:	Date / Time
David Nader	6/2/95 5:00		[illegible]	6/5/95 09:3[illegible]
nquished by: (Signature)	Date / Time	Received by: (Signature)	Remarks	
nquished by: (Signature)	Date / Time	Received by: (Signature)		
quished by: (Signature)	Date / Time	Received by: (Signature)		

Remarks: bottles came late so I used NET and PAL containers
* only report results for compound noted in the attached for VOC PAH, and PVOC

For further assistance in completing the chain of custody form please refer to the instructions found on the opposite sid

Results Faxed to HSI by 6/9/95

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, TN 37204
615-726-0177
FAX 615/726-3404

REFERRING CLIENT
Hydro-Search, Inc

LING CONTROL NUMBER (FOR LAB USE ONLY)

PROJECT # 304253281

P.O. #

AMPLERS (Signature-Please Print) DAVID NADER

PROJECT NAME QuadGraphics

FOR LAB USE ONLY ACC#	SAMPLE DESCRIPTION	DATE	TIME	COMP	GRAB	# OF CONT	ANALYSIS REQUESTED
95-A081080	Area F Pad East	6/1/95	3:15		✓ GW	2-40 ml	VOCs
5-A081080	Area E North 4.5'	5/31/95	9:00		✓ Soil	1-4 oz	PAH
5-A081082	Area E North 4.5'	5/31/95	9:00		✓ Soil	1-2 oz	DRO
-A081081	Area E South 4.5'	5/31/95	11:05		✓ Soil	2	DRO and PAH 2 oz. 4 oz.

quished by: (Signature) David Nader	Date / Time 6/2/95 5:00	Received by: (Signature)	Received for Laboratory by: [signature]	Date / Time 6/5/95 09
linquished by: (Signature)	Date / Time	Received by: (Signature)	Remarks bottles came late so I used NET and PAL containers	
linquished by: (Signature)	Date / Time	Received by: (Signature)		
quished by: (Signature)	Date / Time	Received by: (Signature)	* only report results for compounds noted in the attached for VOC, PAH, and PVOC	

For further assistance in completing the chain of custody form please refer to the instructions found on the opposite si

Results faxed to HSI by 6/7/95

11.2 Petroleum Volatile Organic Compound (PVOC) List

The PVOCs are listed below. Groundwater preventive action limits (PALs) and enforcement standards (ES's) from NR 140, Wis. Adm. Code are included.

PVOC	Enforcement Standard (ppb)	Preventative Action Limit (ppb)
benzene	5	.067
ethylbenzene	1360	272
methyl-tertiary-butyl ether	60	12
toluene	343	68.6
~~1,2,4-trimethylbenzene~~	-	-
~~1,3,5-trimethylbenzene~~	-	-
m-xylene	620*	124*
p-xylene	620*	124*
o-xylene	620*	124*

* Specify isomer concentrations if analysis can distinguish them; otherwise report "total xylenes". PAL and ES are for <u>total</u> Xylene.

11.3 Polynuclear Aromatic Hydrocarbons (PAHs)

The PAHs include all the compounds listed below. Groundwater preventive action limits (PALs) and enforcement standards (ES's) from NR 140, Wis. Adm. Code are included.

PAH	Enforcement Standard (ppb)	Preventative Action Limit (ppb)
~~acenaphthene~~	-	--
~~acenaphthylene~~	-	-
~~anthracene~~	-	-
~~benzo(a)anthracene~~	-	-
benzo(a)pyrene	.003	.0003
~~benzo(b)fluoranthene~~	-	-
~~benzo(ghi)perylene~~	-	-
~~benzo(k)fluoranthene~~	-	-
~~chrysene~~	-	-
~~dibenzo(a,h)anthracene~~	-	-
~~fluoranthene~~	-	-
~~fluorene~~	-	-
~~indeno(1,2,3-cd)pyrene~~	-	-
~~1-methyl naphthalene~~	-	-
~~2-methyl naphthalene~~	-	-
naphthalene	40	8
~~phenanthrene~~	-	-
~~pyrene~~	-	-

plus

1,2-Dichlorobenzene	60 ppb
1,3-Dichlorobenzene	125 ppb
1,4-Dichlorobenzene	15 ppb
Bis (2-ethylhexyl) phthalate	0.3 ppb
2,4-dinitrotoluene	.005 ppb
2,6-dinitrotoluene	.005 ppb
Pentachlorophenol	35 0.1 ppb
Phenol	1.2 ppm
Fluorene	N/A

VOC Compounds List

VOC	Enforcement Standard (ppb)	Preventative Action Limit (ppb)
benzene	5	.067
~~bromobenzene~~	-	-
bromodichloromethane	179	36
~~n-butylbenzene~~	-	-
~~sec-butylbenzene~~	-	-
~~tert-butylbenzene~~	-	-
carbon tetrachloride	5	.5
~~chlorobenzene~~	-	-
chlorodibromomethane	215	43
chloroethane	400	80
chloroform	6	.6
~~chloromethane~~	-	-
~~2-chlorotoluene~~	-	-
~~4-chlorotoluene~~	-	-
1,2-dibromo-3-chloropropane	.05	.005
1,2-dibromoethane (EDB)	.01	.001
1,2-dichlorobenzene	1250	125
1,3-dichlorobenzene	1250	125
1,4-dichlorobenzene	75	15
~~dichlorodifluoromethane~~	-	-
1,1-dichloroethane	850	85
1,2-dichloroethane	5	.05
1,1-dichloroethene	7	.024
cis-1,2-dichloroethene	100	10
trans-1,2-dichloroethene	100	20
1,2-dichloropropane	5	.5
~~1,3-dichloropropane~~	-	-
~~2,2-dichloropropane~~	-	-
~~di-isopropyl ether~~	-	-
ethylbenzene	1360	272
~~hexachlorobutadiene~~	-	-
~~isopropylbenzene~~	-	-
~~p-isopropyltoluene~~	-	-
methylene chloride	150	15
methyl-tert-butyl ether	60	12
naphthalene	40	8
~~n-propylbenzene~~	-	-
~~1,1,2,2-tetrachloroethane~~	-	-
tetrachloroethene	1	.1
toluene	343	68.6
~~1,2,3-trichlorobenzene~~	-	-
~~1,2,4-trichlorobenzene~~	-	-
1,1,1-trichloroethane	200	40
1,1,2-trichloroethane	.6	.06
trichloroethene	5	.18
~~trichlorofluoromethane~~	-	-
~~1,2,4-trimethylbenzene~~	-	-
~~1,3,5-trimethylbenzene~~	-	-
vinyl chloride	.2	.0015
o-xylene	620[1]	124[1]
m-xylene	620[1]	124[1]
p-xylene	620[1]	124[1]

1. Report isomer concentrations if analysis can distinguish them; otherwise report "total xylenes". PAL and ES are for total xylenes.

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031021

Sample ID: AREA-C 2'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 7:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	229.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Toluene	15.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	1052.	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	908.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	34.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Trichloroethene	17.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031021

Sample ID: AREA-C 2'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 7:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
1,2-Dibromo-3-chloropropane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 100.0	ug/Kg	10.	10	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	91.	70 - 130
Halogenated VOA Surrogate 2	81.	70 - 130
Halogenated VOA Surrogate 3	79.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031022

Sample ID: AREA-D 6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 9:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	1.9	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	538.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	4.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	53.6	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	910.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	78.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	56.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031022

Sample ID: AREA-D 6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 9:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	113.	70 - 130
Halogenated VOA Surrogate 2	98.	70 - 130
Halogenated VOA Surrogate 3	91.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031030

Sample ID: AREA-E NORTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Extraction, BNA,s	Completed				6/ 6/95	16:43	C.Bardwell	3550
Benzo(a)pyrene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,2-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,3-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,4-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
2,4-dinitrotoluene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
2,6-Dinitrotoluene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Fluorene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Naphthalene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Pentachlorophenol	< 0.83	mg/kg	0.83	1	6/ 9/95	19:26	G. Baun	8270
Phenol	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Bis-2-ethylhexylphthalate	2.67	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
BNA Surrogate, Nitrobenzene	55.0	23 - 120
BNA Surr., 2-Fluorobiphenyl	64.0	30 - 115
BNA Surrogate, Terphenyl d14	121.	18 - 140
BNA Surrogate, Phenol d5	61.0	10 - 115
BNA Surrogate, 2-Fluorophenol	55.0	20 - 121

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031030

Sample ID: AREA-E NORTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
BNA Surrogate, 2,4,6-Tribromophenol	87.0	19 - 122

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031032

Sample ID: AREA-E NORTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Methc
Diesel Range Organics	< 5000	ug/Kg	5000	1	6/ 8/95	15:58	K.WALKUP	WDNR
DRO/TPH-Hi Extraction	Completed				6/ 6/95	16:44	C.Bardwell	3550

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031031

Sample ID: AREA-E SOUTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 11:05

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Diesel Range Organics	< 5000	ug/Kg	5000	1	6/ 8/95	15:58	K.WALKUP	WDNR
Extraction, BNA,s	Completed				6/ 6/95	16:43	C.Bardwell	3550
DRO/TPH-Hi Extraction	Completed				6/ 6/95	16:44	C.Bardwell	3550
Benzo(a)pyrene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,2-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,3-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,4-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
2,4-dinitrotoluene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
2,6-Dinitrotoluene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Fluorene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Naphthalene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Pentachlorophenol	< 0.83	mg/kg	0.83	1	6/ 9/95	19:26	G. Baun	8270
Phenol	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Bis-2-ethylhexylphthalate	0.50	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270

** QUALITY CONTROL DATA **

* Surrogate Recoveries **

Surrogate	% Recovery	Target Range
DRO Surrogate,s	100.	50 - 150
BNA Surrogate, Nitrobenzene	60.0	23 - 120
BNA Surr., 2-Fluorobiphenyl	72.0	30 - 115

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031031

Sample ID: AREA-E SOUTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 11:05

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
BNA Surrogate, Terphenyl d14	119.	18 - 140
BNA Surrogate, Phenol d5	62.0	10 - 115
BNA Surrogate, 2-Fluorophenol	55.0	20 - 121
BNA Surrogate, 2,4,6-Tribromophenol	88.0	19 - 122

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031023

Sample ID: AREA-F PILE 1'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 7:55

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031023

Sample ID: AREA-F PILE 1'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 7:55

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	74.	70 - 130
Halogenated VOA Surrogate 2	70.	70 - 130
Halogenated VOA Surrogate 3	65.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031024

Sample ID: AREA-F GRASS WEST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:30

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Methc
Benzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031024

Sample ID: AREA-F GRASS WEST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:30

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Methc
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	91.	70 - 130
Halogenated VOA Surrogate 2	79.	70 - 130
Halogenated VOA Surrogate 3	69.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031025

Sample ID: AREA-F GRASS EAST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 15:50

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	1.1	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	3.5	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031025

Sample ID: AREA-F GRASS EAST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 15:50

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	90.	70 - 130
Halogenated VOA Surrogate 2	84.	70 - 130
Halogenated VOA Surrogate 3	75.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031026

Sample ID: AREA-F PAD WEST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 13:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031026

Sample ID: AREA-F PAD WEST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 13:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	88.	70 - 130
Halogenated VOA Surrogate 2	82.	70 - 130
Halogenated VOA Surrogate 3	73.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031027

Sample ID: AREA-F PAD EAST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 14:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	2.7	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	1.2	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	1.5	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	1.6	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031027

Sample ID: AREA-F PAD EAST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 14:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	73.	70 - 130
Halogenated VOA Surrogate 2	61.	70 - 130
Halogenated VOA Surrogate 3	52.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031028

Sample ID: AREA-G SOUTH 8-10'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 12:40

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Toluene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Trichloroethene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031028

Sample ID: AREA-G SOUTH 8-10'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 12:40

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
1,2-Dibromo-3-chloropropane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 20.0	ug/Kg	10.	2	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	121.	70 - 130
Halogenated VOA Surrogate 2	95.	70 - 130
Halogenated VOA Surrogate 3	84.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031029

Sample ID: AREA-G NORTH 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 11:35

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	1.2	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	2.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	3.9	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	1.9	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

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SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031029

Sample ID: AREA-G NORTH 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 11:35

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Methc
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	80.	70 - 130
Halogenated VOA Surrogate 2	80.	70 - 130
Halogenated VOA Surrogate 3	68.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031009

Sample ID: AREA A-15'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 13:55

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Diesel Range Organics	< 100.	ug/l	100.	1	6/ 8/95	9:58	K.WALKUP	WDNR MC
Extraction, DRO/TPH-Hi	Completed				6/ 6/95	16:45	C.Bardwell	3510

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031010

Sample ID: AREA A-15'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 14:15

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Toluene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Xylenes, total	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Methyl-t-butylether	< 50.0	ug/l	10.0	5	6/ 9/95	15:19	P.Williams	8020

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031012

Sample ID: AREA-B 15'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 14:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Toluene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Xylenes, total	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Methyl-t-butylether	< 50.0	ug/l	10.0	5	6/ 9/95	15:19	P.Williams	8020
Diesel Range Organics	1320	ug/l	100.	1	6/ 8/95	9:58	K.WALKUP	WDNR M
Extraction, DRO/TPH-Hi	Completed				6/ 6/95	16:45	C.Bardwell	3510

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031014

Sample ID: AREA-C 2'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 8:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	1.3	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	70.5	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	3.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	7.2	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	286.	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	225.	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	12.3	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	1.2	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031014

Sample ID: AREA-C 2'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 8:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	124.	70 - 130
Halogenated VOA Surrogate 2	112.	70 - 130
Halogenated VOA Surrogate 3	107.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031013

Sample ID: AREA-E NORTH

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:35

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Diesel Range Organics	1700	ug/l	100.	1	6/ 8/95	9:58	K.WALKUP	WDNR MC
Benzo(a)pyrene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
1,2-Dichlorobenzene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
1,3-Dichlorobenzene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
1,4-Dichlorobenzene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
2,4-dinitrotoluene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
2,6-Dinitrotoluene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Fluorene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Naphthalene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Pentachlorophenol	< 30.0	ug/l	25.0	1	6/ 9/95	3:30	J.Mitchell	8270
Phenol	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Bis-2-ethylhexylphthalate	345.	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Extraction, DRO/TPH-Hi	Completed				6/ 6/95	16:45	C.Bardwell	3510
Extraction, BNA	Completed				6/ 6/95	16:42	C.Bardwell	3510

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
BNA Surrogate, Nitrobenzene	77.0	35 - 115
BNA Surrogate, 2-Fluorobiphenyl	70.0	43 - 116
BNA Surrogate, Terphenyl d14	71.0	33 - 141
BNA Surrogate, Phenol d5	0.0	10 - 110
BNA Surrogate, 2-Fluorophenol	0.0	20 - 110

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031013

Sample ID: AREA-E NORTH

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:35

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
BNA Surrogate, 2,4,6-Tribromophenol	22.0	10 - 123

NOTE:
Surrogates outside of QC limits, insufficient sample for re-extraction.

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031017

Sample ID: AREA-F GRASS WEST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	2.7	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031017

Sample ID: AREA-F GRASS WEST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	108.	70 - 130
Halogenated VOA Surrogate 2	119.	70 - 130
Halogenated VOA Surrogate 3	118.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031018

Sample ID: AREA-F GRASS EAST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	1.4	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	17.6	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031018

Sample ID: AREA-F GRASS EAST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	119.	70 - 130
Halogenated VOA Surrogate 2	122.	70 - 130
Halogenated VOA Surrogate 3	110.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031019

Sample ID: AREA-F PAD WEST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 14:05

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	1.1	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	1.3	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	1.7	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031019

Sample ID: AREA-F PAD WEST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 14:05

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	110.	70 - 130
Halogenated VOA Surrogate 2	116.	70 - 130
Halogenated VOA Surrogate 3	101.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031020

Sample ID: AREA-F PAD EAST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 15:15

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	1.3	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031020

Sample ID: AREA-F PAD EAST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 15:15

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
MTBE	<10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	89.	70 - 130
Halogenated VOA Surrogate 2	84.	70 - 130
Halogenated VOA Surrogate 3	88.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031016

Sample ID: AREA-G NORTH

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 11:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031016

Sample ID: AREA-G NORTH

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 11:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	102.	70 - 130
Halogenated VOA Surrogate 2	117.	70 - 130
Halogenated VOA Surrogate 3	116.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031015

Sample ID: AREA-G SOUTH

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 13:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031015

Sample ID: AREA-G SOUTH

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 13:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	105.	70 - 130
Halogenated VOA Surrogate 2	104.	70 - 130
Halogenated VOA Surrogate 3	95.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031011

Sample ID: TRIP

Date Collected:

Project: 304253281

Time Collected:

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Toluene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Xylenes, total	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Methyl-t-butylether	< 50.0	ug/l	10.0	5	6/ 9/95	15:19	P.Williams	8020

Laboratory Supervisor

COPY 1

NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

15 6 4 12

COMPANY: Hydro-Search, Inc.
ADDRESS: 175 N. Corporate Dr.
PHONE: 792-1282 FAX: 792-1310
PROJECT NAME/LOCATION: Quad Graphics
PROJECT NUMBER: 30425328
PROJECT MANAGER: Jerry DeMers

REPORT TO: Jerry DeMers
INVOICE TO: HSI
P.O. NO.
NET QUOTE NO.

SAMPLED BY: DAVID NADER (PRINT NAME) — David Nader (SIGNATURE)
(PRINT NAME) — (SIGNATURE)

ANALYSES: PVOCs, DRO, DRY WT.

DATE	TIME	SAMPLE ID/DESCRIPTION	GRAB	COMP	# OF CONTAINERS TYPE	MATRIX	PRESERVED Y/N	PVOCs	DRO	DRY WT.								COMMENTS
6/22/95	1:30	Area A - North	✓		3G	GW	Y	✓										
		~~Area A South~~																
↓	9:00	Area A - East	✓		4G	GW	Y	✓	✓									
		Trip			2G		Y	✓										
6/22/95	2:30	Area A-North B 15-17'	✓		2G	SOIL	N		✓	✓								
↓	3:30	Area A-South B 15-17'	✓		3G	SOIL	N	✓	✓	✓								

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO — FIELD FILTERED? YES / NO
COC SEALS PRESENT AND INTACT? YES / NO — VOLATILES FREE OF HEADSPACE? YES / NO
TEMPERATURE UPON RECEIPT: received on ice B. Whatupat 6/23/95 9:55

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS: DCN — DATE: 6-22-95

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED FOR NET BY:
David Nader	6/22/95 3:55	Jerry Schmitz	Jerry Schmitz	6-22-95 1835	K Wurz 6-23-95

METHOD OF SHIPMENT: Courier

REMARKS: Very slow recovery for water samples

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

WDNR No. 128053530

MASTER FILE COPY

ANALYTICAL AND QUALITY CONTROL REPORT

PROJECT # 304253281
CC:

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

RECEIVED JUN 30 1995 HSI-BROOKFIELD

06/28/1995

Job No: 95.04129

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
135427	Area A North #304253281	06/22/1995	06/22/1995
135428	Area A East #304253281	06/22/1995	06/22/1995
135429	Trip #304253281	06/22/1995	06/22/1995
135430	Area A North B 15-17 #304253281	06/22/1995	06/22/1995
135431	Area A South B 15-17 #304253281	06/22/1995	06/22/1995

The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed past hold time
C = Standard outside of control limits
E = Extracted past hold time
G = Received past hold time
I = Improperly handled sample
L = Common lab solvent and contaminant
P = Improperly preserved sample
T = Does not match typical pattern
B = Blank is contaminated
D = Diluted for analysis
F = Sample filtered in lab
H = Late eluting hydrocarbons present
J = Estimated concentration
M = Matrix interference
S = Sediment present
X = Unidentified compound(s) present

Brian D. DeJong, Organic Operations Manager
Certification No. 128053530

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135427
Account No: 39150
Page 2

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Area A North #304253281
Recv'd On Ice

Date Taken: 06/22/1995 13:30 Date Received: 06/22/1995

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
PVOC - AQUEOUS						
Benzene	3.5	ug/L	1.0	S-8020	06/25/1995	1820
thylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
TBE	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Toluene	1.9	ug/L	1.0	S-8020	06/25/1995	1820
,2,4-Trimethylbenzene	4.9	ug/L	1.0	S-8020	06/25/1995	1820
,3,5-Trimethylbenzene	1.9	ug/L	1.0	S-8020	06/25/1995	1820
ylenes, Total	4.5	ug/L	3.0	S-8020	06/25/1995	1820
Surr: Bromofluorobenzene	92.5	%	n/a	S-8020	06/25/1995	1820

OCEAN GROUP

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135428
Account No: 39150
Page 3

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Area A East #304253281
Recv'd On Ice

Date Taken: 06/22/1995 09:00 Date Received: 06/22/1995

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
DRO Extraction	06/23/95			WDNR	06/26/1995	499
PVOC - AQUEOUS						
Benzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Ethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
MTBE	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Toluene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
1,2,4-Trimethylbenzene	1.9	ug/L	1.0	S-8020	06/25/1995	1820
1,3,5-Trimethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Xylenes, Total	<3.0	ug/L	3.0	S-8020	06/25/1995	1820
Surr: Bromofluorobenzene	92.0	%	n/a	S-8020	06/25/1995	1820
DRO - AQUEOUS	0.55	mg/L	0.10	WDNR	06/25/1995	499 704

OCEAN GROUP

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602 Commerce Drive
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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135429
Account No: 39150
Page 4

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Trip #304253281
Recv'd On Ice

Date Taken: 06/22/1995 Date Received: 06/22/1995

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
PVOC - AQUEOUS						
Benzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Ethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
MTBE	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Toluene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
1,2,4-Trimethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
1,3,5-Trimethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Xylenes, Total	<3.0	ug/L	3.0	S-8020	06/25/1995	1820
Surr: Bromofluorobenzene	94.5	%	n/a	S-8020	06/25/1995	1820

OCEAN GROUP

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Watertown Division
602 Commerce Drive
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Fax: (414) 261-8120

WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135430
Account No: 39150
Page 5

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Area A North B 15-17 #304253281
Recv'd On Ice

Date Taken: 06/22/1995 14:30 Date Received: 06/22/1995

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
Solids, Total	84.7	%	n/a	E-160.3	06/26/1995	1096
DRO Extraction	06/23/95			WDNR	06/23/1995	446
DRO - NONAQUEOUS	<5.0	mg/kg	5.0	WDNR	06/24/1995	446 844

OCEAN GROUP

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602 Commerce Drive
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Fax: (414) 261-8120

WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135431
Account No: 39150
Page 6

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Area A South B 15-17 #304253281
Recv'd On Ice

Date Taken: 06/22/1995 15:30 Date Received: 06/22/1995

Parameter		Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
Solids, Total		83.8	%	n/a	E-160.3	06/26/1995	1096
DRO Extraction		06/23/95			WDNR	06/23/1995	446
VOC - NONAQUEOUS							
Benzene	I	<0.0055	mg/kg	0.0055	S-8020	06/28/1995	1168
Ethylbenzene	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
MTBE	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
Toluene	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
1,2,4-Trimethylbenzene	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
1,3,5-Trimethylbenzene	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
Xylenes, Total	I	<0.075	mg/kg	0.075	S-8020	06/28/1995	1168
Surr: Bromofluorobenzene		85.0	%	n/a	S-8020	06/28/1995	1168
DRO - NONAQUEOUS		<5.0	mg/kg	5.0	WDNR	06/24/1995	446 844

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Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Job Description: Quad Graphics #304253281

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
PVOC - AQUEOUS	S-8020					
Benzene	S-8020	1820	20.0	20.1	100.5	njd
Ethylbenzene	S-8020	1820	20.0	20.5	102.5	njd
MTBE	S-8020	1820	20.0	18.5	92.5	njd
Toluene	S-8020	1820	20.0	20.2	101.0	njd
1,2,4-Trimethylbenzene	S-8020	1820	20.0	21.1	105.5	njd
1,3,5-Trimethylbenzene	S-8020	1820	20.0	21.2	106.0	njd
Xylenes, Total	S-8020	1820	60.0	63.4	105.7	njd
Surr: Bromofluorobenzene	S-8020	1820	20.0	20.6	103.0	njd
PVOC - AQUEOUS	S-8020					
Benzene	S-8020	1820	20.0	19.7	98.5	njd
Ethylbenzene	S-8020	1820	20.0	19.5	97.5	njd
MTBE	S-8020	1820	20.0	17.3	86.5	njd
Toluene	S-8020	1820	20.0	19.6	98.0	njd
1,2,4-Trimethylbenzene	S-8020	1820	20.0	20.0	100.0	njd
1,3,5-Trimethylbenzene	S-8020	1820	20.0	20.6	103.0	njd
Xylenes, Total	S-8020	1820	60.0	62.0	103.3	njd
Surr: Bromofluorobenzene	S-8020	1820	20.0	20.2	101.0	njd
PVOC - AQUEOUS	S-8020					
Benzene	S-8020	1820	20.0	20.4	102.0	njd
Ethylbenzene	S-8020	1820	20.0	20.7	103.5	njd
MTBE	S-8020	1820	20.0	18.8	94.0	njd
Toluene	S-8020	1820	20.0	20.6	103.0	njd
1,2,4-Trimethylbenzene	S-8020	1820	20.0	21.2	106.0	njd
1,3,5-Trimethylbenzene	S-8020	1820	20.0	21.3	106.5	njd
Xylenes, Total	S-8020	1820	60.0	64.6	107.7	njd
Surr: Bromofluorobenzene	S-8020	1820	20.0	20.5	102.5	njd
DRO - AQUEOUS	WDNR	704	1000	1057	105.7	leh
DRO - AQUEOUS	WDNR	704	1000	1162	116.2	leh
DRO - AQUEOUS	WDNR	704	1000	968	96.8	leh
PVOC - NONAQUEOUS	S-8020					
Benzene	S-8020	1168	1.00	0.90	90.0	jsm
Ethylbenzene	S-8020	1168	1.00	0.93	93.0	jsm
MTBE	S-8020	1168	1.00	1.05	105.0	jsm
Toluene	S-8020	1168	1.00	0.92	92.0	jsm
1,2,4-Trimethylbenzene	S-8020	1168	1.00	0.90	90.0	jsm
1,3,5-Trimethylbenzene	S-8020	1168	1.00	0.92	92.0	jsm
Xylenes, Total	S-8020	1168	3.00	2.81	93.7	jsm

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Page 8

Job Description: Quad Graphics #304253281

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
Surr: Bromofluorobenzene	S-8020	1168	20.0	19.3	96.5	jsm
DRO - NONAQUEOUS	WDNR	844	1000	1087	108.7	leh
DRO - NONAQUEOUS	WDNR	844	1000	1086	108.6	leh

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Watertown Division
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Fax: (414) 261-8120

QUALITY CONTROL REPORT

BLANKS

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Job Description: Quad Graphics #304253281

Parameter	Prep Batch	Run Batch	Blank Result	Detection Limit	Units
PVOC - AQUEOUS					
Benzene		1820	<1.0	1.0	ug/L
Ethylbenzene		1820	<1.0	1.0	ug/L
MTBE		1820	<1.0	1.0	ug/L
Toluene		1820	<1.0	1.0	ug/L
1,2,4-Trimethylbenzene		1820	<1.0	1.0	ug/L
1,3,5-Trimethylbenzene		1820	<1.0	1.0	ug/L
Xylenes, Total		1820	<3.0	3.0	ug/L
Surr: Bromofluorobenzene		1820	93.5	n/a	%
DRO - AQUEOUS	499	704	<0.4	0.10	mg/L
PVOC - NONAQUEOUS					
Benzene		1168	<0.0055	0.0055	mg/kg
Ethylbenzene		1168	<0.025	0.025	mg/kg
MTBE		1168	<0.025	0.025	mg/kg
Toluene		1168	<0.025	0.025	mg/kg
1,2,4-Trimethylbenzene		1168	<0.025	0.025	mg/kg
1,3,5-Trimethylbenzene		1168	<0.025	0.025	mg/kg
Xylenes, Total		1168	<0.075	0.075	mg/kg
Surr: Bromofluorobenzene		1168	92.5	n/a	%
DRO - NONAQUEOUS	446	844	<2.5	5.0	mg/kg

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
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QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Job Description: Quad Graphics #304253281

Analyte	Prep Batch Number	Run Batch Number	LCS Amount	Units	LCS Result	Percent Recovery	LCSD Result	Percent Recovery	Relative Percent Difference
PVOC - NONAQUEOUS									
Benzene		1168	10.0	mg/kg	6.57	65.7	6.93	69.3	5.3
Ethylbenzene		1168	10.0	mg/kg	9.45	94.5	9.93	99.3	5.0
MTBE		1168	10.0	mg/kg	10.6	106.0	11.3	113.0	6.4
Toluene		1168	10.0	mg/kg	8.03	80.3	8.45	84.5	5.1
1,2,4-Trimethylbenzene		1168	10.0	mg/kg	9.88	98.8	10.3	103.0	4.1
1,3,5-Trimethylbenzene		1168	10.0	mg/kg	9.49	94.9	9.83	98.3	3.5
Xylenes, Total		1168	30.0	mg/kg	25.3	84.3	26.2	87.3	3.5
Surr: Bromofluorobenzene		1168	20.0	%	18.6	93.0	18.8	94.0	1.1
DRO - NONAQUEOUS	446	844	1000	mg/kg	1031	103.1	1135	113.5	9.6
DRO - NONAQUEOUS	446	844	1000	mg/kg	1060	106.0			

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Watertown Division
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P.O. Box 288
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Tel: (414) 261-1660
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QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Job Description: Quad Graphics #304253281

Analyte	Prep Batch Number	Run Batch Number	Sample Result	Spike Amount	Units	Matrix Spike Result	Percent Recovery	MSD Result	Percent Recovery	Relative Percent Difference
PVOC - AQUEOUS										
Benzene		1820	<1.0	20.0	ug/L	18.4	92.0	19.8	99.0	7.3
Ethylbenzene		1820	<1.0	20.0	ug/L	18.5	92.5	19.9	99.5	7.3
MTBE		1820	<1.0	20.0	ug/L	16.8	84.0	17.9	89.5	6.3
Toluene		1820	<1.0	20.0	ug/L	18.4	92.0	19.7	98.5	6.8
1,2,4-Trimethylbenzene		1820	<1.0	20.0	ug/L	19.1	95.5	20.3	101.5	6.0
1,3,5-Trimethylbenzene		1820	<1.0	20.0	ug/L	19.1	95.5	20.5	102.5	7.0
Xylenes, Total		1820	<3.0	60.0	ug/L	57.9	96.5	62.5	104.2	7.6
Surr: Bromofluorobenzene		1820	18.6	20.0	%	19.3	96.5	20.1	100.5	4.0

OCEAN GROUP

ATTACHMENT C

Biological Half-Life Information
Bis-2-Ethylhexyl Phthalate

HANDBOOK

OF

Environmental Degradation Rates

PHILIP H. HOWARD
ROBERT S. BOETHLING
WILLIAM F. JARVIS
WILLIAM M. MEYLAN
EDWARD M. MICHALENKO

HEATHER TAUB PRINTUP
Editor

LEWIS PUBLISHERS

Bis-(2-ethylhexyl) phthalate

CAS Registry Number: 117-81-7

Half-lives:

· **Soil:** High: 550 hours (23 days)
Low: 120 hours (5 days)

Comment: Scientific judgement based upon unacclimated aqueous aerobic biodegradation half-life.

· **Air:** High: 29 hours
Low: 2.9 hours

Comment: Based upon estimated photooxidation half-life in air.

· **Surface Water:** High: 550 hours (23 days)
Low: 120 hours (5 days)

Comment: Based upon unacclimated aqueous aerobic biodegradation half-life.

· **Ground Water:** High: 9336 hours (389 days)
Low: 240 hours (10 days)

Comment: Scientific judgement based upon estimated unacclimated aqueous anaerobic (high $t_{1/2}$) and aerobic (low $t_{1/2}$) biodegradation half-life.

Aqueous Biodegradation (unacclimated):

· **Aerobic half-life:** High: 550 hours (23 days)
Low: 120 hours (5 days)

Comment: Based upon grab sample die-away test data and scientific judgement (Schouten, MJ et al. (1979); Johnson, BT and Lulves, W (1975)).

· **Anaerobic half-life:** High: 9336 hours (389 days)
Low: 980 hours (42 days)

Comment: Scientific judgement based upon anaerobic die-away test data (low $t_{1/2}$) (Shanker, R et al. (19859)) and anaerobic aqueous screening studies in which 0-9% theoretical methane production was observed in up to 70 days (Horowitz, A et al. (1982); Shelton, DR et al. (1984)).

· **Removal/secondary treatment:** High: 91%
Low: 70%

Comment: high: Graham, PR (1973); low: Saeger, VW and Tucker, ES (1976).

Photolysis:

· **Atmos photol half-life:** High: 4800 hours (200 days)
Low: 3500 hours (144 days)

Comment: Scientific judgement based upon measured rate of aqueous photolysis for dimethyl

phthalate (Wolfe, NL et al. (1980A)).

· **Max light absorption (nm):** No data
Comment:

· **Aq photol half-life:** High: 4800 hours (200 days)
Low: 3500 hours (144 days)
Comment: Scientific judgement based upon measured rate of aqueous photolysis for dimethyl phthalate (Wolfe, NL et al. (1980A)).

Photooxidation half-life:
· **Water:** High: $1.4X10^4$ hours (584 days)
Low: 1056 hours (44 days)
Comment: Scientific judgement based upon measured rate data for reaction with peroxyl radicals in water (Wolfe, NL et al. (1980A)).

· **Air:** High: 29 hours
Low: 2.9 hours
Comment: Based upon estimated rate constant for reaction with hydroxyl radicals in air (Atkinson, R (1987A)).

Reduction half-life: High: No data
Low:
Comment:

Hydrolysis:
· **First-order hydr half-life:** No data ($t_{1/2}$ = 2,000 years at pH 7)
Comment: Scientific judgement based upon measured base catalyzed hydrolysis rate constant (Wolfe, NL et al. (1980B)).

· **Acid rate const $(M(H+)\text{-}hr)^{-1}$:** No data

· **Base rate const $(M(OH\text{-})\text{-}hr)^{-1}$:** $1.1X10^{-4}$ l/mole-sec ($t_{1/2}$ = 20 years at pH 9)
Comment: (Wolfe, NL et al. (1980B)).

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AUG 0 7 1995
D.N.R. SED Hqtrs.
Milwaukee, WI

QUAD/GRAPHICS

Mr. Charles J. Krohn
Hydrogeologist Supervisor
Wisconsin Department of Natural Resources
P.O. Box 12436
Milwaukee, WI 53212

RE: Subsurface Results-Former Ringier America Facility-16555 West Rogers Drive
New Berlin, Wisconsin

Dear Mr. Krohn:

The purpose of this letter is to follow up on the telephone conversation that we had on Tuesday, August 1, 1995, wherein we reported the fact that soil and/or groundwater samples were collected on behalf of Quad/Graphics and Ringier as part of pre-closing environmental assessment at this facility. This information was reported since Quad/Graphics came into possession or control of the facility as a result of a closing in trust which occurred on August 1, 1995.

As part of the pre-purchase environmental due diligence, Quad/Graphics retained Hydro-Search, Inc. to conduct an environmental assessment of several areas that were of potential environmental concern. Soil and/or groundwater samples were collected from the following areas to determine whether contamination was present at concentrations of concern:

*Area A- Location of former 25,000 gallon fuel oil underground storage tank (UST) north of the boiler room.

*Area B- Location of the former 10,000 gallon diesel fuel UST east of the railroad spur.

*Area C- Discharge of the sump draining the railroad spur area.

*Area D- Collection sump in the floor of the solvent storage room of the building.

*Area E- Two oil sumps in the former press area of the building.

*Area F- Outdoor product and drum storage are south of the building.

*Area G- Railroad spur area.

We have attached to this letter as Exhibit "A" a site diagram depicting the approximate location of each of these areas which were the subject of the environmental assessment. We have attached to this letter as Exhibit "B" the soil and/or groundwater results of the initial investigation conducted by Hydro-Search at each of these areas. An additional investigation was conducted by Hydro-Search in the area of the 25,000 gallon fuel oil UST (Area A) and those results are attached as Exhibit "C." Finally, attached as Exhibit "D" are copies of analytical results which Quad/Graphics received from Sigma Environmental Services, a consultant retained by Ringier during the Quad/Graphics pre-purchase environmental assessment period. The areas which Sigma sampled per Ringier's request were the two oil sump areas inside the press room (Area E), the cistern inside the former virgin material storage room (Area D), the former 10,000 gallon and 25,000 gallon UST's (Areas B and A, respectively), and the sump discharge from inside the railroad spur (Area C).

Quad/Pewaukee W224 N3322 Duplainville Road Pewaukee, Wisconsin 53072-4195 **Phone** 414-691-9200

Generally speaking, the Hydro-Search analytical results for the respective areas are as follows:

Area A-25,000 gallon Fuel Oil UST. Three groundwater samples and one soil sample were collected from north, south, east, and west of the former tank location. Of the samples collected, only one sample indicated a detection of a contaminant in groundwater at a concentration greater than the preventive action limit (PAL) groundwater quality standard in Chapter NR 140 of the Wisconsin Administrative Code. Benzene was detected at 3.5 parts per billion (ppb), compared to its PAL of 0.5 ppb and enforcement standard (ES) of 5 ppb.

Area B-Fuel Oil UST. The groundwater samples collected at this location indicate diesel range organics are present at a concentration of 1320 ppb, but no specific contaminants of concern were detected.

Area C-Discharge of Sump Draining the Railroad Spur Area. Area C is the location of a discharge point for the sump serving the railroad spur within the building. Lab analysis indicated that ethyl benzene, toluene and xylenes were present, but in concentrations below NR 720 standards. Two compounds that do not have NR 720 standards were also detected; tetrachloroethene (PCA) and trichloroethene (TCE). A groundwater sample was collected from the hand augered bore hole in front of the sump discharge point. Lab analysis indicated that benzene, xylenes, cis-1, 2-dichloroethene (1, 2-DCE) and TCE were present at concentrations above NR 140 preventative action limits; no enforcement standards were exceeded for these compounds, however. Low concentrations of naphthalene and toluene were also present.

Area D-Collection Sump in the Floor of the Virgin Material Storage Room. Lab analysis indicated that benzene, ethyl benzene, toluene and xylenes (BETX) were present in the soil in this area, but at concentrations below NR 720 standards. Two compounds without NR 720 soil standards (napthalene and 1, 2-DCE) were also detected.

Area E-Two Oil Sumps in the Former Press Area in the Building. Two soil samples were collected for lab analysis. No detection of DRO above the detection limits was found in either sample. One compound without a soil standard was found in both samples: bis-2-ethylhexylphthalate. One groundwater sample was collected at the north sump location. DRO was detected at 1700 ppb. The NR 140 enforcement standard was exceeded for bis-2-ethylhexylphthalate at 345 ppb; no other PNA was detected.

Area F-Outdoor Product and Drum Storage Area South of the Building. Low (less than 20 ppb) concentrations of several volatile organic compounds were detected in groundwater samples at this location. Benzene (1.1 ppb vs. the PAL of 0.5 ppb), vinyl chloride (1.4 ppb vs. the PAL of 0.02 ppb) and cis-1, 2-dichloroethene (17.6 ppb vs. the PAL of 7 ppb) were detected.

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QUAD/GRAPHICS

Area G-Area Adjacent to Railroad Spur Inside the Building. It was originally proposed to conduct soil sampling and groundwater sampling inside the building at two locations in the railroad spur area. However, the stone subgrade of the railroad lines within the building required geo-probe sampling to be conducted adjacent to the west wall outside the building. Lab analysis indicated no detections of VOC's in concentrations above NR 720 standards at these locations. Laboratory analysis of groundwater samples indicated no concentrations of VOC above detection limits in either groundwater sample.

For your convenience, we have attached to this letter the following tables summarizing the Hydro-Search analytical results for these areas: Table 1 (laboratory analytical results for soil) and Table 2 (laboratory analytical results for groundwater).

Please be advised that Hydro-Search will provide a written summary of the analytical results, as well as recommendations for additional assessment/remediation activities for these areas in accordance with Wis. Adm. Code Chapter NR 700, et seq. Quad/Graphics anticipates that Hydro-Search will file the follow-up report on or before September 1, 1995.

In the interim, should you have any questions, please feel free to contact the undersigned at your convenience.

Very truly yours,

Quad/Graphics, Inc.

By: Thomas Estock

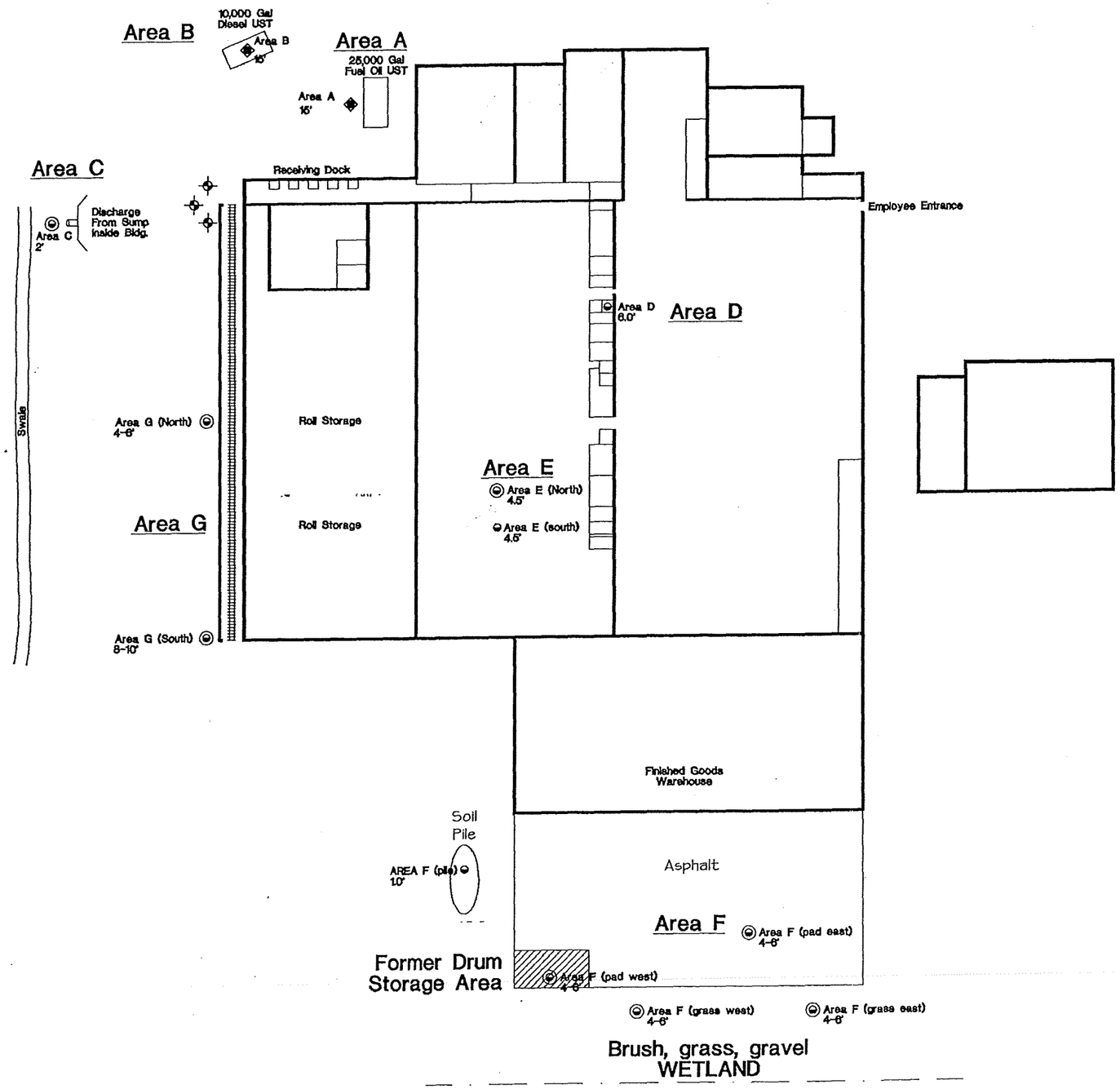
Thomas Estock
Environmental Coordinator

cc: Mr. Jerry DeMeers (Hydro-Search)

bcc: Mr. Jeffrey Danek (President and General Counsel, Ringier)

Quad/Pewaukee W224 N3322 Duplainville Road Pewaukee, Wisconsin 53072-4195 **Phone** 414-691-9200

EXHIBIT A



EXPLANATION

	EXISTING GROUND-WATER MONITOR WELL LOCATION
Area E	SOIL SAMPLE LOCATION AND DESIGNATION
Area C	GROUND-WATER SAMPLE LOCATION AND DESIGNATION
Area E	SOIL/GROUND-WATER SAMPLE LOCATION AND DESIGNATION
4-6'	DEPTH OF SOIL SAMPLE

N

SCALE

0 200

Feet

QUAD GRAPHICS, INC.
NEW BERLIN, WISCONSIN

SITE AND INVESTIGATION LOCATIONS

DATE:	06/07/95
DESIGNED:	DCN
CHECKED:	DCN
APPROVED:	DLM
DRAWN:	MCL
PROJ.:	304253181

HYDRO-SEARCH, INC
A Tetra Tech Company

Figure 1

Base map modified from Ringier America Bldg. Layout Map.

/hsi/425/3181/3181-b1

EXHIBIT B

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031009

Sample ID: AREA A-15'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 13:55

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Diesel Range Organics	< 100.	ug/l	100.	1	6/ 8/95	9:58	K.WALKUP	WDNR
Extraction, DRO/TPH-Hi	Completed				6/ 6/95	16:45	C.Bardwell	3510

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031010

Sample ID: AREA A-15'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 14:15

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Toluene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Xylenes, total	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Methyl-t-butylether	< 50.0	ug/l	10.0	5	6/ 9/95	15:19	P.Williams	8020

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031012

Sample ID: AREA-B 15'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 14:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Toluene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Xylenes, total	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Methyl-t-butylether	< 50.0	ug/l	10.0	5	6/ 9/95	15:19	P.Williams	8020
Diesel Range Organics	1320	ug/l	100.	1	6/ 8/95	9:58	K.WALKUP	WDNR
Extraction, DRO/TPH-Hi	Completed				6/ 6/95	16:45	C.Bardwell	3510

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

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MASTER FILE COPY
PROJECT #_____
CC:_____

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031021

Sample ID: AREA-C 2'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 7:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	229.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Toluene	15.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	1052.	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	908.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	34.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031021

Sample ID: AREA-C 2'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 7:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Trichloroethene	17.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 10.0	ug/Kg	1.	10	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 100.0	ug/Kg	10.	10	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	91.	70 - 130
Halogenated VOA Surrogate 2	81.	70 - 130
Halogenated VOA Surrogate 3	79.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031014

Sample ID: AREA-C 2'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 8:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	1.3	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	70.5	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	3.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	7.2	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	286.	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	225.	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	12.3	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	1.2	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031014

Sample ID: AREA-C 2'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 8:20

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	124.	70 - 130
Halogenated VOA Surrogate 2	112.	70 - 130
Halogenated VOA Surrogate 3	107.	70 - 130

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031022

Sample ID: AREA-D 6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 9:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	1.9	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	538.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	4.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	53.6	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	910.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	78.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	56.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031022

Sample ID: AREA-D 6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 9:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Methc
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	113.	70 - 130
Halogenated VOA Surrogate 2	98.	70 - 130
Halogenated VOA Surrogate 3	91.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031030

Sample ID: AREA-E NORTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Soil

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Meth
Extraction, BNA,s	Completed				6/ 6/95	16:43	C.Bardwell	3550
Benzo(a)pyrene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,2-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,3-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,4-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
2,4-dinitrotoluene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
2,6-Dinitrotoluene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Fluorene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Naphthalene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Pentachlorophenol	< 0.83	mg/kg	0.83	1	6/ 9/95	19:26	G. Baun	8270
Phenol	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Bis-2-ethylhexylphthalate	2.67	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
BNA Surrogate, Nitrobenzene	55.0	23 - 120
BNA Surr., 2-Fluorobiphenyl	64.0	30 - 115
BNA Surrogate, Terphenyl d14	121.	18 - 140
BNA Surrogate, Phenol d5	61.0	10 - 115
BNA Surrogate, 2-Fluorophenol	55.0	20 - 121
BNA Surrogate, 2,4,6-Tribromophenol	87.0	19 - 122

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031032

Sample ID: AREA-E NORTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Soil

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Meth
Diesel Range Organics	< 5000	ug/Kg	5000	1	6/ 8/95	15:58	K.WALKUP	WDNR
DRO/TPH-Hi Extraction	Completed				6/ 6/95	16:44	C.Bardwell	3550

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031030

Sample ID: AREA-E NORTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
BNA Surrogate, 2,4,6-Tribromophenol	87.0	19 - 122

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031013

Sample ID: AREA-E NORTH

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:35

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Diesel Range Organics	1700	ug/l	100.	1	6/ 8/95	9:58	K.WALKUP	WDNR
Benzo(a)pyrene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
1,2-Dichlorobenzene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
1,3-Dichlorobenzene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
1,4-Dichlorobenzene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
2,4-dinitrotoluene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
2,6-Dinitrotoluene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Fluorene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Naphthalene	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Pentachlorophenol	< 30.0	ug/l	25.0	1	6/ 9/95	3:30	J.Mitchell	8270
Phenol	< 12.0	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Bis-2-ethylhexylphthalate	345.	ug/l	10.0	1	6/ 9/95	3:30	J.Mitchell	8270
Extraction, DRO/TPH-Hi	Completed				6/ 6/95	16:45	C.Bardwell	3510
Extraction, BNA	Completed				6/ 6/95	16:42	C.Bardwell	3510

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
BNA Surrogate, Nitrobenzene	77.0	35 - 115
BNA Surrogate, 2-Fluorobiphenyl	70.0	43 - 116
BNA Surrogate, Terphenyl d14	71.0	33 - 141
BNA Surrogate, Phenol d5	0.0	10 - 110
BNA Surrogate, 2-Fluorophenol	0.0	20 - 110
BNA Surrogate, 2,4,6-Tribromophenol	22.0	10 - 123

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031013

Sample ID: AREA-E NORTH

Date Collected: 5/31/95

Project: 304253281

Time Collected: 9:35

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range

NOTE:
Surrogates outside of QC limits, insufficient sample for re-extraction.

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031031

Sample ID: AREA-E SOUTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 11:05

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Soil

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Meth
Diesel Range Organics	< 5000	ug/Kg	5000	1	6/ 8/95	15:58	K.WALKUP	WDNR
Extraction, BNA,s	Completed				6/ 6/95	16:43	C.Bardwell	3550
DRO/TPH-Hi Extraction	Completed				6/ 6/95	16:44	C.Bardwell	3550
Benzo(a)pyrene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,2-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,3-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
1,4-Dichlorobenzene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
2,4-dinitrotoluene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
2,6-Dinitrotoluene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Fluorene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Naphthalene	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Pentachlorophenol	< 0.83	mg/kg	0.83	1	6/ 9/95	19:26	G. Baun	8270
Phenol	< 0.33	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270
Bis-2-ethylhexylphthalate	0.50	mg/kg	0.33	1	6/ 9/95	19:26	G. Baun	8270

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
DRO Surrogate,s	100.	50 - 150
BNA Surrogate, Nitrobenzene	60.0	23 - 120
BNA Surr., 2-Fluorobiphenyl	72.0	30 - 115
BNA Surrogate, Terphenyl d14	119.	18 - 140
BNA Surrogate, Phenol d5	62.0	10 - 115
BNA Surrogate, 2-Fluorophenol	55.0	20 - 121

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031031

Sample ID: AREA-E SOUTH 4.5'

Date Collected: 5/31/95

Project: 304253281

Time Collected: 11:05

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

** QUALITY CONTROL DATA **

Surrogate Recoveries **

Surrogate	% Recovery	Target Range
BNA Surrogate, Terphenyl d14	119.	18 - 140
BNA Surrogate, Phenol d5	62.0	10 - 115
BNA Surrogate, 2-Fluorophenol	55.0	20 - 121
BNA Surrogate, 2,4,6-Tribromophenol	88.0	19 - 122

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031023

Sample ID: AREA-F PILE 1'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 7:55

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031023

Sample ID: AREA-F PILE 1'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 7:55

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	74.	70 - 130
Halogenated VOA Surrogate 2	70.	70 - 130
Halogenated VOA Surrogate 3	65.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031027

Sample ID: AREA-F PAD EAST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 14:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	2.7	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	1.2	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	1.5	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	1.6	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031027

Sample ID: AREA-F PAD EAST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 14:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	73.	70 - 130
Halogenated VOA Surrogate 2	61.	70 - 130
Halogenated VOA Surrogate 3	52.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031020

Sample ID: AREA-F PAD EAST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 15:15

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	1.3	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031020

Sample ID: AREA-F PAD EAST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 15:15

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	89.	70 - 130
Halogenated VOA Surrogate 2	84.	70 - 130
Halogenated VOA Surrogate 3	88.	70 - 130

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031026

Sample ID: AREA-F PAD WEST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 13:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Benzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031026

Sample ID: AREA-F PAD WEST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 13:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	88.	70 - 130
Halogenated VOA Surrogate 2	82.	70 - 130
Halogenated VOA Surrogate 3	73.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031019

Sample ID: AREA-F PAD WEST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 14:05

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	1.1	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	1.3	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	1.7	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031019

Sample ID: AREA-F PAD WEST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 14:05

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	110.	70 - 130
Halogenated VOA Surrogate 2	116.	70 - 130
Halogenated VOA Surrogate 3	101.	70 - 130

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031025

Sample ID: AREA-F GRASS EAST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 15:50

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	1.1	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	3.5	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031025

Sample ID: AREA-F GRASS EAST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 15:50

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

* Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	90.	70 - 130
Halogenated VOA Surrogate 2	84.	70 - 130
Halogenated VOA Surrogate 3	75.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031018

Sample ID: AREA-F GRASS EAST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	1.4	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	17.6	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031018

Sample ID: AREA-F GRASS EAST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	119.	70 - 130
Halogenated VOA Surrogate 2	122.	70 - 130
Halogenated VOA Surrogate 3	110.	70 - 130

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031024

Sample ID: AREA-F GRASS WEST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:30

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

COPY 1

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031024

Sample ID: AREA-F GRASS WEST 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:30

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Metho
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	91.	70 - 130
Halogenated VOA Surrogate 2	79.	70 - 130
Halogenated VOA Surrogate 3	69.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031017

Sample ID: AREA-F GRASS WEST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	2.7	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031017

Sample ID: AREA-F GRASS WEST

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 16:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	108.	70 - 130
Halogenated VOA Surrogate 2	119.	70 - 130
Halogenated VOA Surrogate 3	118.	70 - 130

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031029

Sample ID: AREA-G NORTH 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 11:35

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	1.2	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Toluene	2.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	3.9	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	1.9	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031029

Sample ID: AREA-G NORTH 4-6'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 11:35

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Trichloroethene	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/Kg	1.	1	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 10.0	ug/Kg	10.	1	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	80.	70 - 130
Halogenated VOA Surrogate 2	80.	70 - 130
Halogenated VOA Surrogate 3	68.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031016

Sample ID: AREA-G NORTH

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 11:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031016

Sample ID: AREA-G NORTH

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 11:45

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	102.	70 - 130
Halogenated VOA Surrogate 2	117.	70 - 130
Halogenated VOA Surrogate 3	116.	70 - 130

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031028

Sample ID: AREA-G SOUTH 8-10'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 12:40

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichlorobenzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,3-Dichlorobenzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,4-Dichlorobenzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Ethylbenzene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Naphthalene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Toluene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
m,p-Xylenes	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
o-Xylene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Bromodichloromethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Carbon tetrachloride	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Chloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Chloroform	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Dibromochloromethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromoethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Vinyl chloride	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,1-Dichloroethene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,2-Dichloropropane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Methylene chloride	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
Tetrachloroethene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,1,1-Trichloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,1,2-Trichloroethane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021

SPECIALIZED ASSAYS
ENVIRONMENTAL

2960 Foster Creighton Drive
Nashville, Tennessee 37204

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031028

Sample ID: AREA-G SOUTH 8-10'

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 12:40

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Trichloroethene	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 2.0	ug/Kg	1.	2	6/ 8/95	18:00	E.SMITH	8021
MTBE	< 20.0	ug/Kg	10.	2	6/ 8/95	18:00	E.SMITH	8021

** QUALITY CONTROL DATA **

Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	121.	70 - 130
Halogenated VOA Surrogate 2	95.	70 - 130
Halogenated VOA Surrogate 3	84.	70 - 130

Laboratory Supervisor

COPY 1

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031015

Sample ID: AREA-G SOUTH

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 13:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,3-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,4-Dichlorobenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Naphthalene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Toluene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
m,p-Xylenes	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
o-Xylene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Bromodichloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Carbon tetrachloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Chloroform	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Dibromochloromethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Ethylene Dibromide	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Vinyl chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
cis-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
trans-1,2-Dichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dichloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Methylene chloride	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Tetrachloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,1-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,1,2-Trichloroethane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
Trichloroethene	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
1,2-Dibromo-3-chloropropane	< 1.0	ug/l	1.0	1	6/ 7/95	20:00	E.SMITH	8021
MTBE	< 10.0	ug/l	10.0	1	6/ 7/95	20:00	E.SMITH	8021

ANALYTICAL REPORT

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031015

Sample ID: AREA-G SOUTH

Date Collected: 6/ 1/95

Project: 304253281

Time Collected: 13:00

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

State Certification: 998020430

Sample Type: Water

Site I.D.:

** QUALITY CONTROL DATA **

** Surrogate Recoveries **

Surrogate	% Recovery	Target Range
Halogenated VOA Surrogate 1	105.	70 - 130
Halogenated VOA Surrogate 2	104.	70 - 130
Halogenated VOA Surrogate 3	95.	70 - 130

SPECIALIZED ASSAYS ENVIRONMENTAL
300 12th Ave. So.
Nashville, Tennessee 37203

ANALYTICAL REPORT

** Original report and a copy of the chain of custody will follow by mail.

HYDRO-SEARCH, INC. 6129
ATT: DAVID HOLMES
175 N. CORPORATE DR. SUITE 100
BROOKFIELD, WI 53045

Lab Number: 95-A031011

Sample ID: TRIP

Date Collected:

Project: 304253281

Time Collected:

Project Name: QUAD GRAPHICS

Date Received: 6/ 5/95

Sampler: DAVID NADER

Time Received: 9:30

Stage Certification: 998020430

Sample Type: Water

Site ID:

Analyte	Result	Units	Quan Limit	Dil Factor	Date	Time	Analyst	Method
Benzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Toluene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Ethylbenzene	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Xylenes, total	< 1.0	ug/l	1.0	1	6/ 9/95	15:19	P.Williams	8020
Methyl-t-butylether	< 50.0	ug/l	10.0	5	6/ 9/95	15:19	P.Williams	8020

EXHIBIT C

Table 1. Laboratory Analytical Results for Ground Water and Soil Samples at Area A, Former Ringier America Facility, June 1995

Compound	NR 140 Preventive Action Limit	NR 140 Enforcement Standard	Sample Location and I.D.			
			Area A Groundwater Area A-15' (West)	Area A Groundwater North	Area A Groundwater East	Area A Soil South
Volatile Organic Compounds						
Benzene	0.5	5		3.5		
Ethylbenzene	140	700				
MTBE	12	60				
Toluene	68.6	343		1.9		
Xylenes	124	620		4.5		
1,2,4 Trimethylbenzene	none	none	NA	4.9	1.9	
1,3,5 Trimethylbenzene	none	none	NA	1.9		
Diesel Range Organics	none	none	NA	<5 *	0.55	

Note: All concentrations in parts per billion.

Blank entries mean no detection above quantification limits.

NA means not analyzed.

Shaded concentrations indicate exceedance of an NR 140 PAL or ES

* = Soil sample for DRO

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

WDNR No. 128053530

MASTER FILE COPY

ANALYTICAL AND QUALITY CONTROL REPORT

PROJECT # 304253281
CC:

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

RECEIVED JUN 30 1995
HSI - BROOKFIELD

06/28/1995

Job No: 95.04129

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
135427	Area A North #304253281	06/22/1995	06/22/1995
135428	Area A East #304253281	06/22/1995	06/22/1995
135429	Trip #304253281	06/22/1995	06/22/1995
135430	Area A North B 15-17 #304253281	06/22/1995	06/22/1995
135431	Area A South B 15-17 #304253281	06/22/1995	06/22/1995

The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed past hold time
C = Standard outside of control limits
E = Extracted past hold time
G = Received past hold time
I = Improperly handled sample
L = Common lab solvent and contaminant
P = Improperly preserved sample
T = Does not match typical pattern
B = Blank is contaminated
D = Diluted for analysis
F = Sample filtered in lab
H = Late eluting hydrocarbons present
J = Estimated concentration
M = Matrix interference
S = Sediment present
X = Unidentified compound(s) present

Brian D. DeJong, Organic Operations Manager
Certification No. 128053530

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135427
Account No: 39150
Page 2

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Area A North #304253281
Recv'd On Ice

Date Taken: 06/22/1995 13:30 Date Received: 06/22/1995

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
PVOC - AQUEOUS						
Benzene	3.5	ug/L	1.0	S-8020	06/25/1995	1820
Ethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
MTBE	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Toluene	1.9	ug/L	1.0	S-8020	06/25/1995	1820
1,2,4-Trimethylbenzene	4.9	ug/L	1.0	S-8020	06/25/1995	1820
1,3,5-Trimethylbenzene	1.9	ug/L	1.0	S-8020	06/25/1995	1820
Xylenes, Total	4.5	ug/L	3.0	S-8020	06/25/1995	1820
Surr: Bromofluorobenzene	92.5	%	n/a	S-8020	06/25/1995	1820

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135428
Account No: 39150
Page 3

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Area A East #304253281
Recv'd On Ice

Date Taken: 06/22/1995 09:00 Date Received: 06/22/1995

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
DRO Extraction	06/23/95			WDNR	06/26/1995	499
PVOC - AQUEOUS						
Benzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Ethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
MTBE	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Toluene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
1,2,4-Trimethylbenzene	1.9	ug/L	1.0	S-8020	06/25/1995	1820
1,3,5-Trimethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Xylenes, Total	<3.0	ug/L	3.0	S-8020	06/25/1995	1820
Surr: Bromofluorobenzene	92.0	%	n/a	S-8020	06/25/1995	1820
DRO - AQUEOUS	0.55	mg/L	0.10	WDNR	06/25/1995	499 704

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135429
Account No: 39150
Page 4

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Trip #304253281
Recv'd On Ice

Date Taken: 06/22/1995 Date Received: 06/22/1995

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
PVOC - AQUEOUS						
Benzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Ethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
MTBE	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Toluene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
1,2,4-Trimethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
1,3,5-Trimethylbenzene	<1.0	ug/L	1.0	S-8020	06/25/1995	1820
Xylenes, Total	<3.0	ug/L	3.0	S-8020	06/25/1995	1820
Surr: Bromofluorobenzene	94.5	%	n/a	S-8020	06/25/1995	1820

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135430
Account No: 39150
Page 5

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Area A North B 15-17 #304253281
Recv'd On Ice

Date Taken: 06/22/1995 14:30 Date Received: 06/22/1995

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
Solids, Total	84.7	%	n/a	E-160.3	06/26/1995	1096
DRO Extraction	06/23/95			WDNR	06/23/1995	446
DRO - NONAQUEOUS	<5.0	mg/kg	5.0	WDNR	06/24/1995	446 844

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

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WDNR No. 128053530

ANALYTICAL REPORT

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

06/28/1995
Job No: 95.04129
Sample No: 135431
Account No: 39150
Page 6

JOB DESCRIPTION: Quad Graphics #304253281
PROJECT DESCRIPTION: Ground Water And Soil Analysis
SAMPLE DESCRIPTION: Area A South B 15-17 #304253281
Recv'd On Ice

Date Taken: 06/22/1995 15:30 Date Received: 06/22/1995

Parameter		Results	Units	Reporting Limit	Method	Date Analyzed	Prep/Run Batch
Solids, Total		83.8	%	n/a	E-160.3	06/26/1995	1096
DRO Extraction		06/23/95			WDNR	06/23/1995	446
PVOC - NONAQUEOUS							
Benzene	I	<0.0055	mg/kg	0.0055	S-8020	06/28/1995	1168
Ethylbenzene	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
MTBE	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
Toluene	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
1,2,4-Trimethylbenzene	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
1,3,5-Trimethylbenzene	I	<0.025	mg/kg	0.025	S-8020	06/28/1995	1168
Xylenes, Total	I	<0.075	mg/kg	0.075	S-8020	06/28/1995	1168
Surr: Bromofluorobenzene		85.0	%	n/a	S-8020	06/28/1995	1168
DRO - NONAQUEOUS		<5.0	mg/kg	5.0	WDNR	06/24/1995	446 844

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
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QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Job Description: Quad Graphics #304253281

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
PVOC - AQUEOUS	S-8020					
Benzene	S-8020	1820	20.0	20.1	100.5	njd
Ethylbenzene	S-8020	1820	20.0	20.5	102.5	njd
MTBE	S-8020	1820	20.0	18.5	92.5	njd
Toluene	S-8020	1820	20.0	20.2	101.0	njd
1,2,4-Trimethylbenzene	S-8020	1820	20.0	21.1	105.5	njd
1,3,5-Trimethylbenzene	S-8020	1820	20.0	21.2	106.0	njd
Xylenes, Total	S-8020	1820	60.0	63.4	105.7	njd
Surr: Bromofluorobenzene	S-8020	1820	20.0	20.6	103.0	njd
PVOC - AQUEOUS	S-8020					
Benzene	S-8020	1820	20.0	19.7	98.5	njd
Ethylbenzene	S-8020	1820	20.0	19.5	97.5	njd
MTBE	S-8020	1820	20.0	17.3	86.5	njd
Toluene	S-8020	1820	20.0	19.6	98.0	njd
1,2,4-Trimethylbenzene	S-8020	1820	20.0	20.0	100.0	njd
1,3,5-Trimethylbenzene	S-8020	1820	20.0	20.6	103.0	njd
Xylenes, Total	S-8020	1820	60.0	62.0	103.3	njd
Surr: Bromofluorobenzene	S-8020	1820	20.0	20.2	101.0	njd
PVOC - AQUEOUS	S-8020					
Benzene	S-8020	1820	20.0	20.4	102.0	njd
Ethylbenzene	S-8020	1820	20.0	20.7	103.5	njd
MTBE	S-8020	1820	20.0	18.8	94.0	njd
Toluene	S-8020	1820	20.0	20.6	103.0	njd
1,2,4-Trimethylbenzene	S-8020	1820	20.0	21.2	106.0	njd
1,3,5-Trimethylbenzene	S-8020	1820	20.0	21.3	106.5	njd
Xylenes, Total	S-8020	1820	60.0	64.6	107.7	njd
Surr: Bromofluorobenzene	S-8020	1820	20.0	20.5	102.5	njd
DRO - AQUEOUS	WDNR	704	1000	1057	105.7	leh
DRO - AQUEOUS	WDNR	704	1000	1162	116.2	leh
DRO - AQUEOUS	WDNR	704	1000	968	96.8	leh
PVOC - NONAQUEOUS	S-8020					
Benzene	S-8020	1168	1.00	0.90	90.0	jsm
Ethylbenzene	S-8020	1168	1.00	0.93	93.0	jsm
MTBE	S-8020	1168	1.00	1.05	105.0	jsm
Toluene	S-8020	1168	1.00	0.92	92.0	jsm
1,2,4-Trimethylbenzene	S-8020	1168	1.00	0.90	90.0	jsm
1,3,5-Trimethylbenzene	S-8020	1168	1.00	0.92	92.0	jsm
Xylenes, Total	S-8020	1168	3.00	2.81	93.7	jsm

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QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Job Description: Quad Graphics #304253281

Parameter	Method	Run Batch	True Value	Observed Value	Percent Recovery	Analyst
Surr: Bromofluorobenzene	S-8020	1168	20.0	19.3	96.5	jsm
DRO - NONAQUEOUS	WDNR	844	1000	1087	108.7	leh
DRO - NONAQUEOUS	WDNR	844	1000	1086	108.6	leh

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

BLANKS

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Job Description: Quad Graphics #304253281

Parameter	Prep Batch	Run Batch	Blank Result	Detection Limit	Units
PVOC - AQUEOUS					
Benzene		1820	<1.0	1.0	ug/L
Ethylbenzene		1820	<1.0	1.0	ug/L
MTBE		1820	<1.0	1.0	ug/L
Toluene		1820	<1.0	1.0	ug/L
1,2,4-Trimethylbenzene		1820	<1.0	1.0	ug/L
1,3,5-Trimethylbenzene		1820	<1.0	1.0	ug/L
Xylenes, Total		1820	<3.0	3.0	ug/L
Surr: Bromofluorobenzene		1820	93.5	n/a	%
DRO - AQUEOUS	499	704	<0.4	0.10	mg/L
PVOC - NONAQUEOUS					
Benzene		1168	<0.0055	0.0055	mg/kg
Ethylbenzene		1168	<0.025	0.025	mg/kg
MTBE		1168	<0.025	0.025	mg/kg
Toluene		1168	<0.025	0.025	mg/kg
1,2,4-Trimethylbenzene		1168	<0.025	0.025	mg/kg
1,3,5-Trimethylbenzene		1168	<0.025	0.025	mg/kg
Xylenes, Total		1168	<0.075	0.075	mg/kg
Surr: Bromofluorobenzene		1168	92.5	n/a	%
DRO - NONAQUEOUS	446	844	<2.5	5.0	mg/kg

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NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
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QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Job Description: Quad Graphics #304253281

Analyte	Prep Batch Number	Run Batch Number	LCS Amount	Units	LCS Result	Percent Recovery	LCSD Result	Percent Recovery	Relative Percent Difference
PVOC - NONAQUEOUS									
Benzene		1168	10.0	mg/kg	6.57	65.7	6.93	69.3	5.3
Ethylbenzene		1168	10.0	mg/kg	9.45	94.5	9.93	99.3	5.0
MTBE		1168	10.0	mg/kg	10.6	106.0	11.3	113.0	6.4
Toluene		1168	10.0	mg/kg	8.03	80.3	8.45	84.5	5.1
1,2,4-Trimethylbenzene		1168	10.0	mg/kg	9.88	98.8	10.3	103.0	4.1
1,3,5-Trimethylbenzene		1168	10.0	mg/kg	9.49	94.9	9.83	98.3	3.5
Xylenes, Total		1168	30.0	mg/kg	25.3	84.3	26.2	87.3	3.5
Surr: Bromofluorobenzene		1168	20.0	%	18.6	93.0	18.8	94.0	1.1
DRO - NONAQUEOUS	446	844	1000	mg/kg	1031	103.1	1135	113.5	9.6
DRO - NONAQUEOUS	446	844	1000	mg/kg	1060	106.0			

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NATIONAL ENVIRONMENTAL TESTING, INC.

Watertown Division
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QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

06/28/1995

Mr. Jerry DeMers
HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Job No: 95.04129
Account No: 39150

Job Description: Quad Graphics #304253281

Analyte	Prep Batch Number	Run Batch Number	Sample Result	Spike Amount	Units	Matrix Spike Result	Percent Recovery	MSD Result	Percent Recovery	Relative Percent Difference
PVOC - AQUEOUS										
Benzene		1820	<1.0	20.0	ug/L	18.4	92.0	19.8	99.0	7.3
Ethylbenzene		1820	<1.0	20.0	ug/L	18.5	92.5	19.9	99.5	7.3
MTBE		1820	<1.0	20.0	ug/L	16.8	84.0	17.9	89.5	6.3
Toluene		1820	<1.0	20.0	ug/L	18.4	92.0	19.7	98.5	6.8
1,2,4-Trimethylbenzene		1820	<1.0	20.0	ug/L	19.1	95.5	20.3	101.5	6.0
1,3,5-Trimethylbenzene		1820	<1.0	20.0	ug/L	19.1	95.5	20.5	102.5	7.0
Xylenes, Total		1820	<3.0	60.0	ug/L	57.9	96.5	62.5	104.2	7.6
Surr: Bromofluorobenzene		1820	18.6	20.0	%	19.3	96.5	20.1	100.5	4.0

OCEAN GROUP

EXHIBIT D

ENVIRONMENTAL LABORATORIES INC.

Date of Report: 06/15/95
Project Number: 09517319
Lab ID: 95-0008355
Lab Matrix: gw
Account Number: 189
Date Collected: 05/31/95 00:00
Collected By: Client
Date Received: 06/01/95 12:25
C of C Number: 17213
Temperature: Received on Ice.

Attention: Mark Krueger
Sigma Environmental Services, Inc.
220 East Ryan Road
Oak Creek WI 53154-0000

Sample Desc: GW @ 20K UST AREA/GROUNDWATER/RINGIER
20,000 UST
Container Integrity: Meets Standard, Sample Integrity: Meets Standard

	Result	Unit	Quant Limit	Procedure	Test Date
ORGANIC					
GC VOLATILES					
pH (GC VOCs 8021)	<2.0	N/A	N/A	SW 9041	06/10/95
1,1,1-Trichloroethane	<1.0	ug/l	1.0	SW 8021	06/10/95
1,1,2,2-Tetrachloroethane	<2.0	ug/l	2.0	SW 8021	06/10/95
1,1,2-Trichloroethane	<1.0	ug/l	1.0	SW 8021	06/10/95
1,1-Dichloroethane	<1.0	ug/l	1.0	SW 8021	06/10/95
1,1-Dichloroethene	<1.0	ug/l	1.0	SW 8021	06/10/95
1,2,3-Trichlorobenzene	<2.0	ug/l	2.0	SW 8021	06/10/95
1,2,4-Trichlorobenzene	<2.0	ug/l	2.0	SW 8021	06/10/95
1,2,4-Trimethylbenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
1,2-Dibromo-3-Chloropropane (DBCP)	<3.0	ug/l	3.0	SW 8021	06/10/95
1,2-Dibromoethane	<1.0	ug/l	1.0	SW 8021	06/10/95
1,2-Dichlorobenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
1,2-Dichloroethane	<1.0	ug/l	1.0	SW 8021	06/10/95
1,2-Dichloropropane	<1.0	ug/l	1.0	SW 8021	06/10/95
1,3,5-Trimethylbenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
1,3-Dichlorobenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
1,3-Dichloropropane	<1.0	ug/l	1.0	SW 8021	06/10/95
1,4-Dichlorobenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
2,2-Dichloropropane	<1.0	ug/l	1.0	SW 8021	06/10/95
2-Chlorotoluene	<1.0	ug/l	1.0	SW 8021	06/10/95
4-Chlorotoluene	<1.0	ug/l	1.0	SW 8021	06/10/95
Benzene	<1.0	ug/l	1.0	SW 8021	06/10/95
Bromobenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
Bromodichloromethane	<1.0	ug/l	1.0	SW 8021	06/10/95
Carbon Tetrachloride	<1.0	ug/l	1.0	SW 8021	06/10/95
Chlorobenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
Chloroethane	<5.0	ug/l	5.0	SW 8021	06/10/95
Chloroform	<1.0	ug/l	1.0	SW 8021	06/10/95

wrs

ENVIRONMENTAL LABORATORIES INC.

Date of Report: 06/15/95
Project Number: 09517319
Lab ID: 95-0008355
Lab Matrix: gw
Account Number: 189
Date Collected: 05/31/95 00:00
Collected By: Client
Date Received: 06/01/95 12:25
C of C Number: 17213
Temperature: Received on Ice.

Attention: Mark Krueger
Sigma Environmental Services, Inc.
220 East Ryan Road
Oak Creek WI 53154-0000

Sample Desc: GW @ 20K UST AREA/GROUNDWATER/RINGIER
20,000 UST

Container Integrity: Meets Standard, Sample Integrity: Meets Standard

	Result	Unit	Quant Limit	Procedure	Test Date
Chloromethane	<5.0	ug/l	5.0	SW 8021	06/10/95
cis-1,2-Dichloroethene	<1.0	ug/l	1.0	SW 8021	06/10/95
di-Isopropyl ether (isopropyl ether)	<1.0	ug/l	1.0	SW 8021	06/10/95
Dibromochloromethane	<1.0	ug/l	1.0	SW 8021	06/10/95
Dichlorodifluoromethane (Freon 12)	<10	ug/l	10	SW 8021	06/10/95
Ethylbenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
Hexachlorobutadiene	<1.0	ug/l	1.0	SW 8021	06/10/95
Isopropylbenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
Methyl Tertiary Butyl Ether (MTBE)	<1.0	ug/l	1.0	SW 8021	06/10/95
Methylene Chloride (Dichloromethane)	<5.0	ug/l	5.0	SW 8021	06/10/95
n-Butylbenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
n-Propylbenzene	<2.0	ug/l	2.0	SW 8021	06/10/95
Naphthalene	<3.0	ug/l	3.0	SW 8021	06/10/95
o-Xylene	<1.0	ug/l	1.0	SW 8021	06/10/95
P,M-Xylenes	<1.0	ug/l	1.0	SW 8021	06/10/95
p-Isopropyltoluene (p-Cymene)	<1.0	ug/l	1.0	SW 8021	06/10/95
sec-Butylbenzene	<1.0	ug/l	1.0	SW 8021	06/10/95
tert-Butylbenzene	<2.0	ug/l	2.0	SW 8021	06/10/95
Tetrachloroethene	<1.0	ug/l	1.0	SW 8021	06/10/95
Toluene	<1.0	ug/l	1.0	SW 8021	06/10/95
trans-1,2-Dichloroethene	<1.0	ug/l	1.0	SW 8021	06/10/95
Trichloroethene	<1.0	ug/l	1.0	SW 8021	06/10/95
Trichlorofluoromethane (Freon 11)	<1.0	ug/l	1.0	SW 8021	06/10/95
Vinyl Chloride	<3.0	ug/l	3.0	SW 8021	06/10/95

LUST

wrs

ENVIRONMENTAL LABORATORIES INC.

Date of Report: 06/15/95
Project Number: 09517319
Lab ID: 95-0008355
Lab Matrix: gw
Account Number: 189
Date Collected: 05/31/95 00:00
Collected By: Client
Date Received: 06/01/95 12:25
C of C Number: 17213
Temperature: Received on Ice.

Attention: Mark Krueger
Sigma Environmental Services, Inc.
220 East Ryan Road
Oak Creek WI 53154-0000

Sample Desc: GW @ 20K UST AREA/GROUNDWATER/RINGIER
20,000 UST

Container Integrity: Meets Standard, Sample Integrity: Meets Standard

	Result	Unit	Quant Limit	Procedure	Test Date
pH (DRO)	<2.0	N/A	N/A	SW 9041	06/12/95
Diesel Range Organics	360	ug/l	100	WIMODDRO	06/12/95

Significant baseline rise in DRO sample chromatogram. .36 PPM
The DRO GC chromatogram does not match the diesel standard pattern.

NO DRO DETECT IN OUR RESULTS

All soil and water samples will be disposed of by CBC 60 days following date of receipt.
All waste samples (non-water, non-soil) will be returned 60 days following date of receipt.

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D = Detected below the Quantitation Limit. J = Estimated below the Quantitation Limit.
Elevated Detection Limits :
@ = Due to matrix interference. # = Due to sample concentration.
$ = Due to sample quantity. + = Due to extract volume.

Reviewed and Approved by:
Wes Saferite

ENVIRONMENTAL LABORATORIES INC.

Date of Report: 06/15/95
Project Number: 09517319
Lab ID: 95-0008354
Lab Matrix: gw
Account Number: 189
Date Collected: 05/31/95 00:00
Collected By: Client
Date Received: 06/01/95 12:25
C of C Number: 17213
Temperature: Received on Ice.

Attention: Mark Krueger
Sigma Environmental Services, Inc.
220 East Ryan Road
Oak Creek WI 53154-0000

Sample Desc: GW @10K UST AREA/GROUNDWATER/RINGIER
10,000 UST
Container Integrity: Meets Standard, Sample Integrity: Meets Standard

NO DRO

	Result	Unit	Quant Limit	Procedure	Test Date
ORGANIC					
GC VOLATILES					
pH (GC VOCs 8021)	<2.0	N/A	N/A	SW 9041	06/09/95
1,1,1-Trichloroethane	<1.0	ug/l	1.0	SW 8021	06/09/95
1,1,2,2-Tetrachloroethane	<2.0	ug/l	2.0	SW 8021	06/09/95
1,1,2-Trichloroethane	<1.0	ug/l	1.0	SW 8021	06/09/95
1,1-Dichloroethane	<1.0	ug/l	1.0	SW 8021	06/09/95
1,1-Dichloroethene	<1.0	ug/l	1.0	SW 8021	06/09/95
1,2,3-Trichlorobenzene	<2.0	ug/l	2.0	SW 8021	06/09/95
1,2,4-Trichlorobenzene	<2.0	ug/l	2.0	SW 8021	06/09/95
1,2,4-Trimethylbenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
1,2-Dibromo-3-Chloropropane (DBCP)	<3.0	ug/l	3.0	SW 8021	06/09/95
1,2-Dibromoethane	<1.0	ug/l	1.0	SW 8021	06/09/95
1,2-Dichlorobenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
1,2-Dichloroethane	<1.0	ug/l	1.0	SW 8021	06/09/95
1,2-Dichloropropane	<1.0	ug/l	1.0	SW 8021	06/09/95
1,3,5-Trimethylbenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
1,3-Dichlorobenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
1,3-Dichloropropane	<1.0	ug/l	1.0	SW 8021	06/09/95
1,4-Dichlorobenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
2,2-Dichloropropane	<1.0	ug/l	1.0	SW 8021	06/09/95
2-Chlorotoluene	<1.0	ug/l	1.0	SW 8021	06/09/95
4-Chlorotoluene	<1.0	ug/l	1.0	SW 8021	06/09/95
Benzene	<1.0	ug/l	1.0	SW 8021	06/09/95
Bromobenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
Bromodichloromethane	<1.0	ug/l	1.0	SW 8021	06/09/95
Carbon Tetrachloride	<1.0	ug/l	1.0	SW 8021	06/09/95
Chlorobenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
Chloroethane	<5.0	ug/l	5.0	SW 8021	06/09/95
Chloroform	<1.0	ug/l	1.0	SW 8021	06/09/95

wrs

ENVIRONMENTAL LABORATORIES INC.

Date of Report: 06/15/95
Project Number: 09517319
Lab ID: 95-0008354
Lab Matrix: gw
Account Number: 189
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Collected By: Client
Date Received: 06/01/95 12:25
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Temperature: Received on Ice.

Attention: Mark Krueger
Sigma Environmental Services, Inc.
220 East Ryan Road
Oak Creek WI 53154-0000

Sample Desc: GW @10K UST AREA/GROUNDWATER/RINGIER
10,000 UST
Container Integrity: Meets Standard, Sample Integrity: Meets Standard

	Result	Unit	Quant Limit	Procedure	Test Date
Chloromethane	<5.0	ug/l	5.0	SW 8021	06/09/95
cis-1,2-Dichloroethene	<1.0	ug/l	1.0	SW 8021	06/09/95
di-Isopropyl ether (isopropyl ether)	<1.0	ug/l	1.0	SW 8021	06/09/95
Dibromochloromethane	<1.0	ug/l	1.0	SW 8021	06/09/95
Dichlorodifluoromethane (Freon 12)	<10	ug/l	10	SW 8021	06/09/95
Ethylbenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
Hexachlorobutadiene	<1.0	ug/l	1.0	SW 8021	06/09/95
Isopropylbenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
Methyl Tertiary Butyl Ether (MTBE)	<1.0	ug/l	1.0	SW 8021	06/09/95
Methylene Chloride (Dichloromethane)	<5.0	ug/l	5.0	SW 8021	06/09/95
n-Butylbenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
n-Propylbenzene	<2.0	ug/l	2.0	SW 8021	06/09/95
Naphthalene	<3.0	ug/l	3.0	SW 8021	06/09/95
o-Xylene	<1.0	ug/l	1.0	SW 8021	06/09/95
P,M-Xylenes	<1.0	ug/l	1.0	SW 8021	06/09/95
p-Isopropyltoluene (p-Cymene)	<1.0	ug/l	1.0	SW 8021	06/09/95
sec-Butylbenzene	<1.0	ug/l	1.0	SW 8021	06/09/95
tert-Butylbenzene	<2.0	ug/l	2.0	SW 8021	06/09/95
Tetrachloroethene	<1.0	ug/l	1.0	SW 8021	06/09/95
Toluene	<1.0	ug/l	1.0	SW 8021	06/09/95
trans-1,2-Dichloroethene	<1.0	ug/l	1.0	SW 8021	06/09/95
Trichloroethene	<1.0	ug/l	1.0	SW 8021	06/09/95
Trichlorofluoromethane (Freon 11)	<1.0	ug/l	1.0	SW 8021	06/09/95
Vinyl Chloride	<3.0	ug/l	3.0	SW 8021	06/09/95

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Reviewed and Approved by:
Wes Saferite

ENVIRONMENTAL LABORATORIES INC.

Date of Report: 06/15/95
Project Number: 09517319
Lab ID: 95-0008352
Lab Matrix: sl
Account Number: 189
Date Collected: 05/31/95 00:00
Collected By : Client
Date Received: 06/01/95 12:25
C of C Number: 17231
Temperature: Received on Ice.

Attention: Mark Krueger
Sigma Environmental Services, Inc.
220 East Ryan Road
Oak Creek WI 53154-0000

Sample Desc: AREA E NORTH @ 4 1/2'/SOIL/RINGIER
SUMP PUMPS IN PRESS AREA
Container Integrity: Meets Standard, Sample Integrity: Meets Standard

NO BIS-2-ETHYLHEXYL PHTHALATE

	Wet Result	Dry Result	Unit	Quant Limit	Procedure	Test Date
INORGANIC						
PHYSICAL CHAR.						
Moisture (%)	19		%	0.10	SW 5030	06/05/95
ORGANIC						
HPLC						
1-Methylnaphthalene	<0.0096	<0.012	mg/kg	0.012	SW 8310	06/12/95
2-Methylnaphthalene	<0.0096	<0.012	mg/kg	0.012	SW 8310	06/12/95
Acenaphthene	<0.010	<0.012	mg/kg	0.012	SW 8310	06/12/95
Acenaphthylene	<0.018	<0.022	mg/kg	0.022	SW 8310	06/12/95
Anthracene	<0.0013	<0.0016	mg/kg	0.0016	SW 8310	06/12/95
Benzo(a)anthracene	<0.00048	<0.00059	mg/kg	0.00059	SW 8310	06/12/95
Benzo(a)pyrene	<0.00056	<0.00069	mg/kg	0.00069	SW 8310	06/12/95
Benzo(b)fluoranthene	<0.00040	<0.00049	mg/kg	0.00049	SW 8310	06/12/95
Benzo(g,h,i)perylene	<0.0013	<0.0016	mg/kg	0.0016	SW 8310	06/12/95
Benzo(k)fluoranthene	<0.00034	<0.00042	mg/kg	0.00042	SW 8310	06/12/95
Chrysene	<0.00064	<0.00079	mg/kg	0.00079	SW 8310	06/12/95
Dibenzo(a,h)anthracene	<0.00056	<0.00069	mg/kg	0.00069	SW 8310	06/12/95
Fluoranthene	<0.0012	<0.0015	mg/kg	0.0015	SW 8310	06/12/95
Fluorene	<0.0025	<0.0031	mg/kg	0.0031	SW 8310	06/12/95
Indeno(1,2,3,c,d)pyrene	<0.00023	<0.00028	mg/kg	0.00028	SW 8310	06/12/95
Naphthalene	<0.0096	<0.012	mg/kg	0.012	SW 8310	06/12/95
Phenanthrene	0.0016	0.0020	mg/kg	0.0012	SW 8310	06/12/95
Pyrene	0.00067	0.00083	mg/kg	0.00079	SW 8310	06/12/95
LUST						
Diesel Range Organics	<4.0	<4.9	mg/kg	4.9	WIMODDRO	06/12/95

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Reviewed and Approved by: Wes Raferite
Reviewed and Approved by: Joanne Lipo

TABLE 1

Table 1. Laboratory Analytical Results for Soil
Former Ringier America Facility, June 1995

Compound	NR 720 Standard	Sample Location and I.D.										
		Area C	Area D	Area E		Area F					Area G	
		Area C-2'	Area D-6'	North 4.5'	South 4.5'	Pile 1'	Pad East 4-6'	Pad West 4-6'	Grass East 4-6'	Grass West 4-6'	North 4-6'	South 8-10'
Volatile Organic Compounds												
Benzene	5.5		1.9	NA	NA		2.7				1.2	
Ethylbenzene	2,900	229.0	538.0	NA	NA							
Naphthalene	None		4.0	NA	NA							
Toluene	1,500	15.0	53.6	NA	NA		1.2		1.0		2.0	
Xylenes (total)	4,100	1960.0	988.0	NA	NA		3.1		1.1	1.0	5.8	
Vinyl chloride	None			NA	NA							
1,1-Dichloroethane	None			NA	NA							
1,1-Dichloroethene	None			NA	NA							
cis-1,2-Dichloroethene	None		56.0	NA	NA				3.5			
Tetrachloroethene	None	34.0		NA	NA							
Trichloroethene	None	17.0		NA	NA							
Diesel Range Organics	100	NA	NA			NA	NA	NA	NA	NA	NA	NA
Polynuclear Aromatics												
Bis-2-ethylhexylphthalate	None	NA	NA	2.67	0.50	NA	NA	NA	NA	NA	NA	NA

Note: All concentrations in parts per billion except diesel range organics and polynuclear aromatics (parts per million).

Blank entries mean no detection above quantification limits.

NA means not analyzed.

TABLE 2

Table 2. Laboratory Analytical Results for Ground Water
Former Ringier America Facility, June 1995

Compound	NR 140 Preventive Action Limit	NR 140 Enforcement Standard	Sample Location and I.D.									
			Area A	Area B	Area C	Area E	Area F				Area G	
			Area A-15'	Area B-15'	Area C-2'	North	Pad East	Pad West	Grass East	Grass West	North	South
Volatile Organic Compounds												
Benzene	0.5	5			1.3	NA		1.1				
Ethylbenzene	140	700			70.5	NA	1.3					
Naphthalene	8	40	NA	NA	3.0	NA						
Toluene	68.6	343			7.2	NA						
Xylenes	124	620			511	NA		3.0		1.0		
Vinyl chloride	0.02	0.2	NA	NA		NA			1.4			
1,1-Dichloroethane	85	850	NA	NA		NA		1.0		2.7		
1,1-Dichloroethene	0.7	7	NA	NA		NA						
cis-1,2-Dichloroethene	7	70	NA	NA	12.3	NA			17.6			
Tetrachloroethene	0.5	5	NA	NA		NA						
Trichloroethene	0.5	5	NA	NA	1.2	NA						
Diesel Range Organics	None	None	NA	1,320	NA	1,700	NA	NA	NA	NA	NA	NA
Polynuclear Aromatics												
Bis-2-ethylhexylphthalate	0.3	3	NA	NA	NA	345	NA	NA	NA	NA	NA	NA

Note: All concentrations in parts per billion.

Blank entries mean no detection above quantification limits.

NA means not analyzed.

Shaded concentrations indicate exceedance of an NR 140 PAL or ES

Department of Natural Resources

LEAKING UNDERGROUND STORAGE TANK (Case Tracking)
Form 4400-146 Rev. 2-93

Proj. Manager is Scott Ferguson

UID Number: 5156 **FID Number:** 268017090 **PMN Number:**

County: 68
Site Name: Former Ringier America Facility
Address: 16555 West Rogers Drive
New Berlin, WI

Municipality:
Legal Descript.: ___ 1/4 ___ 1/4 sec. ___ ___ N R ___ (E/W)
Lat.: ___ Long.: ___

Initial Contact Date: 8/7/95
Date RPLetter Sent: 11/8/95
Date Closure Approved: __/__/__

Person/Firm Reporting:
Phone Number: ( )

Priority Screening
4 1 = High
___ 2 = Medium
___ 3 = Low
___ 4 = Unknown

Scoring Criteria
1.
2.
3.
4.
5.

Funding Source
___ 1 = RP
___ 2 = LTF
___ 3 = EF
___ 4 = Other

Effective Date
__/__/__
__/__/__
__/__/__
__/__/__

LUST Trust Eligible
___ 1 = Federal
___ 2 = Non-Federal

Score: ~~84~~ 16 Init.: EA Date: ~~11/7/95~~ 12/19/95

Case Status

	Start Date	End Date
___ (F) Free Product Removal	__/__/__	__/__/__
___ (E) RP Emergency Response	__/__/__	__/__/__
___ (R) LTF Emergency Response	__/__/__	__/__/__
___ (L) Long Term Monitoring	__/__/__	__/__/__

Responsible Party

Company Name: Quad Graphics/Pewaukee
Contact Person:
Address: W224 N3322 Duplainville Rd
Pewaukee, WI 53072-4195
Phone Number: (414) 691-9200

CC's:

Impacts

Enter "P" for potential and "K" for known

___ (1) Fire/Explosion Threat
___ (2) Contaminated Private Well(s) ___ # of Wells
___ (3) Contaminated Public Well
X (4) Groundwater Contamination
___ (5) Soil Contamination
___ (6) Other:
___ (7) Surface Water Impacts
___ (9) Floating Product

Consultant

Company Name: Hydro-Search
Contact Name: Jerry DeMeers
Address:
Telephone: ( )

Substances	# Tank(s)	Size
___ (1) Leaded Gas		
___ (2) Unleaded Gas		
___ (3) Diesel		
X (4) Fuel Oil	1	25,000
___ (5) Unkwn Hydrocrbn		
___ (8) Other		
___ (12) Waste Oil		

human health or property; and/or any case which has caused or has a high potential of causing substantial impacts to the soil, waters and air of the State of Wisconsin).

EMERGENCY FACTORS:

___ Contaminated private or public well >NR 140 enf. std.
___ Explosive or toxic vapors in structures
___ Threat of fire

HIGH FACTORS:

___ Floating product (including sheen)
X GW contamination (>140 enf. std.)
___ Impacted surface water - - wetland, trout stream, etc. impacted
___ Saturated soil contamination posing a risk to groundwater

MEDIUM FACTORS: (DEFINITION: Any case which does not appear to be an immediate threat to human health or vital natural resources but which shows levels of contamination that may cause substantial environmental impacts if left unaddressed.)

___ Moderate soil contamination with potential for impacting groundwater.
___ Impacted surface water - - no critical habitat threats.
___ Groundwater contamination >NR 140 PAL.

LOW FACTORS: (DEFINITION: Any case where contamination has been documented, but which presents limited potential for immediate threat to human health and vital natural resources.)

___ Soil contamination which appears to have a limited potential for impacting groundwater.
___ Initial Remedial action has substantially reduced environmental threat.

UNKNOWN FACTORS: (DEFINITION: Any case where some indication of contamination is present, but due to incomplete or inaccurate information the level of threat to human health or the environment can not be assessed at this time.)

___ Inadequate information to assign a high, medium, or low ranking.

NUMERICAL LUST SCORING WORKSHEET

1. GROUNDWATER & SOILS:

POINTS:

20 Municipal well impacted
18 >6 private wells impacted
6 16 4 - 6 private wells impacted
14 2 - 3 private wells impacted
12 1 private well impacted

Points:

10 Major soil and/or gw >ES within 1200' of a public well
8 Major soil and/or gw >ES within 1200' of one or more private wells
(6) Groundwater contamination >ES
4 Groundwater contamination <ES
2 Soil contamination

For purposes of this scoring, private well includes any non-municipal water supply system (e.g. non-community and other than municipal)

2. EXPLOSIVE OR TOXIC VAPORS:

POINTS: CONFIRMED	POTENTIAL	
20	10	Explosive levels in a residence or building
16	8	Explosive levels in a sewer or other confined space
12	6	Toxic levels in a residence or building

NOTE: Explosive levels determined to be >20% LEL as per an explosivity meter, toxicity levels are based on OSHA permissible exposure limits (PEL's)

3. SURFACE WATER IMPACTS:

POINTS: CONFIRMED	POTENTIAL	
14	7	Visible sheen or product on sensitive surface water environment (e.g. wetland, trout stream)
10	5	Visible sheen or product on non-sensitive surface water area.
6	3	Exceedance of NR 102, 103 or 104 surface water quality standards.

Request assistance from District Water Resources staff in evaluating surface water impacts.

4. HYDROGEOLOGIC SETTING:

Points:

12 Permeable stratigraphy (gravel, sand, fractured bedrock or utilities capable of intercepting and directing flow) and groundwater within 25 feet of the ground surface.
10 Permeable stratigraphy and groundwater greater than 25 feet below ground surface.
8 Moderately permeable stratigraphy (silty sands, silty gravel, clayey sands) and groundwater within 25 feet of ground surface.
6 Moderately permeable stratigraphy and groundwater greater than 25 feet below ground surface.
4 (4) Low permeability stratigraphy (silt, clayey silt, sand clays) and groundwater within 25 feet of ground surface.
2 Low permeability stratigraphy and groundwater greater than 25 feet below ground surface.

5. TYPE OF PRODUCT:

POINTS: FREE PRODUCT	DISSOLVED PRODUCT	
12	8	Gasoline, mixture of gasoline and other products, other light petroleum products
6 10	(6)	Diesel, fuel oil.
6	2	Bunker oil, other heavy oils or crude fractions.