COMPREHENSIVE SITE INVESTIGATION REPORT
VILLAREAL BUILDING
1919 5TH AVENUE
MOLINE, ILLINOIS
USEPA BROWNFIELDS HAZARDOUS SUBSTANCES ASSESSMENT GRANT

USEPA Cooperative Agreement No. BF-00E02901
Terracon Project No. 07067060
May 6, 2009

Prepared For:

CITY OF MOLINE
Moline, Illinois

Prepared By:

Terracon
Bettendorf, Iowa

Terracon

May 6, 2009

Mr. Patrick Burke
Economic Development Manager
City of Moline
619 16th Street
Moline, Illinois 61265

Re: Comprehensive Site Investigation Report
Villareal Building
1919 5th Avenue
Moline, Illinois
USEPA Brownfields Hazardous Substances Assessment Grant (May 2006)
USEPA Cooperative Agreement No. BF-00E02901
Terracon Project No. 07067060

Dear Mr. Burke:

Terracon is pleased to submit this Comprehensive Site Investigation Report for the Villareal Building site located at 1919 5th Avenue, Moline, Illinois. This work was funded using a federal brownfields hazardous substances assessment grant. Throughout the report, the section headers reference the corresponding rule sections in Title 35 Illinois Administrative Code.

Sincerely,
Terracon

Scott A. Kerr
Environmental Scientist

John F. Brimeyer, PE
Environmental Manager

Distribution per Section 1.2 of the QAPP

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TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY [740.425(B)(1)] 1
1.1 Objective 1
1.2 Technical Approach 1
1.3 Previous Assessment Activities 1
1.4 Recognized Environmental Conditions 2
1.5 Limitations 2

2.0 SITE CHARACTERIZATION [740.425(B)(2)] 3
2.1 Sources Consulted [740.425(b)(2)(A)] 3
2.2 Site History [740.425(b)(2)(B)] 3
2.3 Site Description [740.425(b)(2)(C)] 3
2.3.1 Regional Location 3
2.3.2 Pertinent Boundary Features 4
2.3.3 Physiography 4
2.3.4 Geology 5
2.3.5 Hydrogeology 5
2.3.6 Potable Water Supply and Well Survey 6
2.3.7 Migration Pathways and Exposure Routes 11
2.3.8 Current and Post-Remediation Land Use 11
2.4 Site Base Map(s) [740.425(b)(2)(D)] 11
2.5 Legal Description [740.425(b)(2)(E)] 11

3.0 SITE-SPECIFIC SAMPLING PLAN [740.425(B)(3)] 12
3.1 Contaminant Source Investigation 12
3.2 Soil Investigation 12
3.2.1 Location of Underground Utilities 12
3.2.2 Site Layout 13
3.2.3 Push-Probe Investigation Methodology 13
3.2.4 Drilling Methodology 13
3.2.5 Field Screening 13
3.2.6 Soil Sampling for USEPA Method 5035 Analysis 14
3.2.7 Borehole Abandonment and Disposal of Cuttings 14
3.2.8 Analytical Methods for Soil Investigations 15
3.3 Groundwater Investigation 15
3.3.1 Location of Underground Utilities 15
3.3.2 Site Layout 15
3.3.3 Monitoring Well Construction 15
3.3.4 Water Level Measurements 16
3.3.5 Hydraulic Conductivity Testing 16
3.3.6 Groundwater Sample Collection and Handling 16
3.3.7 Analytical Methods for Groundwater Investigation 17
3.4 Surface Water Investigation 17
3.5 Potential Receptor Investigation 17

4.0 DOCUMENTATION OF FIELD ACTIVITIES [740.425(B)(4)] 17
4.1 Narrative Description [740.425(b)(4)(A)] 17
4.2 Quality Assurance Project Plan [740.425(b)(4)(B)] 18
4.2.1 Property-Specific Corrective Actions 19
4.2.2 Quality Control Parameters 19
4.3 Presentation of Data [740.425(b)(4)(C)] 20

TABLE OF CONTENTS (CONTINUED)

5.0 ENDANGERMENT ASSESSMENT [740.425(B)(5)] 21
5.1 RECs and Exposure Routes [740.425(b)(5)(A)] 21
5.2 De Minimis Conditions [740.425(b)(5)(B)] 21
5.3 Contaminants of Concern [740.425(b)(5)(C)] 21
5.4 Physical Features of the Site [740.425(b)(5)(D)] 21
5.5 Tier 1 Comparison [740.425(b)(5)(E)] 21
5.5.1 Soil Analysis 21
5.5.2 Groundwater Analysis 21
5.5.3 Vapor Analysis 22

6.0 CONCLUSION [740.425(B)(6)] 22

TABLES

Table 2-1 Hydraulic Conductivity Values (cm/sec) 5
Table 2-2 Well Survey Information 7
Table 3-1 Soil and Sediment Laboratory Analytical Methods 15
Table 3-2 Groundwater Laboratory Analytical Methods 17
Table 5-1 Groundwater Analysis-(mg/L) 22

APPENDICES

Appendix A - Figures
- Figure 1 - Topographic Vicinity Map
- Figure 2 - Site Base Diagram
- Figure 3 - Site Diagram
- Figure 4 - Groundwater Flow Diagram

Appendix B - Soil Boring Logs and Monitoring Well Construction Diagrams
- General Notes
- Unified Soil Classification System
- Soil Boring Logs and Monitoring Well Construction Diagrams

Appendix C - Hydraulic Conductivity Information
- MW-1
- MW-2

Appendix D - Water Supply Information
- SWAP Fact Sheet for Moline
- Well Logs for Records Found
- Municipal Ordinance 98-10-2

Appendix E - Laboratory Analytical Reports

Appendix F - Tables
- Table Notes
- Table 1 - Soil Analytical Results
- Table 2 - Groundwater Analytical Results

ACRONYMS AND ABBREVIATIONS

35 IAC ..... Title 35 Illinois Administrative Code
bgs ..... below ground surface
City ..... City of Moline
cm ..... centimeter(s)
CWS ..... Community Water Supply
EQL ..... Estimated Quantitation Limit
ESA ..... Environmental Site Assessment
ESC ..... Environmental Science Corporation
eV ..... electron-volt
f_{oc} ..... Organic Carbon Content
g ..... gram(s)
GIS ..... Geographical Information System
GRO ..... Groundwater Remediation Objective
IEPA ..... Illinois Environmental Protection Agency
IPCB ..... Illinois Pollution Control Board
IRO ..... Inhalation Remediation Objectives
ISGS ..... Illinois State Geological Survey
ISWS ..... Illinois State Water Survey
JULIE ..... Joint Utility Locating Information for Excavators
kg ..... kilogram(s)
L ..... liter(s)
mg ..... milligram(s)
mL ..... milliliter(s)
N/A ..... Not Applicable
NFR ..... No Further Remediation
NRCS ..... National Resource Conservation Service
OSFM ..... Office of the State Fire Marshal
PAH ..... Polycyclic Aromatic Hydrocarbons
PCB ..... Polychlorinated Biphenyl
PID ..... Photoionization Detector
PIN ..... Parcel Identification Number
ppm ..... part(s) per million
PVC ..... Polyvinyl Chloride
PWS ..... Public Water Supply
QA ..... Quality Assurance
QAPP ..... Quality Assurance Project Plan
QC ..... Quality Control
RCRA ..... Resource Conservation and Recovery Act
REC ..... Recognized Environmental Condition
RO ..... Remediation Objective
RPD ..... Relative Percent Difference
sec ..... second(s)
SIR ..... Site Investigation Report
Soil Survey ..... Soil Survey of Rock Island County
SPLP ..... Synthetic Precipitation Leaching Procedure
SRO ..... Soil Remediation Objective
SRP ..... Site Remediation Program
SSL ..... Soil Screening Level
SVOC ..... Semivolatile Organic Compound
SWAP ..... Source Water Assessment Program
TACO ..... Tiered Approach to Corrective Action Objectives
TCL ..... Target Compound List

ACRONYMS AND ABBREVIATIONS (CONTINUED)

TCLP ..... Toxicity Characteristic Leaching Procedure
TSOP ..... Terracon-Bettendorf Standard Operating Procedure
USEPA ..... United States Environmental Protection Agency
USGS ..... United States Geological Survey
UST ..... Underground Storage Tank
VOC ..... Volatile Organic Compound
yr ..... year(s)

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1.0 EXECUTIVE SUMMARY [740.425(B)(1)]

1.1 Objective

The objective of the site investigation was to identify RECs and related contaminants of concern that may exist at the site. An initial assessment of the site and adjoining property was completed on behalf of the City of Moline on June 25th 2004. Subsequent work was funded using a federal brownfields hazardous substances assessment grant.

1.2 Technical Approach

To evaluate the site and identify RECs, Terracon first conducted a Phase I ESA in accordance with ASTM E 1527-05: *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and 35 IAC Part 740.420(a). Based on the RECs identified, Terracon developed a plan for site assessment activities. Terracon documented the plan in the Property-Specific Sampling and Analysis Checklist dated October 3, 2008. The USEPA approved the checklist on October 8, 2008.

Terracon's intrusive site investigation activities included the advancement of soil borings, installation of monitoring wells, measurement of site-specific geologic and hydrogeologic parameters, and the collection of groundwater samples for chemical analyses. The intrusive investigation activities identified the presence of contaminants of concern at concentrations above applicable Tier 1 SROs and GROs.

1.3 Previous Assessment Activities

Phase I Environmental Site Assessment, Villareal Building, 1919 Fifth Avenue, Moline, Rock Island County, Illinois, dated May, 20 2004, prepared by Terracon Consultants, Inc., Bettendorf, Iowa.

- The report included the eastern portion of the current site including the former Villareal building. Terracon identified the historic operation of an on-site dry cleaner, the adjacent west garage/wrecker service; the "Orvil Union" LUST facility to the west of the site; the operation of

a filling station to the west and to the east of the site; and a gasoline UST located under 5th Avenue to the south of the site as RECs during the 2004 Phase I ESA.

Limited Site Investigation, O'Rourke and Villareal Building, 1909 Through 1925 5th Avenue, Moline, Illinois, dated June, 25 2004, prepared by Terracon Consultants, Inc., Bettendorf, Iowa.

- The objective of the LSI was to evaluate for the presence of petroleum-related compounds and VOCs in the on-site soils and groundwater as a result of potential releases from nearby current and historical UST, LUST, and dry cleaning activities.

- The LSI activities discovered chlorinated VOCs were present in groundwater at concentrations above Tier 1 ROs. The documented presence of chlorinated VOCs in groundwater above Tier 1 ROs is a REC for the site. Petroleum related compounds were not present in soil or groundwater at concentrations above the respective Tier 1 ROs.

1.4 Recognized Environmental Conditions

Under the USEPA Brownfield Assessment Grant Project, Terracon completed a Phase I ESA, dated August 21, 2007. The Phase I ESA reviewed the previous Phase I ESA dated May 4, 2004, and LSI dated June 25, 2004, identified in Section 1.3. The 2007 Phase I ESA identified the reported chlorinated VOCs above Tier 1 ROs in groundwater as a REC for the site. Figure 3 in Appendix A depicts the site structure and the sample locations referenced in this report.

RECs associated with pesticides, PCBs, metals, or SVOCs were not identified in the Phase I ESA. The subsequent investigation performed under the USEPA Brownfield Hazardous Substances Grant was restricted to assess soil and groundwater at the site for VOCs.

1.5 Limitations

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report.

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this investigation. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations,

or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

2.0 SITE CHARACTERIZATION [740.425(B)(2)]

2.1 Sources Consulted [740.425(b)(2)(A)]

Terracon used the following reference documents in completing the site investigation.

- Terracon, Phase I ESA, Former Villareal Building, 1919 Fifth Avenue, Moline, Rock Island County, Illinois (May 20, 2004), Terracon Project Number 07047725
- Terracon, Limited Site Investigation, O'Rourke and Villareal Properties, 1909 through 1925 5th Avenue, Moline, Rock Island County, Illinois (June 25, 2004), Terracon Project Number 07047049
- Terracon, Phase I ESA, Former O'Rourke and Former Villareal Buildings, 1909 and 1919 5th Avenue, Moline, Rock Island County, Illinois (August 21, 2007), Terracon Project Number 07067060

2.2 Site History [740.425(b)(2)(B)]

The approximate 0.20-acre site is located at 1919 Fifth Avenue in Moline, Illinois. The site is currently occupied by a vacant approximate 6,000-square foot single-story building and surface level paved parking area. Based on a review of historical information, the site was apparently developed residentially from at least 1886 to at least 1927. By 1933, the site was occupied by a restaurant. Since at least 1938, the site has been occupied by various commercial businesses such as a modeling agency and a real estate company. In 1938 and from at least 1949 until at least 1970, a dry cleaner operated on the site.

2.3 Site Description [740.425(b)(2)(C)]

2.3.1 Regional Location

The site is located within the southeast quarter of the northeast quarter of Section 32, Township 18 North, Range 1 West of the 4th Principal Meridian in Moline, Rock Island County, Illinois. The street address of the site is 1919 5th Avenue, Moline, Rock Island County, Illinois. Figure 1 in Appendix A depicts the location of the remediation site on a portion of the 7.5-Minute USGS Topographic Map (Davenport East, Iowa-ILL Quadrangle).

2.3.2 Pertinent Boundary Features

The site is bounded by an alley followed by the John Deere Intercontinental Limited office building to the north, John Deere mechanical building to the east, 5th Avenue followed by a parking lot and Motion Industries to the south, and a parking area followed by the O'Rourke Building to the west.

2.3.3 Physiography

The physiography of the site is typical of the flood plains in Rock Island County. The following is an excerpt from the Soil Survey, and describes the relief, physiography, and drainage of the county.

The topography of Rock Island County consists of upland plains, highly dissected valley sides, terraces, and flood plains. Although the county was covered by glaciers that greatly modified the preexisting landscape, the present topography is almost entirely the result of stream erosion. Thus the upland plains represent a gently rolling surface produced by glacial deposition, and the flood plains and dissected valley sides are the result of subsequent stream erosion.

The upland plains are at elevations of 750 to 790 feet between the Mississippi River and Copperas and Mill Creeks. They are at an elevation of about 810 feet south of Copperas and Mill Creeks and at an elevation of about 700 feet in Coe Township at the northern end of the county. The upland areas are remnants of a once-continuous glacial plain that extended far to the south and east. Although largely of glacial origin, the upland areas are covered with 30 feet or more of wind-deposited loess. In most places the loess is simply a veneer without a topographic expression of its own, but in Coe Township it has been deposited in long, narrow ridges as much as 50 feet high that give the topography a distinct northwest-southeast orientation. Sand dunes are on uplands in the extreme western part of the county and in Coe Township.

The flood plains are chiefly along the Mississippi and Rock Rivers and on the Meredosia bottom lands. The elevation on the flood plains ranges from 540 feet at the southwestern end of the county to 610 feet on the sand plains in the northern part. Flood plains are the floors of the valleys cut by the streams. The lower areas are subject to periodic flooding. The flood plains are underlain by water-deposited sand, silt, and clay. They are relatively shallow over limestone and shale bedrock. In the extreme northern end of the county, however, bedrock is at a depth of more than 100 feet. Sand and silt terraces are common on the flood plains.

Erosion by tributaries of the Mississippi and Rock Rivers has produced highly dissected topography adjacent to these main streams. In many places the local relief varies by more than 200 feet. Steep slopes cause landslides and soil instability.

The Mississippi River serves as the water source for Rock Island, Moline, and East Moline, and the smaller towns and rural areas are supplied by wells pumping from limestone crevices at depths of 100 to 300 feet.

2.3.4 Geology

Terracon interpreted soil types from the NRCS online Soil Survey, ISGS references, and from the information collected during the intrusive investigation. According to the Soil Survey, "Orthents, silty, undulating" is the predominant soil type at the site. The Orthents series consists of well drained soils that typically have a surface layer of silt loam or silty clay loam.

Bedrock in the area typically consists of Middle Devonian series, Cedar Valley Limestone. Cedar Valley Limestone is composed of highly fossiliferous, crystalline, light gray limestone with occasional fine-grained, argillaceous shaly zones and sandstone. Limestone bedrock was encountered at approximately 15 feet below the ground surface (bgs).

Soil boring logs and monitoring well construction diagrams from Terracon's investigation are included in Appendix B. In general, Terracon encountered layers of sandy fill below the surface layer (gravel) to depths of approximately 4 to 8 feet bgs. Below the sandy fill layer, Terracon encountered sandy materials (sandy clay, silty sands) followed by weathered limestone. Terracon generally encountered groundwater at depths of 14 to 16 feet bgs, within the sandy clay to sand/weathered limestone interphase.

2.3.5 Hydrogeology

Terracon installed monitoring wells MW-1, MW-2, and MW-3 to collect groundwater samples and to evaluate hydrogeology at the site.

Terracon obtained groundwater elevation data from monitoring wells MW-1, MW-2, and MW-3 in order to estimate groundwater flow direction. Terracon modeled the data using a Kriging evaluation method packaged with Surfer™ 8.0.1 contouring software. The groundwater contours generated by the software indicate that groundwater flow beneath the remediation site is generally towards the north. Figure 4 in Appendix A (Groundwater Contour Map) depicts the resultant contours.

Terracon calculated the hydraulic conductivity of the saturated soils at the remediation site using test data obtained from monitoring wells MW-1 and MW-2. Terracon used BRSlug version 3.0 to evaluate the data. Appendix C contains software printouts of the results. Table 2-1 summarizes the results of the hydraulic conductivity evaluation.

Table 2-1 Hydraulic Conductivity Values (cm/sec)

Monitoring Well	Hydraulic Conductivity
MW-1	4.29×10^{-4}
MW-2	7.13×10^{-4}

The average hydraulic conductivity for the remediation site is approximately 5.71×10^{-4} cm/sec. This is the appropriate value to use for contaminant modeling at the remediation site. Based on the hydraulic conductivity, groundwater at the remediation site is properly classified as Class I.

Terracon also viewed the USGS topographic map depicting the site to determine the location of the nearest surface water body. According to the map, the Moline pool of the Mississippi River is located approximately 1,600 feet north of the site. According to the topographic map, the Mississippi River is approximately 15 feet lower in elevation than the remediation site.

2.3.6 Potable Water Supply and Well Survey

According to the IEPA SWAP fact sheet for Moline (Facility ID No. 1610450), potable water to the remediation site is supplied by the City. Moline obtains its water from the Mississippi River through one surface water intake (IEPA #31943). The supply provides an average of 5.3 million gallons per day to 18,200 service connections with an estimated population of 43,768 persons in Rock Island County. Moline is interconnected with the Cities of East Moline (Facility ID No. 1610250) and Rock Island (Facility ID No. 1610650) to allow for mutual aid in the event of a water supply emergency.

The City has also established ordinance 98-10-2, which prohibits the installation of potable wells within the municipal limits. According to its website, the IEPA has reviewed and approved the ordinance, and a memorandum of agreement is not required. Appendix D contains a reproduction of the ordinance.

Terracon also performed a search of the IEPA SWAP GIS database. The database includes information compiled from ISWS and ISGS databases. The search indicated that the following were not present at or near the site.

- Regulated Recharge Areas
- Class III Groundwater
- Non-CWS Phase I Wellhead Protection Areas
- Non-CWS Wells
- CWS Phase II Wellhead Protection Areas
- CWS wells
- Adopted Maximum Setback Zones

A CWS Phase I Wellhead Protection Area was identified 1.81 miles northeast of the site on the Rock Island Arsenal. The IEPA SWAP GIS database plotted the closest ISGS well west of the site along 4th Avenue (Well Number 1216100328000). According to its log, the well was constructed in June 1, 1940. A summary of well survey information is attached in Table 2-2. Locations of the wells are depicted on the following screen capture from the SWAP GIS website. When available from the ISGS online database, Terracon downloaded well logs for the identified wells. Appendix D contains these well logs. Several of the wells were plotted by the IEPA SWAP GIS database tool as ISGS wells, but were not present in the ISGS database.

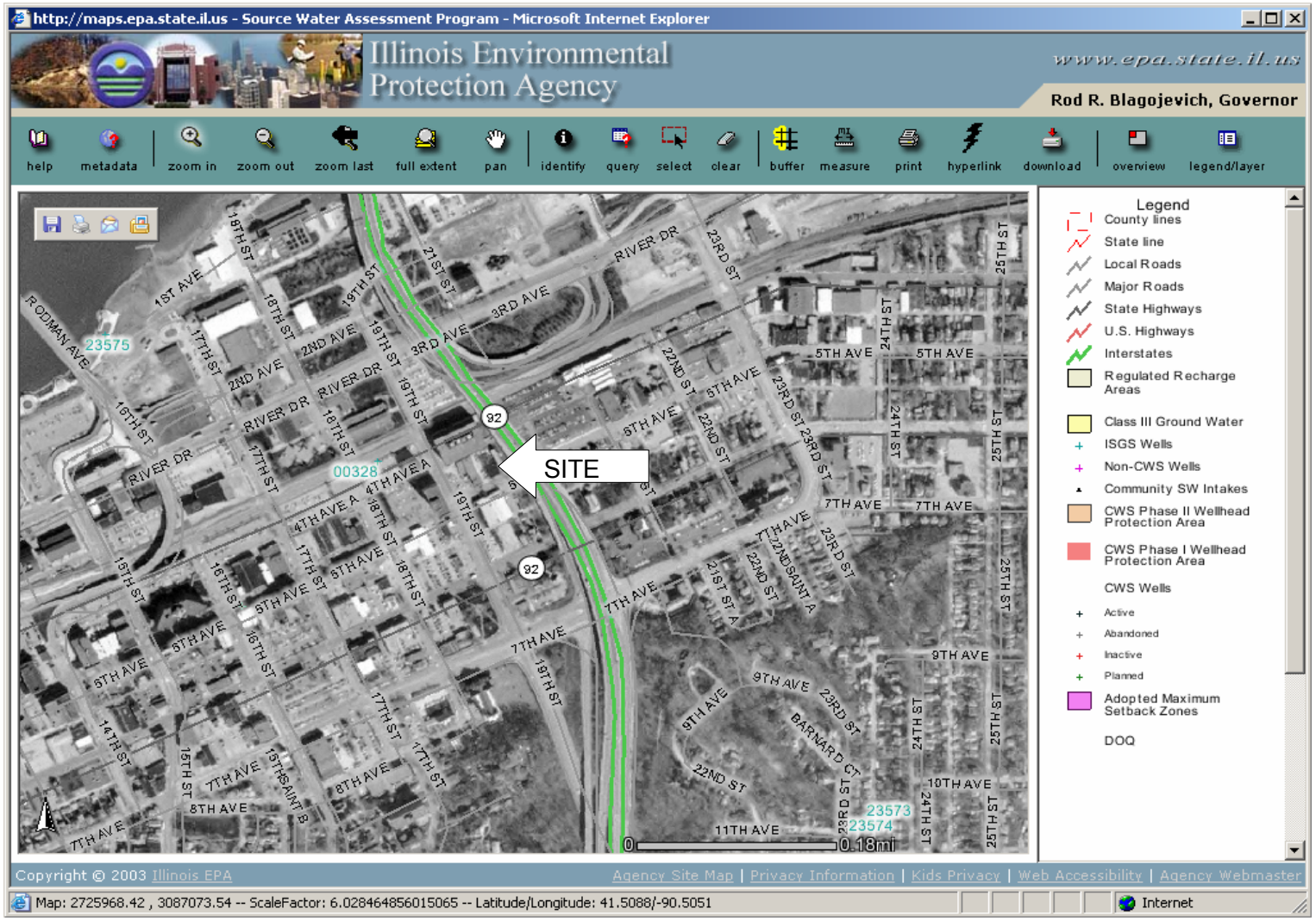
Table 2-2 Well Survey Information

Well Number	Owner	Active?	Distance/Direction From Site	Direction With Respect to On-Site Groundwater Flow Direction
1216100 328000*	YMCA	Unknown	500 feet west	Cross-gradient
1216008 6500	Illini Theater	Unknown	1,300 feet southwest	Cross-gradient
1216123 57500*	16th Street Viaduct	Unknown	1,900 feet south	Down-gradient
1216123 56900	High Rise Housing	Unknown	2,300 feet south	Up-gradient
1216123 57000	High Rise Housing	Unknown	2,300 feet south	Up-gradient
1216123 57100	High Rise Housing	Unknown	2,300 feet south	Up-gradient
1216135 7200	Timber Ridge 2nd Addition	Unknown	2,400 feet southeast	Up-gradient
1216135 7300*	Timber Ridge 2nd Addition	Unknown	2,400 feet southeast	Up-gradient
1216135 7400*	Timber Ridge 2nd Addition	Unknown	2,400 feet southeast	Up-gradient
1216122 40300	Rock Island Arsenal	Unknown	2,800 feet south	Down-gradient
1216100 89100	Rock Island National Cemetery	Unknown	3,300 feet northwest	Down-gradient

* Identified as 00382, 2375, 3573 and 3574, respectively on the following map

Based on the well survey information, the site is not located within the regulated setback zone of a well.[1]

[1] *The minimum setback zone in Illinois is 200 feet, unless the well is a Community Water Supply well tapping certain vulnerable geologic formations.*


http://maps.epa.state.il.us - Source Water Assessment Program - Microsoft Internet Explorer
Illinois Environmental Protection Agency
www.epa.state.il.us
Rod R. Blagojevich, Governor
help
metadata
zoom in
zoom out
zoom last
full extent
pan
identify
query
select
clear
buffer
measure
print
hyperlink
download
overview
legend/layer
SITE
23575
00328
23573
23574
Legend
County lines
State line
Local Roads
Major Roads
State Highways
U.S. Highways
Interstates
Regulated Recharge Areas
Class III Ground Water
ISGS Wells
Non-CWS Wells
Community SW Intakes
CWS Phase II Wellhead Protection Area
CWS Phase I Wellhead Protection Area
CWS Wells
Active
Abandoned
Inactive
Planned
Adopted Maximum Setback Zones
DOQ
Copyright © 2003 Illinois EPA
Agency Site Map | Privacy Information | Kids Privacy | Web Accessibility | Agency Webmaster
Map: 2725968.42 , 3087073.54 -- ScaleFactor: 6.028464856015065 -- Latitude/Longitude: 41.5088/-90.5051
Internet

2.3.7 Migration Pathways and Exposure Routes

Future land use has not been determined. As such, the following are the applicable exposure routes for evaluation.

- Residential Ingestion
- Residential Inhalation
- Construction Worker Inhalation[2]
- Soil Component of the Class I Groundwater Ingestion Route
- Class I Groundwater Ingestion

On September 3, 2008, the Illinois EPA proposed an amendment to the Illinois Pollution Control Board that will add the indoor inhalation exposure route to its risk-based cleanup methodology under TACO (Tiered Approach to Corrective Action Objectives, 35 Ill. Adm. Code Part 742). Once the proposed remediation objectives are finalized, the site may need to be reevaluated with respect to vapor intrusion.

2.3.8 Current and Post-Remediation Land Use

As shown on Figure 3 in Appendix A, current land use of the site and the vicinity is generally industrial/commercial. The site and surrounding area is zoned B-2 Central Business District.

Terracon is not aware of proposed changes to these land uses. Because the future land use of the site has not been determined, on-site soil concentrations are compared to residential SROs.

2.4 Site Base Map(s) [740.425(b)(2)(D)]

Figure 2 in Appendix A is the Site Base Map.

2.5 Legal Description [740.425(b)(2)(E)]

The site is located within located within the southeast quarter of the northeast quarter of Section 32, Township 18 North, Range 1 West of the 4th Principal Meridian in Moline, Rock Island County, Illinois. The PIN for the remediation site is 08-3222-9005. The following is its legal description.

> The East Fifty-seven and One-half (57 ½)feet of the West Sixty (60) feet of Lot Number Seven (7) in Block Number Eight (8) in that part of the City of Moline known as and called the Wood's Third Addition

[2] *For select compounds that have an SRO for the construction worker inhalation exposure route that is lower than the residential SROs.*

to said city; situated in the County of Rock Island and State of Illinois.

3.0 SITE-SPECIFIC SAMPLING PLAN [740.425(B)(3)]

Terracon documented the plan in the Property-Specific Sampling and Analysis Checklist dated October 3, 2008. The USEPA approved the checklist on October 8, 2008. The following sections further describe the physical and chemical methods used during the investigation.

3.1 Contaminant Source Investigation

Based on the LSI, chlorinated solvents have been identified in the soil and groundwater. Subsequently Terracon identified two possible areas of chemical storage in the building. A machine pad was observed adjacent the eastern building wall and a storage closet with a floor drain was observed near the area of the likely dry cleaning operations. Borings GP-1, GP-2, and GP-3 were advanced in the areas of suspect chemical use and storage.

3.2 Soil Investigation

In general, Terracon's approach to soil sampling and screening involved the advancement of "screening soil borings" used to document soil types and conduct field screening. Following completion of each screening soil boring and review of the field screening results, Terracon advanced a "sampling soil boring" located within one foot of the screening soil boring. The sole purpose of the sampling soil borings was to collect soil samples from selected depth intervals for laboratory analyses. The sampling soil borings were not sampled continuously, were not logged by the field crew, and are not shown on the Sample Location Map in Appendix A.[3] Terracon selected he depth intervals selected for laboratory testing based on the field screening results and visual observations of samples collected from the screening soil boring. This approach allowed Terracon to both field screen the full depth of recovered material and obtain soil samples for analysis by USEPA Method 5035, which requires that soil samples be collected as soon as possible after the material is exposed to atmospheric conditions.

Terracon collected one soil sample for laboratory analysis from each of the sampling soil borings. Terracon selected soil samples from the depth intervals of the screening soil borings with the highest PID field screening response, or in the absence of PID results or other unusual characteristics, from depth intervals selected at random by the field crew.

3.2.1 Location of Underground Utilities

[3] *For example, the screening soil boring and sampling soil boring for location B-1 are shown as a single location, designated B-1, on the Sample Location Map.*

Before beginning subsurface investigation activities, Terracon contacted the JULIE Hotline and requested location and markings of subsurface utilities.

3.2.2 Site Layout

Before beginning subsurface investigation activities, Terracon located and staked the approximate sampling locations. Following the completion of investigation activities, Terracon used an engineer's level to measure the ground surface and top of casing elevation for each monitoring well relative to a convenient reference benchmark. Terracon assigned a reference elevation of 100.00 feet to the top of a gas main cover located in the northern drive lane of 5th Avenue and south of the southwest corner of the Villareal building. The monitoring well construction diagrams in Appendix B include the ground surface and top of casing elevations for each monitoring well.

3.2.3 Push-Probe Investigation Methodology

Terracon advanced the soil borings GP-1, GP-2, and GP-3 using direct-push technology provided by a portable self-contained Geoprobe® rig equipped with push-tube sampling equipment. Push-tube sampling equipment included the use of disposable acetate liners to collect continuous soil samples.

Terracon logged the lithology of the recovered material. The soil boring logs and monitoring well construction diagrams in Appendix B detail the subsurface lithology encountered during the investigation activities.

3.2.4 Drilling Methodology

For borings B-1, B-2, B-3, B-4, and monitoring wells MW-1, MW-2, and MW-3, Terracon used a truck-mounted auger drill that employs a hydraulic head for drilling and sampling. Terracon advanced the soil borings using 4¼-inch inside-diameter (8¼-inch diameter borehole) hollow stem augers. Terracon collected soil samples from the soil borings using 24-inch long, split-spoon samplers.

Terracon cleaned the drilling equipment and the working end of the drill rig before field activities with high-pressure hot water and Alconox™ detergent. Terracon cleaned the split-spoon samplers at the beginning of the project and between each soil sample by hand scrubbing in an Alconox™ and potable water solution followed by rinsing in potable water.

Terracon logged the lithology of the recovered material. The monitoring well construction diagrams in Appendix B detail the subsurface lithology encountered during the investigation activities.

3.2.5 Field Screening

Terracon field screened the soil samples recovered from each screening soil boring for organic vapors using a PID. This device provides a direct reading in parts per million (ppm) isobutylene

equivalents. The PID is a nonspecific total vapor detector, and cannot identify unknown substances; it can only roughly quantify them. Upon removal of the sample liner from the borehole, Terracon sealed each core in a Ziplock bag. After a brief stabilization period, Terracon screened the headspace above the soil in each bag using the PID equipped with an approximate 10 eV ultraviolet lamp source. The PID unit was calibrated daily using 100-ppm span gas in accordance with the manufacturer's recommendations. The soil boring logs and monitoring well construction diagrams in Appendix B summarize the PID screening results for each sampling location.

3.2.6 Soil Sampling for USEPA Method 5035 Analysis

As previously indicated, USEPA Method 5035 for VOCs requires the collection of soil samples as soon as possible after exposure of the material to atmospheric conditions. For this reason, Terracon implemented specific procedures for the portion of the samples submitted for analysis by USEPA Method 5035.

Upon removal of the sampler from the sampling soil boring, Terracon cut the sample liner lengthwise to expose the recovered material. Terracon quickly used disposable Terra Core™ sampling kits provided by the laboratory to collect the 5-gram soil “plugs” required by USEPA Method 5035. If the recovered material was cohesive, Terracon collected the soil plugs from the undisturbed center of the core’s cross-section. If the soil was not cohesive, Terracon collected the soil plugs from a representative portion of the recovered material (based on visual observation). Using the Terra Core™ sampling kits, Terracon immediately extruded the soil plugs into pre-weighed, laboratory-provided 40-mL vials with sealed septums. After Terracon filled and sealed the vials, Terracon manually filled a 4-ounce jar with a representative portion of the recovered material (based on visual observation and proximity to the source of the soil plugs). For each sample, Terracon filled (1) 40-mL vial preserved with methanol, (2) 40-mL vials preserved with sodium bisulfate, and (1) 4-ounce soil jar without preservative.

After packaging each sample, Terracon recorded the sample time on each container label in permanent ink and placed the filled containers in an ice-filled cooler for transport to Terracon’s Bettendorf office. At the office, Terracon transferred the samples from the coolers to a refrigerator to await pick-up. A laboratory courier picked up the samples from Terracon’s Bettendorf office and delivered them to ESC[4] in Mt. Juliet, Tennessee under standard Chain-of-Custody procedures.

3.2.7 Borehole Abandonment and Disposal of Cuttings

Terracon abandoned the boreholes not completed as monitoring wells with a mixture of bentonite and soil cuttings.

[4] *IEPA Laboratory Accreditation Number 200008.*

3.2.8 Analytical Methods for Soil Investigations

The laboratory analyzed soil samples using the following analytical methods.

Table 3-1 Soil and Sediment Laboratory Analytical Methods

Compound Group	Test Method
VOCs	USEPA 5035[5]/8260B
BTEX	USEPA 5035[6]/8260B
PAHs	USEPA 8270

3.3 Groundwater Investigation

3.3.1 Location of Underground Utilities

See Section 3.2.1.

3.3.2 Site Layout

See Section 3.2.2.

3.3.3 Monitoring Well Construction

Terracon constructed monitoring wells MW-1, MW-2, and MW-3 using sections of flush-jointed, two-inch outside diameter, schedule 40 PVC threaded pipe. The screened section of each monitoring well consisted of a 0.01-inch slotted section of PVC pipe installed to intersect the water table. Terracon placed fine-grained sand filter pack into each well's annulus from the bottom to approximately one to two feet above the screened section. Terracon placed a bentonite product (approximate ⅛-inch diameter chips) in the annulus from above the filter pack to within two feet of the ground surface. Terracon hydrated the bentonite chips with potable water. Terracon installed a flush-mount steel well cover over the PVC casing. Concrete was placed around the flush mount cover and the surrounding ground surfaces. Terracon fitted each internal PVC casing with an expansion cap and lock, and equipped each outer protector pipe with a lock. Following installation, Terracon developed each monitoring well by removing approximately three well casing volumes using a disposable bailer. Based on the results of previous investigation, purge water was not considered hazardous and was discharged to the ground.

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[5] *USEPA Method 5035 is a field preservation method and, as such, the laboratory did not reference it in their report as the analytical method for VOCs. The laboratory used USEPA Method 8260B to analyze the samples that Terracon preserved in the field using USEPA Method 5035.*

[6] *USEPA Method 5035 is a field preservation method and, as such, the laboratory did not reference it in their report as the analytical method for VOCs. The laboratory used USEPA Method 8260B to analyze the samples that Terracon preserved in the field using USEPA Method 5035.*

3.3.4 Water Level Measurements

Terracon measured the depth to water level by lowering an electric water tape into each well casing. The electric water tape broadcasted an audible signal upon reaching the water table. Once contact with the groundwater was established, Terracon observed the measurement on the tape at the reference point (top of the well casing) to the nearest 0.01 foot. Terracon recorded this measurement in the field notes.

3.3.5 Hydraulic Conductivity Testing

Terracon measured in-situ hydraulic conductivity using a "bail-down" method. The general principal when conducting this type of test is to stress the water-bearing formation near the monitoring well by lowering the head pressure in the well. By monitoring the recovery of the water level in the well following the induced stress, Terracon calculated an estimate of the hydraulic conductivity of the formation.

For each well tested, Terracon removed water from the monitoring well using disposable PVC bailers. Throughout the bail-down and recovery periods, Terracon measured the water level in each monitoring well using an electric water tape. In general, Terracon removed one bailer of water from within the well casing. As the water level within each well recovered, Terracon recorded the depth to water measurements in the field notes. Terracon ceased recording depth to water measurements once the water level recovered to the approximate static water level.

Upon returning to the office, Terracon used the Bouwer-Rice[7] method implemented by BRSlug version 3.0 to calculate the hydraulic conductivity of the formation.

3.3.6 Groundwater Sample Collection and Handling

Terracon allowed a minimum 24-hour stabilization period to pass before sampling activities.

Upon removal of the well cap, Terracon measured the distance to the static water level and the total depth of the well using an electronic water level indicator. Terracon cleaned the electric water level indicator between each monitoring well by washing in an Alconox™ and water solution followed by rinsing in potable water. Terracon inserted a length of new polyethylene tubing into the well. The intake end of the tubing was located near the mid-point of the water column within the well screen.

Terracon pumped groundwater from each well using a peristaltic pump set at a pumping rate less than one gallon per minute. Terracon monitored the drawdown during sampling activities using an electronic water tape, and varied the pumping rate as necessary to maintain the drawdown in the well

[7] *Bouwer, H. and R.C. Rice, 1976. A slug test method for determining hydraulic conductivity of unconfined aquifers with completely or partially penetrating wells, Water Resources Research, vol. 12, no. 3, pp. 423-428.*

casing at less than approximately two inches. Terracon filled the laboratory-prepared containers for directly from the discharge end of the tubing.

After packaging each sample, Terracon recorded the sample time on each container label in permanent ink and placed the filled containers in an ice-filled cooler for transport to Terracon's Bettendorf office. At the office, Terracon transferred the samples from the coolers to a refrigerator to await pick-up. A laboratory courier picked up the samples from Terracon's Bettendorf office and delivered them to ESC under standard Chain-of-Custody procedures.

3.3.7 Analytical Methods for Groundwater Investigation

Table 3-2 summarizes the analytical methods used by the laboratory to analyze groundwater samples.

Table 3-2 Groundwater Laboratory Analytical Methods

Compound Group	Test Method
VOCs	USEPA 8260B
BTEX	USEPA 8260B
PAHs	USEPA 8270

3.4 Surface Water Investigation

Surface water is not present on or near the remediation site, so Terracon did not conduct a surface water investigation.

3.5 Potential Receptor Investigation

During field activities, Terracon observed the remediation site and nearby vicinity for indications of potential receptors. A basement was observed at the O'Rourke building and sewers are present in the alley and 5th Avenue.

4.0 DOCUMENTATION OF FIELD ACTIVITIES [740.425(B)(4)]

4.1 Narrative Description [740.425(b)(4)(A)]

Terracon completed the following field activities on June 15, 2004.

- Terracon advanced four soil borings, designated B-1 through B-4, using a truck-mounted drill rig. The soil borings were advanced along 5th Avenue in front of the O'Rourke building (B-1), and near the southeast (B-2), northwest (B-3), and northeast (B-4) property corners of the Villareal site. The soil borings were advanced to depths of approximately 18 feet below ground surface. Terracon collected soil samples continuously throughout the depth of the

borings using split-spoon samplers. A surface sample (B-5) was collected from a soil pile in the basement of the O'Rouke building.

- Soil and groundwater samples from borings B-1 and B-2 were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), and polynuclear aromatic hydrocarbons (PNAs, also referred to as polycyclic aromatic hydrocarbons or PAHs) using United States Environmental Protection Agency (USEPA) Methods 8260 and 8270, respectively. The soil and water samples from B-3 were analyzed for VOCs using USEPA Method 8260. Soil and water samples from B-4 were analyzed for VOCs and PNAs using the previously referenced methods. USEPA Method 5035 was used to preserve the VOC portion of the soil samples.

Terracon performed field investigation activities on October 24, and 27, 2008. Specifically, Terracon completed the following site investigation activities.

- Terracon advanced four soil borings, GP-1 through GP-4, inside of the building at locations of possible storage, use, or release of chlorinated solvents. Terracon collected and field screened soil samples continuously throughout the depth of each boring. Terracon collected one soil sample from each boring from the 0 to 3 foot sampling interval and from the 3 to 10 foot sampling interval by USEPA Method 5035. Soil samples were submitted for analysis of VOCs by USEPA Method 8260B.

- Terracon advanced two soil borings, MW-1 and MW-2, outside the building at locations adjacent to possible storage, use, or release of chlorinated solvents. Terracon collected and field screened soil samples continuously throughout the depth of each boring. One soil sample from each boring from the 0 to 3 foot sampling interval and from the 3 to 10 foot sampling interval. Terracon converted the borings into monitoring wells and one groundwater sample was collected from each boring location and submitted for analysis of VOCs by USEPA Method 8260B.

- Terracon advanced one soil boring MW-3, west of the building and converted it to a monitoring well for groundwater modeling purposes. Soil or groundwater samples were not collected from the boring.

Figure 3 in Appendix A depicts the locations of these borings.

4.2 Quality Assurance Project Plan [740.425(b)(4)(B)]

Terracon previously submitted a multi-site QAPP to the USEPA. The USEPA approved the QAPP on June 28, 2007. The QAPP set forth the procedures and methods for data collection. Terracon documented the investigation plan for this remediation site in a Property-Specific Sampling and Analysis Checklist dated October 3, 2008. The USEPA approved the checklist on October 8, 2008. The checklist defined the specific procedures and adjustments necessary to maintain data quality to support the project decision. The site investigation required both field and laboratory checks to monitor conformance to project quality limits.

4.2.1 Property-Specific Corrective Actions

A field methods audit was not conducted during the fieldwork for this site.

4.2.2 Quality Control Parameters

To assess whether quality assurance objectives for this project have been achieved, the following QC parameters were considered: precision, accuracy, representativeness, comparability, completeness, and sensitivity.

4.2.2.1 Precision and Accuracy

As described in the QAPP, precision is evaluated using the RPD between an actual sample and a duplicate sample. Accuracy is evaluated using a percent recovery measured in spiked and unspiked samples. Accuracy is a function of the laboratory method, and parameters regarding accuracy are included in the lab report provided by the laboratory. In accordance with the QAPP, duplicate samples with RPDs less than or equal to 20% were considered precise without further discussion. Duplicate samples with RPDs in excess of 20% (water matrix) and 35% (soil/sediment samples) require further evaluation.

One duplicate soil sample was collected from GP-3. For each compound, Terracon compared the maximum detected concentrations from each sample and its corresponding dilutions. VOCs were detected in both samples. The absolute values of the RPDs ranged from approximately 0% to 188%. The reported concentration of cis-1,2-dichloroethene in the soil sample collected from GP-3 was 0.0013. The duplicate sample had a reported concentration of 0.041 mg/kg. The reported cis-1,2-dichloroethene concentrations were below the SRO. Remaining RPDs were below 13.3%. The duplication of non-homogeneous soil samples is difficult due to matrix interference and commonly results in elevated RPDs.

A duplicate groundwater sample was collected from MW-1. For each compound, Terracon compared the maximum detected concentrations from each sample and its corresponding dilutions. VOCs were detected in both samples. The absolute values of the RPDs ranged from approximately 0% to 20.22%. The reported concentration of tetrachloroethene in the groundwater sample collected from MW-1 was 0.008 mg/L. The duplicate had a reported tetrachloroethene concentration of 0.0098 mg/L. Both concentrations exceed the most restrictive GRO.

Terracon evaluated the effects of the elevated RPDs on the project decisions. In Terracon's opinion, the elevated RPDs are not sufficiently elevated to influence the project decisions. Laboratory accuracy controls were documented in accordance with the laboratory's internal QA Manual.

4.2.2.2 Representativeness

Terracon has evaluated the representativeness of the site investigation activities to document the degree to which the sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Review of field methods and procedures indicated that sample collection, handling, and transportation were conducted in accordance with the QAPP and the Property-Specific Sampling and Analysis Checklist. Review of analytical results indicates that the analytical data is generally uniform and consistent between sampling points and with previous sampling and analysis activities.

4.2.2.3 Completeness

Terracon collected each of the samples planned for collection in the Property-Specific Sampling and Analysis Checklist. Field completeness was determined to be 100%.

Analysis for 1,2,3-trimethylbenzene was not completed in 4 of the 13 soil samples submitted for VOC analysis, however; 1,2,3-trimethylbenzene was not detected in the analyzed samples. In Terracon's opinion, resampling for 1,2,3-trimethylbenzene does not appear to be warranted.

4.2.2.4 Comparability

To produce comparable data, the units specified for analytical results obtained during the field activities are consistent throughout this project and standardized analytical methods have been used for each parameter.

4.2.2.5 Sensitivity

Laboratory quantization limits were sufficient to report concentrations below the soil statewide standards for most analytes. Laboratory quantization limits were not sufficient to report concentrations below the statewide standards for the several VOCs in groundwater. In Terracon's opinion, the elevated laboratory quantization limits did not affect primary or secondary project objectives.

4.3 Presentation of Data [740.425(b)(4)(C)]

The SRP regulations require that the data from the investigation be presented such that the information is organized and presented logically, and that relationships between the different investigations for each medium are apparent. Appendix F contains separate tables for soil and groundwater analytical data.

5.0 ENDANGERMENT ASSESSMENT [740.425(B)(5)]

5.1 RECs and Exposure Routes [740.425(b)(5)(A)]

Section 2.3.7 discusses the applicable exposure routes for the site. Section 5.5 discusses the RECs associated with VOC detection in soil and groundwater.

5.2 De Minimis Conditions [740.425(b)(5)(B)]

The Phase I ESA did not identify de minimis conditions.

5.3 Contaminants of Concern [740.425(b)(5)(C)]

The contaminants of concern investigated to assess the RECs were limited to VOCs. Tables 1 and 2 in Appendix F summarize the concentrations of the contaminants of concern. Section 5.5 presents a summary of the sample locations where the concentrations of one or more contaminants exceeded the Tier 1 SROs and/or GROs.

5.4 Physical Features of the Site [740.425(b)(5)(D)]

Terracon did not observe significant physical features (e.g., preferential pathways due to buried conduits, etc.) of the remediation site and vicinity that could affect contaminant transport and risk to human health.

5.5 Tier 1 Comparison [740.425(b)(5)(E)]

5.5.1 Soil Analysis

VOCs were not detected above the Tier I SRO in samples collected in the previous field investigation or the recent field activities. Benzene and ethylbenze were detected below the SRO in soil samples GP-1 (8ft), GP-2 (8.5ft), GP-3 (8ft), and MW-1 (10ft) samples. Cis-1,2-dichloroethene was detected below the SRO in samples GP-3 (3ft) and GP-3 (8ft). Tetrachloroethene was detected below the SRO in 10 of 17 of the analyzed soil samples.

5.5.2 Groundwater Analysis

Methyl tert-butyl ether (MTBE) was detected in groundwater samples collected from GP-1, GP-2, GP-3, GP-4, MW-1 and MW-2 at concentrations below the Tier I GRO. Concentrations of cis-1,2-dichloroethene, tertrachloroethene, trichloroethene, and vinyl chloride were detected in each of the collected groundwater samples. The reported concentrations that exceed the Tier 1 GRO are summarized in Table 5.1.

Table 5-1 Groundwater Analysis-(mg/L)

	B-1	B-2	B-3	B-4	GP-1	GP-2	GP-3	GP-4	MW-1	MW-2	Tier I GRO
cis-1,2-Dichloroethene	n/a	n/a	**0.11**	**1.3**	**1.6**	**1.7**	**1.7**	**0.4**	**0.16**	**0.22**	0.07
Tetra-chloroethene	n/a	n/a	0.002	**0.026**	0.001	0.002	0.003	0.002	**0.0098**	n/d	0.005
Tri-chloroethene	n/a	n/a	0.003	**0.024**	0.004	0.001	0.003	0.003	**0.027**	n/d	0.005
Vinyl chloride	n/a	n/a	n/d	**0.022**	**0.27**	**0.067**	**0.024**	**0.11**	**0.0033**	**0.036**	0.002

n/a-not analyzed; n/d-non-detect;
Reported concentrations highlighted in bold exceed the Tier 1 GRO

5.5.3 Vapor Analysis

Terracon compared the VOC detections in soil and groundwater to the proposed Indoor Inhalation Remediation Objectives (IRO) for Residential and Industrial/Commercial Properties. Based on the proposed IRO values for soil, VOC detections were below the most stringent soil IRO.

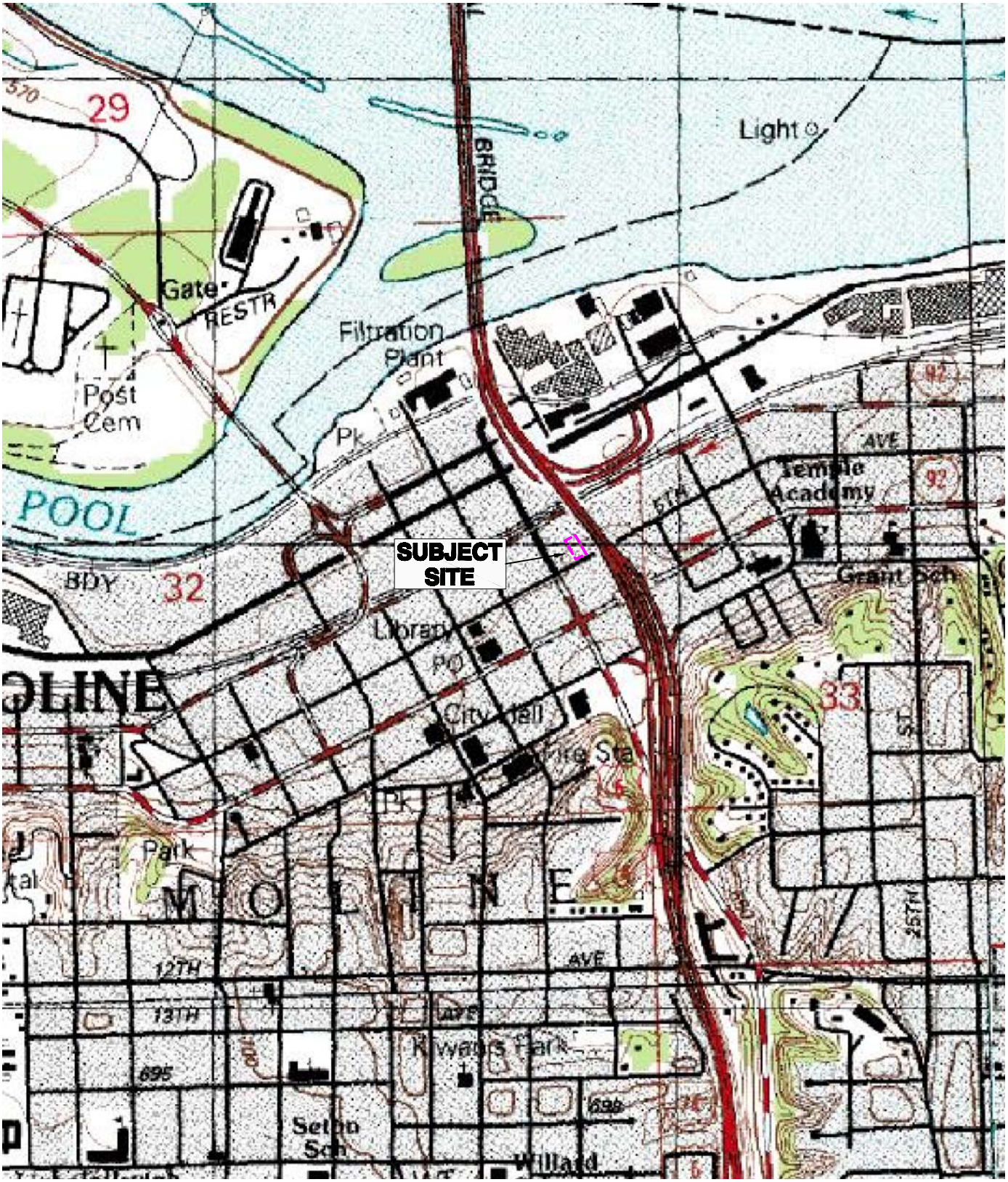
Groundwater samples collected from GP-1, GP-2, and GP-4 exhibited concentrations of vinyl chloride that exceeded 0.05 mg/L, the IRO value for residential groundwater but were below 0.64 mg/L, the IRO value for industrial/commercial groundwater.

The remaining VOC detections in groundwater were below the most stringent IRO for groundwater.

6.0 CONCLUSION [740.425(B)(6)]

Terracon has conducted a site investigation of the remediation site. Terracon conducted the investigation in accordance with a scope of work documented in the Property-Specific Sampling and Analysis Checklist approved by the USEPA. The site investigation data is insufficient to fully evaluate current conditions or develop remediation objectives.

Chemical impact to groundwater at the remediation site consists of chlorinated solvent concentrations above the GROs for Class I Groundwater Ingestion.



N

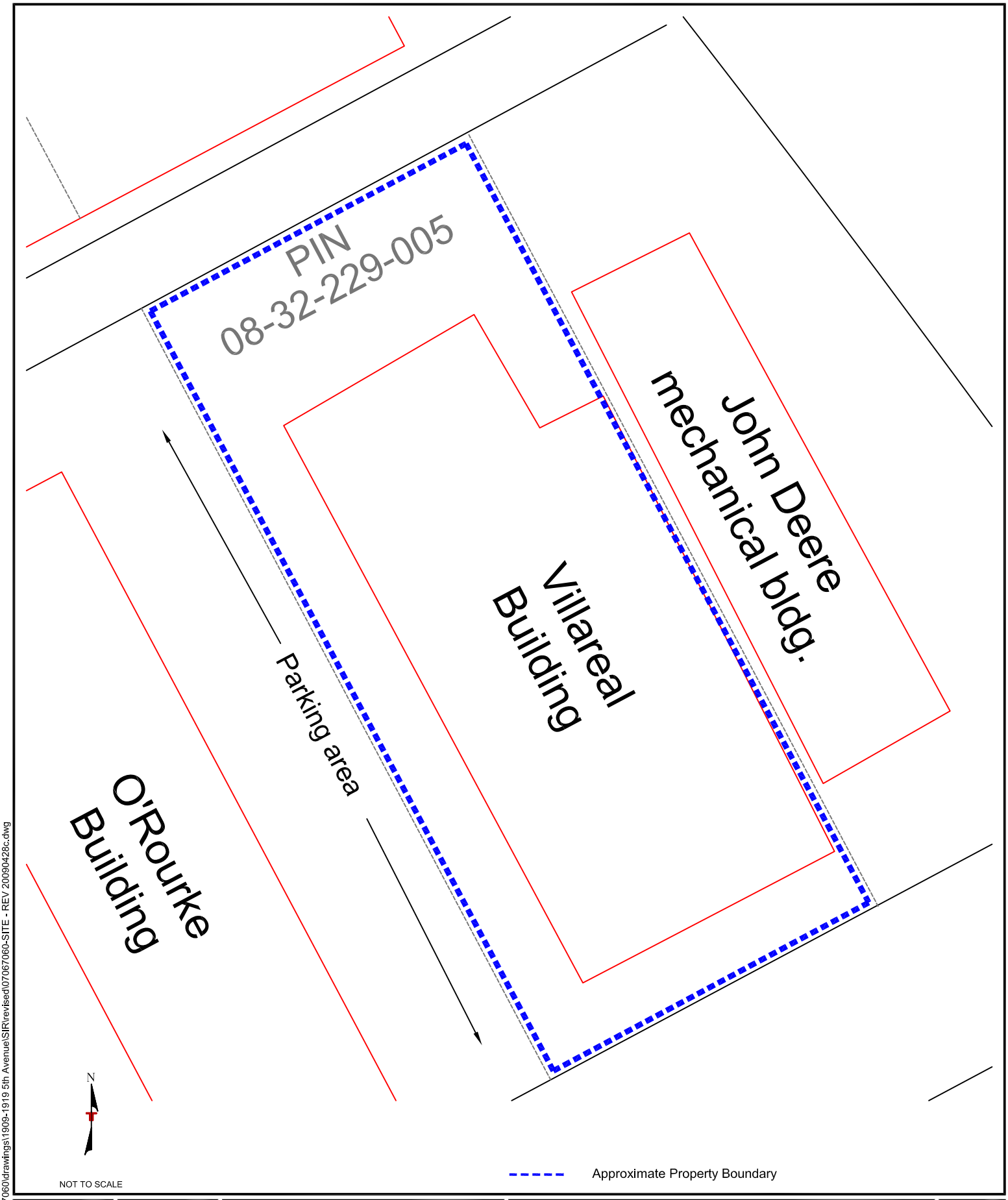
LEGEND

Approximate subject site boundary

DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

TOPOGRAPHIC VICINITY MAP
SITE INVESTIGATION REPORT
VILLAREAL PROPERTIES
1925 5TH AVENUE
MOLINE, ILLINOIS

Project Mngr:	JFB	Terracon	Project No.	07067060
Designed By:	JDW		Scale:	NOT TO SCALE
Checked By:	JDW	870 40th Avenue Bettendorf, Iowa 52722	Date:	OCT 2008
Approved By:	JFB		Drawn By:	KJR
File Name:			Figure No.	1



N:\Projects\2006\07067060\drawings\1909-1919 5th Avenue\SIR\revised\07067060-SITE - REV 20090428c.dwg

Project Mngr: JFB	Project No. 07067060
Drawn By: KJR	Scale: NTS
Checked By: JDW	Revised By: ~
Approved By: JFB	Date: May 4, 2009

Terracon
Consulting Engineers and Scientists
870 40TH AVENUE BETTENDORF, IOWA 52722
PH. (563) 355-0702 FAX. (563) 355-4789

SITE BASE MAP

SITE INVESTIGATION REPORT
VILLAREAL PROPERTY
1925 5TH AVENUE
MOLINE, ILLINOIS

FIG. No.
2

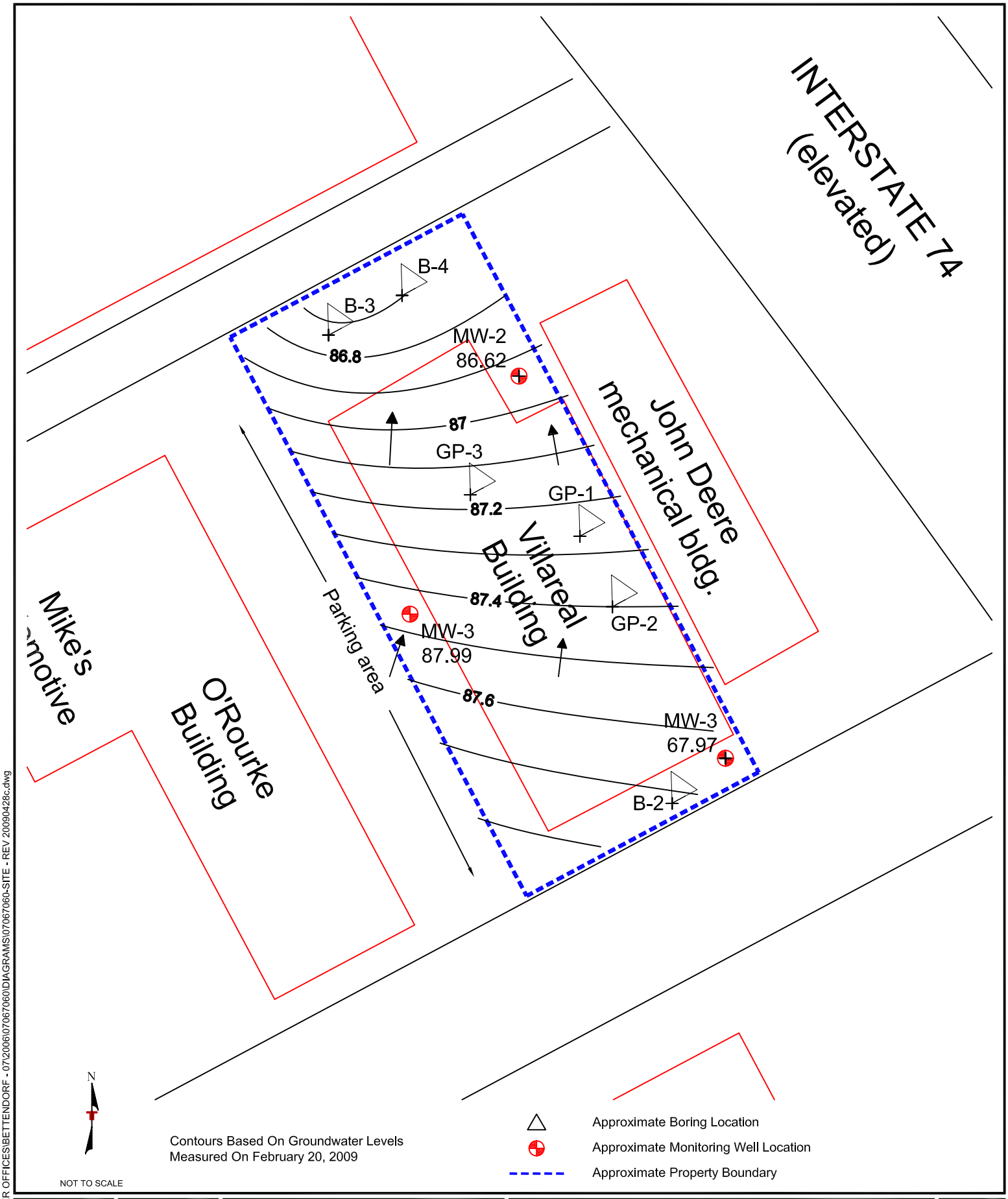
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES.

N:\PROJECTS - OTHER OFFICES\BETTENDORF - 07\2006\07067060\DIAGRAMS\07067060-SITE - REV 20090428c.dwg

Project Mngr: JFB	Project No. 07067060	Terracon Consulting Engineers and Scientists	SITE DIAGRAM
Drawn By: KJR	Scale: NTS	870 40TH AVENUE BETTENDORF, IOWA 52722	SITE INVESTIGATION REPORT
Checked By: JDW	Revised By: ~	PH. (563) 355-0702 FAX. (563) 355-4789	VILLAREAL PROPERTY
Approved By: JFB	Date: April 28, 2009		1925 5TH AVENUE MOLINE, ILLINOIS

FIG. No. 3

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES.



N:\PROJECTS - OTHER OFFICES\BETTENDORF - 07\2006\07067060\DIAGRAMS\07067060-SITE - REV 20090428c.dwg

Project Mngr: JFB	Project No. 07067060	Terracon Consulting Engineers and Scientists	GROUNDWATER FLOW DIAGRAM
Drawn By: KJR	Scale: NTS	870 40TH AVENUE BETTENDORF, IOWA 52722	SITE INVESTIGATION REPORT
Checked By: JDW	Revised By: ~	PH. (563) 355-0702 FAX. (563) 355-4789	VILLAREAL PROPERTY
Approved By: JFB	Date: April 28, 2009		1925 5TH AVENUE MOLINE, ILLINOIS

FIG. No. 4

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES.

GENERAL NOTES

DRILLING & SAMPLING SYMBOLS:

SS:	Split Spoon - 1-3/8" I.D., 2" O.D., unless otherwise noted	HS:	Hollow Stem Auger
ST:	Thin-Walled Tube - 2" O.D., unless otherwise noted	PA:	Power Auger
RS:	Ring Sampler - 2.42" I.D., 3" O.D., unless otherwise noted	HA:	Hand Auger
DB:	Diamond Bit Coring - 4", N, B	RB:	Rock Bit
BS:	Bulk Sample or Auger Sample	WB:	Wash Boring or Mud Rotary

The number of blows required to advance a standard 2-inch O.D. split-spoon sampler (SS) the last 12 inches of the total 18-inch penetration with a 140-pound hammer falling 30 inches is considered the "Standard Penetration" or "N-value".

WATER LEVEL MEASUREMENT SYMBOLS:

WL:	Water Level	WS:	While Sampling	N/E:	Not Encountered
WCI:	Wet Cave in	WD:	While Drilling		
DCI:	Dry Cave in	BCR:	Before Casing Removal		
AB:	After Boring	ACR:	After Casing Removal		

Water levels indicated on the boring logs are the levels measured in the borings at the times indicated. Groundwater levels at other times and other locations across the site could vary. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels may not be possible with only short-term observations.

DESCRIPTIVE SOIL CLASSIFICATION: Soil classification is based on the Unified Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

CONSISTENCY OF FINE-GRAINED SOILS

Unconfined Compressive Strength, Qu, psf	Standard Penetration or N-value (SS) Blows/Ft.	Consistency
< 500	0 - 1	Very Soft
500 – 1,000	2 - 4	Soft
1,000 – 2,000	4 - 8	Medium Stiff
2,000 – 4,000	8 - 15	Stiff
4,000 – 8,000	15 - 30	Very Stiff
8,000+	> 30	Hard

RELATIVE DENSITY OF COARSE-GRAINED SOILS

Standard Penetration or N-value (SS) Blows/Ft.	Relative Density
0 – 3	Very Loose
4 – 9	Loose
10 – 29	Medium Dense
30 – 49	Dense
> 50	Very Dense

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 15
With	15 – 29
Modifier	> 30

GRAIN SIZE TERMINOLOGY

Major Component of Sample	Particle Size
Boulders	Over 12 in. (300mm)
Cobbles	12 in. to 3 in. (300mm to 75 mm)
Gravel	3 in. to #4 sieve (75mm to 4.75 mm)
Sand	#4 to #200 sieve (4.75mm to 0.075mm)
Silt or Clay	Passing #200 Sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 5
With	5 – 12
Modifiers	> 12

PLASTICITY DESCRIPTION

Term	Plasticity Index
Non-plastic	0
Low	1-10
Medium	11-30
High	> 30

Terracon

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests[A]				Soil Classification	
				Group Symbol	Group Name[B]
Coarse Grained Soils More than 50% retained on No. 200 sieve	Gravels More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels Less than 5% fines[C]	Cu ≥ 4 and 1 ≤ Cc ≤ 3[E]	GW	Well-graded gravel[F]
			Cu < 4 and/or 1 > Cc > 3[E]	GP	Poorly graded gravel[F]
		Gravels with Fines More than 12% fines[C]	Fines classify as ML or MH	GM	Silty gravel[F,G,H]
			Fines classify as CL or CH	GC	Clayey gravel[F,G,H]
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands Less than 5% fines[D]	Cu ≥ 6 and 1 ≤ Cc ≤ 3[E]	SW	Well-graded sand[I]
			Cu < 6 and/or 1 > Cc > 3[E]	SP	Poorly graded sand[I]
		Sands with Fines More than 12% fines[D]	Fines classify as ML or MH	SM	Silty sand[G,H,I]
			Fines Classify as CL or CH	SC	Clayey sand[G,H,I]
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays Liquid limit less than 50	inorganic	PI > 7 and plots on or above "A" line[J]	CL	Lean clay[K,L,M]
			PI < 4 or plots below "A" line[J]	ML	Silt[K,L,M]
		organic	Liquid limit - oven dried / Liquid limit - not dried < 0.75	OL	Organic clay[K,L,M,N]
					Organic silt[K,L,M,O]
	Silts and Clays Liquid limit 50 or more	inorganic	PI plots on or above "A" line	CH	Fat clay[K,L,M]
			PI lots below "A" line	MH	Elastic Silt[K,L,M]
		organic	Liquid limit - oven dried / Liquid limit - not dried < 0.75	OH	Organic clay[K,L,M,P]
					Organic silt[K,L,M,Q]
Highly organic soils	Primarily organic matter, dark in color, and organic odor			PT	Peat

[A]Based on the material passing the 3-in. (75-mm) sieve

[B]If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

[C]Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D]Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

[E]$Cu = D_{60}/D_{10}$ $\quad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$

[F]If soil contains ≥ 15% sand, add "with sand" to group name.

[G]If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H]If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K]If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

[L]If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.

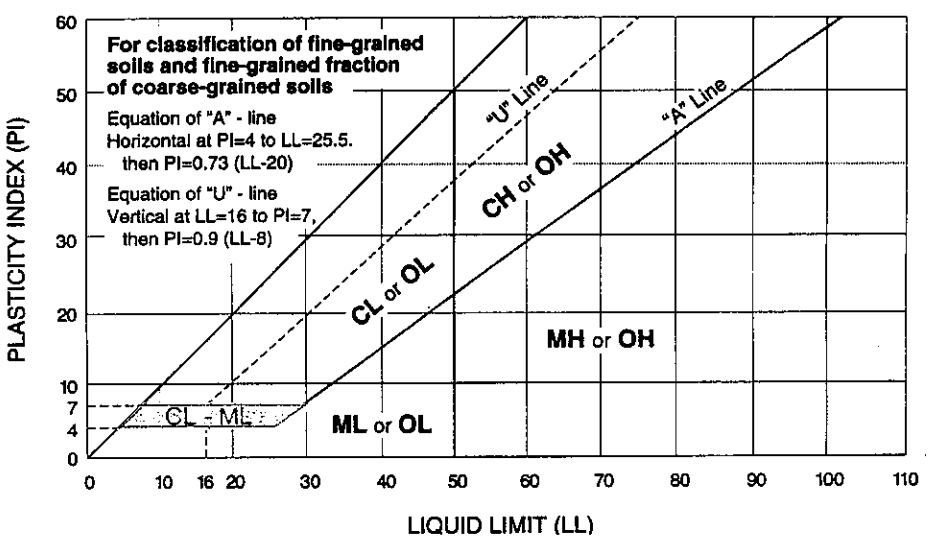
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[N]PI ≥ 4 and plots on or above "A" line.

[O] PI < 4 or plots below "A" line.

[P]PI plots on or above "A" line.

[Q] PI plots below "A" line.



Terracon

Form 111—6/98

BORING NO. GP-1

CLIENT: City of Moline

SITE: Former Villareal Building, Moline, Illinois

PROJECT: Moline Brownsfield

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: RECOVERY, in.	SAMPLES: SPT - N BLOWS / ft.	TESTS: WATER CONTENT, %	TESTS: FIELD VAPOR TEST (PPM)*	TESTS: SOIL SAMPLE SENT TO LABORATORY
	0.6 Approx. 6" Asphalt									
	SANDY FILL Brown, Slight Gray		SW SC		ST					X
		5	SW SC		ST					
		10	SW SC		ST					X
	12									
	SAND Brownish Orange ∇	15	SW		ST					
	16									
	BOTTOM OF BORING									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	∇ 14	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	10-24-08		
BORING COMPLETED	10-24-08		
RIG		FOREMAN	Dave
LOGGED	BCP	JOB #	07067060

BORING NO. GP-2

CLIENT: City of Moline

SITE: Former Villareal Building, Moline, Illinois

PROJECT: Moline Brownsfield

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: RECOVERY, in.	SAMPLES: SPT - N BLOWS / ft.	TESTS: WATER CONTENT, %	TESTS: FIELD VAPOR TEST (PPM)*	TESTS: SOIL SAMPLE SENT TO LABORATORY
0.6	Approx. 6" Asphalt		SW SC		ST					X
	SANDY FILL Brown									
4	**SANDY CLAY** Brown	5	SW SC		ST					
		10	SW SC		ST					X
12	**SAND** Brownish Orange ∇	15	SW		ST					
16	BOTTOM OF BORING									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	∇ 14	∇
WL	∇	∇
WL		

Terracon

BORING STARTED	10-24-08		
BORING COMPLETED	10-24-08		
RIG		FOREMAN	Dave
LOGGED	BCP	JOB #	07067060

BORING NO. GP-3

CLIENT: City of Moline

SITE: Former Villareal Building, Moline, Illinois

PROJECT: Moline Brownsfield

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: RECOVERY, in.	SAMPLES: SPT - N BLOWS / ft.	TESTS: WATER CONTENT, %	TESTS: FIELD VAPOR TEST (PPM)*	TESTS: SOIL SAMPLE SENT TO LABORATORY
	0.6 Approx. 6" Asphalt		SW SC		ST					X
	SANDY FILL Brown, Slight Gray									
	SANDY CLAY	5	SW SC		ST					
		10	SW SC		ST					X
	12 **SAND** Brownish Orange ∇	15	SW		ST					
	16 BOTTOM OF BORING									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	∇ 14	∇
WL	∇	∇
WL		

Terracon

BORING STARTED	10-24-08		
BORING COMPLETED	10-24-08		
RIG		FOREMAN	Dave
LOGGED	BCP	JOB #	07067060

BORING NO. GP-4

CLIENT **City of Moline**

SITE **Former Villareal Building Moline, Illinois**

PROJECT **Moline Brownsfield**

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: RECOVERY, in.	SAMPLES: SPT - N BLOWS / ft.	TESTS: WATER CONTENT, %	TESTS: FIELD VAPOR TEST (PPM)*	TESTS: SOIL SAMPLE SENT TO LABORATORY
	0.6 Approx. 6" Asphalt		SW SC		ST					X
	SANDY FILL Brown, Slight Gray	5	SW SC		ST					
	8 **SANDY CLAY** Brown	10	SW SC		ST					X
	12 **SAND** Brownish Orange ▽	15	SW		ST					
	16 BOTTOM OF BORING									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ 14	▼
WL	▽	▼
WL		

Terracon

BORING STARTED	10-24-08		
BORING COMPLETED	10-24-08		
RIG		FOREMAN	Dave
LOGGED	BCP	JOB #	07067060

WELL NO. MW-1

CLIENT: City of Moline

SITE: Former Villareal Building, Moline, Illinois

PROJECT: Moline Brownsfield

BOREHOLE DIA.: 6 in
WELL DIA.: 2 in
TOP OF CASING:
GROUND SURFACE ELEV.: 100.82 ft

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: RECOVERY, in.	SAMPLES: SPT - N BLOWS / ft.	TESTS: WATER CONTENT, %	TESTS: FIELD VAPOR TEST (PPM)*
0.6	Approx. 6" Asphalt		SW SC		ST				1
	SANDY FILL Brownish Gray		SW SC		ST				ND
		5	SW SC		ST				1
6	**SANDY CLAY** Brown		SW SC		ST				5
			SW SC		ST				5
10	**SILTY SAND WITH GRAVEL** Brown	10	SW SC		ST				ND
			SW		ST				1.75
		15	SW		ST				ND
			SW		ST				3.0
			SW		ST				4.5
20	BOTTOM OF BORING	20							

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ 16	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	10-27-08		
BORING COMPLETED	10-27-08		
RIG	D-50	FOREMAN	JA
LOGGED	BCP	JOB #	07067060

WELL NO. MW-2

CLIENT: City of Moline

SITE: Former Villareal Building, Moline, Illinois

PROJECT: Moline Brownsfield

BOREHOLE DIA.:
WELL DIA.: 6 in
TOP OF CASING: 2 in
GROUND SURFACE ELEV.: 100.14 ft

DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: RECOVERY, in.	SAMPLES: SPT - N BLOWS / ft.	TESTS: WATER CONTENT, %	TESTS: FIELD VAPOR TEST (PPM)*
0.6 Approx. 6" Asphalt								
SILTY SAND Brown		SW SC		ST				1.75
		SW SC		ST				1.5
	5	SW SC		ST				1.25
6 **SILTY CLAY WITH GRAVEL** Reddish		SW SC		ST				2
		SW SC		ST				2
	10	SW SC		ST				1.0
		SW		ST				ND
	15	SW		ST				ND
16 ▽ **WEATHERED LIMESTONE***		SW		ST				4.5
		SW		ST				4.5
20	20							

BOTTOM OF BORING

***Classification of rock materials has been estimated from disturbed samples. Core samples and petrographic analysis may reveal other rock types.

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ 16	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	10-27-08		
BORING COMPLETED	10-27-08		
RIG	D-50	FOREMAN	JA
LOGGED	BCP	JOB #	07067060

WELL NO. MW-3

CLIENT: City of Moline

SITE: Former Villareal Building, Moline, Illinois

PROJECT: Moline Brownsfield

BOREHOLE DIA.: 6 in
WELL DIA.: 2 in
TOP OF CASING:
GROUND SURFACE ELEV.: 99.72 ft

DEPTH, ft.	USCS SYMBOL	SAMPLES: NUMBER	TYPE	RECOVERY, in.	SPT - N BLOWS / ft.	TESTS: WATER CONTENT, %	FIELD VAPOR TEST (PPM)*
0.6 Approx. 6" Asphalt							
CLAY, Brown	SW SC		ST				1.25
	SW SC		ST				1.75
5	SW SC		ST				1.5
6 SILTY SAND, Brownish Gray	SW SC		ST				2.25
	SW SC		ST				1.75
10 SILTY CLAY, Gray and Orange	SW SC		ST				2.25
	SW		ST				1.75
15	SW		ST				1.75
16 WEATHERED LIMESTONE AND GRAVEL***	SW		ST				ND
	SW		ST				ND
20							

BOTTOM OF BORING

***Classification of rock materials has been estimated from disturbed samples. Core samples and petrographic analysis may reveal other rock types.

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ 14	▼
WL	▽	▼
WL		

Terracon

BORING STARTED	10-27-08		
BORING COMPLETED	10-27-08		
RIG	D-50	FOREMAN	JA
LOGGED	BCP	JOB #	07067060

BORING NO. B-1

CLIENT
CITY OF MOLINE

SITE 1909 - 1925 5TH AVENUE
MOLINE, ILLINOIS

PROJECT
O'ROURKE AND VILLAREAL PROPERTIES

Approx. Surface Elev.: 96.8 ft

Depth	Description	Elev.
0.58	**CONCRETE DRIVEWAY**	96.2
	FILL Crushed Rock	
2	Dark Brown Lean Silty Clay at about 1 ft.	94.8
	LEAN CLAY, TRACE SILT Brown	
7.5		89.3
8	**LEAN TO FAT CLAY** Red-Brown	88.8
	SILTY CLAY, TRACE ORGANICS Gray-Brown	
12	▼	84.8
	SILTY CLAY Brown-Gray	
14.5	▽	82.3
	FINE TO COARSE SAND, TRACE LIMESTONE GRAVEL	
18		78.8
	BOTTOM OF BORING	

Depth, ft.	USCS Symbol	Number	Type	Recovery, in.	SPT - N Blows / ft.	Water Content, %	Field Vapor Test (PPM)*	Soil Sample Sent to Laboratory
		1	SS	24			ND	
		2	SS	24			ND	
		3	SS	24			ND	
5		4	SS	24			ND	
		5	SS	24			2	
10		6	SS	24			10	X
		7	SS	24			3	
		8	SS	24			3	
15		9	SS	24			ND	

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft			
WL	▽ 14.5 W.S.	▼ 12 A.B.	
WL	▽	▼	
WL			

Terracon

BORING STARTED	6-15-04		
BORING COMPLETED	6-15-04		
RIG	94	FOREMAN	JC
APPROVED	BRP	JOB #	07047049

BORING NO. B-2

CLIENT: CITY OF MOLINE

SITE: 1909 - 1925 5TH AVENUE, MOLINE, ILLINOIS

PROJECT: O'ROURKE AND VILLAREAL PROPERTIES

Approx. Surface Elev.: 96.9 ft

Depth	Description	Elev.
0.58	**CONCRETE SIDEWALK**	96.3
	FILL	
1.5	Crushed Rock and Gravel	95.4
	Dark Brown Lean Silty Clay at about 1 ft.	
	SILTY CLAY	
	Brown	
7.5		89.4
8	**TILL**	88.9
	Red-Brown	
	SILTY CLAY, TRACE ORGANICS	
	Gray-Brown	
10		86.9
	SILTY CLAY WITH ORGANICS	
	Brown-Gray	
14	Seam at about 13.5 ft.	82.9
14.5	**SILTY CLAY**	82.4
	Gray	
	FINE TO COARSE SAND, TRACE GRAVEL	
	Brown-Gray	
18		78.9
	BOTTOM OF BORING	

Sample Number	Type	Recovery, in.	SPT - N Blows / ft.	Water Content, %	Field Vapor Test (PPM)*	Soil Sample Sent to Laboratory
1	SS	16			5	
2	SS	18			10	
3	SS	20			41	X
4	SS	24			ND	
5	SS	24			3	
6	SS	24			ND	
7	SS	24			ND	
8	SS	24			ND	
9	SS	24			ND	

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ 14	W.S. ▼ 12 A.B.
WL	▽	▼
WL		

Terracon

BORING STARTED	6-15-04		
BORING COMPLETED	6-15-04		
RIG	94	FOREMAN	JC
APPROVED	BRP	JOB #	07047049

BORING NO. B-3

CLIENT
CITY OF MOLINE

SITE 1909 - 1925 5TH AVENUE
MOLINE, ILLINOIS

PROJECT
O'ROURKE AND VILLAREAL PROPERTIES

Approx. Surface Elev.: 97.1 ft

Elev.	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	NUMBER	TYPE	RECOVERY, in.	SPT - N BLOWS / ft.	WATER CONTENT, %	FIELD VAPOR TEST (PPM)*	SOIL SAMPLE SENT TO LABORATORY
0.37	**ASPHALT**			1	SS	24			ND	
96.7	**FILL** Crushed Rock and Gravel									
1.5 / 95.6	Dark Brown Silty Clay, trace Gravel at about 9 in.			2	SS	24			ND	
	SILTY CLAY Brown			3	SS	24			ND	X
		5		4	SS	24			ND	
				5	SS	24			ND	
9.5 / 87.6	**FINE SILTY SAND** Gray-Brown	10		6	SS	24			ND	
10.5 / 86.6	**LEAN CLAY, TRACE SILT** Brown-Gray			7	SS	24			ND	
13 / 84.1	**FINE TO MEDIUM SILTY SAND, TRACE GRAVEL** Red, Brown and Gray			8	SS	24			ND	
14 / 83.1	**FINE TO COARSE SAND, TRACE LIMESTONE GRAVEL** Brown	15		9	SS	24			ND	
16.5 / 80.6	**LIMESTONE** Wet									
18 / 79.1	BOTTOM OF BORING									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft			
WL	▽ 13 W.S.	▼ 13 A.B.	
WL	▽	▼	
WL			

Terracon

BORING STARTED	6-15-04		
BORING COMPLETED	6-15-04		
RIG	94	FOREMAN	JC
APPROVED	BRP	JOB #	07047049

BORING NO. B-4

CLIENT
CITY OF MOLINE

SITE 1909 - 1925 5TH AVENUE
MOLINE, ILLINOIS

PROJECT
O'ROURKE AND VILLAREAL PROPERTIES

Approx. Surface Elev.: 96.9 ft

DESCRIPTION	Elev.	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	TYPE	RECOVERY, in.	SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	FIELD VAPOR TEST (PPM)*	SOIL SAMPLE SENT TO LABORATORY
0.25 **ASPHALT**	96.7			1	SS	24			ND	
1 **FILL** Crushed Rock and Gravel; Dark Brown Silty Clay, trace Gravel at about 6 in.	95.9			2	SS	24			ND	
LEAN CLAY, TRACE SILT Brown				3	SS	24			ND	X
5 **SILTY CLAY** Brown	91.9	5		4	SS	24			ND	
7.5 **TILL** Red-Brown	89.4			5	SS	24			ND	
8.5 **LEAN TO FAT CLAY** Red-Brown	88.4			6	SS	24			ND	
9.5 **CLAYEY SAND** Red-Brown	87.4	10		7	SS	24			ND	
11 **FINE SILTY SAND** Gray-Brown	85.9			8	SS	24			ND	
12 **FINE TO COARSE SAND, TRACE GRAVEL** Gray-Brown	84.9	15		9	SS	24			ND	
16 **LIMESTONE** Wet	80.9									
18 BOTTOM OF BORING	78.9									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft			
WL	11.5 W.S.	12 A.B.	
WL			
WL			

Terracon

BORING STARTED	6-15-04		
BORING COMPLETED	6-15-04		
RIG	94	FOREMAN	JC
APPROVED	BRP	JOB #	07047049

BORING NO. B-5

CLIENT
CITY OF MOLINE

SITE 1909 - 1925 5TH AVENUE
MOLINE, ILLINOIS

PROJECT
O'ROURKE AND VILLAREAL PROPERTIES

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: RECOVERY, in.	SAMPLES: SPT - N BLOWS / ft.	TESTS: WATER CONTENT, %	TESTS: FIELD VAPOR TEST (PPM)*	TESTS: SOIL SAMPLE SENT TO LABORATORY	
				1		1			ND		

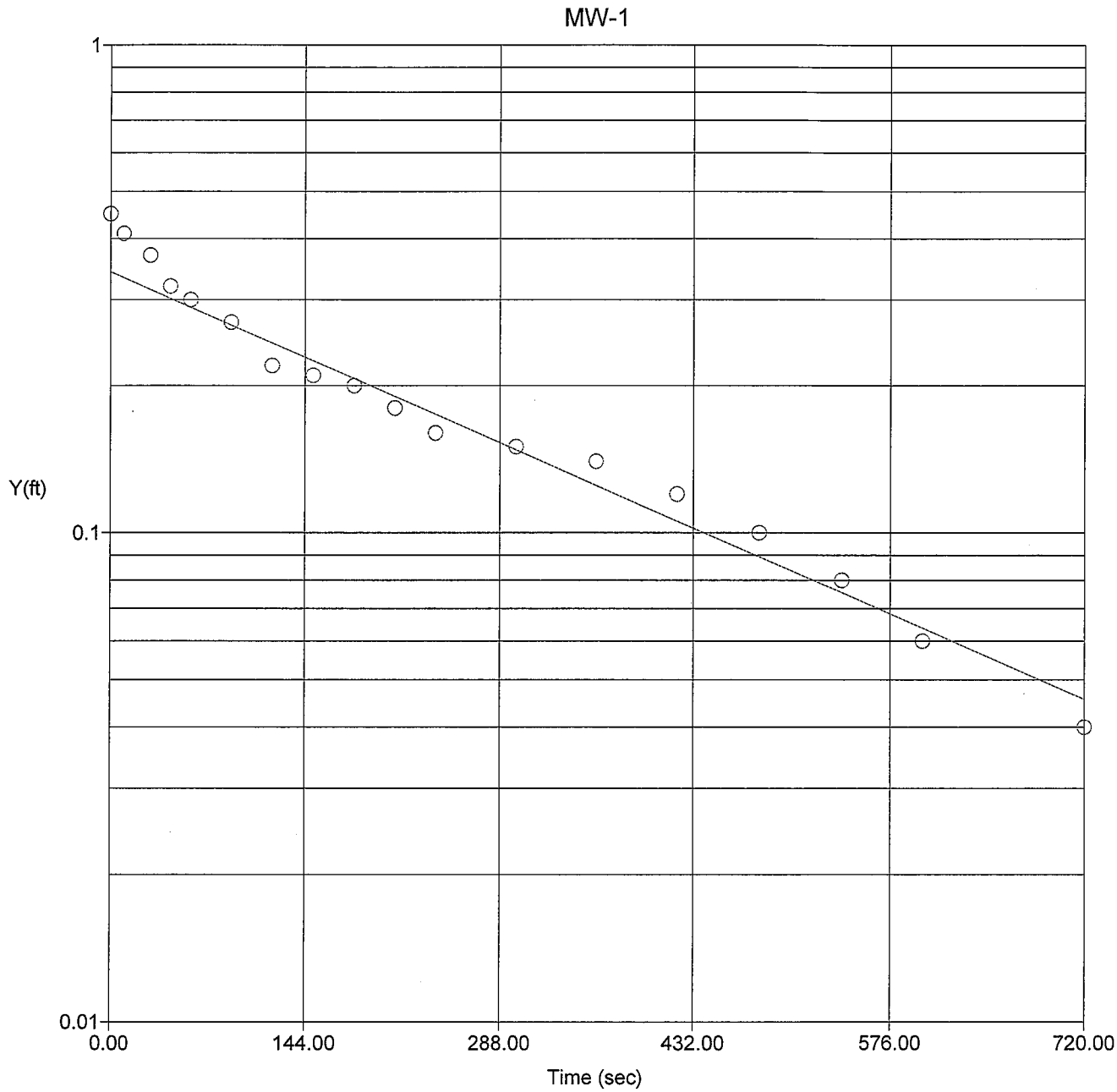
The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

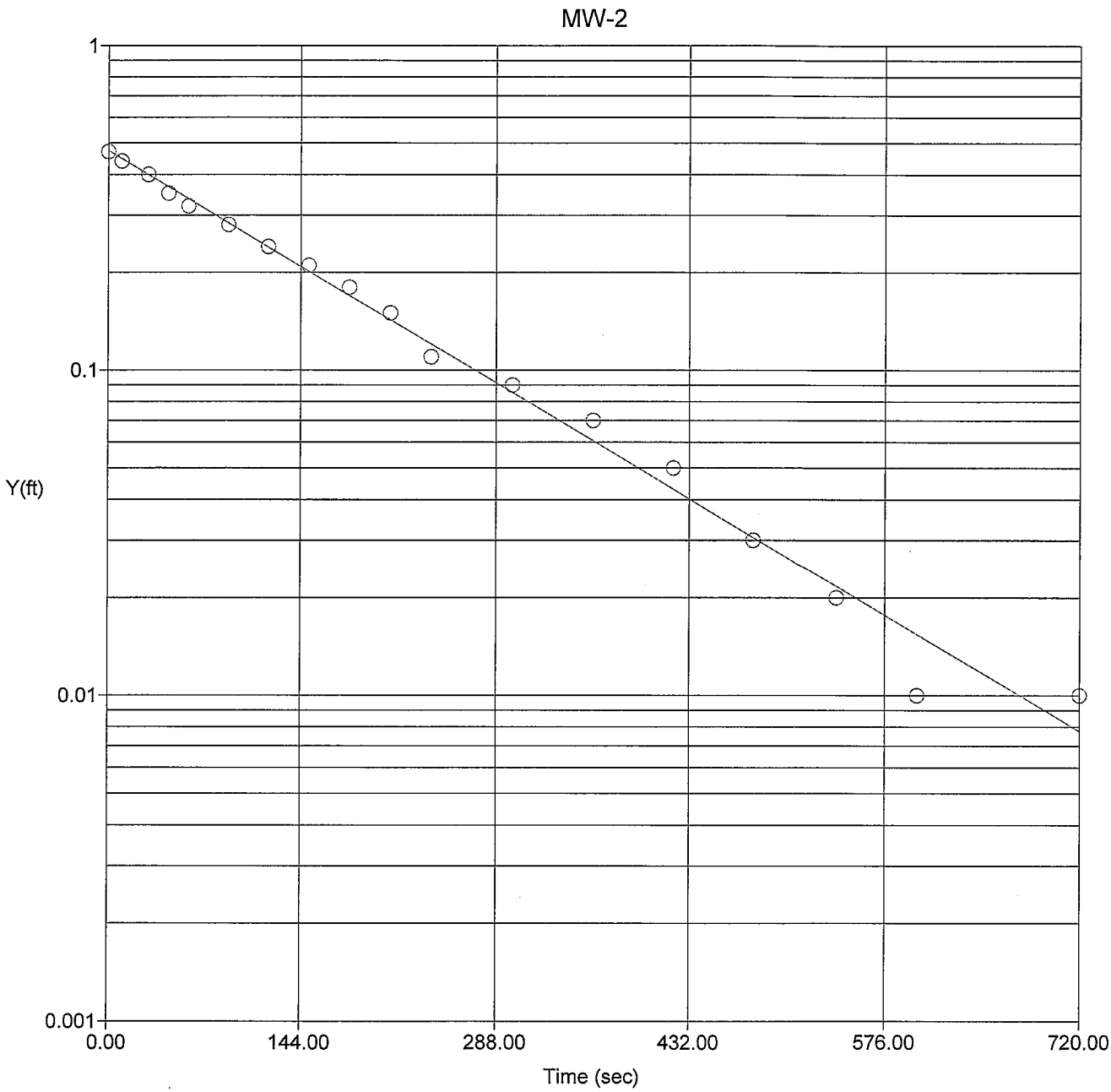
WATER LEVEL OBSERVATIONS, ft		
WL	▽	▼
WL	▽	▼
WL		

Terracon

BORING STARTED	6-15-04		
BORING COMPLETED	6-15-04		
RIG		FOREMAN	
APPROVED	BRP	JOB #	07047049



LUST No.:	Site Name:	
Hydraulic Conductivity: 4.29e-04 cm/sec	Well: MW-1	Slug Test Date:
Terracon	CGWP: N/A, N/A	



LUST No.:	Site Name:	
Hydraulic Conductivity: 7.13e-04 cm/sec	Well: MW-2	Slug Test Date:
Terracon	CGWP: N/A, N/A	

Illinois Environmental Protection Agency

Source Water Assessment Program *FACT SHEET*

Prepared in cooperation with the U.S. Geological Survey

Information and data used in the preparation of this fact sheet provided by the Illinois EPA and are subject to revision

Moline

Rock Island County

IMPORTANCE OF SURFACE WATER: Drinking water for the City of Moline (Facility No. 1610450) is supplied by the Moline community water supply (CWS). The Mississippi River serves as the primary source of this water. This facility draws water from the Mississippi River through one surface water intake (IEPA #31943). The supply provides an average of 5.3 million gallons per day to 18,200 service connections with an estimated population of 43,768 persons in Rock Island County. Facilities purchasing water from Moline include Clover Leaf Village MHP (1610160). In addition, Moline is interconnected with the Cities of East Moline (1610250) and Rock Island (1610650) to allow for mutual aid in the event of a water supply emergency.

SOURCE WATER LOCATION: **Figure 1** shows the entire Upper Mississippi River Watershed. This watershed covers a substantial portion of the United States, and includes parts of nine states. **Figure 2** is a map of the critical area in Illinois associated with the surface water intake for Moline. In Illinois, the following sub-watersheds contribute to the Mississippi River:

- **Mississippi North River** covers 875,528 acres (of the total, 710,400 acres are in Illinois) and includes portions of Jo Daviess, Stephenson, Carroll, Whiteside, Rock Island, and Mercer Counties. The Apple, Galena, and Plum Rivers are the major river systems in the watershed. The largest population areas in the watershed are Moline (43,127), Rock Island (39,684), East Moline (21,300), Savanna (3,819), Fulton (3,698), Galena (3,647), and East Dubuque (1,914).
- **Rock River Watershed** covers a total of 1,374,187 acres in northern Illinois. The major cities in the watershed are Rockford (139,943), Moline (43,127), Rock Island (39,684), East Moline (21,300), Sterling (15,142), and Dixon (15,134). Major streams, which comprise the Rock River Watershed include the Rock River, Pecatonica River, Rock Creek, and Mill Creek.

- **Des Plaines River Watershed** covers a total of 854,669 acres in Lake, Cook, DuPage, and Will Counties. Major streams that comprise the Des Plaines River Watershed include the Des Plaines River, DuPage River, Chicago Sanitary and Ship Canal, Salt Creek, Mill Creek, and Indian Creek.
- **Fox River Watershed** covers a total of 391,966 acres in Lake, McHenry, Cook, Kane, and DuPage Counties. The majority of the watershed is in agricultural lands with expanding urban areas. Major population areas in the watershed are Aurora (99,556), Elgin (77,010), St. Charles (22,847), Batavia (17,076), and Geneva (14,563). Major streams that comprise the Fox River Watershed include the Fox River, Boone Creek, Poplar Creek, Nippersink Creek, and Flint Creek.
- **Illinois River Watershed** covers an area in excess of 8,600,000 acres in Illinois. Some of the larger cities located in this watershed are Peoria (113,504), Jacksonville (19,327), Macomb (20,129), Ottawa (17,541), Streator (14,121), and Morton (13,799). Major streams in this watershed include the Illinois River, Mazon River, La Moine River, Spoon River, Vermilion River, Mackinaw River, and Macoupin Creek.
- **Kankakee/Iroquois River Watersheds** are located in east central Illinois and have one major tributary, the Iroquois River, which flows west from Indiana. The Kankakee/Iroquois River Watersheds cover a total of 1,375,068 acres. Major urban areas in these watersheds include Kankakee (25,575), Bourbonnais (13,934), Bradley (10,792), Wilmington (4,743), and Momence (2,968).
- **Mississippi North Central River Watershed** covers a total of 1,210,503 acres in west central Illinois. The largest cities in the watershed are Galesburg (33,530) Monmouth (9,489), Rock Island (39,681) and Pittsfield (4,231). Major streams that comprise the Mississippi North Central River Watershed include Henderson Creek, Edwards River, Pope Creek, Hadley Creek, and Bear Creek.
- **Sangamon River Watershed** covers a total of 2,191,570 acres in central Illinois. Some of the cities located in the watershed include Springfield (105,227), Taylorville (11,133) and Decatur (83,900). Major streams that comprise the Sangamon River Watershed include the Sangamon River, Sugar Creek, Spring Creek, Mosquito Creek, and Friends Creek.
- **Kaskaskia River Watershed** covers a total 3,657,207 acres in south central/southwest Illinois. Major cities in the watershed are Belleville (42,806), O'Fallon (16,073), Pana (5,796), Shelbyville (4,943) Vandalia (6,144), Greenville (5,108), and Sullivan (4,354). Major streams that comprise the Kaskaskia River Watershed include the Kaskaskia River, Robinson Creek, Crooked Creek, Shoal Creek, Silver Creek, and Horse Creek.
- **Mississippi South Central River Watershed** in southwestern Illinois covers 746,111 acres in Calhoun, Jersey, Macoupin, Madison, St. Clair, Monroe, and Randolph Counties. The largest cities in the watershed are Belleville (42,806), Edwardsville (34,582), Alton (33,064), Granite City (32,769), Collinsville (22,424), and Godfrey (16,085). Major streams that comprise the watershed include the Mississippi River, Fountain Creek, Cahokia Creek, Wood River, and Piasa Creek.
- **Big Muddy River Watershed** drains 1,510,655 acres in Washington, Jefferson, Perry, Franklin, Jackson, and Williamson Counties. The largest cities in the watershed are Carbondale (27,033), Mt. Vernon (17,000), and Marion (14,545). Major tributaries within the Big Muddy Watershed include Casey Fork, Middle Fork Big Muddy, Little Muddy River, and Beaucoup Creek.
- **Mississippi South River Watershed** consists of a small area in extreme southwest Illinois. The largest cities in the watershed are Chester (8,204) and Steeleville (2,059). Major streams within the Mississippi South River Watershed include the Marys River, Clear Creek, and Sexton Creek. The Mississippi South River Watershed covers a total of 433,562 acres in Randolph, Perry, Jackson, Union, Alexander, and Pulaski Counties.

It should be noted that several of these watersheds contributing to the Mississippi River actually enter the river downstream from the Moline surface water intake; therefore they do not affect source water quality for the Moline CWS. The portion of this area considered most critical for water quality concerns at the Moline intake is indicated in **Figure 2**. The majority of the landuse within these watersheds is agricultural (60%), other landuses in the watersheds are forest/grassland (30%), water/wetland (5%), urban (4%), and transportation (1%). The critical area (see **Figure 2**) is intended to assist in emergency preparedness and contingency planning in the event of a release within this area. This critical area is divided into three zones. Zone 1 consists of a quarter mile buffer on either side of the river, extending from a quarter mile downstream of the CWS surface water intake to twenty-five miles upstream (or the five hour time of travel). Zone 2 is the 14-digit Hydrologic Unit Code (HUC) watershed(s) that contain Zone 1. Zone 3 is the 8-digit HUC watershed(s) that contains Zone 2. The entire Zone 3 is shown in **Figure 3**.

SOURCE WATER QUALITY: Waters not attaining water quality standards with technology-based controls alone (e.g. water quality limited) must be identified in accordance with Section 303(d) of the Federal Clean Water Act (CWA). Water body segments (streams) within this watershed are included on the 303(d) list. An explanation of how water body segments are rated can be found in the document entitled "Guidance For Developing Watershed Implementation Plans In Illinois", available from the Watershed Management Section. For information pertaining to the water bodies or watersheds discussed on this factsheet, refer to the CWA Section 303(d) list: Illinois' submittal for 1999. This document can be obtained by contacting the Watershed Management Section of the Bureau of Water at 217/782-3362.

A total of 880 stream miles were assessed in the Mississippi North River Watershed. Overall resource quality is "good" on 533 stream miles (60%), and "fair" conditions exist on 347 stream miles (40%). A total of 938 stream miles were assessed in the Rock River Watershed. Overall resource quality is "good" on 723 stream miles (77%), and "fair" conditions exist on 215 stream miles (23%). A total of 685 stream miles were assessed within the Des Plaines River Watershed. Overall resource quality is "good" on 165 stream miles (24%), "fair" on 481 stream miles (70%), and "poor" on 39 stream miles (6%). A total of 806 stream miles were assessed in the Fox River Watershed. Overall resource quality is "good" on 680 stream miles (84%) and "fair" on 126 stream miles (16%). A total of 6,473 stream miles were assessed in the Illinois River Watershed. Overall resource quality is "good" on 4,694 stream miles (73%) and "fair" on 1,779 stream miles (27%). A total of 970 stream miles were assessed in the Kankakee/Iroquois River Watershed. The watersheds are exceptional water systems, as the watersheds have "good" overall resource quality for 893 stream miles (92%). Only 77 stream miles (8%) are rated as "fair." A total of 1,741 stream miles were assessed in the Mississippi North Central River Watershed. Overall resource quality is "good" on 1,226 stream miles (70%), "fair" on 513 stream miles (30%). A total of 1,414 stream miles were assessed in the Sangamon River Watershed. Overall resource quality is "good" on 545 stream miles (39%), "fair" on 841 stream miles (59%), and "poor" on 28 stream miles (2%). A total of 2,962 stream miles were assessed in the Kaskaskia River Watershed. Overall resource quality is "good" on 1,556 stream miles (52.5%) and "fair" on 1,390 stream miles (47%) and "poor" on 16 stream miles (0.5%). A total of 747 stream miles were assessed within the Mississippi South Central Watershed. Overall resource quality is "good" on 168 stream miles (23%), "fair" on 544 stream miles (72%), and "poor" on 35 stream miles (5%). A total of 1,480 stream miles were assessed in the Big Muddy River Watershed. Overall resource quality is "good" on 227 stream miles (15%) and "fair" on 1,253 stream miles (85%). A total of 390 stream miles were assessed in the Mississippi South River Watershed. Overall resource quality is "good" on 72 stream miles (18%) and "fair" on 318 stream miles (82%).

FINISHED WATER QUALITY: Finished water quality monitoring data are available at http://www.epa.gov/safewater/data/getdata.html. This data includes tables of monitored parameters and any contaminants detected, including any health advisory information, drinking water standards, or maximum

contaminant levels (MCLs). In addition, similar information is also available in the Consumer Confidence Report supplied by the Moline CWS to its customers.

POTENTIAL SOURCES OF CONTAMINATION: The phrase "potential source" is expressly used here to describe sources existing in possibility or having the capability of becoming a source of contamination. The term "point source" is used to distinguish it from the term nonpoint source. Nonpoint source pollution is the diffuse, intermittent runoff of pollutants from various sources. **Figure 2** shows the locations of known potential point sources of contamination in relation to the critical area of the Upper Mississippi River Watershed. This information was obtained from various electronic databases. The names of potential point sources of contamination identified in **Figure 1** are listed in **Table I**. The sites listed in **Table I** are considered "potential" sources of contamination due to: the nature of the activity; the availability of data in electronic databases; and their geographic proximity[1] to the source water protection area. These sites are divided into seven different types of sources that are classified by the following abbreviations: CERCL = Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)[2] site; CU = cleanup (sites that are actively doing cleanups); LF = landfill; NPDES = National Pollutant Discharge Elimination System discharge point; RCRA = Resource Conservation and Recovery Act[3] site; LU = Leaking Underground Storage Tank (sites with leaking underground storage tanks that have not received a No Further Remediation letter); and TRI = Toxic Release Inventory site (a site that has had a toxic release to a receiving stream or publicly owned treatment works). Many of these sites, while located in the watershed containing the Moline intake, are actually located downstream from the intake and therefore could have little impact on water quality at the intake.

A major concern for the above sub-watersheds is the nutrient loading and other effects due to agricultural activities and other nonpoint sources of pollution. Precipitation moving over and through the ground picks up pollutants from these sources and carries them into rivers, lakes, and groundwater. Major sources that contribute to Illinois' nonpoint source pollution problems are agriculture, construction erosion, urban runoff, hydrologic modifications, and resource extraction activities. Potential nonpoint source contaminants of concern include waterborne pathogens such as *Cryptosporidia*, E. *coli*, *Giardia* and fecal coliform, as well as nitrogen and herbicides such as atrazine. *Cryptosporidium* is a single cell disease-causing parasite that lives in wildlife, livestock and domestic animals. If these animals live near bodies of water they may serve as carriers of the parasite. **Figure 3** shows the land use patterns in the watersheds of concern, noting the degree of agricultural usage versus other land use activities. **Figure 4** presents the livestock and wildlife density in various counties within the watershed for reference. Livestock densities are based on actual numbers of cattle, hogs, sheep, goats and horses per county; wildlife densities are based on the estimated number of whitetail deer per county. Due to their ability to adapt to different environments, whitetail deer are a good indicator of wildlife density on a countywide level. **Figures 5 and 6** provide an estimate of nitrogen usage in the Illinois portion of the Mississippi River Watershed and the entire Upper Mississippi River Watershed, respectively. Nitrogen use is shown in tons per square mile. Similarly, in **Figures 7 and 8**, herbicide usage in pounds per square mile is illustrated in the Illinois portion of the Mississippi River Watershed and the entire Upper Mississippi River Watershed, respectively. Herbicides depicted in **Figures 7 and 8** include: atrazine, alachlor, metolachlor, EPTC, trifluralin, 2,4-D, cyanazine, butylate, pendimethalin, and bentazon.

SUSCEPTIBILITY TO POTENTIAL CONTAMINATION: Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation,

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[1] Locations of potential sources are approximate and intended for watershed based inventories only, not for site specific evaluations.
[2] "CERCLA" means Superfund site.
[3] "RCRA" requires that generators, transporters, treaters, storers, and disposers of hazardous waste provide information concerning their activities to state environmental agencies.

sedimentation, filtration, and disinfection. Within the Illinois portion of the Mississippi River Watershed, which is illustrated in **Figure 3**, many commodities, including manufactured goods, petrochemicals, and pesticides are transported along the river system. The production, storage, and transportation of these commodities are a major concern, especially when occurring near surface water intakes. In addition, agricultural runoff within the Illinois portion of the Mississippi River Basin contributes to the susceptibility of the Moline intake. With high flow rates and long distances of travel on the Mississippi River, critical areas can be extensive. The critical area for the Moline intake was determined using data from a joint U.S. Environmental Protection Agency/U.S. Geological Survey project. This project used a computer modeling program (SPARROW) to determine travel times on major rivers in the United States.

Accidental spills of hazardous materials into navigable waterways are a major concern because of their frequency in the United States in recent years. Illinois has access to 1,116 miles of inland waterway that can handle commercial barge traffic. These include the Upper Mississippi River, Illinois River Waterway, and the Ohio River. Along these waterways are numerous facilities that load and unload hazardous materials. Analysis of reported spills indicate that between 1974 and 1989, 794 accidental spills of hazardous materials occurred along Illinois waterways. Approximately 92% of these spills occurred along the Mississippi and/or the Illinois River. **Figure 2** shows the critical area of concern (Zone 1) for the Moline surface water intake. Spills occurring in this critical area will travel to the intake in five hours or less, making contingency planning and spill reporting a major concern in this watershed. Further information concerning spill response planning on the Mississippi River may be found in U.S. EPA's website at www.epa.gov/region5/oil and at U.S. Geological Survey's website ftp://ftp.umesc.er.usgs.gov/pub/gis_data/oil_spill. The Upper Mississippi River Water Suppliers Coalition is currently working to develop an Early Warning Monitoring Network on the Mississippi River. This Network would enhance response times by providing supplies with early notification of spills on the Mississippi River.

WATERSHED PROTECTION EFFORTS: Under Section 319 of the Federal Clean Water Act, U.S. EPA provides grants for the Illinois EPA to finance projects that demonstrate cost-effective solutions to NPS pollution problems and promote public knowledge and awareness of NPS pollution. Projects in the Illinois portion of the Upper Mississippi Watershed have included:

- Mitchell Park Ravine Watershed Project - The project will focus on soil erosion control and water quality in an urban watershed determined to be high priority by the East Moline Stormwater Committee. Proven soil erosion and sediment control and stormwater management approaches planned in consultation with the National Resources Conservation Service (NRCS) will be utilized. Practices included grade stabilization structures, streambank stabilization, stormwater detention basins, critical area treatment, and permanent vegetative cover.
- On going programs in the North Mississippi, Des Plaines, Illinois, Sangamon, and Fox River Watersheds to reduce siltation and improve water quality.

Within the Illinois portion of the Upper Mississippi River Watershed, the Illinois River Watershed has been identified as one of the most significant natural resources in the state. Protection and enhancement of this natural resource is a priority concern of the State of Illinois. In order to focus public attention and identify resource needs, several initiatives are underway including:

- Integrated Management Plan for the Illinois River Watershed – Under the Chairmanship of Lieutenant Governor Corrine Wood, an Illinois River Strategy Team has been formed. This group of public and private sector representatives forms the Illinois River Planning Commission and develops recommendations regarding environmental and economic issues on the Illinois River. These

recommendations are the heart of an Integrated Management Plan, which in turn became the foundation for the Illinois River Restoration and Conservation Grant Act.

- Illinois River Restoration and Conservation Grant Act – This Act establishes an interagency body to develop and administer a grant program to fund local watershed management projects. The Act also established the Illinois River Coordinating Council to advise on grant awards and make recommendations towards the betterment of the Illinois River.
- Conservation Reserve Enhancement Program – The Conservation Reserve Enhancement Program (CREP) is a cooperative effort between the USDA and the State of Illinois to protect water quality in the Illinois River and some of its tributaries. USDA and the State of Illinois will work with other Federal, State and local authorities to reduce sedimentation and runoff, and encourage the growth of local wildlife. The Illinois program will establish CRP contracts with owners and operators of farm properties to plant specific kinds of vegetation near streams and rivers in return for rental payments and other incentives. More information on CREP may be found on Illinois DNR's website at http://dnr.state.il.us.

In an effort to minimize the impact of livestock facilities on water resources on a statewide basis, livestock facilities are now regulated under the Livestock Management Facilities Act. This legislation is designed to keep Illinois' livestock industry productive and environmentally responsible by establishing requirements for design, construction, operation and management of livestock facilities and waste-handling structures. Detailed information on the Livestock Management Facilities Act may be found at the website http://www.agr.state.il.us. In addition, the watershed protection efforts and priorities of the Illinois EPA, Illinois Department of Agriculture, Illinois Department of Natural Resources, U.S. Department of Agriculture's Natural Resources Conservation Service, U.S. Army Corps of Engineers, and The Nature Conservancy are described and illustrated at the website: http://www.epa.state.il.us/water/unified-watershed-assessment/index.html.

In order to help farmers in adopting sound agricultural practices, The Illinois Council on Best Management Practices (C-BMP) was formed. The Council is a coalition of agribusiness and agricultural producer organizations with the support of the University of Illinois Extension and serves as a clearinghouse on current research to protect water quality in Illinois. The Council also provides information and support to local watershed groups to help implement sound water quality initiatives and can offer educational assistance and help facilitate the technical and financial resources needed to carry out water quality objectives. For more information on C-BMP contact Dr. George Czapar, Springfield Extension Center, P.O. Box 8199, Springfield, IL 62791, email: g-czapar@uiuc.edu.

Table I

MAP ID	FACILITY NAME	SOURCE TYPE
1	AGRICO CHEMICAL COMPANY	CERCL
2	COMM EDISON CO QUAD CITIES NUCLEAR GEN S	CERCL
3	MCKAY'S PLATING COMPANY	CERCL
4	DEERE JOHN HARVESTER WORKS	CERCL
5	WEAR COTE INTERNATIONAL INCORPORATION	CERCL
6	SYLVAN SLOUGH	CERCL
7	DEERE JOHN PLOW & PLANTER WKS	CERCL
8	SERVUS RUBBER CO	CERCL

MAP ID	FACILITY NAME	SOURCE TYPE
9	ROCK ISLAND PLATING WORKS	CERCL
10	EAST MOLINE MERCURY	CERCL
11	AA WASTE OIL SERVICE INCORPORATION	CERCL
12	WHEELER CONSOLIDATED, INC.	CERCL
13	AGRICO CHEMICAL COMPANY	CU
14	FULTON RIVER TERMINAL	CU
15	3M COMPANY	CU
16	PRO-HOFF MANUFACTURING	CU
17	THE QUARTER DEVELOPMENT	CU
18	MCKAY'S PLATING	CU
19	EXPORT PACKAGING COMPANY	CU
20	QUAD CITIES CIVIC CENTER	CU
21	CITY OF MOLINE	CU
22	FRANK FOUNDRIES (FF)	CU
23	MIDAMERICAN ENERGY	CU
24	MOLINE ACCESSORIES	CU
25	ELECTRO-COATINGS	CU
26	MARINE CORPS RESERVE CENTER	CU
27	MOLINE ARSENAL RAMPS	CU
28	BARNEY HURLEY CRANE	CU
29	J.I. CASE	CU
30	QUAD CITIES INDUSTRIAL CENTER	CU
31	WEYERHAEUSER PACKAGING, INC.	CU
32	ROCK ISLAND ARMORY OMS #19A	CU
33	IOWA-ILLINOIS GAS & ELECTRIC	CU
34	RIMCO EXPOSITION CENTER	CU
35	CUMMINS GREAT PLAINS DIESEL	CU
36	CITY OF MOLINE	CU
37	BASS STREET LANDING	CU
38	ROCK ISLAND ARSENAL	CU
39	ASHPOLE, RUSSEL	LF
40	MCKAY, WILBUR	LF
41	PORT BYRON MUNICIPAL	LF
42	SPENCER, PERRY E.	LF
43	HEGWOOD, DON E.	LF
44	POLICE FIRE TRAINING CENTER	LF
45	FIVE CITY CONSTRUCTION	LF
46	ROCK ISLAND PARK & REC DEPT	LF
47	HASSELROTH PARK	LF
48	UNION OF OPERATING ENGINEERS	LF
49	MILLER CONTAINER CORP	LF
50	ENRIGHT, THOMAS	LF
51	ALBANY MUNICIPAL	LF
52	DRAGS, INCORPORATED	LF
53	CHEMFIX	LF
54	NORTHERN GAS PRODUCTS	LF
55	FULTON MUNICIPAL #1	LF

MAP ID	FACILITY NAME	SOURCE TYPE
56	FULTON MUNICIPAL TBS	LF
57	WIERSEMA, URSAL	LF
58	J T CULLEN COMPANY	LF
59	GABRIEL, BERNARD	LF
60	FULTON MUNICIPAL #2	LF
61	WATTS LANDFILL	LF
62	ROBBINS, LARRY	LU
63	ALBANY, CITY OF	LU
64	D&D OIL CO.	LU
65	HYPONEX	LU
66	FULTON,CITY OF	LU
67	BURLINGTON RIVER TERMINAL	LU
68	AMERITECH	LU
69	EAGLE FOODS	LU
70	MARTIN OIL	LU
71	ROADWAY EXPRESS INC.	LU
72	MID AMERICAN ENERGY CO.	LU
73	C&W BRANDT CO.	LU
74	JACOBS, CHARLES	LU
75	RENEW MOLINE	LU
76	HASSE OIL	LU
77	ERIKSON GOODYEAR AUTO SERVICE CTR.	LU
78	JIM'S TRUCK & TRAILER REPAIR	LU
79	DAIRY MARTS #584	LU
80	HUGHES SERVICE STATION	LU
81	CLARK OIL & REFINING	LU
82	IOWA ILLINOIS GAS & ELECTRIC	LU
83	ORVIL UNION 76	LU
84	MOLINE AMERICAN LEGIONS	LU
85	WARECO SERVICE INC.	LU
86	JOHN DEERE INC.	LU
87	MANARY, HAROLD	LU
88	EAST MOLINE, CITY OF	LU
89	MIDWAY OIL CO.	LU
90	MARTIN OIL	LU
91	MARTIN OIL	LU
92	EHLERS, JOHN	LU
93	BEALER, DON	LU
94	UNITED METHODIST CHURCH	LU
95	MOLINE, CITY OF	LU
96	WARECO SERVICE INC.	LU
97	CAMPBELL OLDSMOBILE	LU
98	ROADWAY EXPRESS	LU
99	TERRY SPENSER; ESI GAS & GROCERY	LU
100	GEORGIA PACIFIC CORP.	LU
101	FRIENDSHIP MANOR	LU
102	BUTTERWORTH CENTER	LU

MAP ID	FACILITY NAME	SOURCE TYPE
103	CRIMMINS, DONNA	LU
104	CASE CORP.	LU
105	HICKLIN POWER CO.	LU
106	MACMILLAN BLOEDEL CONTAINERS	LU
107	REMOTE SERVICES; DAIRY MART	LU
108	ROADWAY EXPRESS	LU
109	MACK'S SERVICE STATION	LU
110	MILLER, STEVE	LU
111	E&D TRUCKING INC.	LU
112	WHEELER CONSOLIDATOR INC.	LU
113	OVERNIGHT TRANSPORTATION	LU
114	VAN PUYVELDE, JOSEPH	LU
115	MEERSMAN SERVICE	LU
116	E&J METAL CO.	LU
117	BULLOCK GARAGES INC.	LU
118	JOHN DEERE HARVESTER WORKS	LU
119	MCMILLAN, MICHAEL	LU
120	COSNER, HELEN	LU
121	METRO AIRPORT AUTHORITY OF ROCK ISLAND	LU
122	JOHN DEERE TECHNICAL CTR.	LU
123	MOLINE, CITY OF	LU
124	MIDWAY OIL CO.	LU
125	CRIMMINS, DONNA	LU
126	HASTEY'S MOBIL	LU
127	QUINT CITIES PETROLEUM	LU
128	AMOCO OIL CO.	LU
129	UNITED TOWNSHIP HIGH SCHOOL	LU
130	COMMONWEALTH EDISON	LU
131	JOHN FRY CO.	LU
132	AMOCO OIL CO.	LU
133	D&G REAL ESTATE	LU
134	HEINE, MARY	LU
135	BROWN, JEFFERY	LU
136	HARTZ, CHARLES	LU
137	IOWA ILLINOIS GAS & ELECTRIC	LU
138	ILLINOIS BELL TELEPHONE	LU
139	WESSENBERG, JEFF	LU
140	BRANDT CONSTRUCTION CO.	LU
141	AUGUSTANA COLLEGE	LU
142	EXPORT PACKAGING	LU
143	FIRESTONE INC.	LU
144	POWERS, LEE	LU
145	KERR MCGEE	LU
146	ROCKRIDGE C.U.S.D. #300	LU
147	KEN'S MOBIL	LU
148	RON'S DX	LU
149	ROCK ISLAND, CITY OF	LU

MAP ID	FACILITY NAME	SOURCE TYPE
150	BORDNER SERVICES INC.	LU
151	IOWA ILLINOIS GAS & ELECTRIC	LU
152	CASE CORP.	LU
153	COASTAL MART, INC.	LU
154	COASTAL MART, INC.	LU
155	ILLINOIS BELL TELEPHONE	LU
156	TIM'S CAR WASH	LU
157	J I CASE CO.	LU
158	FOLEY CONSTRUCTION	LU
159	ROCK ISLAND, CITY OF	LU
160	JOHN DEERE HARVESTER WORKS	LU
161	MOLINE CONSUMERS CO.	LU
162	CLARK REFINING & MARKETING	LU
163	COLTEC & MOLINE, CITY OF	LU
164	ROCK ISLAND CO. HWY. DEPT.	LU
165	KEN'S UNOCAL 76	LU
166	ROCK ISLAND CO. PUBLIC WORKS	LU
167	AUGUSTANA COLLEGE	LU
168	MID-AMERICAN ENERGY	LU
169	MILAN, VILLAGE OF	LU
170	KNOX CORPORATION	LU
171	ROCK ISLAND CO. MASS TRANSIT	LU
172	NATIONAL PETROLEUM, INC.	LU
173	NATIONAL PETROLEUM, INC.	LU
174	KOELZ DX CO.	LU
175	BORDNER SERVICE, INC.	LU
176	JOHN DEERE HARVESTER WORKS	LU
177	ROCK ISLAND, CITY OF	LU
178	COM-EDISON	LU
179	QUALITY CONTROL AUTO BODY	LU
180	HUGHES SERVICE STATION	LU
181	INT'L TRUCK & ENGINE CORP.	LU
182	STRATA GEOLOGIC SERVICES	LU
183	STRATA GEOLOGIC SERVICES	LU
184	EAST MOLINE, CITY OF	LU
185	FUHR, LARRY	LU
186	PROPERTY DEVELOPMENT & MAINTENANCE	LU
187	FULTON STP	NPDES
188	WENDLING QUARRIES-HUISENGA	NPDES
189	ALBANY STP	NPDES
190	HYPONEX CORPORATION	NPDES
191	MINN MINING & MFG.-CORDOVA	NPDES
192	COMMONWEALTH EDISON-QUAD CTIES	NPDES
193	CORDOVA STP	NPDES
194	PORT BYRON STP	NPDES
195	EAST MOLINE REGIONAL STP	NPDES
196	MOLINE NORTH STP	NPDES

MAP ID	FACILITY NAME	SOURCE TYPE
197	DEERE PLOW AND PLANTER WORKS	NPDES
198	ROCK ISLAND MAIN STP	NPDES
199	ROCK ISLAND S.W. STP	NPDES
200	ANDALUSIA STP	NPDES
201	HICKORY HILLS SECOND ADDITION	NPDES
202	RIDGEWOOD LEDGES APARTMENTS	NPDES
203	CASEYS GENERAL STORES INC	RCRA
204	ARGO MANUFACTURING CORP	RCRA
205	FULTON CORP	RCRA
206	CASEYS GENERAL STORES INC	RCRA
207	AMOCO FERTILIZER PLANT	RCRA
208	AGRICO CHEMICAL CO	RCRA
209	PANHANDLE EASTERN PEORIA	RCRA
210	DU PONT, E I DE NEMOURS & CO INC	RCRA
211	KAISER ALUMINUM & CHEMICAL CORP	RCRA
212	COMMONWEALTH EDISON CO QC GEN STA	RCRA
213	CASEYS GENERAL STORES INC	RCRA
214	SANDSTROM PRODUCT CO	RCRA
215	EAST MOLINE CORRECTIONAL	RCRA
216	DENNHARDT A W CO	RCRA
217	D POLISHING CO	RCRA
218	R & O SPECIALTIES INC	RCRA
219	DEERE JOHN HARVESTER WORKS	RCRA
220	US ARMY ROCK ISLAND ARSENAL	RCRA
221	EAST MOLINE CITY OF WATER PLANT	RCRA
222	EAST MOLINE CITY OF	RCRA
223	INDUSTRIAL SURPLUS INC	RCRA
224	CASE CORPORATION	RCRA
225	QC METAL PICKLING CO	RCRA
226	EAST MOLINE METAL PRODUCTS CO	RCRA
227	MCLAUGHLIN BODY CO	RCRA
228	GARDNER CLEANERS	RCRA
229	BRISTOLS CARRIAGE SHOP	RCRA
230	DEERE AND CO TECHNICAL CTR	RCRA
231	EVANS GEORGE CORP THE	RCRA
232	PARR INSTRUMENT CO	RCRA
233	MOLINE ACCESSORIES CO	RCRA
234	LIFT SYSTEMS INC	RCRA
235	MCLAUGHLIN BODY CO INC	RCRA
236	LAMBERT BODY SHOP	RCRA
237	ILL STATE OF ARNG ROCK ISLAND ARM OMS19	RCRA
238	UNITED PARCEL SERVICE	RCRA
239	MOLINE CITY OF MUNICIPAL GARAGE	RCRA
240	PETERS PAINT AND BODY	RCRA
241	WESTERN STRUCTURAL CO	RCRA
242	DI-CHEM CO	RCRA
243	HARRINGTON SIGNAL CO	RCRA

MAP ID	FACILITY NAME	SOURCE TYPE
244	IOWA-ILLINOIS GAS & ELECTRIC CO	RCRA
245	R I CENTENNIAL BRIDGE COMM	RCRA
246	WEAR COTE INTERNATIONAL INC	RCRA
247	WATTS TRUCKING ROCK ISL IND WST TRMT COM	RCRA
248	MINUTEMAN PRESS	RCRA
249	IL OIL PRODUCTS INC	RCRA
250	SPEED AND FLOYDS INC	RCRA
251	SNYDER GENERAL CORP	RCRA
252	TMQC TIRE MARKETING QUAD CITIES	RCRA
253	GOODYEAR AUTO SERVICE CTR	RCRA
254	ARGUS CO THE	RCRA
255	CAMPBELL OLDSMOBILE INC	RCRA
256	LERCH AND THONN INC	RCRA
257	REGALIA MFG CO	RCRA
258	IL EPA ROCK ISLAND HHW SITE	RCRA
259	RIMCO EXHIBITION CENTER	RCRA
260	ROTH TANK CO	RCRA
261	CUENO INC DBA ACE MUFFL CLINIC	RCRA
262	AUSTIN BUICK GMC INC	RCRA
263	ROCK ISLAND REGISTER CO INC	RCRA
264	IOWA ILLINOIS GAS AND ELEC SVC BLDG ANNE	RCRA
265	HORST ZIMMERMAN INC	RCRA
266	BEAR MFG CO	RCRA
267	QUAD CITY GARAGE POLICY GROUP	RCRA
268	PRECISION AUTO CARE	RCRA
269	IOWA INTERSTATE RAILROAD	RCRA
270	R AND O SPECIALTIES INC	RCRA
271	MCLAUGHLIN BODY GOVT PRODUCTS	RCRA
272	MCLAUGHLIN BODY GOVT PRODUCTS DIV	RCRA
273	SANITARY CLEANERS	RCRA
274	ELECTRO-COATINGS INC	RCRA
275	LUNDAHL MOTORS INC	RCRA
276	INTERNATIONAL HARVESTER CO FARMALL DIV	RCRA
277	STEPHEN STOCK CLEANERS	RCRA
278	CASE J I CO	RCRA
279	LEARNERS SALES AND SERVICE INC	RCRA
280	SANITARY CLEANERS OF RI INC	RCRA
281	KIDDIE RIDE EXCHANGE	RCRA
282	ILL BELL TEL CO MOLINE C O	RCRA
283	AUGUSTANA COLLEGE	RCRA
284	JO COMPRESSOR SERVICE	RCRA
285	WATTS TRUCKING SERVICE INC	RCRA
286	DEERE JOHN HARVESTER MOLINE	RCRA
287	MC AUTOMOTIVE	RCRA
288	METROPOLITAN MEDICAL LAB	RCRA
289	WILLIAM WHITE AND CO	RCRA
290	GBE	RCRA

MAP ID	FACILITY NAME	SOURCE TYPE
291	OSTROM PAINTING AND SANDBLASTING INC	RCRA
292	WATTS TRUCKING SERVICE BODY SHOP	RCRA
293	NORCROSS FOOTWEAR	RCRA
294	ROCK ISLAND FUEL CO	RCRA
295	ROCK ISLAND CITY OF	RCRA
296	MARTIN CLINICAL LABORATORY	RCRA
297	MOLINE CITY OF	RCRA
298	UPTOWN BODY SHOP	RCRA
299	ROCK ISLAND PLATING WORKS	RCRA
300	ROCK ISLAND READY MIX	RCRA
301	SANITARY DRY CLEANERS INC	RCRA
302	OVERLAND TRANSPORTATION SYS	RCRA
303	HSF HOLLAND	RCRA
304	TRI CITY HEAT TREAT CO	RCRA
305	OVERFIELDS STANDARD	RCRA
306	BIG A AUTO PARTS	RCRA
307	GOODYEAR AUTO SERVICE CTR	RCRA
308	SHERWIN-WILLIAMS CO THE	RCRA
309	GEORGES CLASSIC CLEANERS	RCRA
310	JIMS AUTO BODY	RCRA
311	AMOCO	RCRA
312	JOES BRAKE AND ALIGNMENT	RCRA
313	BERGE PLATING WORKS INC	RCRA
314	CHROME SHOP INC	RCRA
315	TRISM SPECIALIZED CARRIERS	RCRA
316	KROBLIN REFRIGERATION	RCRA
317	CLOSE & CO	RCRA
318	SCOTT FORD INC	RCRA
319	ERIKSEN BOB CHEVROLET CO INC	RCRA
320	I DEAL MOTORS	RCRA
321	R AND O SPECIALTIES INC	RCRA
322	FLO PRO SYSTEMS	RCRA
323	BULLOCK BUILDERS INC	RCRA
324	ROTH PUMP MFG CO	RCRA
325	CHURCHILL TRUCK LINES INC	RCRA
326	HURST MFG CO	RCRA
327	ROCK ISLAND PACKAGING CORP	RCRA
328	VALLEY CONSTRUCTION CO	RCRA
329	QUAD CITIES KEN WORTH	RCRA
330	INTERSTATE DETROIT DIESEL	RCRA
331	MILLER CONTAINER CORP	RCRA
332	CUMMINS GREAT PLAINS DIESEL	RCRA
333	EAGLE FOODS MIDWESTERN	RCRA
334	DENNYS AUTO BODY	RCRA
335	AA WASTE OIL SERV INC	RCRA
336	THERMO KING QUAD CITIES INC	RCRA
337	PROGRESSIVE FAMRS	RCRA

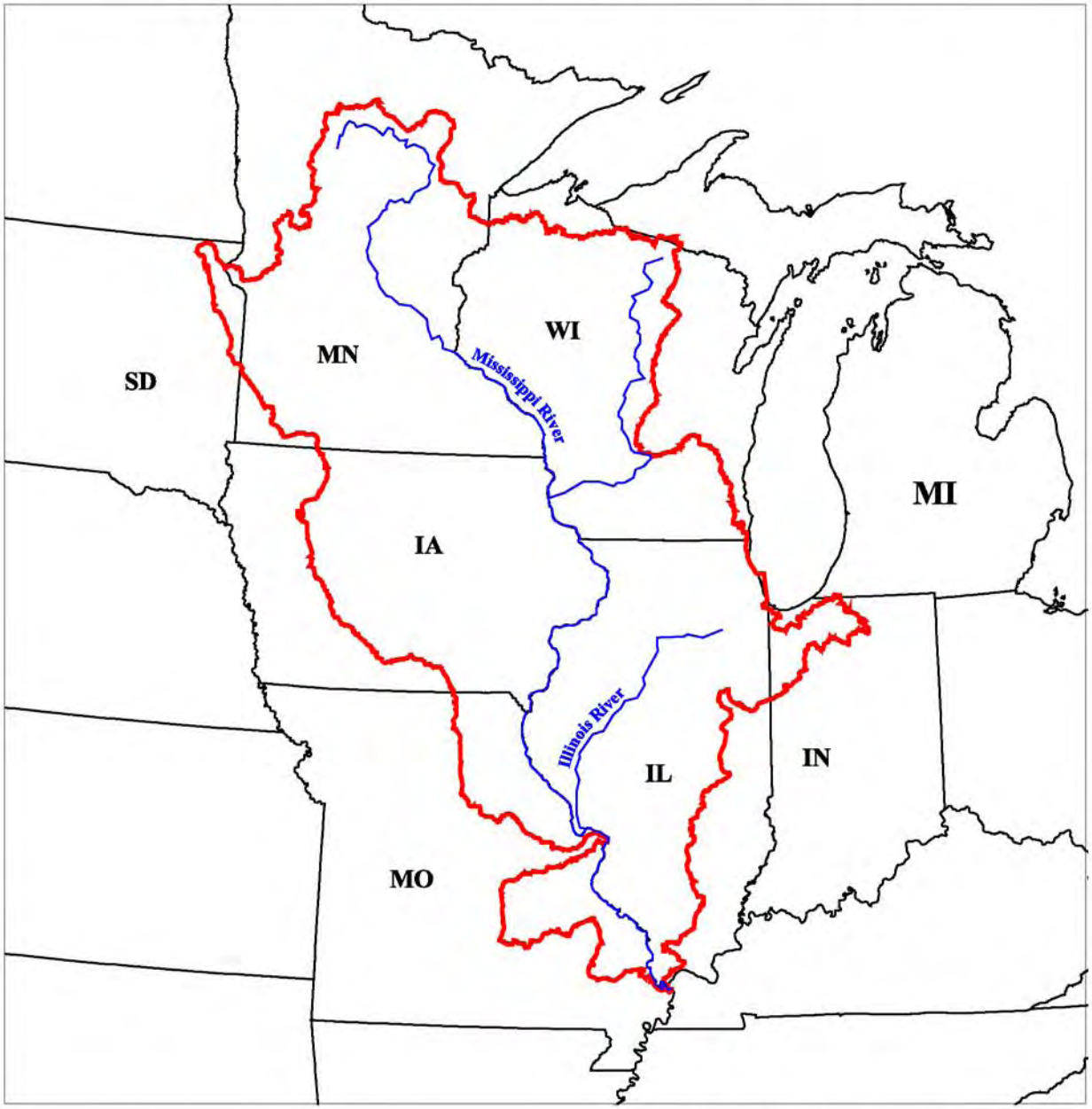
MAP ID	FACILITY NAME	SOURCE TYPE
338	JAYDON INC	RCRA
339	ROCK ISLAND CO HWY DEPT	RCRA
340	MILAN RADIATOR AND MUFFLER RPR INC	RCRA
341	BROWN HERMAN M CO	RCRA
342	DAYCO PRODUCTS INC	RCRA
343	EXPORT PACKAGING CO INC	RCRA
344	WILLIAMS DON E CO	RCRA
345	DON E WILLIAMS CORP	RCRA
346	WHEELER CONSOLIDATED INC	RCRA
347	ILL BELL TEL CO	RCRA
348	EXPORT PACKAGING CO	RCRA
349	QUAD CITY CORVETTE PAINT INC	RCRA
350	RUSTYS AUTO BODY AND TOWING	RCRA
351	MARTIN EQUIP OF IA IL INC	RCRA
352	AUTO ACRES	RCRA
353	U S ARMY ENGINEER LOCK DAM 16	RCRA
354	JERRYS DISPOSAL SYSTEMS INC	RCRA
355	ROCK ISLAND CO HWY DEPT	RCRA
356	ANDERSON AND MANDLE GRAIN CO	RCRA
357	ILDOT DIV OF HIGHWAYS	RCRA
358	AMOCO FERTILIZER PLANT	RCRA
359	C P S FARM CENTER	RCRA
360	FULTON CORPORATION	TRI
361	DRIVES INCORPORATED	TRI
362	AGRI-KING, INC.	TRI
363	3M CORDOVA PLANT	TRI
364	MCKAY'S PLATING CO.	TRI
365	JOHN DEERE HARVESTER WORKS	TRI
366	WILLIAMS-WHITE & COMPANY	TRI
367	JOHN DEERE HARVESTER-MOLINE	TRI
368	CASE CORP. EAST MOLINE PLANT	TRI
369	THE GEORGE EVANS CORPORATION	TRI
370	R & O SPECIALTIES	TRI
371	ILLINOIS OIL PRODUCTS, INC	TRI
372	NORCROSS FOOTWEAR INC	TRI
373	WHEELER CONSOLIDATED, INC.	TRI

SOURCES OF INFORMATION: Data and information used in the maps supplied with this factsheet were obtained from the following sources:

- Transportation, Rivers, County Boundary, Land Cover, and Wildlife Density from Illinois Department of Natural Resources
- CERCLA and RCRA sites from US Environmental Protection Agency's Envirofacts Database
- Herbicide and Nitrogen Usage from United States Geological Survey
- Livestock Densities from United States Department of Agriculture
- TRI, NPDES, LUST Sites, Cleanups, Landfills, Watershed Boundaries, Wells, and Surface Water Intakes provided by Illinois EPA[4]

[4] Locations of potential sources are approximate and intended for watershed based inventories only, not for site specific evaluations.

Figure 1: Upper Mississippi River Watershed



50 0 50 100 150 200 Miles

Legend

Major Rivers

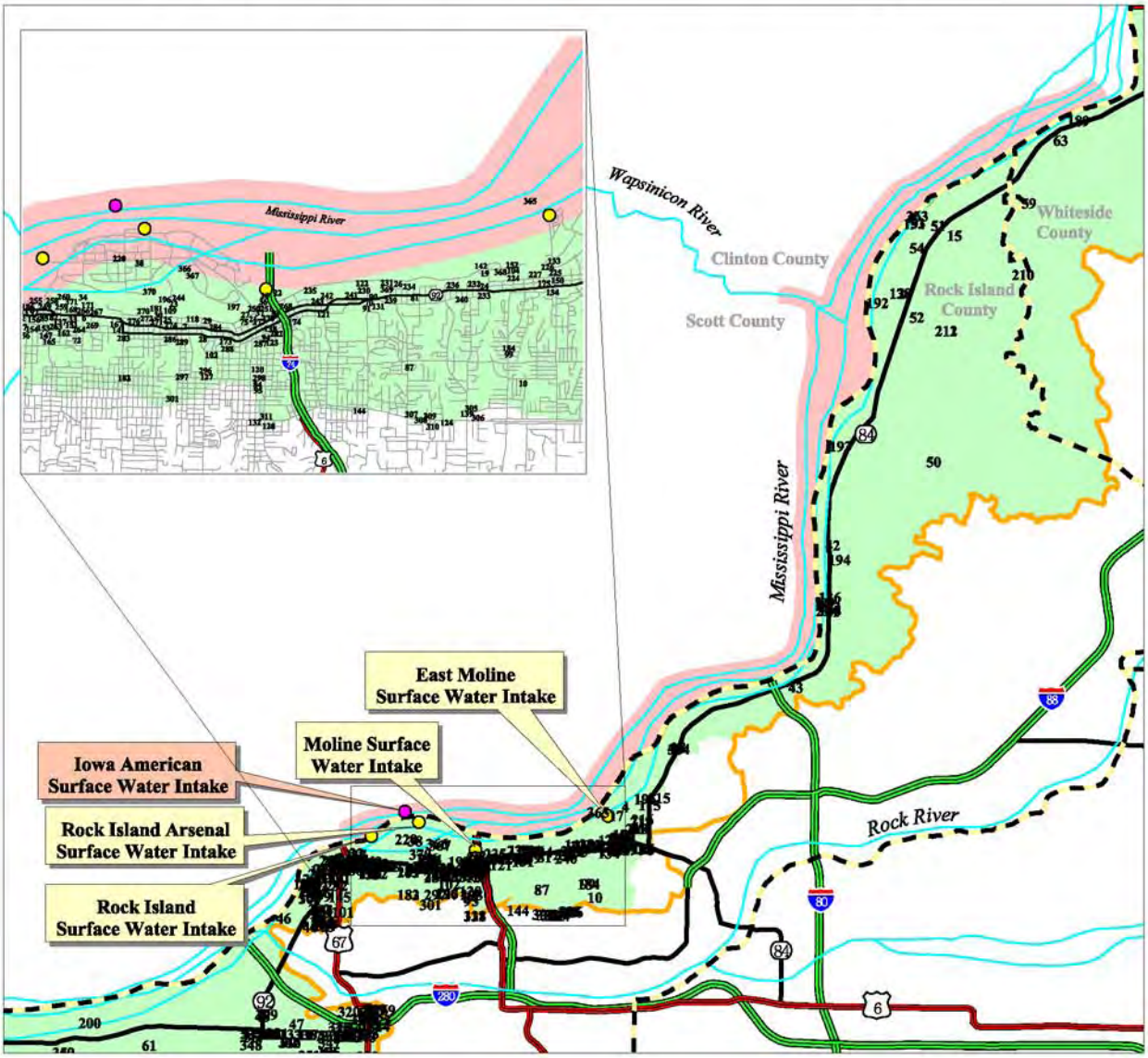
Watershed Boundary

State Boundary

Source Information
Watershed Boundary from USEPA.

Illinois EPA

Figure 2: Moline Source Water - Mississippi River



Legend

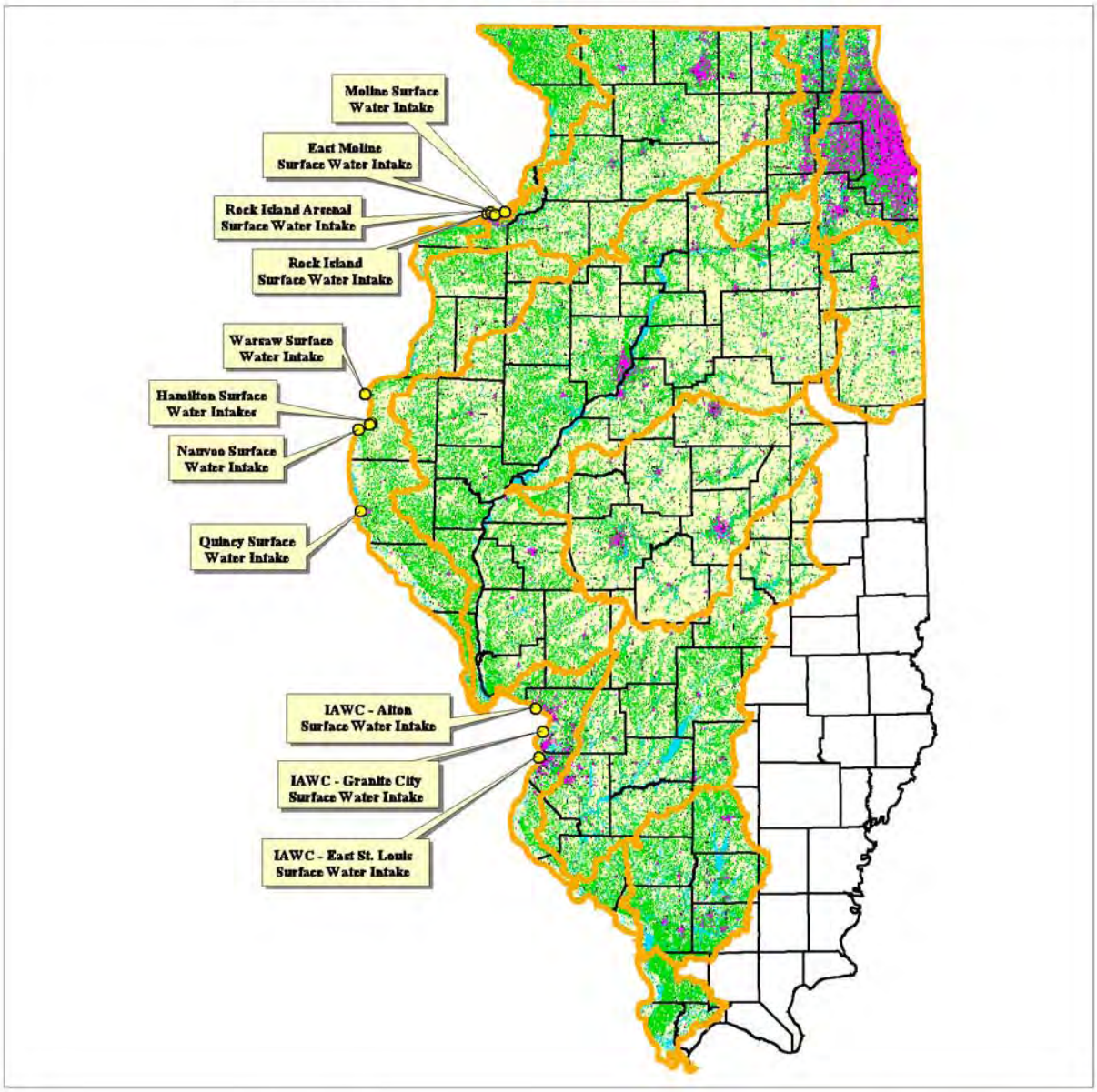
- Interstate Highway
- US Highway
- State Route
- Zone 1 Buffer - .25 miles from the River/Stream Bank and 1st order reach file stream up to the 5 hour time of travel/25 miles
- Zone 2 Buffer - 14 Digit HUC adjoining Zone 1 up to .25 miles below the next upstream surface water intake
- Zone 3 Buffer - 8 digit HUC for the river/stream
- Major Streams
- Active Illinois PWS Surface Water Intake
- Active Iowa PWS Surface Water Intake
- 2 Potential Source Of Contamination
- County Boundary

1 0 1 2 3 4 5 Miles

Illinois EPA

Source Information
CERCLA and RCRA sites obtained from USEPA.
TRI, NPDES, LUST, Cleanups, and Landfills from IEPA.

Figure 3: Illinois Portion Of The Upper Mississippi River Watershed Land Cover



Legend

Land Cover Types

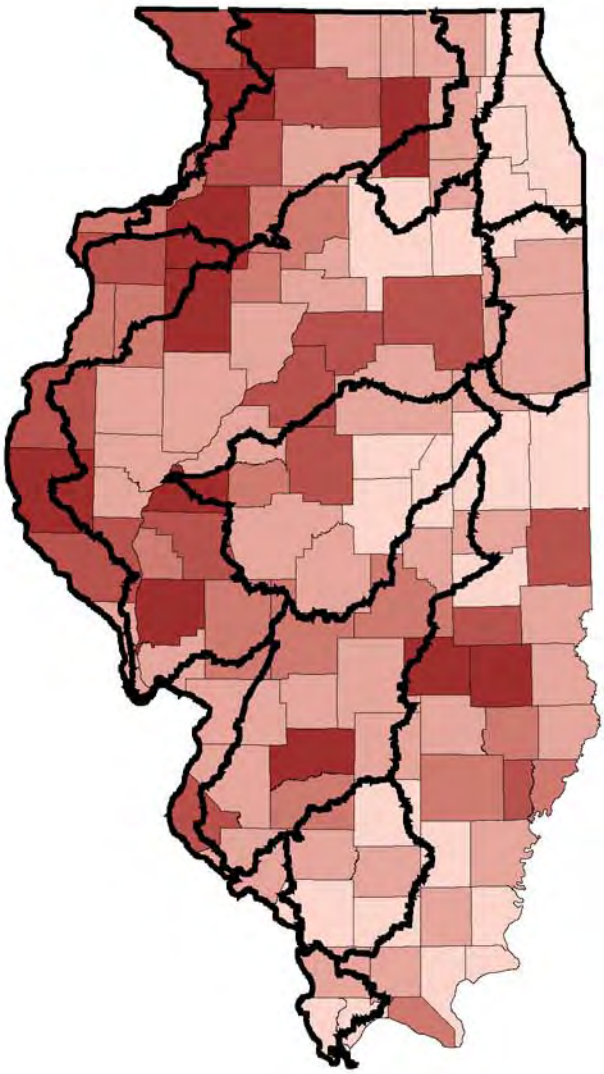
- Urban
- Transportation
- Watershed Boundary
- Agriculture
- Forest/Grassland
- Water/Wetland

Land Cover	Acres	Percent
Urban	1025635	4%
Transportation	262015	1%
Agriculture	17097394	60%
Forest/Grassland	8642462	30%
Water/Wetland	1569456	5%

25 0 25 50 75 100 Miles

Source Information
Land Use/Land Cover from Illinois DNR, 1995.

Figure 4: Estimated Wildlife & Livestock Density In Illinois

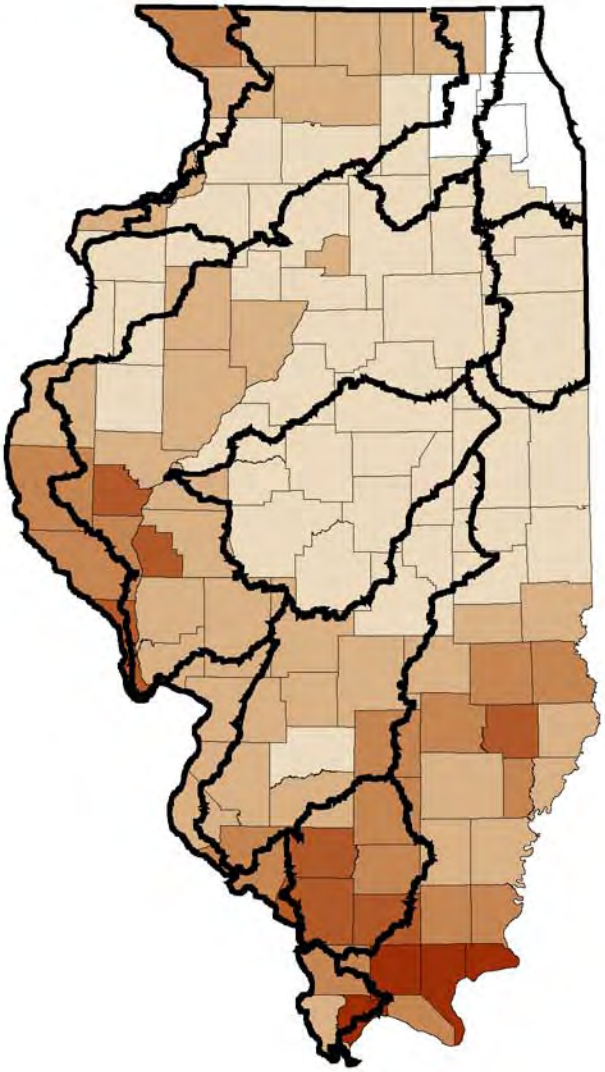


Livestock

Estimated Livestock Density Based On Number Of Cattle, Sheep, Hogs, Goats, and Horses Per Square Mile

- Less than 50
- 50 - 100
- 100 - 150
- 150 - 200
- More Than 200

Watershed Boundary



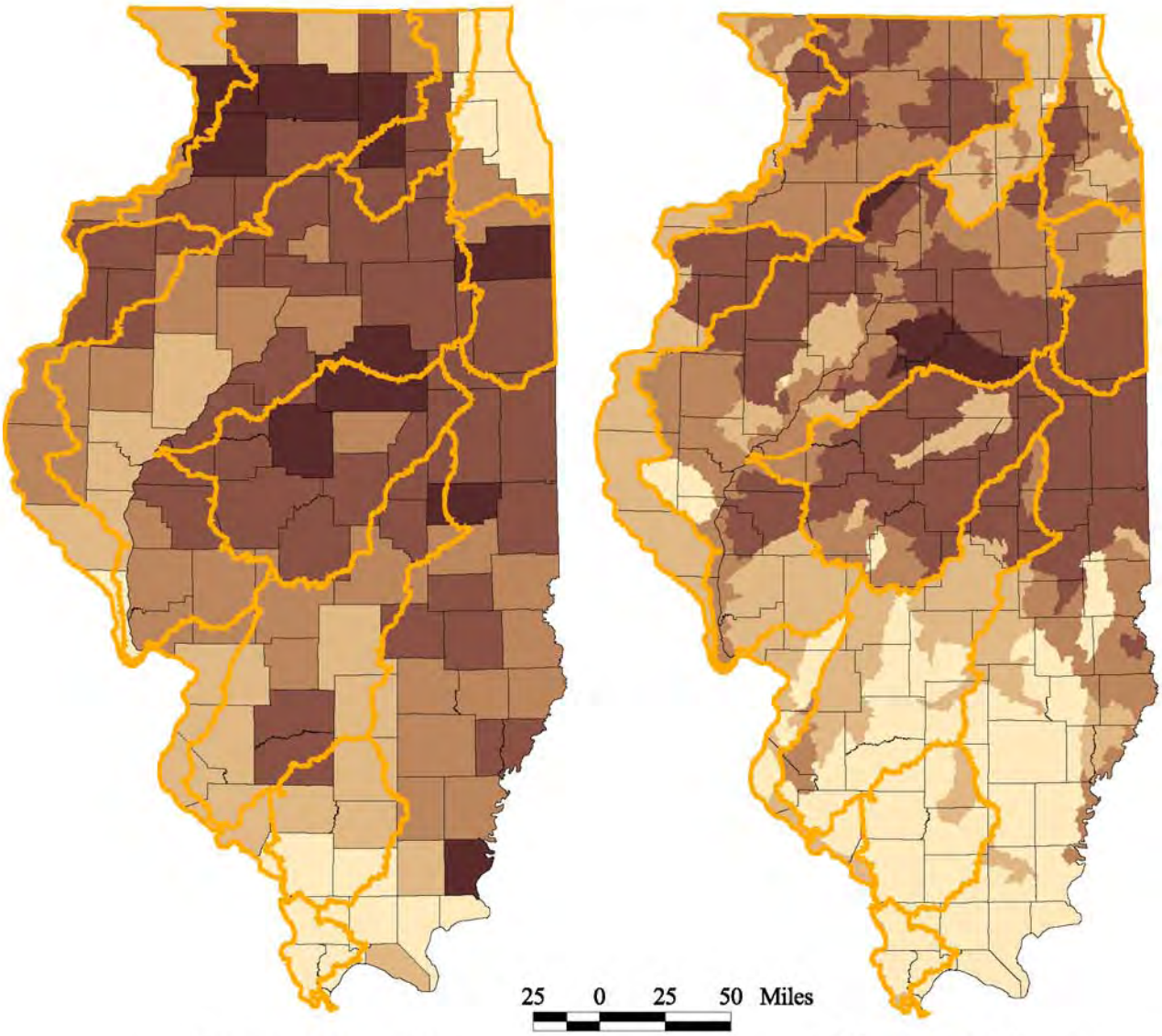
Wildlife

Estimated Wildlife Density Based On Number Of Whitetail Deer Per Square Mile

- No Data
- 1 - 10
- 10 - 20
- 20 - 30
- 30 - 40
- 40 - 50

Source Information
Livestock data obtained from U.S. Dept. of Agriculture, 1997.
Whitetail deer populations from Illinois DNR, 1998.

Figure 5: Estimated Nitrogen Usage By County & Nitrate Concentrations By Watershed In The Illinois Portion Of The Upper Mississippi Watershed



Estimated Nitrogen Usage By County (tons/sq mile)

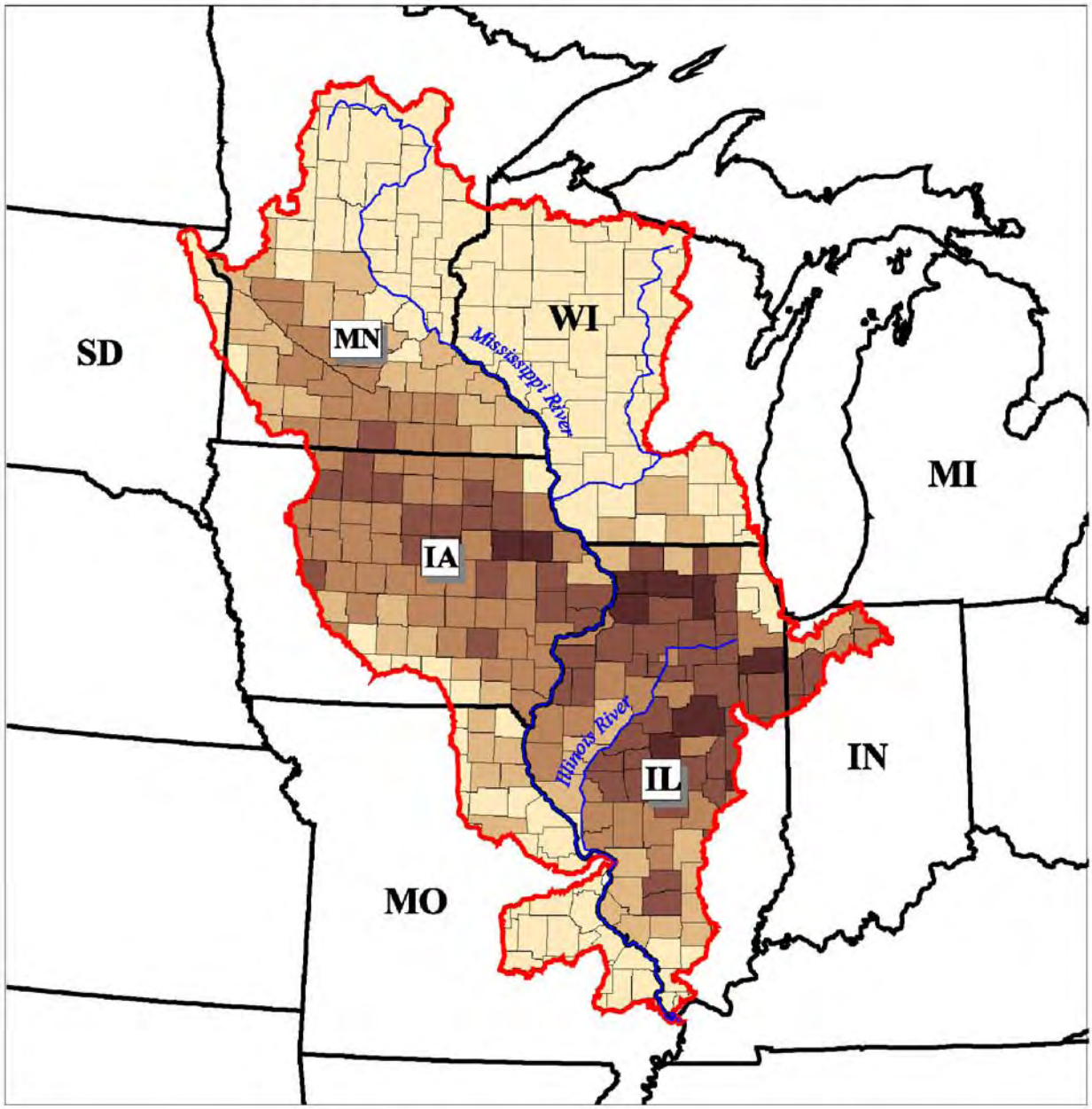
- 0 - 10
- 10 - 15
- 15 - 20
- 20 - 25
- 25 - 30

16-Year Median Nitrate Concentrations By Watershed, Ambient Streams (ppm)

- Less Than 1
- 1 - 3
- 3 - 5
- 5 - 10
- Greater Than 10
- Watershed Boundary

Source Information
Nitrogen Usage by County from USGS, 1991.
Nitrate Detections By Watershed from Illinois EPA, Ambient Stream data 1980-1996.

Figure 6: Estimated Nitrogen Usage In The Upper Mississippi River Watershed



Legend

- Major Rivers
- Mississippi River Watershed Boundary
- State Boundary

Source Information
Nitrogen usage data obtained from USGS, 1991.

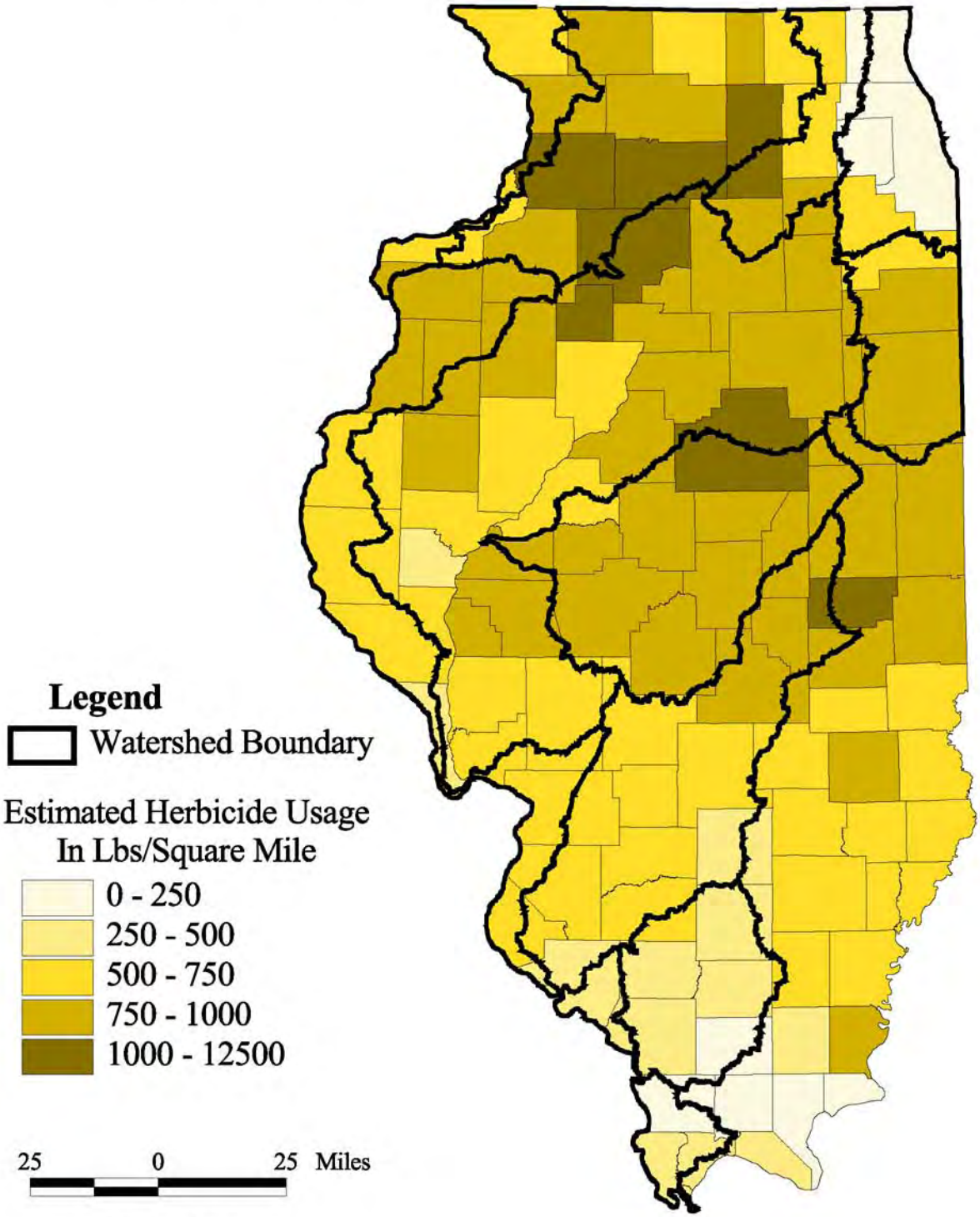
Estimated Nitrogen Usage In Tons/Square Mile

- 0 - 10
- 10 - 15
- 15 - 20
- 20 - 25
- 25 - 30

50 0 50 100 Miles

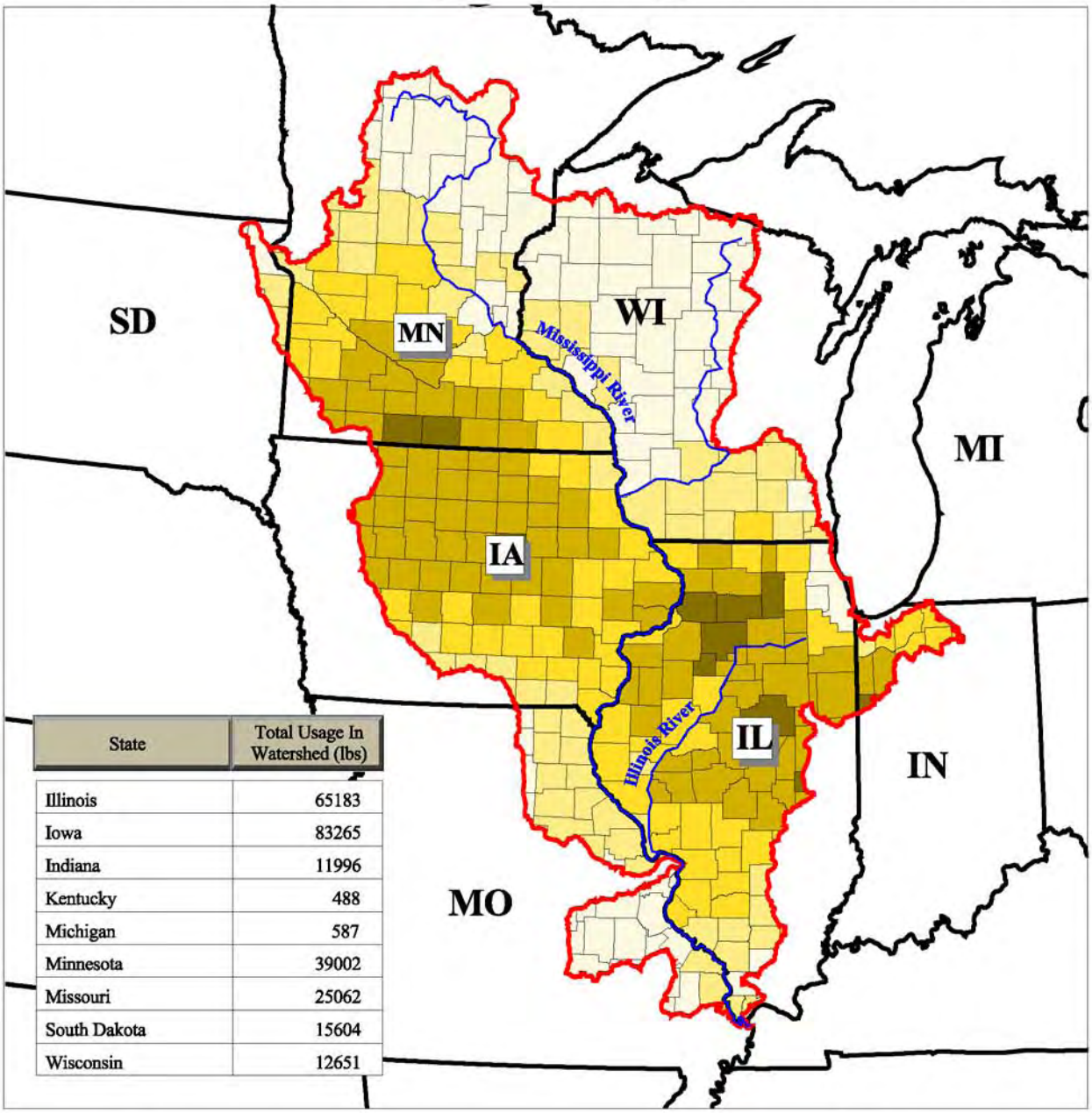
Illinois EPA

Figure 7: Estimated Usage Of The 10 Most Common Herbicides In The Illinois Portion Of The Upper Mississippi River Watershed



Source Information
Nitrogen usage data obtained from USGS, 1991.

Figure 8: Estimated Usage Of The Ten Most Common Herbicides In The Upper Mississippi River Watershed



State	Total Usage In Watershed (lbs)
Illinois	65183
Iowa	83265
Indiana	11996
Kentucky	488
Michigan	587
Minnesota	39002
Missouri	25062
South Dakota	15604
Wisconsin	12651

Legend

- Major Rivers
- Mississippi River Watershed Boundary
- State Boundary

Source Information
Herbicide usage data obtained from USGS, 1991.

Estimated Herbicide Usage In Lbs/Sq Mile

- 0 - 250
- 250 - 500
- 500 - 750
- 750 - 1000
- 1000 - 12500

50 0 50 100 Miles

Illinois EPA

ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
Total Depth		150
Survey Sample Study filed		
Sample set # 4621 (76' - 150') Received: June 1, 1940		

Permit Date: Permit #:

COMPANY Teeple C F

FARM Y M C A

DATE DRILLED NO.

ELEVATION 560GL COUNTY NO. 00328

LOCATION 3000'S line, 1000'E line of section

LATITUDE 41.508674 LONGITUDE -90.512467

COUNTY Rock Island API 121610032800 32 - 18N - 1W

ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
Total Depth		198
Driller's Log filed		

Permit Date: Permit #:

COMPANY Edwards D E

FARM Illini Theatre

DATE DRILLED October 1, 1941 **NO.**

ELEVATION 679GL **COUNTY NO.** 00865

LOCATION NE NW SE

LATITUDE 41.506719 **LONGITUDE** -90.514793

COUNTY Rock Island **API** 121610086500 32 - 18N - 1W

ILLINOIS STATE GEOLOGICAL SURVEY

Engineering Test	Top	Bottom
Total Depth		49
Driller's Log filed		

Permit Date: Permit #:

COMPANY IL Dept. of Transportation

FARM Fai-74

DATE DRILLED September 1, 1969 **NO.** 0001

ELEVATION 600GL **COUNTY NO.** 00672

LOCATION SE SE SE

LATITUDE 41.501292 **LONGITUDE** -90.509956

COUNTY Rock Island **API** 121610067200 32 - 18N - 1W

ILLINOIS STATE GEOLOGICAL SURVEY

Engineering Test	Top	Bottom
Total Depth		31
Core #C 7510 (4' - 31') Received: April 1, 1970		

Permit Date: Permit #:

COMPANY Reese Walter J

FARM High Rise Housing 8th Ave.&17th St.

DATE DRILLED NO. B-3

ELEVATION 0GL COUNTY NO. 23571

LOCATION SE SE

LATITUDE 41.5022 LONGITUDE -90.511165

COUNTY Rock Island API 121612357100 32 - 18N - 1W

ILLINOIS STATE GEOLOGICAL SURVEY

Engineering Test	Top	Bottom
Total Depth		45
Core #C 7508 (4' - 45') Received: April 1, 1970		

Permit Date: Permit #:

COMPANY Reese Walter J

FARM High Rise Housing 8th Ave.&17th St.

DATE DRILLED NO. B-1

ELEVATION 0GL COUNTY NO. 23569

LOCATION SE SE

LATITUDE 41.5022 LONGITUDE -90.511165

COUNTY Rock Island API 121612356900 32 - 18N - 1W

ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
Total Depth		150
Survey Sample Study filed		
Sample set # 4621 (76' - 150') Received: June 1, 1940		

Permit Date: Permit #:

COMPANY Teeple C F

FARM Y M C A

DATE DRILLED NO.

ELEVATION 560GL COUNTY NO. 00328

LOCATION 3000'S line, 1000'E line of section

LATITUDE 41.508674 LONGITUDE -90.512467

COUNTY Rock Island API 121610032800 32 - 18N - 1W

ILLINOIS STATE GEOLOGICAL SURVEY

Engineering Test	Top	Bottom
Total Depth		13
Core #C 12446 (1' - 13') Received: December 1, 1979		

Permit Date: Permit #:

COMPANY Reese Walter J

FARM 16th St. Viaduct

DATE DRILLED NO. B-14

ELEVATION 0GL COUNTY NO. 23575

LOCATION NW SW NE

LATITUDE 41.51033 LONGITUDE -90.517209

COUNTY Rock Island API 121612357500 32 - 18N - 1W

ILLINOIS STATE GEOLOGICAL SURVEY

Engineering Test	Top	Bottom
Total Depth		75
Driller's Log filed		

Permit Date: Permit #:

COMPANY IL Dept. of Transportation

FARM Fai-74

DATE DRILLED December 1, 1966 **NO.** 0002

ELEVATION 684GL **COUNTY NO.** 00407

LOCATION 0'N 0'W SE/c

LATITUDE 41.500387 **LONGITUDE** -90.508747

COUNTY Rock Island **API** 121610040700 **32 - 18N - 1W**

ILLINOIS STATE GEOLOGICAL SURVEY

Engineering Test	Top	Bottom
Total Depth		31
Core #C 7509 (4' - 31') Received: April 1, 1970		

Permit Date: Permit #:

COMPANY Reese Walter J

FARM High Rise Housing 8th Ave.&17th St.

DATE DRILLED NO. B-2

ELEVATION 0GL COUNTY NO. 23570

LOCATION SE SE

LATITUDE 41.5022 LONGITUDE -90.511165

COUNTY Rock Island API 121612357000 32 - 18N - 1W

ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
Total Depth		198
Driller's Log filed		

Permit Date: Permit #:

COMPANY Edwards D E

FARM Illini Theatre

DATE DRILLED October 1, 1941 NO.

ELEVATION 679GL COUNTY NO. 00865

LOCATION NE NW SE

LATITUDE 41.506719 LONGITUDE -90.514793

COUNTY Rock Island API 121610086500 32 - 18N - 1W

ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
Total Depth		325
Driller's Log filed		
Sample set # 57897 (0' - 325') Received: March 10, 1972		

Permit Date: Permit #:

COMPANY

FARM Rock National Cemetery

DATE DRILLED January 1, 1972 NO. 1

ELEVATION 0 COUNTY NO. 00891

LOCATION 260'S line, 155'W line of NW SE NW

LATITUDE 41.510171 LONGITUDE -90.522639

COUNTY Rock Island API 121610089100 32 - 18N - 1W

Municipality: Moline

County: Rock Island

LPC Number:

OC: 99011401

STATE OF ILLINOIS)
) SS
ROCK ISLAND COUNTY)

I, Vickie L. Felger, Deputy City Clerk of the City of Moline, County of Rock Island, State of Illinois, do hereby certify that the foregoing ordinance, General Ordinance No. 98-10-2, is a true and correct copy of the original ordinance passed by the City Council of the City of Moline, Illinois, at a meeting duly convened and held on the 20th day of October, 1998, and approved by the mayor of said city at a meeting duly convened and held on the 27th day of October, 1998.

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the corporate seal of the City of Moline, Illinois, this 14th day of December, 1998.

Vickie L. Felger

Vickie L. Felger, Deputy City Clerk

(seal)

Council Bill No. 98-290 General Ordinance

Sponsor: No. 98-10-2

AN ORDINANCE

AMENDING Chapter 34, "PUBLIC UTILITIES," of the Moline Code of Ordinances, by adopting a new Division 3 of Article III, entitled "USE OF GROUNDWATER AS POTABLE SUPPLY; PROHIBITED."

WHEREAS, certain properties in the City of Moline, Illinois, have been used over a period of time for commerical/industrial purposes; and

WHEREAS, because of said uses, concentrations of certain chemical constituents in the groundwater beneath the City may exceed Class I groundwater quality standards for potable resource groundwater as set forth in 35 Illinois Administrative Code 742; and

WHEREAS, the City of Moline desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOLINE, ILLINOIS, as follows:

Section One - That Chapter 34, "PUBLIC UTILITIES," of the Moline Code of Ordinances, is hereby amended by adopting a new Division 3 of Article III, entitled "USE OF GROUNDWATER AS POTABLE SUPPLY; PROHIBITED," which shall read as follows:

"DIVISION 3. USE OF GROUNDWATER AS POTABLE SUPPLY; PROHIBITED.

SEC. 34-3300. USE OF GROUNDWATER AS A POTABLE WATER SUPPLY PROHIBITED.

Except for such uses or methods in existence before the effective date of this ordinance, the use or attempt to use a potable water supply groundwater from within the corporate limits of the City of Moline by the installation of drilling of wells or by any other method is hereby prohibited, including at points of withdrawal by the City of Moline.

SEC. 34-3301. PENALTIES.

Any person violating the provision of this ordinance shall be subject to a fine of up to $750.00 for each violation.

SEC. 34-3302. DEFINITIONS.

"Person" is any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their legal representatives, officers, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes, or preparing food."

Section Two - That all ordinances or resolutions, or parts of either, in conflict herewith are, to the extent of such conflict, hereby repealed.

Section Three - Each section and each provision or requirement of any section or subsection, each section or subsection, and each paragraph or sentence of this ordinance shall be considered severable, and the invalidity for any reason of any portion or portions of this ordinance shall not affect the validity or enforcement of any other remaining portion thereof.

Section Four - That this ordinance shall be in full force and effect from and after passage and, if required, publication in the manner provided for by law.

CITY OF MOLINE, ILLINOIS

Mayor

October 20, 1998
Date

Passed: October 20, 1998

Approved: October 27, 1998

Attest:
City Clerk

Approved as to Form:

City Attorney

ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

David Wildharber
Terracon - Bettendorf
870 40th Avenue

Bettendorf, IA 52722

Report Summary

Friday October 31, 2008

Report Number: L372125
Samples Received: 10/29/08
Client Project: 07067060

Description: Villareal Building

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jeff Carr, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

This report may not be reproduced, except in full, without written approval from Environmental Science Corp.
Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

22 Samples Reported: 10/31/08 10:16 Printed: 10/31/08 12:01

ENVIRONMENTAL
SCIENCE CORP.

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-01

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-1 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 09:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	90.8		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.055	mg/kg	8260B	10/29/08	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	10/29/08	1
Benzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Bromoform	BDL	0.0011	mg/kg	8260B	10/29/08	1
Bromomethane	BDL	0.0055	mg/kg	8260B	10/29/08	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	10/29/08	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Chloroethane	BDL	0.0055	mg/kg	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	0.055	mg/kg	8260B	10/29/08	1
Chloroform	BDL	0.0055	mg/kg	8260B	10/29/08	1
Chloromethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	10/29/08	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0055	mg/kg	8260B	10/29/08	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	0.0055	mg/kg	8260B	10/29/08	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	10/29/08	1
cis-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	10/29/08	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	10/29/08	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Est. 1970

REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-01

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-1 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 09:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	10/29/08	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	10/29/08	1
Methylene Chloride	BDL	0.0055	mg/kg	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	10/29/08	1
Naphthalene	BDL	0.0055	mg/kg	8260B	10/29/08	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Styrene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Tetrachloroethene	0.0045	0.0011	mg/kg	8260B	10/29/08	1
Toluene	BDL	0.0055	mg/kg	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	10/29/08	1
Trichloroethene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Trichlorofluoromethane	BDL	0.0055	mg/kg	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	10/29/08	1
Xylenes, Total	BDL	0.0033	mg/kg	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	99.1		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	99.7		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	97.4		% Rec.	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-02

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-1 8 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 09:10

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	95.0		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.053	mg/kg	8260B	10/29/08	1
Acrylonitrile	BDL	0.010	mg/kg	8260B	10/29/08	1
Benzene	0.0016	0.0010	mg/kg	8260B	10/29/08	1
Bromobenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
Bromodichloromethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
Bromoform	BDL	0.0010	mg/kg	8260B	10/29/08	1
Bromomethane	BDL	0.0053	mg/kg	8260B	10/29/08	1
n-Butylbenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
sec-Butylbenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
tert-Butylbenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
Carbon tetrachloride	BDL	0.0010	mg/kg	8260B	10/29/08	1
Chlorobenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
Chlorodibromomethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
Chloroethane	BDL	0.0053	mg/kg	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	0.053	mg/kg	8260B	10/29/08	1
Chloroform	BDL	0.0053	mg/kg	8260B	10/29/08	1
Chloromethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
2-Chlorotoluene	BDL	0.0010	mg/kg	8260B	10/29/08	1
4-Chlorotoluene	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0053	mg/kg	8260B	10/29/08	1
1,2-Dibromoethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
Dibromomethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	0.0053	mg/kg	8260B	10/29/08	1
1,1-Dichloroethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,2-Dichloroethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,1-Dichloroethene	BDL	0.0010	mg/kg	8260B	10/29/08	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,1-Dichloropropene	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,3-Dichloropropane	BDL	0.0010	mg/kg	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	10/29/08	1
2,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	10/29/08	1
Di-isopropyl ether	BDL	0.0010	mg/kg	8260B	10/29/08	1
Ethylbenzene	0.0010	0.0010	mg/kg	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/kg	8260B	10/29/08	1
Isopropylbenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-02

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-1 8 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 09:10

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0010	mg/kg	8260B	10/29/08	1
2-Butanone (MEK)	BDL	0.010	mg/kg	8260B	10/29/08	1
Methylene Chloride	BDL	0.0053	mg/kg	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/kg	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	0.0010	mg/kg	8260B	10/29/08	1
Naphthalene	BDL	0.0053	mg/kg	8260B	10/29/08	1
n-Propylbenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
Styrene	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
Tetrachloroethene	BDL	0.0010	mg/kg	8260B	10/29/08	1
Toluene	BDL	0.0053	mg/kg	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/kg	8260B	10/29/08	1
Trichloroethene	BDL	0.0010	mg/kg	8260B	10/29/08	1
Trichlorofluoromethane	BDL	0.0053	mg/kg	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	10/29/08	1
Vinyl chloride	BDL	0.0010	mg/kg	8260B	10/29/08	1
Xylenes, Total	BDL	0.0032	mg/kg	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	99.8		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	98.8		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	99.4		% Rec.	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-03

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-2 8.5 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	79.9		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.062	mg/kg	8260B	10/29/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	10/29/08	1
Benzene	0.0014	0.0012	mg/kg	8260B	10/29/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromomethane	BDL	0.0062	mg/kg	8260B	10/29/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chloroethane	BDL	0.0062	mg/kg	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	0.062	mg/kg	8260B	10/29/08	1
Chloroform	BDL	0.0062	mg/kg	8260B	10/29/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0062	mg/kg	8260B	10/29/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	0.0062	mg/kg	8260B	10/29/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Ethylbenzene	0.0012	0.0012	mg/kg	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-03

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-2 8.5 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methylene Chloride	BDL	0.0062	mg/kg	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Naphthalene	BDL	0.0062	mg/kg	8260B	10/29/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Styrene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Tetrachloroethene	0.0012	0.0012	mg/kg	8260B	10/29/08	1
Toluene	BDL	0.0062	mg/kg	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichlorofluoromethane	BDL	0.0062	mg/kg	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Xylenes, Total	BDL	0.0038	mg/kg	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	99.0		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	97.8		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	100.		% Rec.	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-04

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-2 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 09:50

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	89.0		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.056	mg/kg	8260B	10/29/08	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	10/29/08	1
Benzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Bromoform	BDL	0.0011	mg/kg	8260B	10/29/08	1
Bromomethane	BDL	0.0056	mg/kg	8260B	10/29/08	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	10/29/08	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Chloroethane	BDL	0.0056	mg/kg	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	0.056	mg/kg	8260B	10/29/08	1
Chloroform	BDL	0.0056	mg/kg	8260B	10/29/08	1
Chloromethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	10/29/08	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0056	mg/kg	8260B	10/29/08	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	0.0056	mg/kg	8260B	10/29/08	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	10/29/08	1
cis-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	10/29/08	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	10/29/08	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-04

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-2 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 09:50

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	10/29/08	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	10/29/08	1
Methylene Chloride	BDL	0.0056	mg/kg	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	10/29/08	1
Naphthalene	BDL	0.0056	mg/kg	8260B	10/29/08	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Styrene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
Tetrachloroethene	0.0058	0.0011	mg/kg	8260B	10/29/08	1
Toluene	BDL	0.0056	mg/kg	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	10/29/08	1
Trichloroethene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Trichlorofluoromethane	BDL	0.0056	mg/kg	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	10/29/08	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	10/29/08	1
Xylenes, Total	BDL	0.0034	mg/kg	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	98.8		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	99.4		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	102.		% Rec.	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-05

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-3 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 12:15

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	86.2		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.058	mg/kg	8260B	10/29/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	10/29/08	1
Benzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromomethane	BDL	0.0058	mg/kg	8260B	10/29/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chloroethane	BDL	0.0058	mg/kg	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	0.058	mg/kg	8260B	10/29/08	1
Chloroform	BDL	0.0058	mg/kg	8260B	10/29/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0058	mg/kg	8260B	10/29/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	0.0058	mg/kg	8260B	10/29/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,2-Dichloroethene	0.0014	0.0012	mg/kg	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-05

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-3 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 12:15

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methylene Chloride	BDL	0.0058	mg/kg	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Naphthalene	BDL	0.0058	mg/kg	8260B	10/29/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Styrene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Tetrachloroethene	0.0092	0.0012	mg/kg	8260B	10/29/08	1
Toluene	BDL	0.0058	mg/kg	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichlorofluoromethane	BDL	0.0058	mg/kg	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Xylenes, Total	BDL	0.0035	mg/kg	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	98.4		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	98.0		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	99.8		% Rec.	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-06

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-3 8 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 12:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	82.7		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.060	mg/kg	8260B	10/29/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	10/29/08	1
Benzene	0.0017	0.0012	mg/kg	8260B	10/29/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromomethane	BDL	0.0060	mg/kg	8260B	10/29/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chloroethane	BDL	0.0060	mg/kg	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	0.060	mg/kg	8260B	10/29/08	1
Chloroform	BDL	0.0060	mg/kg	8260B	10/29/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0060	mg/kg	8260B	10/29/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	0.0060	mg/kg	8260B	10/29/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,2-Dichloroethene	0.0013	0.0012	mg/kg	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Ethylbenzene	0.0014	0.0012	mg/kg	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-06

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-3 8 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 12:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methylene Chloride	BDL	0.0060	mg/kg	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Naphthalene	BDL	0.0060	mg/kg	8260B	10/29/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Styrene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Tetrachloroethene	0.0022	0.0012	mg/kg	8260B	10/29/08	1
Toluene	BDL	0.0060	mg/kg	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichlorofluoromethane	BDL	0.0060	mg/kg	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Xylenes, Total	BDL	0.0036	mg/kg	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	99.7		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	97.9		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	103.		% Rec.	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-07

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-4 9 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 13:10

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	84.8		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.059	mg/kg	8260B	10/29/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	10/29/08	1
Benzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromomethane	BDL	0.0059	mg/kg	8260B	10/29/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chloroethane	BDL	0.0059	mg/kg	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	0.059	mg/kg	8260B	10/29/08	1
Chloroform	BDL	0.0059	mg/kg	8260B	10/29/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0059	mg/kg	8260B	10/29/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	0.0059	mg/kg	8260B	10/29/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-07

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-4 9 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 13:10

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methylene Chloride	BDL	0.0059	mg/kg	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Naphthalene	BDL	0.0059	mg/kg	8260B	10/29/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Styrene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Tetrachloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Toluene	BDL	0.0059	mg/kg	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichlorofluoromethane	BDL	0.0059	mg/kg	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Xylenes, Total	BDL	0.0035	mg/kg	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	101.		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	96.1		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	102.		% Rec.	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-08

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-4 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 13:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	84.8		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.059	mg/kg	8260B	10/30/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	10/30/08	1
Benzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromomethane	BDL	0.0059	mg/kg	8260B	10/30/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	10/30/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Chloroethane	BDL	0.0059	mg/kg	8260B	10/30/08	1
2-Chloroethyl vinyl ether	BDL	0.059	mg/kg	8260B	10/30/08	1
Chloroform	BDL	0.0059	mg/kg	8260B	10/30/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/30/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0059	mg/kg	8260B	10/30/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Dichlorodifluoromethane	BDL	0.0059	mg/kg	8260B	10/30/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/30/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/30/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	10/30/08	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Hexachloro-1,3-butadiene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-08

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-4 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 13:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	10/30/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	10/30/08	1
Methylene Chloride	BDL	0.0059	mg/kg	8260B	10/30/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	10/30/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	10/30/08	1
Naphthalene	BDL	0.0059	mg/kg	8260B	10/30/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Styrene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Tetrachloroethene	0.0014	0.0012	mg/kg	8260B	10/30/08	1
Toluene	BDL	0.0059	mg/kg	8260B	10/30/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	10/30/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Trichlorofluoromethane	BDL	0.0059	mg/kg	8260B	10/30/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	10/30/08	1
Xylenes, Total	BDL	0.0035	mg/kg	8260B	10/30/08	1
Surrogate Recovery						
Toluene-d8	99.9		% Rec.	8260B	10/30/08	1
Dibromofluoromethane	98.7		% Rec.	8260B	10/30/08	1
4-Bromofluorobenzene	100.		% Rec.	8260B	10/30/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-09

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : DUPLICATE

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 13:22

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	84.1		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.059	mg/kg	8260B	10/30/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	10/30/08	1
Benzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromomethane	BDL	0.0059	mg/kg	8260B	10/30/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	10/30/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Chloroethane	BDL	0.0059	mg/kg	8260B	10/30/08	1
2-Chloroethyl vinyl ether	BDL	0.059	mg/kg	8260B	10/30/08	1
Chloroform	BDL	0.0059	mg/kg	8260B	10/30/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/30/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0059	mg/kg	8260B	10/30/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Dichlorodifluoromethane	BDL	0.0059	mg/kg	8260B	10/30/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
cis-1,2-Dichloroethene	0.041	0.0012	mg/kg	8260B	10/30/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/30/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/30/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	10/30/08	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Hexachloro-1,3-butadiene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-09

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : DUPLICATE

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 13:22

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	10/30/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	10/30/08	1
Methylene Chloride	BDL	0.0059	mg/kg	8260B	10/30/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	10/30/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	10/30/08	1
Naphthalene	BDL	0.0059	mg/kg	8260B	10/30/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Styrene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Tetrachloroethene	0.0016	0.0012	mg/kg	8260B	10/30/08	1
Toluene	BDL	0.0059	mg/kg	8260B	10/30/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	10/30/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Trichlorofluoromethane	BDL	0.0059	mg/kg	8260B	10/30/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	10/30/08	1
Xylenes, Total	BDL	0.0036	mg/kg	8260B	10/30/08	1
Surrogate Recovery						
Toluene-d8	99.6		% Rec.	8260B	10/30/08	1
Dibromofluoromethane	97.5		% Rec.	8260B	10/30/08	1
4-Bromofluorobenzene	102.		% Rec.	8260B	10/30/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-10

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-1 10 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	88.0		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.057	mg/kg	8260B	10/30/08	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	10/30/08	1
Benzene	0.0014	0.0011	mg/kg	8260B	10/30/08	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
Bromoform	BDL	0.0011	mg/kg	8260B	10/30/08	1
Bromomethane	BDL	0.0057	mg/kg	8260B	10/30/08	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	10/30/08	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
Chloroethane	BDL	0.0057	mg/kg	8260B	10/30/08	1
2-Chloroethyl vinyl ether	BDL	0.057	mg/kg	8260B	10/30/08	1
Chloroform	BDL	0.0057	mg/kg	8260B	10/30/08	1
Chloromethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	10/30/08	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0057	mg/kg	8260B	10/30/08	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
Dichlorodifluoromethane	BDL	0.0057	mg/kg	8260B	10/30/08	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	10/30/08	1
cis-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	10/30/08	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	10/30/08	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	10/30/08	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	10/30/08	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	10/30/08	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	10/30/08	1
Ethylbenzene	0.0012	0.0011	mg/kg	8260B	10/30/08	1
Hexachloro-1,3-butadiene	BDL	0.0011	mg/kg	8260B	10/30/08	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-10

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-1 10 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	10/30/08	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	10/30/08	1
Methylene Chloride	BDL	0.0057	mg/kg	8260B	10/30/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	10/30/08	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	10/30/08	1
Naphthalene	BDL	0.0057	mg/kg	8260B	10/30/08	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
Styrene	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
Tetrachloroethene	BDL	0.0011	mg/kg	8260B	10/30/08	1
Toluene	BDL	0.0057	mg/kg	8260B	10/30/08	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	10/30/08	1
Trichloroethene	BDL	0.0011	mg/kg	8260B	10/30/08	1
Trichlorofluoromethane	BDL	0.0057	mg/kg	8260B	10/30/08	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,2,4-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	10/30/08	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	10/30/08	1
Xylenes, Total	BDL	0.0034	mg/kg	8260B	10/30/08	1
Surrogate Recovery						
Toluene-d8	97.7		% Rec.	8260B	10/30/08	1
Dibromofluoromethane	98.0		% Rec.	8260B	10/30/08	1
4-Bromofluorobenzene	102.		% Rec.	8260B	10/30/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-13

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-2 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	80.3		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.062	mg/kg	8260B	10/30/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	10/30/08	1
Benzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	10/30/08	1
Bromomethane	BDL	0.0062	mg/kg	8260B	10/30/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	10/30/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Chloroethane	BDL	0.0062	mg/kg	8260B	10/30/08	1
2-Chloroethyl vinyl ether	BDL	0.062	mg/kg	8260B	10/30/08	1
Chloroform	BDL	0.0062	mg/kg	8260B	10/30/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/30/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0062	mg/kg	8260B	10/30/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Dichlorodifluoromethane	BDL	0.0062	mg/kg	8260B	10/30/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/30/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/30/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	10/30/08	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Hexachloro-1,3-butadiene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-13

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-2 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	10/30/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	10/30/08	1
Methylene Chloride	BDL	0.0062	mg/kg	8260B	10/30/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	10/30/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	10/30/08	1
Naphthalene	BDL	0.0062	mg/kg	8260B	10/30/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Styrene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
Tetrachloroethene	0.010	0.0012	mg/kg	8260B	10/30/08	1
Toluene	BDL	0.0062	mg/kg	8260B	10/30/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	10/30/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Trichlorofluoromethane	BDL	0.0062	mg/kg	8260B	10/30/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/30/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	10/30/08	1
Xylenes, Total	BDL	0.0037	mg/kg	8260B	10/30/08	1
Surrogate Recovery						
Toluene-d8	99.3		% Rec.	8260B	10/30/08	1
Dibromofluoromethane	100.		% Rec.	8260B	10/30/08	1
4-Bromofluorobenzene	101.		% Rec.	8260B	10/30/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-14

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-2 9 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	84.4		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.059	mg/kg	8260B	10/29/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	10/29/08	1
Benzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromomethane	BDL	0.0059	mg/kg	8260B	10/29/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chloroethane	BDL	0.0059	mg/kg	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	0.059	mg/kg	8260B	10/29/08	1
Chloroform	BDL	0.0059	mg/kg	8260B	10/29/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0059	mg/kg	8260B	10/29/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	0.0059	mg/kg	8260B	10/29/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-14

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-2 9 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methylene Chloride	BDL	0.0059	mg/kg	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Naphthalene	BDL	0.0059	mg/kg	8260B	10/29/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Styrene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Tetrachloroethene	0.0091	0.0012	mg/kg	8260B	10/29/08	1
Toluene	BDL	0.0059	mg/kg	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichlorofluoromethane	BDL	0.0059	mg/kg	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Xylenes, Total	BDL	0.0036	mg/kg	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	99.3		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	111.		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	94.0		% Rec.	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Est. 1970

REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-15

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-1 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	80.1		%	2540G	10/30/08	1
Volatile Organics						
Acetone	BDL	0.062	mg/kg	8260B	10/29/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	10/29/08	1
Benzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	10/29/08	1
Bromomethane	BDL	0.0062	mg/kg	8260B	10/29/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Chloroethane	BDL	0.0062	mg/kg	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	0.062	mg/kg	8260B	10/29/08	1
Chloroform	BDL	0.0062	mg/kg	8260B	10/29/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0062	mg/kg	8260B	10/29/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	0.0062	mg/kg	8260B	10/29/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-15

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-1 3 FT

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	10/29/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methylene Chloride	BDL	0.0062	mg/kg	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	10/29/08	1
Naphthalene	BDL	0.0062	mg/kg	8260B	10/29/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Styrene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
Tetrachloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Toluene	BDL	0.0062	mg/kg	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Trichlorofluoromethane	BDL	0.0062	mg/kg	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	10/29/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	10/29/08	1
Xylenes, Total	BDL	0.0037	mg/kg	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	98.5		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	109.		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	97.6		% Rec.	8260B	10/29/08	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-16

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-1

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 09:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	10/29/08	1
Acrolein	BDL	50.	ug/l	8260B	10/29/08	1
Acrylonitrile	BDL	10.	ug/l	8260B	10/29/08	1
Benzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	10/29/08	1
Bromoform	BDL	1.0	ug/l	8260B	10/29/08	1
Bromomethane	BDL	5.0	ug/l	8260B	10/29/08	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
Chloroethane	BDL	5.0	ug/l	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	10/29/08	1
Chloroform	BDL	5.0	ug/l	8260B	10/29/08	1
Chloromethane	BDL	2.5	ug/l	8260B	10/29/08	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	10/29/08	1
Dibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethene	1.6	1.0	ug/l	8260B	10/29/08	1
cis-1,2-Dichloroethene	1600	20.	ug/l	8260B	10/30/08	20
trans-1,2-Dichloroethene	7.4	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Ethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	1.0	ug/l	8260B	10/29/08	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-16

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-1

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 09:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	10/29/08	1
Methylene Chloride	BDL	5.0	ug/l	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	10/29/08	1
Methyl tert-butyl ether	14.	1.0	ug/l	8260B	10/29/08	1
Naphthalene	BDL	5.0	ug/l	8260B	10/29/08	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Styrene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	10/29/08	1
Tetrachloroethene	1.1	1.0	ug/l	8260B	10/29/08	1
Toluene	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
Trichloroethene	4.2	1.0	ug/l	8260B	10/29/08	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Vinyl chloride	270	20.	ug/l	8260B	10/30/08	20
Xylenes, Total	BDL	3.0	ug/l	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	103.		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	98.0		% Rec.	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-17

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-2

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 10:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	10/29/08	1
Acrolein	BDL	50.	ug/l	8260B	10/29/08	1
Acrylonitrile	BDL	10.	ug/l	8260B	10/29/08	1
Benzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	10/29/08	1
Bromoform	BDL	1.0	ug/l	8260B	10/29/08	1
Bromomethane	BDL	5.0	ug/l	8260B	10/29/08	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
Chloroethane	BDL	5.0	ug/l	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	10/29/08	1
Chloroform	BDL	5.0	ug/l	8260B	10/29/08	1
Chloromethane	BDL	2.5	ug/l	8260B	10/29/08	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	10/29/08	1
Dibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,2-Dichloroethene	1700	20.	ug/l	8260B	10/30/08	20
trans-1,2-Dichloroethene	3.5	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Ethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	1.0	ug/l	8260B	10/29/08	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-17

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-2

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 10:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	10/29/08	1
Methylene Chloride	BDL	5.0	ug/l	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	10/29/08	1
Methyl tert-butyl ether	12.	1.0	ug/l	8260B	10/29/08	1
Naphthalene	BDL	5.0	ug/l	8260B	10/29/08	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Styrene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	10/29/08	1
Tetrachloroethene	2.3	1.0	ug/l	8260B	10/29/08	1
Toluene	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
Trichloroethene	1.2	1.0	ug/l	8260B	10/29/08	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Vinyl chloride	67.	1.0	ug/l	8260B	10/29/08	1
Xylenes, Total	BDL	3.0	ug/l	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	104.		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	104.		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	101.		% Rec.	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-18

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-3

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 12:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	10/29/08	1
Acrolein	BDL	50.	ug/l	8260B	10/29/08	1
Acrylonitrile	BDL	10.	ug/l	8260B	10/29/08	1
Benzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	10/29/08	1
Bromoform	BDL	1.0	ug/l	8260B	10/29/08	1
Bromomethane	BDL	5.0	ug/l	8260B	10/29/08	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
Chloroethane	BDL	5.0	ug/l	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	10/29/08	1
Chloroform	BDL	5.0	ug/l	8260B	10/29/08	1
Chloromethane	BDL	2.5	ug/l	8260B	10/29/08	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	10/29/08	1
Dibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,2-Dichloroethene	1700	20.	ug/l	8260B	10/30/08	20
trans-1,2-Dichloroethene	6.4	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Ethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	1.0	ug/l	8260B	10/29/08	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-18

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-3

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 12:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	10/29/08	1
Methylene Chloride	BDL	5.0	ug/l	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	10/29/08	1
Methyl tert-butyl ether	11.	1.0	ug/l	8260B	10/29/08	1
Naphthalene	BDL	5.0	ug/l	8260B	10/29/08	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Styrene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	10/29/08	1
Tetrachloroethene	2.8	1.0	ug/l	8260B	10/29/08	1
Toluene	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
Trichloroethene	3.4	1.0	ug/l	8260B	10/29/08	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Vinyl chloride	24.	1.0	ug/l	8260B	10/29/08	1
Xylenes, Total	BDL	3.0	ug/l	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	104.		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	97.8		% Rec.	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-19

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-4

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 13:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	10/29/08	1
Acrolein	BDL	50.	ug/l	8260B	10/29/08	1
Acrylonitrile	BDL	10.	ug/l	8260B	10/29/08	1
Benzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	10/29/08	1
Bromoform	BDL	1.0	ug/l	8260B	10/29/08	1
Bromomethane	BDL	5.0	ug/l	8260B	10/29/08	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
Chloroethane	BDL	5.0	ug/l	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	10/29/08	1
Chloroform	BDL	5.0	ug/l	8260B	10/29/08	1
Chloromethane	BDL	2.5	ug/l	8260B	10/29/08	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	10/29/08	1
Dibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,2-Dichloroethene	1400	20.	ug/l	8260B	10/30/08	20
trans-1,2-Dichloroethene	6.3	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Ethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	1.0	ug/l	8260B	10/29/08	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-19

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : GP-4

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/24/08 13:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	10/29/08	1
Methylene Chloride	BDL	5.0	ug/l	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	10/29/08	1
Methyl tert-butyl ether	13.	1.0	ug/l	8260B	10/29/08	1
Naphthalene	BDL	5.0	ug/l	8260B	10/29/08	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Styrene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	10/29/08	1
Tetrachloroethene	2.0	1.0	ug/l	8260B	10/29/08	1
Toluene	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
Trichloroethene	3.2	1.0	ug/l	8260B	10/29/08	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Vinyl chloride	110	1.0	ug/l	8260B	10/29/08	1
Xylenes, Total	BDL	3.0	ug/l	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	103.		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	105.		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	96.1		% Rec.	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-20

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-2

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	10/29/08	1
Acrolein	BDL	50.	ug/l	8260B	10/29/08	1
Acrylonitrile	BDL	10.	ug/l	8260B	10/29/08	1
Benzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	10/29/08	1
Bromoform	BDL	1.0	ug/l	8260B	10/29/08	1
Bromomethane	BDL	5.0	ug/l	8260B	10/29/08	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
Chloroethane	BDL	5.0	ug/l	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	10/29/08	1
Chloroform	BDL	5.0	ug/l	8260B	10/29/08	1
Chloromethane	BDL	2.5	ug/l	8260B	10/29/08	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	10/29/08	1
Dibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,2-Dichloroethene	220	10.	ug/l	8260B	10/30/08	10
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Ethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	1.0	ug/l	8260B	10/29/08	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-20

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-2

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	10/29/08	1
Methylene Chloride	BDL	5.0	ug/l	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	10/29/08	1
Methyl tert-butyl ether	7.3	1.0	ug/l	8260B	10/29/08	1
Naphthalene	BDL	5.0	ug/l	8260B	10/29/08	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Styrene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	10/29/08	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
Toluene	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
Trichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Vinyl chloride	36.	1.0	ug/l	8260B	10/29/08	1
Xylenes, Total	BDL	3.0	ug/l	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	93.9		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	105.		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	106.		% Rec.	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-22

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-1

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	10/29/08	1
Acrolein	BDL	50.	ug/l	8260B	10/29/08	1
Acrylonitrile	BDL	10.	ug/l	8260B	10/29/08	1
Benzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	10/29/08	1
Bromoform	BDL	1.0	ug/l	8260B	10/29/08	1
Bromomethane	BDL	5.0	ug/l	8260B	10/29/08	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
Chloroethane	BDL	5.0	ug/l	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	10/29/08	1
Chloroform	BDL	5.0	ug/l	8260B	10/29/08	1
Chloromethane	BDL	2.5	ug/l	8260B	10/29/08	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	10/29/08	1
Dibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,2-Dichloroethene	150	1.0	ug/l	8260B	10/29/08	1
trans-1,2-Dichloroethene	1.1	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Ethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	1.0	ug/l	8260B	10/29/08	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-22

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : MW-1

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	10/29/08	1
Methylene Chloride	BDL	5.0	ug/l	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	10/29/08	1
Methyl tert-butyl ether	1.5	1.0	ug/l	8260B	10/29/08	1
Naphthalene	BDL	5.0	ug/l	8260B	10/29/08	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Styrene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	10/29/08	1
Tetrachloroethene	8.0	1.0	ug/l	8260B	10/29/08	1
Toluene	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
Trichloroethene	25.	1.0	ug/l	8260B	10/29/08	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Vinyl chloride	2.8	1.0	ug/l	8260B	10/29/08	1
Xylenes, Total	BDL	3.0	ug/l	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	96.0		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	103.		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	99.2		% Rec.	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-23

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : SOIL BLANK

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	10/29/08	1
Acrolein	BDL	50.	ug/l	8260B	10/29/08	1
Acrylonitrile	BDL	10.	ug/l	8260B	10/29/08	1
Benzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	10/29/08	1
Bromoform	BDL	1.0	ug/l	8260B	10/29/08	1
Bromomethane	BDL	5.0	ug/l	8260B	10/29/08	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
Chloroethane	BDL	5.0	ug/l	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	10/29/08	1
Chloroform	BDL	5.0	ug/l	8260B	10/29/08	1
Chloromethane	BDL	2.5	ug/l	8260B	10/29/08	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	10/29/08	1
Dibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Ethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	1.0	ug/l	8260B	10/29/08	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-23

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : SOIL BLANK

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	10/29/08	1
Methylene Chloride	BDL	5.0	ug/l	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Naphthalene	BDL	5.0	ug/l	8260B	10/29/08	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Styrene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	10/29/08	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
Toluene	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
Trichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Vinyl chloride	BDL	1.0	ug/l	8260B	10/29/08	1
Xylenes, Total	BDL	3.0	ug/l	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	97.6		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	101.		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	102.		% Rec.	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-24

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : WATER BLANK

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	10/29/08	1
Acrolein	BDL	50.	ug/l	8260B	10/29/08	1
Acrylonitrile	BDL	10.	ug/l	8260B	10/29/08	1
Benzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	10/29/08	1
Bromoform	BDL	1.0	ug/l	8260B	10/29/08	1
Bromomethane	BDL	5.0	ug/l	8260B	10/29/08	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
Chloroethane	BDL	5.0	ug/l	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	10/29/08	1
Chloroform	BDL	5.0	ug/l	8260B	10/29/08	1
Chloromethane	BDL	2.5	ug/l	8260B	10/29/08	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	10/29/08	1
Dibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Ethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	1.0	ug/l	8260B	10/29/08	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-24

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : WATER BLANK

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	10/29/08	1
Methylene Chloride	BDL	5.0	ug/l	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	10/29/08	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Naphthalene	BDL	5.0	ug/l	8260B	10/29/08	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Styrene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	10/29/08	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
Toluene	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
Trichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Vinyl chloride	BDL	1.0	ug/l	8260B	10/29/08	1
Xylenes, Total	BDL	3.0	ug/l	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	99.7		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	99.3		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	97.3		% Rec.	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-25

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : LAST GW

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	10/29/08	1
Acrolein	BDL	50.	ug/l	8260B	10/29/08	1
Acrylonitrile	BDL	10.	ug/l	8260B	10/29/08	1
Benzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	10/29/08	1
Bromoform	BDL	1.0	ug/l	8260B	10/29/08	1
Bromomethane	BDL	5.0	ug/l	8260B	10/29/08	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
Chloroethane	BDL	5.0	ug/l	8260B	10/29/08	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	10/29/08	1
Chloroform	BDL	5.0	ug/l	8260B	10/29/08	1
Chloromethane	BDL	2.5	ug/l	8260B	10/29/08	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	10/29/08	1
Dibromomethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,2-Dichloroethene	160	1.0	ug/l	8260B	10/29/08	1
trans-1,2-Dichloroethene	1.0	1.0	ug/l	8260B	10/29/08	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	10/29/08	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	10/29/08	1
Ethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Hexachloro-1,3-butadiene	BDL	1.0	ug/l	8260B	10/29/08	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

David Wildharber
Terracon - Bettendorf
870 40th Avenue
Bettendorf, IA 52722

October 31,2008

ESC Sample # : L372125-25

Date Received : October 29, 2008
Description : Villareal Building

Site ID :

Sample ID : LAST GW

Project # : 07067060

Collected By : Bryce Pewonka
Collection Date : 10/27/08 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	10/29/08	1
Methylene Chloride	BDL	5.0	ug/l	8260B	10/29/08	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	10/29/08	1
Methyl tert-butyl ether	1.5	1.0	ug/l	8260B	10/29/08	1
Naphthalene	BDL	5.0	ug/l	8260B	10/29/08	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Styrene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	10/29/08	1
Tetrachloroethene	9.8	1.0	ug/l	8260B	10/29/08	1
Toluene	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	10/29/08	1
Trichloroethene	27.	1.0	ug/l	8260B	10/29/08	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	10/29/08	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	10/29/08	1
Vinyl chloride	3.3	1.0	ug/l	8260B	10/29/08	1
Xylenes, Total	BDL	3.0	ug/l	8260B	10/29/08	1
Surrogate Recovery						
Toluene-d8	95.2		% Rec.	8260B	10/29/08	1
Dibromofluoromethane	98.4		% Rec.	8260B	10/29/08	1
4-Bromofluorobenzene	97.7		% Rec.	8260B	10/29/08	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L372125-14	WG391200	SAMP	Methylene Chloride	R523004	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
10/31/08 at 12:02:35

TSR Signing Reports: 206
R3 - Rush: Two Day

Sample: L372125-01 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16
Refer to P261973
Sample: L372125-02 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-03 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-04 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-05 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-06 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-07 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-08 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-09 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-10 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-13 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-14 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-15 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-16 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-17 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-18 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-19 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-20 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-22 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-23 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-24 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

Sample: L372125-25 Account: TERRABIA Received: 10/29/08 09:00 Due Date: 10/31/08 00:00 RPT Date: 10/31/08 10:16

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REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-01

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-1 12FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 11:22

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	06/18/04	1
Toluene	BDL	5.0	ug/l	8260B	06/18/04	1
Ethylbenzene	BDL	1.0	ug/l	8260B	06/18/04	1
Total Xylenes	BDL	3.0	ug/l	8260B	06/18/04	1
Surrogate Recovery						
Toluene-d8	97.		% Rec.	8260B	06/18/04	1
Dibromofluoromethane	93.		% Rec.	8260B	06/18/04	1
4-Bromofluorobenzene	99.		% Rec.	8260B	06/18/04	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	1.0	ug/l	8270C	06/22/04	1
Acenaphthene	1.1	1.0	ug/l	8270C	06/22/04	1
Acenaphthylene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270C	06/22/04	1
Chrysene	BDL	1.0	ug/l	8270C	06/22/04	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270C	06/22/04	1
Fluoranthene	BDL	1.0	ug/l	8270C	06/22/04	1
Fluorene	BDL	1.0	ug/l	8270C	06/22/04	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270C	06/22/04	1
Naphthalene	BDL	1.0	ug/l	8270C	06/22/04	1
Phenanthrene	BDL	1.0	ug/l	8270C	06/22/04	1
Pyrene	BDL	1.0	ug/l	8270C	06/22/04	1
Surrogate Recovery						
Nitrobenzene-d5	26.		% Rec.	8270C	06/22/04	1
2-Fluorobiphenyl	19.		% Rec.	8270C	06/22/04	1
p-Terphenyl-d14	72.		% Rec.	8270C	06/22/04	1

Jeff Carr, ESC Representative

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:
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Reported: 06/25/04 12:39 Printed: 06/25/04 12:40
L158577-01 (PAH BY GCMS) - No extra bottles, cannot be re-extracted

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REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-02

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-2 12FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 09:47

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	06/18/04	1
Toluene	BDL	5.0	ug/l	8260B	06/18/04	1
Ethylbenzene	BDL	1.0	ug/l	8260B	06/18/04	1
Total Xylenes	BDL	3.0	ug/l	8260B	06/18/04	1
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	06/18/04	1
Dibromofluoromethane	94.		% Rec.	8260B	06/18/04	1
4-Bromofluorobenzene	97.		% Rec.	8260B	06/18/04	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	1.0	ug/l	8270C	06/22/04	1
Acenaphthene	BDL	1.0	ug/l	8270C	06/22/04	1
Acenaphthylene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270C	06/22/04	1
Chrysene	BDL	1.0	ug/l	8270C	06/22/04	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270C	06/22/04	1
Fluoranthene	BDL	1.0	ug/l	8270C	06/22/04	1
Fluorene	BDL	1.0	ug/l	8270C	06/22/04	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270C	06/22/04	1
Naphthalene	BDL	1.0	ug/l	8270C	06/22/04	1
Phenanthrene	BDL	1.0	ug/l	8270C	06/22/04	1
Pyrene	BDL	1.0	ug/l	8270C	06/22/04	1
Surrogate Recovery						
Nitrobenzene-d5	32.		% Rec.	8270C	06/22/04	1
2-Fluorobiphenyl	31.		% Rec.	8270C	06/22/04	1
p-Terphenyl-d14	81.		% Rec.	8270C	06/22/04	1

Jeff Carr, ESC Representative

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:
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Reported: 06/25/04 12:39 Printed: 06/25/04 12:40
L158577-02 (PAH BY GCMS) - No extra bottles, cannot be re-extracted

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SCIENCE CORP.

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-03

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-3 13FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 13:01

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	25.	ug/l	8260B	06/23/04	1
Acrolein	BDL	50.	ug/l	8260B	06/23/04	1
Acrylonitrile	BDL	10.	ug/l	8260B	06/23/04	1
Benzene	BDL	1.0	ug/l	8260B	06/23/04	1
Bromobenzene	BDL	1.0	ug/l	8260B	06/23/04	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	06/23/04	1
Bromoform	BDL	1.0	ug/l	8260B	06/23/04	1
Bromomethane	BDL	1.0	ug/l	8260B	06/23/04	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	06/23/04	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	06/23/04	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	06/23/04	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	06/23/04	1
Chlorobenzene	BDL	1.0	ug/l	8260B	06/23/04	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	06/23/04	1
Chloroethane	BDL	1.0	ug/l	8260B	06/23/04	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	06/23/04	1
Chloroform	BDL	5.0	ug/l	8260B	06/23/04	1
Chloromethane	BDL	1.0	ug/l	8260B	06/23/04	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	06/23/04	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	06/23/04	1
1,2-Dibromo-3-Chloropropane	BDL	2.0	ug/l	8260B	06/23/04	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	06/23/04	1
Dibromomethane	BDL	1.0	ug/l	8260B	06/23/04	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	06/23/04	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	06/23/04	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	06/23/04	1
Dichlorodifluoromethane	BDL	1.0	ug/l	8260B	06/23/04	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	06/23/04	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	06/23/04	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	06/23/04	1
cis-1,2-Dichloroethene	110	1.0	ug/l	8260B	06/23/04	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	06/23/04	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	06/23/04	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	06/23/04	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	06/23/04	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	06/23/04	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	06/23/04	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	06/23/04	1

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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Est. 1970

REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-03

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-3 13FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 13:01

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Di-isopropyl ether	BDL	1.0	ug/l	8260B	06/23/04	1
Ethylbenzene	BDL	1.0	ug/l	8260B	06/23/04	1
Hexachlorobutadiene	BDL	1.0	ug/l	8260B	06/23/04	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	06/23/04	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	06/23/04	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	06/23/04	1
Methylene Chloride	BDL	5.0	ug/l	8260B	06/23/04	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	06/23/04	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	06/23/04	1
Naphthalene	BDL	5.0	ug/l	8260B	06/23/04	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	06/23/04	1
Styrene	BDL	1.0	ug/l	8260B	06/23/04	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	06/23/04	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	06/23/04	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	06/23/04	1
Tetrachloroethene	2.3	1.0	ug/l	8260B	06/23/04	1
Toluene	BDL	5.0	ug/l	8260B	06/23/04	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	06/23/04	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	06/23/04	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	06/23/04	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	06/23/04	1
Trichloroethene	2.5	1.0	ug/l	8260B	06/23/04	1
Trichlorofluoromethane	BDL	1.0	ug/l	8260B	06/23/04	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	06/23/04	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	06/23/04	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	06/23/04	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	06/23/04	1
Vinyl chloride	BDL	1.0	ug/l	8260B	06/23/04	1
Xylenes, Total	BDL	3.0	ug/l	8260B	06/23/04	1
Surrogate Recovery						
Toluene-d8	93.		% Rec.	8260B	06/23/04	1
Dibromofluoromethane	110		% Rec.	8260B	06/23/04	1
4-Bromofluorobenzene	95.		% Rec.	8260B	06/23/04	1

Jeff Carr, ESC Representative

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-04

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-4 12FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 14:05

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	500	ug/l	8260B	06/23/04	20
Acrolein	BDL	1000	ug/l	8260B	06/23/04	20
Acrylonitrile	BDL	200	ug/l	8260B	06/23/04	20
Benzene	BDL	20.	ug/l	8260B	06/23/04	20
Bromobenzene	BDL	20.	ug/l	8260B	06/23/04	20
Bromodichloromethane	BDL	20.	ug/l	8260B	06/23/04	20
Bromoform	BDL	20.	ug/l	8260B	06/23/04	20
Bromomethane	BDL	20.	ug/l	8260B	06/23/04	20
n-Butylbenzene	BDL	20.	ug/l	8260B	06/23/04	20
sec-Butylbenzene	BDL	20.	ug/l	8260B	06/23/04	20
tert-Butylbenzene	BDL	20.	ug/l	8260B	06/23/04	20
Carbon tetrachloride	BDL	20.	ug/l	8260B	06/23/04	20
Chlorobenzene	BDL	20.	ug/l	8260B	06/23/04	20
Chlorodibromomethane	BDL	20.	ug/l	8260B	06/23/04	20
Chloroethane	BDL	20.	ug/l	8260B	06/23/04	20
2-Chloroethyl vinyl ether	BDL	1000	ug/l	8260B	06/23/04	20
Chloroform	BDL	100	ug/l	8260B	06/23/04	20
Chloromethane	BDL	20.	ug/l	8260B	06/23/04	20
2-Chlorotoluene	BDL	20.	ug/l	8260B	06/23/04	20
4-Chlorotoluene	BDL	20.	ug/l	8260B	06/23/04	20
1,2-Dibromo-3-Chloropropane	BDL	40.	ug/l	8260B	06/23/04	20
1,2-Dibromoethane	BDL	20.	ug/l	8260B	06/23/04	20
Dibromomethane	BDL	20.	ug/l	8260B	06/23/04	20
1,2-Dichlorobenzene	BDL	20.	ug/l	8260B	06/23/04	20
1,3-Dichlorobenzene	BDL	20.	ug/l	8260B	06/23/04	20
1,4-Dichlorobenzene	BDL	20.	ug/l	8260B	06/23/04	20
Dichlorodifluoromethane	BDL	20.	ug/l	8260B	06/23/04	20
1,1-Dichloroethane	BDL	20.	ug/l	8260B	06/23/04	20
1,2-Dichloroethane	BDL	20.	ug/l	8260B	06/23/04	20
1,1-Dichloroethene	BDL	20.	ug/l	8260B	06/23/04	20
cis-1,2-Dichloroethene	1300	20.	ug/l	8260B	06/23/04	20
trans-1,2-Dichloroethene	BDL	20.	ug/l	8260B	06/23/04	20
1,2-Dichloropropane	BDL	20.	ug/l	8260B	06/23/04	20
1,1-Dichloropropene	BDL	20.	ug/l	8260B	06/23/04	20
1,3-Dichloropropane	BDL	20.	ug/l	8260B	06/23/04	20
cis-1,3-Dichloropropene	BDL	20.	ug/l	8260B	06/23/04	20
trans-1,3-Dichloropropene	BDL	20.	ug/l	8260B	06/23/04	20
2,2-Dichloropropane	BDL	20.	ug/l	8260B	06/23/04	20

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

L158577-04 (PAH BY GCMS) - No extra bottles, cannot be re-extracted

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REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-04

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-4 12FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 14:05

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Di-isopropyl ether	BDL	20.	ug/l	8260B	06/23/04	20
Ethylbenzene	BDL	20.	ug/l	8260B	06/23/04	20
Hexachlorobutadiene	BDL	20.	ug/l	8260B	06/23/04	20
Isopropylbenzene	BDL	20.	ug/l	8260B	06/23/04	20
p-Isopropyltoluene	BDL	20.	ug/l	8260B	06/23/04	20
2-Butanone (MEK)	BDL	200	ug/l	8260B	06/23/04	20
Methylene Chloride	BDL	100	ug/l	8260B	06/23/04	20
4-Methyl-2-pentanone (MIBK)	BDL	200	ug/l	8260B	06/23/04	20
Methyl tert-butyl ether	BDL	20.	ug/l	8260B	06/23/04	20
Naphthalene	BDL	100	ug/l	8260B	06/23/04	20
n-Propylbenzene	BDL	20.	ug/l	8260B	06/23/04	20
Styrene	BDL	20.	ug/l	8260B	06/23/04	20
1,1,1,2-Tetrachloroethane	BDL	20.	ug/l	8260B	06/23/04	20
1,1,2,2-Tetrachloroethane	BDL	20.	ug/l	8260B	06/23/04	20
1,1,2-Trichloro-1,2,2-trifluoro	BDL	20.	ug/l	8260B	06/23/04	20
Tetrachloroethene	26.	20.	ug/l	8260B	06/23/04	20
Toluene	BDL	100	ug/l	8260B	06/23/04	20
1,2,3-Trichlorobenzene	BDL	20.	ug/l	8260B	06/23/04	20
1,2,4-Trichlorobenzene	BDL	20.	ug/l	8260B	06/23/04	20
1,1,1-Trichloroethane	BDL	20.	ug/l	8260B	06/23/04	20
1,1,2-Trichloroethane	BDL	20.	ug/l	8260B	06/23/04	20
Trichloroethene	24.	20.	ug/l	8260B	06/23/04	20
Trichlorofluoromethane	BDL	20.	ug/l	8260B	06/23/04	20
1,2,3-Trichloropropane	BDL	20.	ug/l	8260B	06/23/04	20
1,2,4-Trimethylbenzene	BDL	20.	ug/l	8260B	06/23/04	20
1,2,3-Trimethylbenzene	BDL	20.	ug/l	8260B	06/23/04	20
1,3,5-Trimethylbenzene	BDL	20.	ug/l	8260B	06/23/04	20
Vinyl chloride	22.	20.	ug/l	8260B	06/23/04	20
Xylenes, Total	BDL	60.	ug/l	8260B	06/23/04	20
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	06/23/04	20
Dibromofluoromethane	94.		% Rec.	8260B	06/23/04	20
4-Bromofluorobenzene	97.		% Rec.	8260B	06/23/04	20
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	1.0	ug/l	8270C	06/22/04	1
Acenaphthene	BDL	1.0	ug/l	8270C	06/22/04	1
Acenaphthylene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270C	06/22/04	1

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
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KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
L158577-04 (PAH BY GCMS) - No extra bottles, cannot be re-extracted

ENVIRONMENTAL
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REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-04

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-4 12FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 14:05

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(a)pyrene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270C	06/22/04	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270C	06/22/04	1
Chrysene	BDL	1.0	ug/l	8270C	06/22/04	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270C	06/22/04	1
Fluoranthene	BDL	1.0	ug/l	8270C	06/22/04	1
Fluorene	BDL	1.0	ug/l	8270C	06/22/04	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270C	06/22/04	1
Naphthalene	3.3	1.0	ug/l	8270C	06/22/04	1
Phenanthrene	BDL	1.0	ug/l	8270C	06/22/04	1
Pyrene	BDL	1.0	ug/l	8270C	06/22/04	1
Surrogate Recovery						
Nitrobenzene-d5	24.		% Rec.	8270C	06/22/04	1
2-Fluorobiphenyl	21.		% Rec.	8270C	06/22/04	1
p-Terphenyl-d14	82.		% Rec.	8270C	06/22/04	1

Jeff Carr, ESC Representative

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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Reported: 06/25/04 12:39 Printed: 06/25/04 12:40
L158577-04 (PAH BY GCMS) - No extra bottles, cannot be re-extracted

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-05

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-1 10FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 11:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	74.6		%	2540G	06/23/04	1
Benzene	BDL	0.0013	mg/kg	8260B	06/19/04	1
Toluene	BDL	0.0067	mg/kg	8260B	06/19/04	1
Ethylbenzene	BDL	0.0013	mg/kg	8260B	06/19/04	1
Total Xylenes	BDL	0.0040	mg/kg	8260B	06/19/04	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	06/19/04	1
Dibromofluoromethane	100		% Rec.	8260B	06/19/04	1
4-Bromofluorobenzene	250		% Rec.	8260B	06/19/04	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.044	mg/kg	8270C	06/23/04	1
Acenaphthene	BDL	0.044	mg/kg	8270C	06/23/04	1
Acenaphthylene	BDL	0.044	mg/kg	8270C	06/23/04	1
Benzo(a)anthracene	BDL	0.044	mg/kg	8270C	06/23/04	1
Benzo(a)pyrene	BDL	0.044	mg/kg	8270C	06/23/04	1
Benzo(b)fluoranthene	BDL	0.044	mg/kg	8270C	06/23/04	1
Benzo(g,h,i)perylene	BDL	0.044	mg/kg	8270C	06/23/04	1
Benzo(k)fluoranthene	BDL	0.044	mg/kg	8270C	06/23/04	1
Chrysene	BDL	0.044	mg/kg	8270C	06/23/04	1
Dibenz(a,h)anthracene	BDL	0.044	mg/kg	8270C	06/23/04	1
Fluoranthene	BDL	0.044	mg/kg	8270C	06/23/04	1
Fluorene	BDL	0.044	mg/kg	8270C	06/23/04	1
Indeno(1,2,3-cd)pyrene	BDL	0.044	mg/kg	8270C	06/23/04	1
Naphthalene	BDL	0.044	mg/kg	8270C	06/23/04	1
Phenanthrene	0.045	0.044	mg/kg	8270C	06/23/04	1
Pyrene	BDL	0.044	mg/kg	8270C	06/23/04	1
Surrogate Recovery						
Nitrobenzene-d5	77.		% Rec.	8270C	06/23/04	1
2-Fluorobiphenyl	90.		% Rec.	8270C	06/23/04	1
p-Terphenyl-d14	110		% Rec.	8270C	06/23/04	1

Jeff Carr, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-06

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-2 4-6FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 09:47

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	78.2		%	2540G	06/23/04	1
Benzene	BDL	0.0013	mg/kg	8260B	06/19/04	1
Toluene	BDL	0.0064	mg/kg	8260B	06/19/04	1
Ethylbenzene	BDL	0.0013	mg/kg	8260B	06/19/04	1
Total Xylenes	BDL	0.0038	mg/kg	8260B	06/19/04	1
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	06/19/04	1
Dibromofluoromethane	80.		% Rec.	8260B	06/19/04	1
4-Bromofluorobenzene	100		% Rec.	8260B	06/19/04	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.042	mg/kg	8270C	06/23/04	1
Acenaphthene	BDL	0.042	mg/kg	8270C	06/23/04	1
Acenaphthylene	BDL	0.042	mg/kg	8270C	06/23/04	1
Benzo(a)anthracene	BDL	0.042	mg/kg	8270C	06/23/04	1
Benzo(a)pyrene	BDL	0.042	mg/kg	8270C	06/23/04	1
Benzo(b)fluoranthene	BDL	0.042	mg/kg	8270C	06/23/04	1
Benzo(g,h,i)perylene	BDL	0.042	mg/kg	8270C	06/23/04	1
Benzo(k)fluoranthene	BDL	0.042	mg/kg	8270C	06/23/04	1
Chrysene	BDL	0.042	mg/kg	8270C	06/23/04	1
Dibenz(a,h)anthracene	BDL	0.042	mg/kg	8270C	06/23/04	1
Fluoranthene	BDL	0.042	mg/kg	8270C	06/23/04	1
Fluorene	BDL	0.042	mg/kg	8270C	06/23/04	1
Indeno(1,2,3-cd)pyrene	BDL	0.042	mg/kg	8270C	06/23/04	1
Naphthalene	BDL	0.042	mg/kg	8270C	06/23/04	1
Phenanthrene	BDL	0.042	mg/kg	8270C	06/23/04	1
Pyrene	BDL	0.042	mg/kg	8270C	06/23/04	1
Surrogate Recovery						
Nitrobenzene-d5	52.		% Rec.	8270C	06/23/04	1
2-Fluorobiphenyl	54.		% Rec.	8270C	06/23/04	1
p-Terphenyl-d14	59.		% Rec.	8270C	06/23/04	1

Jeff Carr, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-07

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-3 4-6FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 13:03

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	80.3		%	2540G	06/23/04	1
Volatile Organics						
Acetone	BDL	0.031	mg/kg	8260B	06/19/04	1
Acrolein	BDL	0.062	mg/kg	8260B	06/19/04	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	06/19/04	1
Benzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Bromoform	BDL	0.0012	mg/kg	8260B	06/19/04	1
Bromomethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	06/19/04	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Chloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
2-Chloroethyl vinyl ether	BDL	0.062	mg/kg	8260B	06/19/04	1
Chloroform	BDL	0.0062	mg/kg	8260B	06/19/04	1
Chloromethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	06/19/04	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2-Dibromo-3-Chloropropane	BDL	0.0025	mg/kg	8260B	06/19/04	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Dichlorodifluoromethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	06/19/04	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	06/19/04	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	06/19/04	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	06/19/04	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-07

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-3 4-6FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 13:03

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	06/19/04	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	06/19/04	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Hexachlorobutadiene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	06/19/04	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	06/19/04	1
Methylene Chloride	BDL	0.0062	mg/kg	8260B	06/19/04	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	06/19/04	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	06/19/04	1
Naphthalene	BDL	0.0062	mg/kg	8260B	06/19/04	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Styrene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Tetrachloroethene	0.0015	0.0012	mg/kg	8260B	06/19/04	1
Toluene	BDL	0.0062	mg/kg	8260B	06/19/04	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	06/19/04	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Trichlorofluoromethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	06/19/04	1
Xylenes, Total	BDL	0.0037	mg/kg	8260B	06/19/04	1
Surrogate Recovery						
Toluene-d8	91.		% Rec.	8260B	06/19/04	1
Dibromofluoromethane	86.		% Rec.	8260B	06/19/04	1
4-Bromofluorobenzene	99.		% Rec.	8260B	06/19/04	1

Jeff Carr, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-08

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-4 4-6FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 14:05

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	82.1		%	2540G	06/23/04	1
Volatile Organics						
Acetone	BDL	0.030	mg/kg	8260B	06/19/04	1
Acrolein	BDL	0.061	mg/kg	8260B	06/19/04	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	06/19/04	1
Benzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Bromoform	BDL	0.0012	mg/kg	8260B	06/19/04	1
Bromomethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	06/19/04	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Chloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
2-Chloroethyl vinyl ether	BDL	0.061	mg/kg	8260B	06/19/04	1
Chloroform	BDL	0.0061	mg/kg	8260B	06/19/04	1
Chloromethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	06/19/04	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2-Dibromo-3-Chloropropane	BDL	0.0024	mg/kg	8260B	06/19/04	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Dichlorodifluoromethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	06/19/04	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	06/19/04	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	06/19/04	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	06/19/04	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-08

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-4 4-6FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 14:05

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	06/19/04	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	06/19/04	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Hexachlorobutadiene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	06/19/04	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	06/19/04	1
Methylene Chloride	BDL	0.0061	mg/kg	8260B	06/19/04	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	06/19/04	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	06/19/04	1
Naphthalene	BDL	0.0061	mg/kg	8260B	06/19/04	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Styrene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
Tetrachloroethene	0.0026	0.0012	mg/kg	8260B	06/19/04	1
Toluene	BDL	0.0061	mg/kg	8260B	06/19/04	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	06/19/04	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Trichlorofluoromethane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	06/19/04	1
Xylenes, Total	BDL	0.0036	mg/kg	8260B	06/19/04	1
Surrogate Recovery						
Toluene-d8	87.		% Rec.	8260B	06/19/04	1
Dibromofluoromethane	88.		% Rec.	8260B	06/19/04	1
4-Bromofluorobenzene	95.		% Rec.	8260B	06/19/04	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.040	mg/kg	8270C	06/22/04	1
Acenaphthene	BDL	0.040	mg/kg	8270C	06/22/04	1
Acenaphthylene	BDL	0.040	mg/kg	8270C	06/22/04	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:
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ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-08

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-4 4-6FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 14:05

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Benzo(a)anthracene	BDL	0.040	mg/kg	8270C	06/22/04	1
Benzo(a)pyrene	BDL	0.040	mg/kg	8270C	06/22/04	1
Benzo(b)fluoranthene	BDL	0.040	mg/kg	8270C	06/22/04	1
Benzo(g,h,i)perylene	BDL	0.040	mg/kg	8270C	06/22/04	1
Benzo(k)fluoranthene	BDL	0.040	mg/kg	8270C	06/22/04	1
Chrysene	BDL	0.040	mg/kg	8270C	06/22/04	1
Dibenz(a,h)anthracene	BDL	0.040	mg/kg	8270C	06/22/04	1
Fluoranthene	BDL	0.040	mg/kg	8270C	06/22/04	1
Fluorene	BDL	0.040	mg/kg	8270C	06/22/04	1
Indeno(1,2,3-cd)pyrene	BDL	0.040	mg/kg	8270C	06/22/04	1
Naphthalene	BDL	0.040	mg/kg	8270C	06/22/04	1
Phenanthrene	BDL	0.040	mg/kg	8270C	06/22/04	1
Pyrene	BDL	0.040	mg/kg	8270C	06/22/04	1
Surrogate Recovery						
Nitrobenzene-d5	60.		% Rec.	8270C	06/22/04	1
2-Fluorobiphenyl	56.		% Rec.	8270C	06/22/04	1
p-Terphenyl-d14	62.		% Rec.	8270C	06/22/04	1

Jeff Carr, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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Reported: 06/25/04 12:39 Printed: 06/25/04 12:40

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SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Brian Porter
Terracon - Bettendorf, IA
870 40th Avenue
Bettendorf, IA 52722

June 25,2004

ESC Sample # : L158577-09

Date Received : June 16, 2004
Description : Limited Site Investigation

Site ID : O'Rourke / Villareal

Sample ID : B-5 1FT

Project # : 07047049

Collected By : Alicia Law
Collection Date : 06/15/04 15:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	82.6		%	2540G	06/23/04	1
Benzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Toluene	BDL	0.0060	mg/kg	8260B	06/19/04	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	06/19/04	1
Total Xylenes	BDL	0.0036	mg/kg	8260B	06/19/04	1
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	06/19/04	1
Dibromofluoromethane	89.		% Rec.	8260B	06/19/04	1
4-Bromofluorobenzene	94.		% Rec.	8260B	06/19/04	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.040	mg/kg	8270C	06/22/04	1
Acenaphthene	BDL	0.040	mg/kg	8270C	06/22/04	1
Acenaphthylene	BDL	0.040	mg/kg	8270C	06/22/04	1
Benzo(a)anthracene	BDL	0.040	mg/kg	8270C	06/22/04	1
Benzo(a)pyrene	BDL	0.040	mg/kg	8270C	06/22/04	1
Benzo(b)fluoranthene	BDL	0.040	mg/kg	8270C	06/22/04	1
Benzo(g,h,i)perylene	BDL	0.040	mg/kg	8270C	06/22/04	1
Benzo(k)fluoranthene	BDL	0.040	mg/kg	8270C	06/22/04	1
Chrysene	BDL	0.040	mg/kg	8270C	06/22/04	1
Dibenz(a,h)anthracene	BDL	0.040	mg/kg	8270C	06/22/04	1
Fluoranthene	BDL	0.040	mg/kg	8270C	06/22/04	1
Fluorene	BDL	0.040	mg/kg	8270C	06/22/04	1
Indeno(1,2,3-cd)pyrene	BDL	0.040	mg/kg	8270C	06/22/04	1
Naphthalene	BDL	0.040	mg/kg	8270C	06/22/04	1
Phenanthrene	BDL	0.040	mg/kg	8270C	06/22/04	1
Pyrene	BDL	0.040	mg/kg	8270C	06/22/04	1
Surrogate Recovery						
Nitrobenzene-d5	61.		% Rec.	8270C	06/22/04	1
2-Fluorobiphenyl	59.		% Rec.	8270C	06/22/04	1
p-Terphenyl-d14	66.		% Rec.	8270C	06/22/04	1

Jeff Carr, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L158577-01	Acenaphthene	J4
	Acenaphthylene	J4
	Benzo(a)anthracene	J4
	Benzo(a)pyrene	J4
	Benzo(b)fluoranthene	J4
	Benzo(g,h,i)perylene	J4
	Chrysene	J4
	Fluoranthene	J4
	Naphthalene	J4
	Pyrene	J4
	Nitrobenzene-d5	J2
	2-Fluorobiphenyl	J2
L158577-02	Acenaphthene	J4
	Acenaphthylene	J4
	Benzo(a)anthracene	J4
	Benzo(a)pyrene	J4
	Benzo(b)fluoranthene	J4
	Benzo(g,h,i)perylene	J4
	Chrysene	J4
	Fluoranthene	J4
	Naphthalene	J4
	Pyrene	J4
	Nitrobenzene-d5	J2
	2-Fluorobiphenyl	J2
L158577-03	Chloromethane	J4
	cis-1,2-Dichloroethene	E
	Vinyl chloride	J4
L158577-04	Acetone	J4J3
	Acrylonitrile	J3
	Bromobenzene	J3
	Bromodichloromethane	J3
	Bromoform	J3
	Bromomethane	J3
	Chlorodibromomethane	J3
	2-Chloroethyl vinyl ether	J3
	1,2-Dibromo-3-Chloropropane	J3
	1,2-Dibromoethane	J3
	Dibromomethane	J4J3
	1,2-Dichlorobenzene	J3
	1,4-Dichlorobenzene	J3
	1,1-Dichloroethane	J3
	1,2-Dichloroethane	J3
	cis-1,2-Dichloroethene	EJ3
	1,2-Dichloropropane	J3
	1,3-Dichloropropane	J3
	cis-1,3-Dichloropropene	J3
	trans-1,3-Dichloropropene	J4
	Di-isopropyl ether	J3
	2-Butanone (MEK)	J3
	4-Methyl-2-pentanone (MIBK)	J3
	Methyl tert-butyl ether	J3
	Styrene	J3
	1,1,1,2-Tetrachloroethane	J3
	1,1,2,2-Tetrachloroethane	J3
	Toluene	J3
	1,2,3-Trichlorobenzene	J3
	1,1,2-Trichloroethane	J3
	1,2,3-Trichloropropane	J3
	Xylenes, Total	J3
	Acenaphthene	J4
	Acenaphthylene	J4
	Benzo(a)anthracene	J4
	Benzo(a)pyrene	J4
	Benzo(b)fluoranthene	J4
	Benzo(g,h,i)perylene	J4
	Chrysene	J4
	Fluoranthene	J4
	Naphthalene	J4
	Pyrene	J4

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
	Nitrobenzene-d5	J2
	2-Fluorobiphenyl	J2
L158577-05	4-Bromofluorobenzene	J1
L158577-07	Acetone	J3
	Acrolein	J3
	Acrylonitrile	J3
	Chlorodibromomethane	J3
	Chloroethane	J3
	1,2-Dibromo-3-Chloropropane	J3
	Dichlorodifluoromethane	J3
	1,1-Dichloroethene	J3
	trans-1,2-Dichloroethene	J3
	2,2-Dichloropropane	J3
	Methylene Chloride	J3
	1,1,2-Trichloroethane	J3
	Vinyl chloride	J3
L158577-08	Acetone	J3
	Acrolein	J3
	Acrylonitrile	J3
	Chlorodibromomethane	J3
	Chloroethane	J3
	1,2-Dibromo-3-Chloropropane	J3
	Dichlorodifluoromethane	J3
	1,1-Dichloroethene	J3
	trans-1,2-Dichloroethene	J3
	2,2-Dichloropropane	J3
	Methylene Chloride	J3
	1,1,2-Trichloroethane	J3
	Vinyl chloride	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
E	GTL (EPA) - Greater than upper calibration limit: Actual value is known to be greater than the upper calibration range.
J3	The associated batch QC was outside the established quality control range for precision.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits
J4	The associated batch QC was outside the established quality control range for accuracy.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC.
Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

Control Limits

2-Fluorophenol	31-119	Nitrobenzene-d5	43-118	Dibromfluoromethane	79-126	83-119
Phenol-d5	12-134	2-Fluorobiphenyl	45-128	Toluene-d8	81-114	82-116
2,4,6-Tribromophenol	51-141	Terphenyl-d14	43-137	4-Bromofluorobenzene	65-129	72-126

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
06/25/04 at 12:40:47

TSR Signing Reports: 206
R5 - Desired TAT

Sample: L158577-01 Account: TERRABIA Received: 06/16/04 09:00 Due Date: 06/23/04 00:00 RPT Date: 06/25/04 12:39

Sample: L158577-02 Account: TERRABIA Received: 06/16/04 09:00 Due Date: 06/23/04 00:00 RPT Date: 06/25/04 12:39

Sample: L158577-03 Account: TERRABIA Received: 06/16/04 09:00 Due Date: 06/23/04 00:00 RPT Date: 06/25/04 12:39

Sample: L158577-04 Account: TERRABIA Received: 06/16/04 09:00 Due Date: 06/23/04 00:00 RPT Date: 06/25/04 12:39

Sample: L158577-05 Account: TERRABIA Received: 06/16/04 09:00 Due Date: 06/23/04 00:00 RPT Date: 06/25/04 12:39

Sample: L158577-06 Account: TERRABIA Received: 06/16/04 09:00 Due Date: 06/23/04 00:00 RPT Date: 06/25/04 12:39

Sample: L158577-07 Account: TERRABIA Received: 06/16/04 09:00 Due Date: 06/23/04 00:00 RPT Date: 06/25/04 12:39

Sample: L158577-08 Account: TERRABIA Received: 06/16/04 09:00 Due Date: 06/23/04 00:00 RPT Date: 06/25/04 12:39

Sample: L158577-09 Account: TERRABIA Received: 06/16/04 09:00 Due Date: 06/23/04 00:00 RPT Date: 06/25/04 12:39

Terracon - Bettendorf, IA

870 40th Avenue
Bettendorf,IA 52722

Alternate billing information:

Report to: **Brian Porter**

Email: **brporter@terracon.com**

Project Description: **Limited Site Investigation**

City/State Collected

Phone: **(563) 355-0702**
FAX: **(563) 355-4789**

Client Project #: **07047049**

Lab Project # **TERRABIA-0 047049**

Collected by (print): Alicia Law

Site/Facility ID#: **O'Rourke / Villareal**

P.O.#: **07047049**

Collected by (signature): Alicia Law

Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Chain of Custody
Page ___ of ___

Prepared by:
ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (800) 767-5859
FAX (615) 758-5859

CoCode: **TERRABIA** (lab use only)
Template/Prelogin: **T25150/ P116388**
Cooler #: 6/8/04
Shipped Via: **FedEx Ground**

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	SV8270PAH 250ml/Amb-NoPres	SV8270PAHL 4ozClr-NoPres	TS 2ozClr-NoPres	V8260 40ml/NaHSO4/Sr/MeOH	V8260 40ml/Amb-HCl	V8260BTEX 40ml/NaHSO4/Sr/MeOH	V8260BTEX 40ml/Amb-HCl	VOC Screen 2ozClr-NoPres	Remarks/Contaminant	Sample # (lab only)
-1	G	GW	12ft	6/15/04	11:22	3	X						X		L158577-01	
-2	G	GW	12ft	6/15/04	9:47	3	X						X			02
-3	G	GW	13ft	6/15/04	1:01	2					X					03
-4	G	GW	12ft	6/15/04	2:05	3	X				X					04
-1	G	SS	10ft	6/15/04	11:30	6		X	X			X		X		05
-2	G	SS	4-6ft	6/15/04	9:47	6		X	X			X		X		06
-3	G	SS	4-6ft	6/15/04	1:03	5			X	X				X		07
-4	G	SS	4-6ft	6/15/04	2:05	6		X	X	X				X		08
-5	G	SS	1ft	6/15/04	3:00	6		X	X			X		X		09

*Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐	Condition: (lab use only)
			Teresa Smith 6-15-04		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1° Bottles Received: 40+6	OK
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/16/04 Time: 900	pH Checked: NCF

JEFF

ENVIRONMENTAL SCIENCE CORP.

SAMPLE NON-CONFORMANCE FORM

Sample No. : L158577

Date: 6/16/04

Evaluated by: Jeremy

Client: TERRABIA

Non-Conformance (check applicable items)

	Chain of Custody is missing	X	Login Clarification Needed
	Improper container type		Improper preservation
	Chain of custody is incomplete		Container lid not in tact
	Parameter(s) past holding time		Improper temperature
	Broken container(s) see below		Broken container: sufficient sample volume remains for analysis requested

	Insufficient packing material around container
	Insufficient packing material inside cooler
	Improper handling by carrier (FedEx / UPS / Courier)
	Sample was frozen

Comments: For the ~~65~~ samples: B1 through B4 the client ~~a~~ plug of soil in ~~each~~ of the soil jars.

TSR Initials: JC

Login Instructions:

Client informed by call / email / fax / voice mail date: 6/16/04 time: 1400

Client contact: Client informed. Proceed w/ analysis.

Table Notes

Remediation Objectives from 35 Illinois Administrative Code Chapter 742: *Tiered Approach to Corrective Action Objectives* (TACO).

Remediation Objectives for Non-TACO Compounds from IEPA Toxicity Assessment Unit, October 1, 2004 and/or May 1, 2007.

mg/L = milligrams per liter, generally equivalent to parts per million (ppm)

mg/kg = milligrams per kilogram, generally equivalent to ppm

TCLP = Toxicity Characteristic Leaching Procedure

SPLP = Synthetic Precipitation Leaching Procedure

TABLE 1
SOIL ANALYTICAL RESULS
VILLAREAL BUILDING
Terracon Project No. 07067060

	Sample Location/Identification		B-1	B-2	B-3	B-4	B-5	GP-1	GP-1	GP-2	GP-2	GP-3	GP-3	GP-4	GP-4	MW-1	MW-1	MW-2	MW-2	GP-3 Duplicate	Number of Detections	Frequency of Detection	Maximum Detected Concentration	Most Restrictive Tier 1 Soil Remediation Objective	Maximum Exceeds Most Restrictive Objective?
	Sample Depth (feet)		10	4-6	4-6	4-6	1	3 FT	8 FT	3 FT	8.5 FT	3 FT	8 FT	3 FT	9 FT	3 FT	10 FT	3 FT	9 FT	8 FT					
	Date Collected		06/15/04	06/15/04	06/15/04	06/15/04	06/15/04	10/24/08	10/24/08	10/24/08	10/24/08	10/24/08	10/24/08	10/24/08	10/24/08	10/27/08	10/27/08	10/27/08	10/27/08	10/24/08					
		Units																							
nic Analytical Parameters																									
630-20-6	1,1,1,2-Tetrachloroethane	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
71-55-6	1,1,1-Trichloroethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	2	NA
79-34-5	1,1,2,2-Tetrachloroethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	3.3	NA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
79-00-5	1,1,2-Trichloroethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.02	NA
75-34-3	1,1-Dichloroethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	23	NA
75-35-4	1,1-Dichloroethene	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.06	NA
563-58-6	1,1-Dichloropropene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
87-61-6	1,2,3-Trichlorobenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
96-18-4	1,2,3-Trichloropropane	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
526-73-8	1,2,3-Trimethylbenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	-	<0.0012	<0.0012	-	-	<0.0012	-	0	0 of 17 (0%)	NA	NA	NA
120-82-1	1,2,4-Trichlorobenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	5	NA
95-63-6	1,2,4-Trimethylbenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
96-12-8	1,2-Dibromo-3-Chloropropane	mg/kg	-	-	-	-	-	<0.0055	<0.0053	<0.0056	<0.0062	<0.0058	<0.0060	<0.0059	<0.0059	<0.0062	<0.0057	<0.0062	<0.0059	<0.0059	0	0 of 17 (0%)	NA	NA	NA
106-93-4	1,2-Dibromoethane	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
95-50-1	1,2-Dichlorobenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	17	NA
107-06-2	1,2-Dichloroethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.02	NA
78-87-5	1,2-Dichloropropane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.023	NA
108-67-8	1,3,5-Trimethylbenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
541-73-1	1,3-Dichlorobenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.2	NA
142-28-9	1,3-Dichloropropane	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
106-46-7	1,4-Dichlorobenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	1.3	NA
594-20-7	2,2-Dichloropropane	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
78-93-3	2-Butanone (MEK)	mg/kg	-	-	<0.012	<0.012	-	<0.011	<0.010	<0.011	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.011	<0.012	<0.012	<0.012	0	0 of 17 (0%)	NA	17	NA
110-75-8	2-Chloroethyl vinyl ether	mg/kg	-	-	-	-	-	<0.055	<0.053	<0.056	<0.062	<0.058	<0.060	<0.059	<0.059	<0.062	<0.057	<0.062	<0.059	<0.059	0	0 of 17 (0%)	NA	NA	NA
95-49-8	2-Chlorotoluene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
106-43-4	4-Chlorotoluene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
108-10-1	4-Methyl-2-pentanone (MIBK)	mg/kg	-	-	<0.012	<0.012	-	<0.011	<0.010	<0.011	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.011	<0.012	<0.012	<0.012	0	0 of 17 (0%)	NA	340	NA
67-64-1	Acetone	mg/kg	-	-	<0.031	<0.030	-	<0.055	<0.053	<0.056	<0.062	<0.058	<0.060	<0.059	<0.059	<0.062	<0.057	<0.062	<0.059	<0.059	0	0 of 17 (0%)	NA	25	NA
107-13-1	Acrylonitrile	mg/kg	-	-	-	-	-	<0.011	<0.010	<0.011	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.011	<0.012	<0.012	<0.012	0	0 of 17 (0%)	NA	NA	NA
71-43-2	Benzene	mg/kg	<0.0013	<.0013	<0.0012	<0.0012	<0.0012	<0.0011	0.0016	<0.0011	0.0014	<0.0012	0.0017	<0.0012	<0.0012	<0.0012	0.0014	<0.0012	<0.0012	<0.0012	4	4 of 17 (24%)	0.0017	0.03	NO
108-86-1	Bromobenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
75-27-4	Bromodichloromethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.6	NA
75-25-2	Bromoform	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.8	NA
74-83-9	Bromomethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0055	<0.0053	<0.0056	<0.0062	<0.0058	<0.0060	<0.0059	<0.0059	<0.0062	<0.0057	<0.0062	<0.0059	<0.0059	0	0 of 17 (0%)	NA	0.2	NA
56-23-5	Carbon tetrachloride	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.021	NA
108-90-7	Chlorobenzene	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	1	NA
124-48-1	Chlorodibromomethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.4	NA
75-00-3	Chloroethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0055	<0.0053	<0.0056	<0.0062	<0.0058	<0.0060	<0.0059	<0.0059	<0.0062	<0.0057	<0.0062	<0.0059	<0.0059	0	0 of 17 (0%)	NA	15	NA
67-66-3	Chloroform	mg/kg	-	-	<0.0062	<0.0061	-	<0.0055	<0.0053	<0.0056	<0.0062	<0.0058	<0.0060	<0.0059	<0.0059	<0.0062	<0.0057	<0.0062	<0.0059	<0.0059	0	0 of 17 (0%)	NA	0.028	NA
74-87-3	Chloromethane	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.14	NA
156-59-2	cis-1,2-Dichloroethene	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	0.0014	0.0013	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	0.041	2	2 of 17 (12%)	0.0014	700	NO
10061-01-5	cis-1,3-Dichloropropene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
74-95-3	Dibromomethane	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
75-71-8	Dichlorodifluoromethane	mg/kg	-	-	-	-	-	<0.0055	<0.0053	<0.0056	<0.0062	<0.0058	<0.0060	<0.0059	<0.0059	<0.0062	<0.0057	<0.0062	<0.0059	<0.0059	0	0 of 17 (0%)	NA	NA	NA
108-20-3	Di-isopropyl ether	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
100-41-4	Ethylbenzene	mg/kg	<0.0013	<0.0013	<0.0012	<0.0012	<0.0012	<0.0011	0.001	<0.0011	0.0012	<0.0012	0.0014	<0.0012	<0.0012	<0.0012	0.0012	<0.0012	<0.0012	<0.0012	4	4 of 17 (24%)	0.0014	13	NO
87-68-3	Hexachloro-1,3-butadiene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	2.9	NA
98-82-8	Isopropylbenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	21	NA
1634-04-4	Methyl tert-butyl ether	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.32	NA
75-09-2	Methylene Chloride	mg/kg	-	-	<0.0062	<0.0061	-	<0.0055	<0.0053	<0.0056	<0.0062	<0.0058	<0.0060	<0.0059	<0.0059	<0.0062	<0.0057	<0.0062	<0.0059	<0.0059	0	0 of 17 (0%)	NA	0.02	NA
91-20-3	Naphthalene	mg/kg	-	-	-	-	-	<0.0055	<0.0053	<0.0056	<0.0062	<0.0058	<0.0060	<0.0059	<0.0059	<0.0062	<0.0057	<0.0062	<0.0059	<0.0059	0	0 of 17 (0%)	NA	0.04	NA
104-51-8	n-Butylbenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
103-65-1	n-Propylbenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
99-87-6	p-Isopropyltoluene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
135-98-8	sec-Butylbenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
100-42-5	Styrene	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	4	NA
98-06-6	tert-Butylbenzene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
127-18-4	Tetrachloroethene	mg/kg	-	-	0.0015	0.0026	-	0.0045	<0.0010	0.0058	0.0012	0.0092	0.0022	0.0014	<0.0012	<0.0012	<0.0011	0.01	0.0091	0.0016	10	10 of 17 (59%)	0.01	0.06	NO
108-88-3	Toluene	mg/kg	<0.0067	<0.0064	<0.0062	<0.0061	<0.0060	<0.0055	<0.0053	<0.0056	<0.0062	<0.0058	<0.0060	<0.0059	<0.0059	<0.0062	<0.0057	<0.0062	<0.0059	<0.0059	0	0 of 17 (0%)	NA	12	NA
156-60-5	trans-1,2-Dichloroethene	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	10	NA
10061-02-6	trans-1,3-Dichloropropene	mg/kg	-	-	-	-	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	NA	NA
79-01-6	Trichloroethene	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.06	NA
75-69-4	Trichlorofluoromethane	mg/kg	-	-	-	-	-	<0.0055	<0.0053	<0.0056	<0.0062	<0.0058	<0.0060	<0.0059	<0.0059	<0.0062	<0.0057	<0.0062	<0.0059	<0.0059	0	0 of 17 (0%)	NA	NA	NA
75-01-4	Vinyl chloride	mg/kg	-	-	<0.0012	<0.0012	-	<0.0011	<0.0010	<0.0011	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0011	<0.0012	<0.0012	<0.0012	0	0 of 17 (0%)	NA	0.01	NA
1330-20-7	Xylenes, Total	mg/kg	<0.004	<0.0038	<0.0037	<0.0036	<0.0036	<0.0033	<0.0032	<0.0034	<0.0038	<0.0035	<0.0036	<0.0035	<0.0035	<0.0037	<0.0034	<0.0037	<0.0036	<0.0035	0	0 of 17 (0%)	NA	5.6	NA

TABLE 1
SOIL ANALYTICAL RESULS
VILLAREAL BUILDING
Terracon Project No. 07067060

	Sample Location/Identification		B-1	B-2	B-3	B-4	B-5	GP-1	GP-1	GP-2	GP-2	GP-3	GP-3	GP-4	GP-4	MW-1	MW-1	MW-2	MW-2	GP-3 Duplicate	Number of Detections	Frequency of Detection	Maximum Detected Concentration	Most Restrictive Tier 1 Soil Remediation Objective	Maximum Exceeds Most Restrictive Objective?
	Sample Depth (feet)		10	4-6	4-6	4-6	1	3 FT	8 FT	3 FT	8.5 FT	3 FT	8 FT	3 FT	9 FT	3 FT	10 FT	3 FT	9 FT	8 FT					
	Date Collected		06/15/04	06/15/04	06/15/04	06/15/04	06/15/04	10/24/08	10/24/08	10/24/08	10/24/08	10/24/08	10/24/08	10/24/08	10/24/08	10/27/08	10/27/08	10/27/08	10/27/08	10/24/08					
		Units																							
591-78-6	2-Hexanone	mg/kg	-	-	<0.0012	<0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.72	NA
ganic Analytical Parameters																									
120-82-1	1,2,4-Trichlorobenzene	mg/kg	-	-	<0.0012	<0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	5	NA
95-50-1	1,2-Dichlorobenzene	mg/kg	-	-	<0.0012	<0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	17	NA
541-73-1	1,3-Dichlorobenzene	mg/kg	-	-	<0.0012	<0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.2	NA
106-46-7	1,4-Dichlorobenzene	mg/kg	-	-	<0.0012	<0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	1.3	NA
83-32-9	Acenaphthene	mg/kg	<0.044	<0.042			<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 15 (0%)	NA	0.04	NA
208-96-8	Acenaphthylene	mg/kg	<0.044	<0.042			<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 15 (0%)	NA	0.03	NA
120-12-7	Anthracene	mg/kg	<0.044	<0.042	-	-	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.14	NA
56-55-3	Benzo(a)anthracene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.72	NA
50-32-8	Benzo(a)pyrene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.09	NA
205-99-2	Benzo(b)fluoranthene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.7	NA
191-24-2	Benzo(g,h,i)perylene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.68	NA
207-08-9	Benzo(k)fluoranthene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.63	NA
218-01-9	Chrysene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	1.1	NA
53-70-3	Dibenzo(a,h)anthracene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.09	NA
206-44-0	Fluoranthene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	1.8	NA
86-73-7	Fluorene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.04	NA
87-68-3	Hexachlorobutadiene	mg/kg	-	-	<0.0012	<0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	2.9	NA
193-39-5	Indeno(1,2,3-c,d)pyrene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.51	NA
91-20-3	Naphthalene	mg/kg	<0.044	<0.042	<0.0062	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	0.04	NA
85-01-8	Phenanthrene	mg/kg	0.045	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		1	1 of 17 (6%)	0.045	0.99	NO
129-00-0	Pyrene	mg/kg	<0.044	<0.042	-	<0.040	<0.040	-	-	-	-	-	-	-	-	-	-	-	-		0	0 of 17 (0%)	NA	1.2	NA

TABLE 2
GROUNDWATER ANALYTICAL RESULS
VILLAREAL BUILDING
Terracon Project No. 07067060

	Sample Location/Identification		B-1	B-2	B-3	B-4	GP-1	GP-2	GP-3	GP-4	MW-1	MW-2	MW-1 Duplicate	Soil Blank	Trip Blank	Number of Detections	Frequency of Detection	Maximum Detected Concentration	Most Restrictive Tier 1 Groundwater Remediation Objective	Maximum Exceeds Most Restrictive Objective?
	Date Collected		06/15/04	06/15/04	06/15/04	06/15/04	10/24/08	10/24/08	10/24/08	10/24/08	10/27/08	10/27/08	10/27/08	10/27/08	10/27/08					
		Units																		
Volatile Organic Analytical Parameters		mg/L																		
630-20-6	1,1,1,2-Tetrachloroethane	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
71-55-6	1,1,1-Trichloroethane	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.2	NA
79-34-5	1,1,2,2-Tetrachloroethane	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.42	NA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
79-00-5	1,1,2-Trichloroethane	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.005	NA
75-34-3	1,1-Dichloroethane	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.7	NA
75-35-4	1,1-Dichloroethene	mg/L	-	-	<0.001	<0.02	0.0016	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	1	1 of 10 (10%)	0.0016	0.007	NO
563-58-6	1,1-Dichloropropene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
87-61-6	1,2,3-Trichlorobenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
96-18-4	1,2,3-Trichloropropane	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
526-73-8	1,2,3-Trimethylbenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
120-82-1	1,2,4-Trichlorobenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.07	NA
95-63-6	1,2,4-Trimethylbenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
96-12-8	1,2-Dibromo-3-Chloropropane	mg/L	-	-	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0	0 of 10 (0%)	NA	NA	NA
106-93-4	1,2-Dibromoethane	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
95-50-1	1,2-Dichlorobenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.6	NA
107-06-2	1,2-Dichloroethane	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.005	NA
78-87-5	1,2-Dichloropropane	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.005	NA
108-67-8	1,3,5-Trimethylbenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
541-73-1	1,3-Dichlorobenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.0063	NA
142-28-9	1,3-Dichloropropane	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
106-46-7	1,4-Dichlorobenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.075	NA
594-20-7	2,2-Dichloropropane	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
78-93-3	2-Butanone (MEK)	mg/L	-	-	<0.01	<0.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0	0 of 10 (0%)	NA	4.2	NA
110-75-8	2-Chloroethyl vinyl ether	mg/L	-	-	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0	0 of 10 (0%)	NA	NA	NA
95-49-8	2-Chlorotoluene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
106-43-4	4-Chlorotoluene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
108-10-1	4-Methyl-2-pentanone (MIBK)	mg/L	-	-	<0.01	<0.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0	0 of 10 (0%)	NA	NA	NA
67-64-1	Acetone	mg/L	-	-	<0.025	<0.5	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0	0 of 10 (0%)	NA	6.3	NA
107-02-8	Acrolein	mg/L	-	-	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0	0 of 10 (0%)	NA	NA	NA
107-13-1	Acrylonitrile	mg/L	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0	0 of 10 (0%)	NA	NA	NA
71-43-2	Benzene	mg/L	<0.001	<0.001	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.005	NA
108-86-1	Bromobenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
75-27-4	Bromodichloromethane	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.0002	NA
75-25-2	Bromoform	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.001	NA
74-83-9	Bromomethane	mg/L	-	-	<0.001	<0.02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0	0 of 10 (0%)	NA	0.0098	NA
56-23-5	Carbon tetrachloride	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.005	NA
108-90-7	Chlorobenzene	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.1	NA
124-48-1	Chlorodibromomethane	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.14	NA
75-00-3	Chloroethane	mg/L	-	-	<0.001	<0.02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0	0 of 10 (0%)	NA	2.8	NA
67-66-3	Chloroform	mg/L	-	-	<0.005	<0.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0	0 of 10 (0%)	NA	0.0002	NA
74-87-3	Chloromethane	mg/L	-	-	<0.001	<0.02	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0	0 of 10 (0%)	NA	0.028	NA
156-59-2	cis-1,2-Dichloroethene	mg/L	-	-	**0.11**	**1.3**	**1.6**	**1.7**	**1.7**	**1.4**	**0.15**	**0.22**	**0.16**	<0.0010	<0.0010	8	8 of 10 (80%)	1.7	0.07	**YES**
10061-01-5	cis-1,3-Dichloropropene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
74-95-3	Dibromomethane	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
75-71-8	Dichlorodifluoromethane	mg/L	-	-	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0	0 of 10 (0%)	NA	NA	NA
108-20-3	Di-isopropyl ether	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
100-41-4	Ethylbenzene	mg/L	<0.001	<0.001	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.7	NA
87-68-3	Hexachloro-1,3-butadiene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.0014	NA
98-82-8	Isopropylbenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	4.8	NA
1634-04-4	Methyl tert-butyl ether	mg/L	-	-	<0.001	<0.02	0.014	0.012	0.011	0.013	0.0015	0.0073	0.0015	0.0073	0.0073	6	6 of 10 (60%)	0.014	0.07	NO
75-09-2	Methylene Chloride	mg/L	-	-	<0.005	<0.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0	0 of 10 (0%)	NA	0.005	NA
91-20-3	Naphthalene	mg/L	-	-	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0	0 of 10 (0%)	NA	0.14	NA
104-51-8	n-Butylbenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
103-65-1	n-Propylbenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
99-87-6	p-Isopropyltoluene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
135-98-8	sec-Butylbenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
100-42-5	Styrene	mg/L	-	-	<0.001	<0.02	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	0.1	NA
98-06-6	tert-Butylbenzene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
127-18-4	Tetrachloroethene	mg/L	-	-	0.0023	**0.026**	0.0011	0.0023	0.0028	0.002	**0.008**	<0.0010	**0.0098**	<0.0010	<0.0010	7	7 of 10 (70%)	0.026	0.005	**YES**
108-88-3	Toluene	mg/L	<0.005	<0.005	<0.005	<0.02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0	0 of 10 (0%)	NA	1	NA
156-60-5	trans-1,2-Dichloroethene	mg/L	-	-	<0.001	<0.02	0.0074	0.0035	0.0064	0.0063	0.0011	<0.0010	0.001	<0.0010	<0.0010	5	5 of 10 (50%)	0.0074	0.1	NO
10061-02-6	trans-1,3-Dichloropropene	mg/L	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0	0 of 10 (0%)	NA	NA	NA
79-01-6	Trichloroethene	mg/L	-	-	0.0025	**0.024**	0.0042	0.0012	0.0034	0.0032	**0.025**	<0.0010	**0.027**	<0.0010	<0.0010	7	7 of 10 (70%)	0.025	0.005	**YES**
75-69-4	Trichlorofluoromethane	mg/L	-	-	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0	0 of 10 (0%)	NA	NA	NA
75-01-4	Vinyl chloride	mg/L	-	-	<0.001	**0.022**	**0.27**	**0.067**	**0.024**	**0.11**	**0.0028**	**0.036**	**0.0033**	<0.0010	<0.0010	7	7 of 10 (70%)	0.27	0.002	**YES**
1330-20-7	Xylenes, Total	mg/L	<0.003	<0.003	<0.003	<0.06	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0	0 of 10 (0%)	NA	10	NA

TABLE 2
GROUNDWATER ANALYTICAL RESULS
VILLAREAL BUILDING
Terracon Project No. 07067060

	Sample Location/Identification		B-1	B-2	B-3	B-4	GP-1	GP-2	GP-3	GP-4	MW-1	MW-2	MW-1 Duplicate	Soil Blank	Trip Blank	Number of Detections	Frequency of Detection	Maximum Detected Concentration	Most Restrictive Tier 1 Groundwater Remediation Objective	Maximum Exceeds Most Restrictive Objective?
	Date Collected		06/15/04	06/15/04	06/15/04	06/15/04	10/24/08	10/24/08	10/24/08	10/24/08	10/27/08	10/27/08	10/27/08	10/27/08	10/27/08					
		Units																		
Semivolatile Organic Analytical Parameters																				
120-82-1	1,2,4-Trichlorobenzene	mg/L	-	-	<0.001	<0.02	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.07	NA
95-50-1	1,2-Dichlorobenzene	mg/L	-	-	<0.001	<0.02	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.6	NA
541-73-1	1,3-Dichlorobenzene	mg/L	-	-	<0.001	<0.02	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.0063	NA
106-46-7	1,4-Dichlorobenzene	mg/L	-	-	<0.001	<0.02	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.075	NA
83-32-9	Acenaphthene	mg/L	0.0011	<0.001	-	-	-	-	-	-	-	-	-	-	-	1	1 of 10 (10%)	0.0011	0.42	NO
208-96-8	Acenaphthylene	mg/L	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.21	NA
120-12-7	Anthracene	mg/L	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	2.1	NA
56-55-3	Benzo(a)anthracene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.00013	NA
50-32-8	Benzo(a)pyrene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.0002	NA
205-99-2	Benzo(b)fluoranthene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.00018	NA
191-24-2	Benzo(g,h,i)perylene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.21	NA
207-08-9	Benzo(k)fluoranthene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.00017	NA
218-01-9	Chrysene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.0015	NA
53-70-3	Dibenzo(a,h)anthracene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.0003	NA
206-44-0	Fluoranthene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.28	NA
86-73-7	Fluorene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.28	NA
87-68-3	Hexachlorobutadiene	mg/L	-	-	<0.001	<0.02	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.0014	NA
193-39-5	Indeno(1,2,3-c,d)pyrene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.00043	NA
91-20-3	Naphthalene	mg/L	<0.001	<0.001	<0.005	0.0033	-	-	-	-	-	-	-	-	-	1	1 of 10 (10%)	0.0033	0.14	NO
85-01-8	Phenanthrene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.21	NA
129-00-0	Pyrene	mg/L	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	0	0 of 10 (0%)	NA	0.21	NA